2018 Annual Financial Report

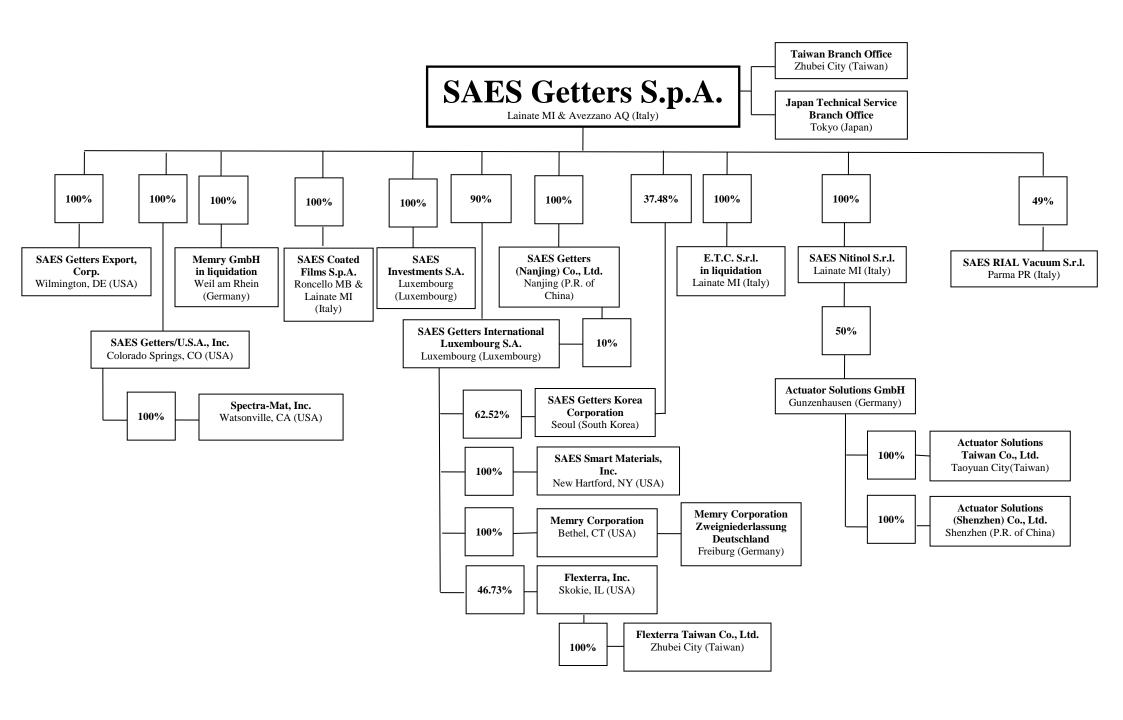
INFO

DIGITAL SIGN

saes group

2018







2018 Annual Financial Report

SAES Getters S.p.A.

Share Capital of 12,220,000 fully paid-in

Corporate Headquarters: Viale Italia, 77 – 20020 Lainate (Milan), Italy

Registered with the Milan Court Companies Register no. 00774910152

Board of Directors

President Massimo della Porta

Vice President and Managing Director Giulio Canale

Alessandra della Porta (1) **Directors**

Luigi Lorenzo della Porta (1)

Andrea Dogliotti (1)

Luciana Rovelli (1) (2) (4) (5) (6) (8)

Adriano De Maio (1) (3) (4)

Stefano Proverbio (1) (2) (5) (6) (7) (8) Gaudiana Giusti (1) (2) (4) (5) (6) (8)

Board of Statutory Auditors

Chairman Vincenzo Donnamaria

Statutory Auditors Maurizio Civardi

Sara Anita Speranza (8)

Alternate Statutory Auditors Massimo Gabelli

Mara Luisa Sartori

Independent Auditors Deloitte & Touche S.p.A. (9)

Representative of holders of savings shares Massimiliano Perletti (10)

(e-mail: massimiliano.perletti@roedl.it)

- Non-executive Director
- Independent Director, pursuant to the criteria of the Corporate Governance Code of Borsa Italiana and according to articles 147-ter, paragraph 4, and 148, paragraph 3, of Italian Legislative Decree 58/1998
- Independent Director, pursuant to the combined provisions of articles 147-ter, paragraph 4, and 148, paragraph 3, of Italian Legislative Decree 58/1998
- Member of the Remuneration and Appointments Committee
- Member of the Audit, Risk and Sustainability Committee
- Member of the Committee for Related Party Transactions
- Lead Independent Director
- Member of the Supervisory Body
- Appointed by the Shareholders' Meeting held on April 23, 2013 for financial years 2013-2021
- Appointed by the Special Meeting of Holders of Savings Shares on April 27, 2017 for financial years 2017-2019

The mandate of the Board of Directors and of the Board of Statutory Auditors, elected on April 24, 2018, will expire on the same date as the Shareholders' Meeting in which the financial statements for the year ended December 31, 2020 are approved.

Powers of the corporate bodies

Pursuant to the By-laws (article 20), the President and the Vice President and Managing Director are each of them separately entrusted with the legal representation of the Company, for the execution of Board of Directors' resolutions, within the limits of and for the exercise of the powers attributed to them by the Board itself.

Following the resolution adopted on April 28, 2015, the Board of Directors granted the President and the Vice President and Managing Director the powers of ordinary and extraordinary administration, with the exception of the powers strictly reserved to the competence of the Board or of those powers reserved by law to the Shareholders' Meeting.

The President Massimo della Porta is confirmed as Group Chief Executive Officer, with the meaning that such definition and role has in the Englishspeaking countries. The Vice President and Managing Director Giulio Canale has been confirmed in roles of Deputy Group Chief Executive Officer and Group Chief Financial Officer, with the meaning that such definitions and roles have in the English-speaking countries.



SAES GETTERS S.p.A.

Registered office Lainate (Milan), Viale Italia, 77
Fully paid-up share capital Euro 12,220,000.00
Companies Registry of Milan, Tax Code and VAT No. 00774910152

Company website: www.saesgetters.com

Call of ordinary shareholders' meeting

The Shareholders are convened to the ordinary Shareholders' Meeting in single call at the offices in Viale Italia 77, Lainate, on 18 April 2019, at 10:30 a.m., to resolve upon the following

Agenda:

- Report of the Board of Directors for the year ended 31 December 2018; financial statements as at 31 December 2018; related resolutions; presentation of the consolidated financial statements as at 31 December 2018; resolutions on allocation of the profit/loss for the year;
- 2. Remuneration Report pursuant to Article 123-ter para 6 of Italian Legislative Decree no. 58/1998 and Article 84-quater of Consob resolution no. 11971 of 14/05/1999 concerning regulations for issuers;
- 3. Supplement of Deloitte & Touche S.p.A.'s fee for the audit assignment for the year 2018; supplement of Deloitte & Touche S.p.A.'s fee for the assignment for limited review of the consolidated non-financial statement for the year 2018; consequent and related resolutions.

Presentation of draft resolutions/additions to the agenda

Shareholders who, individually or jointly, represent at least one fortieth of the share capital with voting rights can request, within ten days from the publication of this notice (i.e. no later than 28 March 2019), to add points to the agenda, specifying in the request the additional points proposed, or submit draft resolutions on points already on the agenda of the Meeting.



The request, together with the communication certifying ownership of the aforesaid stake issued by the intermediaries who keep the accounts on which the shares are recorded, must be submitted in an original signed copy, by the aforesaid deadline, at the Company's registered office (Viale Italia, 77, Lainate (Milan) – for the attention of the Legal Department) or sent to the certified electronic mail address: saes-ul@pec.it., together with information that allows the proposing Shareholders to be identified (in this regard, please also provide a reference telephone number). By the aforesaid deadline and using the same procedures, a report must be sent by the proposing Shareholders, stating the reasons for the draft resolutions on the new points whose discussion is proposed as an addition to the agenda or the reasons for the further draft resolutions submitted on points already on the agenda. Any addition to the list of points on the Meeting's agenda or presentation of further draft resolutions on points already on the agenda will be notified by the Company, in the same form required for the publication of this notice of call, at least fifteen days prior to the date set for the Meeting in single call. Together with the publication of the notice of additions to the agenda or of the presentation of further draft resolutions on the points already on the agenda, the above draft resolutions/additions, as well as their reports prepared by the Shareholders, accompanied by any assessment of the Board of Directors, will be made available to the public as indicated in Article 125-ter para 1 of Italian Legislative Decree no. 58/1998.

The addition to the agenda is not allowed for the points on which the Shareholders' Meeting deliberates, in accordance with the law, on a proposal by the directors or on the basis of a project or report prepared by them (other than the one on the points on the agenda required by Article 125-ter of Italian Legislative Decree no. 58/1998).

Right to ask questions on the items on the agenda

Those entitled to vote can ask questions on the points on the agenda at least three days before the date of the Meeting in single call (i.e. no later than 15 April 2019), by sending a registered letter with return receipt to the Company's registered office (Viale Italia, 77, Lainate (Milan) – for the attention of the Legal Department) or by certified electronic mail to the following address: saes-ul@pec.it.



The questions must be accompanied by documentation that allows identification of the Shareholder and by certifications establishing the right to vote; if the Shareholder requested his/her intermediary for the notice to attend the Shareholders' Meeting, the request must indicate the references of the notice or at least the name of the intermediary.

The requests received before the Shareholders' Meeting will be answered at the latest during the Shareholders' Meeting, specifying that the answers printed on paper and made available to vote holders at the beginning of the Meeting are deemed to be provided during the Meeting.

The right to speak and to vote in the Shareholders' Meeting

Those holding voting rights at the close of the accounting day of the seventh market trading day before the date scheduled for the Shareholders' Meeting in single call, i.e. 9 April 2019 (referred to as the "record date"), and for which the Company received the related notification from the intermediary, have the right to speak and to vote in the Shareholders' Meeting. Therefore, those who will be holders of shares after 9 April 2019 will not have the right to attend and vote at the Shareholders' Meeting.

The notification from the intermediary above must be received by the Company by the close of the third market trading day before the date scheduled for the Shareholders' Meeting in single call (15 April 2019). However if the notification is received by the Company after the above deadline, the person will still have the right to speak and to vote in the Meeting provided that the notification arrives by the beginning of the Meeting in single call. It is to be noted that the notification to the Company is provided by the intermediary at the request of the person entitled to vote.

Attendance and voting by proxy

Each person entitled to speak during the Shareholders' Meeting can arrange to be represented by written proxy in accordance with applicable law provisions and for this purpose may use the proxy form available on the website www.saesgetters.com or at the registered office. The proxy can be notified to the Company by sending it to the certified electronic mail address saesul@pec.it. Any prior notification does not exempt the proxy holder, when undergoing accreditation for attending the Shareholders' Meeting, from the obli-



gation to certify that the notified copy is a true copy of the original and his/her own identity and that of the delegating party.

Appointed Representative

The proxy can be granted, with voting instructions on the proposals concerning the points on the agenda, to Computershare S.p.A., with registered office at Via Lorenzo Mascheroni 19, 20145 Milan, appointed for the purpose by the Company pursuant to Article 135-undecies of Italian Legislative Decree no. 58/1998, by signing the specific proxy form available, in printer-friendly version, on the website www.saesgetters.com (in the section investor relations investors area - shareholders' meeting) or at the Company's registered office or at the aforesaid registered office of Computershare S.p.A. The original proxy with voting instructions must be received by Computershare S.p.A., Via Lorenzo Mascheroni 19, 20145 Milan, by the close of the second market trading day before the date scheduled for the Shareholders' Meeting in single call (i.e. no later than 16 April 2019). The proxy may be sent in advance to the Appointed Representative, within the above deadline, by fax to no. +39 02 46776850 or as an attachment to an electronic mail message to be sent to the address ufficiomilano@pecserviziotitoli.it. The proxy is effective only if voting instructions are given. The proxy and the voting instructions may be revoked within the same deadline above. The notification made to the Company by the intermediary, certifying the right to speak and to vote in the Shareholders' Meeting, is required even if a proxy is granted to the Appointed Representative. Pursuant to law, the shares for which the proxy was granted, partial or otherwise, are counted to determine whether the Meeting is quorate and, if no voting instructions have been given, the shares are not counted in the calculation of the majority and of the capital share required for the approval of resolutions. Information concerning the granting of the proxy to Computershare S.p.A. (which may be contacted for any further explanation at the no. +39 02 46776811) is also made available in the specific proxy form above.

Share capital and shares with voting rights

The share capital amounts to Euro 12,220,000.00 divided into 14,671,350 ordinary shares, and 7,378,619 saving shares all without par value. Each ordinary share is assigned one vote, or two votes, as provided for in Article 11 of



the Company By-Laws in relation to the "increased vote", where all the conditions of law and of the same Article 11 have been met by the right holder.

As at the date of publication of this notice the total number of voting rights that can be exercised is equal to 16,683,792.

Shareholders' Meeting documents

The following documents will be made available to the public at the Company's registered office (Viale Italia, 77 – Lainate, Milan) as well as at the website www.saesgetters.com and in the 1Info storage system at the address www.1info.it:

I. from 19 March 2019:

the Board of Directors' report and attached substantiated proposal of the Board of Statutory Auditors regarding Supplement of Deloitte & Touche S.p.A.'s fee for the audit assignment for the year 2018; supplement of Deloitte & Touche S.p.A.'s fee for the assignment for limited review of the consolidated non-financial statement for the year 2018; consequent and related resolutions.;

- II. from 28 March 2019:
- i) the annual financial report and the other documents referred to in Article 154-ter of Italian Legislative Decree no. 58/1998 and therefore, the draft financial statements and the consolidated financial statements as at 31 December 2018, accompanied by the reports of the Board of Directors, the Board of Statutory Auditors and the Auditing firm Deloitte &Touche S.p.A.;
- ii) the annual report on corporate governance and ownership structures;
- iii) the remuneration report;
- iv) the report on non-financial information;
- III. from 3 April 2019 the documentation relating to the financial statements of the subsidiary companies referred to in Article 77(2-bis) of Consob Regulations the following will be available only at the Company's registered office.

Lainate, 13 March 2019

The Chairman of the Board of Directors

Mr. Massimo della Porta

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LETTER TO SHAREHOLDERS

Dear Shareholders,

The events of 2018 are part of the strategic design launched some years ago, reflecting the decision to reposition the Group to boost growth.

The renewal of our technological assets and knowledge base started with the development of knowhow in shape memory materials, enabling us to develop that which today represents around two thirds of the Group's revenues. We then sought to develop our knowhow in the field of organic chemistry and nanomaterials. This new versatile and highly innovative technology is now ready for industrial use in a number of fields of application and the Group has identified advanced packaging as an extremely promising sector of reference.

The sale of the gas purification business was part of this strategic direction.

In recent years, gas purification has given us a considerable level of satisfaction, contributing significantly to profits and cash generation, but has always maintained a cyclical trend, linked to the investments of the semiconductor industry, also with significant fluctuations in revenues, which for a Group the size of SAES meant high instability and considerable fluctuations in value. Furthermore, the technology was mature and the market was shifting from the USA to China, putting growth and results at risk. Only high investment and a consolidated presence in Asia would have enabled us to maintain our leadership position, but with much lower results, in terms of the very high value recognised by the buyer, who instead holds all the card to be able to effectively manage this business and develop it.

Following the sale, the Group maintained sound revenues and significant operating results, thanks to the excellent performance of the shape memory alloys business in the field of medicine and the renewed vitality of getter applications, as we had the financial strength to expand the innovative packaging sector, through both organic and inorganic growth.

The packaging market is undergoing a profound transformation, with the progressive reduction of fossil-fuel plastic and its replacement with recyclable and biodegradable plastic materials, which can be easily disposed of without harming the environment. Also due to changing legislative requirements, the market will have to develop fully recyclable or compostable packaging solutions that meet the needs of the economic cycle. Our technologies facilitate the use of compostable plastics and encourage the development of fully recyclable packaging solutions. Furthermore, our knowhow in gas management in sealed environments will enable the industry to study innovative forms of packaging, able to maintain or improve the preservation conditions of the package contents.

The Group is now financially very strong and firmly placed in anticyclical businesses with high growth potential and therefore can aim for a significant increase in revenues.

In this context, and after assessing different possible uses for the available resources, the proposal to purchase the ordinary shares of the Company, resolved upon by the Board of Directors on February 14 for the approval of the Shareholders' Meeting convened for March 18, was deemed an advantageous investment, that would create value for the Group and all of its Shareholders. This operation represents an important sign of trust to the market and for the Shareholders who would like to continue to support the Group's future prospects, also thanks to the higher return per unit of capital employed.

Lastly, we would like to draw attention to the higher percentage of products with a low environmental impact and for the medical business in our development strategies and in our revenues, which demonstrates the Group's growing focus on Corporate Social Responsibility- The latter focus can also be found in the

'Sustainability Report', in which we intend to inform all of our Stakeholders about our activities in a transparent and measurable way, representing the progress that the Group has made and will continue to make to meet the expectations of our employees, our customers and partners and as well as the communities we operate in.

Massimo della Porta SAES Group CEO Group financial highlights

GROUP FINANCIAL HIGHLIGHTS

(thousands of euro)

Income statement figures			2018	2017	Difference	Difference
			•	(1)		%
NET SALES						
- Industrial Applications			65,279	57,191	8,088	14.1%
- Shape Memory Alloys			82,450	75,872	6,578	8.7%
- Solutions for Advanced Packaging	2		11,480	12,445	(965)	-7.8%
- Business Development			1,075	1,614	(539)	-33.4%
Total		-	160,284	147,122	13,162	8.9%
GROSS PROFIT (2)						
- Industrial Applications			33,552	28,369	5,183	18.3%
- Shape Memory Alloys			35,486	31,903	3,583	11.2%
- Solutions for Advanced Packaging	3		1,181	1,646	(465)	-28.3%
- Business Development & Corporat	te Costs (3)	_	33	285	(252)	-88.4%
Total		_	70,252	62,203	8,049	12.9%
	% on net sales		43.8%	42.3%		
EBITDA (4)			26,279	18,315	7,964	43.5%
	% on net sales		16.4%	12.4%		
OPERATING INCOME (LOSS)			15,066	9,092	5,974	65.7%
	% on net sales		9.4%	6.2%		
NET INCOME (LOSS) from continue	ed operations		(7,680)	(12,653)	4,973	-39.3%
	% on net sales		-4.8%	-8.6%		
NET INCOME (LOSS) from disconti	inued operations		240,013	26,513	213,500	805.3%
	% on net sales		149.7%	18.0%		
Group NET INCOME (LOSS)			232,333	13,860	218,473	1576.3%
	% on net sales		145.0%	9.4%		
Balance sheet and financial figures	5		December 31,	December 31,	Difference	Difference
			2018	2017		%
Γangible fixed assets			53,832	49,492	4,340	8.8%
Group shareholders' equity			341,220	122,141	219,079	179.4%
Net financial position			223,310	(17,730)	241,040	-1359.5%
			2018	2017	Difference	Difference
Other information			2010	(1)	21101 01100	%
Other information				(1)		
Cash flow from operating activities		(*)	20,604	38,456	(17,852)	-46.4%
Cash flow from operating activities	s	(*)	20,604 10,988		(17,852) (1,809)	-46.4% -14.1%
Cash flow from operating activities Research and development expense		(*)		38,456		
Other information Cash flow from operating activities Research and development expense Number of employees as at Decemb Personnel cost (6)		(*)	10,988	38,456 12,797	(1,809)	-14.1%

^(*) The figure included 11,000 thousand euro from discontinued operations.

^(**) The figure included 168 thousand euro from discontinued operations.

- (1) The income statement balances for 2017, included for comparative purposes, do not coincide with the figures shown in the 2017 Annual Financial Report as they reflect the reclassifications relating to the sale of the gas purification business, finalised on June 25, 2018 (identified as a "major line of business"), in accordance with the provisions of IFRS 5.
- (2) This item is calculated as the difference between the net sales and the industrial costs directly and indirectly attributable to the products sold.

(thousands of euro)

	2018	2017
Net Sales	160,284	147,122
Raw materials	(28,311)	(28,005)
Direct labour	(22,962)	(20,695)
Manufacturing overhead	(39,623)	(38,422)
Increase (decrease) in work in progress and finished goods	864	2,203
Cost of sales	(90,032)	(84,919)
Gross profit	70,252	62,203
% on net sales	43.8%	42.3%

- (3) This item includes costs that cannot be directly attributed or allocated in a reasonable way to the Business Units, but which refer to the Group as a whole.
- (4) EBITDA is not deemed as an accounting measure under International Financial Reporting Standards (IFRSs); however, we believe that EBITDA is an important parameter for measuring the Group's performance and therefore it is presented as an alternative indicator. Since its calculation is not regulated by applicable accounting standards, the method applied by the Group may not be in line with the ones adopted by other Groups. EBITDA is calculated as "Earnings before interest, tax, write-downs, depreciation and amortisation".

(thousands of euro)

(illousalius of euro)			
		2018	2017
	Operating income	15,066	9,092
Depreciation and amortization		(7,588)	(8,085)
Write-down of assets		(3,417)	(1,181)
Bad debt provision (accrual) release		(208)	43
	EBITDA	26,279	18,315
	% on net sales	16.4%	12.4%

- (5) As at December 31, 2018 this item includes:
- employees for 933 units (1,073 units as at December 31, 2017);
- the personnel employed at the Group companies with contract types other than employment agreements, equal to 87 units (65 units as at December 31, 2017).

This figure does not include the personnel (employees and temporary workers) of the joint ventures amounting, according to the percentage of ownership held by the Group, to 57 units as at December 31, 2018 (55 units at the end of the previous year, always according to the percentage of ownership held by the Group).

Lastly, note that the figure as at December 31, 2017 includes 161 units (represented by 160 employees and 1 temporary worker) of the subsidiary SAES Pure Gas, Inc. and 9 employees of the sales office located in Shanghai of the subsidiary SAES Getters (Nanjing) Co., Ltd., both sold to Entegris, Inc. on June 25, 2018.

(6) As at December 31, 2018 the severance costs, included in personnel costs, were 2,704 thousand euro, mainly relating to the reduction of staff at the Parent Company. In 2017, these costs had been 394 thousand euro, above all relating to the liquidation of the subsidiaries Memry GmbH and E.T.C. S.r.l.

The defensive solidarity contract at the Avezzano plant, the use of which was suspended in June 2017 before its natural maturity, instead had led to a reduction of labour costs of 372 thousand euro.

SAES Group Report on Operations

REPORT ON OPERATIONS

A pioneer in the development of getter technology, SAES Getters S.p.A., together with its subsidiaries, (hereinafter "SAES® Group") is the world leader in a variety of scientific and industrial applications where stringent vacuum conditions are required. In more than 70 years of activity, the Group's getter solutions have been supporting innovation in the information display and lamp industries, in sophisticated high vacuum systems and in vacuum thermal insulation, in technologies spanning from large vacuum power tubes to miniaturised silicon-based microelectronic and micromechanical devices (MEMS).

Starting in 2004, by leveraging its core competencies in special metallurgy and in the materials science, the SAES Group has expanded its business into the advanced material markets, in particular shape memory alloys, a family of materials characterised by super elasticity and by the property of assuming predefined forms when subjected to heat treatment. These special alloys, which today are mainly applied in the biomedical sector, are also perfectly suited to the realisation of actuator devices for the industrial sector (domotics, white goods industry, consumer electronics and automotive sector).

More recently, SAES has expanded its business by developing a technological platform which integrates getter materials in a polymeric matrix. These products, initially developed for OLED displays, are currently used in new application sectors, among which implantable medical devices and solid-state diagnostics imaging. Among the new applications, the advanced food packaging is a significantly strategic sector, in which SAES offers a range of new products for active packaging and intends to compete with fully recyclable and biodegradable solutions.

A total production capacity distributed in ten plants, a worldwide-based sales & service network, almost 1,000 employees allow the Group to combine multicultural skills and expertise to form a truly global enterprise.

The headquarters of the SAES Group are located in Lainate, in the Milan area (Italy).

SAES Getters S.p.A. has been listed on the Mercato Telematico Azionario (electronic equity market) of Borsa Italiana, STAR segment, since 1986.

S.G.G Holding S.p.A. is a relative majority shareholder and does not exercise any management and coordination activity towards SAES Getters S.p.A. pursuant to Article 2497 of the Italian Civil Code, for the reasons illustrated subsequently in the Report on corporate governance and ownership.

The Group's business structure has three Business Units: Industrial Applications, Shape Memory Alloys and Solutions for Advanced Packaging. Corporate costs, namely those expenses that cannot be directly attributed or allocated in a reasonable way to the business units, but which refer to the Group as a whole, and the costs related to the basic research projects or undertaken to achieve the diversification into innovative businesses (Business Development Unit) are shown separately from the three Business Units.

The following table illustrates the Group's business structure.

Industrial Applications Business Unit	
Security & Defence	Getters and metal dispensers for electronic vacuum devices
Electronic Devices	Getters for microelectronic, micromechanical systems (MEMS) and sensors
Healthcare Diagnostics	Getters for X-ray tubes used in image diagnostic systems
Thermal Insulation	Products for thermal insulation
Getters & Dispensers for Lamps	Getters and metal dispensers used in discharge lamps and fluorescent lamps
Solutions for Vacuum Systems	Pumps for vacuum systems
Sintered Components for Electronic Devices & Lasers	Cathodes and materials for thermal dissipation in electronic tubes and lasers

Systems for Gas Purification &	Getters and other components used in gas purifier systems for the semiconductor			
Handling	industry and other industries			
Shape Memory Alloys (SMA) Business	Unit			
Nitinol for Medical Devices	Nitinol raw material and components for the biomedical sector			
SMAs for Thermal & Electro	Shape Memory Alloys actuator devices for the industrial sector (domotics, white			
Mechanical Devices	goods industry, consumer electronics and automotive sector)			
Solutions for Advanced Packaging Bus	iness Unit			
Solutions for Advanced Packaging	Advanced plastic films for the food packaging sector			
Business Development Unit				
Organic Electronics	Materials and components for organic electronics applications			

Industrial Applications Business Unit

Security & Defence

The SAES Group provides innovative technological solutions for electronic devices used in the defence sector, such as thermal sensors for night vision, inertial navigation systems, microwave tubes and radiofrequency amplification systems. The portfolio of products includes, among others, getters of different types and shapes, as well as alkaline metal dispensers.

Electronic Devices

The SAES Group provides advanced solutions for electronic devices used in consumer electronics, photonics, infrared sensors, inertia sensors and pressure sensors. In addition, SAES components are used in more traditional applications, such as signal amplifier and photomultiplier tubes for research. The product portfolio includes getters of different types, including thin film getters for MEMS applications and other more traditional getters, together with alkali metal dispensers.

Healthcare Diagnostics

The SAES Group offers the market a portfolio of getters in various types and shapes, as well as alkali metal dispensers used in electronic devices for medical imaging diagnostic applications, such as X-ray tubes and image intensifiers.

Thermal Insulation

SAES solutions for vacuum thermal insulation include NEG products for cryogenic applications, for solar collectors both home applications and those operating at high temperatures, and for thermos. In addition, SAES is particularly active in the development of getter solutions for vacuum insulating panels for the white goods industry.

Getters & Dispensers for Lamps

The SAES Group is the world leader in the supply of getters and metal dispensers for lamps. Its products work by preserving the vacuum and the purity of the refill gases, thereby maintaining optimum lamp operation conditions over time. For some years SAES has also been involved in the development of mercury dispensers with a low environmental impact, in line with the stricter international legislation in force in this field.

Solutions for Vacuum Systems

The skills acquired in vacuum technology are the basis for the development of pumps based on nonevaporable getter materials (NEG), with both industrial and scientific applications (for example in analytical instrumentation, in vacuum systems for research purposes and in particle accelerators).

The NEXTorr® family of high vacuum pumps, which have been well received in the aforementioned application markets, integrates both getter and ionic technologies into a single, extremely compact and powerful device. This product line has most recently been joined by CapaciTorr® HV, high-vacuum pumps that use an innovative alloy with a greater capacity to absorb gases. These products have further reinforced the Group's position in its target markets.

Sintered Components for Electronic Devices & Lasers

Through its subsidiary Spectra-Mat, Inc., the SAES Group provides advanced technological solutions for a wide range of markets including avionics, medical, scientific instruments for various industrial applications, telecommunications and security and defence.

The product portfolio includes electron sources based on dispensing cathodes for a wide variety of microwave tubes, X-ray tubes, and gas lasers, for the most advanced applications. In addition, SAES provides advanced materials and solutions for the thermal management of high-power solid state lasers, high-power LEDs, and advanced semiconductor devices for radio-frequency and microwave systems.

Systems for Gas Purification & Handling

The subsidiary SAES Pure Gas, Inc., which specialises in the sale of advanced gas purification systems for the semiconductor industry and other industries that use ultra-pure gas in their processes was sold on June 25, 2018 (for further details, please refer to the next paragraph of this Consolidated report on operations). Note, therefore, that the Business Systems for Gas Purification & Handling is now residual and only includes the sale by the Parent Company of raw materials and getter components used to build purifiers.

Shape Memory Alloys (SMA) Business Unit

The SAES Group produces semi-finished products, components and devices in shape memory alloy, a special alloy made of nickel-titanium (Nitinol) characterised by super-elasticity (a property that enables the material to withstand even large deformations and then return to its original form) and by the property of assuming predefined forms when subjected to heat treatment. The SAES's production process is vertically integrated (from the melting of the Nitinol alloy to the manufacture of components) and allows full flexibility in the supply of products, together with total quality control.

Nitinol for Medical Devices

Nitinol is used in a wide range of medical devices, particularly in the cardiovascular field. Its super-elastic properties are ideal for manufacturing devices used in the growing field of non-invasive surgery, such as self-expanding devices (aortic and peripheral stents or heart valves) and catheters to navigate within the cardiovascular system. Through its subsidiary Memry Corporation, SAES offers a full range of sophisticated Nitinol-based solutions to the end manufacturers of the medical device.

SMAs for Thermal & Electro Mechanical Devices

In addition to being characterised by their super-elasticity, Shape Memory Alloys are able to assume predefined forms when subjected to heat treatment. Due to this characteristic, they are used in the production of a variety of devices (valves, proportional valves, actuators, release systems, mini-actuators) that exploit their distinctive characteristics (noiseless, compact, light, low power consumption, proportional control). SMA devices are used across the board in the industrial field, in areas of application such as domotics, the white goods industry, consumer electronics and the automotive business.

Solutions for Advanced Packaging Business Unit

The functional chemicals technological platform has been used to develop innovative plastic films for food packaging. It was in this context that SAES acquired Metalvuoto S.p.A. (then renames SAES Coated Films S.p.A.) a well-established player in the advanced packaging sector. Following this acquisition, SAES began its own active packaging business, where it compete today with innovative solutions, particularly in terms of environmental sustainability and improving the performance of flexible packaging, in an expanding market with excellent opportunities for growth.

Business Development Unit – Organic Electronics

The technology platform that integrates getter materials into polymer matrices, which was initially developed by the SAES Group to meet the protection needs of rigid OLED (Organic Light Emitting Diodes) displays, has been enhanced with new materials for flexible OLED applications that represent a new development trend in the display field. SAES is consolidating its position in the dispensing getters business for passive-matrix

OLED (particularly in China and Taiwan) and is also targeting the active-matrix OLED market, particularly with new dispensers for ink-jet applications.

In addition to OLED applications, SAES polymer composites are gradually being adopted in other areas such as optoelectronic devices, implantable medical devices and new solid state imaging diagnostic systems.

Note that, following the finalisation of the sale of the gas purification business at the end of June 2018, the 2017 costs and the revenues relating to the business sold, together with the consulting costs related to said extraordinary transaction, were **reclassified**, in accordance with IFRS 5, in the appropriate item of the income statement "Income (loss) from discontinued operations".

These reclassifications are detailed in Note 1, in the paragraph entitled "Reclassification of 2017 balances".

Significant events in 2018

The most significant event of 2018 was the closing of the **sale** of the **gas purification business** (Systems for Gas Purification & Handling) belonging to the Industrial Applications Business Unit of SAES to the US company Entegris, Inc.

The sale, finalised on June 25, 2018, involved the US affiliate SAES Getters USA, Inc. and the commercial structure of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd., which provided commercial support to SAES Pure Gas, Inc. in the Asian market. The sale also included the assets of the purification laboratory of SAES Getters S.p.A. situated in Lainate, the transfer of which was finalised at the end of October 2018.

The transaction is part of a strategy to focus on the strategic sectors in which the Group has made the most investment in recent years, thereby enabling SAES to obtain the financial resources needed to launch an important process of growth of the Nitinol business for medical applications and advanced packaging. This operation, together with future investments, is focused on the Group's growth and on guaranteeing stability by lessening the impact of exchange rate fluctuations and the cyclical nature of the semiconductor industry.

The effective sale price was 353.6 million USD, driven by the contractual price agreed upon of 355 million USD, updated following a negative adjustment of 1.4 million USD, calculated on the basis of the value of working capital, cash and tax credits¹ on the closing date.

To enable the transaction to take place, on June 15, 2018, SAES Getters USA, Inc., already the controlling company of SAES Pure Gas, Inc., sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly-incorporated company called SAES Colorado, Inc., subsequently renamed SAES Getters/USA, Inc., which continues to belong to the SAES Group. On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling entity of the investment in SAES Pure Gas, Inc., was sold to Entegris, together with the business unit based in Shanghai operating in the purification business of SAES Getters (Nanjing) Co., Ltd., represented by personnel, assets and inventory.

To complete the transaction, the above-cited assets of the purification laboratory based in Lainate were sold in various tranches to Entegris, while the laboratory continued to operate for four months from the closing date exclusively for Entegris, following a specific service agreement. Lastly, at the production plant of Avezzano, the Parent Company maintains a production line of getter material for the purification market in order to meet the procurement needs of Entegris, as per a specific supply agreement, which will last 36 months from the closing date of the sale.

On May 28, 2018, a credit facility for a maximum of 50 million USD was set in place with Banca Intesa Sanpaolo S.p.A. The equivalent of 38.5 million euro was drawn down from the same on June 12 for the capitalisation of the newly incorporated SAES Colorado, Inc. The facility was entirely repaid and extinguished on June 25 following the collection by Entegris.

The transaction included bank fees and interest totalling 229 thousand euro.

The carrying amount in euro of the net assets sold was 40.8 million euro. The net capital gains generated by the transaction were 227.2 million euro, represented by a gross gain of 262.4 million euro, less the costs relating to the transaction (above all legal fees, consulting costs, incentives and fees, interest, exchange rate differences and taxes) corresponding to around 35.2 million euro. This net capital gain, together with the net result relating to the purification business up to June 25, 2018 (corresponding to 12.8² million euro) were classified in the income statement item "Income (loss) from discontinued operations" (240 million euro).

¹ The value of the adjustment could differ depending on the effective value of the tax credit of the companies sold SAES Getters USA, Inc and SAES Pure Gas, Inc. resulting from the Tax Return Declaration relating to January 1 - June 24, 2018, to be submitted by the end of the first half of 2019.

² This item includes revenues of 45.7 million euro, with an operating income of 13.5 million euro (29.6% of revenues).

With regard to the current scope of consolidation, namely net of the above-cited business, **consolidated revenues** for 2018, despite the penalising effect of exchange rates (-3.4%) due to the devaluation of the dollar in the first few months of 2018, recorded double-digit organic growth (+12.3%). This growth was driven by the recovery of investments in the security and defence sector and increased sales in the vacuum pumps business and in the Nitinol sector for medical devices and SMAs for industrial applications (in particular luxury goods and automotive).

If the share of the revenues of the joint ventures is included in Group revenues³, **total revenuesof the Group** are 172.2 million euro, up by 7% thanks both to the increase in consolidated revenues (+8.9%), and to the increase in the sales of the joint venture SAES RIAL Vacuum S.r.l. With regards to the joint venture Actuator Solutions, the slight increase in the automotive sector was more than absorbed by the decrease of the Taiwan company, focused mainly on the autofocus (AF) for action cameras sector.

The growth in consolidated revenues allowed the improvement of the **operating indicators**; in particular, please note the consolidated EBITDA⁴ figure, which rose from 12.4% in 2017 to 16.4% in the current year. If the severance costs relating to the downsizing of the staff employed at the Parent Company (around 2.7 million euro), the consolidated EBITDA figure for 2018 would have been 18.1%.

Operating income, which amounted to 15.1 million euro, net of the already cited severance costs and of a write-down of 3.1 million euro following the impairment testing of the Advanced Packaging business unit, would have been 20.8 million (13% of consolidated revenues) and compared with 9.1 million euro (6.2% of consolidated revenues) recorded last year.

The following are other significant events that occurred in 2018.

In January 2018, the **dispute with the employees of E.T.C. S.r.l.**, dismissed for objective just cause on October 31, 2017, following the elimination of the position due to the liquidation of the company, was formally closed. More specifically, on January 22, 2018 the conciliation document was signed by the trade union association, in which the parties acknowledge that they may claim nothing more from one another. The financial obligation that emerges from this document coincides with the amount already allocated to the provisions for risks and charges as at December 31, 2017 (0.2 million euro).

On January 30, 2018 the independent auditors appointed by Memry Corporation concluded their review, with no findings, on the company's compliance with the agreed conditions (increase of the workforce at the Bethel site and average annual wage not below a predetermined threshold) for the **transformation of 50% of the funding** granted by the State of Connecticut (CT) at the end of 2014 **in a non-repayable grant**. At the beginning of March, the reports were notified to the relevant State authorities and the final authorisation by the State of CT arrived during the first half of 2018. The grant, amounting to 1.4 million USD, generated an income in the income statement and an improvement in the net financial position by the same amount.

On February 12, 2018 SAES Nitinol S.r.l. paid **Actuator Solutions GmbH** a **new tranche** of 0.5 million euro, **of the loan signed on November 28, 2016.** Note that the loan, addressed to providing support to operations, expires on April 30, 2019, with a flexible repayment plan by the expiry date and a fixed annual interest rate of 6%; the relative agreement, which initially provided for an overall maximum fundable amount of 4.5 million euro, was appropriately revised, increasing that figure to 5 million euro.

On February 26, 2018, SAES Getters S.p.A. exercised a call option for the **purchase of the entire share** capital of Metalvuoto S.p.A. (subsequently renamed SAES Coated Films S.p.A.), 70% of which was already

³ Actuator Solutions (50%), SAES RIAL Vacuum S.r.l. (49%) and Flexterra (corresponding to 33.79% at the beginning of the year and 46.73% as at December 31, 2018, following the share capital increases subscribed by the Group on October 5 and December 12 respectively.

⁴ EBITDA is not deemed as an accounting measure under International Financial Reporting Standards (IFRSs); however, we believe that EBITDA is an important parameter for measuring the Group's performance and therefore it is presented as an alternative indicator. Since its calculation is not regulated by applicable accounting standards, the method applied by the Group may not be in line with the ones adopted by other Groups. EBITDA is calculated as "Earnings before interest, tax, write-downs, depreciation and amortisation".

in its possession. Following this transaction, SAES acquired the remaining 30% previously held by the minority shareholder Mirante S.r.l., for a consideration of 75 thousand euro. Note that the consolidated financial statements of the SAES Group as at December 31, 2017 already included a financial payable of the same amount, related to the value of the above option. The acquisition of the entire share capital of Metalvuoto S.p.A. enables SAES to have complete strategic autonomy in the advanced packaging business, above all for applications in the food industry. Following the exercise of the call option by SAES, Ing. Giovanni Ronchi, the owner of Mirante S.r.l. and founder of Metalvuoto S.p.A., whose share capital in Metalvuoto S.p.A. had been bought out, resigned as Chairman on the same date.

On March 14, 2018 SAES Getters S.p.A. approved the **partial waiver of the financial receivable** claimed by the same **towards SAES Nitinol S.r.l.** for an amount of 660 thousand euro, equal to the difference between the total loss (-800 thousand euro) recorded by the subsidiary in 2017 and that estimated for the same year at the beginning of the year (-140 thousand euro) and already covered by the payment made by the Parent Company on March 15, 2017.

On April 3, 2018, in order to protect the results and the profitability from the fluctuation of the exchange rates, **contracts for the forward sale** of US dollars were signed for a total notional value of 2.7 million USD; these contracts, whose term was gradually extended to the end of this year, envisaged an average forward exchange rate equal to 1.2416 against the euro. Similar contracts, for a notional value of 207 million JPY, were underwritten at the same date, with an average forward exchange rate equal to 131.0222 against the euro.

On April 5, 2018 the Ordinary Shareholders' Meeting of Metalvuoto S.p.A., convened to approve the financial statements as at December 31, 2017, resolved to create an **extraordinary reserve to cover any future losses** and with a view to future investments planned or at the planning stage, by means of a payment to the capital account of 3 million euro by the Sole Shareholder SAES Getters S.p.A.

The Shareholders' Meeting, convened on the same date in an extraordinary session as well, resolved to change the name of Metalvuoto S.p.A. to **SAES Coated Films S.p.A.** in order to achieve greater recognisability on the market.

On April 6, 2018, the **purchase** by SAES Getters S.p.A. of the **building** that hosts the registered office of **SAES Coated Films S.p.A.** and where the production of the same takes place, was finalised. The purchase price was 3.5 million euro.

At the end of May 2018, **Flexterra**, in cooperation with E Ink, an important manufacturer of electrophoretic screens, presented the first fully flexible electrophoretic display, which uses technology and materials developed by Flexterra at SID in Los Angeles, which aroused considerable interest from the market.

On June 1, 2018, **SAES Coated Films S.p.A.** opened a **local unit in Lainate**, at the headquarters of the Parent Company.

On July 31, 2018 the residual amount of the **long-term loan underwritten with Banca Intesa Sanpaolo S.p.A. in mid-2015 was repaid in advance** by the Parent Company (initial nominal value of 8 million euro). No penalty was paid for said transaction. At the same time, the Interest Rate Swap contract on said loan was extinguished.

On July 31, 2018 the residual amount of the **long-term loan underwritten at the beginning of 2009 by Memry Corporation with Unicredit was repaid in advance.** The cost for the early termination (breakage costs) were around 30 thousand USD, in accordance with that established by the agreement initially signed by the parties.

On August 1, the residual amount of the **long-term loan underwritten with Unicredit S.p.A. was repaid in advance** by the Parent Company (initial nominal value of 7 million euro). No penalty was paid for said transaction.

At the same time, the Interest Rate Swap contract on said loan was extinguished.

On October 1, 2018, the Shareholders' Meeting of SAES Getters S.p.A. approved, to the intents and purposes of article 114-bis of the TUF [Consolidated Finance Law], the adoption of an incentive plan based on phantom shares, called "2018 Phantom Share Plan", addressed to certain executive directors and strategic executives.

The plan is based on the free assignment to beneficiaries of a specific number of phantom shares which, under the terms and conditions of the plan, give them the right to receive a cash incentive, dependent on the increase in the stock market price of the shares on a date in which certain pre-established events are due to take place, with respect to the assignment value. The events that may trigger the payment of the incentive are, for example: change in control of the Company; failure to renew the position of board director at the end of a term in office; revocation from the position of board director or substantial change in the relative proxies or in the role without just cause; dismissal for just cause; resignation for an objective justified reason (only for Strategic Executives); reaching the age of retirement; permanent invalidity; death; delisting. The plan seeks to remunerate the beneficiaries with relation to the Company's capitalisation, to enhance retention and to better align performance with the interests of shareholders and the Company. On October 17, 2018 the Board of Directors of SAES Getters S.p.A. launched the plan, establishing the names of the plan's beneficiaries on the proposal of the Remuneration and Appointments Committee, and establishing the number of phantom shares to be assigned free of charge to each beneficiary. In accordance with the criteria established by the plan's regulations, the assignment of each phantom share has been established as 16.451 euro, corresponding to the weighted average of the official prices of the Company's ordinary shares recorded on the MTA (electronic equity market) organised and managed by Borsa Italiana S.p.A. on trading days that fall in the 36 (thirty-six) months prior to the date of October 17, 2018.

On October 5, 2018, SAES **conferred 4.5 million USD of share capital in Flexterra, Inc.** through the subsidiary SAES Getters International Luxembourg S.A. after Flexterra, Inc. reached the set commercial milestone. SAES's shareholding in Flexterra rose to 42.23% after this payment.

On October 23, 2018 **SAES Investments S.A.** was formally incorporated, based in Luxembourg, wholly owned by SAES Getters S.p.A. The purpose of the company, with a share capital of 40 million euro, is to manage the liquidity resulting from the sale of the purification business, with the objective of maintaining capital for any future uses.

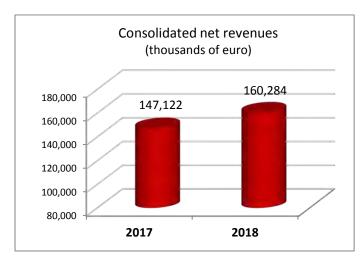
On December 12, 2018, SAES, through its subsidiary SAES Getters International Luxembourg SA, **conferred 2.6 million USD of share capital in Flexterra, Inc.**, bound by the purchase of patents in the OLET field, relating to both materials and configurations that use these materials, developed by the Group company E.T.C. S.r.l. Note that the value of the intellectual property of E.T.C. S.r.l. has been subject to an appraisal carried out by an independent third party.

Finalisation of the sale of these intangible assets is expected in the first half of 2019 and since the patents are not currently recognised as assets of E.T.C. S.r.l. in liquidation, it will generate a revenue of the same amount for the related party.

SAES's shareholding in Flexterra rose to 46.73% after this payment.

On December 17, 2018 Memry Corporation signed a preliminary agreement for the **purchase of the property located in Bethel (CT)**, the operative site of Memry, with the real estate company Berkshire Industrial Corporation, the current owner. This transaction has a value agreed between the parties of 5.8 million USD. In order to proceed with this transaction, Memry Corporation has already paid an initial advance of 290 thousand USD. The closing is expected by the end of the first quarter of 2019, following the completion of the due diligence and of the environmental assessment.

Sales and economic results of 2018



Consolidated net revenues in 2018 were 160,284 thousand euro, up by +8.9% compared to 147,122 thousand euro recorded in 2017.

The **exchange rate effect** was negative and equal to -3.4%, mainly related to the devaluation of the US dollar against the euro in the first few months of the year. Removing the penalising effect of the exchange rates, **organic growth** was +12.3%, mostly driven by the recovery of investments in the security and defence sector and by the increased sales in the vacuum pumps business and in both the Nitinol for medical devices and SMAs for industrial applications sectors (in particular luxury goods and automotive).

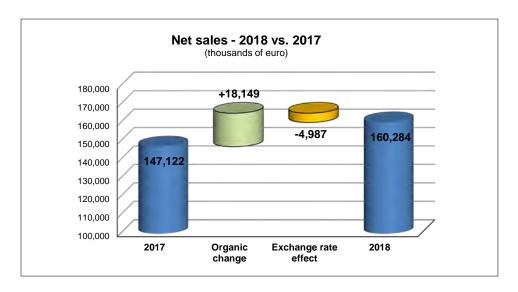
Total revenues of the Group, achieved by incorporating the joint ventures with the proportional method instead of the equity method used in the financial statements, were 172,213 thousand euro, up 7% compared to 160,983 thousand euro in 2017: the increase is mainly due to the increase in consolidated revenues (+8.9%), plus the increase in the sales of the joint venture SAES RIAL Vacuum S.r.l. (+100 thousand euro, according to the percentage held by SAES of 49%). As regards the joint venture Actuator Solutions, the increase in the automotive sector was more than absorbed by the decrease of the Taiwan company, focused mainly on the autofocus (AF) for action cameras sector.

(thousands of euro)

	2018	2017	Total difference	Total difference %
Consolidated net sales	160,284	147,122	13,162	8.9%
50% Actuator Solutions' net sales	11,461	13,538	(2,077)	-15.3%
49% SAES RIAL Vacuum S.r.l.'s net sales	1,292	1,192	100	8.4%
Pro-quota Flexterra's net sales (*)	13	10	3	30.0%
Intercompany eliminations	(830)	(766)	(64)	8.4%
Other adjustments	(7)	(113)	106	-93.8%
Total revenues of the Group	172,213	160,983	11,230	7.0%

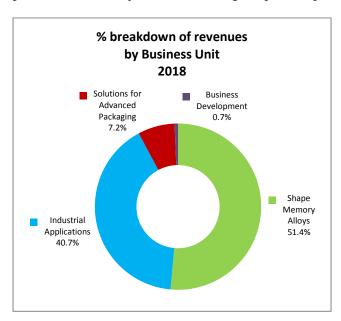
(*) SAES share in the share capital of Flexterra, equal to 33.79% at the beginning of the year, rose progressively to 46.73% as at December 31, 2018, following the share capital increases subscribed by SAES Getters International Luxembourg S.A. on October 5 and December 12 respectively, in which the other partners did not participate, or to which they only partially contributed. Therefore, the pro-quota net sales were calculated considering these progressive increases of the shareholding.

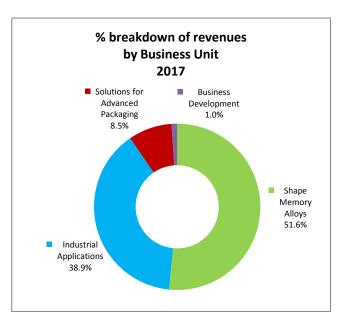
The following chart shows the increase of consolidated net revenues in 2018, highlighting the effect of exchange rates, the variation due to the changes in selling prices and sales volumes (organic growth).



The following graph shows the percentage weight of the revenues of each Business Unit both for 2018 and for the previous year.

The percentage of the divisions of the total was substantially unchanged. In particular, note how exchange rates had a negative effect on the **Shape Memory Alloys Business Unit**; **the Solutions for Advanced Packaging Business Unit** was penalised by the fall in sales of metallised products in favour of coated ones, planned with the objective of evolving the product portfolio towards better returns.





The following table contains the breakdown of consolidated net revenues by business segment in 2018 and in 2017, along with the percentage change at current and comparable exchange rates.

(thousands of euro)

			Total	Total	Exchange rate	Organic
Businesses	2018	2017	difference	difference	effect	change
				%	%	%
Security & Defense	12,595	8,533	4,062	47.6%	-3.9%	51.5%
Electronic Devices	19,209	19,453	(244)	-1.3%	-1.5%	0.2%
Healthcare Diagnostics	4,578	3,848	730	19.0%	-2.5%	21.5%
Getters & Dispensers for Lamps	4,901	5,656	(755)	-13.3%	-1.9%	-11.4%
Thermal Insulation	3,566	4,278	(712)	-16.6%	-3.2%	-13.4%
Solutions for Vacuum Systems	11,183	8,292	2,891	34.9%	-2.7%	37.6%
Sintered Components for Electronic Devices & Lasers	7,350	6,800	550	8.1%	-4.9%	13.0%
Systems for Gas Purification & Handling	1,897	331	1,566	473.1%	-21.4%	494.5%
Industrial Applications	65,279	57,191	8,088	14.1%	-2.8%	16.9%
Nitinol for Medical Devices	70,968	66,294	4,674	7.1%	-4.8%	11.9%
SMAs for Thermal & Electro Mechanical Devices	11,482	9,578	1,904	19.9%	-1.5%	21.4%
Shape Memory Alloys	82,450	75,872	6,578	8.7%	-4.4%	13.1%
Solutions for Advanced Packaging	11,480	12,445	(965)	-7.8%	0.0%	-7.8%
Business Development	1,075	1,614	(539)	-33.4%	-2.7%	-30.7%
Total net sales	160,284	147,122	13,162	8.9%	-3.4%	12.3%

Consolidated revenues of the Industrial Applications Business Unit amounted to 65,279 thousand euro, up by 14.1% compared to 57,191 thousand euro last year. The currency trend led to a negative exchange rate effect of -2.8%, net of which revenues organically increased by 16.9%.

Organic growth was mainly driven by the Security & Defence Business (+51.5%), due to the recovery of investments in the military sector in both the USA and Europe. The Solutions for Vacuum Systems Business also reported high organic growth (+37.6%), thanks to higher sales to manufacturers of analytic instruments (mostly electronic microscopes and inspection systems for semiconductors), which are increasingly extending the use of the NEG pumps in the systems they manufacture, as well as new orders in the field of particle accelerators. Lastly, the Sintered Components for Electronic Devices & Lasers Business also recorded good organic growth (+13%), driven by sales of devices for thermal dissipation in laser applications and solid-state RF devices for the defence market, and the getters sector for healthcare applications (Healthcare Diagnostics Business, +21.5%), due to the good performance of the x-ray tube market for image diagnostic applications. The Electronic Devices Business was in line with the previous year and recorded good sales in the infrared

sensors market for surveillance and industrial applications.

As in 2017, the Thermal Insulation Business and the Getters & Dispensers for Lamps Business recorded lower revenues. In the former, the decrease was mainly due to the drop in sales of insulation panels for the refrigeration market, as well as to a delay of several projects in China regarding the construction of thermodynamic solar power plants and the crisis that affected several historic customers of this segment. In the latter, the structural downtrend continued, due to the technological competition of LED with respect to fluorescent and intensity discharge lights.

Note that the Business Systems for Gas Purification & Handling includes the sale by the Parent Company of raw materials and getter components for purifiers mainly addressed to the semiconductor industry, corresponding to 1,897 thousand euro in 2018. Note that the SAES Group sold the business relating to the manufacture and sale of advanced purification systems to Entegris, Inc. on June 25, 2018; this sale transaction did not regard the Parent Company's production line for the manufacture of getter material for the purification market, situated in Avezzano, which in future will meet the procurement needs of Entegris, as per a specific 36-month supply agreement.

The revenues of the Security & Defence Business in 2018 were 12,595 thousand euro, significantly up (+47.6%) compared to 8,533 thousand euro recorded in 2017. Without the negative impact of exchange rates (-3.9%), organic growth was +51.5%.

The revenues of the *Electronic Devices Business* in 2018 were 19,209 thousand euro, slightly down (-1.3%) compared to 19,453 thousand euro recorded in 2017. Without the negative impact of exchange rates (-1.5%), organic growth was +0.2%.

The revenues of the *Healthcare Diagnostics Business* in 2018 were 4,578 thousand euro, up by 19% compared to 3,848 thousand euro recorded in 2017. Without the negative impact of exchange rates (-2.5%), total organic growth was +21.5%.

The revenues of the *Getters & Dispensers for Lamps Business* were 4,901 thousand euro, down by 13.3% compared to 5,656 thousand euro recorded in 2017. Without the negative impact of exchange rates (-1.9%), the lamps business showed an organic decrease of 11.5%, considered structural.

The revenues of the *Thermal Insulation Business* in 2018 were 3,566 thousand euro, compared to 4,278 thousand euro recorded in 2017 (-16.6%). Exchange rates had a negative impact of -3.2%, while the organic decrease was -13.5%.

The revenues of the *Solutions for Vacuum Systems Business* in 2018 were 11,183 thousand euro, significantly up (+34.9%) compared to 8,292 thousand euro recorded in 2017. Without the negative impact of exchange rates (-2.7%), organic growth was +37.6%.

The revenues of the *Sintered Components for Electronic Devices & Lasers Business* in 2018 were 7,350 thousand euro, up (+8.1%) compared to 6,800 thousand euro recorded in 2017. Without the negative impact of exchange rates (-4.9%), organic growth was +13%.

The revenues of the *Systems for Gas Purification & Handling Business* were 1,897 thousand euro in 2018, compared to 331 thousand euro in 2017. The negative impact of exchange rates was -21.4%.

The consolidated revenues of the **Shape Memory Alloys Business Unit** were 82,450 thousand euro, up (+8.7%) compared to 75,872 thousand euro recorded the previous year. Exchange rates had a negative impact of -4.4%, net of which the organic growth was +13.1%.

Both segments of the Business Unit recorded double digit organic growth. More specifically, the <u>Nitinol for Medical Devices Business</u> recorded an organic increase in revenues of 11.9%, driven by the growth of its target market, with several segments (such as neuro-vascular and electrophysiology) were characterised by above average growth. The revenues of the industrial SMAs sector (<u>SMAs for Thermal and Electro Mechanical Devices Business</u>) recorded substantial organic growth (+21.4%), driven by the continuous expansion of the luxury goods segment and by higher sales in the automotive segment, as well as by encouraging signals in electronic consumer applications.

The revenues of the *Nitinol for Medical Devices Business* were 70,968 thousand euro, up by 7.1% compared to 66,294 thousand euro recorded in 2017. Without the negative impact of exchange rates (-4.8%), organic growth was +11.9%.

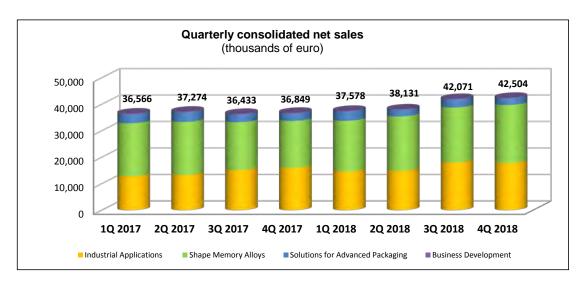
The revenues of the *SMAs for Thermal & Electro Mechanical Devices Business* were 11,482 thousand euro in 2018, up by 19.9% compared to 9,578 thousand euro recorded in 2017. Exchange rates had a negative impact of -1.5%, while the price/quantity effect was +21.4%.

Consolidated revenues of the **Solutions for Advanced Packaging Business Unit** in 2018 amounted to 11,480 thousand euro, compared to 12,445 thousand euro in 2017. Sales are denominated in Euro.

The fall (-7.8%) was exclusively due to lower sales of metallised products (planned reduction of the portfolio to eliminate products with lower returns), only partly offset by the increase in revenues from coated products (better returns).

The **Business Development Unit**, which includes projects of basic research or in a developing phase, and seeks to diversify into innovative businesses, closed 2018 with revenues of 1,075 thousand euro, compared to 1,614 thousand euro last year (-33.4%). Without the negative impact of exchange rates (-2.7%), the organic decrease was -30.7%, mainly due both to the impact on the price resulting from greater competition in the passive matrix OLED market, and to the time needed to introduce the new SAES encapsulating products, currently at an advanced stage of development.

The **quarterly trend of the net consolidated revenues** by Business Unit in 2018 is provided in the following chart.



Note the progressive increase in revenues over the four quarters of the current year.

More specifically, in the **Industrial Applications Business Unit**, growth in the second half of 2018 was driven by new advanced products manufactured in the Avezzano plant (Electronic Devices Business), the sales of which are concentrated in the second half of the year. The **Shape Memory Alloys Business Unit** recorded a progressive increase, in line with the target medical markets and, as regards industrial applications, sustained by the continuous expansion of the luxury goods and automotive sectors.

The **quarterly trend of the net consolidated revenues** for 2018 by Business Unit is provided in the following table.

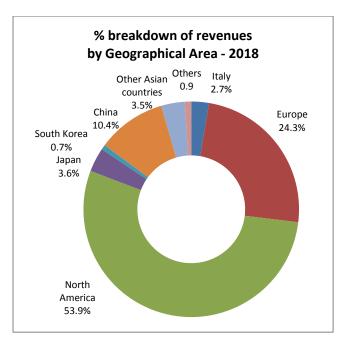
(thousands of euro)

(thousands of euro)		1	1	
Businesses	4 th quarter 2018	3 rd quarter 2018	2 nd quarter 2018	1 st quarter 2018
Security & Defense	3,037	3,411	3,173	2,974
Electronic Devices	5,855	6,031	4,189	3,134
Healthcare Diagnostics	1,368	1,048	1,139	1,023
Getters & Dispensers for Lamps	1,008	1,271	1,192	1,430
Thermal Insulation	864	911	875	916
Solutions for Vacuum Systems	2,885	2,879	2,245	3,174
Sintered Components for Electronic Devices & Lasers	1,954	1,842	1,795	1,759
Systems for Gas Purification & Handling	845	640	226	186
Industrial Applications	17,816	18,033	14,834	14,596
Nitinol for Medical Devices	19,073	17,688	17,879	16,328
SMAs for Thermal & Electro Mechanical Devices	2,856	3,079	2,709	2,838
Shape Memory Alloys	21,929	20,767	20,588	19,166
Solutions for Advanced Packaging	2,559	2,970	2,473	3,478
Business Development	200	301	236	338
Total net sales	42,504	42,071	38,131	37,578

A breakdown of revenues by geographical area of customers is provided below.

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Coographic area	2018	%	2017	%	Total difference	Total difference
Geographic area	2016		2017		unterence	%
						70
Italy	4,260	2.7%	3,993	2.7%	267	6.7%
Europe	38,889	24.3%	35,256	24.0%	3,633	10.3%
North America	86,363	53.9%	78,727	53.5%	7,636	9.7%
Japan	5,783	3.6%	5,020	3.4%	763	15.2%
South Korea	1,170	0.7%	1,434	1.0%	(264)	-18.4%
China	16,591	10.4%	15,701	10.7%	890	5.7%
Other Asian countrie	5,687	3.5%	5,982	4.1%	(295)	-4.9%
Others	1,541	0.9%	1,009	0.6%	532	52.7%
Total net sales	160,284	100.0%	147,122	100.0%	13,162	8.9%



As regards the **geographical distribution of revenues**, 2018 indicated higher revenues in Europe, mainly driven by the industrial SMAs, by the Security & Defence segment and by the sales of getter pumps.

The significant growth in North America was above all due to high sales in the SMA medical business, as well as the expansion of the military segment.

Lastly, revenues in Japan also rose (thanks to the Nitinol devices for medical applications business and to new orders for vacuum systems in the particle accelerator field) as well as in China (growth concentrated in the Electronic Devices Business).

Consolidated gross profit⁵, amounted to 70,252 thousand euro in 2018, compared to 62,203 thousand euro in 2017. The increase (corresponding to 8,049 thousand euro in absolute figures or +12.9%), despite the penalising impact of exchange rates of -2,488 thousand euro, was mainly due to the higher revenues of the security & defence business and in the vacuum systems segment (belonging to the Industrial Applications Business Unit), as well as of both segments of SMAs. The gross profit margin⁶ was also higher (from 42.3% in 2017 to 43.8% in the current year), again driven by the Industrial Applications and Shape Memory Alloys Business Units.

For further details, see the analyses by Business Unit.

The following table shows the consolidated gross profit or loss for 2018 by Business Unit, compared with the previous year.

⁵ Calculated as the difference between consolidated net revenues and industrial costs directly and indirectly attributable to the products sold.

⁶ Calculated as the ratio between gross profit and consolidated net revenues.

(thousands of euro)

Business Unit	2018	2017	Total difference	Difference %
Industrial Applications	33,552	28,369	5,183	18.3%
% on the Business Unit net sales	51.4%	49.6%		
Shape Memory Alloys	35,486	31,903	3,583	11.2%
% on the Business Unit net sales	43.0%	42.0%		
Solutions for Advanced Packaging	1,181	1,646	(465)	-28.3%
% on the Business Unit net sales	10.3%	13.2%		
Business Development & Corporate Costs	33	285	(252)	-88.4%
% on the Business Unit net sales	3.1%	17.7%		
Gross profit	70,252	62,203	8,049	12.9%
% on net sales	43.8%	42.3%		

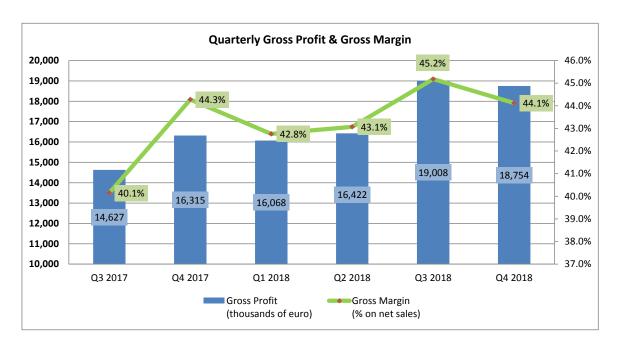
The gross profit of the **Industrial Applications Business Unit** was 33,552 thousand euro in 2018, compared to 28,369 thousand euro in 2017. The increase (+18.3%) was mainly due to the excellent performance of sales in the defence market and in the vacuum systems segment. The gross profit margin was slightly higher, rising from 49.6% to 51.4%: the higher revenues in businesses characterised by higher returns more than offset the reduction of the gross profit margin of the more traditional business and those with structural decreases (particularly the lamps and thermal insulation segments).

The gross profit of the **Shape Memory Alloys Business Unit** was 35,486 thousand euro, compared to 31,903 thousand euro in 2017. The increase (+11.2%) was driven by the higher revenues recorded in both segments, medical and industrial. The gross profit margin rose from 42% to 43%, due above all to better returns of the industrial segment, against the substantial stability of the medical one, which was also penalised by exchange rates.

The **Solutions for Advanced Packaging Business Unit** closed the year with a gross profit of 1,181 thousand euro (10.3% of revenues) compared to 1,646 thousand euro in 2017 (13.2% of revenues): the drop is mainly due to the already-cited fall in sales, and the higher prices of raw materials, which had a negative impact on the gross profit margin of this segment.

The gross profit of the **Business Development Unit and Corporate Costs** segment was 33 thousand euro (3.1% of consolidated revenues) compared to a profit of 285 thousand euro in the previous year (17.7% of consolidated revenues).

The following chart shows the quarterly trend of both the consolidated gross profit and gross margin. Note the uptrend of the quarterly gross profit margin in the current year, which enabled an improved gross margin to be recorded at year end, one percentage point higher than 2017 (43.8% in the current year, against 42.3% last year).



Consolidated operating income in 2018 was 15,066 thousand euro, significantly up (+5,974 thousand euro in absolute terms, corresponding to +65.7%) compared to an operating income of 9,092 thousand euro recorded last year. As a percentage of revenues, the operating income was 9.4% this year, against 6.2% in 2017: despite the penalising impact of exchange rates (-1,953 thousand euro), the increase of gross profit, the lower percentage of operating expenses (from 36.1% to 35%) and the non-refundable grant from the State of Connecticut to Memry Corporation (1,164 thousand euro, recorded under "Other net income (expenses)", for details of which see the paragraphs entitled "Significant events in 2018"), made the significant improvement of the operating indicators possible.

Please note that the operating income of the current year was penalised by severance costs relating to the staff reduction at the Parent Company (2,656 thousand euro) resulting from the downsizing of the Group perimeter after the purification business was sold. Also note the write-down of 3,100 thousand euro relating to impairment testing on the Advanced Packaging operating segment, which led to the total cancellation of the goodwill arising from acquisition of SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A., which amounted to 2,409 thousand euro, and the write-off of other tangible and intangible assets totalling 691 thousand euro. This write-down is due to the strategic transition currently underway, which is changing the range of traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging.

Lastly, please remember that 2017 included costs for the liquidation of the German subsidiary Memry GmbH (303 thousand euro), and charges for suspending the OLET research project and for the consequent liquidation of E.T.C. S.r.l. (1,111 thousand euro).

For further details, see the analyses by Business Unit.

The following table shows consolidated operating income for 2018 by Business Unit, compared with the previous year.

(thousands of euro)

Business Unit	2018	2017	Total difference	Difference %
Industrial Applications	19,273	14,981	4,292	28.6%
Shape Memory Alloys	25,443	20,027	5,416	27.0%
Solutions for Advanced Packaging	(5,872)	(911)	(4,961)	544.6%
Business Development & Corporate Costs	(23,778)	(25,005)	1,227	-4.9%
Operating income (loss)	15,066	9,092	5,974	65.7%
% on net sales	9.4%	6.2%		

The operating income of the **Industrial Applications Business Unit** was 19,273 thousand euro in 2018, compared to 14,981 thousand euro in 2017: the rise in revenues led to a significant increase of operating parameters, both in absolute terms (+28.6%), and as a percentage of revenues (from 26.2% to 29.5%), despite higher operating expenses due to severance costs (706 thousand euro) following the already-cited downsizing of the Parent Company's workforce.

The operating income of the **Shape Memory Alloys Business Unit** was 25,443 thousand euro (30.9% of consolidated revenues), up by 27% compared to corresponding figure for last year of 20,027 thousand euro (26.4% of consolidated revenues). The increase is due both the significant rise in revenues, and to savings on operating costs following the liquidation of Memry GmbH, as well as the previously mentioned non-refundable grant received in 2018 from the State of Connecticut by Memry Corporation (1,164 thousand euro).

The operating income of the **Solutions for Advanced Packaging Business Unit** was -5,872 thousand euro, compared to -911 thousand euro in the previous year. Excluding the already cited write-down of goodwill and assets, corresponding to a total of 3,100 thousand euro, the decrease (-1,861 thousand euro) was due both to a fall of gross profit, and to higher operating expenses (in particular, high costs of sales and marketing staff and those involved in product development, and higher costs of strategic consulting to expand the business).

The operating income of the **Business Development & Corporate Costs** unit was -23,778 thousand euro, and included both the result of the Business Development Unit and costs that cannot be directly attributed or reasonably allocated to any business unit, but which refer to the Group as a whole. This figure compares to an operating loss of -25,005 thousand euro in 2017. Despite the costs relating to the decrease of the Parent Company's workforce (1,940 thousand euro), the improvement was mainly due to the reduction of the variable remuneration⁷ of the Executive Directors and to savings on research costs following the liquidation of the subsidiary E.T.C. S.r.l. Note that 2017 had been penalised by write-downs and severance costs, totalling 1,111 thousand euro, relating to the same transaction.

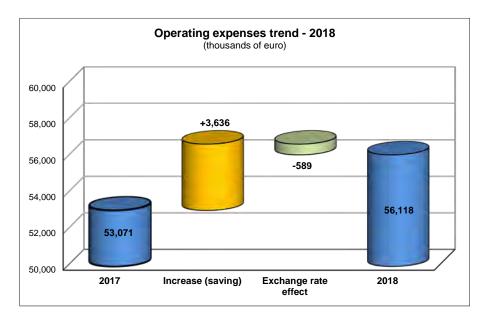
Consolidated operating expenses were 56,118 thousand euro (35% of revenues), compared to 53,071 thousand euro (36.1% of revenues) in the previous year. Excluding the impact of exchange rates (which reducing operating expenses by 589 thousand euro), the rise in operating expenses was +3,636 thousand euro. As already mentioned, note that 2018 was penalised by extraordinary operating expenses totalling 5,756 thousand euro, of which 2,656 thousand euro in severance costs of the Parent Company and 3,100 thousand euro in write-downs from impairment testing. The extraordinary expenses for 2017 instead amounted to 1,414 thousand euro (of which 303 thousand euro of costs for the liquidation of the German subsidiary Memry GmbH and 1,111 thousand euro in charges for suspending the OLET research project and for the consequent liquidation of E.T.C. S.r.l.).

Excluding the extraordinary expenses from both years, consolidated operating expenses in 2018 were 1,295 thousand euro lower than the previous year, above all due to lower variable remuneration of Executive Directors, partially offset by higher legal and consulting costs.

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⁷ In 2017, the provision for the long-term incentive relating to the three-year period 2015-2017 had been doubled as the performance achieved was better than the targets initially assigned.

The following chart shows the trend of the consolidated operating expenses in 2018, also showing the impact of exchange rates.



Overall, **labour costs** were 72,348 thousand euro in 2018 (of which 2,704 thousand euro in severance costs, mainly due to a reduction of the Parent Company's workforce) compared to 66,706 thousand euro (of which 394 thousand euro in severance costs, mostly relating to the liquidation of Memry GmbH and of E.T.C. S.r.l.) in 2017. Excluding the above-cited severance costs and the impact of exchange rates (-1,647 thousand euro), the increase of labour costs (+4,979 thousand euro) is due to the higher average number of employees at the US affiliates and to the boosting of the SAES Coated Films S.p.A. headcount, as well as to salary increases aimed at recovering inflation. Note that greater use of temporary workers, especially in the shape memory alloys segment and at the Avezzano plant of the Parent Company, in addition to increased allocations for the variable components of the remuneration at the affiliates that contributed the most to improvement of consolidated profit. These increases were only partially offset by the savings resulting from putting the subsidiaries Memry GmbH and E.T.C. S.r.l. in liquidation in 2017.

Net income for the year includes the **depreciation of property, plant and equipment and the amortisation of intangible assets** of 7,588 thousand euro, down against last year (8,085 thousand euro), due to the writedown of several assets recognised by the Parent Company at the end of 2017 following the suspension of the OLET research project and due to lower depreciation/amortisation of assets at the end of their useful life.

Consolidated EBITDA was 26,279 thousand euro in 2018 (16.4% of consolidated revenues,), significantly up (+43.5%) compared to 18,315 thousand euro recorded in 2017 (12.4% of consolidated revenues), mainly driven by the security & defence business and the vacuum systems segment, as well as both shape memory alloy businesses.

Excluding both the extraordinary costs for severance of the Parent Company (2,656 thousand euro), and the non-refundable grant from the State of CT to Memry Corporation (1,164 thousand euro), EBITDA would have been 27,771 thousand euro (17.3% of consolidated revenues).

The table below shows the reconciliation of EBITDA and operating income in 2018, together with a comparison with last year.

(thousands of euro)

	2018	2017	Total difference	Difference %
Operating income (loss)	15,066	9,092	5,974	65.7%
Depreciation and amortization Write-down of assets Bad debt provision (accrual) release	(7,588) (3,417) (208)	(1,181)	497 (2,236) (251)	
EBITDA % on net sales	26,279 16.4%	18,315 12.4%	7,964	43.5%

The net balance of **other income (expenses)** was a positive 932 thousand euro, against a negative balance of 40 thousand euro in 2017. The difference was mainly due to the revenues, of 1,164 thousand euro, recognised by the US affiliate Memry Corporation following the transformation of 50% of the loan granted by the state of Connecticut (CT) at year-end 2014 into a non-refundable grant (for further details, please see the paragraph entitled "Significant events in 2018").

Note that the amounts as at December 31, 2018 also included a gain of 136 thousand euro, made by the Parent Company on the sale of a machine, fully depreciated at the end of last year following the suspension of the OLET research project and an allocation to the risks fund of 87 thousand euro to cover a labour dispute between SAES Getters S.p.A. and the social security entities.

The net balance of **financial income** (**expenses**) was a negative -9,529 thousand euro, against a negative balance of -517 thousand euro in 2017. The negative difference (-9,012 thousand euro) is mainly due to the write-down of the financial receivable that the Group granted to Actuator Solutions GmbH (-9,139 thousand euro) against interest-bearing loans that SAES Nitinol S.r.l. granted to the joint venture during the previous years (from 2014 to 2018).

Following the restructuring of the Taiwan subsidiary, the shareholders' equity of Actuator Solutions GmbH dropped considerably and became negative, and in order for it to continue to operate, payment of the interest accrued in the period 2016-2018 on the loans granted by SAES was deferred to year-end 2019, and the total amount of the financial receivable (both principal and interest) was deferred. Management therefore decided to totally write down the financial receivable in spite of the business progress made by Actuator Solutions, since the growth prospects pointed out in the five-year plan, approved by the Supervisory Committee of the same company, show significant risk elements, above all linked to the innovativeness of the products and to the extent of the potential customers, with the consequent forecast of cash flows insufficient to recover the financial receivable SAES granted to Actuator Solutions.

The above-mentioned write-down was partially offset by lower interest expense on long-term loans due to the early repayments made in the second half of the current year, following the payment received for the sale of the purification business.

It should also be noted that in 2017, this item included the costs relating to the early repayment of both tranches of the loan for advanced Research and Development projects taken out in June 2015 by the Parent Company with EIB (European Investment Bank), as well as higher interest on the same loan (372 thousand euro, including both fees and interest), as well as income (of 577 thousand euro) for the adjustment of the present value of the financial debt relating to the purchase of the remaining 30% of SAES Coated Films S.p.A. (reduced by 652 thousand euro to 75 thousand euro, following a change in the value of the put and call option agreed by shareholders on January 30, 2018).

The loss deriving from the **valuation with the equity method** of the joint ventures totalled -1,473 thousand euro, almost exclusively attributable to the joint venture Flexterra, and compares to a cost of -2,468 thousand euro in the previous year. For further details on the breakdown of this loss, please refer to the paragraph entitled "Performance of the joint ventures in 2018" and to Note 8 and Note 16.

With regard to Actuator Solutions, note that as at December 31, 2018, the investment of SAES in Actuator Solutions had already been fully reduced to zero and since there is today no legal or implied obligation of its

recapitalisation by SAES, in accordance with IAS 28, the share pertaining to the Group of the net loss of Actuator Solution in 2018 was not recognised as a liability. Note that as at December 31, 2017 the negative measurement of the investment with the equity method recognised in the income statement was -1,000 thousand euro⁸, less than the pro-quota loss (-2,047 thousand euro) since, again according to IAS 28, the additional losses after the consolidated investment was reduced to zero were not recognised in the income statement.

With regard to Flexterra, impairment testing (for details of which refer to Note 16) led to a **write-down** of -4,300 thousand euro, which was added to the valuation with the equity method, to calculate the final value of the investment.

In any event, the Flexterra project made significant progress in 2018 (presentation of the first fully flexible electrophoretic display, which uses technology and materials developed by Flexterra at SID and signature of a JDA with a leading operator in the electrophoretic sector; for details, see the paragraph entitled "Performance of the joint ventures in 2018").

Based on the five-year plans approved by the Board of Directors of Flexterra, Inc. and introducing elements of prudence to the same with regard to the speed of implementation of future growth and using a WACC of 30% in line with the current stage of advanced development of the joint venture, impairment testing indicated a write-down of the investment of -4,300 thousand euro.

The algebraic sum of the **exchange rate differences** recorded a positive balance in 2018 of +523 thousand euro, compared to a negative balance of -1,156 thousand euro in the previous year. The positive amount of 2018 is mostly related to the release of a part of the translation reserve generated by the consolidation of SAES Getters/U.S.A., Inc. to the income statement after the partial reduction of the share capital of the US subsidiary in October 2018 (+360 thousand euro). The negative balance of last year was instead attributable to foreign exchange losses on commercial transactions, including intercompany, generated mainly by the devaluation of the dollar against the euro, and was only partly offset by the gains made on forward contracts entered into to partially hedge these transactions.

Consolidated income before taxes amounted to 287 thousand euro (+0.2% of consolidated revenues) compared to income before taxes of 4,951 thousand euro in the previous year (3.4% of revenues).

Excluding both the severance costs relating to the reduction of the Parent Company's workforce (-2,656 thousand euro), and the write-downs (totalling -16,539 thousand euro), that penalised the current year, consolidated income before taxes would have been 19,482 thousand euro (12.2% of consolidated revenues). If the non-refundable grant from the State of CT (+1,164 thousand euro) is also eliminated, consolidated income before taxes would be a positive 18,318 thousand euro (11.4% of consolidated revenues).

Income taxes in 2018 amounted to 7,967 thousand euro, compared to 17,604 thousand euro in the previous year. Note that the figure for 2017 included a write-down of 10,770 thousand euro, of deferred tax assets on past tax losses of SAES Getters S.p.A., made on the basis of updated assumptions of recoverability of the same. Net of this write-off, the increase in taxes in the current year compared to 2017 (+1,133 thousand euro) relates to the improvement in net operating income.

Excluding the write-downs that are insignificant for tax purposes or are non-deductible, which amounted to -15,848 thousand euro ¹⁰, the Group **tax rate** in the current year was 49.4%, still very high in spite of the reduction of the rate applied by the US companies for federal tax since the Parent Company, net of the capital gain realised on the sale of the investment in SAES Getters USA, Inc. (controlling company of SAES Pure Gas, Inc.) and discontinued in the item "Income (loss) from discontinued operations", closed 2018 with a negative taxable income that is not measured as deferred tax assets.

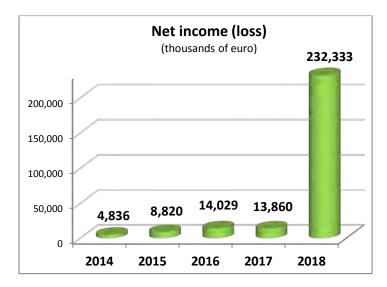
⁹ Write-down following impairment testing of the Advanced Packaging Solutions Cash Generating Unit of -3,100 thousand euro; write-down of the financial receivable due from Actuator Solutions GmbH of -9,139 thousand euro, and write-down following impairment testing of the investment in Flexterra of -4,300 thousand euro.

⁸ Note that the investment was already totally reduced to zero as at December 31, 2016 and that the loss recognised in 2017, which amounted to -1,000 thousand euro, coincided with the payment of capital made by SAES Nitinol S.r.l. on December 21, 2017.

¹⁰ Write-down following impairment testing of the goodwill allocated to the Advanced Packaging Cash Generating Unit of -2,409 thousand euro; write-down of the financial receivable due from Actuator Solutions GmbH of -9,139 thousand euro, and write-down following impairment testing of the investment in Flexterra of -4,300 thousand euro.

The **income from discontinued operations** was 240,013 thousand euro and was mostly represented by the gross capital gain (262,439 thousand euro) generated by the sale of the gas purification business, minus the costs of the transactions of -35,220 thousand euro (above all legal and consulting expenses, and the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, as well as interest, exchange rate differences and taxes). Lastly, this item includes the net profit generated by the gas purification business between January 1 and June 25, 2018 (effective sale date) of 12,794 thousand euro.

As at December 31, 2017, the income from discontinued operations was 26,513 thousand euro, substantially coinciding with the net income of the purification segment in 2017.



Consolidated net income in 2018 was 232,333 thousand euro (145% of consolidated revenues), compared to net income of 13,860 thousand euro (9.4% of consolidated revenues) last year.

Financial position – Investments – Other information

A breakdown of the items making up the consolidated net financial position is provided below.

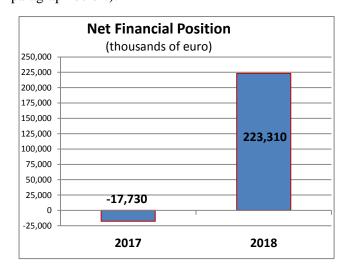
(thousands of euro)

	December 31, 2018	June 30, 2018	December 31, 2017 reclassified (*)	December 31, 2017
Cash on hands	9	11	13	13
Cash equivalents	170,592	302,633	27,551	27,551
Cash and cash equivalents	170,601	302,644	27,564	27,564
Related parties current financial assets	1	897	936	936
Current financial assets	1	897	936	936
Bank overdraft	(27,353)	(28,381)	(12,254)	(12,254)
Current portion of long term debt	(5,438)	(10,358)	(10,478)	(10,478)
Other current financial liabilities	(1,049)	(1,882)	(1,777)	(2,152)
Current financial liabilities	(33,840)	(40,621)	(24,509)	(24,884)
Current net financial position	136,762	262,920	3,991	3,616
Related parties non current financial assets	49	8,049	7,549	7,549
Securities	99,843	0	0	0
Non current financial assets	99,892	8,049	7,549	7,549
Long term debt, net of current portion	(13,344)	(21,981)	(28,057)	(28,057)
Other non current financial liabilities	0	0	0	(838)
Non current financial liabilities	(13,344)	(21,981)	(28,057)	(28,895)
Non current net financial position	86,548	(13,932)	(20,508)	(21,346)
Net financial position	223,310	248,988	(16,517)	(17,730)

^(*) For comparative purposes only, note that the "Other financial liabilities", both current and not current, of SAES Pure Gas, Inc. as at December 31, 2017 have been classified as if the sale transaction had already taken place at the end of the previous year.

The **consolidated net financial position as at December 31, 2018** was a positive 223,310 thousand (cash equal to +170,601 thousand euro and securities in the portfolio of +99,843 thousand euro, against net financial liabilities of -47,134 thousand euro), compared to a negative net financial position of -17,730 thousand euro as at December 31, 2017 (cash equal to +27,564 thousand euro, against net financial liabilities of -45,294 thousand euro).

Compared to December 31, 2017, the significant improvement of the net financial position (+241,040 thousand euro) is due to the <u>extraordinary sale transaction of the purification business</u> (the overall impact of this transaction on the net financial position was +262,976 thousand euro, details of which can be found in the paragraph below).

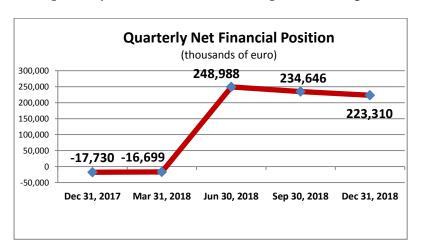


The operating cash flows only partially covered the dividends paid by the Parent Company at the beginning of May (-15,435 thousand euro, included in financing activities) and the outlay for investing activities (in particular, net investments in property, plant and equipment and intangible assets of 14,761 thousand euro and capital payments to Flexterra, Inc. of 6,201 thousand euro).

Lastly, the net financial position was penalised by the <u>write-down of the loans granted to the joint venture Actuator Solutions</u> (-9,139 thousand euro).

Exchange rates had a positive impact of around 0.7 million euro, mainly due to the effect of the revaluation of the US dollar on cash and cash equivalents in dollars as at December 31, 2018, compared to the end of 2017.

The chart below shows the quarterly trend of the net financial position during the current year.



The significant improvement in the net financial position in the second quarter of 2018 (+265,687 thousand euro) is due to the **sale of the gas purification business**.

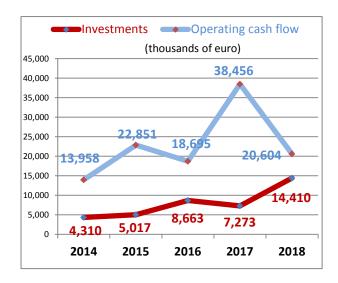
With regard to said extraordinary transaction, the **positive impact on the net financial position** was **262,976 thousand euro**, resulting from the amount received (303,765 thousand euro), minus the cash and cash equivalents of the company sold SAES Pure Gas, Inc. (2,706 thousand euro), and the financial payable (521 thousand euro) correlated to the negative adjustment of the price calculated on the basis of the value of working capital, cash and tax credit¹¹ on the closing date, as well as the accessory monetary charges of the extraordinary transaction (37,562 thousand euro¹²).

The decrease of the net financial position in the third quarter (-14,342 thousand euro) was solely due to the residual expenses relating to the above-mentioned sale transaction, which were made after the closing date, while the fall in the last quarter (-11,336 thousand euro) was mainly due to payments made to the share capital of Flexterra, Inc. (-6,201 thousand euro), as well as the write-down of the loans granted to the joint venture Actuator Solutions GmbH (-9,139 thousand euro).

submitted by the end of the first half of 2019.

This amount excludes the non-monetary income resulting from the release of the translation reserve to the income statement generated by the consolidation of the US companies sold (SAES Getters USA, Inc. and SAES Pure Gas, Inc.) of 2,342 thousand euro.

¹¹ The value of the adjustment could differ slightly depending on the effective value of the tax credit of the companies sold SAES Getters USA, Inc. and SAES Pure Gas, Inc. resulting from the Tax Return Declaration relating to January 1 - June 24, 2018, to be submitted by the end of the first half of 2019.



The cash flow generated by operating activities was a positive 20,604 thousand euro, compared to 38,456 thousand euro in 2017.

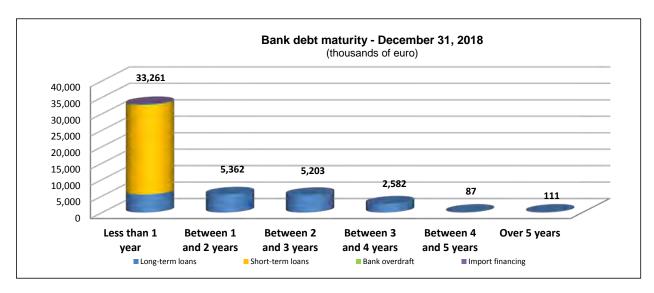
Excluding the cash flow from discontinued operations of 11,000 thousand euro (namely the cash flows generated by the purification business between January 1 and June 25, 2018), operating cash flows were a positive 9,604 thousand euro, mainly sustained by the Security & Defence business and by the Getter Components for Electronic Devices segment, as well as that of Nitinol for Medical Devices. **Net working capital** rose slightly against December 31, 2017, due both to the increase of the stock of the Security & Defence business and in the Medical SMAs segment, in preparation for future sales, and to the increase of the trade receivables of the US subsidiaries, following the progressive increase of sales against last year.

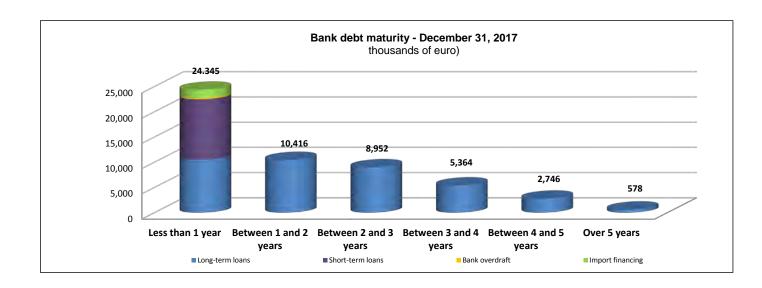
In 2018, cash outlay for **investments in property, plant and equipment** were 14,410 thousand euro, compared to 7,273 thousand euro in the previous year. Instead, investments in intangible assets were not significant (599 thousand euro compared to 378 thousand euro in 2017). The increase in capex in the current year, compared to 2017, was mostly due to investments made by the Parent Company for the installation of the new pilot line for the Advanced Packaging business, with a view to accelerating the development of products for flexible packaging. Note also the purchase of the land and the building where the production of SAES Coated Films S.p.A. takes place, as well as the advances paid both for the purchase of a second production line for the coating of plastic film, and of a new technologically more evolved metallisation plant, able to combine the metallisation process with the coating one.

For further details on the capital expenditure of the year, please refer to Notes 14 and 15.

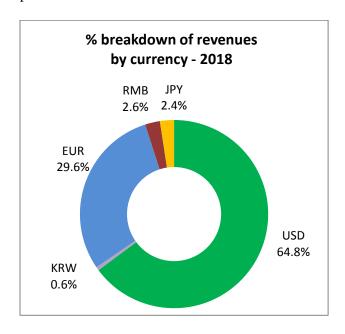
Again as regards **investing activities**, also note the above-cited net amount received for the **sale of the purification business** and the **capital contributions**, totalling 6,201 thousand euro made to the **joint venture Flexterra**, Inc.

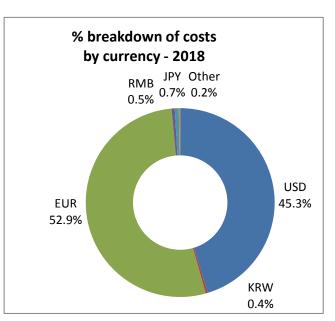
The following chart shows the **maturity profile** of **consolidated bank debt** as at 31 December, 2018 compared with the end of last year.



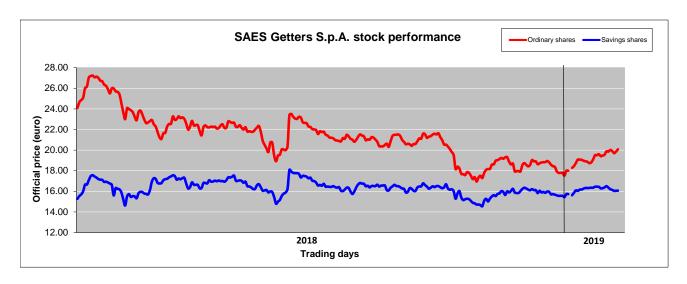


The **breakdown of revenues and costs** (cost of sales and operating expenses) **by currency** in 2018 is provided below.





The following chart shows the trend of the **official prices of ordinary and savings shares** in 2018 and in the first few weeks of 2019.



The value of ordinary shares, listed on the STAR Segment of the Mercato Telematico Azionario (electronic equity market) of Borsa Italiana, fell by -25.3% in 2018, against a reduction of 16.1% recorded by the FTSE MIB index and a fall of 16.9% recorded by the FTSE Italia Star index. On the other hand, the value of savings shares increased by +3%.

The following table shows the main financial statement indicators.

Ratios		2018	2017	2016
Operating income/Total net sales	%	9.4	6.2	13.8
Income before taxes/Total net sales	%	0.2	3.4	11.4
Net income from continued operations/Total net sales	%	-4.8	-8.6	7.4
Net income from continued operations/Average shareholders' equity (ROAE)	%	-3.6	-11.0	11.7
Research expenses/Total net sales	%	6.9	8.7	7.9
Depreciation of tangible assets/Total net sales	%	4.1	4.7	3.8
Cash flows from operating activities/Total net sales	%	12.9	26.1	9.9
Taxes/Income before taxes	%	2,776.0	355.6	35.0
Total net sales/Average number of employees (*)	k euro	174	161	186
Accumulated depreciation/Tangible assets	%	70.7	73.6	71.8

^(*) Calculated without considering the employees of the joint ventures, evaluated using the equity method.

Performance of subsidiaries in 2018

SAES GETTERS/U.S.A., Inc. (formerly SAES Colorado, Inc.), Colorado Springs, CO (USA)

To finalise the sale of the purification business, in June 2018, a process of legal and corporate reorganisation was undertaken, which involved part of the US companies of the SAES Group. More specifically, on June 15, 2018 SAES Getters USA, Inc., the controlling company of SAES Pure Gas, Inc., sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly-incorporated company called SAES Colorado, Inc., subsequently renamed SAES Getters/USA, Inc., which continues to belong to the SAES Group. Among the assets transferred by SAES Getters USA, Inc. to SAES Getters/U.S.A., Inc. was its 100% stake in Spectra-Mat, Inc. On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling entity of the investment in SAES Pure Gas, Inc., was sold to Entegris, Inc.

The following paragraphs comment on the performance of SAES Getters/U.S.A., Inc. and Spectra-Mat, Inc. ¹³ in 2018. Note that as regards the comments on SAES Getters/U.S.A., Inc., to better understand the variances with respect to the previous year, the revenues and costs of SAES Getters/U.S.A., Inc. ¹⁴ have been added to those of SAES Getters USA, Inc. ¹⁵.

The US parent company *SAES Getters USA*, *Inc.*, which operates primarily in the Industrial Applications Business Unit, closed 2018 with revenues of 18,996 thousand USD (corresponding to 16,084 thousand euro), compared to 15,162 thousand USD (corresponding to 13,426 thousand euro) in 2017: this increase (+25.3%) was mainly concentrated in Security & Defence segment.

The company recorded net income of 17,436 thousand USD (corresponding to 14,764 thousand euro), against a net income of 10,168 thousand USD (corresponding to 9,004 thousand euro) in 2017: this significant increase was due to the gain ¹⁶, after tax, made on the above-mentioned transfer of the net assets of SAES Getters USA, Inc. to SAES Getters/U.S.A., Inc., only partially offset by the negative valuation at equity of the investment in the subsidiary SAES Pure Gas, Inc., which closed the period between January 1 and June 25, 2018 ¹⁷ at a loss due to costs for incentives and severance relating to the sale of the company to Entegris, Inc.

The subsidiary *Spectra-Mat, Inc.*, Watsonville, CA (USA), operating in the Sintered Components for Electronic Devices & Lasers Business, recorded revenues of 8,678 thousand USD in 2018, corresponding to 7,348 thousand euro (7,662 thousand USD in the previous year, corresponding to 6,785 thousand euro) and net income of 686 thousand USD, corresponding to 581 thousand euro (987 thousand USD in 2017, corresponding to 874 thousand euro). The fall in net income, despite higher sales in the Thermal Management segment, particularly for defence application, is due to the fall in the gross profit margin resulting from a different mix, characterised by a greater use of raw materials. The result for 2017 had also benefitted from the positive impact on taxes resulting from a recalculation of deferred tax liabilities using the new tax rate applicable to Federal tax from 2018 (cut from 34% to 21%).

SAES GETTERS EXPORT Corp., Wilmington, DE (USA)

The company, of which SAES Getters S.p.A. is the direct controlling company, manages the exports of all the US companies of the Group.

In 2017 it recorded a net income of 11,255 thousand USD (9,530 thousand euro), down by 35.1% against the previous year (17,339 thousand USD, corresponding to 15,353 thousand euro) mainly due to lower commissions received by the affiliate SAES Pure Gas, Inc., following the sale of the latter on June 25, 2018.

SAES GETTERS (NANJING) Co., Ltd., Nanjing (People's Republic of China)

The company manages the commercial activities of the Group in the Republic of China. In the first half of 2018, as part of the sale of the purification business to Entegris, Inc., the Chinese subsidiary sold its sales office in Shanghai, which provided support to SAES Pure Gas, Inc. in the Asian market, making a net gain of 41,608 thousand RMB¹⁸ (corresponding to 5,329 thousand euro).

SAES Getters (Nanjing) Co., Ltd. closed 2018 with revenues of 42,654 thousand RMB (5,463 thousand euro), down by 10.8% compared to 47,816 thousand RMB (6,270 thousand euro) in the previous year, due mainly to lower commission income ¹⁹ collected from the affiliate SAES Pure Gas, Inc., following already mentioned sale of the latter in June 2018. Despite the decrease in sales, the higher dividends

¹⁸ Gross gain of 53,517 thousand RMB and accessory sale costs (including taxes) of 11,909 thousand RMB.

¹³ Subsidiaries included in the scope of consolidation as at December 31, 2018.

¹⁴ Revenues and costs relating to June 16 - December 31, 2018.

¹⁵ Revenues and costs relating to January 1 - June 15, 2018.

¹⁶ Note that, as this is intercompany income, it is not recognised in the consolidated results.

¹⁷ Date of sale.

¹⁹ Commission income received for sales assistance provided by SAES Getters (Nanjing) Co., Ltd. to SAES Pure Gas, Inc. for the sale of purifiers in China.

received from SAES Getters International Luxembourg S.A. (in which SAES Getters (Nanjing) Co., Ltd. owns a 10% stake), together with the above-mentioned net gain resulting from the sale of the sales office in Shanghai, enables it to close the year with a net income of 49,910 thousand RMB (6,392 thousand euro), up significantly compared to 15,162 thousand RMB (1,988 thousand euro) recorded last year.

MEMRY GmbH in liquidation, Weil am Rhein (Germany)

The company, which manufactured and marketed shape memory alloy components for both medical and industrial applications in the European market, after having transferred all its manufacturing and sales activities to other Group companies²⁰ in October 2017 commenced the liquidation process, which is expected to last around one year.

Following the commencement of liquidation proceedings, Memry GmbH closed the current year with an income of almost nothing (+16 thousand euro), against a net income of 3,141 thousand euro in 2017 (the company had been operational for a fair part of the previous year and had also recorded some intercompany²¹ income resulting from the transfer of its production and sales activities to other Group companies).

SAES NITINOL S.r.l., Lainate, MI (Italy)

The corporate purpose of the company, wholly owned by SAES Getters S.p.A., is the design, production and sale of shape memory alloy instruments and actuators, getters and any other equipment for the creation of high vacuum devices, either directly or by means of interests and investments in other companies. In order to achieve its corporate purpose, on July 5, 2011, the company established the joint venture Actuator Solutions GmbH, together with the German group Alfmeier Präzision (for further details on the joint venture, please refer to following paragraph and to Notes 8 and 16 of the Consolidated financial statements).

SAES Nitinol S.r.l. closed the current year with a loss of -8,969 thousand euro against as loss of -800 thousand euro in 2017. The significant negative difference (-8,169 thousand euro) is mainly due to the write-down of the financial receivable that the company is due from Actuator Solutions GmbH (-9,139 thousand euro) against interest-bearing loans granted up until December 31, 2018 (for further details, refer to Note 20 of the Consolidated financial statements). The loss recorded in the previous year, instead, was mainly due to the write-down (of -1,000 thousand euro) of the investment in the same joint venture²². Lastly, note that on March 14, 2018 SAES Getters S.p.A. approved the partial waiver of the financial receivable due to the same by SAES Nitinol S.r.l. for an amount of 660 thousand euro, equal to the difference between the total loss (-800 thousand euro) recorded by the subsidiary in 2017 and that estimated for the same year at the beginning of the year (-140 thousand euro) and already covered by the payment made by the Parent Company on March 15, 2017.

E.T.C. S.r.l. in liquidation, Lainate, MI (Italy)

The company, a spin-off supported by the National Research Council (CNR), operated from 2010 to 2017 exclusively as a research centre to develop functional materials for applications in Organic Electronics and Organic Photonics, as well as to develop integrated organic photonic devices for niche applications. Following a review of the company's growth prospects and the suspension of the OLET (Organic Light Emitting Diodes) research project, on November 16, 2017, the Shareholders' Meeting of E.T.C. S.r.l. resolved to wind up the company in advance and place it in liquidation (the liquidation process is expected to be completed before the end of 2019).

Due to the fact that it had been placed in liquidation, E.T.C. S.r.l. closed 2018 with a net loss of -45 thousand euro, significantly lower than the loss of -799 thousand euro recorded in 2017 (lower personnel costs and lower charge-backs from the Parent Company).

²⁰ Memry Corporation, SAES Smart Materials, Inc. and SAES Getters S.p.A. (Avezzano plant).

As this is intercompany income, it will not be recognised in consolidated net income.

²² Note that this investment was fully written down both at December 31, 2018 and at the end of the previous year.

Note that in January 2018, the dispute with the employees of E.T.C. S.r.l., dismissed for objective just cause on October 31, 2017, following the elimination of the position due to the liquidation of the company, was formally closed. More specifically, on January 22, 2018 the conciliation document was signed by the trade union association, in which the parties acknowledge that they may claim nothing more from one another. The financial obligation that emerges from this document coincides with the amount already allocated to the provisions for risks and charges as at December 31, 2017 (0.2 million euro).

Lastly, note that the joint venture Flexterra, Inc. had a commitment as at December 31, 2018 to purchase the package of intellectual property developed by E.T.C. S.r.l. as regards OLET. As the value of these patents is not included under assets, the sale will generate a gain corresponding to the sale price (2.6 million USD, appraised by an independent third party).

SAES COATED FILMS S.p.A. (formerly Metalvuoto S.p.A.) – Roncello, MB & Lainate²³, MI (Italy)

SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A.²⁴), based in the province of Monza Brianza, is a well-established player in the field of advanced packaging, producing metallised and innovative plastic films for food preservation. More specifically, SAES Coated Films S.p.A. intends to compete in the advanced food packaging sector, entering the market with a complete and innovative range of high performance active plastics, characterised by transparency, recyclability or compostability and therefore a low environmental impact.

Note that, on February 26, 2018, SAES Getters S.p.A. exercised a call option for the purchase of the entire share capital of the Roncello company, 70% of which was already in its possession. Following this transaction, SAES acquired the remaining 30% previously held by the minority shareholder Mirante S.r.l., for a consideration of 75 thousand euro. Note that the consolidated financial statements of the SAES Group as at December 31, 2017 already included a financial payable of the same amount, related to the value of the above option, and that Metalvuoto S.p.A. was already 100% consolidated without recognition of minority interests.

In 2018, SAES Coated Films S.p.A. recorded revenues of 11,480 thousand euro, slightly down against 12,445 thousand euro recorded last year: the fall was exclusively due to lower sales of metallised products (planned reduction of the portfolio to eliminate products with lower returns), only partly offset by the increase in revenues from coated products (better returns). The company closed the current year with a net loss of -2,847 thousand euro, lower than the -371 thousand euro recorded as at December 31, 2017 due both to the fall in sales, and to difficulties encountered in the procurement of nylon raw materials, which had a negative impact on the gross profit margin, as well as higher personnel costs (expansion of the salesforce) and higher costs for services provided by the Parent Company and charged back to SAES Coated Films S.p.A.

Lastly, note that on April 5, 2018 SAES Getters S.p.A. approved a payment to the capital account of 3 million euro, to create an extraordinary reserve to cover any future losses and with a view to future investments.

SAES INVESTMENTS S.A., Luxembourg (Luxembourg)

SAES Investments S.A., based in Luxembourg and wholly owned by SAES Getters S.p.A., was formally incorporated on October 23, 2018. Its corporate purpose is to manage the liquidity resulting from the sale of the purification business, with the objective of maintaining capital for any future uses.

The company closed the current year with a loss of 250 thousand euro, mainly due to the fair value measurement of securities in the portfolio as at December 31, 2018.

SAES GETTERS INTERNATIONAL LUXEMBOURG S.A., Luxembourg (Luxembourg)

The company's main purposes are the management and the acquisition of investments, the optimal cash management, the grant of intra-group loans and the coordination of the Group services.

²³ On June 1, 2018, SAES Coated Films S.p.A. opened a local unit in Lainate, at the headquarters of the Parent Company.

²⁴ On April 5, 2018, the extraordinary Shareholders' Meeting resolved to change the name from Metalvuoto S.p.A. to SAES Coated Films S.p.A. in order to achieve greater recognisability on the market.

In 2018, the company recorded a net income of 8,616 thousand euro, compared to net income of 4,668 thousand euro in 2017: the improvement was due to the higher dividends received from the subsidiaries SAES Smart Materials, Inc. and Memry Corporation, only partly offset by the higher write-down of the investment in Flexterra, Inc. following impairment testing.²⁵

Some notes on the performance of the subsidiaries of SAES Getters International Luxembourg S.A. are provided below.

SAES Getters Korea Corporation, Seoul (South Korea) is 62.52% owned by SAES Getters International Luxembourg S.A., whereas the remaining share capital is held directly by the Parent Company SAES Getters S.p.A. The company closed its production activities in 2011 and operates as a distributor in Korea for the products manufactured by other Group companies.

In 2018, the company recorded revenues of 1,319 million KRW (1,015 thousand euro), slightly down compared to 1,444 million KRW (1,132 thousand euro) in the previous year due to lower sales mainly in the Organic Electronics business. The period closed with a loss of 409 million KRW (-315 thousand euro), compared to a loss of 337 million KRW (-264 thousand euro) in 2017: the lower result of the period was due to lower sales and to foreign exchange losses resulting from the conversion of the financial receivable into euro that is due to the Korean affiliate by the Parent Company, following the revaluation of the Korean won against the euro.

SAES Smart Materials, Inc., based in New Hartford, NY (USA), which develops, manufactures and sells Nitinol semi-finished products, recorded revenues of 19,724 thousand USD (16,701 thousand euro) in 2018, up by 15.5% compared to 17,082 thousand USD (15,126 thousand euro) in 2017. The increase in sales, together with the improvement of the gross profit margin, enabled the company to close the period with a higher net income by 23% against that of the previous year (4,827 thousand USD, corresponding to 4,087 thousand euro, in 2018, against 3,924 thousand USD, corresponding to 3,474 thousand euro in 2017).

Memry Corporation, Bethel, CT (USA), is a technological leader in the new generation medical devices with high engineering value sector, made of Nitinol shape memory alloys.

The company recorded sales of 73,907 thousand USD (62,580 thousand euro) in 2018, compared to 65,012 thousand USD (57,569 thousand euro) in the previous year: the increase (+13.7%) was driven by the expansion of its target markets, with some segments (such as neuro-vascular and electrophysiology) characterised by above average growth. Net income amounted to 14,229 thousand USD (12,049 thousand euro), also significantly higher (+36.4%) compared to a net income of 10,431 thousand USD (9,237 thousand euro) in 2017, thanks to the increase in revenues, in production efficiency and to the income of 1,375 thousand euro resulting from the transformation of 50% of the loan granted by the State of Connecticut (CT) at the end of 2014 into a non-refundable grant. This grant, together with the early payment at the end of July 2018 of the residual amount of the long-term loan granted by Unicredit in 2009, also resulted in a reduction of income expense.

Lastly, note that on December 17, 2018 Memry Corporation signed a preliminary agreement for the purchase of the property located in Bethel (CT). The price agreed by the parties for the transaction is 5.8 million USD and, to be able to proceed with this transaction, Memry Corporation paid an initial advance of 290 thousand USD at the end of 2018. The closing of the transaction is expected by the end of the first quarter of 2019, following the completion of the due diligence and of the environmental assessment.

²⁵ In 2018, SAES Getters International Luxembourg S.A. made two capital contributions to Flexterra, Inc. totalling 7.1 million USD. For further details see "Significant events in 2018".

Performance of the joint ventures in 2018

ACTUATOR SOLUTIONS GmbH, Gunzenhausen (Germany)

Actuator Solutions GmbH is based in Gunzenhausen (Germany) and is 50% jointly owned by SAES and Alfmeier Präzision, a German group operating in the fields of electronics and advanced plastic materials. This joint venture, which consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd., is focused on the development, production and sale of actuators that use shape memory alloys in place of the engine.

Actuator Solutions recorded net revenues of 22,922 thousand euro in 2018, down by 15.3% compared to 27,075 thousand euro in 2017. The revenues of the current year are almost entirely attributable to the German seat comfort business, which continues to record an uptrend (+3.2%), against a fall in the sales of autofocus (AF) for action cameras of the Taiwan company (revenues of 23 thousand euro as at December 31, 2018, against 4,548 thousand euro last year).

Net income in 2018 was a negative -1,074 thousand euro, compared to a loss of -4,093 thousand euro in 2017: the improvement is mainly due to the recovery of profit margins by the German segment, also favoured by economies of scale resulting from higher sales, and to the lower costs of the Taiwan subsidiary, following the reorganisation made last year with a view to closing the Zhubei plant, outsourcing production activities and focusing Actuator Solutions Taiwan Co., Ltd.'s efforts on research and development projects.

Lastly, note that the loss recorded as at December 31, 2018 included extraordinary expenses of around 0.8 million euro (1.4 million euro of extraordinary expenses as at December 31, 2017), relating to the continuing process to outsource production, also as regards the Chinese subsidiary, net of which Actuator Solutions closed the current year with positive operating income of around 0.7 million euro and substantially at break-even in terms of net income.

(thousands of euro)

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Actuator Solutions	2018	2017
	100%	100%
Total net sales	22,922	27,075
Cost of sales	(18,865)	(24,467)
Gross profit	4,057	2,608
% on net sales	17.7%	9.6%
Total operating expenses	(4,500)	(5,382)
Other income (expenses), net	384	(7)
Operating income (loss)	(59)	(2,781)
% on net sales	-0.3%	-10.3%
Interests and other financial income, net	(616)	(709)
Foreign exchange gains (losses), net	12	(460)
Income taxes	(411)	(143)
Net income (loss)	(1,074)	(4,093)

The share of the SAES Group in the 2018 result of this joint venture is -537 thousand euro (-2,047 thousand euro in 2017). However, as at December 31, 2018, the investment of SAES in Actuator Solutions had already been fully reduced to zero and since there is today no legal or implied obligation for SAES, to recapitalise Actuator Solutions, in accordance with IAS 28, the share pertaining to the Group of the net loss of Actuator Solution in 2018 was not recognised as a liability. Note that as at December 31, 2017 the negative measurement of the investment with the equity method recognised in the income statement was 1,000 thousand euro²⁶, less than the pro-quota loss (-2,047 thousand euro) since, again according to IAS

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²⁶ Note that the investment was already totally reduced to zero as at December 31, 2016 and that the loss recognised in 2017, which amounted to -1,000 thousand euro, coincided with the payment of capital made by SAES Nitinol S.r.l. on December 21, 2017.

28, the additional losses after the consolidated investment was reduced to zero were not recognised in the income statement.

SAES RIAL VACUUM S.r.l., Parma, PR (Italy)

SAES RIAL Vacuum S.r.l., established at the end of 2015, is jointly controlled by SAES Getters S.p.A. (49%) and Rodofil s.n.c. (51%). The company specialises in the design and manufacture of vacuum chambers for accelerators, synchrotrons and colliders and combines the expertise of SAES in the field of materials, vacuum applications and innovation, with the experience of Rodofil in the design, assembling and fine mechanical productions, with the aim of offering absolutely excellent quality products and of successfully competing in the international markets.

SAES RIAL Vacuum S.r.l. closed 2018 with revenues of 2,637 thousand euro, up by 8.4% compared to 2,433 thousand euro recorded in 2017.

Despite the higher sales, the current year closed with a net income of 51 thousand euro, down against 323 thousand euro recorded in 2017, mainly due to the fall in the gross profit margin resulting from a different product mix and higher taxes.

(thousand	s or curor

SAES RIAL Vacuum S.r.l.	2018	2017
	100%	100%
Total net sales	2,637	2,433
Cost of sales	(2,126)	(1,847)
Gross profit	511	586
% on net sales	19.4%	24.1%
Total operating expenses	(348)	(344)
Other income (expenses), net	(46)	104
Operating income (loss)	117	346
% on net sales	4.4%	14.2%
Interests and other financial income, net	(22)	(21)
Foreign exchange gains (losses), net	0	0
Income taxes	(44)	(2)
Net income (loss)	51	323

The share of the SAES Group in the 2018 net income of this joint venture amounted to +25 thousand euro (compared to +158 thousand euro last year).

FLEXTERRA, Inc., Skokie, IL (USA)

Flexterra, Inc. based in Skokie (close to Chicago, Illinois, USA), was established at the end of 2016 as a development start-up for the purpose of designing, manufacturing and selling materials and components for the production of truly flexible displays.

Starting from January 10, 2017 Flexterra, Inc. fully controls Flexterra Taiwan Co., Ltd.

In 2018, the Flexterra project made significant progress.

At the end of May 2018, Flexterra, in cooperation with E Ink, an important manufacturer of electrophoretic screens, presented the first fully flexible electrophoretic display, which uses technology and materials developed by Flexterra at SID in Los Angeles.

In the following months, Flexterra signed a Joint Development Agreement with a leading player in the electrophoretic display segment, achieving the commercial milestone envisaged by the initial agreements between the partners. The partner with whom Flexterra is developing the product innovation has already invested in production facilities and is forging ahead with the production industrialisation stage, with production start-up envisaged in the second half of 2019.

SAES, which as at December 31, 2017 held 33.79% of the share capital of the joint venture Flexterra, Inc., on 5 October 2018, through the subsidiary SAES Getters International Luxembourg S.A. after Flexterra, Inc., contributed a further 4.5 million USD to the capital, after Flexterra had achieved the abovementioned milestone. On December 12, 2018, SAES contributed a further 2.6 million USD to the share capital, bound by the purchase of patents²⁷ in the OLET field, developed by the Group company E.T.C. S.r.l.

Following the share capital increases subscribed by SAES Getters International Luxembourg S.A., in which the other partners did not participate, or to which they only partially contributed, SAES's share in the share capital of Flexterra, Inc. rose progressively to 42.23% on October 5 and to 46.73% on December 12, 2018.

Flexterra, which qualifies as a joint venture, closed 2018 with a net loss of -4,153 thousand euro, against -4,810 thousand euro last year (mostly costs for the employees involved in research and general and administrative work, consulting, costs relating to the management of patents and amortisation of intangible assets conferred by several third parties at the time the company was established). The lower loss was mainly due to lower personnel costs, due to the gradually more efficient use of resources, together with the reduction of consulting, which had been higher in the company's first year of business as related to the start-up of operations. By contrast, higher costs for the management of parents and licences were recorded.

(thousands of euro)

Flexterra	2018	2017
	100%	100%
Total net sales	35	29
Cost of sales	(7)	(3)
Gross profit	28	26
% on net sales	80.0%	89.7%
Total operating expenses	(4,161)	(4,924)
Other income (expenses), net	0	(147)
Operating income (loss)	(4,133)	(5,045)
% on net sales	n.a.	n.a.
Interests and other financial income, net	(8)	7
Foreign exchange gains (losses), net	(62)	92
Income taxes	50	136
Net income (loss)	(4,153)	(4,810)

The share of the SAES Group in the net income for 2018 of this joint venture amounted to -1,498 thousand euro²⁸ (compared to -1,626 thousand euro last year).

Lastly, note that impairment testing led to a write-down of SAES's investment in Flexterra of -4,300 thousand euro, which was added to the valuation with the equity method, to calculate the final value of the investment. For further details on the impairment testing, please see Note 16.

The following table shows the Group's statement of **comprehensive income** (loss), obtained by incorporating the Group's joint ventures with the proportional method instead of the equity method.

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²⁷ Note that the value of the intellectual property of E.T.C. S.r.l. has been subject to an appraisal carried out by an independent third party.

28 The pro-rata result was calculated by taking the progressive increases of SAES's share of Flexterra's share capital during 2018.

	2018							
(thousands of euro)	Consolidated profit or loss	50% Actuator Solutions	Intercompany eliminations & other adjustments	49% SAES RIAL Vacuum S.r.l.	Intercompany eliminations & other adjustments	46.73% Flexterra (*)	Intercompany eliminations & other adjustments	Total profit or loss of the Group
Total net sales	160,284	11,461	(687)	1,292	(150)	13		172,213
Cost of sales	(90,032)	(9,433)	687	(1,042)	150	(2)		(99,672)
Gross profit	70,252	2,028	0	250	0	11		72,541
% on net sales	43.8%							42.1%
Total operating expenses	(56,118)	(2,250)		(171)		(1,504)	(4,300)	(64,343)
Other income (expenses), net	932	192		(22)		(1)		1,101
Operating income (loss)	15,066	(30)	0	57	0	(1,494)	(4,300)	9,299
% on net sales	9.4%							5.4%
Interests and other financial income, net	(9,529)	(308)	4,570	(11)		(2)		(5,280)
Income (loss) from equity method evaluated companies	(1,473)		0		(25)		1,498	0
Write-down of investments in equity method evaluated companies	(4,300)						4,300	0
Foreign exchange gains (losses), net	523	6		0		(20)		509
Income (loss) before taxes	287	(332)	4,570	46	(25)	(1,516)	1,498	4,528
Income taxes	(7,967)	(205)		(21)		18		(8,175)
Net income (loss) from continued operations	(7,680)	(537)	4,570	25	(25)	(1,498)	1,498	(3,647)
Income (loss) from discontinued operations	240,013	0		0		0		240,013
Net income (loss) before minority interest	232,333	(537)	4,570	25	(25)	(1,498)	1,498	236,366
Net income (loss) pertaining to minority interest	0							0
Net income (loss) pertaining to the Group	232,333	(537)	4,570	25	(25)	(1,498)	1,498	236,366

^(*) SAES percentage in the share capital of Flexterra, equal to 33.79% at the beginning of the year, progressively increased to 46.73% as at December 31, 2018, following the capital increases subscribed by SAES Getters International Luxembourg S.A. respectively on October 5 and on December 12, 2018, to which the other shareholders did not partecipate, or only partially contributed. Therefore, the pro-quota revenues and costs have been calculated taking into account these progressive increases of the investment.

Certification pursuant to article 2.6.2., paragraph 12, of the Regulation for Markets organised and managed by Borsa Italiana S.p.A.

With regard to article 36 of Consob's Market Regulation no. 16191 of 29/10/2007, specifically the requirements for the listing of companies controlling companies incorporated or regulated according to the laws of countries that do not belong to the European Union and which are significantly relevant to the Consolidated financial statements, note that (i) the Group companies listed below are covered by the regulatory provision, (ii) adequate procedures have been adopted to ensure full compliance with the aforesaid regulation and (iii) the conditions set forth in article 36, cited, are met.

The following are considered companies of significant relevance, as at December 31, 2018, they exceeded the individual significance parameters envisaged by article 151 of the Issuers' Regulations:

- SAES Getters/U.S.A., Inc. Colorado Springs, CO (USA);
- SAES Smart Materials, Inc. New Hartford, NY (USA);
- Memry Corporation Bethel, CT (USA);
- SAES Getters Export, Corp. Wilmington, DE (USA);
- SAES Getters (Nanjing) Co., Ltd. Nanjing (People's Republic of China).

Research, Development and Innovation

Research and development expenses in 2018 totalled 10,988 thousand euro (6.9% of consolidated net revenues), compared to 12,797 thousand euro the previous year (8.7% of consolidated net revenues).

In 2018, the **organic materials laboratory** was highly focused on **improving** the **Oxaqua**[®] **coating**. This activity was successfully concluded with the registration of a patent application, which has already obtained the first positive responses. The new coating, which is resistant to the thermal treatments typical of the food industry, namely sterilisation and pasteurisation, and performs markedly better as a barrier against humidity, was also developed with the assistance of third parties and is based on very innovative technologies, such as emulsification, which enables polymeric microspheres to be produced. The latter can also be used for other applications besides food.

The laboratory also launched a partnership with the University of Salerno, with which it is working on two projects to **develop crystalline polymers** (PS and PPO) which have interesting properties both as absorbents and as materials able to release active antimicrobial properties, which may be used in packaging.

The laboratory then worked on developing various configurations of a **coating to absorb ethylene** and on a formulation able to guarantee integration in rigid trays for a type of application known on the market as the "fourth range", in which the management of the ethylene enables specific degradation mechanisms to be resolved, together with problems linked to excessive gas pressure, with the consequent loss of the seal of containers.

Lastly, note that the definition of a **pilot line** has been completed, which will enable different types of coating to be tested and to fine-tune innovative thin-film deposition technologies. The line, which has already been ordered, will be installed in 2019 and will enable the development of products for flexible packaging to be developed, operating at the same conditions as an industrial production line, but adopting flexible films with smaller size brackets.

Again in the field of organic materials, the joint venture **Flexterra**, in cooperation with the largest global manufacturer of electrophoretic screens, the Taiwan company E Ink, achieved an important objective with the presentation of the first fully flexible electrophoretic display, which uses technology and materials developed by Flexterra at SID in Los Angeles, the leading global exhibition of displays.

The display aroused considerable interest from potential users and at present, with the collaboration of an important Taiwan manufacturer, the product is being industrialised, which will see the SAES Group, as the industrial partner, involved in the production and supply of chemical formulations.

The development of an **antifog coating for automotive applications** is also worth noting, to avoid the cameras for assisted parking fogging up. A coating based on zeolites was fine-tuned, and preparatory activities are underway for a patent application.

Numerous product development activities continued at **SAES Coated Films S.p.A.** These included deposition testing of SAES coatings on compostable substrates, namely achieved without the use of fossilfuel polymers; these tests produced positive results in terms of characteristics, both regarding the barrier and mechanical properties and this is a result of exceptional importance as it will enable the Group to start promoting a highly innovative film on the market, which meets the increasingly pressing need to limit or eliminate fossil-fuel plastic from packaging.

The **metallurgic laboratory** focused on several projects relating to Shape Memory Alloys (SMA) and on an important area of research on bio-resorbable materials. More specifically, **as regards SMA**, the laboratory continued its work on researching **new alloys, both at high transformation temperatures, and at zero hysteresis**. These are very complex research activities that require a very high number of tests, both in the laboratory and on pilot lines, the results of which are due in the first half of 2019.

Again in the Shape Memory Alloys sector, work to improve the industrial processes for the production of shape memory materials continued successfully. Thanks to these activities, we were able to develop an **extremely pure or "clean melt" material, which can be used in mobile phone cameras**. The material guarantees performance that the other materials available on the market are unable to provide and gives SAES a competitive advantage in a business which, according to the latest data, will develop rapidly in 2019.

Lastly, in 2018, the metallurgic laboratory made **SMA alloy thin-film deposition tests**, using the thin-film deposition machine that the laboratory owns. Initial tests enabled new compositions to be identified. In the coming months, work will continue, also in collaboration with external entities.

As regards bio-resorbable alloys, work was conducted in collaboration with other Italian and North American research institutes. Efforts have focused on alloys with a FeMn base and the most interesting field of application appears to be orthopaedics. At present, interviews are underway with cardiologists and

orthopaedics, to gain a better understanding of the opportunities and the problems of these interesting materials.

Lastly, please note that all of the basic research costs incurred by the Group are charged directly to the income statement in the year in which they occur as they do not qualify for capitalisation.

Group's main risks and uncertainties

Based on the requirements of Italian Legislative Decree 32/2007, a brief illustration of the main risks and uncertainties to which the Group is exposed is provided below, together with the main measures set in place to mitigate said risks and uncertainties.

Strategic risk

Sector risk

Some of the businesses in which the SAES Group operates are particularly sensitive to the trends of macroeconomic indicators (GDP trend, level of consumer confidence, availability of cash and of public funding, etc.). More specifically, some sectors, such as thermodynamic solar power, large-scale physics projects, technologies for low energy consumption lighting and applications for the defence market, have been influenced, also in 2018, by changes in political decisions regarding public investment. The impact on the Group has been a fall in demand for getter solutions for lamps and the temporary delay of several projects for the construction of thermodynamic solar power stations. Revenues from getters for the Security & Defence sector instead rose against the previous year, due to the resumption of public sector investment in this area.

The SAES Group responds to these risks by seeking to diversify its product range and to expand into markets that are less dependent on the economic cycle, such as the medical and food industries, at the same time rebalancing and rationalising the structure of fixed costs, maintaining the departments (engineering, applied research etc.) that are needed to guarantee that production facilities can react quickly when sectors in difficult show signs of recovery.

The sale, finalised at the end of June 2018, of the gas purification business, exposed to the cyclical nature of the semiconductor industry, was also a part of a strategy to focus on businesses with a greater level of stability.

Another external factor that cannot be influenced by SAES is changing legislation in the countries in which the Group distributes its products or in those where SAES's customers' markets are located. This legislation and the consequent operating practices are particularly important in the industrial lamps business, where the market is often influenced by requirements regarding the environmental, or those regarding applications for the medical market: think, for example of the indirect impact of the welfare laws on the customers of these applications, or of the frequent need for institutional entities to certify the products of customers in which the technologies (or the products themselves as components) of the Group have been applied. Think also of the case in which the above-mentioned certifications are awarded, but with a delay with respect to the timing envisaged, which delays the payback of the investments made by the Group to support the development and industrialisation of new products.

Another area in which legislative changes can influence market opportunities for SAES is the packaging industry. The functional polymer technology developed by SAES facilitates the development of recyclable plastic film as well as making the use of plastic film that does not originate from oil, and is therefore compostable, possible. The use of these materials on the market is therefore sensitive to the introduction of legislation that seeks greater eco-sustainability, at a time when the general public is increasingly focused on the environmental impact of plastic. The acceleration or large-scale implementation of these laws could have a positive impact on the success of the Group's innovative food packaging products on the market.

SAES seeks to mitigate the risks relating to changes in legislation by monitoring, where possible, legislative and macroeconomic trends, also by joining national and transnational associations, to anticipate the impact of any changes, maintaining its focus on the development of its products, to be able to innovate the range when needed and to anticipate sector trends; as mentioned above, SAES seeks to respond quickly by adapting its production facilities through its engineering functions.

Another factor that may affect the Group is the presence of any customs duties resulting from global trade tensions and poor cooperation between national governments and supranational institutions (such as tensions between the US Government and the European Union), which could influence the sectors in which the Group operates, with a consequent impact on SAES products.

To mitigate this risk, the Group continually monitors the market.

Competitive risk

The Group is involved in the phases at the start of the value and production chains of the sectors in which it operates (B2B or Business to Business), often as tier 2 or 3, and therefore does not sell to the end consumer. This reduces the SAES Group's ability to anticipate or guide the trend of final demand of its products, which depends on the success or commercial skills of its customers.

In recent years, aggressive competitors have emerged, targeting customers and the most price-sensitive and mature industries, with consequent risks to profit margins.

To respond to these risks, the SAES Group has adopted a number of strategies. In particular, where possible and in compliance with the law in force, long-term supply agreements are entered into; by developing new solutions and services, new higher quality products can be offered and SAES has sought to reposition its range of products at different stages of the value chain.

Furthermore, as also mentioned, SAES seeks to diversify its target markets with a view to reducing its dependence on markets characterised by an increasing level of competition.

In parallel, market research continues to anticipate changes in demand, also by using alliances and agreements with leading specialised centres.

Lastly, also by developing joint ventures, such as Actuator Solutions and SAES RIAL Vacuum S.r.l., the Group intends to pursue the objective of changing its positioning on the value chain, shifting from the production of simple components to that of more complex devices, of actual systems that can be sold directly to end users, which gives it the opportunity to handle the competition better due to the fact that it is closer to its customers.

Risk related to technological and technical trends

One risk that companies operating in consumer electronics are exposed to is the rapid technological obsolescence of applications and technologies on the market. As already mentioned, the replacement of a technology or of certain specifications of a product with others may be triggered by legislative changes in target markets. More specifically, during the year, the market of fluorescent lamps, in which the Group's getter solutions are used, came under pressure and was penalised by the technological competition of LED lamps.

This risk is mitigated by continuous market analyses and by screening emerging technologies, both to identify new opportunities for development and to ensure that one is not prepared for the emergence of technological ageing.

Furthermore, as already mentioned, SAES seeks to reduce the importance of a single industry/application by diversifying the target markets.

Risk of catastrophic events

This risk regards the possibility that incidents or natural events may occur (natural disasters, terrorism, earthquakes etc.) which could led to the damage or destruction of the industrial facilities and which, therefore could affect business continuity.

The presence of some of the Group's production plants in areas at risk of earthquakes (for example Abruzzo and California) is managed by adopting specific measures to mitigate said risk, such as: operating in certified earthquake-proof buildings; drawing up special procedures to manage emergencies; ensuring that the relevant authorities make periodic checks of the buildings; drawing up insurance policies to assets and for business interruption at Italian sites and for the production affiliates abroad; frequent evacuation drills for the employees that work there.

Operational risk

Uncertainty as to the success of research and development projects

The SAES Group, on its own initiative or in cooperation with its customers or partners, operates with the objective of developing innovative products or solutions, often "cutting-edge" and with returns in the long term.

The risk of unsuccess does not just depend on our ability to provide that requested in the required form, time and costs. In reality, SAES has no control over the ability of its customers to develop that envisaged in their business plans, nor on the time for new technologies to be approved.

By way of example, but not limited to such, competitive technologies may emerge that do not require the use of the Group's products or expertise, or development times could become so long that continuing with the project is no longer economically viable, or in any event delaying the time-to-market with negative effects on the return on investment.

This risk is mitigated by periodic and structural reviews of the project portfolio, managed by the Innovation Committee, which, as part of its task to provide support to the Chief Technology and Innovation Officer (CTIO), who is tasked with i) establishing R&D project priorities; ii) proposing an annual budget for research and innovation in terms of costs and timing; iii) preparing proposals for plans and budgets to submit to the approval of the Corporate Management Committee (CMC); iv) developing technological knowhow; v) assessing and proposing new technological solutions; vi) developing and promoting a consistent and distinctive scientific approach for the different areas of the Group.

Where and when possible, SAES seeks to access public funding, obviously if the objectives are perfectly in line with the R&D project in question. Furthermore, forms of "open" cooperation with external centres of excellence are being increasingly used, in order to reduce development times.

Another reason why R&D projects may be unsuccessful lies in the difficulty of transferring the results at the time of industrialisation, which may restrict the ability to move to mass production.

To mitigate this risk, the Group's organisation encourages the R&D and Engineering functions to work closely together, in order to achieve greater interaction in project management and to cut the time needed to move to production.

Defence of intellectual property

The SAES Group has always sought to develop original knowhow, where possible protecting it with forms of industrial property rights, such as patents. It is becoming increasingly difficult to defend the same, also due to uncertainties relating to the legal systems in some of the countries in which the Group operates.

The risks are the loss of market share and margins taken by counterfeit products infringing the Group's intellectual property rights, as well as the need to cover significant legal expenses.

The Group responds to these risks by seeing to improve the quality and the completeness of the patents, also reducing the number published, and by monitoring the commercial initiatives of other industrial and commercial operators with a view to identifying potential adverse effects on the value of said patents as soon as possible.

Risks relating to the definition of requirements

The rationalisation of the Group's production and commercial facilities implemented over the past few years and still underway, had led to an increasing level of polarisation, which sees Italy, in particular the Avezzano site, as the only manufacturing plant for traditional getter metal alloys, and the USA as the production base for the raw material in Nitinol and SMA medical devices (stents). Lastly, the active packaging business is concentrated at the production plant of SAES Coated Films S.p.A. and product development will be supported by a new pilot line, which will be installed, by mid 2019, in the nearby laboratories of Lainate, at SAES Getters S.p.A.

The main risks relate to the greater distance from some customers, with possible repercussions on service levels, as well as higher transport and insurance costs.

The Group has responded by seeking to maintain service levels and customer assistance, as well as through better stock management, covering any production peaks by using temporary workers in order to be efficient in dispatching orders.

As regards industrial SMA, precisely to mitigate the risk of production concentration, in 2018, part of the production lines dedicated to the wire training of shape memory alloys were transferred from the Parent Company plant in Lainate to Avezzano.

Furthermore, following the already mentioned exposure of the Group to the external scenario, the risk of a shortage of production capacity addressed to specific markets/product lines may arise, if particularly positive demand trends are not envisaged; the Group companies may not be able to react as quickly as necessary.

To contain the potential impact of said risk, SEAS has sought to increase the integration between commercial and operational functions, in order to anticipate demand trends as far as possible and to monitor the production process closely. Furthermore, the main production plants have sought to maximise the flexibility of their facilities, with specific regard to indirect activity centres. In the event of particularly high levels of demand, the Group may assess the opportunity of adding production capacity at different production sites with respect to those where the production was originally located.

Risks relating to supplier relations

This risk regards the likelihood that limited sources of key resources and/or difficulties accessing them question the ability to produce high quality products at competitive prices in short time frames.

We believe that the Group's exposure to this risk is limited. The risk relating to the procurement of the raw materials used by the Group is very low, even in periods of rising demand.

In any event, the Group seeks to diversify the sources of supply (double supplier/continuous scouting for better suppliers policy) and, where possible, signed agreements with prices fixed for the medium-long term, to mitigate the volatility of the purchase prices.

It is also envisaged that for suppliers who are considered strategic for the business in which the Group operates, checks are made as to their financial stability, as well as their reliability in the provision of high quality raw materials/semi-finished goods.

Risks relating to customer concentration

This risk regards the case in which for some businesses, revenues are generated by a small number of customers, meaning that the Group's results are excessively dependent on the economic-financial performance of these customers or on their strategic decisions: think, for example of a situation in which one

or more customers intend to vertically integrate the production of the semi-finished goods or components that they now purchase from the Group.

The Group seeks to mitigate the potential consequences of this risk by extending the customer base as far as possible, both through new prospects, and by diversifying the range of products offered to individual customers. Furthermore, the Group aims to strengthen its partnerships with its key customers by sharing specific technical expertise where necessary, in accordance with intellectual property rights, and seeking to obtain and renew medium-long term contracts that guarantee less volatility of the volumes invoiced and of unit prices.

Transport risk

This risk regards the transport of materials and products and the consequent deterioration of relations with final customers.

The possible application of customs duties could have a negative impact on the receipt of goods by customers (higher costs) and delays in shipments to customers located abroad, with a consequent deterioration of relations with the latter.

To this end, the Group has set in place systems to mitigate this risk by continuously monitoring customs duties, using different carriers and applying appropriate delivery times agreed with the customer, with a view to reinforcing the shipping process.

Risk of IT business continuity

This risk regards the possible interruption of IT systems, with impacts on the production and/or business activities of the Group, due to external or internal events and/or inadequate recovery plans.

To strengthen the current IT infrastructure, the Company has envisaged the implementation of a business continuity plan for the IT systems. This process will include the formalisation of a specific disaster recovery procedure, with a view to defining roles, responsibilities and modus operandi for the management of risk events that could potentially impact the functioning of the company's IT systems.

Financial and reporting risk

Budget & planning risk

Frequent changes in business, such as tier 2 or tier 3, the consequent organisational re-adaptation and limited forward-looking visibility as regards the different business the Group operates in, are risk events on the budget and planning process.

To mitigate this risk, the Group involves all interested company departments in the forecasting process and, in specific circumstances and where available, uses assessments made by third parties; if the assumptions initially used change, additional reports are prepared and implemented, involving the various parties involved in the process.

Financial risk

The SAES Group is also exposed to several financial risks, in particular:

- <u>Interest-rate risk</u>, associated with the volatility of interest rates, which may influence the cost of the use of debt financing and the return on investments of cash and on securities in the portfolio;
- <u>Exchange-rate risk</u>, associated with the volatility of exchange rates, which may influence the related value of the Group's costs and revenues denominated in currencies different from the euro and may thus have an impact on the Group's net income or loss; also the amount of financial receivables/payables denominated in currencies other than the euro depends on the value of exchange rates, with potential effects both on the net income and on the net financial position;

- <u>The risk of changes in prices of raw materials</u>, which may affect the Group's product margins if these changes are not charged to the price agreed upon with customers;
- <u>Credit risk</u>, associated with the solvency of customers and the ability to collect receivables claimed from them:
- <u>Liquidity risk</u>, associated with the Group's ability to raise funds to finance its operating activities, or with the capacity of the sources of funding if the Group were to adopt strategic decisions involving some extraordinary expenditure (such as merger & acquisition transactions or organisational rationalisation and restructuring activities).

With regard to financial risk, the Board of Directors periodically re-examines and defines the risk management policies, as illustrated in detail in Note 38, to which the reader should refer also for the relative sensitivity analyses.

Subsequent events

On January 15, 2019, SAES Nitinol S.r.l. irrevocably waived the guarantee granted jointly by Alfmeier S.E. and SMA Holding GmbH, by means of a letter of patronage, on 50% of the loan which, on July 28, 2016 SAES Nitinol S.r.l. had granted to Actuator Solutions GmbH (total value of the loan was 3 million euro).

In January 2019, the duration of all outstanding loans (principal of 8 million euro) granted by SAES Nitinol S.r.l. to Actuator Solutions GmbH was extended by five years, delaying the expiry from April 30, 2019 to April 30, 2024.

On February 14, 2019, the Board of Directors of SAES Getters S.p.A. approved the guidelines of a transaction that envisages, after obtaining the necessary authorisation of the Shareholders' Meeting, promoting a voluntary partial public tender offer (Offer) on a maximum of 3,900,000 ordinary treasury shares (corresponding to 17.7% of total shares and to 26.6% of ordinary shares), at the price of 23 euro per share (after 2018 dividend), for a total maximum counter value of 89.7 million euro.

The price includes a premium of 8.4% with respect to the official price of the Company's ordinary shares recorded on February 13, 2019, as well as a premium of 15.0%, 20.2%, 19.2% and 10.6% with respect to the weighted average of the official prices of the Company's ordinary shares in 1-month, 3-month, 6-month and 12-month periods respectively before February 13, 2019.

The promotion of the Offer is subject (i) to the approval of the Shareholders' Meeting of SAES Getters S.p.A., which will be convened, in accordance with the law, on March 18, 2019, of the authorisation to purchase treasury shares pursuant to art. 2357 of the Italian Civil Code and 132 of Italian Legislative Decree 58/1998, and (ii) to the approval by the subsequent Shareholders' Meeting of SAES Getters S.p.A., currently set for April 18, 2019, of the Company's annual financial statements as at December 31, 2018, which indicates distributable profits and/or sufficient available reserves to cover the total maximum counter value of the Offer.

The Price will be paid in cash. With a view to optimising its financial structure and to making it more efficient, the Company plans to use financial resources resulting from a medium/long-term loan being finalised with a leading bank.

If the number of ordinary shares put up for subscription for the Offer exceeds the maximum number of 3,900,000 of the offer, an allotment will be carried out based on the "pro-rata" method, according to which the Company would purchase the same proportion of ordinary shares from all shareholders as that put up for subscription to the Offer. The Offer is not conditioned by reaching a minimum number of subscriptions.

It is believed that, also given the trend of stock market prices, the use of part of the available resources for the purchase of ordinary treasury shares represents an advantageous investment opportunity for the Company and its shareholders.

The transaction leads to better profitability per unit of capital employed. The reduction of the number of ordinary shares in circulation will actually benefit all shareholders, as it will lead to an increase in the earning

per share, with the same annual profit, and an increase of the dividend per share, with the same dividends distributed.

The transaction will also increase the efficiency of the Company's financial structure, at the same time maintaining a solid capital structure to sustain growth by internal and external means as well as maintaining a high percentage float, which is also a requirement for listing on the STAR segment.

Following the Offer, the Company would obtain an appropriate number of ordinary treasury shares which represent a medium to long term investment in the Company, which can also be used to guarantee loans at the time of any extraordinary operations and/or to develop alliances consistent with the Group's strategic direction. Nevertheless, until these opportunities present themselves, the Company intends to keep the treasury shares purchased following the Offer in the portfolio, also to consolidate the positive effects in terms of increasing the earning per share and the dividend per share.

It is envisaged that, when the required authorisations have been obtained, the Offer may be launched after the payment date of the dividend relating to the year ending December 31, 2018 and may be finalised by the following June.

On March 7, 2019, following the loss recorded in 2018, the Board of Directors of SAES Coated Films S.p.A. decided to propose to the Shareholders' Meeting, convened for April 4, 2019, to resolve on the establishment of an available reserve of 5 million euro to cover any future losses, by means of a payment to the capital account, by the Sole Shareholder SAES Getters S.p.A.

On March 13, 2019 SAES Getters S.p.A. approved the full waiver of the financial receivables held by the same at the end of 2018 towards SAES Nitinol S.r.l. for an amount of 8,905 thousand euro. At the same time, the Parent Company approved an additional payment to the capital account of SAES Nitinol S.r.l. of 100 thousand euro, 65 thousand euro of which to cover the difference between the total loss recorded by the subsidiary in 2018 (-8,969 thousand euro) and the above-mentioned waiver of the financial receivable (8,905 thousand euro), and 35 thousand euro of which to set up an available capital reserve.

At the beginning of 2019, a further 100 million euro of cash and cash equivalents, in addition to the 100 million euro already allocated as at December 31, 2018. was invested in the establishment of a portfolio with a conservative investment profile, and with high flexibility and redeemability, with a view to promptly covering the Group's future requirements.

Business outlook

In the **first two months of 2019**, **consolidated net revenues** amounted to 27,640 thousand euro, compared to 24,780 thousand euro in the corresponding period of the previous year. Sales in the two-month period rose by 11.5%. Without the positive impact of exchange rates (+6%), organic growth was +5.5% (corresponding to 1,380 thousand euro in absolute terms).

(thousands of euro)

			Total	Total	Exchange rate	Organic
Businesses	Feb-19	Feb-18	difference	difference	effect	change
				%	%	%
Security & Defense	2,556	2,121	435	20.5%	7.1%	13.4%
Electronic Devices	2,323	2,160				4.2%
Healthcare Diagnostic	735	690	45	6.5%	3.6%	2.9%
Lamps	737	1,016	(279)	-27.5%	2.9%	-30.4%
Thermal Insulated Devices	614	656	(42)	-6.4%	6.4%	-12.8%
Solutions for Vacuum Systems	1,874	1,976	(102)	-5.2%	3.1%	-8.3%
Sintered Components for Electronic Devices & Lasers	1,587	1,190	397	33.4%	9.6%	23.8%
SMA Industrial	2,470	1,743	727	41.7%	4.3%	37.4%
Organic Electronics	135	247	(112)	-45.3%	3.9%	-49.2%
Industrial	13,031	11,799	1,232	10.4%	4.9%	5.5%
Nitinol for Medical Devices	12,826	10,591	2,235	21.1%	8.5%	12.6%
Medical	12,826	10,591	2,235	21.1%	8.5%	12.6%
Packaging	1,783	2,390	(607)	-25.4%	0.0%	-25.4%
Total net sales	27,640	24,780	2,860	11.5%	6.0%	5.5%

Consolidated revenues of the <u>Industrial Business Unit</u> were 13,031 thousand euro, compared to 11,799 thousand euro in the corresponding period of 2018. Organic growth (+5.5%) was mainly driven by the Security & Defence Business and the Sintered Components for Electronic Devices & Lasers Business, as well as by SMA trained wire for the electronic consumer business.

The <u>Medical Business Unit</u> closed the two-month period with revenues of 12,826 thousand euro (10,591 thousand euro) in the first two months of 2018). Without the positive impact of exchange rates (+8.5%), organic growth was +12.6%, above those of the target market.

The <u>Packaging Business Unit</u> recorded revenues of 1,783 thousand euro in the first two months of 2019, compared to 2,390 thousand euro in the corresponding period of the previous year.

Total Group revenues in the **first two months of 2019** were 29,613 thousand euro, up by 10.5% compared to 26,806 thousand euro in the corresponding period of 2018: the increase was mainly due to the rise in consolidated revenues (+11.5%, mentioned earlier), against the substantial stability of joint venture revenues.

Following the finalisation of the sale of the gas purification business at the end of June 2018, the revenues for the first two months of 2018 relating to the business sold, were reclassified as "Income (loss) from discontinued operations" in the income statement. The remaining business of the gas purification segment, which only includes the sale by the Parent Company of raw materials and getter components used to build purifiers, as now insignificant, was encompassed with the Electronic Devices Business in 2019.

It should also be noted that to better reflect the internal organisational structure of the Group, from January 1, 2019:

- the revenues of the Shape Memory Alloys for Industrial Applications business have been classified within the Industrial Applications Business Unit (instead of the Shape Memory Alloys Business Unit);
- the revenues of the Organic Electronics business have been classified within the Industrial Applications Business Unit (instead of the Business Development Unit).

Lastly, note that all operating units have been renamed to provide greater clarification.

2018 figures have been reclassified to enable a like-for-like comparison with 2019.

Last year's favourable market conditions extended into the beginning of 2019, so the Group is expected to continue to grow.

Going concern

The financial statements are prepared on the going concern assumption, given that, despite a difficult economic and financial environment, there aren't any significant uncertainties (as defined in paragraph no. 25 of IAS 1 - *Presentation of Financial Statements*) regarding business continuity. This scenario, as previously illustrated in the paragraphs on the risks to which the Group is exposed, can only be in part influenced by Company Management, as it is mostly dependent on external variables.

Based on the best estimates available to date, a three-year business plan has been approved, which includes the strategies set in place by Company management to enable the set company objectives to be achieved in this difficult economic scenario.

Related party transactions

With regard to the Group's related party transactions, please note that they fall within the ordinary operations and are settled at market or standard conditions.

Complete disclosure on related party transactions performed during the year is provided in Note 40 of the consolidated financial statements.

Consob regulatory simplification process

Please note that, on November 13, 2012, the Board of Directors approved, pursuant to article no. 3 of Consob resolution no. 18079/2012, to adhere to the opt-out provisions as envisaged by article no. 70, paragraph 8, and no. 71, paragraph 1-bis of the Consob Regulation related to Issuer Companies, and it therefore avails itself of the right of making exceptions to the obligations to publish information documents required in connection with significant mergers, spin-offs and capital increases by contributions in kind, acquisitions and disposals.

Consolidated non-financial statement

The Consolidated non-financial statement of the SAES Group relating to 2018, prepared according to Italian Legislative Decree 254/16 and approved by the Board of Directors on March 13, 2019, is considered a separate report to this Report on operations, as envisaged by article 5, paragraph 3, letter b) of Italian Legislative Decree 254/16, and is also available on the website www.saesgetters.com, in the "Investor relations - Sustainability" section.

Consolidated Financial Statements as at December 31, 2018

Consolidated statement of profit or loss					
(thousands of euro)	Notes	2018	2017 reclassified (*)		
Total net sales	3	160 284	147 122		
Cost of sales	4	160,284 (90,032)	147,122 (84,919)		
Cost of sales	4	(90,032)	(84,919)		
Gross profit		70,252	62,203		
D 101 1	_	(10.000)	(12.707)		
Research & development expenses	5	(10,988)	(12,797)		
Selling expenses	5	(12,451)	(11,692)		
General & administrative expenses	5	(32,471)	(28,625)		
Write-down of trade receivables	5	(208)	43		
Total operating expenses		(56,118)	(53,071)		
Other income (expenses), net	6	932	(40)		
Operating income (loss)		15,066	9,092		
Interests and other financial income	7	982	1,160		
Interests and other financial expenses	7	(1,228)	(1,677)		
Write-down of financial receivables and other financial assets	7	(9,283)	0		
Share of result of investments accounted for using the equity method	8	(1,473)	(2,468)		
Write-down of investments accounted for using the equity method	8	(4,300)	0		
Foreign exchange gains (losses), net	9	523	(1,156)		
Income (loss) before taxes		287	4,951		
Income taxes	10	(7,967)	(17,604)		
Net income (loss) from continued operations		(7,680)	(12,653)		
Net income (loss) from discontinued operations	11	240,013	26,513		
Net income (loss) for the period		232,333	13,860		
Minority interests in consolidated subsidiaries		0	0		
Group net income (loss) for the period		232,333	13,860		
Net income (loss) per ordinary share	12	10.53109	0.62301		
- from continued operations		(0.34830)	(0.57383)		
- from discontinued operations		10.87939	1.19684		
Net income (loss) per savings share	12	10.54772	0.63964		
- from continued operations		(0.34830)	(0.57383)		
- from discontinued operations		10.89602	1.21347		

Consolidated statement of other comprehensive i	ncome		
(thousands of euro)	Notes	2018	2017 reclassified(*)
Net income (loss) for the period from continued operations		(7,680)	(12,653)
T. 1. 100	26	4 120	(10.240)
Exchange differences on translation of foreign operations	26 26	4,130 340	(10,340
Exchange differences on equity method evaluated companies	26		(877)
Total exchange differences	26	4,470	(11,217
Equity transaction costs related to equity method evaluated companies	26	(15)	(7
Total components that will be reclassified to the profit (loss) in the future		4,455	(11,224
Actuarial gain (loss) on defined benefit plans related to SAES Getters S.p.A. and subsidiaries	26	21	(41
Income taxes	26	(6)	10
Actuarial gain (loss) on defined benefit plans, net of taxes - SAES Getters S.p.A. and subsidiaries		15	(31
Actuarial gain (loss) on defined benefit plans on equity method evaluated companies	26	(10)	(10
Income taxes	26	2	
Actuarial gain (loss) on defined benefit plans, net of taxes - equity method evaluated companies		(8)	(8
Total components that will not be reclassified to the profit (loss) in the future		7	(39)
Reversal of currency conversion reserve after the capital stock reduction of the subsidiaries	26	(360)	(
Total components that have been reclassified to the profit (loss)		(360)	(
		4.102	(11.262
Other comprehensive income (loss), net of taxes - continued operations	+	4,102	(11,263)
Total comprehensive income (loss), net of taxes - continued operations		(3,578)	(23,916
Total comprehensive meonic (1988); net of taxes - continued operations		(5,576)	(23,710
Net income (loss) for the period from discontinued operations		240,013	26,513
T. J. 1995	26	421	(2.00.4
Exchange differences on translation of foreign operations	26	421	(2,984
Reversal of currency conversion reserve after the disposal of the subsidiaries	26	(2,342)	(2.00.1
Total exchange differences	+ -	(1,921)	(2,984
Total components that have been reclassified to the profit (loss)		(1,921)	(2,984
Other comprehensive income (loss), net of taxes - discontinued operations		(1,921)	(2,984
Total comprehensive income (loss), net of taxes - discontinued operations		238,092	23,529
Total comprehensive income (loss), net of taxes	1	234,514	(387
attributable to:	+	234,514	(387)
		224 514	/207
- Equity holders of the Parent Company - Minority interests		234,514	(387)
 - Minority interests (*) Some amounts shown in the column do not correspond to the 2017 Annual financial report because they reflect 		0	

^(*) Some amounts shown in the column do not correspond to the 2017 Annual financial report because they reflect both the reclassifications related to the sale of the gas purification business (finalized on 25 June 2018 and identified as "major line of business") in compliance with the provisions of IFRS 5, and the reclassifications to give evidence in the Consolidated statement of profit or loss of the write-downs of the financial assets, in accordance with IAS 1. These reclassifications are detailed in the Note 1, paragraph "Reclassification of the 2017 balances".

Consolidated statement of	financ	rial position	
Consolidated Statement of		position	
(thousands of euro)	Notes	December 31, 2018	December 31, 2017
ASSETS	1		
Non current assets	1		
Property, plant and equipment	14	53,832	49,492
Intangible assets	15	45,290	
Investments accounted for using the equity method	16	8,006	
Securities in the portfolio	17	99,843	
Deferred tax assets	18	8,678	
	19	272	272
Tax consolidation receivables from the Controlling Company Financial receivables from related parties	20	49	7,549
Other long term assets	20 21	396	429
Total non current assets	21	216,366	123,618
Current assets	+	210,000	120,010
Inventory	22	23,482	47,553
Trade receivables	23	19,676	
Other receivables, accrued income and prepaid expenses	24		
Cash and cash equivalents	25	4,634 170,601	27,564
Financial receivables from related parties	20	170,001	936
Total current assets	20	218,394	115,434
Total assets	+	434,760	239,052
	1	434,700	200,002
EQUITY AND LIABILITIES			
Capital stock		12,220	
Share issue premium		41,120	
Legal reserve		2,444	· ·
Other reserves and retained earnings		42,814	
Other components of equity		10,289	
Net income (loss) of the period Group shareholders' equity	26	232,333	
Other reserves and retained eanings of third parties	20	341,220	122,141
Minority interests in consolidated subsidiaries	26	0	0
Total equity	20	341,220	122,141
Non current liabilities	1	0.13,230	
Financial debts	27	13,344	28,057
Other non current financial payables to third parties	34	0	838
Deferred tax liabilities	18	6,523	7,011
Staff leaving indemnities and other employee benefits	28	7,909	·
Provisions for risks and charges	29	411	755
Total non current liabilities		28,187	45,585
Current liabilities			
Trade payables	30	12,082	18,877
Other payables	31	12,533	15,315
Accrued income taxes	32	1,778	1,657
Provisions for risks and charges	29	4,640	4,896
Derivative financial instruments measured at fair value	33	48	
Current portion of medium/long term financial debts	27	5,438	10,478
Other financial debts towards third parties	34	1,001	2,091
Bank overdrafts	35	27,353	·
Accrued expenses and deferred income	36	480	5,697
Total current liabilities		65 353	71 326

Total current liabilities

Total equity and liabilities

71,326

239,052

65,353

434,760

Consolidated statement of financial posit	ion (#)	
	2018	2017
(thousands of euro)		reclassified (*)
Cash flows from operating activities	(= <00)	(10.550)
Net income (loss) from continued operations	(7,680)	(12,653)
Net income (loss) from discontinued operations	240,013	26,513
Current income taxes	13,134	13,145
Changes in deferred income taxes	(4,499)	8,683
Depreciation William () for the last of t	6,764	7,399
Write-down (revaluation) of property, plant and equipment Amortization	712	1,177
	1,220	1,442
Write-down (revaluation) of intangible assets	2,705	(92)
Net loss (gain) on disposal of fixed assets	(141)	(82)
Net gain on purification business disposal	(227,219)	594
Interest and other financial (income) expenses, net	15,337	3,130
Write-down of trade receivables	123	(13)
Other non-monetary costs (revenues)	(1,524)	0
Accrual for termination indeminities and similar obligations	255	2,971
Changes in provisions	(130)	1,808
Working agrital adjustments	39,070	54,118
Working capital adjustments Cash increase (decrease)		
Account receivables and other receivables	1 000	9,664
	1,009	,
Inventory Account payables	(4,460) (1,180)	(13,898)
Other current payables	, , , ,	(1,170)
Other current payables	(115) (4,746)	3,256 (2,148)
	(4,740)	(2,140)
Payment of termination indemnities and similar obligations	(446)	(455)
Interests and other financial payments	(441)	(525)
Interests and other financial receipts	406	82
Taxes paid	(13,239)	(12,616)
Net cash flows from operating activities	20,604	38,456
Cash flows from investing activities		
Disbursements for acquisition of tangible assets	(14,410)	(7,273)
Proceeds from sale of tangible and intangible assets	248	105
Disbursements for acquisition of intangible assets	(599)	(378)
Capital injection into joint ventures	(6,201)	(1,000)
Consideration for the acquisition of minority interests in subsidiaries	(75)	134
Price paid for the acquisition of businesses	(142)	(364)
Consideration for the purification business disposal, net of the disposed cash	301,059	0
Ancillary monetary charges for the purification business disposal	(37,562)	(594)
Net cash flows from investing activities	242,318	(9,370)
Cash flows from financing activities		
Proceeds from long term financial liabilities, current portion included	0	9,950
Proceeds from short term financial liabilities	13,857	6,580
Dividends payment	(15,435)	(12,250)
Repayment of financial liabilities	(18,758)	(12,230)
Interests paid on long term financial liabilities		(14,639) (864)
Interests paid on long term imancial liabilities	(487)	, ,
•	(19)	(18)
Other costs paid Financial receivables repaid (granted) from related parties	(54)	(98)
	(225)	(2,175)
Interests receipts on financial receivables from related parties	1	0
Other financial payables	(100,000)	21
Securities portfolio Net cash flows from financing activities	(100,000)	(13,493)
-	(121,116)	
Net foreign exchange differences	1,277	(2,278)
Net (decrease) increase in cash and cash equivalents	143,083	13,315
Cash and cash equivalents at the beginning of the period	27,312	13,997
Cash and cash equivalents at the end of the period	170,395	27,312

^(#) It should be noted that the amounts shown in the consolidated cash flow statement include both the cash flows generated by the gas purification business during the period 1 January - 25 June 2018, and the effects relating to its sale, finalized on 25 June 2018. For more details please refer to the Note 11 and to the Note 37.

^(*) The net income for the period and the net gain on purification business disposal do not correspond to the 2017 Annual financial report because they reflect the effects arising to the sale of the gas purification business, finalized on 25 June 2018 (identified as "major line of business") in compliance with the provisions of IFRS 5. These effects are detailed in the Note 11.

^(**) Consideration equal to €303,765 thousand and cash sold equal to €2,706 thousand.

(***) The figure of the FY 2018 does not include the non-monetary income related to the release into the income statement of the conversion reserve generated by the consolidation of the US companies sold (SAES Getters USA, Inc. and SAES Pure Gas, Inc.), equal to €2,342 thousand.

Consolidated statement o	f change	s in equ	iity as at	Decem	ber 31, 2	2018					
(thousands of euro)					Other cor						
	Capital stock	Share issue premium	Treasury shares	Legal reserve	Currency conversion reserve	Currency conversion reserve from discontinued operations	Other reserves and retained earnings	Net income (loss)	Group shareholders' equity	Minority interests	Total equity
December 31, 2017 reclassified (*)	12,220	41,120	0	2,444	6,179	1,921	44,397	13,860	122,141	0	122,141
Distribution of 2017 result							13.860	(13,860)	0		0
Dividends paid							(15,435)	(10,000)	(15,435)		(15,435)
Net income (loss)								232,333	232,333	0	232,333
Reversal of currency conversion reserve after the capital stock reduction of the subsidiaries					(360)				(360)		(360)
Reversal of currency conversion reserve after subsidiaries sale			•		•	(2,342)			(2,342)		(2,342)
Other comprehensive income (loss)					4,470	421	(8)		4,883		4,883
Total comprehensive income (loss)					4,110	(1,921)	(8)	232,333	234,514	0	234,514
December 31, 2018	12,220	41,120	0	2,444	10,289	0	42,814	232,333	341,220	0	341,220

⁽dentified as "major line of business") in compliance with the provisions of IFRS 5. For further details please refer to the Note 1, paragraph "Restatement of the 2017 figures".

Consolidated statement of char	nges in equ	iity as a	t Decem	ber 31, 2	2017 rec	lassified	l (**)				
(thousands of euro)					Other cor	nponents Juity					
	Capital stock	Share issue premium	Treasury shares	Legal reserve	Currency conversion reserve	Currency conversion reserve from discontinued operations	Other reserves and retained earnings	Net income (loss)	Group shareholders' equity	Minority interests	Total equity
December 31, 2016	12,220	41,120	0	2,444	17,396	4,905	42,664	14,029	134,778	0	134,77
Distribution of 2016 result							14,029	(14,029)	0		
Dividends paid							(12,250)	(11,025)	(12,250)		(12,250)
Net income (loss)								13,860	13,860	0	
Other comprehensive income (loss)			•		(11,217)	(2,984)	(46)		(14,247)		(14,247)
Total comprehensive income (loss)					(11,217)	(2,984)	(46)	13,860	(387)	0	(387)
December 31, 2017	12,220	41,120	0	2,444	6,179	1,921	44,397	13,860	122,141	0	122,141

⁽identified as "major line of business") in compliance with the provisions of IFRS 5. For further details please refer to the Note 1, paragraph "Restatement of the 2017 figures".

1. BASIS OF PREPARATION AND ACCOUNTING POLICIES

Basis of preparation

SAES Getters S.p.A., the Parent Company with headquarters in Lainate, and its subsidiaries (hereinafter "SAES Group") operate both in Italy and abroad in the development, manufacturing and marketing of getters and other components for applications where stringent vacuum conditions are required (electronic devices, lamps, vacuum systems and thermal insulation solutions). The Group also operates in the field of advanced materials, particularly in the business of shape memory alloys for both medical and industrial applications. Lastly, SAES has recently developed a technological platform that integrates getter materials in a polymeric matrix, which covers numerous fields of application (advanced packaging, OLED displays, optoelectronic devices, implantable medical devices and new solid-state diagnostics imaging).

The preparation of the financial statements is in compliance with the historical cost criterion, except when specifically required by the applicable standards, as well as on the going concern assumption, given that, despite a difficult economic and financial environment, there aren't any significant uncertainties (as defined in paragraph no. 25 of IAS 1 - *Presentation of Financial Statements*) regarding business continuity.

S.G.G Holding S.p.A.²⁹ is a relative majority shareholder³⁰ and does not exercise any management and coordination activity towards SAES Getters S.p.A. pursuant to Article 2497 of the Italian Civil Code (as specified in the Report on corporate governance and ownership).

The Board of Directors approved and authorised the publication of the 2018 annual consolidated financial statements with the resolution passed on March 13, 2019.

The consolidated financial statements of the SAES Group are presented in euro (rounded to the nearest thousand), which is the Group's functional currency.

Foreign subsidiaries are included in the consolidated financial statements according to the standards described in the Note 2 "Accounting standards".

The consolidated financial statements for the year ending December 31, 2018 have been prepared in accordance with the IFRSs issued by the International Accounting Standards Board ("IASB") and approved by the European Union ("IFRS"), CONSOB resolutions no. 15519 and no. 15520 of July 27, 2006, CONSOB communication no. DEM/6064293 of July 28, 2006 as well as article 149-duodecies of the Issuers' Regulations. The abbreviation "IFRS" includes all revised International Accounting Standards ("IAS") and all interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC"), included those previously issued by the Standing Interpretations Committee ("SIC").

For comparative purposes, the comparative figures for 2017 are also shown, in application of IAS 1- *Presentation of Financial Statements*.

Accounting schedules

The presentation adopted is compliant with the provisions of IAS 1 – revised, that provides for the consolidated statement of profit or loss and of other comprehensive income (the Group elected to present two different statements) and a statement of consolidated financial position that includes only the details of operations on the Group's shareholders' equity, while changes in the minority interests are presented in a separate line.

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²⁹ Based in Milan at Via Vittor Pisani, 27.

³⁰ As at December 31, 2018, S.G.G. Holding S.p.A. held 36.96% of the ordinary shares of SAES Getters S.p.A. and, taking into account the majority voting rights, it held 42.28% of all voting rights that could be exercised on that date.

Moreover we report that:

- the consolidated statement of financial position has been prepared by classifying assets and liabilities as current or non-current and by stating "Assets held for sale" and "Liabilities held for sale" in two separate items, as required by IFRS 5;
- the consolidated statement of profit or loss has been prepared by classifying operating expenses by allocation, inasmuch this form of disclosure is considered more suitable to represent the Group's specific business, is compliant with the internal reporting procedures and in line with the standard industry practice;
- the consolidated cash flow statement has been prepared by stating cash flows provided by operating activities according to the "indirect method" as allowed by IAS 7.

In addition, as required by Consob resolution no. 15519 of July 27, 2006, significant income and expenses arising from non-recurring transactions or from events that do not recur frequently during the normal conduct of operations are specifically identified in the consolidated statement of profit or loss by allocation and their detailed information is provided in the Explanatory notes to the consolidated financial statements.

Non-recurring events and transactions are identified primarily on the basis of the nature of the transactions. In particular, non-recurring income/expenses include cases that by their nature do not occur consistently in the course of normal operating activities. In further detail:

- income/expenses arising from the sale of property;
- income/expenses arising from the sale of business units and equity investments;
- income/expenses arising from reorganisation processes associated with extraordinary corporate transactions (mergers, de-mergers, acquisitions and other corporate transactions);
- income/expenses arising from discontinued businesses.

As required by Consob resolution no. 15519 of July 27, 2006, the amounts of positions or transactions with related parties have been highlighted separately from the related items in the Explanatory notes to the consolidated financial statements.

Reclassification of 2017 balances

The income statement balances relating to 2017, included for comparative purposes, have been **reclassified** to reflect the impact of the sale of the gas purification business (finalised on June 25, 2018, see the consolidated Report on operations for details), considered a major line of business. In accordance with the provisions of IFRS 5, the costs and the revenues in 2017 relating to the business sold, together with the consulting costs related to said extraordinary transaction, have been reclassified in the appropriate item of the income statement "Income (loss) from discontinued operations", without any impact on the net profit/loss or on shareholders' equity as at December 31, 2017.

Note that further **reclassifications** have been made without any impact on net profit/loss or on shareholders' equity to highlight write-downs of financial assets in the consolidated Statement of profit or loss, in accordance with IAS 1.

The effect of the above reclassification on the consolidated Statement of profit or loss and of other comprehensive income as at December 31, 2017 is seen in the following table.

Consolidated statement of profit or loss								
(thousands of euro)	2017	Reclassifications for the sale of the gas purification business	Reclassifications of the financial assets' write-down	2017 reclassified (*)				
Total net sales	231.078	(83,956)	0	147,122				
Cost of sales	(127,468)	42,549	0	(84,919)				
Gross profit	103,610	(41,407)	0	62,203				
R&D expenses	(16,102)	3,305		(12,797)				
Selling expenses	(16,102)	4,670		(12,797)				
G&A expenses	(31,150)	2,578						
Write-down of trade receivables	0	0	43	43				
Total operating expenses	(63,624)	10,553	0	(53,071)				
Altri proventi (oneri) netti	(6)	(34)	C	(40)				
Operating income (loss)	39,980	(30,888)	0	9,092				
Interests and other financial income Interests and other financial expenses Write-down of financial receivables and other financial assets Share of result of investments accounted for using the equity method Write-down of investments accounted for using the equity method Foreign exchange gains (losses), net	1,160 (1,822) 0 (2,468) 0 (1,162)	0 145 0 0 0	0 0 0 0 0	1,160 (1,677) 0 (2,468) 0 (1,156)				
Income (loss) before taxes	35,688	(30,737)	0	4,951				
Income taxes	(21,828)	4,224	0	1,5-0-2				
Net income (loss) from continued operations	13,860	(26,513)	0	(12,653)				
Income (loss) from discontinued operations	0	26,513	O	26,513				
Net income (loss) before minority interest	13,860	0	0	13,860				
Net income (loss) pertaining to minority interest	0	0	C	0				
Net income (loss) pertaining to the Group	13,860	0	0	13,860				
Net income (loss) per ordinary share Net income (loss) per savings share	0.62301 0.63964	0.00000 0.00000	0.00000 0.00000	0.62301 0.63964				

Consolidated statement of other comprehensive income							
2017	Reclassifications for the sale of the gas purification business	Reclassifications of the financial assets' write-down	2017 reclassified (*)				
12010	/a / = 1 a						
13,860	(26,513)	0	(12,653)				
(13,324)	2,984	0	(10,340)				
	2.004		(877)				
	2,984	0	(11,217)				
(1)	2.004		(11,224)				
(14,208)	2,964		(11,224)				
(41)	0	0	(41)				
	0	0	(31)				
(- /	0	0	(10)				
(10)	0	1	(10)				
(8)	0	0	(8)				
(-2	0		(39)				
0							
0	0		0				
· ·	•		ľ				
(14.247)	2,984	0	(11,263)				
	, ,		())				
(387)	(23,529)	0	(23,916)				
0	26,513		26,513				
0	(2,984)	0	(2,984)				
0	0	C	0				
0	(2,984)	C	(2,984)				
0	(2,984)	0	(2,984)				
0	(2,984)	0	(2,984)				
0	23,529	0	23,529				
(207)	Δ.	0	(387)				
(387)	U	0	(387)				
(387)	0	C	(387)				
	2017 13,860 (13,324) (877) (14,201) (7) (14,208) (41) 100 2 (8) (39) 0 (14,247) (387) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Reclassifications for the sale of the gas purification business 13.860 (26,513) (13,324) 2,984 (877) 0 (14,201) 2,984 (7) 0 (14,208) 2,984 (41) 0 (10) 0 (31) 0 (31) 0 (30) (39) 0 (39) 0 (41,247) 2,984 (387) (23,529) (387) (23,529) 0 (2,984) 0 0 (2,984) 0 0 (2,984) 0 0 (2,984) 0 0 (2,984) 0 0 (2,984) 0 0 (2,984) 0	Reclassifications for the sale of the gas purification of the financial assets' write-down				

The table below shows the aforementioned reclassification broken down by operating segment.

(thousands of euro)															
Consolidated statement	Inc	Industrial Applications		SI	hape Memory Allo	ys	Solutions for Advanced Pack		ackaging	Not allocated			Total		
of profit or loss	2017	Reclassifications for the sale of the gas purification	2017 reclassified	2017	Reclassifications for the sale of the gas purification	2017 reclassified	2017	Reclassifications for the sale of the gas purification	2017 reclassified	2017	Reclassifications for the sale of the gas purification	2017 reclassified	2017	Reclassifications for the sale of the gas purification	2017 reclassified
Total net sales Cost of sales Gross profit % on net sales	141,147 (71,371) 69,776 49.4% (23,444)	(83,956) 42,549 (41,407) 49.3%	57,191 (28,822) 28,369 49.6% (13,485)	75,872 (43,969) 31,903 42.0%		75,872 (43,969) 31,903 42.0%	12,445 (10,799) 1,646 13.2% (2,595)		12,445 (10,799) 1,646 13.2%	(1,329) 285 17.7%	0	1,614 (1,329) 285 17.7% (24,923)	231,078 (127,468) 103,610 44.8% (63,624)	(83,956) 42,549 (41,407) 49.3%	147,122 (84,919) 62,203 42.3% (53,071)
Total operating expenses Other income (expenses), net	97	0	97	192		(12,068) 192	38		(2,595)	(25,517) (333)	(34)	(367)	(6)	(34)	(40)
Operating income (loss) % on net sales	46,429 32.9%	(31,448) 37.5%	14,981 26.2%	20,027 26.4%	0	20,027 26.4%	(911) -7.3%	0	(911) -7.3%	(25,565) n.s.	560 n.a.	(25,005) n.s.	39,980 17.3%	(30,888) 36.8%	9,092 6.2%
Interests and other financial incor Interests and other financial exper Share of result of investments acc Foreign exchange gains (losses),	ounted for us	ing the equity met	hod										1,160 (1,822) (2,468) (1,162)	0 145 0 6	1,160 (1,677) (2,468) (1,156)
Income (loss) before taxes													35,688	(30,737)	4,951
Income taxes													(21,828)	4,224	(17,604)
Net income (loss) from continued operations								13,860	(26,513)	(12,653)					
Net income (loss) from discontinued operations								0	26,513	26,513					
Net income (loss)								13,860	0	13,860					
Minority interests in consolidated subsidiaries								0	0	0					
Group net income (loss)													13,860	0	13,860

Please note that in compliance with IFRS 5, the reclassifications related to the sale of the gas purification business were not made on the equity balances as at December 31, 2017 presented for comparative purposes.

The comparative equity figures relating to 2017 are presented only in the following table for disclosure purposes, as if the assets and liabilities pertaining to the purification business had been reclassified under the items "Assets held for sale and discontinued operations" and "Liabilities held for sale and discontinued operations", respectively, already at the end of the previous year.

(thousands of euro)	December 31, 2017	Reclassifications for the sale of the gas purification business	December 31, 2017 reclassified
<u>ASSETS</u>			
Non current assets			
Property, plant and equipment	49,492	(3,394)	46,098
Intangible assets	53,175	(6,392)	46,783
Investments accounted for using the equity method	7,261	0	7,261
Deferred tax as sets	5,440	(824)	4,616
Tax consolidation receivables from the Controlling Company	272	0	272
Financial receivables from related parties	7,549	0	7,549
Other long term as sets	429	(4)	425
Total non current assets	123,618	(10,614)	113,004
Current assets			
Inventory	47,553	(26,097)	21,456
Trade receivables	33,529	(16,263)	17,266
Other receivables, accrued income and prepaid expenses	5,852	(198)	5,654
Cash and cash equivalents	27,564	0	27,564
Financial receivables from related parties	936	0	936
Total current assets	115,434	(42,558)	72,876
Assets held for sale and discontinued transactions	0	53,172	53,172
Total assets	239,052	0	239,052
EQUITY AND LIABILITIES			
	12 220		12.220
Capital stock	12,220	0	12,220
Share issue premium	41,120	0	41,120
Legal reserve	2,444	0	2,444
Other reserves and retained earnings	44,397	0	44,397
Other components of equity	8,100	0	8,100 13,860
Net income (loss) of the period Group shareholders' equity	13,860 122,141	0	122,141
Other reserves and retained eanings of third parties	122,141	0	122,141
Minority interests in consolidated subsidiaries	0	0	0
Total equity	122,141	0	122,141
Non current liabilities		<u> </u>	
Financial debts	28.057	0	28,057
Other non current financial payables to third parties	838	(838)	20,037
Deferred tax liabilities	7,011	(030)	7,011
Staff leaving indemnities and other employee benefits	8,924	0	8,924
Provisions for risks and charges	755	(369)	386
Total non current liabilities	45,585	(1,207)	
Current liabilities			
Trade payables	18,877	(7,751)	11,126
Other payables	15,315	(2,373)	12,942
Accrued income taxes	1,657	0	1,657
Provisions for risks and charges	4,896	(591)	4,305
Derivative financial instruments measured at fair value	61	Ó	61
Current portion of medium/long term financial debts	10,478	0	10,478
Other financial debts towards third parties	2,091	(375)	1,716
Bank overdrafts	12,254	0	12,254
Accrued expenses and deferred income	5,697	(5,322)	375
Total current liabilities	71,326	(16,412)	54,914
Liabilities held for sale and discontinued transactions	0	17,619	17,619
Total equity and liabilities	239,052	0	239,052

Segment information

The Group's financial reporting is broken down into the following business segments:

- Industrial Applications;
- Shape Memory Alloys;
- Solutions for Advanced Packaging.

This structure has not changed with respect to last year.

Seasonality of revenues

Based on historical data, the revenues of the different businesses are not characterised by significant seasonal variations.

Scope of consolidation

The following table shows the companies included in the scope of consolidation according to the full consolidation method as at December 31, 2018.

Company	Currency	Share		nership
		Capital	Direct	Indirect
Directly-controlled subsidiaries:				
SAES Getters/U.S.A., Inc. Colorado Springs, CO (USA)	USD	33,000,000*	100.00	_
SAES Getters (Nanjing) Co., Ltd.	552	00,000,000	100.00	
Shenzhen (P.R. of China)	USD	6,570,000	100.00	-
SAES Getters International Luxembourg S.A. Luxembourg (Luxembourg)	EUR	34,791,813	90.00	10.00**
SAES Getters Export, Corp. Wilmington, DE (USA) Memry GmbH in liquidation	USD	2,500	100.00	-
Weil am Rhein (Germany) E.T.C. S.r.l. in liquidation	EUR	330,000	100.00	-
Lainate, MI (Italy) SAES Nitinol S.r.I.	EUR	75,000	100.00	-
Lainate, MI (Italy)	EUR	10,000	100.00	-
SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A.) Roncello, MB & Lainate, MI (Italy) SAES Investments S.A.	EUR	50,000	100.00	-
Luxembourg (Luxembourg)	EUR	40,000,000	100.00	-
Indirectly-controlled subsidiaries:				
Through SAES Getters/U.S.A., Inc.:				
Spectra-Mat, Inc. Watsonville, CA (USA)	USD	204,308	-	100.00
Through SAES Getters International Luxembourg S.A.:				
SAES Getters Korea Corporation Seoul (South Korea)	KRW	524,895,000	37.48	62.52
SAES Smart Materials, Inc.	VKAA	524,695,000	37.48	02.52
New Hartford, NY (USA)	USD	17,500,000	-	100.00
Memry Corporation Bethel, CT (USA) & Freiburg (Germany)	USD	30,000,000	-	100.00

^{*} The share capital of the subsidiary SAES Getters/U.S.A., Inc. was reduced from 45 million euro to 33 million euro at the end of October 2018.

The following table shows the companies included in the scope of consolidation according to the equity method as at December 31, 2018.

^{** %} of indirect ownership held by SAES Getters (Nanjing) Co., Ltd.

Company	Currency	Share Capital	% of Ov Direct	vnership Indirect
		-		
Actuator Solutions GmbH				
Gunzenhausen (Germany)	EUR	2,000,000	-	50.00*
Actuator Solutions Taiwan Co., Ltd.				
Taoyuan (Taiwan)	TWD	5,850,000	-	50.00**
Actuator Solutions (Shenzhen) Co., Ltd.				
Shenzhen (P.R. of China)	EUR	760,000	-	50.00***
SAES RIAL Vacuum S.r.l.				
Parma, PR (Italy)	EUR	200,000	49.00	-
Flexterra, Inc.				
Stokie, IL (USA)	USD	(#) 33,358,815	-	(#) 46.73****
Flexterra Taiwan Co., Ltd.				
Zhubei City (Taiwan)	TWD	5,000,000	-	46.73****

^{* %} of indirect ownership held by SAES Nitinol S.r.l.

The changes introduced to the scope of consolidation compared to December 31, 2017 follow:

- On February 26, 2018, SAES Getters S.p.A. exercised a call option for the purchase of the entire share capital of Metalvuoto S.p.A., 70% of which was already in its possession. Following this transaction, SAES acquired the remaining 30% previously held by the minority shareholder Mirante S.r.l., for a consideration of 75 thousand euro. Note that the consolidated financial statements of the SAES Group as at December 31, 2017 already included a financial payable of the same amount, related to the value of the above option, and that Metalvuoto S.p.A. was already 100% consolidated without recognition of minority interests.
- The sale of the gas purification business to the US company Entegris, Inc. was finalised on June 25, 2018. The sale regarded the US affiliate SAES Pure Gas, Inc. and the commercial structure of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. located in Shanghai that provided commercial support to SAES Pure Gas, Inc. on the Asian market.

To enable the transaction to take place, on June 15, 2018 SAES Getters USA, Inc., the controlling company of SAES Pure Gas, Inc., sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly-incorporated company called SAES Colorado, Inc., subsequently renamed SAES Getters/USA, Inc., which continues to belong to the SAES Group. On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling entity of the investment in SAES Pure Gas, Inc., was sold to Entegris together with the above-mentioned commercial structure of SAES Getters (Nanjing) Co., Ltd. based in Shanghai.

- On October 5, 2018, SAES conferred 4.5 million USD of share capital in Flexterra, Inc. through the subsidiary SAES Getters International Luxembourg S.A. after Flexterra, Inc. reached the set commercial milestone. SAES's shareholding in Flexterra rose to 42.23% after this payment.
- On October 23, 2018 SAES Investments S.A. was formally incorporated, based in Luxembourg, wholly owned by SAES Getters S.p.A. The purpose of the company, with a share capital of 40 million euro, is to manage the liquidity resulting from the sale of the purification business, with the objective of maintaining capital for any future uses.
- On December 12, 2018, SAES conferred 2.6 million USD of share capital in Flexterra, Inc. through the subsidiary SAES Getters International Luxembourg S.A. for the purchase of the OLET patents regarding both materials and configurations using these material developed by the E.T.C. S.r.l. Group company. Finalisation of the sale of these intangible assets is expected in the first half of 2019 and since the patents are not currently recognised as assets of E.T.C. S.r.l. in liquidation, it will generate a revenue of the same amount for the related party.

^{** %} of indirect ownership held by the joint venture Actuator Solutions GmbH (which holds a 100% interest in Actuator Solutions Taiwan Co., Ltd.).

^{*** %} indirect ownership held by the joint venture Actuator Solutions GmbH (which holds a 100% interest in Actuator Solutions (Shenzhen) Co., Ltd.).

^{**** %} of indirect ownership held by SAES Getters International Luxembourg S.A.

^{***** %} indirect ownership held by the joint venture Flexterra, Inc (which holds a 100% interest in Flexterra Taiwan Co., Ltd.).

^(#) The interest of the SAES Group in the share capital of Flexterra, Inc. went up from 33.79% as at December 31, 2017 to 46.73% as at December 31, 2018, as a result of the contributions made by the shareholders during the second part of the current year based on the original agreement signed at the end of 2016 (please refer to the following information as regards the contribution by SAES Getters International Luxembourg S.A.).

Lastly, it is reported that:

- On April 5, 2018, the extraordinary Shareholders' Meeting of Metalvuoto S.p.A. resolved to change the name of Metalvuoto S.p.A. to SAES Coated Films S.p.A. in order to achieve greater recognisability on the market.
- On June 1, 2018, SAES Coated Films S.p.A. opened a local unit in Lainate, at the headquarters of the Parent Company.

2. ACCOUNTING STANDARDS

Consolidation principles

The consolidated financial statements contain the financial statements of SAES Getters S.p.A. and the financial statements of all of the subsidiaries starting from the date on which their control was taken over and until the time when said control ceased to exist.

Control exists when the Group is exposed or is entitled to varying yields arising from its relationship with the entity in which it has invested and, at the same time, it has the ability to affect these yields by exercising its power over the entity.

Specifically, the Group controls an investee if it simultaneously has:

- decision-making power, or the ability to manage the relevant activities of the investee, i.e. those activities that make a significant impact on the results of the same investee;
- the right to varying profits or losses coming from its investment in the entity;
- the possibility to use its decision-making power to determine the relevant activities of the investee.

When the Group holds less than the majority of voting rights (or similar rights), it considers all of the relevant events and circumstances to determine if it controls the investee, including:

- contractual agreements with other holders of voting rights;
- rights arising from contractual agreements;
- voting rights and potential voting rights of the Group.

When preparing the consolidated financial statements, the assets, liabilities and the costs and revenues of the subsidiaries are taken on a line by line basis in their total amount, assigning the Third-party Shareholders the share of the shareholders' equity and of the profit or loss of the year due to them in specific items of the statement of financial position and income statement.

The book value of the investment in each of the subsidiaries is eliminated against the corresponding share of shareholders' equity including any adjustments to fair value as at the date of acquisition; the positive difference that emerges is recognised as goodwill under the intangible assets, as explained further below, while the negative difference is recognised in the income statement.

When preparing the consolidated financial statements, all equity and financial balances between the Group companies and the profits and losses not realised on intercompany transactions are eliminated.

All companies over which the Group is able to exercise considerable influence are considered associated companies. Considerable influence means the power to take part in determining financial and management policies of the investee without having its control or joint control.

A joint venture, on the other hand, is an agreement to exercise joint control over an entity on the basis of which the parties holding the joint control enjoy rights to the net assets of the entity. Joint control is the sharing, established in an agreement, of the control of an economic activity that only exists when the unanimous consent of all parties sharing the control is required to take decisions regarding said activity.

Joint ventures differ from joint operations which are instead agreements that give rights to single assets and obligations for the single liabilities relating to the agreement to the parties of the agreement that have joint control over the initiative.

Equity investments in associates and joint ventures are measured using the equity method. In the case of a joint operation, the assets and liabilities, costs and revenues of the agreement based on the accounting standards of reference are instead recognised.

The consolidated financial statements are presented in euro, which is the functional currency of the Group.

Each company of the Group defines the functional currency for its financial statements. Transactions in foreign currencies are initially recorded at the exchange rate (related to the functional currency) at the date of the transaction.

All of the assets and liabilities of foreign companies in currencies other than the euro that fall within the scope of consolidation are converted by using the exchange rates in force as of the balance sheet data (current exchange rate method), whereas the associated revenues and costs are converted at the average exchange rates for the year. Translation differences resulting from the application of this method are classified as a shareholders' equity item until the equity investment is sold. In preparing the consolidated cash flow statement, the cash flows of consolidated foreign companies expressed in currencies other than the euro are converted by using the average exchange rates for the year.

Non-current items measured at historical cost in a foreign currency (including goodwill and adjustments to the fair value generated during the purchase price allocation of a foreign company) are converted at the exchange rates at the date of their initial recognition. At a later stage, these figures are converted at the exchange rate at year end.

The following table shows the exchange rates used for the conversion of the foreign financial statements.

expressed in foreign currency (per 1 euro)

	December	31, 2018	December	31, 2017
Currency	Average	Final	Average	Final
	rate	rate	rate	rate
US dollar	1.1810	1.1450	1.1297	1.1993
Japanese yen	130.3959	125.8500	126.7112	135.0100
South Korean won	1,299.0713	1,277.9300	1,276.7400	1,279.6100
Renminbi (P.R. of China)	7.8081	7.8751	7.6290	7.8044
Taiwan dollar	35.5864	35.0223	34.3635	35.6555

When the IFRS were first adopted, the combined conversion differences generated by the consolidation of foreign companies outside the Eurozone were set at zero, as allowed by IFRS 1 (First adoption of the International Financial Reporting Standards) and therefore only the conversion exchange rate differences accumulated and recognised after January 1, 2004 contribute to determining capital gains and losses generated by their transfer, if any.

Business combinations and Goodwill

Business combinations are recognised using the purchase method. According to this method, the assets (including intangible assets not previously recognised), liabilities and potential liabilities (excluding future restructuring) acquired and identifiable, are recognised at their fair value on the date of acquisition. The positive difference between the purchase cost and the Group's share of the fair value of said assets and liabilities is classified as goodwill and recognised as an intangible asset. Any negative difference ("negative goodwill") is instead recognised in the income statement at the time of the acquisition.

Any considerations subject to conditions set out in the business combination contracts are measured at fair value as at the date of acquisition and are included in the value of the considerations transferred into the business combination in order to determine goodwill. Any subsequent changes in this fair value that can be put down as adjustments arising during the measurement period are retrospectively included in goodwill. The changes in fair value that can be put down as adjustments arising during the measurement period are those that derive from more information on events and circumstances that existed as at the date of acquisition, obtained during the measurement period (that cannot exceed the period of one year from the business combination). If the acquisition cost and/or the value of the assets and liabilities acquired can be determined only temporarily, the Group will record the business combination using temporary values that will be determined definitively within 12 months from the date of acquisition. This accounting methodology, if use, will be reported in the Explanatory notes.

The accessory transaction costs are recognised in the income statement when they are incurred.

Goodwill is not amortised, but annually, or more frequently if certain specific events or particular circumstances indicate the possibility that it may be impaired, it is tested for impairment to identify any impairment losses, in accordance with IAS 36 - *Impairment of Assets*. After initial recognition, goodwill is valued at cost, net of any accumulated impairment losses. Once goodwill has been written down, impairment losses will not be reversed.

To assess consistency, the goodwill acquired in a business combination is allocated, on the acquisition date, to the Group's individual Cash Generating Units (CGU), or to groups of cash generating units, which should benefit from synergies of the business combination, regardless of the fact that other assets or liabilities of the Group are allocated to these units or groups of units. Each CGU or group of CGUs to which the goodwill is allocated, represents the lowest level, as regards the Group, at which goodwill is monitored for internal management purposes.

When the goodwill is part of a CGU and part of the internal business of said unit is sold, the goodwill associated to the business sold is included in the carrying amount of the asset to calculate the profit or loss resulting from the sale. The goodwill sold in these circumstances is measured on the basis of the relative values of the asset sold and of the portion of the unit maintained.

If the entire business or part of the same previously acquired is sold, and said acquisition had indicated goodwill, when establishing the impact resulting from said sale, the corresponding residual value of the goodwill is taken into account. The difference between the sale price and the net assets plus the accrued conversion differences and the goodwill is booked to the income statement. The accrued profits and losses recognised directly under shareholders' equity are transferred to the income statement at the time of the sale.

In the case of options that give no actual access to the yields associated with ownership of the minority shares, the shares or quotas that the options concern are recognised as at the date control is acquired as "quotas attributable to third parties"; the portion of profits and losses (and other shareholders' equity movements) of the entity acquired following the business combination is attributed to the third-party quota. The third-party quota is reversed to each balance sheet date and reclassified as financial liability at its fair value (equal to the current value of the price for exercising the option), as if the acquisition were to occur on that date. The Group opted to recognise the difference between the financial liability at fair value and the third-party quota reversed to the balance sheet date as goodwill (Parent entity extension method).

Intangible assets

Development costs

Costs incurred internally to develop new products and services are considered, depending on the case, as intangible assets or property, plant and equipment generated internally and are recognised under assets only if the costs can be determined reliably and the technical feasibility of the product, the expected volumes and prices, indicate that the costs incurred during the development stage will generate future economic benefits.

Development costs capitalised only include expenses incurred that may be directly attributed to the development process.

Development costs capitalised are amortised systematically, starting from the start of production, for the estimated lifetime of the product/service.

Other assets with a finite useful life

Other intangible assets with a finite useful life purchased or produced internally are recognised under assets, in accordance with the provisions of IAS 38 - *Intangible Assets*, when it is likely that the use of the asset will generate future economic benefits and when the cost of the asset can be reliably determined.

These assets are recognised at purchase or production cost and amortised on a straight line basis for their estimated useful life. Intangible assets with a finite useful life are tested for impairment on an annual basis, or whenever there is any indication that the asset may be impaired.

Amortisation is calculated on the basis of a straight-line criterion for the estimated useful life of the assets; the rates of amortisation are reviewed annually and are changed if the current estimated life differs from that estimated previously. The impact of these changes is recognised in the income statement on a forward-looking basis.

Intangible assets are amortised on the basis of their estimated useful life, if established, as follows.

Industrial patent rights and intellectual property rights	3-15 years/term of contract
Concessions, licenses, trademarks and similar rights	3-25 years/term of contract
Others	5-15 years/term of contract

Property, plant and equipment

Property, plant and equipment are recognised at purchase or production cost or, for those in place as at January 1, 2004 at deemed cost, which for some assets is represented by the revalued cost. The costs incurred after the purchase are capitalised only if they lead to an increase in future economic benefits inherent to the asset to which they refer. All other costs are recognised in the income statement when incurred. The cost of the assets also includes the costs envisaged by the dismantling of the asset and the recovery of the site where a legal or implicit obligation is present. The corresponding liability is recognised, at its present value, in the period in which the obligation arises, in a fund recognised under liabilities as part of provisions for risks and charges; the recognition of the capitalised expense in the income statement is made over the useful life of the relative property, plant and equipment through the depreciation process of the same.

Depreciation is calculated on the basis of a straight-line criterion for the estimated useful life of the assets.

Land, including that relating to buildings, is not depreciated.

The rates of depreciation are reviewed annually and are changed if the current estimated life differs from that estimated previously. The impact of these changes is recognised in the income statement on a forward-looking basis. The minimum and maximum rates of depreciation are shown below.

Buildings	2.5% - 20%
Plant and machinery	6% - 33%
Industrial and commercial equipment	3% - 40%
Other assets	3% - 25%

Finance lease agreements are considered those that substantially transfer all of the risks and benefits of the property to the Group.

The assets under finance leases are recognised at the lesser between the fair value and the present value of the minimum payments due on the basis of the agreements and are depreciated on the basis of their estimated useful life.

Liabilities towards the lessor are classified as financial liabilities in the statement of financial position. The instalments are divided between the principal and interest in order to obtain the application of a constant interest rate on the residual balance of the debt. The interest included in the periodic instalments is recognised under financial expenses in the income statement for the year.

Lease agreements in which the lessor substantially maintains all of the risks and benefits related to the property are considered operating leases. Operating lease instalments are recognised in the income statement on a straight-line basis for the term of the agreement.

Impairment of assets

On each reporting date, the Group assesses if there are any indications that intangible assets with a finite useful life and property, plant and equipment may have suffered an impairment loss. Goodwill and intangible assets with an indefinite useful life undergo impairment testing at least once a year, or, more frequently, whenever there is any indication that the asset may be impaired.

Goodwill

Goodwill undergoes impairment testing to identify its recoverable amount on the reporting date and whenever there are indicators of problems with said item during the year. The goodwill acquired and allocated during the year undergoes impairment testing to identify the recoverable amount before the end of the year in which the acquisition and allocation took place.

To assess its recoverable amount, the goodwill is allocated, on the acquisition date, to each Cash Generating Unit (CGU) or group of CGUs, which benefit from the acquisition, regardless of the fact that other assets or liabilities of the entity acquired are allocated to these units.

If the carrying amount of the Cash Generating Unit (or group of CGUs) exceeds the respective recoverable amount, an impairment loss is recognised in the income statement corresponding to the difference.

The impairment loss is recognised in the income statement, first by reducing the carrying amount of the goodwill allocated to the CGU (or group of CGUs) and only later to the other assets of the unit in proportion to their carrying amount up to the recoverable amount of the asset with a finite useful life. The recoverable amount of a Cash Generating Unit, or group of CGUs, to which the goodwill is allocated, is the higher between the fair value less selling costs, and the value in use of the same CGU.

The value in use of an asset is represented by the present value of expected cash flows calculated by applying a discounting rate that reflects current market valuations of the time value of money and of the specific risks of the asset. The explicit future cash flows cover a period of three years and are projected for a specific period of between 2 and 12 years, with the exception of cases in which the projections require longer periods as in the case of newly-started businesses and startups. The long-term growth rate used to estimate the terminal value of the CGU (or group of CGUs) is assumed at a value not exceeding the average long-term growth rate of the sector, country or market in which the CGU (or group of CGUs) operates.

The value in use of Cash Generating Units in foreign currency is estimated in the local currency by discounting on the basis of an appropriate rate for said currency. The present value obtained in this way is converted into euro on the basis of the spot exchange rate on the reference date of the impairment test (in our case the reporting date of the financial statements).

Future cash flows are estimated by referring to the current conditions of the Cash Generating Unit and, therefore, neither the benefits resulting from future restructuring which the entity has not yet committed to, nor future investments to improve or optimise the CGU are considered.

For impairment testing purposes, the carrying amount of a Cash Generating Unit is calculated according to the criterion with which the recoverable amount of the Cash Generating Unit is determined, excluding surplus assets (namely financial assets, deferred tax assets and non-current assets held for sale).

After having conducted impairment testing of the Cash Generating Unit (or group of CGUs) to which the goodwill is allocated, a second-level impairment test is conducted also including centralised assets with accessory functions (corporate assets) that do not generate positive cash flows and that cannot be allocated according to a criterion that is reasonable and consistent to the individual CGUs. At this second level, the recoverable amount of all of the CGUs (or groups of CGUs) is compared with the carrying amount of all of the CGUs (or groups of CGUs), also including those CGUs to which no goodwill has been allocated, and centralised assets.

If the conditions that led to the previously recognised impairment loss no longer apply, the original value of the goodwill is not reversed, in accordance with the provisions of IAS 36 - *Impairment of Assets*.

(Intangible and tangible) assets with a finite useful life

During the year, the Group checks whether there are indications that tangible or intangible assets with a finite useful life may have suffered impairment losses. To this end, internal and external sources of information have been considered. As regards the former (internal sources) the following are considered: the obsolescence or physical deterioration of the asset, any significant changes in the use of the asset and the economic performance of the asset with respect to that envisaged. As regards external sources, instead, the following are considered: the trend of the market prices of the assets, any negative changes in technology, markets or laws, the trend of market interest rates, the cost of capital used to value the investments and lastly, if the carrying amount of the net assets of the Group are higher than market capitalisation.

If there are indications that both tangible or intangible assets with a finite useful life have suffered an impairment loss, the carrying amount of the asset is reduced to the relative recoverable amount. The recoverable amount of an asset is defined as the higher between the fair value, net of selling costs, and its value in use. The value in use of an asset is represented by the present value of expected cash flows calculated by applying a discounting rate that reflects current market valuations of the time value of money and of the specific risks of the asset. When the recoverable amount of a single asset cannot be estimated, the Group estimates the recoverable value of the Cash Generating Unit to which the asset belongs.

The impairment loss is recognised in the income statement.

If, subsequently, the reasons that led to the impairment loss no longer exist, the carrying amount of the asset or of the Cash Generating Unit is increased up to the new estimated recoverable amount which, in any event, cannot exceed the amount that would have been determined if no impairment loss had been recognised. The reversal of the impairment loss is recognised in the income statement.

Equity investments in associates and joint ventures

Equity investments in associates and joint ventures are measured using the equity method, on the basis of which the investment is recognised at cost at the time of acquisition, and is later adjusted for the fraction concerning the changes in the shareholders' equity of the same associate. The portions of profit or loss arising from application of this consolidation method are recognised in the income statement under the item "Share of result of investments accounted for using the equity method".

The losses of the associates exceeding the portion the Group owns of them are not recognised unless the Group has undertaken an obligation to hedge them.

The surplus of the acquisition costs over and above the percentage of the current value of the assets, liabilities and potential identifiable liabilities of the associate as at the acquisition date pertaining to the Group is the goodwill and remains included in the book value of the investment.

The lesser acquisition book value compared to the percentage of the fair value of the assets, liabilities and potential identifiable liabilities of the associate as at the acquisition date pertaining to the Group is credited to the income statement in the year as soon as the process of applying the acquisition method within the 12 months following the acquisition is completed.

If an associate or joint venture recognises adjustments with direct recognition to the shareholders' equity and the statement of comprehensive income, the Group in turn recognises its portion in the shareholders' equity and, where applicable, represents it in the statement of changes in shareholders' equity and in the consolidated statement of comprehensive income.

The consolidated profit or loss is adjusted to eliminate the positive or negative economic effects arising from intercompany transactions with the associate or the joint venture and not yet realised with the third parties at the end of the year.

Every year the Group assesses the existence of any impairment indicators by comparing the value of the investment recognised with the equity method and its recoverable value. Any impairment is allocated to the investment as a whole with a balancing entry in the income statement.

When considerable influence over an associate or joint control of a joint venture is lost, the Group assesses and recognises the residual investment at fair value. The difference between the book value of the investment as at the date considerable influence or joint control is lost and the fair value of the residual investment and payments received is recognised in the income statement.

Financial assets (other than trade receivables) and financial liabilities

Pursuant to IFRS 9, the classification and measurement of financial assets is made on the basis of the business model chosen by the Group for their management, as well as on the basis of the characteristics of the contractual cash flows of the financial assets in question.

The business models adopted by the Group are the following:

- Held to Collect: these are financial instruments used to absorb temporary cash surpluses; they are characterised by a low level of risk and mostly held to maturity. The measurement is made at amortised cost.

Held to Collect and Sell: these are monetary instruments, bonds and equity trading instruments used for the dynamic management of cash surpluses; they are characterised by a low level of risk and usually held to maturity or sold to cover specific liquidity requirements. The measurement is made at fair value through profit or loss.

The impairment of financial assets other than trade receivables is made following the general model that identifies the expected losses on receivables in the following 12 months, or over the entire residual life if the credit risk substantially worsens.

Financial liabilities include trade payables as well as financial liabilities, including therein financial derivatives. They also include trade payables and those of a miscellaneous nature.

Financial liabilities are measured at amortised cost. These liabilities are recorded according to the settlement date principle and initially recognised at fair value, which usually corresponds to the fee received, net of settlement costs directly attributable to the financial liability. After initial recognition, these instruments are measured at amortised cost, using the effective interest rate criterion.

Trade receivables

Group trade receivables are characterised by a low level of risk and are generally held to maturity; they are classified in the category "Held to Collect" and are measured at amortised cost.

Impairment testing on trade receivables is conducted using a simplified approach permitted by IFRS 9. This approach enables an estimate of the expected loss for the whole life of the receivable at the time of initial recognition and of subsequent measurements. The estimate is made mainly by calculating the average expected uncollectability, based on historic and geographical indicators. For some receivables characterised by specific risk, specific measurements of the single credit positions are made instead.

Financial derivatives

The financial derivatives set in place by the SAES Group seek to cover the exposure to exchange rate and interest rate risk and to a diversification of debt parameters, which enable the cost and the volatility to be reduced to within set operational thresholds.

The SAES Group has decided to defer the application of the hedge accounting model envisaged by IFRS 9 and to continue to apply the IAS 39 model.

Therefore, in accordance with the provisions of IAS 39, derivative hedges are recognised according to the procedures established for hedge accounting only when:

a) at the beginning of the hedge, there are the formal description and the documentation of the hedging relationship in question;

- b) the hedge is expected to be highly effective;
- c) the effectiveness can be reliably measured;
- d) the hedge in question is highly effective during the different accounting periods to which it pertains.

All financial derivatives are measured at fair value, as established in IAS 39.

When derivative instruments have the characteristics to be measured according to hedge accounting criteria, the following accounting treatments are applied:

- Fair value hedge If a financial derivative is designated to hedge exposure to changes in the fair value of an asset or liability, attributable to a specific risk, the profit or the loss resulting from subsequent changes in the fair value of the hedging derivative is recognised in the income statement. The profit or loss resulting from the adjustment to the fair value of the item hedged, for the part attributable to the risk hedged, changes the carrying amount of said item and is recognised in the income statement.
- Cash flow hedge If a financial derivative is designated to hedge the exposure to the fluctuation of the cash flows of an asset or liability recognised in the financial statements or of a transaction deemed as highly likely, the effective portion of the profits or losses resulting from the adjustment to fair value of the derivative instrument is recognised in a specific equity reserve (Reserve for the fair value adjustment of hedging derivatives). The accrued profit or loss is reversed from the equity reserve and recognised in the income statement in the same years in which the effects of the hedged transaction are recognised in the income statement.

The profit or loss associated to that part of the ineffective hedge is immediately recognised in the income statement. If the hedged transaction is no longer deemed likely, the profits or losses not yet realised, recognised in the equity reserve, are immediately recognised in the income statement.

For derivatives for which no hedging relationship has been established, the profits or the losses resulting from their measurement at fair value are recognised directly in the income statement.

Inventories

Inventories - represented by raw materials, products purchased, semi-finished goods, work in progress and finished products - are measured at the lower of purchase and production cost and assumed realisable value; the cost is calculated using the FIFO method. The measurement of inventories includes direct costs of materials and of labour and the indirect costs of production (variable and fixed).

In addition, provisions are allocated for materials, finished products, spare parts and other supplies considered obsolete or slow moving, taken their future expected use and their assumed realisable value into account.

Assets held for sale/Discontinued operations

Divested assets, Assets held for sale and Discontinued operations refer to those business lines and to those assets (or operations) sold or being disposed of, whose carrying amount has been or will be recovered mainly through the sale rather than the continuative use of the same.

These conditions are considered to be met when the sale or the discontinuance of the disposal group is considered highly likely and the assets and liabilities are immediately available for sale in their current condition.

Assets held for sale are measured at the lower of their net carrying amount and fair value net of selling costs.

If these assets originate from recent business combinations, they are measured at their present value net off selling costs.

In compliance with IFRS, the date relating to the assets divested and/or held for sale are presented as follows

- in two specific items on the statement of financial position: Assets held for sale and Liabilities held for sale;
- in a specific income statement item: Income (loss) from discontinued operations.

Provisions relating to personnel

Staff Leaving Indemnities (TFR)

Staff Leaving Indemnities (TFR), mandatory for Italian enterprises pursuant to article 2120 of the Italian Civil Code, are a type of deferred remuneration and are correlated to the length of the employee's working life and to the remuneration received in the relative period of service.

In application of IAS 19, the TFR, calculated in this way, is considered a "Defined Benefits Plan" and the relative obligation to be recognised in the financial statements (Payable for TFR) is established by an actuarial calculation, using the Projected Unit Credit Method. As envisaged by the revised version of IAS 19, the profits and losses resulting from the actuarial calculation are fully recognised in the statement of comprehensive income in the period in which they arise. These actuarial differences are immediately recognised in profits carried forward and are not classified in the income statement in later periods.

The costs relating to the present value of the obligation for TFR resulting from the approximation of the time at which the benefits will be paid, are included under "Personnel costs". From January 1, 2007, the 2007 Finance Law and relative implementing decrees introduced significant changes to the TFR scheme, including giving workers a choice as to the destination of their accruing TFR, to supplementary pension plans or to the "Treasury Fund" managed by INPS.

This therefore means that the obligation towards INPS and the contributions made to supplementary pension plans are considered, according to IAS 19, "Defined contribution plans", while the amounts recognised as payables for TFR continue to be considered "Defined benefit plans". The legislative changes that have been made since 2007 have therefore led to a redetermination of actuarial assumptions and of the consequent calculations used to establish the TFR.

Other long-term benefits

Bonuses for anniversaries or other benefits linked to length of service and long-term incentive plans are discounted to establish the present value of the obligation for defined benefits and the relative cost of current work performed. Any actuarial differences, as envisaged by the revised version of IAS 19, are fully recognised in the statement of comprehensive income in the period in which they arise. These actuarial differences are immediately recognised in profits carried forward and are not classified in the income statement in later periods.

Provisions for risks and charges

The Group companies recognise provisions for risks and charges when, in the presence of a present, legal or implicit obligation towards a third party, resulting from a past event, it is likely that resources will be required to meet said obligation, and when a reliable estimate of the amount of said obligation can be made.

Changes in estimates are reflected in the income statement of the year in which the same arose.

Treasury Shares

Treasury shares are deducted from shareholders' equity.

Foreign currency transactions

Foreign currency transactions are recorded at the exchange rate in force on the date of the transaction. Monetary assets and liabilities in foreign currency are converted at the exchange rate in force on the reporting date of the financial statements. The exchange rate differences generated by

the cancellation of monetary entries or by their conversion at rates different to those of their initial recognition in the year or to those at the end of the previous year.

Non-current items measured at historical cost in a foreign currency (including goodwill and adjustments to the fair value generated during the purchase price allocation of a foreign company) are converted at the exchange rates at the date of their initial recognition. At a later stage, these figures are converted at the exchange rate at year end.

Recognition of revenues

Pursuant to IFRS 15, a contract with a customer is only recognised if it is likely that the Group will receive the consideration it will have a right to in exchange for goods and services that will be transferred to the customer.

Revenues from the sale of goods are recognised at the time at which the control of the good sold is transferred, while revenues resulting from the provision of services are recognised at the time the service is performed.

Revenues are recorded net of discounts, allowances and returns.

Cost of sales

The cost of sales includes the cost of production or purchase of the products and of the goods that have been sold. It includes all costs for materials, processing and general expenses directly associated with the production, including the depreciation of assets used in production and the write-downs of the inventories.

Research and development and advertising costs

The research and advertising costs are charged directly to the income statement in the year in which they occur. Development costs are capitalised if the conditions envisaged by IAS 38 are met, already illustrated in the paragraph on intangible assets. If the requirements for the mandatory capitalisation of development costs are not met, the charges are booked to the income statement of the year in which they were incurred.

Government grants

Government grants are recognised in the financial statements in accordance with IAS 20, namely when it is reasonably certain that the company will meet all of the conditions envisaged for the receipt of the grants and that the grants in question will be received. Grants are recognised in the income statements for the period in which the costs relating to the same are recorded.

Current and deferred taxes

Income taxes include all of the taxes calculated on the taxable income of the Group companies.

Income taxes are recognised in the income statement, with the exception of those relating to items that are directly debited from or credited to an equity reserve, in which case the relative tax is recognised directly in the respective equity reserve.

The provisions for taxes that might be generated by the transfer of non-distributed profits of the subsidiaries are made only where there is a real intention to transfer these profits.

Deferred tax assets/liabilities are recognised according to the balance sheet liability method. These are calculated on all temporary differences that emerge between the tax base of the assets and liabilities and their book values in the consolidated financial statements, except for the fiscally non-deductible goodwill.

Deferred tax assets on tax losses that may be carried forward are recognised to the extent to which future taxable income is likely to be generated against which they can be recovered.

Tax assets and liabilities for current and deferred taxes are offset when the income taxes are applied by the same tax authority and when there is a legal right to offset the same.

Deferred tax assets and deferred tax liabilities are calculated by adopting the tax rates that are expected to be applicable, in the respective systems of the countries where the Group companies operate, in the years in which the temporary differences will cancel each other out.

Earning (loss) per share

The basic earning (loss) per ordinary share is calculated by dividing the share of Group profit (loss) attributable to the ordinary shares by the weighted average of the ordinary shares outstanding during the year, except for the treasury shares. Likewise, the basic earning (loss) per savings share is calculated by dividing the share of Group profit (loss) attributable to the savings shares by the weighted average of the savings shares outstanding during the year.

Use of estimates and subjective valuations

The preparation of the consolidated financial statements and of the relative notes in application of IFRSs, requires the use of estimates and assumptions from Management that have an effect on the values of financial statement assets and liabilities, as well as the disclosure of contingent assets and liabilities on the reporting date. If such estimates and assumptions, which are based on the best evaluation currently available, should differ from the actual circumstances in the future, they will be modified accordingly during the period in which said circumstances change.

Estimates and subjective valuations are used to recognise the recoverable amount of non-current assets (including goodwill), revenues, accruals to provision for receivables, obsolete and slow-rotation inventory, depreciation and amortisation, employee benefits, taxes, restructuring provision as well as other accruals and provisions. Estimates and assumptions are reviewed periodically and the effects of all changes are immediately reflected on the statement of profit or loss.

In the absence of a standard or an interpretation that applies specifically to a transaction, Company Management makes weighted subjective valuations to establish which accounting methods it intends to adopt to provide relevant and reliable information so that the financial statements:

- truly reflect the equity/financial situation, the profit/loss and the cash flows of the Group;
- reflect the economic substance of the transactions:
- are neutral:
- are prepared on prudential bases;
- are complete in terms of all relevant aspects.

The financial statement items that require greater subjectivity by the directors in drawing up estimates and for which a change in the conditions underlying the assumptions used could have a significant impact on the financial statements are: goodwill, the write-down of fixed assets, the amortisation/depreciation of fixed assets, deferred tax assets, the bad debt provision, the provision for obsolete inventory, the risks provision, pension plans and other post-employment benefits.

Please refer to the relative paragraphs of the Explanatory notes for the main assumptions adopted and the sources used for making the estimates.

IFRS accounting standards, amendments and interpretations applicable from January 1, 2018

IFRS accounting standards, amendments and interpretations that were applied for the first time starting from January 1, 2018 follow.

IFRS 15 - Revenue from contracts with customers

On May 28, 2014 the IASB issued IFRS 15 - Revenue from contracts with customers that, together with further clarifications published on April 12, 2016, replaces IAS 18 - Revenues and IAS 11 - Construction contracts, as well as the interpretations IFRIC 13 - Customer loyalty programmes, IFRIC 15 - Agreements for the construction of real estate, IFRIC 18 - Transfers of assets from customers and SIC 31 - Revenues - barter transactions involving advertising services. The standard defines a new model of revenue recognition that applies to all contracts with customers except

those that fall within the scope of other IAS/IFRSs such as leases, insurance contracts and financial instruments. The basic steps for the recognition of revenues under the new model are the following ones:

- o the identification of a contract with the customer;
- o the identification of the performance obligations of the contract;
- o the determination of the price;
- o the allocation of the price to the performance obligations of the contract;
- o the revenue recognition criteria when the entity meets each performance obligation.

Based on the analyses conducted, the Directors believe that in terms of the revenues of the SAES Group, the following considerations can be made:

- o identification of the performance obligations of the contract based on commercial agreements in place with customers, no further performance obligations for the SAES Group have been identified.
- o determination of the price as regards the SAES Group, there is no variable consideration or significant financing components in the commercial agreements with customers.
- o allocation of the price to the performance obligations of the contract based on the structure of the commercial agreements in place with customers, the price can clearly be identified from the latter
- o revenue recognition criteria when the entity meets each performance obligation according to the current revenue recognition process in place in the Group, revenue recognition takes place when performance obligations contained in the commercial agreements with customers are met. The standard has been applied since January 1, 2018.

The analysis made to identify the types of contract covered by the new provisions and to determine the relative impact, led us to conclude that there are no significant impacts on either shareholders' equity as at January 1, 2018 or on revenues from sales as at December 31, 2018.

IFRS 9 - Financial instruments

On July 24, 2014 the IASB published the final version of IFRS 9 - Financial Instruments.

The document summarises the results of the IASB project aimed at replacing IAS 39.

The standard introduces new requirements for the classification and measurement of financial assets and liabilities. In particular, for financial assets, the new standard uses a single approach based on the management of financial instruments and the contractual cash flow characteristics of the financial assets themselves in order to determine the evaluation criterion, replacing the many different rules envisaged by IAS 39. Instead, for financial liabilities, the main change regards the accounting treatment of the changes in the fair value of a financial liability designated as a financial liability measured at fair value through profit or loss, if these changes are due to changes in the creditworthiness of the issuer of the liability itself. Under the new standard, these changes must be recognised in the statement of "other comprehensive income" and not in the income statement. Furthermore, in the changes to non-substantial liabilities, it is no longer permitted to spread the economic effects of the renegotiation over the residual term of the debt by changing the effective interest rate at said date, as the relative effect must be recognised in the income statement.

With reference to impairment, the new standard requires that the estimate of credit losses is made on the basis of the expected losses model (and not of the incurred losses model used by IAS 39) using concrete information, available without unreasonable effort or expense, which include historical, current and future data. The standard requires that this impairment model applies to all financial instruments, namely to financial assets measured at amortised cost, to those measured at fair value through other comprehensive income, to receivables deriving from lease contracts and to trade receivables.

Lastly, the standard introduces a new hedge accounting model in order to adapt the requirements of the current IAS 39 that sometimes were considered too stringent and unsuitable to reflect the risk management policies of the company. The main changes of the document regard:

- o an increase in the types of transactions eligible for hedge accounting, including also the risks of non-financial assets/liabilities eligible to be managed in hedge accounting;
- o a change in the accounting method for forward contracts and options when included in a hedge accounting relation in order to reduce the volatility of the income statement;

o changes in the effectiveness test by replacing the current model based on the 80-125% parameter with the principle of the "economic relationship" between the hedged item and the hedging instrument; moreover, a retrospective evaluation of the effectiveness of the hedging relationship will be no longer requested.

The greater flexibility of the new accounting rules is offset by additional requests of information on the risk management activities of the company.

The standard has been applied since January 1, 2018. At the time of first application of IFRS 9, the amended back-dated method was applied. Consequently, no changes have been made to the comparative schedules and any impacts have been recognised in the opening shareholders' equity. Based on the analyses conducted, the Directors believe that the following considerations can be made for the SAES Group:

o the classification and measurement of financial assets and liabilities - the main impacts of the new classification and measurement requirements mainly regard the placement of trade receivables in the new category called "held to collect".

A table with the new classification of assets and liabilities in accordance with the requirements of IFRS 9 is shown below.

(thousands of euro)	December 31, 2018	December 31, 2017	Held to Collect	Held to Collect and Sell	Other
<u>ASSETS</u>					
Securities	99,843	0		X	
Tax consolidation receivables from the Controlling Company	272	272	X		
Financial receivables from related parties	50	8,485	X		
Trade receivables	19,676	33,529	X		
Other receivables, accrued income and prepaid expenses	4,634	5,852	X		
Cash and cash equivalents	170,601	27,564	X		
<u>LIABILITIES</u>					
Financial debts	18,782	38,535	X		
Trade payables	12,082	18,877	X		
Other payables	12,533	15,315	X		
Derivative financial instruments measured at fair value	48	61	X		
Other financial debts to third parties	1,001	2,091	X		
Bank overdraft	27,353	12,254	X		

- o write-downs of receivables pursuant to IFRS 9, the Expected Credit Loss model has been adopted for outstanding receivables. With regard to trade receivables, in particular, the application of this method has entailed the specific write-down of receivables that are difficult to collect and a generic write-down for all other receivables, including those not yet due. This approach substantially corresponds to that adopted in previous years and therefore did not entail the recognition of significant additional write-downs.
- o hedge accounting the company has decided to continue to apply the rules envisaged by IAS 39 for hedge accounting, as permitted by the new IFRS 9.

Following the analyses made, the Directors assessed the impacts on shareholders' equity as at January 1, 2018 resulting from the application of the new accounting standard IFRS 9 as not significant, therefore the same have not been included in this annual report. The application of the new standard, instead, led to the recognition of additional costs for write-downs of 188 thousand euro as at December 31, 2018, with a net impact on the profit/loss for the year of -141 thousand euro.

Classification and measurement of share-based payment transactions (amendments to IFRS 2)

On June 20, 2016 the IASB published a document entitled "Classification and measurement of share-based payment transactions (amendments to IFRS 2)", which provides some clarifications on the accounting treatment of the effects of vesting conditions in the presence of cash-settled share-based payments, on the classification of share-based payments with net settlement characteristics

and on the accounting of the changes to the terms and conditions of a share-based payment that alter its classification from cash-settled to equity-settled one.

The changes have been applied since January 1, 2018. The adoption of this amendment did not affect the Group's financial statements.

Annual Improvements to IFRSs: 2014-2016 Cycle

On December 8, 2016 the IASB published the document "Annual Improvements to IFRSs: 2014-2016 Cycle" that incorporates some pre-existing standards as part of the annual process to improve the same. The main changes concern:

- o IFRS 1 First-Time Adoption of International Financial Reporting Standards Deletion of short-term exemptions for first-time adopters. The amendment of this standard was applied from January 1, 2018 and concerns the elimination of some short-term exemptions provided by paragraphs E3-E7 of Appendix E of IFRS 1, as the benefit of such exemptions is deemed outdated;
- o IAS 28 Investments in Associates and Joint Ventures Measuring investees at fair value through profit or loss: an investment-by-investment choice or a consistent policy choice. The amendment states that the option for a venture capital organisation or another entity qualified as such (for example, a mutual fund or a similar entity) to measure investments in associates and joint ventures measured at fair value through profit or loss (rather than by applying the equity method) is exercised for each investment at the time of its initial recognition. This amendment has been applied since January 1, 2018;
- o IFRS 12 Disclosure of Interests in Other Entities Clarification of the scope of the Standard. The amendment clarifies the scope of IFRS 12, specifying that the information required by the standard, except for that envisaged by paragraphs B10-B16, is applied to all equity interests that are classified as held for sale, held for distribution to shareholders or as discontinued operations in accordance with IFRS 5.

This amendment has been applied since January 1, 2018. The adoption of these amendments did not affect the Group's financial statements.

Transfers of Investment Property (amendments to IAS 40)

On December 8, 2016 the IASB published the document "Transfers of investment property (amendments to IAS 40)" that contains some changes to IAS 40. These amendments clarify the requirements needed to transfer a property to, or from, an investment property. In particular, an entity shall transfer a property to, or from, investment property when, and only when, there is evidence of a change in its use. Such a change must be related to a specific event that happened and therefore should not be limited to a change in the intentions of the management of an entity.

The changes have been applied since January 1, 2018. The adoption of these amendments did not affect the Group's financial statements.

Foreign Currency Transactions and Advance Consideration (IFRIC Interpretation 22)

On December 8, 2016 the IASB published the document "Foreign Currency Transactions and Advance Consideration (IFRIC Interpretation 22)". The interpretation aims at providing guidelines for foreign exchange transactions if non-cash advances or down payments are recognised in the accounts, prior to the recognition of the related assets, costs or revenues. This document provides guidance on how an entity should determine the date of a transaction, and as a result, the spot exchange rate to be used when there are foreign currency transactions in which the payment is made or received in advance.

The interpretation clarifies that the transaction date is the earlier between:

- a) the date on which the advance payment or the down payment received are recorded in the financial statements;
- b) the date on which the asset, the cost or the income (or part of it) is recognised in the financial statements (with the cancellation of the advance or down payment received).

If there are a number of advance or down payments received, a transaction date for each of them must be identified.

IFRIC 22 has been applied since January 1, 2018. The adoption of this interpretation did not affect the Group's financial statements.

IFRS and IFRIC accounting standards, amendments and interpretations approved by the European Union but not yet mandatorily applicable, but applicable with an earlier adoption

The standards and the amendments approved by the European Union, but not yet mandatorily applicable and not adopted by the Group in advance as at December 31, 2018 are illustrated below.

IFRS 16 - Leases

On January 13, 2016 the IASB issued IFRS 16 – Leases, which is intended to replace IAS 17 - Leases, and the interpretations IFRIC 4 - Determining whether an arrangement contains a leas, SIC 15 - Operating leases incentives and SIC 27 - Evaluating the substance of transactions involving the legal form of a lease.

The new standard provides for a new definition of lease and introduces a criterion based on control (right of use) of an asset to distinguish the lease contracts from the contracts for the provision of services, by identifying the following discriminating factors: the identification of the asset, the right to replace it, the right to substantially obtain all the economic benefits arising from the use of the asset and the right to direct the use of the underlying asset of the contract.

The standard establishes a single model of recognition and measurement of the lease agreements for the lessee which provides for the record of the lease asset, including an operating lease, among the assets with a financial debt as counterpart, while providing also the possibility not to recognise as leases those contracts which refer to "low-value assets" and those leases with a duration of the contract equal to or less than 12 months. In contrast, the standard does not include significant changes for the lessors.

The standard is applicable from January 1, 2019, but earlier application is allowed.

The Company is completing the preliminary project to assess potential impacts caused by application of the new standard as at the transition date (1 January 2019). This process breaks down into different steps, including the complete mapping of the contracts that potentially may contain a lease and their analysis in order to understand their key clauses important for IFRS 16 purposes. As a result, also the standard implementation process is still in the completion stage.

At the time of first application of IFRS 16, it has been decided that the amended back-dated method will be applied. Specifically, the Group chose to apply the standard retrospectively, however recognising the accumulated effect arising from application of the standard in the shareholders' equity as at January 1, 2019 according to the instructions in paragraphs C7-C13 of IFRS 16. Therefore, as regards lease agreements previously classified as operating, the Group will recognise: a) a financial liability, corresponding to the present value of future residual payments on the transition date, discounted using the incremental borrowing rate applicable on the transition date;

b) a right of use corresponding to the value of the financial liability on the transition date, net of any accruals or deferrals relating to the lease and recognised in the statement of financial position on the reporting date of these financial statements.

The following table shows the impacts estimated from adoption of IFRS 16 as at the transition date.

(thousands of euro)	Impacts at the transition date
	(January 1, 2019)
<u>ASSETS</u>	
Non current assets	
Right of use - Buildings	870
Right of use - Vehicles	487
Right of use - Office machines	308
Total non current assets	1,665
Total assets	1,665
EQUITY AND LIABILITIES	
Retained earnings	77
Total equity	77
Non current financial liabilities for leases	885
Total non current liabilitis	885
Current financial liabilities for leases	703
Total current liabilities	703
Total equity and liabilities	1,665

In adopting IFRS 16, the Group intends to exploit the exemption granted by paragraph IFRS 16:5(a) with regard to short-term leases. Similarly, the Group intends to exploit the exemption granted by IFRS 16-5(b) with regard to lease agreements for which the underlying assets are considered as low-value assets (namely the assets underlying the lease agreement do not exceed 5,000 euro when new). The agreements for which the exemption has been applied mostly fall into the following categories:

- computers and telephones;
- printers;
- other electronic devices.

For these agreements, the introduction of IFRS 16 will not entail the recognition of the financial liabilities of the lease and of the relative right of use, but the lease instalments will be booked to the income statement on a straight-line basis for the duration of the respective agreements.

Also the contracts expiring within 12 months from the transition date were classified as short term leases and their lease instalments will be recognised in the income statement on a straight-line basis.

Prepayment Features with Negative Compensation (amendments to IFRS 9)

On October 12, 2017 the IASB published the document Prepayment Features with Negative Compensation (amendments to IFRS 9). This document specifies that instruments that envisage an early prepayment option could comply with the Solely Payments of Principal and Interest test also in the event in which the "reasonable additional compensation" envisaged in the case of early prepayment is a "negative compensation" for the lender. The amendment applies from January 1, 2019, but an earlier adoption is allowed.

The adoption of these changes is not expected to have any significant impact on the Group's consolidated financial statements.

Uncertainty over Income Tax Treatments (IFRIC Interpretation 23)

On June 7, 2017 the IASB published the interpretation document Uncertainty over Income Tax Treatments (IFRIC Interpretation 23). The interpretation addresses the issue of uncertainties about the tax treatment to be adopted in respect of income taxes. In particular, the interpretation requires an entity to analyse uncertain tax treatments (individually or as a whole, depending on their characteristics) always assuming that the tax authority will examine the tax position in question, with full knowledge of all relevant information. If the entity believes it is unlikely that the tax authority will approve the tax treatment adopted, the entity must reflect the effect of said uncertainty when measuring its current and deferred income taxes. In addition, the document does not contain any new disclosure requirement, but emphasises that the entity should assess whether it

is necessary to provide information on the management's considerations and related to the uncertainty inherent to the recognition of the income taxes, in accordance with the provisions of IAS 1.

The adoption of this interpretation is not expected to have any significant impact on the consolidated financial statements of the Group.

IFRS accounting standards, amendments and interpretations not yet validated by the European Union

At the date of these consolidated financial statements, the competent bodies of the European Union have not yet completed the endorsement process necessary for the adoption of the amendments and the principles described below.

IFRS 17 – Insurance Contracts

On May 18, 2017 the IASB issued IFRS 17 – Insurance Contracts that will replace IFRS 4 – Insurance Contracts.

The objective of the new standard is to ensure that an entity provides relevant information that faithfully represents rights and obligations deriving from the insurance contracts it issues. The IASB developed this standard to eliminate inconsistencies and weaknesses in existing accounting practices, by providing a single principle-based framework to account for all types of insurance contracts, including reinsurance contracts that an insurer holds.

The new standard also envisages some submission and disclosure requirements to improve the comparability between the entities of this sector.

The new standard measures an insurance contract based on a General Model or a simplified version of it, called Premium Allocation Approach ("PAA").

The main features of the General Model are as follows:

- o estimates and assumptions of future cash flows are always the current ones;
- o the measurement reflects the time value of money;
- o estimates provide for an extensive use of information available in the market;
- o there is a current and explicit risk measurement;
- o the expected profit is deferred and aggregated in groups of insurance contracts at the time of their initial recognition;
- o the expected profit is recognised in the hedging period taking into account the adjustments resulting from variations in the assumptions related to the cash flows of each group of contracts.

The PAA approach envisages the measure of the liability for the residual coverage of a group of insurance contracts provided that, at its initial recognition, the entity provides that such a liability is reasonably an approximation of the General Model. Contracts with a coverage period of one year or less are automatically eligible for the PAA approach. The simplifications arising from the application of the PAA method do not apply to the assessment of liabilities for existing claims that are measured with the General Model. However, it is not necessary to discount those cash flows if the balance to be paid or settled is expected to take place within one year from the date in which the claim was filed.

The new standard must be applied to insurance contracts issued, including reinsurance contracts issued, to reinsurance contracts held and also to investment contracts with a discretionary participation feature (DPF).

The standard is applicable starting from January 1, 2021, but an earlier application is allowed only for entities applying IFRS 9 - Financial Instruments and IFRS 15 - Revenue from Contracts with Customers.

The adoption of this standard is not expected to have any significant impact on the consolidated financial statements of the Group.

Long-term Interests in Associates and Joint Ventures (amendments to IAS 28)

On October 12, 2017 the IASB published the document Long-term Interests in Associates and Joint Ventures (amendments to IAS 28). This document clarifies the need to apply IFRS 9, including

requirements relating to impairment, to long-term joint interests in associated companies and joint ventures for which the equity method is not applied.

The amendment applies from January 1, 2019, but an earlier adoption is allowed.

The adoption of these changes is not expected to have any significant impact on the Group's consolidated financial statements.

Annual Improvements to IFRSs: 2015-2017 Cycle

On December 12, 2017 the IASB published the document "Annual Improvements to IFRSs: 2015-2017 Cycle" that incorporates the amendments to some standards as part of the annual process to improve the same. The main changes concern:

- o IFRS 3 Business Combinations e IFRS 11 Joint Arrangements: the amendment clarifies that when an entity obtains control of a business that is a joint operation, it must remeasure previously held interests in that business. Instead, this process is not envisaged if joint control is obtained.
- o IAS 12 Income Taxes: the amendment clarifies that all of the tax consequences of dividends (including payments on financial instruments classified under equity) must be recognised in a consistent manner with the transaction that generated said profits (income statement, OCI or shareholders' equity).
- o IAS 23 Borrowing Costs: the amendment clarifies that if any loans remain outstanding after the related qualifying asset is already ready for its intended use or sale, the same become part of the loan funds used to calculate borrowing costs.

The amendments apply from January 1, 2019, but an earlier adoption is allowed.

The adoption of these changes is not expected to have any significant impact on the Group's consolidated financial statements.

Amendment to IAS 19 "Plant Amendment, Curtailment or Settlement"

The document, published on February 7, 2018, clarifies that an entity must recognise a change (i.e. a curtailment or a settlement) of a defined benefit plan. The amendments require the entity to update its assumptions and to remeasure the net liability or asset resulting from the plan. The amendments clarify that after said event has arisen, an entity uses updated assumptions to measure the current service cost and the interest for the remainder of the related period following the event. The adoption of these amendments is not expected to have any significant impact on the consolidated financial statements of the Group.

Definition of a Business (amendments to IFRS 3)

On October 22, 2018 the IASB published the document "Definition of a Business (Amendments to IFRS 3)". The document provides several clarifications as to the definition of a business with a view to the correct application of IFRS 3. In particular, the amendment clarifies that while a business usually generates an output, the presence of an output is not strictly necessary to identify a business in the presence of an integrated set of assets/processes and goods. Nevertheless, to meet the definition of a business, an integrated set of assets/processes and goods must include, at least, one input and one substantial process that together significantly contribute to the ability to generate output. To this end, the IASB has replaced the term "ability to generate output" with "ability to contribute to the generation of output" to clarify that a business can exist also without the presence of all of the inputs and processes needed to generate an output.

The amendment also introduced an optional test ("concentration test") for the entity to establish whether a set of assets/processes and goods acquired is a business or not. If the test provides a positive outcome, the set of assets/processes and goods acquired does not represent a business and the standard does not require any further tests. If the test provides a negative outcome, the entity must conduct further analyses on the assets/processes and goods acquired to identify the presence of a business. To this end, the amendment added numerous illustrative examples to standard IFRS 3, to clarify the practical application of the new definition of a business in specific cases. The changes will apply to all business combinations and acquisitions subsequent to January 1, 2020, but an early application is allowed.

The adoption of this amendment is not expected to affect the Group's consolidated financial statements.

Definition of Material (amendments to IAS 1 and IAS 8)

On October 31, 2018 the IASB published the document "Definition of Material (Amendments to IAS 1 and IAS 8)". The document introduces a change to the definition of "relevant" contained in standards IAS 1 – Presentation of Financial Statements and IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors. The objective of this amendment is to make the definition of "relevant" and introduces the concept of "obscured information" alongside the concepts of omitted or misstated information already present in the two standards being amended. The amendment clarifies that information is "obscured" if it has been described in such a way as to produce an effect on primary users similar to that which would have been produced if said information had been omitted or misstated.

The adoption of this amendment is not expected to affect the Group's consolidated financial statements.

IFRS 10 and IAS 28 - Sales or contribution of assets between an investor and its associate or joint venture (amendment)

On September 11, 2014 the IASB published an amendment to IFRS 10 and IAS 28 - Sales or contribution of assets between an investor and its associate or joint venture. The document was published in order to solve the current conflict between IAS 28 and IFRS 10.

According to IAS 28, the gain or loss resulting from the sale or transfer of a non-monetary asset to a joint venture or associate in exchange of a share in the share capital of the latter is limited to the stake held in the joint venture or associate by the other investors not involved in the transaction. In contrast, IFRS 10 requires the recording of the entire gain or loss in the event of loss of the control of a subsidiary, even if the entity continues to hold a non-controlling stake in it, including in this case also the sale or transfer of a subsidiary to a joint venture or to an associate. The changes introduced provide that in case of a sale/transfer of an asset or a subsidiary to a joint venture or an associate, the measure of the gain or loss to be recognised in the balance sheet of the assignor/transferor depends on the fact that the sold/transferred assets or subsidiary constitute or not a business, as envisaged by IFRS 3. In the event that the sold/transferred activities or subsidiary represent a business, the entity shall recognise the gain or loss on the entire investment previously held; while, in the opposite case, the portion of gain or loss related to the share still held by the entity should be eliminated.

At the moment, the IASB has suspended the application of this amendment.

The adoption of these changes is not expected to have any significant impact on the Group's consolidated financial statements.

Please be reminded that according to the provisions of IFRS 5, the income statement balances relating to 2017, shown for comparative purposes, have been reclassified to reflect the impact of the sale of the gas purification business. For more detailed information about these reclassifications, please see Note 1 in the paragraph entitled "Reclassification of 2017 balances".

3. NET SALES

In 2018 consolidated net sales were equal to 160,284 thousand euro, up by 8.9% compared to 147,122 thousand euro in 2017. Net of the penalising effect of the exchange rates (negative by - 3.4%), organic growth was +12.3%, mostly driven by the recovery of investments in the security and defence sector and by the increased sales in the vacuum pumps business and in both the Nitinol for medical devices and SMAs for industrial applications sectors (in particular luxury goods and automotive).

The following table shows a breakdown of revenues by Business.

(thousands of euro)

			Total	Total	Exchange rate	Organic
Businesses	2018	2017	difference	difference	effect	change
				%	%	%
Security & Defense	12,595	8,533	4,062	47.6%	-3.9%	51.5%
Electronic Devices	19,209	19,453	(244)	-1.3%	-1.5%	0.2%
Healthcare Diagnostics	4,578	3,848	730	19.0%	-2.5%	21.5%
Getters & Dispensers for Lamps	4,901	5,656	(755)	-13.3%	-1.9%	-11.4%
Thermal Insulation	3,566	4,278	(712)	-16.6%	-3.2%	-13.4%
Solutions for Vacuum Systems	11,183	8,292	2,891	34.9%	-2.7%	37.6%
Sintered Components for Electronic Devices & Lasers	7,350	6,800	550	8.1%	-4.9%	13.0%
Systems for Gas Purification & Handling (*)	1,897	331	1,566	473.1%	-21.4%	494.5%
Industrial Applications	65,279	57,191	8,088	14.1%	-2.8%	16.9%
Nitinol for Medical Devices	70,968	66,294	4,674	7.1%	-4.8%	11.9%
SMAs for Thermal & Electro Mechanical Devices	11,482	9,578	1,904	19.9%	-1.5%	21.4%
Shape Memory Alloys	82,450	75,872	6,578	8.7%	-4.4%	13.1%
Solutions for Advanced Packaging	11,480	12,445	(965)	-7.8%	0.0%	-7.8%
Business Development	1,075	1,614	(539)	-33.4%	-2.7%	-30.7%
Total net sales	160,284	147,122	13,162	8.9%	-3.4%	12.3%

^(*) Following the completion of the sale sof the gas purification business at the end of June 2018, the revenues of 2017 related to the business being sold had beed reclassified under the specific income statement item "Result from discontinued operations".

Please refer to the Report on operations for further details and comments.

4. COST OF SALES

The cost of sales for 2018 amounted to 90,032 thousand euro, compared to 84,919 thousand euro in the previous year.

A breakdown of the cost of sales by category is provided below, compared with the figure of the previous year.

(thousands of euro)

Cost of sales	2018	2017	Difference
Raw materials	28,311	28,005	306
Direct labour	22,962	20,695	2,267
Manufacturing overhead	39,623	38,422	1,201
Increase (decrease) in work in progress and finished goods	(864)	(2,203)	1,339
Total cost of sales	90,032	84,919	5,113

Excluding the decrease due to the exchange rate effect (costs down by -2,499 thousand euro), the percentage change in the cost of sales (+9%) is basically in line with the organic sales' growth (+12.3%).

In particular, again excluding the exchange rate effect, the indirect production costs posted a lower increase (+6.1%) than the organic turnover change thanks to the economies of scale related to the increase in volumes. Raw materials also increased with a lower percentage (+9%) was the organic variation including also the change in inventories of semi-finished products and finished products) as a result of both a different sales mix and growth in the turnover of those sectors marked by a lower absorption of raw materials, in particular within the Industrial Applications Business Unit. The greater increase in direct labour costs (organic change of +14.2%) is related again to the different sales mix and the salary increases aimed at recovering inflation.

5. OPERATING EXPENSES

Operating expenses in 2018 amounted to 56,118 thousand euro, compared to 53,071 thousand euro in the previous year.

A breakdown by function of operating expenses, compared with the previous year, is given below.

(thousands of euro)

Operating expenses	2018	2017	Difference
Research & development expenses	10,988	12,797	(1,809)
Selling expenses	12,659	11,702	957
General & administrative expenses	32,471	28,572	3,899
Total operating expenses	56,118	53,071	3,047

Please note that the operating expenses of the current year include extraordinary severance costs relating to the staff reduction at the Parent Company (2,656 thousand euro) resulting from the downsizing of the Group perimeter after the purification business was sold. Also note the writedown of 3,100 thousand euro relating to impairment testing on the Advanced Packaging operating segment, which led to the total cancellation of the goodwill arising from acquisition of SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A., which amounted to 2,409 thousand euro, and the write-off of other tangible and intangible assets totalling 691 thousand euro.

Lastly, please remember that 2017 included costs for the liquidation of the German subsidiary Memry GmbH (303 thousand euro), and charges for suspending the OLET research project and for the consequent liquidation of E.T.C. S.r.l. (1,111 thousand euro).

Leaving out both the exchange rate effect (reduction in costs of -589 thousand euro) and the above-mentioned extraordinary costs in both years, the operating expenses dropped by 706 thousand euro. The decrease is concentrated in the **research and development expenses** (in particular, lower costs for management of patents and a reduction in both personnel costs and in the amortisation relating

to suspension of the OLET research project at year-end 2017 and the resulting placing of the subsidiary E.T.C. S.r.l. in liquidation) and in the **general and administrative expenses** (lower variable compensation for the executive directors was partially offset by increased fixed compensation paid to employees working in G&A activities at the Parent Company and by higher legal and consultancy expenses) against substantial stability in the **selling expenses**.

A breakdown by nature of the expenses included in the cost of sales and operating expenses, compared with the previous year, is given below.

(thousands of euro)

Total costs by nature	2018	2017	Difference
Raw materials	28,311	28,005	306
Personnel cost	72,348	66,706	5,642
Corporate bodies	3,947	6,169	(2,222)
Travel expenses	1,331	1,323	8
Maintenance and repairs	3,733	3,173	560
Various materials	7,349	6,973	376
Transports	1,783	1,659	124
Commissions	73	66	7
Licenses and patents	879	1,206	(327)
Consultant fees and legal expenses	5,702	5,087	615
Audit fees (*)	689	659	30
Rent and operating leases	2,311	2,451	(140)
Insurances	1,083	1,118	(35)
Promotion and advertising	369	317	52
Utilities	3,118	3,208	(90)
Telephones and faxes	324	339	(15)
General services (canteen, cleaning, vigilance, etc.)	1,647	1,499	148
Training	279	250	29
Depreciation	6,516	6,949	(433) (*
Amortization	1,072	1,136	(64) (3
Write-down of non current assets	3,417	1,181	2,236
Provision (release) for bad debts	208	(43)	251 (*
Other	525	762	(237)
Total costs by nature	147,014	140,193	6,821
Increase (decrease) in work in progress and finished goods	(864)	(2,203)	1,339
Total cost of sales and operating expenses	146,150	137,990	8,160

^(*) Of which 130 thousand euro as out of pocket expenses incurred in 2018 and 20 thousand euro as balance on out of pocket expenses related to the previous year (in 2017, the out of pocket expenses were 121 thousand euro and the recovery of out of pocket expenses related to the previous year was 12 thousand euro).

The items "Raw materials", "Maintenance and repairs" and "Various materials" which are strictly connected to the production cycle, increased in correlation with the increase in production activities and sales.

The increase of the "Personnel costs" item is due to the increased average number of employees at the US affiliates and to the boosting of the SAES Coated Films S.p.A. headcount, as well as to salary increases aimed at recovering inflation. Note that greater use of temporary workers, especially in the shape memory alloys segment and at the Avezzano plant of the Parent Company, in addition to increased allocations for the variable components of the remuneration at the affiliates that contributed the most to improvement of consolidated profit. These increases were only partially offset by the savings resulting from putting the subsidiaries Memry GmbH and E.T.C. S.r.l. in liquidation in 2017. Lastly, please also remember that the severance costs totalling 2,656 thousand euro, relating to the reduction of Parent Company staff headcount, are also included in

^(**) These figures do not correspond to the amounts shown in the Consolidated cash flow statement because they do not include the costs related to the purification business, classified under the item "Result from discontinued operations".

this item (in 2017, on the other hand, 290 thousand euro of costs for severance resulting from placing Memry GmbH and E.T.C. S.r.l. in liquidation were included).

The item "Corporate bodies" included the remuneration of the members of the Board of Directors, both executive and non-executive, and of the Board of Statutory Auditors of the Parent Company. The decrease against the previous year is due to lower provisions for the variable component of remuneration for Executive Directors; in particular, note that in 2017, the provision for the long-term incentive relating to the three-year period 2015-2017 had been doubled as the performance achieved was better than the targets initially assigned.

For the details on the amounts paid in terms of remuneration in 2018 and the comparison with the previous year, please refer to Note 40 and to the Report on remuneration.

The reduction of the "Patent management and registration expenses" and "Depreciation" items results from the year-end 2017 suspension of the OLET research project, the write-down of the assets relating to it and the consequent start-up of the E.T.C. S.r.l. liquidation process. Please also note the lower amortisation and depreciation on Memry Corporation assets at the end of their useful life.

The item "Technical, legal, tax and administrative consulting" went up due to special projects mainly included in the framework of focus placed on the Group's evolutionary strategy in the advanced packaging sector.

The item "Write-down of non current assets" includes the above-mentioned write-down of 3,100 thousand euro relating to the impairment test on the Advanced Packaging operating segment, which involved the total cancellation of the goodwill arising from acquisition of SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A., which amounted to 2,409 thousand euro, and the write-off of other tangible and intangible assets totalling 691 thousand euro. This write-down is due to the strategic transition currently underway, which is changing the range of traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging.

For further details on the impairment analysis, please see Note 15.

In 2017, this item was mainly made up of the write-off of the assets consequent to the decision to suspend the OLET research project (937 thousand euro) and the write-down of the residual assets of Memry GmbH in liquidation (187 thousand euro).

The increase in the item "Provision for bad debts" is linked to the write-down of a specific credit position of the Parent Company toward a customer declared bankrupt.

6. OTHER INCOME (EXPENSES)

The item "Other income (expenses)" as at December 31, 2018 recorded a positive balance of +932 thousand euro compared to the slightly negative figure of -40 thousand euro in the previous year. A breakdown of this item in both years is provided below.

(thousands of euro)

	2018	2017	Difference
Other income	1,643	503	1,140
Other expenses	(711)	(543)	(168)
Total other income (expenses)	932	(40)	972

The item "Other income" includes all those revenues that do not fall within the ordinary operations of the Group, such as, for example, the proceeds from the sale of scrap materials and the capital gains coming from sale of the assets.

Compared to last year, the increase is mainly related to the revenue of 1,164 thousand euro recognised by the US affiliate Memry Corporation following transformation of 50% of the loan granted by the state of Connecticut (CT) at year-end 2014 as a non-refundable grant (for more detailed information, please consult Note 27).

Note that the amount as at December 31, 2018 also includes a gain of 136 thousand euro, made by the Parent Company on the sale of a machine, fully depreciated at the end of last year following the suspension of the OLET research project.

The item "Other expenses", instead, mostly includes the property taxes and other taxes, other than income taxes, paid by the Italian Group's companies. The increase compared to 2017 is mainly due to the allocation to the risks fund of 87 thousand euro for a labour dispute with the social security entities.

7. FINANCIAL INCOME (EXPENSES)

The following table shows the financial income breakdown in 2018, compared to the previous year.

(thousands of euro)

Financial income	2018	2017	Difference
Bank interest income	398	74	324
Other financial income	488	1,086	(598)
Gains from securities evaluation at fair value	84	0	84
Realized gains on IRS	0	0	0
Gains from IRS evaluation at fair value	12	0	12
Total financial income	982	1,160	(178)

The increase of "Bank interest income" relates to the higher cash and cash equivalents, following the payment received for the sale of the purification business.

The decrease of "Other financial income" is mainly due to the fact that last year this item included an income of 577 thousand euro to adjust the current value of the financial debt relating to the purchase of the remaining 30% of Metalvuoto S.p.A. (reduced from 652 thousand euro to 75 thousand euro following a change in the measurement of the put and call option agreed upon by the shareholders on January 30, 2018).

The breakdown of financial expenses in 2018, compared to the previous year, is given below.

(thousands of euro)

(thousands of euro)			
Financial expenses & write-down of financial assets	2018	2017	Difference
Bank interests and other bank expenses	813	1,472	(659)
Other financial expenses	95	133	(38)
Losses from securities evaluation at fair value	241	0	241
Realized losses on IRS	79	61	18
Losses from IRS evaluation at fair value	0	11	(11)
Total financial expenses	1,228	1,677	(449)
Write-down of financial receivables and other financial assets	9,283	0	9,283
Total financial expenses & write-down of financial assets	10,511	1,677	8,834

The item "Bank interest and other bank expenses" mainly included interest expenses on both short term and long term loans granted to the Parent Company, to SAES Coated Films S.p.A. and to the US subsidiary Memry Corporation, as well as the bank fees related to the credit lines held by the Italian companies of the Group. The decrease compared with last year is related to lower interest expense on long-term loans due to the early repayments made in the second half of the current year, following the payment received for the sale of the purification business. It should also be noted that in 2017, this item included the costs relating to the early repayment of both tranches of the loan for advanced Research and Development projects taken out in June 2015 by the Parent Company with EIB (European Investment Bank), as well as higher interest on the same loan (372 thousand euro, including both fees and interest).

The items "Income (expenses) from measurement of securities at fair value" (negative net value amounting to -157 thousand euro) consist of the profits and losses deriving from measurement at fair value of the subscribed securities at year-end by the subsidiary SAES Investments S.A. in order to manage the liquidity coming from the sale of the purification business. For further details on the subscribed securities, please see Note 17.

The item "Income from IRS evaluation at fair value" is the effect on the income statement of the fair value measurement of the hedge contracts, included the implied ones, on long-term variable rate loans held by the Controlling Company and by Metalvuoto S.p.A. The item "Realised losses on IRS" comprises the interest differences actually paid to the banks in respect of those contracts during 2018.

The item "Write-down of financial receivables and other financial assets" is mainly made up of the write-down of the financial receivable that the Group granted to Actuator Solutions GmbH (-9,139 thousand euro) against interest-bearing loans that SAES Nitinol S.r.l. granted to the joint venture during the previous years (from 2014 to 2018). Following the restructuring of the Taiwan subsidiary, the shareholders' equity of Actuator Solutions GmbH dropped considerably and became negative, and in order for it to continue to operate, payment of the interest accrued in the period 2016-2018 on the loans granted by SAES was deferred to year-end 2019, and the total amount of the financial receivable (both principal and interest) was deferred. Management therefore decided to totally write down the financial receivable in spite of the business progress made by Actuator Solutions, since the growth prospects pointed out in the five-year plan, approved by the Supervisory Committee of the same company, show significant risk elements, above all linked to the innovativeness of the products and to the extent of the potential customers, with the consequent forecast of cash flows insufficient to recover the financial receivable SAES granted to Actuator Solutions.

The -144 thousand euro difference consists of additional write-downs of the financial assets (particularly cash and cash equivalents) in application of IFRS 9. In particular, the expected losses were calculated based on a percentage of default associated with each bank where the cash and cash equivalents are deposited, obtained on the basis of the rating of each bank.

8. SHARE OF RESULT OF INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD & WRITE-DOWN OF INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

The item "Share of result of investments accounted for using the equity method" includes the Group's share in the result of the joint ventures Actuator Solutions $GmbH^{31}$, SAES RIAL Vacuum S.r.l. and Flexterra, Inc. ³², evaluated with the equity method.

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³¹ Please note that Actuator Solutions GmbH consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. (established in June 2013) and Actuator Solutions (Shenzhen) Co., Ltd. (established in September 2016).

(thousands of euro)

	2018	2017	Difference
Actuator Solutions	0	(1,000)	1,000
SAES RIAL Vacuum S.r.l.	25	158	(133)
Flexterra	(1,498)	(1,626)	128
Total income (loss) from equity method evaluated companies	(1,473)	(2,468)	995

In 2018, the loss from investments accounted for using the equity method amounted to

-1,473 thousand euro and is mainly attributable to Flexterra (-1,498 thousand euro). The company, established as a technological start-up, in 2018 made remarkable progress in developing its own materials. The first totally flexible electrophoretic screen that uses technology developed by Flexterra was presented at SID in Los Angeles (major display world exhibition) and the company signed a Joint Development Agreement with a primary operator in the electrophoretic sector in the second half of the year. Nevertheless, in 2018 Flexterra posted revenue still close to zero (35 thousand euro), mainly attributable to sampling activity, versus operating costs that topped 4 million euro (above all research and development costs).

The share pertaining to SAES in the net loss of Actuator Solution of 2018 (-537 thousand euro) was not recognised by the Group as a liability given that, in accordance with IAS 28, the investment of SAES in Actuator Solutions was already fully reduced to zero as at December 31, 2018 and since today there is no legal or implied obligation of its recapitalisation.

As regards this latter company, note that as at December 31, 2017 the negative measurement of the investment with the equity method recognised in the income statement was -1,000 thousand euro³³, less than the pro-quota loss (-2,047 thousand euro) since, again according to IAS 28, the additional losses after the consolidated investment was reduced to zero were not recognised in the income statement because there was no legal or implied recapitalisation obligation at the end of last year.

For further details on the performance of the joint ventures please refer to the Report on operations, paragraph "Performance of the joint ventures in 2018" and to Note 16.

The item "Write-down of investments accounted for using the equity method"

(-4,300 thousand euro) is due only to the joint venture Flexterra and consists of the write-down that arose from the impairment test on the investment. See Note 16 for further details on the analysis conducted and on the assumptions used.

This write-off is therefore added to the measurement at equity in order to calculate the final value of the investment.

(thousands of euro)

	2018	2017	Difference
Actuator Solutions	0	0	0
SAES RIAL Vacuum S.r.l.	0	0	0
Flexterra	(4,300)	0	(4,300)
Total write-down of investments in equity method evaluated companies	(4,300)	0	(4,300)

³² Flexterra, Inc. consolidates the wholly owned subsidiary Flexterra Taiwan Co., Ltd. (established in January 2017).

³³ Note that the investment was already totally reduced to zero as at December 31, 2016 and that the loss recognised in 2017, which amounted to -1,000 thousand euro, coincided with the payment of capital made by SAES Nitinol S.r.l. on December 21, 2017.

9. FOREIGN EXCHANGE GAINS (LOSSES), NET

In 2018, the exchange rates management recorded a positive balance equal to +523 thousand euro, compared to a negative balance equal to -1,156 thousand euro in the previous year.

The breakdown of foreign exchange gains and losses as at December 31, 2018 compared to the previous year is given below.

(thousands of euro)

Foreign exchange gains and losses	2018	2017	Difference
Foreign exchange gains	1,592	357	1,235
Foreign exchange losses	(915)	(1,703)	788
Foreign exchange gains (losses), net	677	(1,346)	2,023
Realized exchange gains on forward contracts	6	191	(185)
Realized exchange losses on forward contracts	(160)	(1)	(159)
Gains (losses) from forward contracts evaluation at fair value	0	0	0
Gains (losses) on forward contracts	(154)	190	(344)
Total foreign exchange gains (losses), net	523	(1,156)	1,679

The item "Foreign exchange gains (losses), net" recorded a positive balance equal to +677 thousand euro, compared to a negative balance equal to -1,346 thousand euro in the previous year. The positive amount of 2018 is mostly related to the release of a part of the translation reserve generated by the consolidation of SAES Getters/U.S.A., Inc. to the income statement after the partial reduction of the share capital of the US subsidiary in October 2018 (+360 thousand euro). The negative balance of last year was instead attributable to foreign exchange losses on commercial transactions, including intercompany, generated mainly by the devaluation of the dollar against the euro.

The item "Gains (losses) on forward contracts" recorded a negative balance of -154 thousand euro, versus a positive balance of +190 thousand euro as at December 31, 2017. This balance included the gains realised when forward contracts on transactions in dollars and yen stipulated by the Parent Company are unwound in order to limit the impact of currency fluctuations.

10. INCOME TAXES

In 2018, income taxes amounted to 7,967 thousand euro, compared to 17,604 thousand euro in the previous year.

The related details are provided below.

(thousands of euro)

(thousands of curo)		_	
	2018	2017	Difference
Current taxes	12,545	9,502	3,043
Deferred taxes	(4,578)	8,102	(12,680)
Total	7,967	17,604	(9,637)

^(*) These figures do not correspond to the amounts shown in the Consolidated cash flow statement because they do not include the taxes related to the purification business, classified under the item "Result from discontinued operations".

The figure for the previous year included a write-down of 10,770 thousand euro, of deferred tax assets on past tax losses of SAES Getters S.p.A., made on the basis of updated assumptions of recoverability of the same, net of which the taxes would have amounted to 6,834 thousand euro. Net of this write-off, the increase in taxes in the current year compared to 2017 (+1,133 thousand euro) relates to the improvement in the operational results, only partially offset by reduction of the US federal taxes following the US tax reform³⁴ applicable starting from January 1, 2018. The current taxes paid on the intercompany capital gain arising from sale of the net assets of SAES Getters USA, Inc. to SAES Getters/U.S.A., Inc. generated recognition of deferred tax assets of the same amount.

Excluding the write-downs insignificant for tax purposes or that are non-deductible that penalised the current year, which amounted to -15,848 thousand euro³⁵, the Group tax rate in 2018 was 49.4%, still very high in spite of the above reduction of the rate applied by the US companies for federal tax since the Parent Company, net of the capital gain realised on the sale of the investment in SAES Getters USA, Inc. (controlling company of SAES Pure Gas, Inc.) and discontinued in the item "Income (loss) from discontinued operations", closed 2018 with a negative taxable income that is not measured as a deferred tax asset.

The reconciliation between the theoretical tax charge based on the current tax rates in Italy (IRES) and the actual tax charge recognised in the consolidated financial statements is shown below.

(thousands of euro)					
	2018		2017		
Income before taxes		287		4,951	
Theorical tax rate and tax charges	24.00%	69	24.00%	1,188	
Effect of different tax rates	13.59%	39	67.20%	3,327	
Non deductible costs/non taxable income	303.83%	872	-93.13%	(4,611)	
Taxes on subsidiaries' accumulated profits	267.60%	768	39.85%	1,973	
Unrecognition (recognition) of deferred tax assets on fiscal losses	1033.10%	2,965	28.32%	1,402	
Write-off of deferred tax assets on fiscal losses	0.00%	0	217.53%	10,770	
Write-off of deferred tax assets after the sale of the purification business	285.71%	820	0.00%	0	
Unrecognition (recognition) of deferred tax assets on temporary differences	0.35%	1	0.16%	8	
R&D credits and other tax credits	-30.66%	(88)	-12.74%	(631)	
Redetermination of deferred tax assets and liabilities following the tax rate variation	14.63%	42	-23.25%	(1,151)	
Other permanent differences	932.75%	2,677	96.95%	4,800	
IRAP and other local taxes	-68.99%	(198)	10.68%	529	
Effective tax rate and tax charges	2775.92%	7,967	355.57%	17,604	

The tax losses that the Parent Company and its subsidiaries sustained in 2018 amounted to a total of 8,274 thousand euro and are basically in line with the negative taxable incomes attained during 2017, which totalled 8,258 thousand euro. The fact that the Parent Company of closed 2018 with a positive taxable income owing to the net capital gain realised on the sale to Entegris, Inc. of the investment in SAES Getters USA, Inc., controlling company of SAES Pure Gas, Inc., was offset by the higher negative taxable incomes of SAES Coated Films S.p.A. and SAES Getters International Luxembourg S.A. (for details on the results attained by the two subsidiaries during the current year and for a comparison with the prior year, please see the paragraph entitled "Performance of the subsidiaries in 2018" of the Report on operations).

No Group company recorded deferred tax assets on tax losses on sustained in 2018; only SAES Coated Films S.p.A. had recognised deferred tax assets on negative taxable income (amounting to 377 thousand euro, for a total of 90 thousand euro of deferred tax assets recognised in 2017) in the previous year.

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³⁴ The tax rate applicable for calculating federal tax was reduced from 34% to 21% starting from January 1, 2018.

³⁵ Write-down following impairment testing of the goodwill allocated to the Advanced Packaging Cash Generating Unit of -2,409 thousand euro; write-down of the financial receivable due from Actuator Solutions GmbH of -9,139 thousand euro, and write-down following impairment testing of the investment in Flexterra of -4,300 thousand euro.

³⁶ The Parent Company had tax losses that totalled 4,367 thousand euro in 2017.

11. INCOME (LOSS) FROM DISCONTINUED OPERATIONS

The income from discontinued operations was 240,013 thousand euro in 2018 and was primarily comprised by the net gain generated by the sale of the gas purification business of 227,219 thousand euro (gross gain of 262,439 thousand euro)³⁷, minus the costs of the sale transaction of 35,220 thousand euro, mostly made up of legal and consulting expenses, the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, interest, exchange rate differences and taxes, as well as by the net profit generated by the purification business from January 1, 2018 to June 25, 2018 (effective date of sale), of 12,794 thousand euro.

In 2017, the net income from discontinued operations totalled 26,513 thousand euro, primarily coinciding with the net profit of the purification segment in the previous year.

The table below shows the breakdown of the result from discontinued operations in 2018 compared with last year.

(thousands of euro)	Consolidated statement of profit or loss - gas purification business	Capital gain on purification business disposal, net of the related costs	2018	Consolidated statement of profit or loss - gas purification business	Costs related to the sale transaction	2017
Total net sales Cost of sales	45,660 (26,505)		45,660 (27,838)	83,956 (42,549)		83,956 (42,549)
Gross profit	19,155	(1,333)	17,822	41,407	0	41,407
R&D expenses Selling expenses G&A expenses	(2,652) (1,085)	(1,016) (26,708)	(27,793)	(3,305) (4,670) (1,984) (9,959)	(594)	(3,305) (4,670) (2,578)
Total operating expenses Other income Other expenses	(5,647) 23 (34)	262,439	(34,253) 262,462 (84)	312 (278)		(10,553) 312 (278)
Operating income (loss)	13,497	232,450	245,947	31,482	(594)	30,888
Financial income Financial expenses Foreign exchange gains (losses), net	0 (35) 0	(229) (3,287)	0 (264) (3,287)	(145) (6)		0 (145) (6)
Income (loss) before taxes	13,462	228,934	242,396	31,331	(594)	30,737
Income taxes	(668)	(1,715)	(2,383)	(4,224)		(4,224)
Income (loss) from discontinued operations	12,794	227,219	240,013	27,107	(594)	26,513

The following table provides a breakdown by nature of the costs, including both the cost of sales and operating expenses.

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³⁷ Coinciding with "Other income" in the table below.

(thousands of euro)				·		
Total costs by nature	gas purification business	disposal	2018	gas purification business	disposal	2017
Raw materials	21,550		21,550	34,408		34,408
Personnel cost	7,096	15,265	22,361	12,260		12,260
Corporate bodies	0	8,698	8,698	0		0
Travel expenses	204		204	379		379
Maintenance and repairs	250		250	376		376
Various materials	1,632		1,632	2,991		2,991
Transports	941		941	2,019		2,019
Commissions	611		611	915		915
Licenses and patents	0		0	0		0
Consultant fees and legal expenses	195	5,922	6,117	368	594	962
Audit fees	0		0	0		0
Rent and operating leases	82		82	73		73
Insurances	142		142	95		95
Promotion and advertising	45		45	66		66
Utilities	105		105	278		278
Telephones and faxes	29		29	61		61
General services (canteen, cleaning, vigilance, etc.)	4		4	9		9
Training	13		13	2		2
Depreciation	248		248	450		450
Amortization	148		148	306		306
Write-down of non current assets	0		0	0		0
Provision (release) for bad debts	(85)		(85)	30		30
Other	99	54	153	(113)		(113)
Total costs by nature	33,309	29,939	63,248	54,973	594	55,567
Increase (decrease) in work in progress and finished goods	(1,157)		(1,157)	(2,465)		(2,465)
Total cost of sales and operating expenses	32,152	29,939	62,091	52,508	594	53,102

Regarding the costs relating to the extraordinary transaction of the sale of the purification business, note that the item "Personnel costs" (15,265 thousand euro) includes the bonuses and the severance paid to employees of the Parent Company that worked in the segment sold, as well as the remuneration of employees relating to the strategic incentive plan called the Asset Sale Plan³⁸. The portion of the incentive due to Executive Directors is represented, instead, in the item "Corporate bodies" (8,698 thousand euro).

Lastly, "Consulting" (5,922 thousand euro) is comprised by the fees paid for investment banking activities, for legal assistance, for tax advice and for other appraisal activities.

Again, regarding the sale of the purification business, the item "Financial expenses" (-229 thousand euro) is represented by bank fees and the interest accrued on the credit line opened with Banca Intesa Sanpaolo S.p.A. on May 28, 2018, 38.5 million euro of which was drawn down between June 12. 2018 and June 25, 2018, in order to capitalise the newly-established company SAES Colorado, Inc. (later renamed SAES Getters/U.S.A., Inc.), established for the purpose of the reorganisation of the US business, in preparation for the sale of the purification division (for further details on the legal and corporate reorganisation of the US companies, see the Report on operations, paragraph "Significant events in 2018").

"Foreign exchange gains (losses), net" (-3,287 thousand euro) includes a gain of 2,342 thousand euro coming from the release of the translation reserve generated by consolidation of the US companies sold (SAES Getters USA, Inc. and SAES Pure Gas, Inc.) and a cost of -4,273 thousand euro related to the derivative contract with a currency option (notional amount of 330 million dollars plus a fixing at 1.1880 USD/EUR) signed with Banca Intesa Sanpaolo S.p.A. to cover exchange rate risk on the payment in dollars from Entegris, together with other foreign exchange losses recorded by the Parent Company of -1,356 thousand euro.

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Monetary incentive plan for Executive Directors, executives that report directly to Executive Directors and that are members of the Corporate Management Committee (a committee to which the Executive Directors provide guidelines and share objectives with their direct reports) and to other employees of the Parent Company considered particularly important. The aim of the plan is to reward the beneficiaries with regard to extraordinary transactions relating to the sale of investments, business units, fixed assets and assets (in this specific case, the sale of the purification business), if these transactions create value and economic benefits for the Group, with a view to guaranteeing the retention of the beneficiaries and to better align their performance with the interests of the company. The plan is managed by the Board of Directors, after consulting with the Remuneration and Appointments Committee. More specifically, the Board of Directors, with the involvement of the Remuneration and Appointments Committee, must ascertain which events, in accordance with the terms and conditions of the plan, may give rise to the payment of a monetary incentive and how much said incentive should be.

Lastly, "Taxes" (-1,715 thousand euro) is comprised of current taxes calculated on the net gain made both by the Parent Company³⁹ on the sale of the investment in SAES Getters USA, Inc.⁴⁰ and by the subsidiary SAES Getters (Nanjing) Co., Ltd. on the transfer to Entegris, Inc. of the Shanghai-based business unit⁴¹ operating in the purification business.

The gas purification business contributed to the consolidated result with an operating income of 13,497 thousand euro and an EBITDA⁴² totalling 13,808 thousand euro from the beginning of the year until the date of sale (June 25, 2018) (the operating income and EBITDA of the business sold were 31,482 thousand euro and 32,268 thousand euro, respectively, in 2017).

The following table shows the cash flows generated by the purification business in the period between January 1 and June 25, 2018 and the net consideration (namely net of the monetary costs relating to the sale transaction, and to the cash and cash equivalents sold) resulting from the sale of the latter to Entegris, Inc.

	2018 - from discontinued operations			
	gas purification			
	business	dis pos al	total	
(thousands of euro)	Jan 1-Jun 25 2018			
Cash flows from operating activities				
Net income (loss) from discontinued operations	12,794	227,219	240,013	
Current income taxes	589	0	589	
Changes in deferred income taxes	79	0	79	
Depreciation	248	0	248	
Amortization	148	0	148	
Net gain on purification business disposal	0	(227,219)	(227,219)	
Interest and other financial (income) expenses, net	35	0	35	
Write-down of trade receivables	(85)	0	(85)	
Changes in provisions	(366)	0	(366)	
	13,442	0	13,442	
Working capital adjustments				
Cash increase (decrease)				
Account receivables and other receivables	2,856	0	2,856	
Inventory	(3,072)	0	(3,072)	
Account payables	(2,136)	0	(2,136)	
Other current payables	947	0	947	
	(1,405)	0	(1,405)	
Interests and other financial payments	(35)	0	(35)	
Taxes paid	(1,002)	0	(1,002)	
Net cash flows from operating activities	11,000	0	11,000	
Cash flows from investing activities	†			
Disbursements for acquisition of tangible assets	(168)	0	(168)	
Disbursements for acquisition of intangible assets	(28)	0	(28)	
Price paid for the acquisition of businesses	(142)	0	(142)	
Consideration for the purification business disposal, net of the disposed cash	Ó	301,059		
Ancillary monetary charges for the purification business disposal	0	(37,562)	(37,562)	
Net cash flows from investing activities	(338)	263,497	263,159	
Cash flows from financing activities	0	0	0	
Net foreign exchange differences	(1,426)	0	(1,426)	
Cash flows in the period	9,236	263,497	272,733	

^(*) Consideration equal to €303,765 thousand and cash sold equal to €2,706 thousand.

³⁹ The gain net of sales costs of the Parent Company is subject to a limited tax rate of 5%, pursuant to the provisions of article 87 of the Consolidated Law on Income Tax, "TUIR" (participation exemption).

^(**) The figure of the FY 2018 does not include the non-monetary income related to the release into the income statement of the conversion reserve generated by the consolidation of the US companies sold (SAES Getters USA, Inc. and SAES Pure Gas, Inc.), equal to €2,342 thousand.

⁴⁰ Following the legal and corporate reorganisation of the US companies, prior to the sale of the purification business (details of which can be found in the Report on operations, paragraph "Significant events in 2018"), SAES Getters USA, Inc. (later renamed Pure Gas Colorado, Inc.) became the controlling entity of SAES Pure Gas, Inc. and was sold to Entegris, Inc.

⁴¹ Structure supporting sales on the Asian market for SAES Pure Gas, Inc.

⁴² Since calculation of the EBITDA is not regulated by applicable accounting standards, the method applied by the Group may not be homogeneous with the ones adopted by other Groups. EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) is calculated as "Earnings before interest, taxes, write-downs, depreciation and amortisation".

The following table shows the cash flows that were generated by the purification business in 2017.

	2017 - from discontinued operations					
(thousands of euro)	gas purification business	disposal	total			
Cash flows from operating activities						
Net income (loss) from discontinued operations	27,107	(594)	26,513			
Current income taxes	3,643	0	3,643			
Changes in deferred income taxes	581	0	581			
Depreciation	450	0	450			
Amortization	306	0	306			
Net loss (gain) on disposal of fixed assets	3	0	3			
Net gain on purification business disposal	0	594	594			
Interest and other financial (income) expenses, net	145	0	145			
Write-down of trade receivables	30	0	30			
Changes in provisions	83	0	83			
	32,348	0	32,348			
Working capital adjustments						
Cash increase (decrease)						
Account receivables and other receivables	4,643	0	4,643			
Inventory	(10,201)	0	(10,201)			
Account payables	937	0	937			
Other current payables	4,576	0	4,576			
	(45)	0	(45)			
Interests and other financial payments	(66)	0	(66)			
Taxes paid	(4,580)	0	(4,580)			
Net cash flows from operating activities	27,657	0	27,657			
Cash flows from investing activities	1					
Disbursements for acquisition of tangible assets	(452)	0	(452)			
Price paid for the acquisition of businesses	(364)	0	(364)			
Ancillary monetary charges for the purification business disposal	0	(594)	(594)			
Net cash flows from investing activities	(816)	(594)	(1,410)			
Cash flows from financing activities	0	0	0			
Net foreign exchange differences	3,880	0	3,880			
Cash flows in the period	30,721	(594)	30,127			

The assets and liabilities pertaining to the purification business sold in 2018 are broken down in the following table.

(thousands	of euro)

(thousands of cuto)	
Property, plant and equipment	3,354
Intangible assets	6,371
Deferred tax as sets	823
Other non current assets	11
Total non current assets	10,559
Inventory	29,587
Trade receivables	13,808
Cash and cash equivalents	2,706
Total current assets	46,101
Total assets held for sale (*)	56,660
Other non current financial payables to third parties	852
Provisions for risks and charges	366
Total non current liabilities	1,218
Trade payables	5,695
Other payables	7,948
Accrued income taxes	(547)
Provisions for risks and charges	244
Other financial debts towards third parties	239
Accrued expenses and deferred income	8,050
Total current liabilities	21,629
Total liabilities held for sale (*)	22,847

^(*) Currency amounts converted into Euro using the average exchange rate.

For detailed information up to December 31,2017 about the assets and liabilities transferred, please see Note 1 in the paragraph entitled "Reclassification of 2017 balances".

12. EARNING (LOSS) PER SHARE

As indicated in the Note 26, SAES Getters S.p.A.'s share capital is represented by two different types of shares (ordinary shares and savings shares) which bear different rights with regards to the distribution of dividends.

The pro-quota earning attributable to each type of shares is determined on the basis of the respective rights to receive dividends. Therefore, in order to calculate the earnings per share, the value of the preferred dividends contractually assigned to savings shares has been deducted from the net income of the year, assuming the theoretical distribution of the latter. The value obtained is divided by the average number of outstanding shares in the year.

If the year ended with a loss, the latter would be instead allocated equally to each type of shares.

The following table shows the result per share in 2018, compared with the figure of 2017.

Earning (loss) per share	2018			2017			
		Savings shares	Total	Ordinary shares	Savings shares	Total	
Profit (loss) attribuitable to shareholders (thousands of euro)			232,333			13,860	
Theoretical preference dividends (thousands of euro)		1,022	1,022		1,022	1,022	
Profit (loss) attributable to the different categories of shares (thousands of euro)	154,505	76,805	231,311	9,140	3,697	12,838	
Total profit (loss) attributable to the different categories of shares (thousands of euro)	154,505	77,828	232,333	9,140	4,720	13,860	
Average number of oustanding shares	14,671,350	7,378,619	22,049,969	14,671,350	7,378,619	22,049,969	
Basic earning (loss) per share (euro)	10.5311	10.5477		0.62301	0.63964		
-from continued operations (euro)	(0.34830)	(0.34830)		(0.57383)	(0.57383)		
- from discontinued operations (euro)	10.87939	10.89602		1.19684	1.21347		
Diluted earning (loss) per share (euro)	10.53109	10.54772		0.62301	0.63964		
-from continued operations (euro)	(0.34830)	(0.34830)		(0.57383)	(0.57383)		
-from discontinued operations (euro)	10.87939	10.89602		1.19684	1.21347		

13. SEGMENT INFORMATION

For management purposes, the Group is organised into three Business Units based on the type of products and services provided. As at December 31, 2018 the Group's operations were divided into three primary operating segments:

- ➤ Industrial Applications getters and dispensers used in a wide range of industrial applications (electronic vacuum devices, MEMS, image diagnostic systems, products for thermal insulation, lamps, vacuum systems);
- ➤ Shape Memory Alloys shape memory alloy raw materials, semi-finished products, components and devices for both medical and industrial applications;
- ➤ Solutions for Advanced Packaging innovative and advanced metallised and plastic films for the food packaging sector and, more in general, for the evolved packaging sector, also totally recyclable and compostable.

The Top Management monitors the results of the several Business Units separately in order to make decisions concerning the allocation of resources and investments and to determine the Group's performance. Each sector is evaluated according to its operating result; financial income and expenses, foreign exchange performance and income taxes are measured at the overall Group level and thus they are not allocated to the operating segments.

Internal reports are prepared in accordance with IFRSs and no reconciliation with the carrying amounts is therefore necessary.

The columns "Not allocated" include corporate income statement and equity amounts that cannot be directly attributed or allocated to the business units on a reasonable basis, but which refer to the Group as a whole, and the amounts related to the basic research projects or undertaken to achieve the diversification into innovative businesses (Business Development Unit).

The following table shows the breakdown of the main income statement figures by operating segment.

(thousands of euro) Consolidated statement	Industrial A	pplications	Shape Men	nory Alloys	Solutions for		Not all	ocated	Tot	al
of profit or loss	2018	2017	2018	2017	2018	2017	2018	2017	2018	2017
Total net sales Cost of sales Gross profit % on net sales	65,279 (31,727) 33,552 51.4%	57,191 (28,822) 28,369 49.6%	82,450 (46,964) 35,486 43.0%	(43,969)		12,445 (10,799) 1,646 13.2%	1,075 (1,042) 33 3.1%	1,614 (1,329) 285 17.7%		147,122 (84,919) 62,203 42.3%
Total operating expenses Other income (expenses), net	(14,283) 4	(13,485) 97	(11,157) 1,114	(12,068) 192	(7,007) (46)	(2,595) 38	(23,671) (140)	(24,923) (367)	. , ,	(53,071) (40)
Operating income (loss) % on net sales	19,273 29.5%	14,981 26.2%	25,443 30.9%	20,027 26.4%	(5,872) -51.1%	(911) -7.3%	(23,778) n.s.	(25,005) n.s.	15,066 9.4%	9,092 6.2%
Interest and other financial income Share of result of investments acco Write-down of investments in equi Foreign exchange gains (losses), n	ounted for using	ng the equity							(9,529) (1,473) (4,300) 523	(517) (2,468) 0 (1,156)
Income (loss) before taxes									287	4,951
Income taxes									(7,967)	(17,604)
Net income (loss) from continued	operations								(7,680)	(12,653)
Net income (loss) from discontinued operations								240,013	26,513	
Net income (loss)								232,333	13,860	
Minority interests in consolidated subsidiaries									0	C
Group net income (loss)									232,333	13,860

The following table shows the breakdown of the main equity figures by operating segment.

(thousands of euro)												
	Industrial Applications		Industrial Applications		Shape Men	nory Alloys	Solutions for Adv	anced Pack aging	Not all	ocated	To	tal
	31-Dec-18	31-Dec-17	31-Dec-18	31-Dec-17	31-Dec-18	31-Dec-17	31-Dec-18	31-Dec-17	31-Dec-18	31-Dec-17		
Assets and liabilities												
Non current assets	25,103	34,735	57,782	61,772	11,715	9,539	121,766	17,572	216,366	123,618		
Current assets	19,630	61,043	20,714	19,385	4,173	4,155	173,877	30,851	218,394	115,434		
Total assets	44,733	95,778	78,496	81,157	15,888	13,694	295,643	48,423	434,760	239,052		
Non current liabilities	3,801	5,776	520	1,339	694	651	23,172	37,819	28,187	45,585		
Current liabilities	9,386	21,331	7,744	6,379	3,587	3,759	44,636	39,857	65,353	71,326		
Total liabilities	13,187	27,107	8,264	7,718	4,281	4,410	67,808	77,676	93,540	116,911		
Other segment information												
Capital expenditure (*)	2,543	2,714	4,127	2,555	6,376	831	1,963	1,551	15,009	7,651		
Depreciation & amortization	2,614	2,507	3,114	3,508	622	648	1,238	1,422	7,588	8,085		
Other non cash expenses	176	-47	51	235	3,115	10	283	940	3,625	1,138		

Information on geographical areas

The non-current assets broken down by geographical area follow.

(thousands of euro)

	Italy	Europe	United States	Asia	Total non current assets (*)
2018	41,974	8,299	57,412	111	107,796
2017	39,726	7,585	63,147	171	110,629

^(*) It includes: tangible fixed assets, intangible fixed assets, investments in joint ventures, other long term assets and the non current part of the tax consolidation receivables from the Controlling Company.

Please refer to the table and the comments in the report on operations for the breakdown of consolidated net sales by customer's location.

The breakdown of consolidated net sales based on the countries where the Group's companies that generated the revenue are based, is provided below.

Country in which the Group's entity is located	2018	%	2017	%	Total difference
Italy	58,981	36.8%	53,811	36.6%	5,170
Europe	0	0.0%	2,421	1.6%	(2,421)
North America	96,174	60.0%	85,878	58.4%	10,296
South Korea	1,005	0.6%	1,122	0.8%	(117)
China	4,089	2.6%	3,793	2.5%	296
Other Asian countries	35	0.0%	97	0.1%	(62)
Others	0	0.0%	0	0.0%	0
Total net sales	160,284	100%	147,122	100%	13,162

14. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, net, amounted to 53,832 thousand euro as at December 31, 2018 and showed an increase of 4,340 thousand euro compared to December 31, 2017.

The changes that occurred during the year, compared with those of the previous year, are shown below.

(thousands	of euro)
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Property, plant and equipment	Land	Building	Plant and machinery	Assets under construction and advances	Total
December 31, 2017	3,747	19,952	23,509	2,284	49,492
Difference from the sale of the gas purification business	(564)	(1,824)	(913)	(93)	(3,394)
Additions	890	3,421	3,943	5,988	14,242
Disposals	0	(1)	(106)	0	(107)
Reclassifications	0	137	2,207	(2,344)	0
Depreciation	0	(1,420)	(5,096)	0	(6,516)
Write-downs	0	(62)	(167)	(86)	(315)
Write-downs relating to impairment testing on the Solutions for Advanced Packaging CGU	(58)	(197)	(142)	0	(397)
Revaluations	0	0	0	0	0
Translation differences	124	122	473	108	827
December 31, 2018	4,139	20,128	23,708	5,857	53,832
December 31, 2017					
Historical cost	3,747	44,404	136,566	2,569	187,286
Accumulated depreciation and write-downs	0	(24,452)	(113,057)	(285)	(137,794)
Net book value	3,747	19,952	23,509	2,284	49,492
December 31, 2018					
Historical cost	4,197	43,093	130,220	6,228	183,738
Accumulated depreciation and write-downs	(58)	(22,965)	(106,512)	(371)	(129,906)
Net book value	956	2,000	1,112	3,666	53,832

(thousands	of euro)
(thousands	or curo,

Property, plant and equipment	Land	Building	Plant and machinery	Assets under construction and advances	Total		
December 31, 2016	4,182	21,371	25,578	2,271	53,402		
Additions	0	482	4,488	2,303	7,273		
Disposals	0	0	(23)	0	(23)		
Reclassifications	0	156	1,899	(2,055)	0		
Depreciation	0	(1,443)	(5,956)	0	(7,399)		
Write-downs	0	0	(1,114)	(63)	(1,177)		
Revaluations	0	0	0	0	0		
Translation differences	(435)	(614)	(1,363)	(172)	(2,584)		
December 31, 2017	3,747	19,952	23,509	2,284	49,492		
December 31, 2016							
Historical cost	4,182	45,322	137,306	2,493	189,303		
Accumulated depreciation and write-downs	0	(23,951)	(111,728)	(222)	(135,901)		
Net book value	4,182	21,371	25,578	2,271	53,402		
December 31, 2017							
Historical cost	3,747	44,404	136,566	2,569	187,286		
Accumulated depreciation and write-downs	0	(24,452)	(113,057)	(285)	(137,794)		
Net book value	3,747	19,952	23,509	2,284	49,492		

Note that, as at December 31, 2018, land and buildings were not burdened by mortgages or other guarantees.

In 2018, investments in property, plant and equipment totalled 14,242 thousand euro and included investments made by the Parent Company for the purchase of land and buildings from Mirante S.r.l., which host the registered office of SAES Coated Films S.p.A. as well as the production site of the same subsidiary. SAES Getters S.p.A. finalised the purchase on April 6, 2018, for a purchase price of 3.5 million euro.

The investments made by the Parent Company in the Lainate plant should also be noted, in preparation for the installation of a new pilot production line for the advanced packaging business, with a view to accelerating the development of products for flexible packaging, as well as those in the Avezzano plant, to complete the new production line in the Electronic Devices sector.

Acquisitions also included improvements and investments by the Parent Company relating to plant and equipment used by various production and research departments.

Lastly, "Acquisitions" includes the advances paid by the affiliated company Memry Corporation to increase the production capacity of existing lines for medical products, as well as the advances paid both for the purchase of a second production line for the coating of plastic film, and of a new, more technologically evolved metallisation plant, able to combine the metallisation process with the coating one.

Disposals, amounting to 107 thousand euro, mostly relate to the sale of machinery that is no longer used, in particular a packing machine sold by the Parent Company and a machine for SMA wire machining of the affiliated company Memry Corporation.

Depreciation for 2018, totalling 6,516 thousand euro, was lower than that of the previous year (6,949 thousand euro, net of depreciation relating to the gas purification business of 450 thousand euro, reclassified under "Income (loss) from discontinued operations") due to both the impact of exchange rates (-121 thousand euro) and the write-down of several assets recognised by the Parent Company at the end of 2017, following the suspension of the OLET research project. Lower depreciation was also recorded for assets that have reached the end of their useful life, particularly by the affiliate Memry Corporation.

Write-downs, totalling 315 thousand euro, mainly relate to write-offs made by the Parent Company of laboratory equipment built internally, as well as some machines no longer used by the Organic Electronics segment.

Furthermore, following impairment testing in the Solutions for Advanced Packaging operating segment, assets were written down for 397 thousand euro. For further details on impairment testing, refer to the paragraph entitled "Impairment testing" in Note 15 below.

The translation differences (+827 thousand euro) relate to assets of the US companies and are due to the revaluation of the US dollar as at December 31, 2018 compared to the exchange rate of December 31, 2017.

All property, plant and equipment are owned by the SAES Group and no financial lease agreement was in place as at December 31, 2018.

15. INTANGIBLE ASSETS

Intangible assets, net, amounted to 45,290 thousand euro as at December 31, 2018 and recorded a decrease of 7,885 thousand euro compared to December 31, 2017.

The changes that occurred during the year, compared with those of the previous year, are shown below.

Intangible assets	Goodwill	Research and development expenses	Industrial and other patent rights	Concessions, licenses, trademarks and similar rights	Other intangible assets	Assets under construction and advances	Total
December 31, 2017	42,994	0	6,605	359	3,187	30	53,17
Difference from the sale of the gas purification business	(4,418)	0	(850)	0	(1,124)	0	(6,392
Additions	0	0	6	391	27	147	57
Disposals	0	0	0	0	0	0	
Reclassifications	0	0	52	0	(22)	(30)	
Other movements	0	0	0	0	0	0	
Amortization	0	0	(521)	(166)	(385)	0	(1,072
Write-downs	0	0	0	(2)	0	0	(2
Write-downs relating to impairment testing on the Solutions for Advanced Packaging CGU	(2,409)	0	(294)	0	0	0	(2,703
Revaluations	0	0	0	0	0	0	
Translation differences	1,580	0	42	4	83	4	1,71
December 31, 2018	37,747	0	5,040	586	1,766	151	45,29
December 31, 2017							
Historical cost	48,271	183	11,840	-,	23,498	769	95,11
Accumulated depreciation and write-downs	(5,277)	(183)	(5,235)		(- /- /	(739)	(41,937
Net book value	42,994	0	6,605	359	3,187	30	53,17
December 31, 2018							
Historical cost	45,433	183	10,313	10,871	22,421	890	90,11
Accumulated depreciation and write-downs	(7,686)	(183)	(5,273)	(10,285)	(20,655)	(739)	(44,821
Net book value	37,747	0	5,040	586	1,766	151	45,29

(thousands of euro) Intangible assets	Goodwill	Research and development expenses	Industrial and other patent rights	Concessions, licenses, trademarks and similar rights	Other intangible assets	Assets under construction and advances	Total	
December 31, 2016	48,321	0	7,555	270	4,086	89	60,321	
Additions	0	0	57	205	43	73	378	
Disposals	0	0	0	0	0	0	0	
Reclassifications	0	0	0	90	42	(132)	0	
Other movements	(134)	0	0	0	0	0	(134)	
Amortization	0	0	(727)	(198)	(517)	0	(1,442)	
Write-downs	0	0	0	0	(4)	0	(4)	
Revaluations	0	0	0	0	0	0	0	
Translation differences	(5,193)	0	(280)	(8)	(463)	0	(5,944)	
December 31, 2017	42,994	0	6,605	359	3,187	30	53,175	
December 31, 2016	December 31, 2016							
Historical cost	53,598	183	12,418	10,390	25,578	828	102,995	
Accumulated depreciation and write-downs	(5,277)	(183)	(4,863)	(10,120)	(21,492)	(739)	(42,674)	
Net book value	48,321	0	7,555	270	4,086	89	60,321	
December 31, 2017								
Historical cost	48,271	183	11,840	10,551	23,498	769	95,112	
Accumulated depreciation and write-downs	(5,277)	(183)	(5,235)	(10,192)	(20,311)	(739)	(41,937)	
Net book value	42,994	0	6,605	359	3,187	30	53,175	

Net of the difference resulting from the sale of the gas purification business, the decrease recorded in the year was mostly due to the write-down of 2,703 thousand euro relating to impairment testing on the Advanced Packaging operating segment, which led to the total cancellation of the goodwill arising from the acquisition of SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A., which amounted to 2,409 thousand euro, and the write-off of patent rights totalling 294 thousand euro. For further details on impairment testing, refer to the paragraph entitled "Impairment testing" below.

Amortisation for the year (-1,072 thousand euro) was substantially in line with that of the previous year (-1,136 thousand euro, net of amortisation relating to the gas purification business of -306 thousand euro).

In 2018, investments in intangible assets amounted to 571 thousand euro and mainly refer to the purchase of new software licences by the Parent Company and affiliates Memry Corporation and SAES Coated Films S.p.A.

The translation differences (+1,713 thousand euro) related to intangible assets of the US companies and are due to the revaluation of the US dollar as at December 31, 2018 compared to the exchange rate of December 31, 2017.

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All intangible assets, except for goodwill, are considered to have finite useful lives and are systematically amortised to account for their expected residual use.

Goodwill is not amortised, but its recoverable amount is periodically reviewed on the basis of the expected cash flows of the Cash Generating Unit (CGU) to which the goodwill refers (impairment testing).

Goodwill

The changes in "Goodwill" and the Cash Generating Unit to which the goodwill refers are highlighted below.

(thousands	of euro)
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Business Unit	December 31, 2017	Write-downs	Difference from the sale of the gas purification business	Translation differences	December 31, 2018
Industrial Applications	5,363	0	(4,418)	0	945
Shape Memory Alloys	35,222	0	0	1,580	36,802
Solutions for Advanced Packaging	2,409	(2,409)	0	0	0
Not allocated	0	0	0	0	0
Total goodwill	42,994	(2,409)	(4,418)	1,580	37,747

Net of the difference resulting from the sale of the gas purification business, the decrease recorded in the year was due to the previously-mentioned full write-down, following impairment testing on the Solutions for Advanced Packaging operating segment, of the goodwill arising from the acquisition of SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A.), which amounted to 2,409 thousand euro. This write-down was only partly offset by the impact of positive exchange rates (due to the revaluation of the US dollar as at December 31, 2018, compared to the end of last year) on goodwill in currencies other than the euro.

For further information on the write-down of goodwill, please see the paragraph below.

The following table shows the gross carrying amounts of goodwill and the relative write-downs for impairment from January 1, 2004 to December 31, 2018 and to December 31, 2017.

(thousands	of euro)

Business Unit	December 31, 2018				December 31, 2017	
Business Chit	Gross value	Write-downs	Net book value	Gross value	Write-downs	Net book value
Industrial Applications (*)	1,008	(63)	945	5,426	(63)	5,363
Shape Memory Alloys (**)	40,202	(3,400)	36,802	38,622	(3,400)	35,222
Solutions for Advanced Packaging	2,409	(2,409)	0	2,409	0	2,409
Not allocated	358	(358)	0	358	(358)	0
Total goodwill	43,977	(6,230)	37,747	46,815	(3,821)	42,994

(*) The difference between the gross value as at December 31, 2018 and the gross value as at December 31, 2017 is due to the sale of the purification business.

(**) The difference between the gross value as at December 31, 2018 and the gross value as at December 31, 2017 is due to the translation differences on goodwill amounts denominated in currence other than area.

Impairment testing

Pursuant to IAS 36, goodwill is not amortised but rather is tested for impairment annually or more often should any specific event take place or circumstance arise that may lead to the assumption that an impairment loss has been incurred. For the purpose of testing, goodwill is allocated to a Cash Generating Unit (CGU) or groups of CGUs, in accordance with the thresholds established by IFRS 8, according to which the latter may not be larger than an operating segment.

More specifically, the CGUs identified by the SAES Group for impairment testing coincide with the following operating segments (as indicated in Note 13):

- Industrial Applications;
- Shape Memory Alloys;
- Solutions for Advanced Packaging.

With regard to the operating structure for 2018, note that in the 2019-2021 plan used for impairment testing:

- the Shape Memory Alloys for Industrial Applications business was classified within the Industrial Applications operating segment (instead of the Shape Memory Alloys Business Unit);
- the Organic Electronics business was classified within the Industrial Applications operating segment (instead of the Business Development Unit);

The impairment tests approved by the Board of Directors on March 13, 2019, entail estimating the recoverable amount of each Cash Generating Unit (CGU) and comparing this to the net carrying amount of the property, plant and equipment and intangible assets allocated to the same CGU, including goodwill.

The recoverable amount is verified by calculating the value in use, which corresponds to the present value of the future cash flows that are expected to be associated to each Cash Generating Unit on the basis of the most recent three-year plays drawn up by top management for 2019-2021 and approved by the Board of Directors on February 14, 2019, based on the medium-term forecasts prepared by Management, as well as the terminal value.

To make these forecasts, management use many assumptions, which are based on the following key variables:

- change in macroeconomic variables;
- estimate of future sales volumes by business area / product family / customer;
- price and profit margin trends;
- cost of materials and of sales by product family;
- cost of production, operating expenses and investment plan;
- discounting rates estimated by Management.

The expected rise of sales is based on Management forecasts, while the profit margin and the operating costs of the various businesses have been estimated on the basis of historical information, adjusted to reflect the expected results and the expected dynamics of market prices. The value of investments and working capital has been calculated as a function of different factors, such as future expected growth levels and the product development plan. These assumptions are influenced by future expectations and market conditions.

The discounting rate used to discount the cash flows represents an estimate of the rate of return expected for each Cash Generating Unit on the market. To select an adequate discounting rate to apply to future cash flows, to calculate the cost of indebtedness, an indicative interest rate deemed appropriate to be applied to the Group in event that it requested new medium-term loans was considered. Additionally, in order to calculate the cost of its own capital, the yield curve of long-term government bonds, both US and Italian, weighted by the geographical area generating the Group's income was adopted. The capital structure was, instead, established by identifying specific comparable players for each business. The Weighted Average Cost of Capital (WACC) applied to future cash flows was estimated at 7% and is considered representative of all Group CGUs. The WACC used is net of taxes, consistent with the cash flows used.

In the discounting model of future cash flows, a terminal value is considered to reflect the residual value that each Cash Generating Unit should generate beyond the three years covered by the plans; this value has been estimated prudentially at a growth rate (g-rate) of zero and a time horizon considered representative of the estimated duration of the various businesses, as indicated in the following table.

	Industrial Applications	Shape Memory Alloys
Estimated years after the three years plan	10 (*)	12

^(*) Calculated as the weighted average of the years assumed for each business on forecasted sales for 2019:

- 12 years assumed for Business Solutions for Vacuum Systems, SMA Industrial e Organic Electronics;
- 10 years assumed for Business Electronic Devices, Security & Defense, Healthcare Diagnostic e Sintered Components for Electronic Devices & Lasers;
- 6 years assumed for Business Thermal Insulated Devises;
- 2 years assumed for Business Lamps.

For the Solutions for Advanced Packaging operating segment, whose operating sector was more recently introduced than the others, the explicit forecasting period was extended by additional two

years (5 years in total) and a time horizon estimated after the five years of the plan equal to 10 years was used.

	Solutions for
	Advanced
	Packaging
Estimated years after the five years plan	10

This first level assessment showed an impairment loss for the Solutions for Advanced Packaging CGU totalling 3,100 thousand euro.

As required by IAS 36, the difference between the carrying amount of tangible and intangible assets and their recoverable amount was recorded in the income statement, first as a reduction of the carrying amount of the goodwill⁴³ allocated to the CGU in question (amounting to 2,409 thousand euro) and, then, to the other assets of the operating unit in proportion to their net carrying amount as at December 31, 2018 (totalling 691 thousand euro).

A breakdown of the total write-down by allocation category is provided below.

(thousands of euro)	
Land write-down	(58)
Building write-down	(197)
Plant and machinery write-down	(142)
Property, plant and equipment write-down	(397)
Goodwill write-down	(2,409)
Goodwill write-down Industrial and other patent rights write-down	(2,409) (294)
	1 1.2

This write-down is due to the strategic transition currently underway of the product range of the Solutions for Advanced Packaging Business Unit, from traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging.

By conducting a sensitivity analysis, by increasing the WACC by 1 percentage point more than the reference value of the Group, the write-down of the Solutions for Advanced Packaging CGU would have been 1,650 thousand euro higher (from 3,100 thousand euro to 4,750 thousand euro). Regarding the other two CGUs, instead, no issues have arisen over the net value of the asset recognised in the financial statements as at December 31, 2018.

Lastly, a second level testing was conducted, including both the assets not allocated to any operating segment and, in the recoverable amount, the costs relating to corporate functions, as well as the economic values that cannot be allocated uniquely or through drivers to primary sectors, which include some of particular importance, such as the basic research costs, sustained by the Group to identify innovative solutions. No further potential impairment of assets emerged at this level.

With reference to investments measured using the equity method, with regards to the disclosure on impairment testing, the reader should refer to the content of Note 16 "Investments accounted for using the equity method" As illustrated more extensively below, impairment testing showed an impairment of the investment in Flexterra, Inc. of -4,300 thousand euro. Furthermore, with regard to the investment in Actuator Solutions GmbH, already fully written down in previous years,

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⁴³Goodwill resulting from the acquisition of SAES Coated Films S.p.A. (formerly Metalvuoto S.p.A.).

impairment testing led to a write-down of the financial receivable due to the same in the amount of 9,139 thousand euro.

The estimated recoverable amount of the various Cash Generating Units and of investments measured using the equity method required discretion and the use of estimates by Management. The Group cannot, therefore, ensure that no impairment losses will emerge in the future. In fact, a number of different factors, also related to changes in the market and in demand, could require the value of the assets in future periods to be redetermined. The circumstances and the events that could cause a further assessment of the existence of impairment will be constantly monitored by the Group.

16. INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

As at December 31, 2018, the item includes the share of shareholders' equity attributable to the Group in the joint ventures Actuator Solutions GmbH⁴⁴, SAES RIAL Vacuum S.r.l. and Flexterra, Inc. ⁴⁵.

The following table shows the changes of each investment in 2018.

		_	
(thou	sands	of ar	iro)

Investments valued using the equity method	December 31, 2017	Capital payments	Share of the	Share of other comprehensive income (loss)	Write-downs	December 31, 2018
Actuator Solutions	0	0	0	0	0	0
SAES RIAL Vacuum S.r.l.	1,625	0	25	(8)	0	1,642
Flexterra	5,636	6,201	(1,498)	325	(4,300)	6,364
Total	7,261	6,201	(1,473)	317	(4,300)	8,006

The increase for the period (totalling 745 thousand euro) is mainly due to the capital contribution made by SAES Getters International Luxembourg S.A to Flexterra, Inc. (+6,201 thousand euro). These capital contributions were partially offset by the adjustment of the value of each investment to SAES's share of the result and of the other profits (losses) recorded as a whole by the joint ventures in 2018 (-1,156 thousand euro) and by the write-down of the investment in Flexterra that emerged from impairment testing (-4,300 thousand euro).

With regards to Actuator Solutions, note that as at December 31, 2018, the investment of SAES in Actuator Solutions had already been fully reduced to zero and since there is today no legal or implied obligation of its recapitalisation by the Group, in accordance with IAS 28, SAES's share of the net loss for 2018 (-561 thousand euro⁴⁶) was not recognised by the Group.

Actuator Solutions

Actuator Solutions GmbH is based in Gunzenhausen (Germany) and is 50% jointly owned by SAES and Alfmeier Präzision, a German group operating in the fields of electronics and advanced plastic materials. This joint venture, which consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd., is focused on the development, production and commercialisation of actuators using shape memory alloys in place of the engine.

⁴⁶ Last year, the share of total losses not recognised, because it exceeded the investment, had been -807 thousand euro.

⁴⁴ Please note that Actuator Solutions GmbH, in turn, consolidates its wholly owned subsidiaries Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd.

⁴⁵ Flexterra, Inc. (USA), in turn, consolidates its wholly owned subsidiary Flexterra Taiwan Co., Ltd.

The table below shows the SAES Group interest in Actuator Solutions' assets, liabilities, revenues and costs.

(thousands of euro)

Actuator Solutions	December 31, 2018	December 31, 2017
Statement of financial position	50%	50%
Non current assets	3,510	5,491
Current assets	1,297	1,908
Total assets	4,807	7,399
Non current liabilities	4,000	4,982
Current liabilities	2,360	3,409
Total liabilities	6,360	8,391
Capital stock, reserves and retained earnings	(992)	815
Net income (loss) for the period	(537)	(2,047)
Other comprehensive income (loss) for the period (*)	(24)	240
Total equity	(1,553)	(992)

^(*) Currency translation difference reserve arising from the conversion in euro of the financial statements of the subsidiary Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd.

(thousands of euro)

Actuator Solutions	December 31, 2018	December 31, 2017
Statement of profit or loss and of other comprehensive income	50%	50%
Net sales	11,461	13,538
Cost of sales	(9,433)	(12,234)
Gross profit	2,028	1,304
Total operating expenses	(2,250)	(2,691)
Other income (expenses), net	192	(4)
Operating income (loss)	(30)	(1,391)
Interest and other financial income, net	(308)	(354)
Foreign exchange gains (losses), net	6	(230)
Income taxes	(205)	(72)
Net income (loss)	(537)	(2,047)
Exchange differences	(24)	240
Total comprehensive income (loss)	(561)	(1,807)

Overall⁴⁷, Actuator Solutions recorded net revenues of 22,922 thousand euro in 2018, down by 15.3% compared to 27,075 thousand euro in 2017. The revenues of the current year are almost entirely attributable to the German seat comfort business, which continues to record an uptrend (+3.2%), against a fall in the sales of autofocus (AF) for action cameras of the Taiwan company (revenues of 23 thousand euro as at December 31, 2018, against 4,548 thousand euro last year). Net income in 2018 was negative and equal to -1,074 thousand euro, compared to a loss of -4,093 thousand euro in 2017: the improvement is mainly due to the recovery of profit margins by the German segment, also favoured by economies of scale resulting from higher sales, and to the lower costs of the Taiwan subsidiary, following the reorganisation made last year with a view to closing the Zhubei plant, outsourcing production activities and focusing Actuator Solutions Taiwan Co., Ltd.'s efforts on research and development projects.

Lastly, note that the loss recorded as at December 31, 2018 included extraordinary expenses of approximately 0.8 million euro (1.4 million euro of extraordinary expenses as at December 31, 2017), relating to the continuing process to outsource production, also regarding the Chinese subsidiary, net of which, Actuator Solutions closed the current year with positive operating income of around 0.7 million euro and substantially at break-even in terms of net income.

For further details on the developments in Actuator Solutions, please refer to the paragraph dedicated to the joint venture in the SAES Group Report on operations.

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⁴⁷ Values at 100%.

The share of the SAES Group (equal to 50%) in the 2018 result of this joint venture amounted to 537 thousand euro, plus the other components of comprehensive income amounting to -24 thousand euro, represented by the translation differences generated by the consolidation of Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd. into Actuator Solutions GmbH.

As the investment of SAES in Actuator Solutions had already been fully reduced to zero and since there is today no legal or implied obligation of its recapitalisation by Group, in accordance with IAS 28, SAES's share of the net loss for 2018 (-561 thousand euro) was not recognised by the Group.

Note that as at December 31, 2017, the negative measurement of the investment with the equity method recognised in the income statement was -1,000 thousand euro⁴⁸, less than the total proquota loss (-1,807 thousand euro) since, again according to IAS 28, the additional losses after the consolidated investment was reduced to zero were not recognised in the income statement.

As at December 31, 2018, as the value of the investment in Actuator Solutions GmbH had been fully reduced to zero and there was no obligation to recapitalise the same, no impairment testing was necessary.

Concerning the financial receivable due to the Group by the joint venture (9,139 thousand euro), the Group decided to fully write down the receivable (both principal and interest). More specifically, following the restructuring of the Taiwan subsidiary, the shareholders' equity of Actuator Solutions GmbH dropped considerably and became negative, and in order for it to continue to operate, payment of the interest accrued in the period 2016-2018 on the loans granted by SAES was deferred to year-end 2019, and the total amount of the financial receivable was deferred. Management, therefore, decided to totally write down the financial receivable in spite of the business progress made by Actuator Solutions, since the growth prospects pointed out in the five-year plan, approved by the Supervisory Committee of the same company, show significant risk elements, above all linked to the innovativeness of the products and to the extent of the potential customers, with the consequent forecast of cash flows insufficient to recover the financial receivable SAES granted to Actuator Solutions.

For further details on the write-down, please see Note 20.

The following table provides the number of employees of the joint venture Actuator Solutions as at December 31, 2018 by category, based on the percentage of ownership held by the Group (equal to 50%).

Actuator Solutions	December 31, 2018	December 31, 2017
	50%	50%
Managers	4	6
Employees and middle management	22	20
Workers	12	11
Total (*)	38	37

^(*) The figure excludes the personnel employed with contract other than salaried employment, equal to 1 unit as at December 31, 2018 and equal to 4 unit at December 31, 2017 (according to the percentage held by the Group).

The number of employees was substantially unchanged with respect to the end of 2017.

SAES RIAL Vacuum S.r.l.

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⁴⁸ Note that the investment was already totally reduced to zero as at December 31, 2016 and that the loss recognised in 2017, which amounted to -1,000 thousand euro, coincided with the payment of capital made by SAES Nitinol S.r.l. on December 21, 2017.

SAES RIAL Vacuum S.r.l., established at the end of 2015, is jointly controlled by SAES Getters S.p.A. (49%) and Rodofil s.n.c. (51%). The company specialises in the design and manufacture of vacuum chambers for accelerators, synchrotrons and colliders and combines the expertise of SAES in the field of materials, vacuum applications and innovation, with the experience of Rodofil in the design, assembling and fine mechanical productions, with the aim of offering absolutely excellent quality products and of successfully competing in the international markets.

The Group's equity investment is accounted for using the equity method since the operation consists of a joint control agreement and, more specifically, a joint venture. With this regard, please note that a key factor in qualifying the agreement is the subscription of the shareholders' agreements that provide that the decisions on some significant activities are taken with the unanimous consent of the parties, irrespective of their ownership percentage in the share capital.

Lastly, please note that a put and call option is in place between the shareholders SAES Getters S.p.A. and Rodofil S.r.l, according to an agreed schedule. In particular, Rodofil S.r.l. will have the right to exercise, through a one-off operation, a put option, by selling to SAES Getters S.p.A. a minimum of 2%, up to a maximum of 51%, of its shares of SAES RIAL Vacuum S.r.l., between May 1, 2020 and May 31, 2020, at a predetermined price related to the performance of the new company at the date of the sale. If Rodofil does not exercise its put option, SAES Getters S.p.A. will have the right to exercise a call option through a one-off operation between June 1 and June 30, 2020, for a percentage equal to 30% of the share capital, at a price calculated with a similar method. Note that, as at December 31, 2018, the Management did not have enough information in order to conduct an accurate assessment of the fair value of the above options, the latter were not included in the financial statements.

The table below shows the SAES Group's share of SAES RIAL Vacuum S.r.l.'s assets, liabilities, revenues and costs.

SAES RIAL Vacuum S.r.l.	December 31, 2018	December 31, 2017
Statement of financial position	49%	49%
Non current assets	161	145
Current assets	813	731
Total assets	974	876
Non current liabilities	151	150
Current liabilities	574	494
Total liabilities	725	644
Capital stock, reserves and retained earnings	232	82
Net income (loss) for the period	25	158
Other comprehensive income (loss) for the period (*)	(8)	(8)
Total equity	249	232
Goodwill arising on acquisition	1,393	1,393
SAES Group Investment	1,642	1,625

^(*) Actuarial differences on the employee severance indemnities (TFR), in accordance with the revised IAS 19.

(thousands of euro)

SAES RIAL Vacuum S.r.l.	December 31, 2018	December 31, 2017
Statement of profit or loss and of other comprehensive income	49%	49%
Net sales	1,292	1,192
Cost of sales	(1,042)	(905)
Gross profit	250	287
Total operating expenses	(171)	(169)
Other income (expenses), net	(22)	51
Operating income (loss)	57	169
Interest and other financial income, net	(11)	(10)
Foreign exchange gains (losses), net	0	0
Income taxes	(21)	(1)
Net income (loss)	25	158
Actuarial gain (loss) on defined benefit plans, net of taxes	(8)	(8)
Total comprehensive income (loss)	17	150

Overall⁴⁹, SAES RIAL Vacuum S.r.l. closed 2018 with revenues of 2,637 thousand euro, up by 8.4% compared to 2,433 thousand euro recorded in 2017.

Despite the higher sales, the current year closed with a net income of 51 thousand euro, down against 323 thousand euro recorded in 2017, mainly due to the fall in the gross profit margin resulting from a different product mix and higher taxes.

The share of the SAES Group (49%) in the 2018 profit for the year of this joint venture amounted to +25 thousand euro, plus the other components of comprehensive income amounting to -8 thousand euro, represented by the actuarial differences on defined benefit plans (in particular, Staff Leaving Indemnities), net of the relative tax.

The difference, equal to 1,393 thousand euro, between the recognition value of the investment (1,642 thousand euro) and the value of the share of the SAES Group in the company's net assets (249 thousand euro) represents the implicit goodwill included in the carrying amount of the investment.

The value of the investment in SAES RIAL Vacuum S.r.l. underwent impairment testing. To this end, the value in use was calculated using the Free Operating Cash Flow method, based on the three-year plan for 2019-2021 approved by the Board of Directors of the same company on October 16, 2018, and using a WACC of 7%, in line with that of the Group.

In the discounting model of future cash flows, a terminal value was considered to reflect the residual value that the company should generate beyond the three years covered by the plans; this

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⁴⁹ Values at 100%.

value was estimated prudentially at a growth rate (g-rate) of zero and a time horizon of 12 years estimated after the three years envisaged by the plan (time horizon in line with that used for the Solutions for Vacuum Systems business).

No potential impairment of assets emerged from the test conducted.

A sensitivity analysis was also conducted by increasing the discounting rate by up to 1 percentage point more than the reference value; no issues were identified from this.

The following table provides the number of employees of the joint venture SAES RIAL Vacuum S.r.l. as at December 31, 2018 by category, based on the percentage of ownership held by the SAES Group (equal to 49%).

SAES RIAL Vacuum S.r.l.	December 31, 2018	December 31, 2017
	49%	49%
Managers	0	0
Employees and middle management	4	3
Workers	4	4
Total (*)	8	7

^(*) The figure excludes the personnel employed with contract other than salaried employment, equal to 1 unit as at December 31, 2018 and equal to 1 unit at December 31, 2017 (according to the percentage held by the Group).

The number of employees was substantially unchanged with respect to the end of 2017.

Flexterra

Flexterra was established from a technological partnership launched in previous years between SAES and the US Company Polyera in the field of flexible thin film transistors for new generation displays. In particular, Flexterra, Inc. based in Skokie (close to Chicago, Illinois, USA), was established at the end of 2016 as a development start-up SAES (through the subsidiary SAES Getters International Luxembourg S.A.) and by previous members and lenders of Polyera, for the purpose of designing, manufacturing and selling materials and components for the production of truly flexible displays. Starting from January 10, 2017 Flexterra, Inc. fully controls the newly established company Flexterra Taiwan Co., Ltd.

In 2018, the Flexterra project made significant progress.

At the end of May 2018, Flexterra, in cooperation with E Ink, an important manufacturer of electrophoretic screens, presented the first fully flexible electrophoretic display, which uses technology and materials developed by Flexterra at SID in Los Angeles.

In the following months, Flexterra signed a Joint Development Agreement with a leading player in the electrophoretic display segment (commercial milestone envisaged by the initial agreements between the lending partner of Flexterra); the partner with whom Flexterra is developing the product innovation has already invested in production facilities and is forging ahead with the production industrialisation stage, with production start-up envisaged in the second half of 2019.

Please note that, as at December 31, 2017 SAES had committed to contribute a further 4.5 million USD in capital – in addition to tangible and intangible assets (IP) subject to Flexterra achieving the technical and commercial objectives as set out in the initial agreement between the partners (milestones).

SAES, which as at December 31, 2017 held 33.79% of the share capital of the joint venture Flexterra, Inc., on 5 October 2018, through the subsidiary SAES Getters International Luxembourg S.A. after Flexterra, Inc., contributed a further 4.5 million USD to the capital, after Flexterra had achieved the above-mentioned milestone. On December 12, 2018, SAES contributed a further 2.6

million USD to the share capital, bound by the purchase of patents⁵⁰ in the OLET field, developed by the Group company E.T.C. S.r.l.

Following the share capital increases subscribed by SAES Getters International Luxembourg S.A., in which the other partners did not participate, or to which they only partially contributed, SAES's share in the share capital of Flexterra, Inc. rose progressively to 42.23% on October 5 and to 46.73% on December 12, 2018.

The Group's equity investment is accounted for using the equity method since, irrespective of their ownership percentage in the share capital, the operation is categorised as a joint control agreement and, specifically, as a joint venture, based on the composition of the Board of Directors (five members, two of which appointed by SAES) and the shareholders agreements (that provide that the decisions on relevant matters are taken with the consent of at least 4 of the 5 Board members).

The value of the investment as at December 31, 2018 represents the initial total contribution (8,146 thousand euro, equal to 8,500 thousand USD) of SAES Getters International Luxembourg S.A. to the share capital of Flexterra, Inc., increased by the above-mentioned share capital increases made this year (totalling 6,201 thousand euro, corresponding to 7,100 thousand USD), adjusted for the SAES Group's share in the result and in the other components of comprehensive income of both 2017 and 2018. The latter include the expenses related to the issue of equity instruments, as well as the translation difference reserve arising from the conversion into Euro of the financial statements of Flexterra, Inc. and of its subsidiary Flexterra Taiwan Co., Ltd. (drawn up respectively in US Dollars and Taiwanese Dollars). To calculate the final value of the investment, a write-down, amounting to -4,300 thousand euro was included, resulting from impairment testing, for details of which, please refer to the paragraph below.

The table below shows the SAES Group's share of Flexterra's assets, liabilities, revenues and costs.

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⁵⁰ Note that the value of the intellectual property of E.T.C. S.r.l. has been subject to an appraisal carried out by an independent third party.

Flexterra	December 31, 2018	December 31, 2017
Statement of financial position	46.73%	33.79%
Non current assets	6,140	4,616
Current assets	3,732	1,206
Total assets	9,872	5,822
Non current liabilities	47	0
Current liabilities	227	154
Total liabilities	274	154
Capital stock, reserves and retained earnings	10,628	8,064
Reserve for stock option plans	143	114
Net income (loss) for the period	(1,498)	(1,626)
Other comprehensive income (loss) for the period (*)	325	(884)
Total equity	9,598	5,668

^(*) Currency translation difference reserve arising from the conversion in euro of the financial statements of Flexterra, Inc. and of Flexterra Taiwan Co., Ltd. and capital expenditure costs.

(thousands of euro)

Flexterra	December 31, 2018	December 31, 2017
Statement of profit or loss and of other comprehensive income	46,73% (**)	33.79%
Net sales	13	10
Cost of sales	(2)	(1)
Gross profit	11	9
Total operating expenses	(1,504)	(1,664)
Other income (expenses), net	(1)	(50)
Operating income (loss)	(1,494)	(1,705)
Interest and other financial income, net	(2)	2
Foreign exchange gains (losses), net	(20)	31
Income taxes	18	46
Net income (loss)	(1,498)	(1,626)
Exchange differences and capital expenditure costs	325	(884)
Total comprehensive income (loss)	(1,173)	(2,510)

(**) SAES share in the share capital of Flexterra, equal to 33.79% at the beginning of the year, rose progressively to 46.73% as at December 31, 2018, following the share capital increases subscribed by SAES Getters International Luxembourg S.A. on October 5 and December 12 respectively, in which the other partners did not participate, or to which they only partially contributed. Therefore, the revenues and the costs pro-quota were calculated considering these progressive increases of the shareholding.

Overall⁵¹, Flexterra closed 2018 with a net loss of -4,153 thousand euro, against -4,810 thousand euro in the prior year (mostly costs for the employees involved in research and general and administrative work, consulting, costs relating to the management of patents and amortisation of intangible assets conferred by several third parties at the time the company was established). The lower loss was mainly due to lower personnel costs, due to the gradually more efficient use of resources, together with the reduction of consulting, which had been higher in the company's first year of business as related to the start-up of operations. By contrast, higher costs for the management of parents and licences were recorded.

As mentioned above, the share of the SAES Group in the 2018 loss for the year of this joint venture amounted to -1,498 thousand euro, to which the other components of comprehensive income amounting to 325 thousand euro must be added.

The value of the investment underwent impairment testing. To this end, the value in use was calculated using the Free Operating Cash Flow method, starting from the five-year plan drawn up by top management and approved by the Board of Directors of Flexterra, Inc. on February 20, 2019. More specifically, the Board of Directors of SAES Getters S.p.A. held on February 14, 2019, considering the elements of risk highlighted in the minutes of the above Board of Directors' meeting of Flexterra, decided to introduce further prudential elements to the plan used for impairment testing, above all with regard to the speed of implementation of the plan.

⁵¹ Values at 100%.

Regarding the WACC, given the significant progress made by Flexterra and already illustrated above (achievement of commercial milestones and signature of a JDA with a leading operator in the electrophoretic sector), the start-up stage of the joint venture is considered to have been surpassed and a WACC of 30% was used (the WACC used last year had been 50.5% due to the development stage of Flexterra, its recent establishment and the expected capital requirement to fund future growth).

In the discounting model of future cash flows, a terminal value was considered to reflect the residual value that the company should generate beyond the five years covered by the plans; this value was estimated prudentially at a growth rate (g-rate) of zero and a time horizon of 10 years estimated after the five years envisaged by the plans.

Impairment testing showed an impairment of the consolidated investment of -4,300 thousand euro.

The following table provides the number of employees of the joint venture Flexterra by category, based on the percentage of ownership held by the SAES Group as at December 31, 2018 (46.73%).

Flexterra	December 31, 2018	December 31, 2017
	46.73%	33.79%
Managers	3	2
Employees and middle management	5	4
Workers	0	0
Total	8	7

The number of employees was substantially unchanged with respect to the end of 2017.

17. SECURITIES IN THE PORTFOLIO

"Securities in the portfolio" amounted to 99,843 thousand euro as at December 31, 2018 and include the investment at the end of 2018 of part of the cash resulting from the sale of the purification business in a *Cardif Lux Vie* multisegment insurance policy for the newly-established SAES Investments S.A. The initial overall investment was 100,000 thousand euro, split over two segments, and specifically:

- Segment I (initial investment of 40,000 thousand euro and fair value as at December 31, 2018 of 40,084 thousand euro), which envisages a minimum guaranteed interest rate (corresponding to 0.5%, net of management fees, up to the end of 2019) and a return recognised on the policy corresponding to the net return achieved by the separately managed Fondo Generale, if higher than the minimum guaranteed rate;
- Segment III (initial investment of 60,000 thousand euro and fair value as at December 31, 2018 of 59,759 thousand euro), which comprises a multiline dynamic mandate, with a view to maintaining the value of the capital invested through a conservative volatility profile in the construction of the portfolio.

With regard to the fair value measurement of the securities in the portfolio as at December 31, 2018, note that the fair value, calculated by an independent third party, coincides with the market prices on the reporting date for all securities listed in an active market (Level 1 of the fair value hierarchy) and, where there is no active market, the fair value has been calculated by using the most common measurement models and techniques available on the market or by referring to prices of comparable securities (level 2 of the fair value hierarchy).

18. DEFERRED TAX ASSETS AND LIABILITIES

As at December 31, 2018 the net balance of deferred tax assets and liabilities was a positive 2,155 thousand euro, against a negative balance of -1,571 recorded last year. Net of the difference due to the sale of the purification business (which resulted in a reduction of deferred tax assets of 824 thousand euro), the increase was mainly due to taxes on the intercompany gain realised on the sale of net assets by SAES Getters USA, Inc. to SAES Getters/U.S.A., Inc., as part of the sale of the purification business (for further details on intercompany transfer, see the paragraph entitled "Significant events in 2018" of the Report on operations).

The related details are provided below.

(thousands of euro)

Deferred taxes	December 31, 2018	December 31, 2017	Variazione
Deferred tax as sets	8,678	5,440	3,238
Deferred tax liabilities	(6,523)	(7,011)	488
Total	2,155	(1,571)	3,726

Since deferred tax assets and liabilities have been recognised in the consolidated financial statements by offsetting the figures attributable to the various legal entities against one another when appropriate, the following table shows deferred tax assets and liabilities before the offsetting process.

(thousands of euro)

Deferred taxes	December 31, 2018	December 31, 2017	Variazione
Deferred tax as sets	10,881	8,442	2,439
Deferred tax liabilities	(8,726)	(10,013)	1,287
Total	2,155	(1,571)	3,726

The following tables provide a breakdown of the temporary differences that comprise deferred tax assets and liabilities by their nature, compared with the figures as at December 31, 2017.

(thousands of euro)

	December 3	31, 2018	December 31, 2017		
Deferred tax assets	Deferred tax assets Temporary differences Fiscal effect		Temporary differences	Fiscal effect	
Intercompany profit eliminations	24,279	6,445	6,752	2,080	
Differences on depreciation/amortization and write-downs	2,140	541	1,284	341	
IAS 19 effect	227	65	248	58	
Bad debts	450	113	414	103	
Inventory write-down	3,609	932	5,731	1,495	
Provisions	947	240	3,493	841	
Cash deductable expenses	7,119	1,736	11,368	2,754	
Deferred taxes on recoverable losses	1,673	401	1,673	401	
Exchange differences and other	489	408	496	369	
Total		10,881		8,442	

The increase of deferred tax assets compared to the figure at the end of the previous year (+2,439 thousand euro) mostly relates to deferred tax assets recognised against taxes paid on the intercompany gain realised on the sale of net assets by SAES Getters USA, Inc. to SAES

Getters/U.S.A., Inc., only partially offset by lower tax-deductible costs on a cash basis rather than on an accrual one⁵².

The assessment of the recoverability of the deferred tax assets recognised in the financial statements results from specific analyses on the likelihood that the objectives indicated in the 2019-2021 plan are reached and that, consequently, sufficient taxable income will be generated in future years to enable the use of said assets. These assumptions are based on estimates based on future economic and market forecasts, which may change depending on a number of factors, requiring a recalculation of the said estimates.

As at December 31, 2018 the Group had 132,099 thousand euro in tax losses eligible to be carried forward, mainly related to the Parent Company, to the subsidiary SAES Getters International Luxembourg S.A. and to E.T.C. S.r.l. in liquidation (tax losses eligible to be carried forward amounted to 129,820 thousand euro as at December 31, 2017).

The tax losses eligible to be carried forward that were taken into account when calculating deferred tax assets were 1,673 thousand euro (essentially in line with those at December 31, 2017) and related exclusively to SAES Coated Films S.p.A. The deferred tax assets on said tax losses have been recognised on the reasonable certainty that they will be recovered in future years, in the light of the forecasts included in the three-year plan for 2019-2021.

	December 3	31, 2018	December 31, 2017		
Deferred tax liabilities	Temporary differences	Fiscal effect	Temporary differences	Fiscal effect	
Tax due on distribution of earnings accumulated by the subsidiaries	(29,308)	(2,731)	(51,261)	(3,907)	
Differences on depreciation/amortization and fair value revaluations	(22,016)	(5,867)	(22,934)	(5,983)	
IAS 19 effect	(459)	(110)	(436)	(105)	
Other	(72)	(18)	(83)	(18)	
Total		(8,726)		(10,013)	

The deferred tax liabilities recorded in the consolidated financial statements as at December 31, 2018, in addition to the provision for taxes due in the event of distribution of the profits and of the reserves of the subsidiaries for which a distribution is expected in a foreseeable future, also include the temporary differences on the gains identified at the time of the purchase price allocation of both the US companies acquired in the past years, and the more recently acquired company SAES Coated Films S.p.A.

The decrease compared to December 31, 2017 (-1,287 thousand euro) is mainly due to the release of the deferred tax liabilities relating to taxes due in the event of the distribution of profits and of reserves of the US subsidiaries SAES Getters USA, Inc. and SAES Pure Gas, Inc., sold in June 2018.

19. TAX CONSOLIDATION RECEIVABLES FROM THE CONTROLLING COMPANY

The item "Tax consolidation receivables from the Controlling Company" (272 thousand euro) refers to the receivable initially due to SAES Advanced Technologies S.p.A. and now due to the Parent Company⁵³, from S.G.G. Holding S.p.A., following a claim for a refund that the latter had presented as consolidating entity of the tax consolidation scheme in place until December 31, 2014. As this receivable is due to be collected beyond the end of the year, it has been classified under non-current assets.

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⁵² More specifically, lower provisions for long-term incentives.

⁵³ Please note that SAES Advanced Technologies S.p.A. merged into SAES Getters S.p.A. effective from January 1, 2016 from an accounting point of view.

Starting from January 1, 2015, following the decrease of the stake of S.G.G. Holding S.p.A. in SAES Getters S.p.A. below the threshold of 50%, the prerequisite to access to the tax consolidation scheme with S.G.G. Holding S.p.A. as consolidating company ended, as envisaged by the combined provisions of articles 117 and 120 of the Consolidated Law on Income Tax ("TUIR"). The Italian companies of the Group⁵⁴ currently belong to a new tax consolidation scheme with the Parent Company as consolidator.

No credit or debit balance emerged towards SAES Getters S.p.A., as positive taxable income is offset by negative taxable income. For more details please see Note 32.

20. FINANCIAL RECEIVABLES FROM RELATED PARTIES

The item "Financial receivables from related parties", of 50 thousand euro as at December 31, 2018 , relates to the interest-bearing loan granted by SAES Group to the joint venture SAES RIAL Vacuum S.r.l.

The share whose repayment by the joint venture is expected within one year was included in the current assets (1 thousand euro), while the remaining portion was classified as non-current assets (49 thousand euro).

The decrease against the end of last year (8,458 thousand euro as at December 31, 2017) was mainly due to the write-down of the financial receivable due from Actuator Solutions GmbH (9,139 thousand euro as at December 31, 2018), details of which are contained in the specific section on Actuator Solutions in this paragraph.

The relative details are given in the tables below.

⁵⁴ SAES Getters S.p.A., SAES Nitinol S.r.l. and E.T.C. S.r.l. in liquidation. In October 2017, the option to also include Metalvuoto S.p.A. (then renamed SAES Coated Films S.p.A.) in the scope of the national tax consolidation scheme was exercised, with effect from January 1, 2017.

Actuator Solutions GmbH

Description	Currency	Principal (thousands of euro)	Timing of capital reimbursement	Interest rate	Value as at December 31, 2018 (*) (thousands of euro)	Value as at December 31, 2017 (*) (thousands of euro)	
Loan granted in October 2014	EUR	1,200	flexible, with maturity date October 2018 (°)	6% annual fixed rate	74	271	
Loan granted in April 2016	EUR	1,000	flexible, with maturity date April 2019 extended to April 2024 (°°)	6% annual fixed rate	99	99	
Loan signed in July 2016: - first tranche granted in July 2016	EUR	2,000	flexible, with maturity date April 2019	6% annual	3.427	3.247	(#)
- second tranche granted in September 2016 EUR 1,000 extended to April 2024 (°°) fixed ra	fixed rate	3,421	3,247	(")			
	EUR	1,000		019 6% annual fixed rate			
Loan signed in November 2016: - first tranche granted in November 2016	EUR	1,000				4.743	
- second tranche granted in February 2017 - third tranche granted in February 2017	EUR	1,000	flexible, with maturity date April 2019		5,539		
- fourth tranche granted in March 2017	EUR	1,000	extended to April 2024 (°°)		3,339	4,/43	
- fifth tranche granted in April 2017 - sixth tranche granted in February 2018	EUR	500					
	EUR 500						
Total		10,200			9,139	8,360]
Financial receivables from related parties provis	ion	•			(9,139)	0	Ţ
Total net of write-downs					0	8,360	

On February 12, 2018 SAES Nitinol S.r.l. paid Actuator Solutions GmbH a new tranche of 500 thousand euro, of the loan signed on November 28, 2016. Note that the loan, addressed to providing support to operations, expires on April 30, 2019⁵⁵, with a flexible repayment plan by the expiry date and a fixed annual interest rate of 6%; the relative agreement, which initially provided for an overall maximum fundable amount of 4.5 million euro, was appropriately revised, increasing that figure to 5 million euro.

On June 7, 2018, Actuator Solutions GmbH completed the repayment of the principal of the loan granted by SAES Nitinol S.r.l. in October 2014.

Note that the total amount of the financial receivable (both principal and interest) was the subject of a letter of postponement issued by SAES Nitinol S.r.l. in order to guarantee the going concern assumption of Actuator Solutions, which ended 2018 with a negative consolidated shareholders' equity of about -3.1 million euro, mainly due to the restructuring of the Taiwan subsidiary.

Furthermore, the payment of the interest accrued in 2016-2018 on loans granted to the joint venture (amounting to 1,139 thousand euro) was postponed to the end of 2019.

Management therefore decided to totally write down the financial receivable, for a total of 9,139 thousand euro, in spite of the business progress made by Actuator Solutions, since the growth prospects pointed out in the five-year plan, approved by the Supervisory Committee of the same company, show significant risk elements, above all linked to the innovativeness of the products and to the extent of the potential customers, with the consequent forecast of cash flows insufficient to recover the financial receivable due to SAES by Actuator Solutions.

SAES RIAL Vacuum S.r.l.

Description	Currency	Principal	Timing of capital reimbursement	Interest rate		Value as at December 31, 2017 (*)
		(thousands of euro)			(thousands of euro)	(thousands of euro)
Loan granted in January 2016	EUR	49	flexibile	Three-months Euribor, plus 2.50% spread	50	50

^(*) Interests included

^(*) Interests included.

(*) The value at December 31, 2018 includes only the portion of interest accrued in the 2016-2018 period, whose payment was postponed to the end of the 2019 financial year.

(*) In January 2019, the duration of the loan was extended by five years, delaying the expiry from April 30, 2019 to April 30, 2024.

(#) On January 15, 2019, SAES Nitinol S.r.l. irrevocably waived the guarantee granted jointly by Alfmeier S.E. and SMA Holding GmbH, by means of a letter of patronage, on 50% of the loan.

⁵⁵ Expiry extended from April 30, 2019 to April 30, 2024 on February 14, 2019.

As at December 31, 2017 "Financial receivables from related parties" also included a receivable of 75 thousand euro due to the SAES Group by Mirante S.r.l., a minority shareholder in Metalvuoto S.p.A. (later renamed SAES Coated Films S.p.A.), against a capital contribution resolved by the Shareholders' Meeting of Metalvuoto S.p.A. on December 20, 2017 and entirely subscribed by SAES Getters S.p.A., also on behalf of Mirante, as the latter had not attended the above-mentioned meeting. Mirante S.r.l. arranged for the payment of its share of capital on January 19, 2018.

21. OTHER LONG TERM ASSETS

The item "Other long term assets" amounted to 396 thousand euro as at December 31, 2018 compared to 429 thousand euro as at December 31, 2017 and included the deposits paid by the various Group companies, as part of their operations.

22. INVENTORY

Closing inventory amounted to 23,482 thousand euro as at December 31, 2018, with a decrease of -24,071 thousand euro compared to December 31, 2017, mainly due to the sale of the assets of the purification business.

The following table shows the breakdown of inventory as at December 31, 2018 compared with the previous year.

(thousands of euro)

Inventory	December 31, 2018	December 31, 2017	Difference
Raw materials, auxiliary materials and spare parts Work in progress and semi-finished goods	8,046 10,271	<i>'</i>	(15,251) (6,558)
Finished products and goods	5,165		(2,262)
Total	23,482	47,553	(24,071)

Excluding the positive impact of exchange rates (+638 thousand euro), related mainly to the revaluation of the US dollar as at December 31, 2018 compared to the end of the previous year, and excluding that relating to the purification business, the sale of which was finalised on June 25, 2018 (the sale entailed a reduction of inventory of -26,097 thousand euro), inventory would have increased by 1,388 thousand euro compared to the previous year: in fact, the higher volumes of raw materials and semi-finished goods in the Security & Defence segment, needed to complete orders of products to be delivered in the first part of 2019, were summed to the higher volumes of semi-finished goods in the SMA Medical segment due to the growing revenue trend being recorded by this operating sector.

Inventory is stated net of any provision for depreciation, which, in 2018, recorded the changes shown in the table below.

Inventory provision					
December 31, 2017	4,182				
Difference from the sale of the gas purification business	(1,335)				
Accrual	391				
Release into income statement	(211)				
Utilization	(357)				
Translation differences	68				
December 31, 2018	2,738				

The provision (+391 thousand euro) was mainly related to the write-down of the semi-finished products and finished goods characterized by slow-moving or no longer used in the production process, in particular by the Parent Company and by the US affiliates Spectra-Mat, Inc. and SAES Smart Materials, Inc.

The release into the income statement (-211 thousand euro) was due to a recall into production of some items written-down in the previous year, in particular in the SMA business.

The use (-357 thousand euro) is due to the scrapping of items already written down in previous years, above all by the Parent Company and by the US affiliate Spectra-Mat, Inc.

23. TRADE RECEIVABLES

Trade receivables, net of the bad debt provision, were 19,676 thousand euro as at December 31, 2018 and decreased by -13,853 thousand euro compared to December 31, 2017.

Excluding both the impact of exchange rate fluctuations (+606 thousand euro), and that relating to the sale of the purification business (reduction of trade receivables by -16,263 thousand euro), the increase (+1,804 thousand euro) was mainly due to the increase of the trade receivables due from US affiliates Memry Corporation and SAES Smart Materials, Inc., related to the organic growth recorded by the revenues in the shape memory alloys business in the last quarter of 2018 compared to the corresponding period of the previous year. The higher receivables of SAES Getters/U.S.A., Inc. are also worth noting, due to the progressive increase of sales in the Security & Defence segment.

The breakdown of the item is shown in the following table.

(thousands of euro)

Trade receivables	December 31, I 2018		Difference	
Gross value	20,092	33,865	(13,773)	
Bad debt provision	(416)	(336)	(80)	
Net book value	19,676	33,529	(13,853)	

Trade receivables do not bear interest and generally are due between 30-90 days.

The bad debt provision recorded the following changes during the year.

Bad debt provision	December 31, 2018	December 31, 2018
Opening balance	336	439
Difference from the sale of the gas purification business	(128)	0
Accrual	211	147
Release into income statement	(3)	(160)
Utilization	(1)	(67)
Change in consolidation area	0	0
Translation differences	1	(23)
Closing balance	416	336

The provision to the income statement (+211 thousand euro) was mainly related to the write-down of a specific credit position of the Parent Company, estimated by Management as non-recoverable as due from a customer declared bankrupt.

This item also includes the generic write-down made according to the Expected Credit Loss model envisaged by IFRS 9 and based on the calculation of the average expected non-recoverability based on historic and geographical indicators (44 thousand euro).

The following table provides a breakdown of the trade receivables, by those not yet due and past due as at December 31, 2018 compared with the previous year:

(thousands of euro)

Agoing	Total	Not vet due		Due written				
Ageing	Total	Not yet due	< 30 days	30 - 60 days	60 - 90 days	90 - 180 days	> 180 days	down
December 31, 2018	20,092	14,432	4,479	426	76	168	95	416
December 31, 2017	33,865	22,185	5,926	3,290	1,525	321	282	336

Receivables past due by more than 30 days and not written down, as deemed to be recoverable, represented a non-significant percentage of the total amount of trade receivables and are constantly monitored. The lower percentage represented by these receivables on the total trade receivables (from 16% as at December 31, 2017 to 4% as at December 31, 2018) was mainly due to the sale of the purification business, as well as to some specific receivables of the subsidiary Memry Corporation, the collection of which was finalised in early 2018.

See Note 38 regarding the credit risk of trade receivables in order to understand how the Group monitors and manages credit quality in the event that the relative trade receivables are not due or written down.

24. OTHER RECEIVABLES, ACCRUED INCOME AND PREPAID EXPENSES

This item, which includes current non-trade receivables from third parties, along with prepaid expenses and accrued income, showed a balance of 4,634 thousand euro as at December 31, 2018, compared to 5,852 thousand euro as at December 31, 2017.

A breakdown of this item is provided below.

Prepaid expenses, accrued income and other	December 31, 2018	December 31, 2017	Difference
	1 222	1.522	(200)
Income tax and other tax receivables	1,233	1,533	(300)
VAT receivables	1,737	2,048	(311)
Social security receivables	3	76	(73)
Personnel receivables	5	1	4
Receivables for public grants	23	31	(8)
Other receivables	95	230	(135)
Total other receivables	3,096	3,919	(823)
Accrued income	0	0	0
Prepaid expenses	1,538	1,933	(395)
Total prepaid expenses and accrued income	1,538	1,933	(395)
Total prepaid expenses, accrued income and other	4,634	5,852	(1,218)

The item "Income tax and other tax receivables" includes the receivables for advance corporation taxes and other tax credits of the Group's companies with local authorities. The decrease compared to December 31, 2017 (-300 thousand euro) was mainly related to the loss of the tax credit due to the US affiliate SAES Getters USA, Inc., sold to Entegris (together with its subsidiary SAES Pure Gas, Inc.) on June 25, 2018.

The decrease of "VAT credit" is due to the fact that the credit accrued in 2018, generated by the Parent Company, and due to the excess of passive taxable transactions compared to active ones, was lower than the portion of the credit generated in 2017, and has been used to offset other taxes and contributions.

Please note that the item "Receivables for public grants" was composed of credits matured by the Parent Company as at December 31, 2018 as a result of public funding for outstanding research projects.

Income from government grants included in the income statement for 2018 totalled 1,305 thousand euro (362 thousand euro in 2017) and include the revenue of 1,164 thousand euro recognised by the US affiliate Memry Corporation following the transformation of 50% of the loan granted by the state of Connecticut (CT) at year-end 2014 into a non-refundable grant (for more detailed information, please consult Note 6 and Note 27).

The decrease of "Others" is mainly due to the lower receivable for contributions to Italian companies with high energy consumption, following the change, introduced as of January 1, 2018 of the mechanism for the acknowledgment of this subsidy: the latter, is now no longer recognised ex-post in the form of a repayment, but by directly paying a lower amount in the energy bill.

The decrease of "Prepaid expenses" against December 31, 2017 was mainly due, in addition to the sale of SAES Pure Gas, Inc., to several cost items relating to 2018 (particularly insurance costs) paid in advance at the end of the previous year; vice versa, as at December 31, 2018, no expense was recognised as the respective invoices were paid directly in the relevant year, namely 2019.

Please note that there are no receivables due beyond five years.

Government grants - disclosure pursuant to law no. 124 of 4 August 2017 - article 1, paragraphs 125-129

Law no. 124 of 4 August 2017, article 1, paragraphs 125-129 - Fulfilment of obligations of transparency and publication" has introduced, starting from 2018 financial statements, a series of obligations relating to publication and transparency for parties that entertain economic relations with the Public Administration.

The Group has conducted the necessary analyses, in consideration of the fact that this provision has raised issues regarding interpretation and application that have still not been resolved and, also in the light of more recent rulings, it is deemed that the following are not subject to the obligation of publication:

- the general measures that may be used by all enterprises included in the general structure of the reference system defined by the State (for example: ACE);
- the selective economic advantages received in application of a system of aid, accessible to all enterprises that meet specific conditions, based on pre-established general conditions (for example: grants for research and development projects and tax subsidies);
- the public resources relating to public entities of other countries (European or non-European) and to European institutions;
- the training grants received from interprofessional funds insofar as said funds are associations and are legally private entities, which are funded by contributions paid by the same enterprises. Based on the above, the analyses conducted showed that in 2018, the Group had not received any government granted that fall within the scope of application of Law no. 124/2017 (article 1, paragraphs 125-129) and any later amendments.

25. CASH AND CASH EQUIVALENTS

This item includes cash and cash equivalents that are part of cash flow management required to run business operations, together with the net cash and cash equivalents collected from the sale of the purification business (gross consideration of 301,059⁵⁶ thousand euro, net of the cash expenses relating to the extraordinary transaction of -37,562 thousand euro) and not yet invested as at December 31, 2018 through the newly- established SAES Investments S.A. (see Note 17 for the investments already underwritten at the end of this year).

The following table shows the balances as at December 31, 2018 and December 31, 2017.

(thousands of euro)

Cash and cash equivalents	December 31, 2018	December 31, 2017	Difference
Bank accounts	170,592	27,551	143,041
Petty cash	9	13	(4)
Total	170,601	27,564	143,037

The item "Bank accounts" consists of short-term deposits with some leading financial institutions, denominated primarily in Euro, US dollars and Chinese renminbi.

Note that "Bank accounts" is shown net of the write-down of -144 thousand euro determined in application of IFRS 9. In particular, the expected losses were calculated based on a percentage of default associated with each bank where the cash and cash equivalents are deposited, obtained on the basis of the rating of each bank.

For the analysis of the changes in cash and cash equivalents during the period please refer to the comments on the Cash flow statement (Note 37).

As at December 31, 2018 the Group has unused credit lines of 21.7 million euro compared to 40.1 million euro as at December 31, 2017. The decrease was mainly the result of the greater use by the Parent Company of debt in the form of "hot money", as well as the cancellation of a credit line of

⁵⁶ This amount coincides with the gross consideration of 303,765 thousand euro, minus the cash and cash equivalents of the company sold SAES Pure Gas, Inc. of 2,706 thousand euro.

SAES Getters USA, Inc. before the sale of the US affiliate to Entegris, and the cancellation of the revolving credit facility with Banca Intesa Sanpaolo S.p.A. associated to the loan granted in June 2015 and repaid in advance in July 2019 (details of the early repayment are illustrated in the paragraph entitled "Significant events in 2018" in the Report on operations and in Note 27).

26. SHAREHOLDERS' EQUITY

The Group shareholders' equity amounted to 341,220 thousand euro as at December 31, 2018, with an increase of 219,079 thousand euro compared to December 31, 2017, mainly due to the profit for the period (+232,333 thousand euro) and to the exchange rate differences arising from the translation of the financial statements in foreign currencies (+4,891 thousand euro), only partially offset by the dividends distributed by the Parent Company (-15,435 thousand euro). Moreover we report:

- the release of the translation reserve to the income statement (positive for 2,342 thousand euro) generated by the consolidation of the US companies SAES Getters USA, Inc. and SAES Pure Gas, Inc., transferred to Entegris, Inc. on June 25, 2018 as part of the extraordinary transaction of sale of the gas purification business;
- the release of a part of the translation reserve (positive for 360 thousand euro) generated by the consolidation of SAES Getters/U.S.A., Inc. after the partial reduction of the share capital of the US subsidiary.

A summary of the changes occurred is provided in the Statement of changes in the shareholders' equity.

Share capital

As at December 31, 2018 the share capital, fully subscribed and paid-up, amounted to 12,220 thousand euro and consisted of no. 14,671,350 ordinary shares and no. 7,378,619 savings shares, for a total of no. 22,049,969 shares.

The composition of the share capital was unchanged compared to December 31, 2017.

The implicit book value per share was 0.554196 euro as at December 31, 2018, unchanged from December 31, 2017.

Please refer to the Report on corporate governance and ownership structure for all of the information required by article 123-bis of the Consolidated Finance Law (TUF).

All the Parent Company's securities are listed on the segment of the Mercato Telematico Azionario known as "STAR" (Securities with High Requirements), dedicated to small and medium caps that meet specific requirements with regard to reporting transparency, liquidity and corporate governance.

Share issue premium reserve

This item includes amounts paid by the shareholders in excess of the par value for new shares of the Parent Company subscribed in capital issues.

This item was unchanged compared to December 31, 2017.

Legal reserve

This item corresponds to the Parent Company's legal reserve of 2,444 thousand euro as at December 31, 2018 and it was unchanged compared to December 31, 2017, since the reserve had reached its legal limit.

Other reserves and retained earnings

This item includes:

- the reserves (totalling 2,615 thousand euro) represented by the positive monetary revaluation balances resulting from the application of Law no. 72 of March 19, 1983 (1,039 thousand euro) and

Law no. 342 of November 21, 2000 (1,576 thousand euro) by the Parent Company SAES Getters S.p.A. Pursuant to Law no. 342 of 2000, the revaluation reserve has been stated net of the related lieu tax of 370 thousand euro;

- the other reserves of subsidiaries, the retained earnings, and other shareholders' equity items of the companies of the Group which were not eliminated during the consolidation process.

The change in the item "Other reserves and retained earnings" includes the distribution to the shareholders of the 2017 dividends, approved by the Parent Company's Shareholders' Meeting (-15,435 thousand euro), the carry forward of the 2017 consolidated income (+13,860 thousand euro), the equity transaction cost⁵⁷ of the joint venture Flexterra, Inc. (-15 thousand euro), and the actuarial differences on the defined-benefit plans of both the subsidiaries and the companies measured with the equity method, generated by applying the revised version of IAS 19, net of the relevant tax effect (+7 thousand euro).

As reported in the Report on corporate governance and ownership structure enclosed to these financial statements, each share is entitled to a proportional part of the net income that it is decided to distribute, except the rights attached to savings shares.

More specifically, as described in article no. 26 of the By-laws, savings shares are entitled to a preferred dividend equal to 25% of their implied book value; if in one financial year a dividend of less than 25% of the implied book value has been allocated to savings shares, the difference will be made up by increasing the preferred dividend in the following two years. The remaining profit that the Shareholders' Meeting has resolved to distribute will be allocated among all shares in such a way to ensure that savings shares are entitled to a total dividend that is 3% of the implied carrying amount higher than that of ordinary shares. In case of distribution of reserves, shares have the same rights irrespective of the category to which they belong.

Other components of the shareholders' equity

This item includes the exchange rate differences arising from the translation of the financial statements in foreign currencies. The translation reserve had a positive balance of 10,289 thousand euro as at December 31, 2018, compared to a positive balance of 8,100 thousand euro as at December 31, 2017.

The increase of 2,189 thousand euro was due both to the overall impact on the consolidated shareholders' equity of the conversion into euro of the financial statements of foreign subsidiaries expressed in currencies other than the euro and the respective consolidation adjustments (+4,551 thousand euro⁵⁹), and to the share of the Group in the translation reserve arising from the consolidation of the companies⁶⁰ measured with equity method (+340 thousand euro), partially offset by the release to the income statement (-2,342 thousand euro) of the translation reserve generated by the consolidation of the US affiliates sold (SAES Getters USA, Inc. and SAES Pure Gas, Inc.) and by the partial release (-360 thousand euro) of the translation reserve generated by the consolidation of the newco SAES Getters/U.S.A., Inc. following the partial reduction of share capital of the US subsidiary.

In compliance with IFRS 5, both the amount as at December 31, 2017 and the changes in the translation reserve of the sold companies for the period were stated in a separate item of the consolidated statement of changes in shareholders' equity called "Translation reserve of discontinued operations".

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⁵⁷ Legal expenses related to the share capital increase made in the second half of 2018.

⁵⁸ Of which +1,921 thousand euro relating to discontinued operations (that is, the translation reserve generated by the consolidation of the US companies SAES Getters USA, Inc. and SAES Pure Gas, Inc., sold on June 25, 2018).

⁵⁹ Of which 421 thousand euro relating to discontinued operations.

⁶⁰ Translation reserve arising both from the consolidation of Actuator Solutions Taiwan Co., Ltd. and Actuator Solutions (Shenzhen) Co., Ltd. into Actuator Solutions GmbH, and of the conversion into euro of the financial statements of Flexterra, Inc. and its subsidiary Flexterra Taiwan Co., Ltd.

Please note that the Group exercised the exemption allowed under IFRS 1 - First-time adoption of International Financial Reporting Standards, regarding the possibility of writing-off the accumulated translation gains or losses generated by the consolidation of foreign subsidiaries as of January 1, 2004. Consequently, the translation reserve includes only the translation gains or losses generated after the date of transition to IASs/IFRSs.

Reconciliation between the net profit and the shareholders' equity of SAES Getters S.p.A. with the net profit and consolidated shareholders' equity as at December 31, 2018 and December 31, 2017 is shown in the following table.

	December	r 31, 2018	December	31,2017
(thousands of euro)	Net income	Shareholders' equity	Net income	Shareholders' equity
SAES Getters S.p.A Parent Company	258,234	303,043	(2,979)	60,209
Shareholders' equity and net result of consolidated subsidiaries, net of dividends distribution and write-downs of investments in share capital	18,777	231,396	22,937	171,010
Book value of investments in share capital		(152,965)		(87,943)
Consolidation adjustments:				
Elimination of profit arising from intercompany transaltions, net of the related tax effect	(14,625)	(19,364)	(3,441)	(4,739)
Accrual of deferred taxes on equity distributable of consolidated subsidiaries	1,176	(2,731)	(553)	(3,907)
Equity evaluation of joint venture	(5,773)	(17,355)	(2,468)	(11,899)
Other adjustments	(25,456)	(804)	364	(590)
Consolidated financial statements	232,333	341,220	13,860	122,141

27. FINANCIAL DEBTS

As at December 31, 2018, the financial debts amounted to 18,782 thousand euro, with a decrease of 19,753 thousand euro compared to December 31, 2017.

The reduction is a consequence of the repayments, also before the contractual due date, of the principal amounts made during the year (-18,758 thousand euro), which is added to the 50% transformation of the funding granted to the affiliate Memry Corporation by the state of Connecticut (CT) by way of contribution during the first half of 2018 in a non-repayable grant (-1,164 thousand euro, reported in the item "Other movements" of the table below).

These decreases were partially offset by the exchange rate effect which generated an increase in the Group's financial debt equal to 128 thousand euro: in fact, 2.8% of the Group's financial debt is composed by loans denominated in US dollars held by the US affiliate Memry Corporation, whose equivalent amount in euro has increased following the revaluation of the US dollar as at December 31, 2018 compared to December 31, 2017.

The following table shows the changes in the financial debts in 2018.

(thousands of euro)

Financial debts				
December 31, 2017	38,535			
Proceeds	0			
Reclassifications	23			
Amortization of fees and interests	505			
Repayments	(18,758)			
Interest payments	(487)			
Conversion differences on loans in foreign currencies	128			
Other changes	(1,164)			
December 31, 2018	18,782			

The following table shows the breakdown of the item by contractual maturity. Please note that the debt with a maturity of less than one year is included under the current liabilities among the "Current portion of medium/long term financial debts".

(thousands of euro)

Financial debts	December 31, 2018	December 31, 2017	Difference
Less than 1 year	5,438	10,478	(5,040)
Current portion of financial debts	5,438	10,478	(5,040)
Between 1 and 2 years	5,361	10,416	(5,055)
Between 2 and 3 years	5,203	8,952	(3,749)
Between 3 and 4 years	2,582	5,364	(2,782)
Between 4 and 5 years	87	2,746	(2,659)
Over 5 years	111	579	(468)
Non current financial debts	13,344	28,057	(14,713)
Total	18,782	38,535	(19,753)

The following table shows the details of the loans held by the companies of the Group which were all already existing as at December 31, 2017.

Description	Currency	Principal	Timing of capital reimbursement			Effective interest rate	Value as at December 31, 2018 (thousands of euro)	Value as at December 31, 2017 (thousands of euro)	
SAES Getters S.p.A. Unicredit	EUR	7 (millions of euro)	quarterly with maturiry date December 31, 2019	Half -yearly	Three-months Euribor plus 2.25% spread	2.57%	0	2,794	(*)
SAES Getters S.p.A. Unicredit	EUR	10 (millions of euro)	quarterly with maturiry date March 31, 2022	Half-yearly	Three-months Euribor plus 1% spread	0.90%	6,478	8,464	
SAES Getters S.p.A. Intesa Sanpaolo	EUR	8 (millions of euro)	half-yearly with maturity date July 31, 2020	Yearly	Six-months Euribor plus 2.25% spread	2.74%	0	4,820	(*)
SAES Getters S.p.A. Intesa Sanpaolo	EUR	10 (millions of euro)	half-yearly (with fixed principal amounts) with maturity date December 21, 2022	Yearly	Six-months Euribor plus 1.20% spread	1.18%	7,966	9,948	
SAES Getters S.p.A. Banco BPM	EUR	5 (millions of euro)	quarterly (with variable principal amounts) with maturity date December 31, 2021	n.a.	Three-months Euribor plus 1% spread	1.11%	3,353	4,446	
Memry Corporation Soft financing granted by the State of Connecticut	USD	1 ^a tranche = 2 millions of USD 2 ^a tranche = 0.8 millions of USD	monthly with maturity date March 1, 2025	n.a.	296	2%	528	1,779	(**)
Memry Corporation Unicredit	USD	11 (millions of USD)	half-yearly with maturity date December 31, 2020	Half-yearly	Six-months USD Libor plus 2.20% spread	4.04%	0	5,504	(*)
SAES Coated Films S.p.A. Banco BPM -MIUR loan	EUR	319 (thousand of euro)	half-yearly with maturity date December 31, 2018	n.a.	0.50%	0.50%	0	46	
SAES Coated Films S.p.A. Intesa Sanpaolo	EUR	300 (thousand of euro)	quarterly with maturiry date June 30, 2020	n.a.	Three-months Euribor plus 2.25% spread	1.95%	112	188	
SAES Coated Films S.p.A. Banco BPM	EUR	231 (thous and of euro)	half-yearly	n.a.	Three-months Euribor plus 2.799% spread	2.48%	90	148	
Banco BPM - MIUR loan	EUR	231 (thousand of euro)	with maturity date June 30, 2020	п.а.	0.50%	0.50%	87	145	
SAES Coated Films S.p.A. Intesa Sanpaolo	EUR	400 (thousand of euro)	quarterly with maturiry date December 31, 2020	n.a.	Three-months Euribor plus 1.50% spread	1.20%	168	253	

(*) Expired loan during 2018 following an early repayment respect the original repayment schedules. (**) During 2018, 50% of the loan has been transformed in a non-repayable grant.

As regards the loan granted at year-end 2014 to Memry Corporation by the state of Connecticut (CT), please note that on January 30, 2018 the independent auditors appointed by Memry Corporation concluded their review, with no findings, on the company's compliance with the agreed conditions (increase of the workforce at the Bethel site and average annual wage not below a predetermined threshold) for the transformation of 50% of the funding in a non-repayable grant. At the beginning of March, the reports by the auditors were notified to the relevant State authorities and the final authorisation by the State of CT arrived during the first half of 2018. The grant, amounting to 1.4 million USD (corresponding to 1,164 thousand euro), generated an income in the income statement by the same amount.

As shown in the above table, during the second half of 2018 the Parent Company repaid the residual amount of the long-term loan underwritten with Banca Intesa Sanpaolo S.p.A. (initial nominal value of 8 million euro) and the residual amount of the long-term loan underwritten with Unicredit S.p.A. (nominal initial amount equal to 7 million euro) before the original expected repayment schedules. No penalty was paid for said transactions.

On July 31, 2018 the US affiliate Memry Corporation repaid the residual amount of the long-term loan underwritten at the beginning of 2009 with Unicredit in advance. The cost for the early termination (breakage costs) were around 30 thousand USD, in accordance with that established by the agreement initially signed by the parties.

Lastly, it is reported that on December 31, 2018 SAES Coated Films S.p.A. completed repayment of the loan underwritten with Banco BPM in 2013, as per the original expected repayment schedule.

No new loans were underwritten during the year.

Covenants

With the exception of the loan signed with Banco BPM, all the loans held by the Parent Company are subject to the compliance with covenants calculated on some Group's economic and financial figures. Specifically, the loan that Unicredit granted is subject to half-yearly checking of the covenants (as at June 30 and December 31 each year), while the guarantee clauses are checked annually (as at December 31) for the one granted by Banca Intesa.

As better shown in the table below, as at December 31, 2018, all of the covenants had been met.

			loan Intesa Sanpaolo (*)	loan Unicredit (**)
		Covenant	Value as at December 31, 2018	Value as at December 31, 2018
Net equity	k euro	≥ 94,000	n.a.	341,220
Net financial position Net equity	%	≤ 1.0	(0.36)	(0.65)
Net financial position EBITDA	%	≤ 2.25	(4.70)	(8.50)
<u>EBITDA</u> Financial expenses	%	> 5.0	21.40	n.a.

^(**) Net financial position calculated excluding the non current financial activities and receivables (payables) for derivative financial instruments evaluated at fair value.

^(**) Net financial position calculated excluding financial receivables from related parties and receivables (payables) for derivative financial instruments evaluated at fair value.

Please note that both the soft financing disbursed by the state of Connecticut to Memry Corporation and the loan agreements signed by SAES Coated Films S.p.A. contain no economic and financial covenants.

Based on future plans, the Group is expected to be able to comply with the covenants described above in future years as well.

28. STAFF LEAVING INDEMNITIES AND OTHER EMPLOYEE BENEFITS

Please note that this item includes liabilities to employees under both defined-contribution and defined-benefit plans existing in the companies of the Group in accordance with the contractual and legal obligations in place in the various countries.

The following table shows a breakdown of this item and the related changes occurred during the year.

(thousands of euro)

Employee severance indemnities and other employee benefits	Employee severance indemnities	Other employee benefits	Total
December 31, 2017	5,608	3,316	8,924
Accrual (release)	116	139	255
Indemnities paid	(428)	(18)	(446)
Other changes	(165)	(715)	(880)
Conversion differences	0	56	56
December 31, 2018	5,131	2,778	7,909

The amounts recognised in the income statement may be broken down as follows.

(thousands of euro)	2018	2017
Financial expenses	74	92
Cost of current work performed	1,181	2,879
Released to the income statement	(1,000)	0
Expected return on plan assets	0	0
Recognized past service costs	0	0
Total cost	255	2,971

The considerable reduction of the item "Cost of current work performed" is mainly due to the lower provisions for the long-term three-year incentive due to the Executive Directors. In the previous year, this provision relating to the three-year period 2015-2017 had been doubled as the performance achieved was better than the targets initially assigned.

The item "Released to the income statement" includes the removal of the provisions relating to the three-year period 2015-2017 for the non-competition pact of the Executive Directors, following the expiry of the mandate, as the conditions for the payment of said amount had not been met. Also note the release of provisions relating to the long-term cash incentive plan of several employees, who left the company before payment of the same fell due and therefore, no longer have a right to said incentive.

The breakdown of the obligations under defined-contribution and defined-benefit plans and the related changes occurred during the year 2018 are shown below.

(thousands of euro)									
	December 31, 2017	Financial expenses	Current service cost	Benefits paid	Actuarial (profit) loss on the obligation	Other movements	Released to the income statement	Conversion differences	December 31, 2018
Present value of defined benefit obligations	7,839	74	1,110	(446)	(21)	(859)	(1,000)	3	6,700
Fair value of plan assets	0	0	0	0	0	0	0	0	0
Costs non yet recognized deriving from past obligations	0	0	0	0	0	0	0	0	0
Defined benefit obligations	7,839	74	1,110	(446)	(21)	(859)	(1,000)	3	6,700
Defined contribution obligations	1,085	0	71	0	0	0	0	53	1,209
Staff leaving indemnities and similar obligations	8,924	74	1,181	(446)	(21)	(859)	(1,000)	56	7,909

"Actuarial (profit) loss on the obligation" refers to the differences on the obligations relating to defined-benefit plans resulting from the actuarial calculation, which are immediately recognised in shareholders' equity under profits carried forward.

The item "Other movements" refers to the portion of long-term monetary incentive plans that will be paid out over the first half of 2019 and whose amount was therefore reclassified under "Other debts" to personnel

When referred to the Group's Italian companies, staff leaving indemnity consists of the obligation, estimated according to actuarial techniques, related to the sum to be paid to the employees of the Italian companies when employment is terminated.

Following the entry into force of the 2007 Finance Law and associated implementation decrees, in the company with a number of employees above 50, the liability associated with past years staff leaving indemnity continues to be considered a defined-benefit plan and is consequently measured according to actuarial assumptions. The portion paid to pension funds is instead considered a defined-contribution plan and therefore it is not discounted.

The obligations under defined-benefit plans are measured annually by independent actuarial consultants according to the projected unit credit method, separately applied to each plan. The main economic-financial assumptions used for the actuarial calculations of defined-benefit plans as at December 31, 2018 and December 31, 2017 respectively are shown below.

	Italy		
	December 31,2018 December 3		
Average duration of the employees subject to actuarial evaluation	n > 10 years > 10 yea		
Discount rate	1.55%	1.20%	
Inflation rate	1.50%	1.50%	
Expected annual salary increase rate (*) (**)	3.50%	3.50%	

^(*) Factor not considered in the actuarial appraisal of the staff leaving indemnity of the Parent Company, company with more than 50 employees.

Note that, as regards the choice of the discounting rate, the reference index was the Eurozone *Iboxx Corporate AA*, the duration of which is consistent with the average financial duration of the collective amount under valuation as at December 31, 2018 and of the benefit under valuation.

With regard to the demographic assumptions, ISTAT 2004⁶¹ mortality tables were used as well as INPS incapacity/invalidity tables.

As regards the likelihood of employees leaving their jobs for reasons other than death, turnover probabilities were used that were consistent with previous valuations, which adopt a time horizon deemed to be representative by the company under valuation. More specifically, an average turnover rate of 2.00% was used.

The item "Other employee benefits" includes the provision for long-term incentive plans, signed by the Executive Directors and by some employees of the Group identified as particularly important for the achievement of the consolidated medium to long term corporate objectives. The three-year

⁶¹ The 2011 ISTAT mortality tables were used to conduct the SAES Coated Films S.p.A. staff leaving indemnity actuarial assessment.

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^(**) The expected annual salary increase rate of Metalvuoto S.p.A. is equal to 2.00%

plans provide for the recognition of cash incentives proportional to the achievement of specific personal and Group's objectives.

The aim of these plans is to further strengthen the alignment over time of individual interests to corporate interests and, consequently, to the shareholders' interests. The final payment of the long-term incentive is always subject to the creation of value in a medium to long-term period, rewarding the achievement of performance objectives over time. The performance review is based on multi-year indicators and the payment is always subject, in addition to maintaining the employer-employee relationship with the company for the duration of the plan, also to the presence of a positive consolidated income before taxes at the expiry date of the plan.

Such plans fall into the category of defined-benefit obligations and they are discounted. The discounting rates used for the plans subscribed by the Parent Company's strategic employees and by the Executive Directors are shown below, and they reflect the rates of return of Italian government bonds, taking the different duration of the plans into account.

Year	Discount rate
2020	0.53%

Please note that as at December 31, 2018, the long-term monetary incentive plans of the Group's US companies had not been discounted in so far as they had reached maturity. The relevant debts were therefore reclassified under "Other debts" to personnel.

The following table shows a breakdown of the actuarial differences relating to 2018.

(thousands of euro)

Difference December 31, December 31, Other payables 2018 2017 Payables to employees (vacation, wages, staff leaving indemnity, etc.) 5,755 5,315 440 Social security payables 1,993 1,827 166 Tax payables (excluding income taxes) 1.451 235 1,686 (3,623) Other 3,099 6,722 12,533 Total 15,315 (2,782)

With regard to defined-benefit plans⁶², the following table shows the effect on the obligation of an increase or decrease of half a percentage point of the discounting rate, as calculated by the independent actuary.

(thousands of euro)	Discou	ınt rate
(thousands of euro)	+0,5%	-0,5%
Effect on the defined benefit obligation	(283)	293

Instead, the table below shows the effect on the payable for three-year cash incentive plans (both of employees and the Executive Directors) of an increase or a decrease of half a percentage point of the discounting rate.

(thousands of euro)	Discou	int rate
(thousands of edito)	+0,5%	-0,5%
Effect on the long-term incentive plans obligation	(7)	7

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⁶² The long-term monetary incentive plans are not included in this calculation, and they are referred to in the following table.

The following table shows the Group's employees split by category.

Group's employees	December 31, 2018	December 31, 2017	Average 2018	Average 2017
Managers	91	88	94	87
Employees and middle management	315	364	337	386
Workers	527	621	567	607
Total (*)	933	1,073	998	1,080

^(*) It does not include the employees of the joint ventures for which please refer to the Note no. 16.

The workforce amounted to 933 units as at December 31, 2018 (of which 483 were employed abroad), to be compared with 1,073 units as at December 31, 2017 (of which 614 were employed abroad): the decrease of 140 units is mainly related to the combined effect of the staff leaving in the business of the gas purification⁶³ (-169 units⁶⁴) and to the growth in workforce employed in the shape memory alloys (SMAs) business (+35 units).

This figure does not include the personnel employed at the Group companies with contract types other than employment agreements, equal to 87 units (65 units as at December 31, 2017).

29. PROVISIONS FOR RISKS AND CHARGES

"Provisions for risks and charges" amounted to 5,051 thousand euro as at December 31, 2018.

(thousands of euro)

Provisions for risks and charges	December 31, 2018	December 31, 2017	Difference
Product warranty provision	74	472	(398)
Bonus	4,391	4,564	(173)
Phantom shares	70	0	70
Other provisions	516	615	(99)
Total	5,051	5,651	(600)

The following table shows the composition of and the changes in these provisions compared to December 31, 2017.

(thousands of euro)

Provisions for risks and charges	December 31, 2017	Increase	Utilization	Released to the income statement	Reclassificati ons	Conversion differences	Difference from the sale of the gas purification business	December 31, 2018
Product warranty provision	472	0	0	(33)	0	4	(369)	74
Bonus	4,564	4,459	(4,144)	0	(16)	119	(591)	4,391
Phantom shares	0	70	0	0	0	0	0	70
Other provisions	615	89	(200)	(5)	0	17	0	516
Total	5,651	4,618	(4,344)	(38)	(16)	140	(960)	5,051

The decrease of the item "Product warranty provision" is related to the sale of the purification business.

⁶³ Business whose sale was finalised on June 25, 2018.

⁶⁴ 160 employees and of the subsidiary SAES Pure Gas, Inc. and 9 employees of the sales office located in Shanghai of the subsidiary SAES Getters (Nanjing) Co., Ltd., both sold to Entegris, Inc.

The item "Bonus" included the accrual of bonuses to the Group's employees (mainly referring to the Parent Company and the US subsidiaries⁶⁵) related to the 2018. The change compared to December 31,2017 was mainly due to both the accrual of bonuses matured during the period and the payment of the bonuses of the previous year, settled during the first half of 2018.

On October 1, 2018, the Shareholders' Meeting of SAES Getters S.p.A. approved the adoption of an incentive plan based on phantom shares addressed to certain executive directors and strategic executives. The plan is based on the free assignment to beneficiaries of a specific number of phantom shares which, under the terms and conditions of the plan, give them the right to receive a cash incentive, dependent on the increase in the stock market price of the shares on a date in which certain pre-established events are due to take place, with respect to the assignment value. The events that may trigger the payment of the incentive are, for example: change in control of the Company; failure to renew the position of board director at the end of a term in office; revocation from the position of board director or substantial change in the relative proxies or in the role without just cause; dismissal for just cause; resignation for an objective justified reason (only for Strategic Executives); reaching the age of retirement; permanent invalidity; death; delisting. The plan seeks to remunerate the beneficiaries with relation to the Company's capitalisation, to enhance retention and to better align performance with the interests of shareholders and the Company.

On October 17, 2018 the Board of Directors of SAES Getters S.p.A. launched the plan, establishing the names of the plan's beneficiaries on the proposal of the Remuneration and Appointments Committee, and establishing the number of phantom shares to be assigned free of charge to each beneficiary. In accordance with the criteria established by the plan's regulations, the assignment of each phantom share has been established as 16.451 euro, corresponding to the weighted average of the official prices of the Company's ordinary shares recorded on the MTA (electronic equity market) organised and managed by Borsa Italiana S.p.A. on trading days that fall in the 36 (thirty-six) months prior to the date of October 17, 2018.

The phantom shares plan liability (70 thousand euro as at December 31, 2018) was measured by an independent actuary following the risk neutral approach required by IFRS 2. Specifically, the economic-financial assumptions adopted as at December 31, 2018 to estimate the fair value of the phantom shares were the following:

- risk vesting period for each beneficiary, with maximum term equal to the assumed pension date;
- probabilities of death and permanent invalidity calculated using the IPS55 tables and the INPS 2010 model, respectively;
- a 2% annual flat probability of occurrence was considered for all the other events assigning the right to receive the incentive;
- a 1.50% annual flat probability of occurrence was considered for the events entailing forfeiture of the right to receive the incentive (this possibility was not contemplated for the Executive Directors);
- the expected dividend rate was considered 2.89% for the entire term of the plan;
- the annual volatility of the share's yield was estimated at 4.69% (on the basis of the historic volatility).

The increase of the item "Other provisions" includes the allocation of 87 thousand euro as the best estimate of the obligation that arose for a labour dispute of the Parent Company with the social security entities.

Use of the item "Other provisions" is mainly related to finalisation of the dispute with several former employees of E.T.C. S.r.l., dismissed for objective just cause on October 31, 2017, following the elimination of the position due to the liquidation of the company, was formally closed. More specifically, on January 22, 2018 the conciliation document was signed by the trade union association, in which the parties acknowledge that they may claim nothing more from one another and from which a 124 thousand euro obligation emerged, paid in February 2018.

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⁶⁵ As regards the US subsidiaries, please note that the monetary incentive plan relates to the attainment of targets calculated both on the consolidated financial results and on the results achieved by the individual companies.

The same item lastly includes the implicit obligations of the company Spectra-Mat, Inc., calculated based on the agreement reached with the local authorities, regarding the costs to be incurred for monitoring the pollution level at the site where it operates (318 thousand euro), in addition to the best estimate, equal to 100 thousand euro, of the expenditure required to settle the obligation existing at the balance sheet date and related to an incident occurred at the plant of the Parent Company in Avezzano.

A breakdown of provisions by current and non-current portion is provided below.

(thousands of euro)

Provisions for risks and charges	Current provisions	Non current provisions	December 31, 2018	Current provisions	Non current provisions	December 31, 2017
Product warranty provision	61	13	74	58	414	472
Bonus	4,391	0	4,391	4,564	0	4,564
Phantom shares	0	70	70	0	0	0
Other provisions	188	328	516	274	341	615
Total	4,640	411	5,051	4,896	755	5,651

30. TRADE PAYABLES

Trade payables amounted to 12,082 thousand euro as at December 31, 2018, marking a decrease of 6,795 thousand euro compared to December 31, 2017, mainly due to the sale of the purification business.

(thousands of euro)

Trade payables	December 31, 2018	December 31, 2017	Difference	
Trade payables	12,082	18,877	(6,795)	
Total	12,082	18,877	(6,795)	

Net of what pertains to the purification business (decrease of 7,751 thousand euro), whose sale was finalised on 25 June 2018, trade payables would have increased by 956 thousand euro. This increase is due to higher investments made in the latter part of the year by the Parent Company both in preparation for the installation of a new pilot production line for the advanced packaging business, and relating to the transfer of some production activities from the Lainate plant to the Avezzano plant.

The effect of the revaluation of the US dollar compared to 31 December 2017 generated an increase in this item totalling 123 thousand euro.

Trade payables do not bear interests and are due within twelve months.

There are no trade payables in the form of debt securities.

The following table provides a breakdown of the trade payables, by those not yet due and past due as at December 31, 2018 compared with the previous year:

,	41	- ¢	,
l	thousands	or euro	J

A	Total	Not vet due	Due					
Ageing	Total	Not yet due	< 30 days	30 - 60 days	60 - 90 days	90 - 180 days	> 180 days	
December 31, 2018	12,082	11,118	322	378	25	40	199	
December 31, 2017	18,877	10.447	7.249	888	112	113	68	

31. OTHER PAYABLES

The item "Other payables" includes amounts that are not classified as trade payables and amounted to 12,533 thousand euro as at December 31, 2018 compared to 15,315 thousand euro as at December 31, 2017.

The table below shows the detail of the other payables, compared with the previous year.

(thousands of euro)

Other payables	December 31, 2018	December 31, 2017	Difference
Payables to employees (vacation, wages, staff leaving indemnity, etc.)	5,755	5,315	440
Social security payables	1,993	1,827	166
Tax payables (excluding income taxes)	1,686	1,451	235
Other	3,099	6,722	(3,623)
Total	12,533	15,315	(2,782)

The item "Payables to employees" is mainly made up of the provisions for holidays accrued but not taken during the period and for the monthly salaries of December 2018, not yet paid as at December 31. At year-end 2018 this item also included the severance payables related to the downsizing of the headcount at the Parent Company (about 1.6 million euro) and the payable connected with the three-year monetary incentive plans that had reached maturity at year-end and were paid during the first half of 2019 (859 thousand euro 66), to which the increase over 31 December 2017 is principally due. The latter was only partially offset by the reduction due to the sale of the liabilities pertaining to the purification business (-1,548 thousand euro).

The item "Social security payables" includes the payables owed by the Group's Italian companies to the INPS (Italy's social-security agency) for contributions to be paid on wages as well as the payables to the treasury fund operated by the INPS and to the pension funds under the reformed staff leaving indemnity legislation.

The item "Tax payables" primarily consists of the payables owed by the Italian companies to the Treasury in connection with the withholding taxes on the wages of employees and consultants, the payable due to the tax authority for VAT to be paid, and the payable for local taxes of the US affiliates. The increase compared to December 31, 2017 is in line with the increase in the item "Payables to employees".

Lastly, the item "Other" mainly includes payables of the Parent Company for both fixed and variable Directors' remuneration (2,273 thousand euro), and for advances received on government grants for research (115 thousand euro).

The decrease compared to last year is mainly due to the fact that as at December 31, 2017 the item included the payable for the portion of the three-year cash incentive plan which matured⁶⁷ and was paid in the first half of 2018 (2,800 thousand euro). The sale of the purification business also led to a 755 thousand euro reduction.

Please note that there are no accrued liabilities due after more than five years.

⁶⁶ It should be noted that at the end of the previous year the payable arising from the three-year monetary incentive plans that had reached maturity totalled 558 thousand euro.

⁶⁷ As at December 31, 2018, the same payable was included in the item "Staff leaving indemnities and other employee benefits" in so far as it was a provision.

32. ACCRUED INCOME TAXES

This item consists of payables for taxes associated with the Group's foreign subsidiaries and the IRAP payable of the Italian companies. As regards IRES, the Italian companies on the other hand elected to participate in the national tax consolidation programme with the Parent Company in the capacity of consolidator. Therefore, the negative taxable incomes are offset by both the positive ones and the prior tax losses carried forward; the IRES tax is due only on the residual taxable income, but since it is negative until the end of the current year, no payable to the tax authority is recognised in the financial statements as at December 31, 2018. For more information about the national tax consolidation programme, please see the Note 19.

It is lastly reported that the item includes the payable of the Parent Company to the tax authority for the IRES on the income subject to separate taxation of the foreign subsidiary SAES Getters International Luxembourg S.A., in application of provisions regarding subsidiaries (known as "CFC Legislation" dictated by art. 167, paragraph 5-bis et seq. of the Consolidated Law on Income Tax).

Accrued income taxes amounted to 1,778 thousand euro as at December 31, 2018 and included the tax obligations accrued in the year, net of advance payments. This figure is basically in line with the one of December 31, 2017, which amounted to 1,657 thousand euro.

33. DERIVATIVE FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

As at December 31, 2018 the item "Derivate financial instruments measured at fair value", which represents the fair value of agreements signed by the Group with a view to fixing the interest rate on long-term bank loans, as well as the fair value of the implicit derivatives included in said loan agreements, recorded a negative balance of 48 thousand euro compared to a negative net balance of 61 thousand euro as at December 31, 2017.

The following table provides details of these contracts and their fair value as at December 31, 2018 compared to December 31, 2017.

Description	Subscription date	Currency	Notional amount (thousands of euro)	Maturity	Interest rate	Timing	Fair value December 31, 2018 (thousands of euro)	Fair value December 31, 2017 (thousands of euro)
SAES Getters S.p.A. Interest Rate Swap (IRS) on Intesa Sanpaolo S.p.A. loan	September 25, 2015	EUR	3,600	July 31, 2020	Fixed rate paid: 0.285% Variable rate received: six- month Euribor	Half-yearly	0 (§)	(20)
SAES Getters S.p.A. Interest Rate Swap (IRS) on Unicredit S.p.A. loan	March 29, 2016	EUR	5.250 (*)	December 31, 2019	Fixed rate paid: 0.0% Variable rate received: three month Euribor (**)	Quarterly	0 (§)	(9)
SAES Getters S.p.A. Interest Rate Floor on Banco BPM loan (derivative embedded in the loan agreement)	December 22, 2016	EUR	5.000 (*)	December 31, 2021	If three month Euribor <0, the financing variable rate is equal to the spread	Quarterly	(8)	(12)
SAES Getters S.p.A. Interest Rate Swap (IRS) on Unicredit S.p.A. loan	April 7, 2017	EUR	10.000 (*)	March 31, 2022	Fixed rate paid: 0.0% Variable rate received: three month Euribor (***)	Quarterly	(21)	(11)
SAES Getters S.p.A. Interest Rate Swap (IRS) on Intesa Sanpaolo S.p.A. loan	April 19, 2017	EUR	5,000	December 21, 2022	Fixed rate paid: 0.16% Variable rate received:six month Euribor	Half-yearly	(19)	(9)
SAES Coated Films S.p.A. Interest Rate Cap on Intesa Sanpaolo S.p.A. loan	March 31, 2016	EUR	400 (*)	December 31, 2020	Cap rate on three month Euribor: 0.0%	Quarterly	O (#)	O (#)
SAES Coated Films S.p.A. Interest Rate Cap on Banco BPM loan	October 29, 2015	EUR	230 (*)	December 31, 2020	Cap rate on three month Euribor: 0.67%	Quarterly	O (#)	0 (#)
SAES Coated Films S.p.A. Interest Rate Cap on Intesa Sanpaolo S.p.A. loan	November 2, 2015	EUR	300 (*)	September 15, 2020	Cap rate on three month Euribor: 0.25%	Quarterly	O (#)	O (#)
Total							(48)	(61)

^(*) The reference amount is aligned with the amortization plan of the hedged long-term loan.

During the year, the Group did not enter into any new IRS agreements.

Note that, in the second half of 2018, as the Parent Company had fully repaid the residual portion of the long-term loans granted by Banca Intesa Sanpaolo S.p.A. in advance on September 25, 2015 and by Unicredit S.p.A. on March 29, 2016, the relevant Interest Rate Swaps were extinguished at the same time. For further details see "Significant events in 2018" in the Report on operations.

The derivatives of SAES Coated Films S.p.A. refer to interest rate options that fix, for each revision date of the interest rate, a maximum limit for the rate paid on the loan (Cap) or, conversely, a minimum limit for the same rate (Floor).

The fair valuation, conducted by an independent third party, was made at market rates, in a risk neutral context and by using rate models that reflect the best practices usually adopted.

To determine the fair value, the input information used was:

- the Interest Rate Swap rate curve by maturity;
- the migration matrices of the credit rating extracted from Moody's;
- interest rate volatility surfaces extracted from Bloomberg.

The pricing was adjusted, in accordance with IFRS 13, by means of a Credit Value Adjustment (CVA, namely the adjustment relating to the risk of default of the counterparty) and a Debt Value Adjustment (DVA, namely the cost of protecting against the risk of default of the Company by the counterparty), calculated using the "Provision Model" method. In particular, to determine the counterparty risk component in the fair value, the rating opinion issued by Moody's rating agency on the issuing credit entity for the calculation of the CVA. To determine the DVA, given the objective impossibility of assigning a rating opinion for the SAES Group, the lowest rating opinion of those identified for credit entities was prudentially applied.

As the accounting requirements to apply the hedge accounting method as set out in IAS 39 are not met for these contracts, they are measured at fair value and the profits or losses deriving from their valuation are directly charged into the income statement.

^(**) In case of a negative three months Euribor, the contract provides for a floor equal to -2.25%.
(***) In case of a negative three months Euribor, the contract provides for a floor equal to -1.00%.

^(***) In case of a negative three months Euribor, the contract pr
(#) Fair value lower than €1 thousand.

^(§) During the 2018 financial year, the hedged loan was extinguished in advance and, at the same time, the related IRS contract was settled.

As at December 31, 2018, the Group does not have any hedge contract in place to cover the exposure to changes in future cash flows originating from commercial and financial transactions performed in a currency other than the euro.

To cover the exchange rate risk on the payment in US dollars for the sale of the gas purification business, on 7 June 2018, the Parent Company entered into a derivative contract with a currency option for a notional amount of 330 million USD plus a fixing at 1.1880 USD/EUR with Banca Intesa Sanpaolo S.p.A., with flexible maturity. This contract resulted in a loss of -4,273 thousand euro, classified under the item "Income (loss) from discontinued operations" (for more detailed information, please refer to Note 11).

The Group enters into derivative contracts with various counterparties, primarily leading financial institutions and it uses the following hierarchy to determine and document the fair value of its financial instruments:

Level 1 – (unadjusted) prices listed on an active market for identical assets or liabilities;

Level 2 – other techniques for which all inputs with a significant effect on the fair value reported may be observed, either directly or indirectly;

Level 3 – techniques that use inputs with a significant effect on the fair value reported that are not based on observable market data.

As at December 31, 2018 the derivative contracts held by the Group belonged to Level 2: in fact, the fair value was calculated by an independent third party on the basis of market data, such as interest rate curves and exchange rates curves.

No instruments were transferred from one level to another during the year.

34. OTHER FINANCIAL DEBTS TOWARDS THIRD PARTIES

The item "Other financial debts towards third parties" amounted to 1,001 thousand euro as at December 31, 2018 compared to 2,929 thousand euro as at December 31, 2017.

(thousands of euro)

	December 31, 2018	December 31, 2017	Difference
Other financial debts towards third parties - current	1,001	2,091	(1,090)
Other financial debts towards third parties - non current	0	838	(838)
Other financial debts towards third parties	1,001	2,929	(1,928)

This item included the financial debts of the affiliate SAES Coated Films S.p.A. (470 thousand euro as at December 31, 2018 to be compared with 1,612 thousand euro as at December 31, 2017) related to some short-term loans intended for the import of goods, signed with primary financial institutions in order to have more financial resources to facilitate its procurement activities.

The item also comprised the financial debt (521 thousand euro) relating to the contractual adjustment of the sale price of the gas purification business. As established by the agreement signed by the parties, the price was calculated on the closing date using estimated values of working capital, cash and tax credit, while a financial liability was recognised for the difference between the estimated values and the actual values. Note that the adjustment calculated in this way could differ depending on the effective value of the tax credit of the companies sold SAES Getters USA, Inc and SAES Pure Gas, Inc. resulting from the Tax Return Declaration relating to January 1 - June 24, 2018, to be submitted by the end of the first half of 2019.

Note that as at December 31, 2017 the item included the financial liability arising from measurement of the put option exercised by the minority shareholder on the remaining 30% of SAES Coated Films S.p.A., which amounted to 75 thousand euro. On February 26, 2018, SAES

Getters S.p.A. exercised a call option for the purchase of the entire share capital, and so the financial debt was eliminated.

At the end of last year the item also included the financial debt of 1,213 thousand euro with the US company Power & Energy, Inc. relating to the amount still to be paid to acquire the hydrogen purification business finalised in 2013. This debt was transferred to Entegris, Inc. on June 25, 2018 as part of the extraordinary purification business sale transaction.

As at December 31, 2018, like the previous year, there are no debts related to any financial lease contract.

35. BANK OVERDRAFTS

As at December 31, 2018 the amounts due to banks amounted to 27,353 thousand euro and primarily consisted of short-term debt owed by the Parent Company in the form of "hot money" debt (27,003 thousand euro as at December 31, 2018 compared to 12,002 thousand euro as at December 31, 2017), whose average interest rate, spread included, was around 0.042%.

The difference consisted in the overdrafts on current bank accounts exclusively attributable to the affiliate SAES Coated Films S.p.A. (350 thousand euro as at December 31, 2018, as compared to 252 thousand euro at the end of the previous year).

On May 28, 2018 a credit facility for a maximum of 50 million USD was set in place with Banca Intesa Sanpaolo S.p.A. The equivalent of 38.5 million euro was drawn down from the same on June 12 for the capitalisation of the newly-incorporated SAES Colorado, Inc. The facility was entirely repaid and extinguished on June 25, following the collection by Entegris.

36. ACCRUED EXPENSES AND DEFERRED INCOME

Accrued expenses and deferred income amounted to 480 thousand euro as at December 31, 2018, marking a significant decrease compared to December 31, 2017, mainly due to the sale of the purification business.

This item may be broken down as follows.

(thousands of euro)

	December 31, 2018	December 31, 2017	Difference
Accrued expenses	334	235	99
Deferred income	146	5,462	(5,316)
Total	480	5,697	(5,217)

The item "Accrued expenses" included the amounts pertaining to future years of the public contribution of capital granted to the Parent Company in previous years in connection with the investments to boost the production lines of the Avezzano plant.

The item "Deferred income" is related to the commercial sales pertaining to future accounting periods received by customers. As previously pointed out, the heavy decrease is correlated with the sale of the purification business.

Please note that there are no accrued liabilities due after more than five years.

37. CASH FLOW STATEMENT

The cash flow generated by **operating activities** was a positive 20,604 thousand euro, compared to 38,456 thousand euro in 2017.

Excluding the cash flow from discontinued operations of 11,000 thousand euro (namely the cash flows generated by the purification business between January 1 and June 25, 2018), operating cash flows were a positive 9,604 thousand euro, mainly sustained by the Security & Defence business and by the Getter Components for Electronic Devices segment, as well as that of Nitinol for Medical Devices. **Net working capital** rose slightly against December 31, 2017, due both to the increase of the stock of the Security & Defence business and in the Medical SMAs segment, in preparation for future sales, and to the increase of the trade receivables of the US subsidiaries, following the progressive increase of sales against last year.

Investing activities generated cash for 242,318 thousand euro (2017 had instead used liquidity for 9,370 thousand euro).

The cash flows related to the extraordinary transaction of selling the purification business totalled 263,497 thousand euro (amount collected was +301,059 thousand euro⁶⁸, net of the accessory costs that amounted to -37,562 thousand euro).

In 2018, cash outlay for investments in property, plant and equipment were 14,410 thousand euro, compared to 7,273 thousand euro in the previous year. Instead, investments in intangible assets were not significant (599 thousand euro compared to 378 thousand euro in 2017). The increase in capex in the current year, compared to 2017, was mostly due to investments made by the Parent Company for the installation of the new pilot line for the Advanced Packaging business, with a view to accelerating the development of products for flexible packaging. Note also the purchase of the land and the building where the production of SAES Coated Films S.p.A. takes place, as well as the advances paid both for the purchase of a second production line for the coating of plastic film, and of a new technologically more evolved metallisation plant, able to combine the metallisation process with the coating one. For further details on the capital expenditure of the year, please refer to Notes 14 and 15.

Also reported within the investment activity is the capital contributions, which totalled 6,201 thousand euro, in favour of the joint venture Flexterra, Inc. and the purchase of the minority interest of SAES Coated Films S.p.A. (former Metalvuoto S.p.A.) for the amount of 75 thousand euro, plus the disbursement of SAES Pure Gas, Inc. for the earn-out relating to the investment in new technology for the hydrogen field made during 2013 (-142 thousand euro⁶⁹).

The balance of **financing activities** was negative and equal to 121,116 thousand euro against a balance, always negative, of 13,493 thousand euro in the previous year.

The financial management of the period was characterised by the financial disbursements (-100,000 thousand euro) for the purchase of shares by the Luxembourg affiliate SAES Investments S.A. (for greater detail on the shares purchased, please see Note 17), by the payment of dividends (equal to 15,435 thousand euro), by the repayments of long-term loans and by the payment of the related interests (please refer to the Note 27), as well as the cash-out for the additional loan tranche granted to the joint venture Actuator Solutions GmbH, net of the principal repaid by it (please refer to the Note 20). These cash-out were only partially offset by the cash-in generated by the use of funding in form of "hot money" by the Parent Company (for further details please refer to the Note 35).

⁶⁸ Amount received, net of the cash and cash equivalents transferred.

⁶⁹ Outlay relating to January 1 - June 25, 2018.

The following table contains the consolidated Cash Flow Statement, showing the net cash flows relating to discontinued operations and the net cash flows relating to operating activities.

		2018 - from discontinued operations			
(thousands of euro)	2018	gas purification business Jan 1-Jun 25 2018	disposal	total	2018 - from operating activities
Cash flows from operating activities					
Net income (loss) from continued operations	(7,680)	0	0	0	(7,680)
Net income (loss) from discontinued operations	240,013	12,794	227,219	240,013	(7,000)
Current income taxes	13,134	589	227,219	589	12,545
Changes in deferred income taxes	(4,499)	79	0	79	(4,578)
		248	0	248	
Depreciation	6,764	248	0	248	6,516
Write-down (revaluation) of property, plant and equipment	712	0	0	0	712
Amortization	1,220	148	0	148	1,072
Write-down (revaluation) of intangible assets	2,705	0	0	0	2,705
Net loss (gain) on disposal of fixed assets	(141)	0	0	0	(141)
Net gain on purification business disposal	(227,219)	0	(227,219)	(227,219)	0
Interest and other financial (income) expenses, net	15,337	35	0	35	15,302
Write-down of trade receivables	123	(85)	0	(85)	208
Other non-monetary costs (revenues)	(1,524)	0	0	0	(1,524)
Accrual for termination indeminities and similar obligations	255	0	0	0	255
Changes in provisions	(130)	(366)	0	(366)	236
• .	39,070	13,442	0	13,442	25,628
Working capital adjustments	23,070	-5,2	Ů	,	
Cash increase (decrease)					
Account receivables and other receivables	1,009	2,856	0	2,856	(1,847)
Inventory	(4,460)	(3,072)	0	(3,072)	(1,388)
Account payables	(1,180)	(2,136)	0	(2,136)	956
			0		
Other current payables	(115)	947	0	947	(1,062)
	(4,746)	(1,405)	0	(1,405)	(3,341)
Payment of termination indemnities and similar obligations	(446)	0	0	0	(446)
Interests and other financial payments	(441)	(35)	0	(35)	(406)
Interests and other financial receipts	406	(0.0)	0	(00)	406
Taxes paid	(13,239)	(1,002)	0	(1,002)	(12,237)
Net cash flows from operating activities	20,604	11,000	0	11,000	9,604
	20,001	11,000	· ·	11,000	3,001
Cash flows from investing activities					
Disbursements for acquisition of tangible assets	(14,410)	(168)	0	(168)	(14,242)
Proceeds from sale of tangible and intangible assets	248	0	0	0	248
Disbursements for acquisition of intangible assets	(599)	(28)	0	(28)	(571)
Consideration for the acquisition of minority interests in subsidiaries	(75)	0	0	0	(75)
Capital injection into joint ventures	(6,201)	0	0	0	(6,201)
Price paid for the acquisition of businesses	(142)	(142)	0	(142)	0
Consideration for the purification business disposal, net of the disposed cash	301,059) ó	301,059	301,059	0 (
Ancillary monetary charges for the purification business disposal	(37,562)	ő	(37,562)	(37,562)	0
Net cash flows from investing activities	242,318	(338)	263,497	263,159	(20,841)
V	212,010	(000)	200,157	200,105	(20,011)
Cash flows from financing activities					
Proceeds from long term financial liabilities, current portion included					
Proceeds from short term financial liabilities	13,857	0	0	0	13,857
Dividends payment	(15,435)	0	0	0	(15,435)
Repayment of financial liabilities	(18,758)	0	0	0	(18,758)
Interests paid on long term financial liabilities	(487)	0	0	0	(487)
Interests paid on short term financial liabilities	(19)	0	0	0	(19)
Other costs paid	(54)	0	0	0	(54)
Financial receivables repaid (granted) from related parties	(225)	0	0	0	(225)
	(223)	0	0	0	(223)
Interests receipts on financial receivables from related parties	1	0	0	0	1
Other financial payables	(100.000)	0	0	0	(100 000)
Securities portfolio	(100,000)	0	0	0	(100,000)
Net cash flows from financing activities	(121,116)	0	0	0	(121,116)
Net foreign exchange differences	1,277	(1,426)	0	(1,426)	2,703
Cash flows in the period	143,083	9,236	263,497	272,733	(129,650)

^(**) The figure of the FY 2018 does not include the non-monetary income related to the release into the income statement of the conversion reserve generated by the consolidation of the US companies sold (SAES Getters USA, Inc. and SAES Pare Gas, Inc.), equal to €2,342 thousand.

		2017 - from discontinued operations			
	2017	gas purification business	disposal	total	2017 - from operating activities
(thousands of euro)					
Cash flows from operating activities					_
Net income (loss) from continued operations	(12,653)	0	0	0	(12,653)
Net income (loss) from discontinued operations	26,513	27,107	(594)	26,513	(
Current income taxes	13,145	3,643	0	3,643	9,502
Changes in deferred income taxes	8,683	581	0	581	8,102
Depreciation	7,399	450	0	450	6,949
Write-down (revaluation) of property, plant and equipment	1,177	0	0	0	1,177
Amortization	1,442	306	0	306	1,130
Write-down (revaluation) of intangible assets	4	0	0	0	4
Net loss (gain) on disposal of fixed assets	(82)	3	0	3	(85)
Net gain on purification business disposal	594	0	594	594	(
Interest and other financial (income) expenses, net	3,130	145	0	145	2,985
Write-down of trade receivables	(13)	30	0	30	(43)
Other non-monetary costs (revenues)	0	0	0	0	
Accrual for termination indeminities and similar obligations	2,971	0	0	0	2,971
Changes in provisions	1,808	83	0	83	1,725
	54,118	32,348	0	32,348	21,770
Working capital adjustments					
Cash increase (decrease)	0.664	4.642	0	4.642	5.001
Account receivables and other receivables	9,664	4,643	0	4,643	5,021
Inventory	(13,898)	(10,201)	0	(10,201)	(3,697)
Account payables	(1,170)	937	0	937	(2,107)
Other current payables	3,256	4,576	0	4,576	(1,320)
	(2,148)	(45)	0	(45)	(2,103)
Payment of termination indemnities and similar obligations	(455)	0	0	0	(455)
Interests and other financial payments	(525)	(66)	0	(66)	(459)
Interests and other financial receipts	82	0	0	0	82
Taxes paid	(12,616)	(4,580)	0	(4,580)	(8,036)
Net cash flows from operating activities	38,456	27,657	0	27,657	10,799
Cash flows from investing activities					
Disbursements for acquisition of tangible assets	(7,273)	(452)	0	(452)	(6,821)
Proceeds from sale of tangible and intangible assets	105	(432)	0	(4,32)	105
Disbursements for acquisition of intangible assets	(378)	0	0	0	(378)
Consideration for the acquisition of minority interests in subsidiaries	134	Ü	0	0	134
Capital injection into joint ventures	(1,000)	0	0	0	(1,000)
Price paid for the acquisition of businesses	(364)	(364)	0	(364)	(1,000)
Ancillary monetary charges for the purification business disposal	(594)	(304)	(594)	(594)	7
Net cash flows from investing activities	(9,370)	(816)	(594)	(1,410)	(7,960
	(5,270)	(010)	(6) 1)	(1,110)	(1,500)
Cash flows from financing activities					
Proceeds from long term financial liabilities, current portion included	9,950	0	0	0	9,950
Proceeds from short term financial liabilities	6,580	0	0	0	6,580
Dividends payment	(12,250)	0	0	0	(12,250)
Repayment of financial liabilities	(14,639)	0	0	0	(14,639)
Interests paid on long term financial liabilities	(864)	0	0	0	(864)
Interests paid on short term financial liabilities	(18)	0	0	0	(18)
Other costs paid	(98)	0	0	0	(98)
Financial receivables repaid (granted) from related parties	(2,175)	0	0	0	(2,175
Other financial payables	21	0	0	0	2.
Net cash flows from financing activities	(13,493)	0	0	0	(13,493)
Net foreign exchange differences	(2,278)	3,880	0	3,880	(6,158
Cash flows in the period	13,315	30,721	(594)	30,127	(16,812

The following is a reconciliation of the net cash and cash equivalents shown in the statement of financial position and in the cash flow statement.

(thousands of euro)

(Modelands of Care)		
	2018	2017
Cash and cash equivalents	170,601	27,564
Bank overdraft	(27,353)	(12,254)
Cash and cash equivalents, net - statement of financial position	143,248	15,310
Write-down of other financial assets (in application of IFRS 9)	144	0
Short term debt	27,003	12,002
Cash and cash equivalents, net - cash flow statement	170,395	27,312

The following table shows the reconciliation between the balances of the liabilities arising from financial transactions as at December 31, 2017 and December 31, 2018, with the changes arising from monetary movements and from non-cash flows.

		Reclassifications	D 21		Non-cash changes					
(importi in migliaia di euro)	December 31, 2017	to liabilities held for sale		Cash flows	Acquisition	Foreign exchange movement	Change in fair value	Other movements	Reclassifications	December 31, 2018
Financial debts	28,057	0	28,057	(3,877)		94		(1,164)	(9,766)	13,344
Other current financial payables to third parties	838	(838)	0	0						0
Non current debt	28,895	(838)	28,057	(3,877)	0	94	0	(1,164)	(9,766)	13,344
Derivative financial instruments evaluated at fair	61	0	61	(79)			(13)	79		48
Current portion of medium/long term financial de	10,478	0	10,478	(15,368)		34		505	9,789	5,438
Other current financial payables to third parties	2,091	(375)	1,716	(1,227)				535	(23)	1,001
Bank borrowings	12,254	0	12,254	15,090				9		27,353
Current debt	24,884	(375)	24,509	(1,584)	0	34	(13)	1,128	9,766	33,840

The item "Other movements" of the non-current portion of financial debts refers to the transformation of 50% of the soft financing granted to Memry Corporation by the state of Connecticut (CT) into a non-refundable grant. For more details please see the Note 27.

Lastly, the item "Other movements" of the current portion of financial debts includes allocation of the interest accrued during the period on both short-term and long-term financing, as well as the debt to adjust the selling price of the gas purification business (please see Note 34).

38. FINANCIAL RISK MANAGEMENT

The main financial liabilities of the Group other than derivatives included both the short-term and long-term bank loans and the trade payables, as well as the short-term loans for importing goods and the financial debt related to the contractual adjustment of the selling price of the gas purification business.

The main objective of the financial liabilities is to fund the Group's operations and to support its future growth (both organic and for external acquisitions).

The Group also has cash and cash equivalents immediately convertible into liquidity, and trade receivables originating directly from operations, financial receivables for loans granted to related parties and securities in the portfolio.

The derivative instruments used by the Group are mostly forward contracts on foreign currencies and Interest Rate Swaps (IRS). Their purpose is to manage the exchange rate and interest risk arising from the Group's sales and financial transactions.

The Group does not trade in financial instruments.

The Board of Directors periodically re-examines and defines the risk management policies, as summarised below.

Interest rate risk

The Group's financial debts, both short and long-term ones, are mainly structured on a variable interest rate basis, therefore they are subject to the risk of interest rate fluctuations.

With regards to long-term financial debts, the exposure to interest rate variation is handled by way of entering into Interest Rate Swap or interest Rate Cap agreements, with a view to guarantee a level of financial expenditures which are sustainable by the SAES Group's financial structure. For details of the contracts as at December 31, 2018 please refer to the Note 33.

The funding for the working capital is managed through short-term financing transactions and, as a consequence, the Group does not hedge itself against the interest-rate risk.

Sensitivity to interest rates

With regard to financial assets (cash and cash equivalents, bank deposits and financial receivables due from related parties), the table below provides details of the sensitivity of the Group's pre-tax profit and shareholders' equity, assuming that all other variables are stable when interest rates change.

		(%)	(thousands of euro)	(thousands of euro)
		Increase /	Effect on result	Effect on net result
		Decrease	before taxes	and net equity
2018	euro	+/- 1	+/-1,323	+/- 997
	other currencies	+/- 1	+/- 331	+/- 248
2017	euro	+/- 1	+/-141	+/- 115
	other currencies	+/- 1	+/- 181	+/- 130

With regard to financial liabilities (both short-term and long-term debts), the table below provides details of the sensitivity of the Group's pre-tax profit and shareholders' equity, assuming that all other variables are stable when interest rates change.

		(%)	(thousands of euro)	(thousands of euro)
		Increase /	Effect on result	Effect on net result
		Decrease	before taxes	and net equity
2018	Euribor	+/- 1	-/+ 474	-/+ 360
	Libor	+/- 1	-/+ 35	- /+ 26
2017	Euribor	+/- 1	-/+ 486	-/+ 484
	Libor	+/- 1	-/+ 92	-/+ 5 6

With regard to Interest Rate Swaps and Interest Rate Caps, and to Interest Rate Floors implicitly included in the long-term loan agreements, the table below provides details of the sensitivity of the Group's pre-tax profit and shareholders' equity, assuming all other variables remain stable, following a shift of one percentage point of the spot rate curve (and consequently, to changes of the relative forward rate curve).

			(euro)	(euro)	(euro)	(euro)
Description	Notional amount	Fair Value	Estimated FV	Difference in FV	Estimated FV	Difference in FV
Description	(thousands of euro)	(euro)	+1%	+1%	-1%	-1%
Saes Getters S.p.A Interest						
Rate Swap (IRS) on Intesa	5,000	(19,477)	67,257	86,734	(107,984)	(88,507)
Sanpaolo S.p.A. loan						
Saes Getters S.p.A Interest						
Rate Swap (IRS) on Unicredit	10,000	(20,670)	75,833	96,503	(101,390)	(80,720)
S.p.A. loan						
Saes Getters S.p.A Interest						
Rate Floor on Banco BPM loan	5,000	(8,330)	0	8,330	(62,402)	(54,072)
(derivative embedded)						
SAES Coated Films S.p.A						
Interest Rate Cap on Intesa	400	130	1,955	1,825	0	(130)
Sanpaolo S.p.A. loan						
SAES Coated Films S.p.A						
Interest Rate Cap on Banco	230	1	284	283	0	(1)
BPM loan						
SAES Coated Films S.p.A						
Interest Rate Cap on Intesa	300	1	611	610	0	(1)
Sanpaolo S.p.A. loan						
·	Total effect on	result before taxes		194,285		(223,431)
	Total effect on net r	esult and net equity		147,657		(169,808)

Exchange rate risk

The Group is exposed to the exchange rate risk on foreign commercial transactions.

Such exposure is mainly generated by sales in currencies other than the reference currency: during 2018 around 70.4% of the sales was denominated in foreign currency, while only 47.1% of the Group's operating costs was denominated in a currency other than the euro.

In order to manage the economic impact generated by the fluctuations in exchange rates versus the euro, primarily of the US dollar and of the Japanese yen, the Group has in place hedging contracts, whose values are periodically determined by the Board of Directors according to the net currency cash flows expected to be generated by SAES Getters S.p.A. The maturities of the hedging derivatives tend to coincide with the scheduled date of collection of the hedged transactions.

Moreover, the Group can occasionally hedge specific transactions in a currency other than the reference currency, to mitigate the effect on profits and losses of the exchange rate volatility, with reference to financial receivables/payables, also intercompany ones, denominated in a currency different from the one used in the financial statements, including those relating to cash pooling (executed by foreign affiliates, but denominated in euro).

Lastly, the Group constantly monitors the exchange rate trend in order to assess the feasibility of entering into additional contracts to cover the risk tied to the fluctuation of exchange rates on payments in foreign currency arising from extraordinary company transactions or regarding the funding necessary for any acquisition transactions denominated in a currency other than the euro.

To hedge the risk of fluctuation in the exchange rates on trade receivables denominated in foreign currencies in 2018, on April 3, 2018 the Group signed:

- forward contracts on the US dollar with a notional value of 2.7 million USD (average USD/Euro exchange rate of 1.2416).
- forward contracts on the Japanese yen with a notional value of 207 million JPY (average Yen/Euro exchange rate of 131.0222).

These contracts had all expired by December 31, 2018.

To cover the exchange rate risk on the payment in US dollars for the sale of the gas purification business, the Parent Company, on June 7, 2018, also entered into a derivative contract with a currency option for a notional amount of 330 million USD plus a fixing at 1.1880 USD/EUR with Banca Intesa Sanpaolo S.p.A., with flexible maturity.

Sensitivity to exchange rates

Exchange-rate risk – Sensitivity analysis – Trade receivables and payables

For the current trade receivables and payables outstanding at the end of each year, the following table provides detailed information on the sensitivity of the Group's pre-tax profit and shareholders' equity as the US dollar and Japanese yen exchange rates vary, maintaining all other variables fixed.

	(%)	(thousands of euro)	(thousands of euro)
US dollar	Increase / Decrease	Effect on result before taxes	Effect on net result and net equity
2018	+ 5%	(117)	(89)
	- 5%	129	98
2017	+ 5%	(172)	(170)
	- 5%	190	188

	(%)	(thousands of euro)	(thousands of euro)
Japanese YEN	Increase / Decrease	Effect on result before taxes	Effect on net result and net equity
2018	+ 5%	(29)	(22)
	- 5%	32	25
2017	+ 5%	(38)	(38)
	- 5%	42	42

Exchange-rate risk – Sensitivity analysis – Intercompany liquidity and financial receivables/payables

For the intercompany net cash and cash equivalents and financial receivables/payables, including those of cash pooling, outstanding at the end of each year, the following table provides detailed information on the sensitivity of the Group's pre-tax profit and shareholders' equity as the US dollar and Euro compared to the other currencies vary, maintaining all other variables fixed. This analysis was conducted from the moment the affiliates have both cash and cash equivalents and financial receivables/payables due from/to the Parent Company in euro, whose translation may trigger exchange rate differences.

	(%)	(thousands of euro)	(thousands of euro)
Euro	Increase / Decrease	Effect on result before taxes	Effect on net result and net equity
2018	+ 5%	87	66
	- 5%	(87)	(66)
2017	+ 5%	(85)	85
	- 5%	(51)	51

	(%)	(thousands of euro)	(thousands of euro)
US dollar	Increase /	Effect on result	Effect on net result
US domai	Decrease	before taxes	and net equity
2018	+ 5%	(30)	(23)
	- 5%	33	26
2017	+ 5%	(32)	(24)
	- 5%	35	27

Since all forward contracts entered into were expired as at December 31, 2018, no sensitivity analysis is provided on them.

With reference to the net financial position (NFP), note that a 5% depreciation of the US dollar would have penalised the net financial position as at December 31, 2018 by about 836 thousand euro⁷⁰, while its 5% appreciation would have improved the position by about 924 thousand euro.

	(%)	(thousands of euro)
	Increase / Decrease USD	Effect on Net Financial Position
December 31, 2018	+5%	(836)
	- 5%	924
December 31, 2017	+5%	(271)
	- 5%	300

Commodity price risk

The Group's exposure to the commodity price risk is usually moderate. The procurement procedure requires the Group to have more than one supplier for each commodity deemed to be critical. In order to reduce its exposure to the risk of price variations, it enters into specific supply agreements aimed at controlling the commodity price volatility. The Group monitors the trends of the price of the main commodities subject to the greatest price volatility and does not exclude the possibility of

⁷⁰ The negative effect of the devaluation of the US dollar on the cash denominated in dollars was only partially offset by the positive effect on the debt denominated in that currency since the latter was clearly lower in absolute value than the cash and cash equivalents (20,706 thousand USD and debt 605 thousand USD as at December 31, 2018).

undertaking hedging transactions using derivative instruments with the aim of neutralising the price volatility of its commodities.

Credit risk

The Group deals mainly with well-known, reliable customers. The Sales and Marketing Department assesses new customers' solvency and periodically verifies that credit limit conditions are met.

The balance of receivables is constantly monitored so as to minimise the risk of potential losses, particularly given the current difficult macroeconomic situation.

The credit risk associated with other financial assets, including cash and cash equivalents and securities in the portfolio is not significant due to the nature of the counterparties. In particular, the Group places such assets exclusively in bank deposits held with leading Italian and international financial institutions.

Also with reference to the securities in the portfolio, the investments are made with primary operators of the sector, mainly with the objective of keeping the capital for any future uses.

Liquidity risk

This risk can arise from the incapacity to obtain the necessary financial resources to grant the continuity of the Group's operations.

In order to minimise such risk, the Administration Finance and Control Division acts as follows:

- constantly monitors the Group's financial requirements in order to obtain credit lines necessary to meet such requirements;
- optimises the liquidity management through a centralised management system of available liquidity (cash pooling) in euro which involves nearly all of the Group's companies;
- manages the correct balance between short-term financing and medium/long-term financing depending on the expected generation of operating cash flows.

For further information about the Group's financial debts as at December 31, 2018 and about the maturity date of these debts please refer to the Note 27.

As at December 31, 2018 the Group was not significantly exposed to liquidity risk, owing to the availability of assets and bank deposits, and also considering the unused credit lines to which it has access.

Equity management

The objective pursued by the Group is to maintain a solid credit rating and adequate capital ratios in order to support operations and maximise the value for shareholders.

No changes were made to equity management objectives or policies during 2018. Some performance indicators, such as the debt-to-equity ratio, defined as net debt to equity, are periodically monitored with the aim of keeping them at low levels, and in any case lower than what is required by the contracts signed with the financial institutions.

39. POTENTIAL ASSETS/LIABILITIES AND COMMITMENTS

The guarantees that the Group has granted to third parties are shown in the following table.

(thousands of euro)

Guarantees	December 31, 2018	December 31, 2017	Difference
Guarantees	4,095	16,267	(12,172)

The decrease compared to December 31, 2017 was mainly explained by the extinction of the guarantee granted by the Parent Company on the credit line⁷¹ of the affiliate SAES Getters USA, Inc. following its sale during the first half of 2018, together with the expiration of the guarantee, also given by the Parent Company, to secure the long-term bank loan undertaken by Memry Corporation, extinguished in advance in July.

The following table shows the maturities of operating lease obligations outstanding as at December 31, 2018.

(thousands of euro)

(moustaines of care)				
	Less than 1 year	1-5 years	Over 5 years	Total
Operating lease obligations	1,219	945	31	2,195

To assist the understanding of the impact resulting from the first-time application of the standard, the following table provides a reconciliation between future commitments for leases as at December 31, 2018 and the impact expected by the adoption of IFRS 16 from January 1, 2019.

(thousands of euro)

Operating lease obligation as at December 31, 2018	2,195
Short term lease fees (exemption)	(444)
Low-value lease fees (esemption)	(86)
Financial liabilities not discounted for leases as at January 1, 2019	1,665
Discounting effect	(77)
Financial liabilities for leases as at January 1, 2019	1,588
Present value of liabilities for financial leases at December 31, 2018	0
Financial liabilities for total leases as at January 1, 2019 following the transition to IFRS 16	1,588

Please note that among the shareholders of SAES RIAL Vacuum S.r.l., SAES Getters S.p.A. and Rodofil S.r.l., there is a put & call option, according to a predefined schedule, that is detailed in the Note 16. Since as at December 31, 2018 the Management did not have enough information to be able to make an accurate assessment of the fair value of the above options, the latter were not included in the financial statements.

On December 17, 2018 Memry Corporation signed a preliminary agreement for the purchase of the property located in Bethel (CT), its operative site, at an agreed-upon value of 5.8 million USD. The commitment to purchase is subordinate to the positive result of the due diligence and environmental assessment. The closing is expected by the end of the first quarter of 2019.

Noteworthy of the potential assets are Flexterra, Inc.'s commitment to acquire a package of intellectual property of the E.T.C. S.r.l. Group company against the granting of 2.6 million USD of capital by SAES Getters International Luxembourg S.A. on December 12, 2018 (for more detailed information, please refer to the paragraph "Significant events in 2018" of the Consolidated Report on operations). The intellectual property, which was subject to an appraisal carried out by an independent third party, is not recognised in the transferee company's assets as at December 31, 2018 and therefore the sale will give rise to a gain equivalent to the price of sale. Finalisation of the sale of these intangible assets is expected in the first half of 2019.

⁷¹ Credit line in favour of SAES Getters USA, Inc. of the total value of 4 million euro.

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40. RELATED PARTY TRANSACTIONS

Related Parties are identified in accordance with IAS 24 revised.

Related Parties as at December 31, 2018 include the following ones:

- **S.G.G. Holding S.p.A.**, a relative majority shareholder holding 36.96%⁷² of the ordinary shares of SAES Getters S.p.A. at December 31, 2018, which is debtor of SAES Getters S.p.A. in relation to the application for a refund of the excess IRES paid in prior years by the merged SAES Advanced Technologies S.p.A., a request filed by S.G.G. Holding S.p.A. as the consolidator of national tax consolidation programme in place until December 31, 2014⁷³ (see the Note 19). Please also note that, on May 3, 2018, S.G.G. Holding S.p.A. has collected dividends from SAES Getters S.p.A. totalling 4.2 million euro.
- **Actuator Solutions GmbH**, a joint venture, 50% jointly owned by SAES and Alfmeier Präzision Groups, focused on the development, manufacturing and marketing of actuators based on the SMA technology.
- Actuator Solutions Taiwan Co., Ltd., a Taiwan-based company wholly owned by the joint venture Actuator Solutions GmbH, aimed at developing SMA actuation devices for the image focus and stabilisation in tablet and smart-phone cameras.
- **Actuator Solutions (Shenzhen) Co., Ltd.**, a company wholly owned by Actuator Solutions GmbH for the technology development of actuators for the mobile market.

With regards to Actuator Solutions GmbH and its subsidiaries, the SAES Group has a commercial relationship (sale of raw materials and semi-finished products) and performs various services (in particular, commercial activities, development services and accessory/administrative activities) that are recharged on the basis of a service contract. Finally, as already mentioned before, please note that SAES Nitinol S.r.l. granted several loans to Actuator Solutions GmbH, for the details of which please refer to the Note 20. As at December 31, 2018, the financial debt of Actuator Solutions GmbH towards SAES Nitinol S.r.l. was equal to 9.1 million euro, including 1.1 million euro of interests accrued and not yet paid.

Note that the total amount of the financial receivable (both principal and interest) was the subject of a letter of postponement issued by SAES Nitinol S.r.l. in order to guarantee the going concern assumption of Actuator Solutions, which ended 2018 with a negative consolidated shareholders' equity of about -3.1 million euro, mainly due to the restructuring of the Taiwan subsidiary. Payment of the interest accrued in 2016-2018 was also postponed to year-end 2019.

- **SAES RIAL Vacuum S.r.l.**, a joint venture between SAES Getters S.p.A. and Rodofil s.n.c., focused on the design and production of integrated vacuum components and systems for accelerators, for the research, as well as for industrial systems and devices.

With regards to SAES RIAL Vacuum S.r.l. the SAES Group has a commercial relationship (both purchase and sale of raw materials, components and machining for the creation of vacuum systems) and performs various services, mainly commercial and marketing and administrative support activities. Finally, as already mentioned before, SAES Getters S.p.A granted a loan of 50 thousand euro, aimed at financially supporting SAES RIAL Vacuum S.r.l. (for further details please refer to the Note 20).

36.96%.

73 Please note that on May 27, 2015, the tax consolidation among SAES Getters S.p.A., SAES Advanced Technologies S.p.A. (subsequently merged into SAES Getters S.p.A. in 2016), SAES Nitinol S.r.l., E.T.C. S.r.l. in liquidation and S.G.G. Holding S.p.A., with the latter company as consolidator, was interrupted with effect from January 1, 2015, following a reduction in the percentage of participation of S.G.G. Holding S.p.A. in SAES Getters S.p.A. below 50%, which resulted in the loss of control under the legislation on the national tax consolidation.

⁷² On December 20, 2018, the number of ordinary shares held by S.G.G. Holding S.p.A. dropped from 6,008,023 to 5,422,023; consequently, the percentage of the ordinary shares held by S.G.G. Holding S.p.A. fell from 40.95% to 36.96%.

- **Flexterra, Inc.**, a joint venture of SAES Getters International Luxembourg S.A. based in Skokie (USA), established at the end of 2016 for the development, production and the commercialisation of materials and devices used in flexible displays.
- **Flexterra Taiwan Co., Ltd.**, a company established at the beginning of 2017, wholly owned by joint venture Flexterra, Inc.

With regards to Flexterra, Inc. and its subsidiary the SAES Group carries out some administrative activities, and provides a legal, financial and tax support, as well as assistance in joint venture research and development activities, including the management of patents.

As previously pointed out in the paragraph "Significant events in 2018" of the consolidated Report on operations, on December 12, 2018, SAES conferred 2.6 million USD of share capital in Flexterra, Inc. through the subsidiary SAES Getters International Luxembourg S.A. for the purchase of the OLET patents regarding both materials and configurations using these material developed by the E.T.C. S.r.l. Group company. Finalisation of the sale of these intangible assets is expected in the first half of 2019 and since the patents are not currently recognised as assets of E.T.C. S.r.l. in liquidation, it will generate a revenue of the same amount for the related party.

- Managers with Strategic Responsibilities, these include the members of the Board of Directors, including non-executive directors, and the members of the Board of Statutory Auditors.

Moreover, the Corporate Human Resources Manager, the Corporate Operations Manager, the Group Administration, Finance and Control Manager, the Group Legal General Counsel and the Group Strategic Marketing & Planning Manager⁷⁴ are considered managers with strategic responsibilities.

Their close relatives are also considered related parties.

Compared to the list as at December 31, 2017 provided, note that on February 26, 2018, after SAES Getters S.p.A. exercised a call option for the purchase of the entire share capital of Metalvuoto S.p.A. (subsequently renamed SAES Coated Films S.p.A.), the following were no longer related parties:

- Mirante S.r.l., former minority shareholder of SAES Getters S.p.A. in SAES Coated Films S.p.A. (previously Metalvuoto S.p.A.). There was a lease agreement for the property owned by Mirante S.r.l., where the registered office and SAES Coated Films S.p.A. production were located, in place between SAES Coated Films S.p.A. and Mirante S.r.l. On April 6, 2018, SAES Getters S.p.A. finalised the purchase of this property for the price of 3.5 million euro and took over the aforesaid commercial lease agreement.
- **Metalvuoto Lux S.r.l.**, a company wholly owned by Mirante S.r.l. With regards to Metalvuoto Lux S.r.l., the SAES Group (through its subsidiary SAES Coated Films S.p.A.) had a commercial relationship in the first half of 2017 (sale of raw materials and semi-finished products); in addition, Metalvuoto Lux S.r.l. was the lessee until the end of August 2017 of part of the property occupied by SAES Coated Films S.p.A.
- **Metalvuoto Polska Sp. z.o.o.**, a company in liquidation 60% owned by Mirante S.r.l. (former minority shareholder of SAES Getters S.p.A. in SAES Coated Films S.p.A.), with which the SAES Group (through the subsidiary SAES Coated Films S.p.A.) had a commercial relationship in the first semester of 2017 (in particular, purchase of raw materials).

The following table shows the total values of the related party transactions performed in 2018 and 2017:

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⁷⁴ Added to the headcount on February 2, 2018.

(thousands of euro)											
					De	ecember 31, 20	018				
	Total net sales	Cost of sales	Research & development expenses	Selling expenses	General & administrative expenses	Other income (expenses)	Other financial income (expenses)	Trade receivables	Trade payables	Tax consolidation receivables from Controlling Company	Financial receivables from related parties
S.G.G. Holding S.p.A.										272	
SAES RIAL Vacuum S.r.l.	139	(167)		10 (*)	10 (*)	,	1	45	(44)		50
Actuator Solutions GmbH	1,360	(107)		1 (*)			479	82	(44)		0 (**)
Actuator Solutions Taiwan Co., Ltd.	7		63 (*)	9 (*)				24			,
Mirante S.r.l.					(40)					l	
Flexterra, Inc.			55 (*)		161 (*)			215			
Total	1,506	(167)	118	20	171	1	480	366	(44)	272	50

(*) Costs recovery.

(**) The total amount of the financial receivable (both principal and interest) was written down as at December 31, 2018.

(thousands of euro)		December 31, 2017									
	Total net sales	Cost of sales	Research & development expenses	Selling expenses	General & administrative expenses	Other	Other financial income (expenses)	Trade receivables	Trade payables	Tax consolidation receivables from Controlling Company	Financial receivables from related parties
GGG Hallian Ga A										272	
S.G.G. Holding S.p.A.	20	(72)		10 (*)	2 (0)		,	£1	(20)	272	
SAES RIAL Vacuum S.r.l.	29			19 (*)			1	51	(20)		50
Actuator Solutions GmbH	1,317		35 (*)	1 (*)			500	170			8,360
Actuator Solutions Taiwan Co., Ltd.	229		126 (*)	18 (*)				32			
Mirante S.r.l.					(240)						75
Metalvuoto Lux S.r.l.	94				8 (*)						
Metalvuoto Polska Sp. z.o.o.		(11)					(24)				
Flexterra, Inc.			97 (*)		151 (*)			223			
Total	1,669	(84)	258	38	(18)	0	477	476	(20)	272	8,485

(*) Costs recovery.

The following table shows the guarantees that the Group has granted to third parties (and, therefore, included in the detail reported in the Note 39) in favour of the joint ventures.

(thousands of euro)

(thousands of caro)			
Guarantees	December 31, 2018	December 31, 2017	Difference
Guarantees in favour of the joint venture Actuator Solutions Guarantees in favour of the joint venture SAES RIAL Vacuum S.r.l.	1,749 0	2,088 312	(339) (312)
Total guarantees in favour of the joint ventures	1,749	2,400	(651)

The following table shows the remunerations to managers with strategic responsibilities as identified above.

(thousands of euro)

Total remunerations to key management	2018	2017
Short term employee benefits	16,998	4,340
Post employment benefits	0	0
Other long term benefits	561	2,299
Termination benefits	898	1,100
Share-based payments	0	0
Total	18,457	7,739

The increase of the item "Short-term benefits" compared to December 31, 2017 is mainly attributable to the remuneration of both the Executive Directors and the employees of the Parent Company holding the position of manager with strategic responsibilities, paid following the sale of the purification business as part of the incentive plan called *Asset Sale Plan*⁷⁵.

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Monetary incentive plan for Executive Directors, executives that report directly to Executive Directors and that are members of the Corporate Management Committee (a committee to which the Executive Directors provide guidelines and share objectives with their direct reports) and to other employees of the Parent Company considered particularly important. The aim of the plan is to reward the beneficiaries with regard to extraordinary transactions relating to the sale of investments, business units, fixed assets and assets (in this specific case, the sale of the purification business), if these transactions create value and economic benefits for the Group, with a view to guaranteeing the retention of the beneficiaries and to better align their performance with the interests of the company.

The decrease of the item "Other long-term benefits" is due to the fact that the amount of last year included a provision for the long-term incentive of the Executive Directors relating to the three-year period 2015-2017 doubled as the performance achieved was better than the targets initially assigned (for more details, see Note 28).

The item "Termination benefits" includes the severance costs relating to the leaving of a strategic manager of the Parent Company, in addition to the provision for the phantom shares incentive plan (for more details, please see Note 29).

As at December 31, 2018 payables to managers with strategic responsibilities recorded in the financial statements, as defined above, were 4,813 thousand euro, against payables of 7,542 thousand euro as at December 31, 2017.

Pursuant to the Consob communications of February 20, 1997 and February 28, 1998, as well as to IAS 24 revised, we report that also in 2018 all related-party transactions fell within ordinary operations and were settled at economic and financial standard market conditions.

41. FEES TO THE INDEPENDENT AUDITORS AND TO ENTITIES BELONGING TO ITS NETWORK

Pursuant to article 149-duodecies "Disclosure of fees" of the Issuers' Regulations, introduced by Consob with resolution 15915 of May 3, 2007, the fees that the independent auditors and the entities belonging to its network have received, separately, for the assignments of auditing and for the provision of other auditing services, tax consultancy services and other services other than the audit, indicated by type or category, are summarised in the table below:

(thousands of euro)

Business services	Supplier	Customer	Fees
Audit	Parent Company auditor	SAES Getters S.p.A.	209
Other auditing services	Parent Company auditor	SAES Getters S.p.A.	12
Tax consultancy services	Parent Company auditor	SAES Getters S.p.A.	0
Other services	Parent Company auditor	SAES Getters S.p.A.	0
Audit	Parent Company auditor	Subsidiaries	157
Other auditing services	Parent Company auditor	Subsidiaries	0
Tax consultancy services	Parent Company auditor	Subsidiaries	0
Other services	Parent Company auditor	Subsidiaries	0
Audit	Network of Parent Company auditor	Subsidiaries	161
Other auditing services	Network of Parent Company auditor	Subsidiaries	0
Tax consultancy services	Network of Parent Company auditor	Subsidiaries	0
Other services	Network of Parent Company auditor	Subsidiaries	0

^(*) Specific activities designed to understand the effects of first-time adoption of the IFRS 9 standard.

42. EVENTS OCCURRED AFTER THE END OF YEAR

For the events occurred after the end of the year please refer to the paragraph "Subsequent Events" of the Report on operations.

Lainate (MI), March 13, 2019

on behalf of the Board of Directors Massimo della Porta President

Certification of the co	nsolidated financial s	tatements	

CERTIFICATION OF THE CONSOLIDATED FINANCIAL STATEMENTS

pursuant to article 81-ter of Consob Regulation 11971 of May 14, 1999 and subsequent amendments and additions

- 1. The undersigned Giulio Canale, as Vice President, Managing Director and as the Manager in charge of preparing the company's accounting documents, of SAES Getters S.p.A., hereby certifies, also in compliance with the provisions of article 154-bis, paragraphs 3 and 4, of Italian Legislative Decree no. 58 of February 24, 1998:
- the adequacy with relation to the characteristics of the enterprise and
- the effective application

of the administrative and accounting procedures for the preparation of the consolidated financial statements, in the period January 1 - December 31, 2018.

2. In this regard, the following is of note:

2.1 The Administrative-Accounting Control Model of the SAES Group

- On December 20, 2012, the Board of Directors of SAES Getters S.p.A. approved the update of the Administrative-Accounting Control Model, issued on May 14, 2007, the adoption of which seeks to guarantee the alignment of SAES with the provisions introduced by Italian Law no. 262 of December 28, 2005 (hereinafter also the "Law on Savings") implemented in December 2006 with the approval of Italian Legislative Decree no. 303/06, with specific reference to obligations regarding the preparation of company accounting documents, as well as any document or disclosure of a financial nature released to the market.
- The Control Model, with reference to the organisation chart of the SAES Group:
 - o defines the roles and the responsibilities of the individuals involved at various levels in the process of preparation and/or control of the financial disclosures of the SAES Group, introducing the figure of the Manager in charge of preparing the company's accounting documents (hereinafter the "Manager in Charge");
 - o illustrates the elements comprising the administrative-accounting control system, referred to the general control environment underlying the Internal Control System of the SAES Group, as well as specific components relating to administrative-accounting disclosures;
 - o with specific reference to the latter aspect, envisages the integration of the Group Accounting Principles and the IAS Operating Procedures with a system of administrative-accounting control matrices, which describe the control activities implemented in each process;
 - o defines procedures and the frequency of the administrative-accounting risk assessment process, to identity the most relevant processes for the purposes of accounting and financial disclosures.

2.2 Implementation of the Administrative-Accounting Control Model in SAES Getters S.p.A. and relative results of the internal certification process

Refer in this regard to paragraphs 2.2, 2.3 and 2.4 of the Certification of the separate financial statements of SAES Getters S.p.A., which are reported here with specific reference to the consolidation process.

2.3 Internal administrative-accounting control system of the subsidiaries of the SAES Group

- Following the administrative-accounting risk assessment conducted on the basis of the data of the 2017 consolidated financial statements the most important administrative-accounting processes were selected, based on materiality criteria, for each of the Group companies.
- For the purpose of the certification of the consolidated financial statements, the Manager in Charge requested, for each of the subsidiaries that had important processes, to send a representation letter, drawn up in the format attached to the Administrative-Accounting Control Model of the SAES Group, signed by the General Manager/Financial Controller, that certified the application and adequacy of procedures that guarantee the correctness of the company's accounting and financial data and the consistency of the financial reports with respect to the company's transactions and relative accounting records.

2.4 - Results of the certification process by the subsidiaries of the SAES Group

• As at today's date, the Manager in Charge, with the assistance of the Group Reporting and Consolidation Manager, has received all 12 representation letters requested, signed by the General Manager/Financial Controller of the subsidiaries with the processes selected as important following the risk assessment.

The result of the process was positive, no irregularities were identified.

- 3. It is also hereby certified that:
- 3.1. The consolidated financial statements as at December 31, 2018:
- a) have been prepared in compliance with the applicable international accounting standards recognised by the European Community in (EC) regulation no. 1606/2002 of the European Parliament and Council of July 19, 2002;
- b) correspond to the entries in the accounting records and books;
- c) are suitable to represent the equity, economic and financial situation of the issuer in a truthful and correct manner and of the group of companies included in the scope of consolidation.
- 3.2. The Report on operations contains a reliable analysis of performance and of the profit/loss of operations, as well as the issuer's situation, and of the group of companies included in the scope of consolidation, together with a description of the main risks and uncertainties to which it is exposed.

Lainate (MI), March 13, 2019

The Vice President, Managing Director and Manager in charge of preparing the company's accounting documents Giulio Canale⁷⁶

⁷⁶ On October 17, 2018, the Board of Directors of SAES Getters S.p.A. approved the appointment of Giulio Canale as the Manager in charge of preparing the company's accounting documents, to replace Michele Di Marco.

Report of the Board of Statutory Auditors to the Shareholders' Mee	ting
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REPORT OF THE BOARD OF STATUTORY AUDITORS TO THE SHAREHOLDERS' MEETING

PURSUANT TO ARTICLE 153 OF ITALIAN LEGISLATIVE DECREE 58/1998 AND ARTICLE 2429, PARAGRAPH 3 OF THE ITALIAN CIVIL CODE

To the Shareholders' Meeting of SAES Getters S.p.A.

Dear Shareholders,

In its current formation, the Board of Statutory Auditors was regularly appointed by the Shareholders' Meeting of the Company on April 24, 2018, also in observance of Article 22 of the By-laws, and shall end its mandate with the Shareholders' Meeting called to approve the financial statements of the Company as at December 31, 2020.

During the year ended on December 31, 2018, the supervisory activity of the Board of Statutory Auditors was conducted in compliance with the legislation of the "Consolidated Finance Law" pursuant to Italian Legislative Decree 58/1998 and, for those provisions that are applicable, of the Italian Civil Code, also taking into account the Principles of Conduct recommended by the Italian accounting profession in the version approved with the resolution of April 26, 2018, and Consob communications on the subject of corporate controls and activities of the Board of Statutory Auditors and, to be more precise, communication no. DEM/1025564 of April 6, 2001 and later updates. In its role established by Article 19 of Italian Legislative Decree 39/2010, the Board of Statutory Auditors also performed an audit on itself during the year as required by law.

That being said, we report on the supervisory activities required by law that we conducted during the year that ended on December 31, 2018, and more specifically:

- we can guarantee to have supervised compliance with the law and with the By-laws, and observance of the principles of proper administration, having held 6 meetings of the Board of Statutory Auditors for the year without considering additional informal meetings; in particular, 3 meetings were held by the Board of Statutory Auditors in its previous formation;
- on the occasion of these meetings, of the board meetings and in any case at least every three months, we obtained from the Directors and from the management bodies of the Company information on the general course of operations and on its foreseeable development, and on the most important operations in terms of size or characteristics carried out by the Company, also regarding the subsidiaries:
- for calendar year 2018, the Board of Statutory Auditors not always in its entirety attended 2 Shareholders' Meetings and 13 Board of Directors meetings held in observance of the statutory and legislative rules governing their operation and for which we can reasonably ensure that the resolved actions comply with the law and with the By-laws, and again in the company's interest, including the intercompany interests, and were not imprudent, risky, atypical or unusual, or in potential conflict of interest or such as to jeopardise the integrity of the shareholders' equity. Considerations, opinions and judgements could be expressed freely at these meetings;
- we assessed and supervised the adequacy of the organisational, administrative and accounting system, and the reliability of the latter in properly representing the operational transactions by obtaining information from the managers of the functions and by examining company documents and, to this regard, we have no particular comments to report. Moreover, having followed the activities carried out by the Internal Audit function and by the Audit and Risk Committee, we can confirm that the internal control system adopted by the Company is entirely adequate;
- pursuant to Article 19, paragraph 1, of Italian Legislative Decree 39/2010, we supervised the financial disclosure process; the effectiveness of the internal control, internal auditing and risk management system; the statutory audit of the annual accounts and of the consolidated accounts; the independence of the audit firm, particularly as concerns the provisions of non-auditing services to the Company;
- we also verified the adequacy of the instructions given to the subsidiaries pursuant to Article 114, paragraph 2 of Italian Legislative Decree 58/1998;
- we examined and obtained information on the organisational and procedural activities initiated pursuant to Italian Legislative Decree 231/2001 as amended and on the administrative responsibility of the entities for the offences established by this legislation. No significant critical issues that must be reported herein emerged from the report of the Supervisory Body - of which one member of the

Board of Statutory Auditors has always taken part - on the activities carried out during 2018 or from the meetings of the Body with the Board of Statutory Auditors.

With reference to the provisions under Article 36 of the Market Regulation issued by Consob relating to the subsidiaries of significant importance, formed and regulated by the law of non-European Union states, we report that the companies in question were identified and their administrative-accounting system appears suitable for having the economic, equity and financial data necessary for drawing up the consolidated financial statements reach the Company on a regular basis.

That being said, we believe it opportune to call the attention of the Shareholders' Meeting to the following.

Performance of the year

As explained by the Directors in the annual financial report, the results of 2018 and also the forecasts for 2019 continue to show strong growth of the Group; the 2018 results presented revenues enjoying two-digit organic growth with a significant improvement of all economic and financial indicators. These results matured thanks to the excellent performance of the shape memory alloys business in the field of medicine and the renewed vitality of getter applications.

The summary of the percentage changes of the main indicators taken from the 2018 consolidated figures as compared to the corresponding data of the previous year follows, taking into account exclusion of the gas purification business and the write-down of several financial assets.

Consolidated revenues +8.9% Consolidated gross profit +12.9% Consolidated EBITDA +43.5%

Transactions of greater significance during the year

Of the transactions of greater significance pointed out in the report on operations of SAES Getters S.p.A. we will to highlight the following:

- On February 26, 2018, SAES Getters S.p.A. exercised a call option for the purchase of the entire share capital of Metalvuoto S.p.A. (subsequently renamed SAES Coated Films S.p.A.), 70% of which was already in its possession. Following this transaction, SAES Getters S.p.A. acquired the remaining 30% previously held by the minority shareholder Mirante S.r.l., for a consideration of 75 thousand euro. The acquisition of the entire share capital of Metalvuoto S.p.A. enables SAES to have complete strategic autonomy in the advanced packaging business, above all for applications in the food industry.
- The March and April 2018 Board of Directors meetings approved a strategic incentive plan called Asset Sale Plan. The goal of this plan is to remunerate the Executive Directors, managers who hierarchically report directly to the Executive Directors and who are also members of the Corporate Management Committee and Parent Company employees considered particularly important in connection with extraordinary transactions to sell equity investments, business units, fixed assets and assets should value and economic benefits for the Group be achieved through these transactions. The purpose is to guarantee retention of the beneficiaries and to better align their performance with the company interests.
- On May 28, 2018 a credit facility for a maximum of 50 million USD was set in place with Banca Intesa Sanpaolo S.p.A. The equivalent of 38.5 million euro was drawn down from the same on June 12 for the capitalisation of the newly-incorporated SAES Colorado, Inc. (later renamed SAES Getters/U.S.A., Inc.). The facility was entirely repaid and extinguished on June 25, following the collection by Entegris as part of the transaction described in the above point.
- The sale of the gas purification business to the US company Entegris, Inc. was finalised on June 25, 2018. The sale regarded the US affiliate SAES Pure Gas, Inc. and the commercial structure of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. The effective sale price was 353.6 million USD, namely the contractual price agreed as 355 million USD, corrected following a negative adjustment of 1.4 million USD, calculated on the basis of the value of working capital, cash and tax credit on the closing date. The carrying amount of the net assets sold was 7 million euro. The net capital gains generated by the transaction were 253.9 million euro, represented by a gross gain of 282.5 million euro, less the costs relating to the transaction (above all legal fees, consulting costs, incentives and fees, interest, exchange rate differences and taxes) corresponding to around 28.6

million euro. This net capital gain, together with the costs relating to the purification business sold up until June 25, 2018 (corresponding to 50 thousand euro) were classified in the income statement item "Income (loss) from discontinued operations" (253.8 million euro).

To optimise the transaction, on June 15, 2018 SAES Getters USA, Inc., the controlling company of SAES Pure Gas, Inc., sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly-incorporated company called SAES Colorado, Inc., subsequently renamed SAES Getters/U.S.A., Inc. On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling company of the investment in SAES Pure Gas, Inc., was sold to Entegris together with the Chinese commercial structure.

To complete the transaction, the assets of the purification laboratory based in Lainate were sold, in various tranches, to Entegris, while the laboratory continued to operate for four months from the closing date exclusively for Entegris, following a specific service agreement. Lastly, at the production plant of Avezzano, SAES Getters S.p.A. maintained a production line of getter material for the purification market, also to meet the procurement needs of Entegris, as per a specific supply agreement, which will last 36 months from the closing date of the sale.

- On July 31, 2018 the residual amount of the long-term loan underwritten with Banca Intesa Sanpaolo S.p.A. in mid-2015 was repaid in advance (initial nominal value of 8 million euro). No penalty was paid for said transaction. At the same time, the Interest Rate Swap contract on said loan was extinguished.
- On August 1, 2018, the residual amount of the long-term loan underwritten with Unicredit S.p.A. was repaid in advance (initial nominal value of 7 million euro). No penalty was paid for said transaction.
- On October 1, 2018, the Shareholders' Meeting of SAES Getters S.p.A. approved, to the intents and purposes of article 114-bis of the TUF [Consolidated Finance Law], the adoption of an incentive plan based on phantom shares, called "2018 Phantom Share Plan", addressed to certain executive directors and strategic executives. The plan is based on the free assignment to beneficiaries of a specific number of phantom shares which, under the terms and conditions of the plan, give them the right to receive a cash incentive, dependent on the increase in the stock market price of the shares on a date in which certain pre-established events are due to take place, with respect to the assignment value. The events that may trigger the payment of the incentive are, for example; change in control of the Company; failure to renew the position of board director at the end of a term in office; revocation from the position of board director or substantial change in the relative proxies or in the role without just cause; dismissal for just cause; resignation for an objective justified reason (only for Strategic Executives); reaching the age of retirement; permanent invalidity; death; delisting. The plan seeks to remunerate the beneficiaries with relation to the Company's capitalisation, to enhance retention and to better align performance with the interests of shareholders and the Company. On October 17, 2018 the Board of Directors of SAES Getters S.p.A. launched the plan, establishing the names of the plan's beneficiaries on the proposal of the Remuneration and Appointments Committee, and establishing the number of phantom shares to be assigned free of charge to each beneficiary. In accordance with the criteria established by the plan's regulations, the assignment of each phantom share has been established as 16.451 euro, corresponding to the weighted average of the official prices of the Company's ordinary shares recorded on the MTA (electronic equity market) organised and managed by Borsa Italiana S.p.A. on trading days that fall in the 36 (thirtysix) months prior to the date of October 17, 2018.
- On October 23, 2018 SAES Investments S.A. was formally incorporated, based in Luxembourg, wholly owned by SAES Getters S.p.A. The purpose of the company, with a share capital of 40 million euro, is to manage the liquidity resulting from the sale of the purification business, with the objective of maintaining capital for any future uses.

As regards the other SAES Group companies, we point out the following:

• On December 12, 2018, the SAES Group, through its subsidiary SAES Getters International Luxembourg S.A., conferred 2.6 million USD of share capital in Flexterra, Inc., bound by the purchase of patents in the OLET field, relating to both materials and configurations that use these materials, developed by the Group company E.T.C. S.r.l. Following this payment, the share of SAES in Flexterra rose to 46.73%.

Transactions of greater significance after the end of the year

Of the events of greater significance that occurred after the end of the year as at December 31, 2018, we wish to point out the following:

- On February 14, 2019, the Board of Directors of SAES Getters S.p.A. approved the guidelines of a transaction that envisages, after obtaining the necessary authorisation of the Shareholders' Meeting, promoting a voluntary partial public tender offer (Offer) on a maximum of 3,900,000 ordinary treasury shares (corresponding to 17.7% of total shares and to 26.6% of ordinary shares), at the price of 23 euro per share (after 2018 dividend), for a total maximum counter value of 89.7 million euro. The price includes a premium of 8.4% with respect to the official price of the Company's ordinary shares recorded on February 13, 2019, as well as a premium of 15.0%, 20.2%, 19.2% and 10.6% with respect to the weighted average of the official prices of the Company's ordinary shares in 1-month, 3-month, 6-month and 12-month periods respectively before February 13, 2019.
 - The promotion of the Offer, approved by the SAES Getters S.p.A. Shareholders' Meeting held on March 18, 2019 (which at the same time revoked the previous authorisation to purchase treasury shares and their disposal adopted on April 24, 2018), is subject to the approval of the next Shareholders' Meeting of SAES Getters S.p.A. scheduled for April 18, 2019, of the Company's annual financial statements as at December 31, 2018, which indicates distributable profits and/or sufficient available reserves to cover the total maximum counter value of the Offer.
 - The Price will be paid in cash. If the number of ordinary shares put up for subscription for the Offer exceeds the maximum number of 3,900,000 of the offer, an allotment will be carried out based on the "pro-rata" method, according to which the Company would purchase the same proportion of ordinary shares from all shareholders as that put up for subscription to the Offer. The Offer is not conditioned by reaching a minimum number of subscriptions. The transaction complies with the provisions of Article 2359 of the Italian Civil Code.
- On March 7, 2019, following the loss recorded in 2018, the Board of Directors of SAES Coated Films S.p.A. decided to propose to the Shareholders' Meeting, convened for April 4, 2019, to resolve on the establishment of an available reserve of 5 million euro to cover any future losses, by means of a payment to the capital account, by the Sole Shareholder SAES Getters S.p.A.
- On March 13, 2019 SAES Getters S.p.A. approved the full waiver of the financial receivables held by the same at the end of 2018 towards SAES Nitinol S.r.l. for an amount of 8,905 thousand euro. At the same time, the Parent Company approved an additional payment to the capital account of SAES Nitinol S.r.l. of 100 thousand euro, 65 thousand euro of which to cover the difference between the total loss recorded by the subsidiary in 2018 (8,969 thousand euro) and the above-mentioned waiver of the financial receivables (8,905 thousand euro), and 35 thousand euro of which to set up an available capital reserve.

The Board of Statutory Auditors, duly and promptly informed by the Directors, ascertained compliance of the aforesaid transactions with the law, with the By-laws and the principles of correct administration, ensuring that they were not manifestly imprudent or risky, or conflicting with the resolutions passed by the Shareholders' Meeting or such as to jeopardise the integrity of the company's assets.

Atypical and/or unusual transactions, including intercompany or related party transactions

Pursuant to the Consob communications of February 20, 1997 and February 28, 1998, as well as to IAS 24 revised, we report that also in 2018 transactions with subsidiaries, associated companies or joint ventures and with other related parties of the SAES Group continued.

As regards the subsidiaries, these transactions were mostly commercial, and regarded purchases and sales of raw materials, semi-finished goods, finished products, tangible assets, royalties and various services. Cash pooling agreements are in place with several Group companies as well as loan agreements. Agreements for the provision of commercial, technical, IT, administrative, legal and financial services for the study of specific projects are also in force with several subsidiaries. The Board of Statutory Auditors was told that all contracts were concluded at economic and financial conditions considered arm's length.

The equity and economic transactions with subsidiaries and jointly-controlled companies of SAES Getters S.p.A. are summarised below.

(thousands of euro)

(thousands of euro) Legal Entity	Reiceivables	Dovables	Revenues	Emongos	Commitments
Legal Fility	_	Payables	_	Expenses	
	2018	2018	2018	2018	2018 (*)
S.G.G. Holding S.p.A.	272	0	0	0	
SAES Getters/U.S.A, Inc.	1,174	113	3,193	262	-
SAES Getters USA, Inc.	0	0	2,196	367	-
SAES Pure Gas, Inc.	0	0	2,690	264	-
Spectra-Mat, Inc.	108	0	145	1	-
SAES Getters Export, Corp.	0	0	0	0	-
SAES Smart Materials, Inc.	150	169	215	1,325	-
Memry Corporation	843	110	1,107	908	-
SAES Getters Korea Corporation	156	614	776	28	-
SAES Getters (Nanjing) Co., Ltd.	651	34	3,323	161	-
Memry GmbH in liquidation	0	1,712	0	2	-
SAES Getters International Luxembourg S.A.	376	7,974	376	24	-
E.T.C. S.r.l. in liquidation	64	36	58	0	-
SAES Nitinol S.r.l.	687	0	213	0	-
SAES Coated Films S.p.A.	2,107	310	2,210	0	325
SAES Investments S.A.	160,087	0	41	0	
SAES RIAL Vacuum S.r.l.	95	44	161	167	-
Actuator Solutions GmbH	141	0	1,393	0	1,749
Actuator Solutions Taiwan Co., Ltd	26	0	81	0	-
Flexterra, Inc.	180	0	181	0	-
Total	167,117	11,115	18,360	3,509	2,074

^(*) It includes the guarantees issued by SAES Getters S.p.A.

The Board of Statutory Auditors received information on the related-party transactions; they fell within ordinary operations and were settled at economic and financial standard market conditions.

The information provided by the Directors in their Report on the financial statements of the year ended December 31, 2018 and in the relevant notes is complete and adequate for the transactions initiated with all Group entities and with those with other related parties.

To this regard, the Board of Statutory Auditors acknowledges that, as indicated in the Report on Corporate Governance, the Company, in compliance with Article 2391-bis of the Italian Civil Code, as implemented by Consob Regulation no. 17221 of March 12, 2010 and with the Consob Communication dated September 24, 2010, and also with Article 9.C.I of the Corporate Governance Code of listed companies, adopted the procedures for the transactions with related parties - identified pursuant to the international accounting standard IAS 24 revised - aimed at ensuring their transparency and substantial and procedural correctness.

In connection with the transactions with related parties other than the subsidiaries as at December 31, 2018, the Directors identified the following in their Report:

- S.G.G. Holding S.p.A., a relative majority shareholder holding 36.96% of the ordinary shares of SAES Getters S.p.A. at December 31, 2018. With regard to the controlling investment held by S.G.G. Holding S.p.A., note that the latter does not exercise management and coordination over SAES Getters S.p.A. pursuant to articles 2497 and foll. of the Italian Civil Code.
- **Actuator Solutions GmbH**, a joint venture, 50% jointly owned by SAES and Alfmeier Präzision Groups, focused on the development, manufacturing and marketing of actuators based on the SMA technology.
- Actuator Solutions Taiwan Co., Ltd., a Taiwan-based company wholly owned by the joint venture Actuator Solutions GmbH, for the development and commercialisation of SMA devices for the image focus and stabilisation in tablet and smart-phone cameras.
- Actuator Solutions (Shenzhen) Co., Ltd., a company wholly owned by Actuator Solutions GmbH for the technology development of actuators for the mobile market.
 - With regards to Actuator Solutions GmbH and its subsidiaries, the SAES Group has a commercial relationship (sale of raw materials and semi-finished products) and performs various services (in particular, commercial activities, development services and accessory/administrative activities) that

are recharged on the basis of a service contract. Finally, please note that SAES Nitinol S.r.l. granted several loans to the joint venture Actuator Solutions GmbH. As at December 31, 2018, the financial debt of Actuator Solutions GmbH towards SAES Nitinol S.r.l. was equal to 9.1 million euro, including 1.1 million euro of interests accrued and not yet paid.

- **SAES RIAL Vacuum S.r.l.**, a joint venture between SAES Getters S.p.A. and Rodofil s.n.c., focused on the design and production of integrated vacuum components and systems for accelerators, for the research, as well as for industrial systems and devices.
 - With regards to SAES RIAL Vacuum S.r.l. the SAES Group has a commercial relationship (both purchase and sale of raw materials, components and machining for the creation of vacuum systems) and performs various services, mainly commercial and marketing and administrative support activities. Finally, SAES Getters S.p.A granted a loan of 50 thousand euro, aimed at financially supporting SAES RIAL Vacuum S.r.l.
- **Flexterra, Inc.**, a joint venture of SAES Getters International Luxembourg S.A. based in Skokie (USA), established at the end of 2016 for the development, production and the commercialisation of materials and devices used in flexible displays.
- **Flexterra Taiwan Co., Ltd.**, a company established at the beginning of 2017, wholly owned by joint venture Flexterra, Inc.
 - With regards to Flexterra, Inc. and its subsidiary the SAES Group carries out some administrative activities, and provides a legal, financial and tax support, as well as assistance in joint venture research and development activities, including the management of patents.
- **Mirante S.r.l.**, minority shareholder of Metalvuoto S.p.A. up until February 26, 2018, the date on which SAES Getters S.p.A. exercised the call option for the purchase of the remaining 30% of the share capital of Metalvuoto S.p.A., subsequently renamed SAES Coated Films S.p.A.
- Managers with Strategic Responsibilities, these include the members of the Board of Directors, including non-executive directors, and the members of the Board of Statutory Auditors. Moreover, the Corporate Human Resources Manager, the Corporate Operations Manager, the Group Administration, Finance and Control Manager, the Group Legal General Counsel and the Group Strategic Marketing & Planning Manager are considered managers with strategic responsibilities. Their close relatives are also considered related parties.

The same Report on Corporate Governance, to which the reader is referred in its entirety, explains in detail the composition of the company offices, directors, members of the board committees, Supervisory Body and the function of Manager in charge of preparing the company's accounting documents and Internal Audit manager consequent to the appointment of the new company offices during the Shareholders' Meeting held on April 24, 2018.

The following table shows the total values of the transactions performed in 2018 with related parties other than the subsidiaries:

(thousands of euro)											
					Dec	ember 31, 20	18				
	Total net sales	Cost of sales	Research & development expenses	Selling expenses	General & administrativ e expenses	Other income (expenses)	Other financial income (expenses)	Trade receivables	Trade payables	Tax consolidatio n receivables from	Financial receivables from related parties
S.G.G. Holding S.p.A.										272	
SAES RIAL Vacuum S.r.l.	139	(167)		10 (*)	10 (*)	1	1	45	(44)		50
Actuator Solutions GmbH	1,360			1 (*)	40 (*)		479	82			0 (**)
Actuator Solutions Taiwan Co., Ltd.	7		63 (*)	9 (*)				24			
Mirante S.r.l.					(40)						
Flexterra, Inc.			55 (*)		161 (*)			215			
Total	1,506	(167)	118	20	171	1	480	366	(44)	272	50

(*) Costs recovery.

(**) The total amount of the financial receivable (both principal and interest) was written down as at December 31, 2018.

The following table shows the remunerations SAES Getters S.p.A. paid to managers with strategic responsibilities:

(thousands of euro)	2018	2017
Short term employee benefits	16,989	4,340
Post employment benefits	0	0
Other long term benefits	561	2,299
Termination benefits	898	1,100
Share-based payments	0	0
Other	0	0
Total remunerations to key management	18,448	7,739

As at December 31, 2018 payables to Managers with strategic responsibilities recorded in the financial statements of SAES Getters S.p.A., as defined above, were 4,804 thousand euro, against payables of 7,542 thousand euro as at December 31, 2017.

The increase of the item is mainly attributable to the greater remunerations of the Executive Directors and of the Managers with strategic responsibilities under the strategic incentive plan called Asset Sale Plan approved by the Boards of Directors in March and April 2018.

This Monetary incentive plan, approved in March 2018 and lasting nine years from its approval, is for Executive Directors, executives that report directly to Executive Directors and that are members of the Corporate Management Committee (a committee to which the Executive Directors provide guidelines and share objectives with their direct reports) and to other employees of the Parent Company considered particularly important. The aim of the plan is to reward the beneficiaries with regard to extraordinary transactions relating to the sale of investments, business units, fixed assets and assets (in this specific case, the sale of the purification business), if these transactions create value and economic benefits for the Group, with a view to guaranteeing the retention of the beneficiaries and to better align their performance with the interests of the company. The plan is managed by the Board of Directors, after consulting with the Remuneration and Appointments Committee. More specifically, the Remuneration and Appointments Committee must ascertain which events, in accordance with the terms and conditions of the plan, may give rise to the payment of a monetary incentive and how much said incentive should be for each beneficiary and the performance of any action to fulfil and the formalities necessary for implementation of the plan.

Independent Auditors

Deloitte & Touche S.p.A., the firm appointed to audit the consolidated and separate financial statements of SAES Getters S.p.A. and to perform the statutory audit of accounts pursuant to Article 150, paragraph 3 of Italian Legislative Decree 58/1998, issued the certification reports on March 28, 2019 and gave an opinion without findings and without requests for information on the consolidated and separate financial statements of the year 2018.

We held meetings, also informal, with the representatives of the firm Deloitte & Touche S.p.A., and during said meetings no significant data or information to be pointed out in this report emerged.

The Board of Statutory Auditors acknowledges to have received, pursuant to Article 19, paragraph 3, of Italian Legislative Decree 39/2010, the report of the independent auditors explaining essential issues that arose during the statutory audit and any significant gaps that emerged in the internal control system in connection with the financial disclosure process; the report reveals that no specific gaps were found. The Board also acknowledges to have received from the audit firm, pursuant to Article 17, paragraph 9, letter a) of Italian Legislative Decree 39/2010 confirmation of its independence, to have had information on the services other than the statutory audit provided to the Company also by entities belonging to its network and to lastly have discussed, pursuant to Article 17, paragraph 9, letter b) of the same decree,

<u>Information on the assignment of additional tasks, if any, to the independent auditors and/or to parties connected to it by ongoing relations</u>

the risks concerning its independence and the measures taken to limit these risks with the audit firm.

As regards the additional tasks appointed to the independent auditors and/or to parties connected to it by ongoing relations, total reference is made to the information given by the Company in the Explanatory

notes to the consolidated financial statements, pursuant to Article 149-duodecies of the Issuers' Regulations on the subject of disclosure of fees.

Information on the existence of opinions provided pursuant to the law during the year

In 2018, the Board of Statutory Auditors provided:

- a favourable opinion on the request to adjust the fees to be paid to Deloitte & Touche S.p.A. in light of the amendments introduced by the amended regulatory framework of reference relating to the audit of the financial statements starting from the financial statements as at December 31, 2017;
- a favourable opinion on granting Deloitte & Touche S.p.A., already appointed for the Statutory Audit of the accounts of the Company and of the SAES Group, the additional task of "conducting a limited examination of the Consolidated Non-Financial Declaration of SAES Getters S.p.A. and of its subsidiaries for the years 2017-2021 pursuant to Italian Legislative Decree 254/16";
- a favourable opinion on the new organisational structure of the Company following the appointment of Giulio Canale, former Chief Financial Officer of the Company, to the office of Manager in charge of preparing the company's accounting documents.

Also with reference to the year 2018, the Board of Statutory Auditors was called upon in the year 2019 to express itself:

- on the adjustment for 2018 of the fees to pay to the firm Deloitte & Touche S.p.A. in connection with the statutory audit appointment granted previously for the years from 2013 to 2021 with resolution of the ordinary Shareholders' Meeting on 23 April 2013 (the "Appointment for the Statutory Audit 2013-2021"), providing its favourable opinion;
- on the adjustment for 2018 of the fees to pay to the same Deloitte & Touche S.p.A. in connection with the appointment concerning the limited examination of the consolidated non-financial statement of SAES Getters S.p.A. and of its subsidiaries granted previously for the years from 2017 to 2021 with resolution of the ordinary Shareholders' Meeting on April 24, 2018, providing its favourable opinion;

Submission of notices pursuant to Article 2408 of the Italian Civil Code and complaints

With the communication dated March 11, 2019 received by the Board of Statutory Auditors on March 12, 2019, the company established under Maltese law Praude Asset Management, manager of the portfolio of the shareholder Hermes Linder Sicav, holder of 211,153 savings shares of SAES Getters S.p.A., submitted to the attention of the Chairman of the Board of Statutory Auditors a notice pursuant to Article 2408 of the Italian Civil Code, with a copy of the document sent to the common representative of the savings shareholders and to CONSOB.

In this notice the shareholder asked the Board of Statutory Auditors to conduct an investigation into the regularity of the process relating to the public tender offer proposed by the Board of Directors during its meeting on February 14, 2019.

Preliminarily, it is reported that the notifying shareholder holds less than 2% of shares. As a result, the Board of Statutory Auditors:

- is not required to present its conclusions to the Shareholders' Meeting pursuant to Article 2408, paragraph 2 of the Italian Civil Code;
- must take the notice into consideration only in the report on the financial statements of the year pursuant to Article 2408, paragraph 1 of the Italian Civil Code.

That being stated, although having found after an in-depth analysis that the notice is totally unfounded for the reasons that will be explained hereunder, the Board finds it advisable to report to the Shareholders' Meeting called on March 18, 2019 in consideration of the fact that this Shareholders' Meeting is called upon to resolve precisely on the transactions whose legitimacy is being disputed.

This Board believes that the notification is devoid of any foundation since:

- (i) there is no influence whatsoever of S.G.G. Holding S.p.A. in the decision taken by SAES Getters S.p.A. regarding the partial public tender offer on treasury shares;
- (ii) all transactions existing between the Company and S.G.G. Holding, and between the representatives of both, have always correctly and fully referred to the market and to the company bodies of the Company in observance of the legal requirements;
- (iii) all decisions of the Board of Directors of the Company regarding the public tender offer were taken in observance of the applicable legal and regulatory provisions, including those relating to conflict

of interest (which, in any case, with reference to the aspects raised in the notice, we believe do not exist); no conflict of interest was found so there is no longer duty to abstain but rather duty of disclosure:

(iv) the legal assistance regarding the public tender offer, as well as that of the financial advisors, was requested solely in the interest of the Company.

With reference to the reasons that led to limiting the public tender offer to only the ordinary treasury shares, the Board of Statutory Auditors finds it proper to summarise the wealth of information received from the Board of Directors and from the legal and financial advisors on the basis of which the guidelines of the take-over bid were resolved.

From the investment viewpoint, the Company believes that as of today the ordinary shares:

- may represent a more efficient use of its resources from a financial viewpoint;
- are better suited to meeting any opportunities of use that should arise from a strategic viewpoint in the future.

This is because the ordinary shares:

- a) have underperformed the reference index (FTSE Italia STAR), unlike the savings shares whose trading considerably overperformed it. Indeed, considering the time horizon of the 12 months prior to announcement of the transaction:
 - the ordinary shares recorded a performance of -8.6%;
 - the reference index FTSE Italia STAR recorded a performance of -7.5%;
 - the savings shares recorded a performance of +5.1%;
- b) have a liquidity profile higher than the savings shares. Therefore, the decrease of the floating capital of the category of shares that the take-over bid concerns would have a lower impact on the course of the trading following the take-over bid. Indeed, considering the time horizon of the 12 months prior to announcement of the transaction:
 - the ordinary shares recorded accumulated volumes of trading of 9.1 thousand ordinary shares or 62.1% of the ordinary capital;
 - the savings shares recorded accumulated volumes of trading of 2.5 thousand ordinary shares or 33.8% of the savings capital;
- c) thanks to the assignation of administrative rights, they are better suited than the savings shares for being used afterwards as part of the consideration in any future extraordinary transactions consistent with the strategic lines of the Group (subject to authorisation of the Shareholders' Meeting for transactions of the shares in the portfolio).

Furthermore, in reiterating that there was no influence whatsoever of S.G.G. Holding in the decision taken by the Board of Directors of the Company with reference to observance of the legal and statutory provisions regarding conflict of interest, the Board of Statutory Auditors notifies that it received confirmation from the legal advisors that followed all steps of the transactions of the non-existence of this conflict - for which, on the other hand, it is reminded that there is no longer duty to abstain but rather to disclose any interest - with reference to the delegated Directors of the Company who are, among other things, also Directors of S.G.G. Holding.

As for the observations made by the representative as to conduct and/or obligations referring to S.G.G. Holding (including (i) the surprise that would emerge from the press release issued by S.G.G. Holding after it learned of the take-over bid proposed by SAES Getters, (ii) existence or non-existence of S.G.G. Holding's public tender offer obligation as a result of the completed public tender offer promoted by SAES Getters, (iii) the intention of S.G.G. Holding to reduce its investment in the ordinary capital of the Company), this Board believes these are issues that totally lie outside its scope of activity.

Lastly, the Board of Statutory Auditors was able to verify the non-existence of legal opinion written on the transaction. As previously stated, the Company obviously availed itself of the consultancy of a prominent legal firm that supported it in all steps of the transaction.

Correct administration - Organisational structure and its changes

The Company is expertly administered in observance of the rules of law and of the By-laws. We attended the Shareholders' Meetings and the meetings of the Board of Directors, and the meetings of the other set up committees for which our presence is required, held in observance of the statutory and legislative rules that govern their functioning.

The mandates and powers granted meet the needs of the Company and are adequate for the evolving company management.

During the last quarter of 2018, in so far as the Manager of the Internal Audit Function and the Manager in charge of preparing the company's accounting documents were no longer employed, the Company introduced an organisational change that involved transfer of the Internal Audit activities to the Legal and Compliance function and appointment of the Chief Financial Officer of the Company to serve as Manager in charge of preparing the company's accounting documents. The legitimacy of the above changes to the organisational structure was supported by opinions of a primary law firm.

The Board of Statutory Auditors believes that the overall organisational structure of the Company is appropriate for the size of the Group.

Lastly, the Statutory Auditors verified the correctness and promptness of all fulfilments/communications consequent to the listing of the Parent Company on the STAR segment of the electronic equity market (MTA) to be made to Borsa Italiana and Consob over the course of the periodic checks made during the year.

Internal control and risk management system - Administrative-accounting system

The internal control and corporate risk management system (hereinafter also "SCIGR") is managed and monitored by the Board of Directors, the Director responsible for the internal control and risk management system, the Audit and Risk Committee, the Internal Audit Function, the Supervisory Body and the Board of Statutory Auditors, each with specific tasks within the scope of their role and relevant responsibilities. The SCIGR framework adopted by the Company implements the components of the "CoSO Framework" model, recognised internationally as the best practice of reference for representing and assessing the internal control system. It is also pointed out that:

- the Chairman of the Board of Statutory Auditors attends, as a guest, the meetings of the Audit and Risk Committee and the Remuneration and Appointments Committee;
- a Statutory Auditor is member of the Supervisory Body, the body that promoted and supported correct implementation of the Organisational Model pursuant to Italian Law 231/2001 for 2018 as well.

During the year, the Board of Statutory Auditors found no particular critical issues or anomalies requiring mention in this report as part of its supervision of the effectiveness of the system and observance of the law, also following periodic meetings with the aforesaid parties.

We acquired knowledge and supervised the adequacy of the organisational structure of the Company and the adequacy of the administrative and accounting system, and the reliability of the latter in properly representing the operational transactions by obtaining information from the managers of the functions, by examining company documents through direct verifications and also through the exchange of information with the independent auditors Deloitte & Touche S.p.A., based on the provisions of Article 150 of Italian Legislative Decree 58/1998 and, to this regard, we have no particular comments to report.

The Company adopted proper procedures for controlling and monitoring disclosure of the figures and transactions regarding the Group companies to the market.

Subsidiaries

As established in the internal control model adopted by the Company, the Manager in charge of preparing the company's accounting documents ensures the circulation and updating of the control rules of the subsidiaries, ensuring that they are in line with the Group's principles. On this aspect, the Board fully refers to the detailed information provided in the specific paragraph of the Report on corporate governance and ownership (pursuant to Article 123 of the Consolidated Finance Law (TUF)), approved by the Board of Directors on March 13, 2019 and made available on the website of the Company.

Corporate Governance Code of listed companies

The Corporate Governance system of the Company implements, in its essential passages, the principles and recommendations contained in the "Corporate Governance Code of listed companies", which the Board of Directors decided to adopt on February 23, 2012. The Board of Directors also approved the annual Report on corporate governance and ownership structure for the year 2018 on March 13, 2019, whose full text - to which the reader is referred for complete information - is placed at the disposal of the public according to the procedure dictated by current legislation and regulations.

Report on remuneration pursuant to Article 123-ter of the Consolidated Finance Law (TUF) and Article 84-quater of the Issuers' Regulations and monetary incentive systems for strategic resources

The Board of Statutory Auditors certifies to have previously examined and provided its favourable opinion, together with the Remuneration and Appointments Committee, also in observance of the provisions under Article 2389, paragraph 3 of the Italian Civil Code on policies and general guidelines on the subject of remuneration of administrative bodies and managers with strategic responsibilities of the Company and, in particular, on the Remuneration Report drawn up pursuant to Articles 123-ter of the Consolidated Finance Law (TUF) and 84-quater of the Issuers' Regulations, and with reference to the annual and three-year monetary incentive instruments for the strategic resources of the Company and of the SAES Group.

Independence

The Board of Statutory Auditors certifies to have checked the correctness of the criteria adopted by the Board of Directors to assess:

- the independence of its members based on the requirements set out in the Corporate Governance Code and under Articles 147-ter, paragraph 4 and 148, paragraph 3 of the Consolidated Finance Law (TUF), acknowledging the declarations issued by the Directors and confirming the status of "Independent" of the Directors Gaudiana Giusti, Stefano Proverbio, Luciana Rovelli, and based on the independence requirements set out under Articles 147-ter, paragraph 4 and 148, paragraph 3 of the Consolidated Finance Law (TUF), the status of "Independent" of Adriano De Maio.
- permanence of the requirements of professional competence and reputation that the Auditors must possess pursuant to Ministry of Justice Decree 162 of March 30, 2000 and of independence pursuant to Article 148, paragraph 3 of the Consolidated Finance Law (TUF) and of application criterion 8.C.1. of the Corporate Governance Code.

Submission of the Financial Statements of the Parent Company and of the Consolidated Financial Statements as at December 31, 2018

As we are not charged with the analytical checking of the content of the financial statements, we certify that we supervised the general outline adopted with regard to both the separate financial statements of SAES Getters S.p.A. and the consolidated financial statements, and the overall compliance with the law in form and structure; we also confirm that we found them to correspond to the events and information of which we are knowledgeable. As for the previous years, please note that both the consolidated financial statements after European Regulation 1606/2002 came into force and the separate financial statements were drawn up according to the international accounting standards IAS/IFRS, on a going concern basis.

The accounting schedules adopted comply with those envisaged by IAS 1-revised. The consolidated statement of financial position has been prepared by distinguishing assets and liabilities as current or non-current, based on whether the equity elements will be realised by or beyond, twelve months from the reporting date and by stating "Assets held for sale" and "Liabilities held for sale" in two separate items, as required by IFRS 5.

The accounting schedules adopted are consistent with those envisaged by IAS 1 - revised; specifically:

- the Statement of Financial Position has been prepared by classifying assets and liabilities as current or non-current and by stating "Assets held for sale" and "Liabilities held for sale" in two separate items, as required by IFRS 5;
- the Income Statement has been prepared by classifying operating expenses by allocation, as this form of disclosure is considered more suitable to represent the Company's specific business, complies with the internal reporting procedures and in line with standard industry practices;
- the Cash Flow Statement has been prepared by stating cash flows provided by operating activities according to the "indirect method" as allowed by IAS 7.

In addition, as required by Consob resolution no. 15519 of July 27, 2006, in the context of the statement of profit (loss) by allocation and in the Explanatory notes the significant income and expenses arising from non-recurring transactions or from events that do not recur frequently during the normal conduct

of operations are specifically identified. Again in observance of the aforementioned resolution, the amounts of positions or transactions with related parties have been highlighted separately from the related items in the Explanatory notes.

The financial statements were drawn up on the assumption of a going concern.

As for the financial statements submitted for your approval, we point out the following in brief.

Separate financial statements of SAES Getters S.p.A.

	2018	2017 (*)
(euro)		
Third party net sales	47,529,972	41,349,940
Intercompany net sales	9,674,804	11,337,229
Total net sales	57,204,776	52,687,169
Third party cost of sales	(28,919,356)	(26,656,060)
Intercompany cost of sales	(2,877,295)	(2,715,089)
Total cost of sales	(31,796,651)	(29,371,149)
Gross profit	25,408,125	23,316,020
Research & development expenses	(7,610,092)	(9,162,592)
Selling expenses	(6,987,035)	(6,196,932)
General & administrative expenses	(21,695,695)	(20,317,736)
Write-down of trade receivables	(160,245)	0
Total operating expenses	(36,453,067)	(35,677,260)
Royalty from third parties	0	0
Intercompany royalties	1,217,861	1,348,299
Other third party income (expenses), net	(228,130)	(172,092)
Other intercompany income (expenses), net	4,005,806	3,313,386
Total other income (expenses), net	4,995,537	4,489,593
Operating income (loss)	(6,049,405)	(7,871,647)
Dividends	21,944,621	22,602,453
Third party financial income	150,076	1,408
Intercompany financial income	696,435	330,726
Total financial income	846,511	332,134
Third party financial expenses	(546,597)	(1,057,059)
Intercompany financial expenses	(36,190)	(12,908)
Total financial expenses	(582,787)	(1,069,967)
Foreign exchange gains (losses), net	370,553	(211,648)
Write-down of intercompany investments	(10,738,194)	(5,356,598)
Income before taxes	5,791,299	8,424,727
Income taxes	(1,404,486)	(10,751,046)
Current taxes	(691,920)	(768,579)
Deferred taxes	(712,566)	(9,982,467)
Net income (loss) from continued operations	4,386,813	(2,326,319)
Net income (loss) from discontinued operations	253,846,790	(652,865)
Net income (loss)	258,233,603	(2,979,184)

^(*) Some amounts shown in the column do not correspond to the 2017 financial statements because they reflect both the reclassifications related to the sale of the gas purification business (finalized on 25 June 2018 and identified as "major line of business"), in compliance with the IFRS 5.

Net revenues in 2018 were 57,205 thousand euro, up compared to 2017.

Gross industrial profit was 25,408 thousand euro in 2018 against 23,316 thousand euro the previous year, marking an increase of 9.0%. The gross profit margin instead was substantially unchanged, rising from 44.3% in 2017 to 44.4% in 2018.

EBITDA for the year was a negative 1,328 thousand euro against a negative figure of 2,911 thousand euro in 2017.

2018 closed with a profit for the year of 258,234 thousand euro against as loss of -2,979 thousand euro in 2017.

As regards the various income statement components, we point out:

• the write-down of equity investments and financial receivables from subsidiaries for a total of 10,738 thousand euro, of which: (i) 1,735 thousand euro, write-down of the equity investment in SAES Coated Films S.p.A. after the impairment test; (ii) 8,278 thousand euro, write-down of the financial

receivable from SAES Nitinol S.r.l., which the Company waived in the early months of 2019 in order to increase the subsidiary's equity; (iii) 691 thousand euro, write-down of the equity investment in SAES Nitinol S.r.l.; (iv) 34 thousand euro, other write-downs of financial receivables according to the provisions of IFRS 9,

• the income from discontinued operations was 253,847 thousand euro: it was mostly represented by the gross capital gain (282,507 thousand euro) generated by the sale of the gas purification business, minus the costs of the transaction of 28,610 thousand euro (above all legal and consulting expenses, and the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, as well as interest, exchange rate differences and taxes). Lastly, this item includes some costs relating to the gas purification business between January 1 and June 25, 2018 (effective sale date) of around 50 thousand euro. As at December 31, 2017 the result from discontinued operations had been -653 thousand euro, due to the costs relating to the sale of the gas purification business paid in advance in the previous year.

The net financial position recorded a positive balance of 146,052 thousand euro as at December 31, 2018, against a negative balance of -30,106 thousand euro as at December 31, 2017: the considerable improvement results from the extraordinary purification sale transaction whose positive impact on the net financial position was 255,209 thousand euro, resulting from the amount received (284,340 thousand euro), minus the financial payables (521 thousand euro) related to the negative adjustment of the price calculated on the basis of the value of working capital, cash and tax credit on the closing date, as well as the accessory monetary charges of the extraordinary transaction (28,610 thousand euro).

Impairment testing of assets of the separate financial statements

Equity investments and property

In compliance with the international accounting standard IAS 36, on each reporting date, the Company assesses if there are elements that might lead one to believe that intangible assets with a finite useful life and property, plant and equipment and equity investments may have suffered an impairment loss.

Goodwill and intangible assets with an indefinite useful life undergo impairment testing at least once a year, or, more frequently, whenever there is any indication that the asset may be impaired.

With reference to the financial statements as at December 31, 2018, the impairment test was conducted on the basis of the most recent plan drawn up by top management for the period 2019-2021 and approved by the Company's Board of Directors on February 14, 2019, with a view to establishing if the equity investments had been recognised in the financial statements as at December 31, 2018 at a lower value than their recoverable amount. The testing conducted, based also on the best estimates made by Management as regards the company's operations, production profiles, market context and changes in the regulatory and legislative framework, was concentrated on the equity investments having a carrying amount higher than the pertinent amount of shareholders' equity.

What resulted from the impairment test was: (i) the write-down of the equity investment held by the Company in the subsidiary SAES Coated Films S.p.A. for 1,735 thousand euro; (ii) the write-down of the property leased to SAES Coated Films S.p.A. for 316 thousand euro by direct adjustment of the book value of the building in the financial statements. These write-downs were due to the transition currently underway in the offer from the traditional metallised products to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging; (iii) write-down of the entire equity investment in the subsidiary SAES Nitinol S.r.l. for 691 thousand euro and the financial receivable in its favour for 8,278 thousand euro.

Consolidated financial statements of SAES Getters S.p.A.

The companies included in the scope of consolidation according to the full consolidation method as at December 31, 2018 are the following:

Company	Currency	Share	% of Ow	•
		Capital	Direct	Indirect
Directly-controlled subsidiaries:				
SAES Getters/U.S.A., Inc.				
Colorado Springs, CO (USA) SAES Getters (Nanjing) Co., Ltd.	USD	33,000,000*	100.00	-
Shenzhen (P.R. of China)	USD	6,570,000	100.00	_
SAES Getters International Luxembourg S.A.				
Luxembourg (Luxembourg)	EUR	34,791,813	90.00	10.00**
SAES Getters Export, Corp. Wilmington, DE (USA)	lusp	2,500	100.00	_
Memry GmbH in liquidation	1000	2,000	.00.00	
Weil am Rhein (Germany)	EUR	330,000	100.00	-
E.T.C. S.r.I. in liquidation Lainate, MI (Italy)	EUR	75,000	100.00	_
SAES Nitinol S.r.l.	1001	73,000	100.00	-
Lainate, MI (Italy)	EUR	10,000	100.00	-
SAES Coated Films S.p.A. (formerly Metalyuoto S.p.A.)	EUR	50,000	100.00	
Roncello, MB & Lainate, MI (<u>Italy</u>) SAES Investments S.A.	COK	50,000	100.00	-
Luxembourg (Luxembourg)	EUR	40,000,000	100.00	-
Indirectly-controlled subsidiaries:				
Through SAES Getters/U.S.A., Inc.:				
Spectra-Mat, Inc.				
Watsonville, CA (USA)	USD	204,308	-	100.00
Through SAES Getters International Luxembourg S.A.:				
SAES Getters Korea Corporation				
Seoul (South Korea)	KRW	524,895,000	37.48	62.52
SAES Smart Materials, Inc.		47 500 000		400.00
New Hartford, NY (USA) Memry, Corporation	USD	17,500,000	-	100.00
Bethel, CT (USA) & Freiburg (Germany)	USD	30,000,000	-	100.00

^{*} The share capital of the subsidiary SAES Getters/U.S.A., Inc. was reduced from 45 million euro to 33 million euro at the end of October 2018.

The companies included in the scope of consolidation according to the equity method as at December 31, 2018 are the following:

Company	Currency	Share % of Own		mership	
		Capital	Direct	Mdirect	
Actuator Solutions GmbH					
Gunzenhausen (Germany)	EUR	2,000,000	-	50.00*	
Actuator Solutions Taiwan Co., Ltd. Taoyuan (Taiwan)	TWD	5,850,000	-	50.00**	
Actuator Solutions (Shenzhen) Co., Ltd. Shenzhen (P.R. of China)	EUR	760,000	-	50.00***	
SAES RIAL Vacuum S.r.l. Parma, PR (Italy)	EUR	200,000	49.00	-	
Flexterra, Inc. Stokie, IL (USA)	USD	(#) 33,358,815	_	(#) 46.73****	
Flexterra Taiwan Co., Ltd. Zhubei City (Taiwan)	TWD	5,000,000	-	46.73****	

^{* %} of indirect ownership held by SAES Nitinol S.r.l.

^{** %} of indirect ownership held by SAES Getters (Nanjing) Co., Ltd.

^{** %} of indirect ownership held by the joint venture Actuator Solutions GmbH (which holds a 100% interest in Actuator Solutions Taiwan Co., Ltd.).

^{*** %} indirect ownership held by the joint venture Actuator Solutions GmbH (which holds a 100% interest in Actuator Solutions (Shenzhen) Co., Ltd.).

^{**** %} of indirect ownership held by SAES Getters International Luxembourg S.A.

^{****** %} indirect ownership held by the joint venture Flexterra, Inc (which holds a 100% interest in Flexterra Taiwan Co., Ltd.).

(#) The interest of the SAES Group in the share capital of Flexterra Inc. went up from 33.79% as at December 31, 2017 to 46.73% as at December 31, 2018, as a result of the contributions made by the shareholders during the second part of the current year based on the original agreement signed at the end of 2016 (please refer to the following information as regards the contribution by SAES Getters International Luxembourg S.A.).

The consolidated profit and loss for 2018 is the following:

(thousands of euro)

(mousands of euro)	2018	2017 reclassified (*)
Total net sales	160,284	147,122
Cost of sales	(90,032)	(84,919)
Gross profit	70,252	62,203
R&D expenses	(10,988)	(12,797)
Selling expenses	(12,451)	(11,692)
G&A expenses	(32,471)	(28,625)
Write-down of trade receivables	(208)	43
Total operating expenses	(56,118)	(53,071)
Other income (expenses), net	932	(40)
Operating income (loss)	15,066	9,092
Interest and other financial income, net	(246)	(517)
Write-down of financial receivables and other financial assets	(9,283)	0
Income (loss) from equity method evalueted companies	(1,473)	(2,468)
Write-down of investments in equity method evalueted companies	(4,300)	0
Foreign exchange gains (losses), net	523	(1,156)
Income (loss) before taxes	287	4,951
Income taxes	(7,967)	(17,604)
Net income (loss) from continued operations	(7,680)	(12,653)
Income (loss) from discontinued operations	240,013	26,513
Net income (loss) before minority interest	232,333	13,860
Net income (loss) pertaining to minority interest	0	0
Net income (loss) pertaining to the Group	232,333	13,860

^(*) Some amounts shown in the column do not correspond to the 2017 financial statements because they reflect both the reclassifications related to the sale of the gas purification business (finalized on 25 June 2018 and identified as "major line of business"), in compliance with the IFRS 5 and the reclassifications in the consolidated statement of the write-down of the financial assets in accordance with IAS 1.

In 2018, the SAES Group achieved consolidated net revenues equal to 160.3 million euro, up by 8.9% compared to 147.1 million euro achieved in 2017. The exchange rate effect was slightly negative (-3.4%), mainly caused by the devaluation of the US dollar against the euro in the first few months of the year. Consolidated gross profit in 2018 was 70.3 million euro, compared to 62.2 million euro in 2017, while consolidated operating income was 15.1 million euro, also significantly up (+65.7%) compared to an operating income of 9.1 million euro recorded last year. Consolidated EBITDA in 2018 was 26.3 million euro, significantly up (+43.5%) compared to 18.3 million euro in 2017. The income from discontinued operations was 240,013 thousand euro and was mostly represented by the gross capital gain (262,439 thousand euro) generated by the sale of the gas purification business, minus the costs of the transaction of 35,220 thousand euro (above all legal and consulting expenses, and the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, as well as interest, exchange rate differences and taxes). Lastly, this item includes the net profit generated by the gas purification business between January 1 and June 25, 2018 (effective sale date) of 12,794 thousand euro. As at December 31, 2017, the income from discontinued operations was 26,513 thousand euro, substantially coinciding with the net income of the purification segment in 2017.

Consolidated net income in 2018 was 232.3 million euro compared to 2017 consolidated net income of 13.9 million euro.

Impairment testing of assets of the consolidated financial statements

Goodwill

Goodwill recognised in the financial statements as at December 31, 2018 amounted to 37,747 thousand euro. Pursuant to IAS 36, goodwill is not amortised but rather is tested for impairment annually or more often should any specific event take place or circumstance arise that may lead to the assumption that an impairment loss has been incurred.

For the purpose of testing, goodwill is allocated to a Cash Generating Unit (CGU) or groups of CGUs, in accordance with the thresholds established by IFRS 8, according to which the latter may not be larger than an operating segment.

More specifically, the CGUs identified by the SAES Group for impairment testing coincide with the following operating segments:

- Industrial Applications;
- Shape Memory Alloys;
- Solutions for Advanced Packaging.

The Board of Directors approved the impairment tests on March 13, 2019. They entail estimating the recoverable amount of each Cash Generating Unit (CGU) and to compare this to the net carrying amount of the property, plant and equipment and intangible assets allocated to the same CGU, including goodwill. The recoverable amount was verified by calculating the value in use, which corresponds to the present value of the future cash flows which are expected to be associated to each Cash Generating Unit on the basis of the most recent three-year plays drawn up by top management for 2019-2021 and approved by the Board of Directors on February 14, 2019, based on the medium-term forecasts prepared by Management and based on the terminal value.

Emerging from the result of the impairment testing was an impairment on the CGU Solutions for Advanced Packaging that totalled 3,100 thousand euro, which led to the total cancellation of the goodwill arising from acquisition of SAES Coated Films S.p.A., which amounted to 2,409 thousand euro, and the write-off of other tangible and intangible assets totalling 691 thousand euro.

As required by IAS 36, the surplus book value of the tangible and intangible assets compared to the recoverable value of the CGU Solutions for Advanced Packaging was recognised on the income statement under the item "Write-down of non-current assets", under operating expenses.

The estimated recoverable amount of the various Cash Generating Units required discretion and the use of estimates by Management. The Group cannot therefore ensure that no impairment losses will emerge in the future. In fact, a number of different factors, also related to changes in the market and in demand, could require the value of the assets in future periods to be redetermined. The circumstances and the events that could cause a further assessment of the existence of impairment will be constantly monitored by the Group.

Equity investments

In compliance with the requirements of international accounting standard IAS 36, the equity investments measured with the equity method underwent impairment testing in order to verify that the equity investments are recognised in the consolidated financial statements as at December 31, 2018 at an amount not higher than the recoverable amount: Actuator Solutions, SAES RIAL Vacuum S.r.l. and Flexterra.

The impairment analysis revealed an impairment of the consolidated equity investment in the joint venture Flexterra of 4,300 thousand euro. The value in use of the investment was calculated using the Free Operating Cash Flow method, starting from the five-year plans drawn up by top management and approved by the Board of Directors of Flexterra, Inc. on February 20, 2019, which introduced additional prudence elements, especially in connection with the speed of implementing the plan. The write-down was recorded in the income statement under the item "Write-down of investments accounted for using the equity method".

Write-down of financial receivables and other financial assets

The item is mainly made up of the write-down of the financial loan that the Group granted to Actuator Solutions GmbH (9,139 thousand euro) against interest-bearing loans that SAES Nitinol S.r.l. granted to the joint venture during the previous years (from 2014 to 2018). Following the restructuring of the Taiwan subsidiary, the shareholders' equity of Actuator Solutions GmbH dropped considerably and became negative, and in order for it to continue to operate, payment of the interest accrued in the period 2016-2018 on the loans granted by SAES was deferred to year-end 2019, and the total amount of the financial receivable (both principal and interest) was deferred. Management therefore decided to totally write down the financial receivable in spite of the business progress made by Actuator Solutions, since the growth prospects pointed out in the five-year plan, approved by the Supervisory Committee of the same company, show significant risk elements, above all linked to the innovativeness of the products

and to the extent of the potential customers, with the consequent forecast of cash flows insufficient to recover the financial receivable SAES granted to Actuator Solutions.

Non-financial statement

The Board of Statutory Auditors supervised the meeting of the obligations set by the legislation on drawing up and publishing the consolidated non-financial statement - 2018 Sustainability Report prepared by the Company and the adequacy of the procedures, processes and structures that oversee the production, reporting, measurement and representation of the results and information of this nature. To this regard, the control body examined the report issued by the independent auditors on March 28, 2019, pursuant to Article 3, paragraph 10, Italian Legislative Decree 254/2016 and Article 5 of Consob Regulation 20267 that, on the basis of the work performed, concluded that it did not receive elements leading it to believe that the Consolidated non-financial statement was not drawn up, in all significant aspects, in compliance with the requirements of Articles 3 and 4 of the cited legislative decree and with the "Global Reporting Initiative Sustainability Reporting Standards".

Lastly, the Board acknowledges the proposal of the Board of Directors to distribute a part of the net income for the year equal to 258,233,603.22 euro, assigning:

- o 1,022,300.28 euro to savings shareholders only as full recognition of the privileged dividend for 2017, by allocating them a dividend of 0.138549 euro per share;
- o 5,287,710.22 to savings shares only allocating them a dividend of 0.716626 euro per share (including an additional 0.016626 euro and 0.138549 euro as full recognition of the privileged dividend for 2018) per share;
- o to distribute a part of the net income for the year corresponding to 10,269,945.00 euro to ordinary shares, allocating them a dividend of 0.700000 euro per share.

In brief, therefore, we propose the distribution of a total dividend of:

For a total maximum amount of	16,579,955.50
- 0.700000 euro for each of the 14,671,350 ordinary shares	10,269,945.00
- 0.855175 euro for each of the 7,378,619 savings shares	6,310,010.50

On the basis of the above and in consideration of the results of the activities we carried out, we propose to the Shareholders' Meeting to approve the consolidated and separate financial statements for the year ended December 31, 2018, as drawn up by the Directors.

Lainate, March 28, 2019

Board of Statutory Auditors

Mr. Vincenzo Donnamaria

Mr. Maurizio Civardi

Ms. Sara Anita Speranza

Report of the Independent Auditors on the consolidated financial statements



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INDEPENDENT AUDITOR'S REPORT PURSUANT TO ARTICLE 14 OF LEGISLATIVE DECREE No. 39 OF JANUARY 27, 2010 AND ARTICLE 10 OF THE EU REGULATION 537/2014

To the Shareholders of Saes Getters S.p.A.

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Opinion

We have audited the consolidated financial statements of Saes Getters S.p.A. and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2018, and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 2018, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/05.

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of Saes Getters S.p.A. (the "Company") in accordance with the ethical requirements applicable under Italian law to the audit of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment test on goodwill, tangible and other intangible fixed assets and on investments accounted for using the equity method

Description of the key audit matter The Group's consolidated financial statements include goodwill equal to Euro 37,747 thousand, other intangible fixed assets equal to Euro 7,543 thousand, tangible fixed assets equal to Euro 53,832 thousand and investments accounted for using the equity method equal to Euro 8,006 thousand.

The goodwill has been attributed to the "cash generating units" (CGUs) related to the operating sectors and, following the write-off of the amount allocated to the CGU Solutions for Advance Packaging carried out as a result of the impairment test as at December 31, 2018, is composed as follows:

- Industrial Applications (Euro 945 thousand);
- Shape Memory Alloys (Euro 36,802 thousand).

The *impairment test* was carried out by comparing the recoverable value of the CGUs - determined according to the value in use method - and the book value, which also includes the other tangible and intangible assets allocated to the CGUs. The Directors also performed a second level *impairment test*, including assets not allocated to any business sector.

The Company estimated the recoverable amount by determining the present value of the cash flows expected based on the explicit period of three years, corresponding to the business plan 2019–2021 approved by the Company's Borad of Directors on Febbruay 14, 2019, for the CGUs Industrial Applications and Shape Memory Alloys. Regarding the Solutions for Advanced Packaging CGU, whose operating sector was more recently introduced than the others, the explicit forecast period was extended by an additional two years. The Directors have also determined a *terminal value*, assuming a g-rate of zero and a time horizon deemed representative of the estimated duration specific to the various businesses

As a result of the *impairment test*, as previously mentioned, the Directors reported impairment losses on the Solutions for Advanced Packaging CGU for a total amount of Euro 3,100 thousand, allocated, respectively, for Euro 2,409 thousand to goodwill, Euro 294 thousand to other intangible assets and Euro 397 thousand to tangible assets. In addition, an impairment loss was recognised on the investment on Flexterra Inc. for Euro 4,300 thousand. Finally, the Directors have proceeded to a full write down of the financial receivables for an amount of Euro 9,139 thousand toward Actuator Solutions Gmbh, with reference to which the value of the investment booked is already equal to zero.

The valuation process made by the Directors for carrying out the *impairment* test is complex and based on assumptions concerning, among others, the forecast of expected cash flows of each of the above mentioned companies and the determination of an appropriate discount rate (WACC) and long-term growth rate (g-rate).

The most important key variables in determining the projections of the future cash flows are:

- sales forecasts by Business Area/product family/client;
- · prices and margins trend;
- cost of sales (including cost of materials) by product family;
- production costs, operating expenses and investment plan;
- discount rates.

Future expectations and market conditions influence these assumptions.

Considering the relevance of these assets amounts recognized in the consolidated financial statements, the subjectivity of the estimates related to the determination of cash flows of the CGU and the key variables of the impairment model, we considered the related *impairment test* as a key audit matter of Saes Groups's consolidated financial statements.

Paragraphs 14 "Property, plan and equipment", 15 "Intangible assets" and 16 "Investments using the equity method" state the disclosures on the *impairment test and* the related results, including a sensitivity analysis performed by the Directors, which illustrates the effects that may occur on the recoverable amount resulting from the changes in certain key assumptions used for the impairment test.

Audit procedures performed

As part of our audit, among other procedures, we have carried out the following, even with the support of experts:

- review of the methods adopted by the Directors for the determination of the recoverable value of the CGUs and analyses of the methods and assumptions used on the impairment test;
- understand the methodology used by the Directors on the impairment test and examination of its compliance with the referenced accounting principles;
- understand the Group's relevant internal controls on the impairment test process;
- analysis of the reasonableness of the key assumptions underlying the cash flow calculation, also through information obtained from Management;
- analysis of the actual figures compared to the plans in order to assess the nature of the deviations and the reliability of the planning process;
- analysis of the reasonableness of the discount rate (WACC), long-term growth rate (g-rate) and assumptions used for the terminal value (TV) calculation;
- review of the mathematical accuracy of the model used to estimate the value in use of the CGUs;
- review of the correct calculation of the book value of the CGUs;
- · review of the Directors' sensitivity analysis.

Further, we also examined the adequacy and compliance of the disclosure provided by the Group on the impairment test based on IAS 36 disclosure requirements.

Discontinued operations - sale of the gas purification business

Description of the key audit matter

On June 25, 2018, the Group sold the gas purification business at a sale price equal to USD 353.6 million.

The income realized from the difference between the selling price and the carrying amount of the net assets sold, net of the transaction costs of the sale, and the net income realised from the purification business until the selling date, has been classified in the income statement under "Income (loss) deriving from discontinued operations" for an amount equal to Euro 240 million, in accordance with IFRS 5.

Considering the relevance of the transaction, we considered that such transaction and the related disclosure of the financial statements constitute a key audit matter of the Group's consolidated financial statements.

Paragraph 11, "Income (loss) from discontinued operations," states the disclosure on the sale of the gas purification business and its related effect on the consolidated financial statements.

Audit procedures performed

As part of our audit, among other procedures, we have carried out the following:

- analysis of the sales agreement and the Company documentation available on the transaction in question;
- verification of the existence of the conditions established by IFRS 5 for the purposes of recording the transaction;
- examination of the criteria used by the Directors to determine the income and charges relating to the sale of the gas purification business and the related supporting documentation;
- review of the presentation of the operation in the financial statemets and the disclosure in the explanatory notes.

Responsibilities of the Directors and the Board of Statutory Auditors for the Consolidated Financial Statements

The Directors are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/05, and, within the terms established by law, for such internal control as the Directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they have identified the existence of the conditions for the liquidation of the Company or the termination of the business or have no realistic alternatives to such choices.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether
 due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit
 evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a
 material misstatement resulting from fraud is higher than for one resulting from error, as fraud may
 involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
 are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence applicable in Italy, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report.

Other information communicated pursuant to art. 10 of the EU Regulation 537/2014

The Shareholders' Meeting of Saes Getters S.p.A. has appointed us on April 23, 2013 as auditors of the Company for the years from December 31, 2013 to December 31, 2021.

We declare that we have not provided prohibited non-audit services referred to in art. 5 (1) of EU Regulation 537/2014 and that we have remained independent of the Company in conducting the audit.

We confirm that the opinion on the financial statements expressed in this report is consistent with the additional report to the Board of Statutory Auditors, in its role of Audit Committee, referred to in art. 11 of the said Regulation.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinion pursuant to art. 14 paragraph 2 (e) of Legislative Decree 39/10 and art. 123-bis, paragraph 4, of Legislative Decree 58/98

The Directors of Saes Getters S.p.A. are responsible for the preparation of the report on operations and the report on corporate governance and the ownership structure of Saes Getters as at December 31, 2018, including their consistency with the related consolidated financial statements and their compliance with the law.

We have carried out the procedures set forth in the Auditing Standard (SA Italia) n. 720B in order to express an opinion on the consistency of the report on operations and some specific information contained in the report on corporate governance and the ownership structure set forth in art. 123-bis, n. 4 of Legislative Decree 58/98, with the consolidated financial statements of Saes Getters as at December 31, 2018 and on their compliance with the law, as well as to make a statement about any material misstatement.

In our opinion, the above-mentioned report on operations and some specific information contained in the report on corporate governance and the ownership structure are consistent with the consolidated financial statements of Saes Getters as at December 31, 2018 and are prepared in accordance with the law.

With reference to the statement referred to in art. 14, paragraph 2 (e), of Legislative Decree 39/10, made on the basis of the knowledge and understanding of the Group and of the related context acquired during the audit, we have nothing to report.

Statement pursuant to art. 4 of the Consob Regulation for the implementation of Legislative Decree 30 December 2016, no. 254

The Directors of Saes Getters S.p.A. are responsible for the preparation of the non-financial statement pursuant to Legislative Decree 30 December 2016, no. 254.

We verified the approval by the Directors of the non-financial statement.

Deloitte.

Pursuant to art. 3, paragraph 10 of Legislative Decree 30 December 2016, no. 254, this statement is subject of a separate attestation issued by us .

DELOITTE & TOUCHE S.p.A.

Giovanni Gasperini

Partner

Milan, Italy March 28, 2019

This report has been translated into the English language solely for the convenience of international readers.

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Report on Operations of SAES Getters S.p.A.

Financial highlights of SAES Getters S.p.A.

Income Statement figures		2018	2017	Difference	Difference
N - 0.1			(7)		%
Net Sales - Industrial Applications		47.032	44.222	2.810	6,4%
- Shape Memory Alloys		9.148	6.936	2.810	31,9%
- Solutions for Advanced Packaging (1)	0	0.930	0	n.a.
- Business Development	1)	1.025	1.529	(504)	-33,0%
Total	_	57.205	52.687	4.518	8,6%
CDOCC DDOCET (2)					
GROSS PROFIT (2) - Industrial Applications		22.764	21.898	866	4,0%
- Shape Memory Alloys		2.828	1.211	1.617	133,5%
- Solutions for Advanced Packaging (1)	(171)	0	(171)	n.a.
- Business Development & Corporate		(171)	207	(220)	-106,3%
Total		25.408	23.316	2.092	9,0%
1044	% on sales	44,4%	44,3%	2.052	2,0 /0
EBITDA (4)		(1.328)	(2.911)	1.583	54,4%
	% on sales	-2,3%	-5,5%		
OPERATING INCOME (LOSS)		(6.049)	(7.872)	1.823	23,2%
	% on sales	-10,6%	-14,9%		
NET INCOME (LOSS)		258.234	(2.979)	261,213	n.a.
()	% on sales	451,4%	-5,7%		
Balance sheet and financial figures		2018	2017	Difference	Difference
Datance sheet and maneral rightes		2010	reclassified	Difference	%
Tangible fixed assets		34.180	29.303	4.877	16,6%
Group shareholders' equity		303.043	60.209	242.834	n.a.
Net financial position		146.052	(30.106)	176.157	n.a.
Other information		2018	2017	Difference	Difference
			(7)		0/0
Cash flow from operating activities		(1.437)	(291)	(1.146)	n.a.
Research and development expenses		7.610	9.163	(1.553)	-16,9%
Number of employees as at December	31 (5)	449	450	(1)	-0,2%
Personnel cost (6)	_	33.809	30.477	3.332	10,9%
Disbursement for acquisition of tangil	ole assets	9.321	3.635	5.686	156,4%

- (1) Following the acquisition of the control of Metalvuoto S.p.A., a significant player in the advanced packaging field, occurred at the end of 2016, starting from January 1, 2017 a third Business Unit named "Solutions for Advanced Packaging" was established, in order to ensure a better information transparency.
- (2) This item is calculated as the difference between the net sales recorded and the industrial costs directly and indirectly attributable to the products sold.

(thousands of Euro)		
	2018	2017
Net Sales	57,205	52,687
Raw materials	(10,360)	(10,981)
Direct labour	(7,456)	(6,763)
Manufacturing overhead	(13,769)	(13,243)
Increase (decrease) in work in progress and finished goods	(212)	1,616
Cost of sales	(31.797)	(29.371)

(3) This item includes costs that cannot be directly attributed or allocated in a reasonable way to the Business Units, but which refer to the Company as a whole.

Gross profit

25,40

23,316

(4) EBITDA is not deemed as an accounting measure under International Financial Reporting Standards (IFRSs); however, we believe that EBITDA is an important parameter for measuring the Company's performance and therefore it is presented as an alternative indicator. Since its calculation is not regulated by applicable accounting standards, the method applied by the Company may not be in line with those adopted by other Companies. EBITDA (Earnings Before Interest, Tax, Depreciation and Amortisation) is calculated as "Earnings before interest, taxes, write-downs, depreciation and amortisation".

A reconstruction of EBITDA is provided below, starting from Operating income.

(thousands of Euro)

		2018	2017
	Operating income	(6,049)	(7,872)
Depreciation and amortization		3,921	4,021
Write-down of assets		640	941
Bad debt provision accrual (release)		160	(2)
	EBITDA	(1,328)	(2,911)
	% on sales	-2.3%	-5.5%

- (5) As at December 31, 2018 this item includes:
- employees for 427 units (439 units as at December 31, 2017);
- the personnel working for the Company with contract types other than employment agreements, equal to 22 units (11 units as at December 31, 2017).
- (6) As at December 31, 2018 the severance costs, included in personnel costs, were 2,699 thousand euro (85 thousand euro in 2018). In 2017 the use of social security provisions at the Avezzano plant, suspended in June 2017, led to a reduction in labour costs of 371 thousand euro.
- (7) The income statement balances for 2017, included for comparative purposes, do not coincide with the figures shown in the 2017 Annual Financial Report as they reflect the impact of the sale of the gas purification business, finalised on June 25, 2018 (identified as a "major line of business"), in accordance with the provisions of IFRS 5. See Note 12 in this regard.

Report on Operations

The organisational structure of SAES Getters S.p.A., as Parent Company (hereinafter also referred to as the Company), envisages three Business Units: Industrial Applications, Shape Memory Alloys (SMA) and Solutions for Advanced Packaging. The corporate costs, that means those expenses that cannot be directly attributed or allocated in a reasonable way to the business units, but which refer to the Company as a whole, and the costs related to the basic research and development projects undertaken to achieve diversification into innovative businesses (Business Development Unit) are shown separately from the three Business Units.

The following table illustrates the Group's business structure:

Industrial Applications Business Unit					
Security & Defense	Getters and metal dispensers for electronic vacuum devices				
Electronic Devices	Getters for microelectronic, micromechanical systems (MEMS) and sensors				
Healthcare Diagnostics	Getters for X-ray tubes used in image diagnostic systems				
Thermal Insulation	Products for thermal insulation				
Getters & Dispensers for Lamps	Getters and metal dispensers used in discharge lamps and fluorescent lamps				
Solutions for Vacuum Systems	Pumps for vacuum systems				
Sintered Components for Electronic Devices & Lasers	Cathodes and materials for thermal dissipation in electronic tubes and lasers				
Systems for Gas Purification & Handling	Gas purifier systems for semiconductor industry and other industries				
Shape Memory Alloys (SMA) Business	s Unit				
Nitinol for Medical Devices	Nitinol raw material and components for the biomedical sector				
SMAs for Thermal & Electro Mechanical Devices	Shape Memory Alloys actuator devices for the industrial sector (domotics, white goods industry, consumer electronics and automotive sector)				
Solutions for Advanced Packaging					
Solutions for Advanced Packaging	Advanced plastic films for the food packaging sector				
Business Development Unit					
Organic Electronics	Materials and components for organic electronics applications				

The subsidiary SAES Pure Gas, Inc., which specialises in the sale of advanced gas purification systems for the semiconductor industry and other industries that use ultra-pure gas in their processes, was sold on 25 June 2018 (for further details, please refer to the next paragraph of this Report on operations). Note, therefore, that the Business Systems for Gas Purification & Handling is now residual and only includes the sale of raw materials and getter components used to build purifiers.

Note that at the end of June 2018, following the finalisation of the sale of the gas purification business, the costs and the revenues in 2017 relating to the business sold, together with the consulting costs related to said extraordinary transaction, were classified in the appropriate item of the income statement "Income (loss) from discontinued operations".

These effects are detailed in Note 1. in the paragraph entitled "Reclassification of 2017 balances".

Net revenues for 2018 were 57,205 thousand euro, up against 2017 (+8.6%: net of the negative exchange rate effect of -1.8%, organic growth would have been +10.5%), due above all to a significant increase of the Solutions for Vacuum Systems (+40.9%), SMA for Thermal & Electro Mechanical Devices (+32.5%) and Security & Defence (+30.9%) businesses.

Note that the <u>Business Systems for Gas Purification & Handling</u> includes the sale of raw materials and getter components for purifiers mainly addressed to the semiconductor industry. It should be noted that the SAES Group sold the business relating to the manufacture and sale of advanced purification systems to Entegris, Inc. on 25 June 2018; this transaction, however, did not regard the production line of SAES Getters S.p.A. for the manufacture of getter material for the purification market, situated in Avezzano, which in future will meet the procurement needs of Entegris, as per a specific 36-month supply agreement.

Gross industrial profit was 25,408 thousand euro in 2018 against 23,316 thousand euro the previous year, marking an increase of +9.0%, corresponding to 2,092 thousand euro, due to an increase in volumes, partly offset by the impact of negative exchange rates. The gross profit margin was substantially unchanged, rising from +44.3% in 2017 to +44.4% in 2018.

2018 recorded an **operating loss** of -6,049 thousand euro, against -7,872 thousand euro the previous year: the reduction of the loss was substantially due to the improvement of the gross profit.

EBITDA for the year was a negative -1,328 thousand euro against a negative figure of -2,911 thousand euro in 2017.

Dividends, net financial income and net gains on exchange rates totalled 22,579 thousand euro in 2018, compared to 21,653 thousand euro in the previous year. The Company also wrote down equity investments and financial receivables due from subsidiaries totalling -10,738 thousand euro, against -5,357 thousand euro in 2017.

For further details, refer to Notes 8 and 10.

2018 therefore closed with an **EBIT** of 5,791 thousand euro, down against 8,425 thousand in the previous year.

Income taxes for the year recorded a balance of 1,404 thousand euro against a balance of 10,751 thousand euro in 2017. The figure for 2017 including a write-down of 10,770 thousand euro, of deferred tax assets on past tax losses of the Company, accrued between tax years 2009-2013, made on the basis of updated management estimates as to the recoverability of the same, in the light of the assumptions of the three year plan 2018-2020. For further details, refer to Notes 11 and 16.

The **income from discontinued operations** was 253,847 thousand euro and was mostly represented by the gross capital gain (282,507 thousand euro) generated by the sale of the gas purification business, minus the costs of the transaction of 28,610 thousand euro (above all legal and consulting expenses, and the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, as well as interest, exchange rate differences and taxes). Lastly, this item includes some costs relating to the gas purification business between January 1 and June 25, 2018 (effective sale date) of around 50 thousand euro.

As at December 31, 2017 the Income (loss) from discontinued operations had been -653 thousand euro, due to the costs relating to the sale of the gas purification business paid in advance in the previous year.

2018 therefore closed with a **profit for the year** of 258,234 thousand euro against as loss of -2,979 thousand euro in 2017.

The **net financial position** recorded a positive balance of 146,052 thousand euro as at December 31, 2018, against a negative balance of -30,106 thousand euro as at December 31, 2017.

Compared to December 31, 2017, the significant improvement of the net financial position (+176,157 thousand euro) is due to the extraordinary sale transaction of the purification business (the overall impact of this transaction on the net financial position was +255,209 thousand euro, details of which can be found in the paragraph below).

With regard to said extraordinary transaction, the **positive impact on the net financial position** was **255,209 thousand euro**, resulting from the amount received (284,340 thousand euro), minus the financial payables (521 thousand euro) correlated to the negative adjustment of the price calculated on the basis of the value of working capital, cash and tax credit¹ on the closing date, as well as the accessory monetary charges of the extraordinary transaction (28,610 thousand euro).

¹ The value of the adjustment could differ slightly depending on the effective value of the tax credit of the companies sold SAES Getters USA, Inc. and SAES Pure Gas, Inc. resulting from the Tax Return Declaration relating to January 1 - June 24, 2018, to be submitted by the end of the first half of 2019.

Significant events in 2018

The most important event that characterised 2018 was the closing of the **sale** of the **gas purification business** (Systems for Gas Purification & Handling) belonging to the Industrial Applications Business Unit of SAES to the US company Entegris, Inc.

The sale, finalised on 25 June 2018, regarded the investment in the US company SAES Getters USA, Inc., the commercial structure of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd., which provides commercial support to the gas purification business in the Asian market from its head office in Shanghai and the assets of the purification laboratory of SAES Getters S.p.A. situated in Lainate, the transfer of which was finalised at the end of October 2018.

The transaction is part of a strategy to focus on the strategic sectors in which SAES has made the most investment in recent years.

The effective sale price for the Group was 353.6 million USD, namely the contractual price agreed as 355 million USD, corrected following a negative adjustment of 1.4 million USD, calculated on the basis of the value of working capital, cash and tax credit on the closing date.

To enable the transaction to take place, on June 15, 2018 SAES Getters USA, Inc., already the controlling company of SAES Pure Gas, Inc., sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly-incorporated company called SAES Colorado, Inc., subsequently renamed SAES Getters/USA, Inc., which continues to belong to the SAES Group. On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling company of the investment in SAES Pure Gas, Inc., was sold to Entegris, together with the business unit based in Shanghai and operating in the purification business of SAES Getters (Nanjing) Co., Ltd., represented by personnel, assets and inventory.

To complete the transaction, the above-cited assets of the purification laboratory based in Lainate were sold, in various tranches, to Entegris, while the laboratory continued to operate for four months from the closing date exclusively for Entegris, following a specific service agreement. Lastly, at the production plant of Avezzano, SAES Getters S.p.A. maintains a production line of getter material for the purification market, also to meet the procurement needs of Entegris, as per a specific supply agreement, which will last 36 months from the closing date of the sale.

On May 28, 2018 a credit facility for a maximum of 50 million USD was set in place with Banca Intesa Sanpaolo S.p.A. The equivalent of 38.5 million euro was drawn down from the same on June 12 for the capitalisation of the newly-incorporated SAES Colorado, Inc. The facility was entirely repaid and extinguished on June 25, following the collection by Entegris.

The transaction entailed bank fees and interest totalling 229 thousand euro.

The carrying amount in euro of the net assets sold was 7 million euro. The net capital gains generated by the transaction were 253.9 million euro, represented by a gross gain of 282.5 million euro, less the costs relating to the transaction (above all legal fees, consulting costs, incentives and fees, interest, exchange rate differences and taxes) corresponding to around 28.6² million euro. This net capital gain, together with the costs relating to the purification business sold up until June 25, 2018 (corresponding to 50 thousand euro) were classified in the income statement item "Profit (loss) from discontinued transactions" (253.8 million euro).

The following are other significant events that occurred in 2018.

On February 26, 2018, SAES Getters S.p.A. exercised a call option for the **purchase of the entire share capital of Metalvuoto S.p.A.** (subsequently renamed SAES Coated Films S.p.A.), 70% of which was already in its possession. Following this transaction, SAES acquired the remaining 30% previously held by the minority shareholder Mirante S.r.l., for a consideration of 75 thousand euro. Note that the consolidated financial statements of the SAES Group as at December 31, 2017 already included a financial payable of the same

² This amount also includes a cost of 4.3 million euro relating to the derivative contract with a currency option (notional amount of 330 million USD plus a fixing at 1.1880 USD/EUR) signed with Banca Intesa Sanpaolo S.p.A. to cover exchange rate risk on the payment in dollars from Entegris.

amount, related to the value of the above option. The acquisition of the entire share capital of Metalvuoto S.p.A. enables SAES to have complete strategic autonomy in the advanced packaging business, above all for applications in the food industry. Following the exercise of the call option by SAES, Ing. Giovanni Ronchi, the owner of Mirante S.r.l. and founder of Metalvuoto S.p.A., whose share capital in Metalvuoto S.p.A. had been bought out, resigned as Chairman on the same date. See the Note 15.

On March 14, 2018 SAES Getters S.p.A. approved the **partial waiver of the financial receivables** claimed by the same **towards SAES Nitinol S.r.l.** for an amount of 660 thousand euro, equal to the difference between the total loss (-800 thousand euro) recorded by the subsidiary in 2017 and that estimated for the same year at the beginning of the year (-140 thousand euro) and already covered by the payment made on March 15, 2017.

On April 3, 2018, in order to protect the results and the profitability from the fluctuation of the exchange rates, **contracts for the forward sale** of US dollars were signed for a total notional value of 2.7 million USD; these contracts, whose term was gradually extended to the end of this year, envisaged an average forward exchange rate equal to 1.2416 against the euro. Similar contracts, for a notional value of 207 million JPY, were underwritten at the same date, with an average forward exchange rate equal to 131.0222 against the euro.

On April 6, 2018, the **purchase** by SAES Getters S.p.A. of the **building** that hosts the registered office of **SAES Coated Films S.p.A.** and where the production of the same takes place, was finalised. The purchase price was 3.5 million euro.

On June 1, 2018, **SAES Coated Films S.p.A.** opened a **local unit in Lainate**, at the headquarters of SAES Getters S.p.A.

On July 31, 2018 the residual amount of the **long-term loan underwritten with Banca Intesa Sanpaolo S.p.A.** in mid-2015 was repaid in advance (initial nominal value of 8 million euro). No penalty was paid for said transaction. At the same time, the Interest Rate Swap contract on said loan was extinguished.

On August 1, the residual amount of the **long-term loan underwritten with Unicredit S.p.A. was repaid in advance** (initial nominal value of 7 million euro). No penalty was paid for said transaction.

On October 1, 2018, the Shareholders' Meeting of SAES Getters S.p.A. approved, to the intents and purposes of article 114-bis of the TUF [Consolidated Finance Law], the adoption of an incentive plan based on phantom shares, called "2018 Phantom Share Plan", addressed to certain executive directors and strategic executives. The plan is based on the free assignment to beneficiaries of a specific number of phantom shares which, under the terms and conditions of the plan, give them the right to receive a cash incentive, dependent on the increase in the stock market price of the shares on a date in which certain pre-established events are due to take place, with respect to the assignment value. The events that may trigger the payment of the incentive are, for example: change in control of the Company; failure to renew the position of board director at the end of a term in office; revocation from the position of board director or substantial change in the relative proxies or in the role without just cause; dismissal for just cause; resignation for an objective justified reason (only for Strategic Executives); reaching the age of retirement; permanent invalidity; death; delisting. The plan seeks to remunerate the beneficiaries with relation to the Company's capitalisation, to enhance retention and to better align performance with the interests of shareholders and the Company. On October 17, 2018 the Board of Directors of SAES Getters S.p.A. launched the plan, establishing the names of the plan's beneficiaries on the proposal of the Remuneration and Appointments Committee, and establishing the number of phantom shares to be assigned free of charge to each beneficiary. In accordance with the criteria established by the plan's regulations, the assignment of each phantom share has been established as 16.451 euro, corresponding to the weighted average of the official prices of the Company's ordinary shares recorded on the MTA (electronic equity market) organised and managed by Borsa Italiana S.p.A. on trading days that fall in the 36 (thirty-six) months prior to the date of October 17, 2018.

On October 23, 2018 **SAES Investments S.A.** was formally incorporated, based in Luxembourg, wholly owned by SAES Getters S.p.A. The purpose of the company, with a share capital of 40 million euro, is to manage the

liquidity resulting from the sale of the purification business, with the objective of maintaining capital for any future uses.

Research, Development and Innovation activities

Research and development expenses in 2018 totalled 7,610 thousand euro (13.3% of net revenues), compared to 9,163 thousand euro the previous year (17.4% of revenues).

In 2018, the **organic materials laboratory** was highly focused on **improving** the **Oxaqua**[®] **coating**. This activity was successfully concluded with the registration of a patent application, which has already obtained the first positive responses. The new coating, which is resistant to the thermal treatments typical of the food industry, namely sterilization and pasteurization, and which performs markedly better as a barrier against humidity, was also developed with the assistance of third parties and is based on very innovative technologies, such as emulsification, which enables polymeric microspheres, which can also be used in other sectors of application, in addition to the food industry.

The laboratory also launched a partnership with the University of Salerno, with which it is working on two projects to **develop crystalline polymers** (PS and PPO) which have interesting properties both as absorbents and as materials able to release active antimicrobial properties, which may be used in packaging.

The laboratory then worked on developing various configurations of a **coating to absorb ethylene** and on a formulation able to guarantee integration in rigid trays for a type of application known on the market as the "fourth range", in which the management of the ethylene enables specific degradation mechanisms to be resolved, together with problems linked to excessive gas pressure, with the consequent loss of the seal of containers.

Lastly, note that the definition of a **pilot line** has been completed, which will enable different types of coating to be tested and to fine-tune innovative thin-film deposition technologies. The line, which has already been ordered, will be installed in 2019 and will enable the development of products for flexible packaging to be developed, operating at the same conditions as an industrial production line, but adopting flexible films with smaller size brackets.

The development of an **antifog coating for automotive applications** is also worth noting, to avoid the cameras for assisted parking fogging up. A coating based on zeolites was fine-tuned, and preparatory activities are underway for a patent application.

The **metallurgic laboratory** focused on several projects relating to Shape Memory Alloys (SMA) and on an important area of research on bio-resorbable materials. More specifically, **as regards SMA**, the laboratory continued its work on researching **new alloys, both at high transformation temperatures, and at zero hysteresis**. These are very complex research activities that require a very high number of tests, both in the laboratory and on pilot lines, the results of which are due in the first half of 2019.

Lastly, in 2018, the metallurgic laboratory made **SMA alloy thin-film deposition tests**, using the thin-film deposition machine that the laboratory owns. Initial tests enabled new compositions to be identified. In the coming months, work will continue, also in collaboration with external entities.

Again in the Shape Memory Alloys sector, work to improve the industrial processes for the production of shape memory materials continued successfully. Thanks to these activities, we were able to develop an **extremely pure or "clean melt" material, which can be used in mobile phone cameras**. The material guarantees performance that the other materials available on the market are unable to provide and gives SAES a competitive advantage in a business which, according to the latest data, will develop rapidly in 2019.

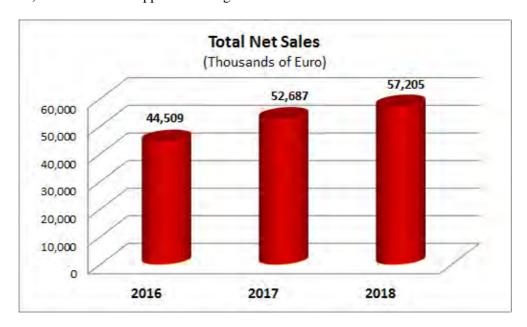
As regards **bio-resorbable alloys**, work was conducted in collaboration with other Italian and North American research institutes. Efforts have focused on alloys with a FeMn base and the most interesting field of application

appears to be orthopaedics. At present, interviews are underway with cardiologists and orthopaedics, to gain a better understanding of the opportunities and the problems of these interesting materials.

Lastly, please note that all of the basic research costs incurred by the Company are charged directly to the income statement in the period in which they occur, as they do not qualify for capitalization.

Sales and economic results of 2018

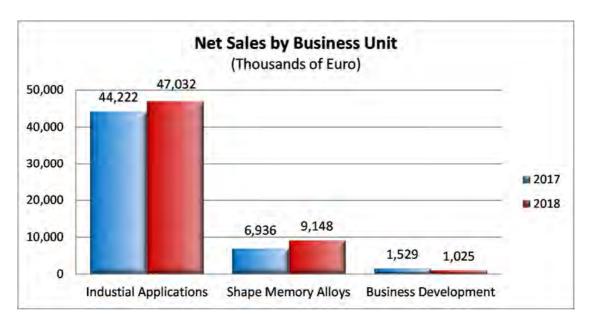
Net revenues in 2018 were 57,205 thousand euro, up (+8.6%) compared to 52,687 thousand euro recorded the previous year. Net of the negative effect of exchange rates of -1.8%, organic growth was +10.5%, thanks to the results of several segments of Industrial Applications, particularly Solutions for Vacuum Systems (+40.9%) and Security & Defence (+30.9%), as well as the improvement of sales in the Shape Memory Alloys Business Unit (SMA, +32.5%) in the industrial applications segment.



The following table shows details of revenues by business segment in 2018 compared to last year, showing the changes separately due to the effect of exchange rates and volumes.

(thousands of Eu	ro)
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Business Unit	2018	2017	Total Difference	Total Difference %	Exchange rate effect %	Price/quantity effect %
Security & Defense	6,466	4,995	1,471	29.4%	-1.5%	30.9%
Electronic Devices	16,310	16,873	(563)	-3.3%	-1.3%	-2.0%
Healthcare Diagnostics	2,962	2,272	690	30.4%	-1.1%	31.5%
Thermal Insulation	3,412	3,816	(404)	-10.6%	-3.4%	-7.1%
Getters & Dispensers for Lamps	4,574	5,393	(819)	-15.2%	-1.8%	-13.4%
Solutions for Vacuum Systems	10,486	7,587	2,899	38.2%	-2.7%	40.9%
Sintered Components for Electronic Devices & Lasers	0	0	0	n.a.	n.a.	n.a.
Systems for Gas Purification & Handling	2,822	3,286	(464)	-14.1%	-3.5%	-10.6%
Subtotale Industrial Applications	47,032	44,222	2,810	6.4%	-2.0%	8.3%
Nitinol for Medical Devices	0	2	(2)	-100.0%	0.0%	-99.9%
SMAs for Thermal & Electro Mechanical Devices	9,148	6,934	2,214	31.9%	-0.6%	32.5%
Subtotale Shape Memory Alloys	9,148	6,936	2,211	31.9%	-0.6%	32.5%
Solutions for Advanced Packaging	0	0	0	n.a.	n.a.	n.a.
Business Development	1,025	1,529	(504)	-32.9%	-2.9%	-30.1%
Total Net Sales	57,205	52,687	4,518	8.6%	-1.8%	10.5%



The revenues of the **Industrial Applications Business Unit** were 47,032 thousand euro, with an increase of +6.4% (+8.3% at stable exchange rates) compared to 2017.

The increase in sales was mainly driven by Business <u>Solutions for Vacuum Systems</u> (organic growth was +40.9%), thanks to higher sales to manufacturers of analytic instruments (mostly electronic microscopes and inspection systems for semiconductors), which are increasing extending the use of the NEG pumps in the systems they manufacture, as well as new orders in the field of particle accelerators, and <u>Security & Defence</u> (organic growth of +30.9%), driven by the recovery in investments in the military segment in USA and in Europe.

Albeit to a lesser extent in terms of absolute values, the volumes of the <u>Healthcare Diagnostics</u> Business rose (+31.5% at stable exchange rates), thanks to the uptrend of the x-ray tube market for image diagnostic applications.

The positive trends mentioned more than offset the decreases recorded in the other segments.

The <u>Getters & Dispensers for Lamps</u> Business showed an organic change of -13.4%, due to the structural decrease resulting from the technological competition of LED with respect to fluorescent and intensity discharge lights.

The <u>Systems for Gas Purification & Handling</u> Business recorded an organic change of -10.6%: in fact, it should be noted that the SAES Group sold the business relating to the manufacture and sale of advanced purification systems to Entegris, Inc. on June 25, 2018; this sale transaction did not regard the Company's production line for the manufacture of getter material for the purification market, situated in Avezzano, which in future will meet the procurement needs of Entegris, as per a specific 36-month supply agreement.

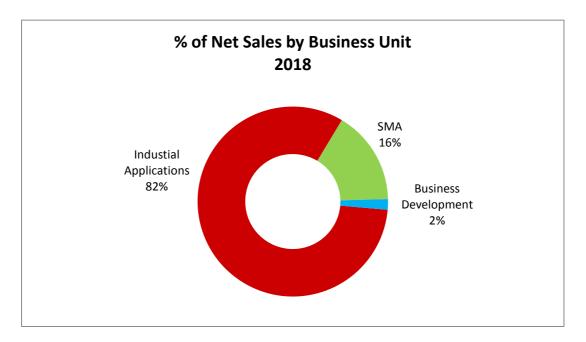
The <u>Thermal Insulation</u> Business showed an organic change of -7.1%, mainly due to the drop in sales of insulation panels for the refrigeration market, as well as to a delay of several projects in China regarding the construction of thermodynamic solar power plants and the crisis that affected several historic customers of this segment.

The Electronic Devices Business recorded an organic drop of -2.0%.

The revenues of the **Shape Memory Alloys (SMA) Business Unit** were 9,148 thousand euro, marking a significant increase (+31.9%, which would have been +32.5% net of the exchange rate effect), driven by the continuous expansion of the luxury goods segment and by higher sales in the automotive segment, as well as by encouraging signals in electronic consumer applications.

The revenues of the **Business Development Business Unit** were 1,025 thousand euro, down 32.9% (-30.1% at stable exchange rates) against 2017, mainly due both to the impact on the price resulting from greater competition in the passive matrix OLED market, and to the time needed to introduce the new SAES encapsulating products, currently at an advanced stage of development.

The graph shows the percentage breakdown of revenues per Business Unit:



A breakdown of revenues by geographical area of customers for 2018 and 2017 is shown in the following table:

(thousands	of Euro)

Geographical Area	2018	%	2017	%	Total Difference	Total Difference %
Italy	1,993	3.5%	1,328	2.5%	665	50.1%
Other EU and Europe	23,957	41.9%	19,594	37.2%	4,363	22.3%
North America	7,546	13.2%	9,182	17.4%	(1,636)	-17.8%
Japan	3,322	5.8%	3,278	6.2%	44	1.3%
P. R. of China	14,414	25.2%	13,043	24.8%	1,371	10.5%
South Korea	907	1.6%	892	1.7%	15	1.7%
Taiwan	1,382	2.4%	1,828	3.5%	(446)	-24.4%
Other Asian	3,386	5.9%	3,449	6.5%	(63)	-1.8%
Other	298	0.5%	93	0.2%	205	218.7%
Total Net Sales	57,205	100.0%	52,687	100.0%	4,518	8.6%

As regards the **geographical distribution of revenues**, 2018 indicated higher revenues in Europe, mainly driven by the industrial SMAs, by the Security & Defence segment and by the sales of getter pumps, and in China thanks to the Electronic Devices Business.

The following table shows the breakdown by Business Unit of the gross industrial profit for 2018 and 2017, indicating the same as a percentage of revenues and the changes occurring in the period:

(thousands of Euro)

Business Unit	2018	2017	Difference	Difference %
Industrial Applications	22,764	21,898	866	4.0%
% on Business Unit sales	48.4%	49.5%		
Shape Memory Alloys	2,828	1,211	1,617	133.5%
% on Business Unit sales	30.9%	17.5%		
Solutions for Advanced Packaging	(171)	0	(171)	n.a.
% on Business Unit sales	0.0%	0.0%		
Business Development & Corporate Costs	(13)	207	(220)	-106.3%
% on Business Unit sales	-1.3%	13.5%		
Gross Profit	25,408	23,316	2,092	9.0%
% on Business Unit sales	44.4%	44.3%		

Gross industrial profit³ was 25,408 thousand euro in 2018 against 23,316 thousand euro the previous year, marking an increase of 9.0%, corresponding to 2,092 thousand euro, due to an increase in volumes, partly offset by the impact of negative exchange rates. The gross profit margin⁴ instead was substantially unchanged, rising from 44.3% in 2017 to 44.4% in 2018.

The gross profit of the **Industrial Applications Business Unit** was 22,764 thousand euro in 2018, compared to 21,898 thousand euro in 2017. The increase (+4.0%) is mainly due to the excellent performance of sales in the Defence market and in the Vacuum systems segment. The gross profit margin fell slightly from 49.5% to 48.4%, substantially due to the negative impact of exchange rates.

The gross profit of the **Shape Memory Alloys Business Unit** was 2,828 thousand euro compared to 1,211 thousand euro in 2017. The increase (+133.5%) was driven by the increase of revenues, also due to the revenues from applications transferred from Memry GmbH, which in 2017 only contributed to one six-month period. The gross profit margin rose from 17.5% in to 30.9%.

The **Business Development & Corporate Costs Business Unit** recorded a gross industrial loss of -13 thousand euro in 2018, compared to a profit of 207 thousand euro in 2017.

The following table shows the operating result for 2018 and 2017, and the changes occurring in the period:

(thousands of Euro)

Business Unit	2018	2017	Difference	Difference %
Industrial Applications	13,978	13,219	759	5.7%
Shape Memory Alloys	218	(1,018)	1,236	121.4%
Solutions for Advanced Packaging	(1,998)	(435)	(1,563)	-359.3%
Business Development & Corporate Costs	(18,247)	(19,638)	1,391	7.1%
Operating result	(6,049)	(7,872)	1,823	23.2%
% on sales	-10.6%	-14.9%		

³ Calculated as the difference between net revenues and industrial costs directly and indirectly attributable to the products sold.

⁴ Calculated as the ratio between gross industrial profit and net revenues.

2018 recorded an **operating loss** of -6,049 thousand euro, against -7,872 thousand euro the previous year: the reduction of the loss was substantially due to the improvement of the gross profit, despite a negative impact of exchange rates of -723 thousand euro.

Research and development expenses amounted to 7,610 thousand euro, down by 16.9% compared to 9,163 thousand euro in 2017. A part of the change is due to that fact that in 2017, write-downs of fixed assets totalling 937 thousand euro were made, mostly relating to assets held at the Company's branch in Taiwan, which had been used for research projects conducted in collaboration with the subsidiary E.T.C. S.r.l., at present still in liquidation. Other cost reductions mostly regarded personnel costs and the management of patents.

Sales costs recorded an increase of 790 thousand euro, mainly attributable to severance.

General and administrative expenses recorded an increase of 1,378 thousand euro. The higher personnel, severance and consulting costs and write-downs were partly offset by lower variable remuneration for Executive directors.

Dividends, net financial income and net gains on exchange rates totalled 22,579 thousand euro in 2018, compared to 21,653 thousand euro in the previous year. The Company also wrote down equity investments and financial receivables due from subsidiaries totalling -10,738⁵ thousand euro, against -5,357 thousand euro in 2017 (for more details see Notes 15 and 20).

2018 therefore closed with an **EBIT** of 5,791 thousand euro, down against 8,425 thousand in the previous year.

Income taxes for the year recorded a balance of 1,404 thousand euro against a balance of 10,751 thousand euro in 2017. The percentage of EBIT represented by taxes is substantially in line with that of the previous year, net of the extraordinary effect of the write-down of the credit for deferred tax assets on previous losses made in 2017.

The **income from discontinued operations** was 253,847 thousand euro and was mostly represented by the gross capital gain (282,507 thousand euro) generated by the sale of the gas purification business, minus the costs of the transaction of 28,610 thousand euro (above all legal and consulting expenses, and the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, as well as interest, exchange rate differences and taxes). Lastly, this item includes some costs relating to the gas purification business between January 1 and June 25, 2018 (effective sale date) of around 50 thousand euro.

As at December 31, 2017 the Income (loss) from discontinued operations had been -653 thousand euro, due to the costs relating to the sale of the gas purification business paid in advance in the previous year.

2018 therefore closed with a **profit for the year** of 258,234 thousand euro against as loss of -2,979 thousand euro in 2017, influenced by a write-down for deferred tax assets.

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⁵ Write-downs following impairment testing of the investments in SAES Coated Films S.p.A. of -1,735 thousand euro and in SAES Nitinol S.r.l. of -691 thousand euro; write-down of the financial receivable due from SAES Nitinol S.r.l. of -8,278 thousand euro; provisions for the write-down of financial receivables under IFRS 9 of -34 thousand euro.

Financial position – Investments – Other information

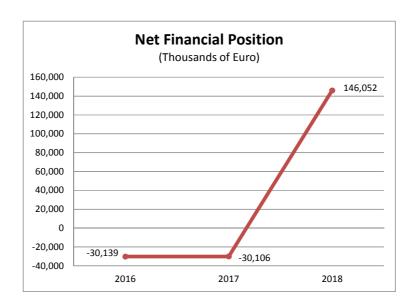
A breakdown of the items making up the net financial position is provided below:

(thousands of Euro)

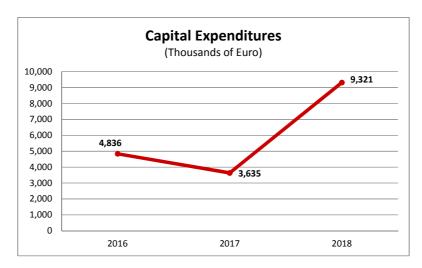
	December 31	December 31	Difference
	2018	2017	
Cash on hand	2	4	(2)
Cash equivalents	40,493	8,374	32,119
Total cash and cash equivalents	40,495	8,378	32,117
Current financial assets*	161,203	11,029	150,174
Bank overdraft	(27,002)	(12,001)	(15,001)
Current portion of long term debt	(5,080)	(8,088)	3,008
Other current financial liabilities*	(10,365)	(7,084)	(3,281)
Other financial debt	(531)	(6)	(525)
Total current liabilities	(42,979)	(27,178)	(15,799)
Current net financial position	158,720	(7,771)	166,491
Non current financial receivables **	49	49	0
Long term debt, net of current portion	(12,717)	(22,384)	9,667
Total non current liabilities	(12,668)	(22,335)	9,667
Net financial position	146,052	(30,106)	176,157

^{*} Including current financial receivables / debts versus Group companies and joint ventures

^{**} Including non current financial receivables versus Group companies and joint ventures



The **net financial position** recorded a positive balance of 146,052 thousand euro as at December 31, 2018, a considerable improvement on the negative balance of 30,106 thousand euro as at December 31, 2017. The main reason for this improvement (176,157 thousand euro) is due to collections (284,340 thousand euro), net of accessory costs (28,610 thousand euro) and of the financial payable relating to the negative adjustment of the price calculated on the basis of the value of working capital, cash and tax credit⁶ on the closing date (521 thousand euro), generated by the sale of the gas purification business (impact on the financial position of 255,209 thousand euro). This positive impact was partially offset by the payment of dividends amounting to 15,435 thousand euro and by the capitalisation of subsidiaries SAES Investments S.A. of 40 million euro, SAES Getters/U.S.A. Inc. of 28 million euro and SAES Coated Films S.p.A. of 3 million euro. The balance as at December 31, 2018 also includes a bad financial debt provision of 8,278 thousand euro towards the subsidiary SAES Nitinol S.r.l., net of which the net financial provision would have been 154,330 thousand euro.



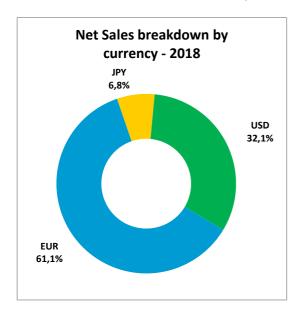
In 2018, property, plant and equipment increased by 9,321 thousand euro compared to 3,635 thousand euro in 2017: the increase in capex in the current year, compared to 2017, is mostly due to investments for the installation of the new pilot line for the Advanced Packaging business, with a view to accelerating the development of products for flexible packaging. Note also the purchase of the land and the building where the production of SAES Coated Films S.p.A. takes place, as well as the advances paid both for the purchase of a second production line for the coating of plastic film, and of a new technologically more evolved metallisation plant, able to combine the metallisation process with the coating one.

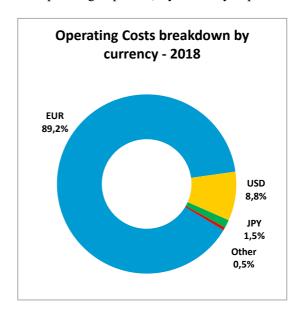
For further details on the capital expenditure of the year, please refer to Notes 13 and 14.

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⁶ The value of the adjustment could differ slightly depending on the effective value of the tax credit of the companies sold SAES Getters USA, Inc. and SAES Pure Gas, Inc. resulting from the Tax Return Declaration relating to January 1 - June 24, 2018, to be submitted by the end of the first half of 2019.

The breakdown of revenues and costs (cost of sales and operating expenses) by currency is provided below:





Related party transactions with Group companies

As regards transactions with Group companies, identified on the basis of accounting standard IAS 24 revised, and article 2359 of the Italian Civil Code, note that transactions with subsidiaries continued also in 2018. Transactions regarding the Company's ordinary business activities were performed with these counterparties. These transactions were mostly commercial, and regarded purchases and sales of raw materials, semi-finished goods, finished products, plant, tangible assets and various services; cash pooling agreements are in place with several Group companies as well as loan agreements.

Pursuant to the Consob communications of February 20, 1997 and February 28, 1998, as well as to IAS 24 revised, we report that also in 2018 all Related-Party transactions fell within the sphere of ordinary operations and were settled at standard economic and financial market conditions.

The main transactions performed with subsidiary, associated or jointly-controlled companies of the SAES Group were as follows:

SAES GETTERS USA, Inc. (until June 25, 2018) and SAES GETTERS/U.S.A., Inc. (formerly SAES Colorado, Inc.), Colorado Springs, CO (USA) (from June 15, 2018)

Getter sales; purchases of finished products; charge-backs of centrally managed insurance costs; charge-backs of centrally managed audit costs; revenue on the charge-back of centralised group services; income resulting from the use of the "SAES" trademark; royalties from the granting of the use of $PageLid^{\circledast}$ and $PageWafer^{\circledast}$ technologies. An interest-bearing cash pooling agreement is also in place.

To finalise the sale of the purification business, in June 2018, a process of legal and corporate reorganisation was undertaken, which involved part of the US companies of the SAES Group. More specifically, on June 15, 2018 **SAES Getters USA, Inc.**, the controlling company of **SAES Pure Gas, Inc.**, sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly-incorporated company called SAES Colorado, Inc., subsequently renamed **SAES Getters/USA, Inc.**, which continues to belong to SAES Getters S.p.A. Among the assets transferred by SAES Getters USA, Inc. to SAES Getters/U.S.A., Inc. was its 100% stake in **Spectra-Mat, Inc.** On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling company of the investment in SAES Pure Gas, Inc., was sold to Entegris, Inc.

SAES PURE GAS, Inc., San Luis Obispo, CA (USA) (until June 25, 2018)

Income resulting from the license to use patents for the production of purifiers; charge-backs of centrally managed insurance costs; charge-backs of centrally managed audit costs; income on the charge-back of centralised group services including the management of patents and support to commercial activities, income resulting from the use of the "SAES" trademark.

SAES SMART MATERIALS, Inc., New Hartford, NY (USA)

Income resulting from charge-backs of centrally managed insurance costs; income on the charge-back of centralised group services including the management of patents; income resulting from the use of the "SAES" trademark.

SPECTRA-MAT. INC., Watsonville, CA (USA)

Income on the charge-back of centralised group services; charge-backs of centrally managed insurance costs; charge-backs of centrally managed audit costs; income resulting from the use of the "SAES" trademark.

MEMRY CORPORATION, Bethel, CT (USA)

Purchase of raw materials; income on the charge-back of centralised group services; charge-backs of centrally managed insurance costs; income resulting from the use of the "SAES" trademark.

SAES GETTERS KOREA Corporation, Seoul (South Korea)

Income on the charge-back of centralised group services; charge-backs of centrally managed insurance costs; commission paid on commercial transactions. An interest-bearing loan agreement is also in place.

SAES GETTERS (NANJING) CO., LTD. – Nanjing (People's Republic of China)

Income on the charge-back of centralised group services; charge-backs of centrally managed insurance costs.

SAES GETTERS INTERNATIONAL LUXEMBOURG S.A., Luxembourg (Luxembourg)

An interest-bearing loan agreement is in place. The company has also been given a mandate to manage foreign exchange hedge transactions on the Korean currency, the Won.

E.T.C. S.r.l. in liquidation, Lainate (Italy)

Income on the charge-back of general and administrative services, including patent management; a cash pooling agreement is also in place.

Lastly, note that E.T.C. S.r.l. in liquidation, as a consolidated entity, is a part of the national tax consolidation scheme in place since January 1, 2015, of which the Company is the consolidating entity. See Note 21.

SAES Nitinol S.r.l. – Lainate (Italy)

An interest-bearing cash pooling agreement is in place with the Company.

Also note that SAES Nitinol S.r.l., as a consolidated entity, is a part of the national tax consolidation scheme in place since January 1, 2015, of which the Company is the consolidating entity. See Note 21.

SAES COATED FILMS S.p.A. (formerly Metalvuoto S.p.A.) – Roncello, MB & Lainate⁷, MI (Italy)

Income on the charge-back of research activities, commercial services, general and administrative services. Note that from January 1, 2017 SAES Coated Films S.p.A., as a consolidated entity, is a part of the national tax consolidation scheme. See Note 21.

SAES INVESTMENTS S.A., Luxembourg (Luxembourg)

Incorporated on October 23, 2018. A loan agreement, to be renewed annually, is in place.

SAES GETTERS EXPORT Corp., Wilmington, DE (USA)

No transactions.

⁷ On June 1, 2018, SAES Coated Films S.p.A. opened a local unit in Lainate, at the headquarters of the Parent Company.

To clarify the above, the Company has agreements for the provision of commercial, technical, IT, legal, and financial services, and for the development of specific projects, in place with several subsidiaries (E.T.C. S.r.l. in liquidation, SAES Getters USA, Inc. until June 25, 2018, SAES Getters/USA, Inc. from June 15, 2018, SAES Pure Gas, Inc. until June 25, 2018, SAES Getters Korea Corporation, SAES Getters (Nanjing) Co., Ltd., Spectra-Mat, Inc., SAES Smart Materials, Inc. and Memry Corporation).

The Company exercises management and coordination over E.T.C. S.r.l. in liquidation, di SAES Coated Films S.p.A., of SAES Nitinol S.r.l. and of SAES Investments S.A. pursuant to article 2497 of the Italian Civil Code and foll.

The Company has bank guarantees in place in favour of its subsidiaries: see Note 36 for further details.

The most significant transactions performed in 2018 are commented upon in the Explanatory Notes, in the section analysing the breakdown of the individual Financial Statement items.

The equity and economic transactions performed with subsidiary, associated or jointly-controlled companies of the SAES Getters Group are summarised below:

(thousands of Euro)

Legal Entity	Reiceivables	Payables	Revenues	Expenses	Memorandum accounts
	2018	2018	2018	2018	2018*
S.G.G. Holding SpA	272	0	0	0	
SAES Getters/U.S.A, Inc.	1,174	113	3,193	262	-
SAES Getters USA, Inc.	0	0	2,196	367	-
SAES Pure Gas, Inc.	0	0	2,690	264	-
Spectra-Mat, Inc.	108	0	145	1	-
SAES Getters Export, Corp	0	0	0	0	-
SAES Smart Materials, Inc.	150	169	215	1,325	-
Memry Corporation	843	110	1,107	908	-
SAES Getters Korea Corporation	156	614	776	28	-
SAES Getters (Nanjing) Co.Ltd.	651	34	3,323	161	-
Memry GmbH in liquidation	0	1,712	0	2	-
SAES Getters International S.A.	376	7,974	376	24	-
E.T.C. S.r.l. in liquidation	64	36	58	0	-
SAES Nitinol S.r.l.	687	0	213	0	-
SAES Coated Films S.p.A.	2,107	310	2,210	0	325
SAES Investments S.A.	160,087	0	41	0	
SAES RIAL Vacuum S.r.l.	95	44	161	167	-
Actuator Solutions GmbH	141	0	1,393	0	1,749
Actuator Solutions Taiwan Co., Ltd	26	0	81	0	-
Flexterra, Inc.	180	0	181	0	-
Total	167,117	11,115	18,360	3,509	2,074

^{*}includes guarantees issued by SAES Getters S.p.A.

With regard to the definition of "Related Party" included in IAS 24 revised, on December 31, 2018, the following Related Parties were identified:

- S.G.G. Holding S.p.A., controlling company. S.G.G. Holding S.p.A. is the Company's majority shareholder, in possession of 36.96% of ordinary capital with voting rights as at December 31, 2018.

With regard to the controlling investment held by S.G.G. Holding S.p.A., note that the latter does not exercise management and coordination over SAES Getters S.p.A. pursuant to articles 2497 and foll. of the Italian Civil Code. Assessments made by the Board of Directors showed that S.G.G. Holding S.p.A. does not play any part

in the definition of the annual budget and the long-term strategic plans, or in investment decisions, does not approve certain significant transactions of the Company or of its subsidiaries (acquisitions, sales, investments etc.), does not coordinate business initiatives and actions in the segments in which the Company and its subsidiaries operate and that SAES Getters S.p.A. has its own organisational and decision-making autonomy as well as independence in negotiations with customers and suppliers.

It should also be noted that, pursuant to article 2428, paragraphs 3 and 4 of the Italian Civil Code, the Company does not hold shares of the controlling company even through trust companies or third parties. In 2018, no purchase or sale transactions regarding the shares of the controlling company took place.

The Company holds a credit balance towards S.G.G. Holding S.p.A. in relation to the application for a refund of the excess IRES paid by the merged SAES Advanced Technologies S.p.A. in previous years, a request filed by S.G.G. Holding S.p.A. as the consolidator of the national tax consolidation scheme in place until December 31, 2014 and interrupted on January 1, 2015 following the decrease of the investment of S.G.G. Holding S.p.A. in subsidiaries to under the 50% threshold.

- **Actuator Solutions GmbH**, a joint venture, 50% jointly owned by SAES and Alfmeier Präzision Groups, focused on the development, manufacturing and marketing of actuators based on the SMA technology.
- Actuator Solutions Taiwan Co., Ltd., a Taiwan-based company wholly owned by the joint venture Actuator Solutions GmbH, for the development and commercialization of SMA devices for the image focus and stabilization in tablet and smart-phone cameras.
- **Actuator Solutions (Shenzhen) Co., Ltd.**, a company established at the end of September 2016, wholly owned by Actuator Solutions GmbH for the technology development and the sale of actuators for the mobile market.

The economic and equity transactions performed vis-à-vis Actuator Solutions GmbH and its subsidiary Actuator Solutions Taiwan Co., include income resulting from the sale of semi-finished goods; an agreement is in place for charge-backs of commercial costs and services, research, development and administrative costs.

- **SAES RIAL Vacuum S.r.l.**, a joint venture between SAES Getters S.p.A. and Rodofil s.n.c., focused on the design and production of integrated vacuum components and systems for accelerators, for the research, as well as for industrial systems and devices.

With regard to SAES RIAL Vacuum S.r.l. the Company performs commercial transactions (purchase of components for the creation of vacuum systems) and performs various services, mainly commercial. Lastly, on January 12, 2016, the Company granted a loan to the joint venture of 49 thousand euro, to provide financial support to the newly-incorporated company's operations.

- **Flexterra, Inc.**, a joint venture of SAES Getters International Luxembourg S.A. and Polyera, based in Skokie (USA), established at the end of 2016, dedicated to production of materials and components for the manufacture of truly flexible displays.
- **Flexterra Taiwan Co., Ltd.**, a company established at the beginning of 2017, wholly owned by joint venture Flexterra, Inc.

With regard to Flexterra, Inc. and its subsidiary the Company provides some administrative services, as well as legal, financial and tax support, as well as assistance in joint venture research and development activities, including the management of patents.

- **Mirante S.r.l.**, minority shareholder of Metalvuoto S.p.A. up until February 26, 2018, the date on which SAES Getters S.p.A. exercised the call option for the purchase of the remaining 30% of the share capital of Metalvuoto S.p.A., subsequently renamed SAES Coated Films S.p.A.
- Managers with Strategic Responsibilities, these include the members of the Board of Directors, including non-executive directors, and the members of the Board of Statutory Auditors.

Moreover, the Corporate Human Resources Manager, the Corporate Operations Manager, the Group Legal General Counsel and the Group Administration, the Finance and Control Manager and the Group Strategic Marketing & Planning Manager are considered managers with strategic responsibilities.

Their close relatives are also considered related parties.

The following table shows the total values of the related party transactions performed in 2018 and 2017:

(thousands of Euro)			E	xpense recharg	ge						
December 31, 2018	Net sales	Cost of goods sold	Research and development expenses	Selling expenses	General and administrativ e expenses	Other income (expenses)	Financial income (expenses)	Trade receivables	Trade payable	Tax consolidation receivables from Parent Company	Financial receivables
S.G.G. Holding S.p.A.										272	
SAES RIAL Vacuum S.r.l.	139	167		11	10	1	1	45	44		50
Actuator Solutions GmbH	1,351			1	40			141			
Actuator Solutions Taiwan Co., Ltd	9		63	9				26			
Flexterra, Inc.			55		127			180			
Total	1,500	167	118	21	177	1	1	392	44	272	50

(thousands of Euro)			E	xpense recharg	ge						
December 31, 2017	Net sales	Cost of goods sold	Research and development expenses	Selling expenses	General and administrativ e expenses	Other income	Financial income (expenses)	Trade receivables	Trade payable	Tax consolidation receivables from Parent Company	Financial receivables
S.G.G. Holding S.p.A.										272	
SAES RIAL Vacuum S.r.l.	18	73		19	3		1	48	20		50
Actuator Solutions GmbH	1,200		35	1	60			234			
Actuator Solutions Taiwan Co., Ltd	233		126	18				36			
Flexterra, Inc.			97		117			189			
Total	1,451	73	258	38	180	0	1	507	20	272	50

The following table shows the remunerations to managers with strategic responsibilities:

	Fiscal Year	Fiscal Year
(thousands of Euro)	2018	2017
Short term employee benefits	16,989	4,340
Post employment benefits		
Other long term benefits	561	2,299
Termination benefits	898	1,100
Payments in shares		
Other benefits		
Total remuneration provided to managers with strategic responsibilities	18,448	7,739

As at December 31, 2018 payables to Managers with strategic responsibilities recorded in the financial statements, as defined above, were 4,804 thousand euro, against payables of 7,542 thousand euro as at December 31, 2017.

Other information regarding the Company

To illustrate the performance of subsidiaries, please refer to the Consolidated Financial Statements and to the "Summary schedule of key data of subsidiary companies".

The Company has two Branch Offices, one in Taoyuan City (Taiwan) and one in Tokyo (Japan).

Information on the shareholding structures set forth in article 123-bis of Italian Legislative Decree 58/98 (Consolidated Finance Law), paragraph 1, is illustrated in the "Report on Corporate Governance" drawn up by the Company, included in the financial statements and published on the Company's website www.saesgroup.com, Investor Relations section, Corporate Governance sub-section.

Going concern

The financial statements are prepared on the going concern assumption, given that, despite a difficult economic and financial environment, there aren't any significant uncertainties (as defined in paragraph no. 25 of IAS 1 - Presentation of Financial Statements) regarding business continuity. This scenario can only be in part influenced by Company Management, as it is mostly dependent on external variables.

Based on the best estimates available to date, a three-year business plan has been approved, which includes the strategies set in place by Company Management to enable the set company objectives to be achieved in this difficult economic scenario.

Subsequent events

On February 14, 2019, the Board of Directors of SAES Getters S.p.A. approved the guidelines of a transaction that envisages, after obtaining the necessary authorisation of the Shareholders' Meeting, promoting a voluntary partial public tender offer (Offer) on a maximum of 3,900,000 ordinary treasury shares (corresponding to 17.7% of total shares and to 26.6% of ordinary shares), at the price of 23 euro per share (after 2018 dividend), for a total maximum counter value of 89.7 million euro.

The price includes a premium of 8.4% with respect to the official price of the Company's ordinary shares recorded on February 13, 2019, as well as a premium of 15.0%, 20.2%, 19.2% and 10.6% with respect to the weighted average of the official prices of the Company's ordinary shares in 1-month, 3-month, 6-month and 12-month periods respectively before February 13, 2019.

The promotion of the Offer is subject (i) to the approval of the Shareholders' Meeting of SAES Getters S.p.A., which will be convened, in accordance with the law, on March 18, 2019, of the authorisation to purchase treasury shares pursuant to art. 2357 of the Italian Civil Code and 132 of Italian Legislative Decree 58/1998, and (ii) to the approval by the subsequent Shareholders' Meeting of SAES Getters S.p.A., currently set for April 18, 2019, of the Company's annual financial statements as at December 31, 2018, which indicates distributable profits and/or sufficient available reserves to cover the total maximum counter value of the Offer.

The Price will be paid in cash. With a view to optimising its financial structure and to making it more efficient, the Company plans to use financial resources resulting from a medium/long-term loan being finalised with a leading bank.

If the number of ordinary shares put up for subscription for the Offer exceeds the maximum number of 3,900,000 of the offer, an allotment will be carried out based on the "pro-rata" method, according to which the Company would purchase the same proportion of ordinary shares from all shareholders as that put up for subscription to the Offer. The Offer is not conditioned by reaching a minimum number of subscriptions.

It is believed that, also given the trend of stock market prices, the use of part of the available resources for the purchase of ordinary treasury shares represents an advantageous investment opportunity for the Company and its shareholders

The transaction leads to better profitability per unit of capital employed. The reduction of the number of ordinary shares in circulation will actually benefit all shareholders, as it will lead to an increase in the earning per share, with the same annual profit, and an increase of the dividend per share, with the same dividends distributed.

The transaction will also increase the efficiency of the Company's financial structure, at the same time maintaining a solid capital structure to sustain growth by internal and external means as well as maintaining a high percentage float, which is also a requirement for listing on the STAR segment.

Following the Offer, the Company would obtain an appropriate number of ordinary treasury shares which represent a medium to long term investment in the Company, which can also be used to guarantee loans at the time of any extraordinary operations and/or to develop alliances consistent with the Group's strategic direction.

Nevertheless, until these opportunities present themselves, the Company intends to keep the treasury shares purchased following the Offer in the portfolio, also to consolidate the positive effects in terms of increasing the earning per share and the dividend per share.

It is envisaged that, when the required authorisations have been obtained, the Offer may be launched after the payment date of the dividend relating to the year ending December 31, 2018 and may be finalised by the following June.

On March 7, 2019, following the loss recorded in 2018, the Board of Directors of SAES Coated Films S.p.A. decided to propose to the Shareholders' Meeting, convened for April 4, 2019, to resolve on the establishment of an available reserve of 5 million euro to cover any future losses, by means of a payment to the capital account, by the Sole Shareholder SAES Getters S.p.A.

On March 13, 2019 SAES Getters S.p.A. approved the full waiver of the financial receivables held by the same at the end of 2018 towards SAES Nitinol S.r.l. for an amount of 8,905 thousand euro. At the same time, the Company approved an additional payment to the capital account of SAES Nitinol S.r.l. of 100 thousand euro, 65 thousand euro of which to cover the difference between the total loss recorded by the subsidiary in 2018 (-8,969 thousand euro) and the above-mentioned waiver of the financial receivables (8,905 thousand euro), and 35 thousand euro of which to set up an available capital reserve.

In the first few months of 2019, the company invested 30 million euro of cash and cash equivalents, resulting from the partial repayment of the intercompany loan disbursed to the Luxembourg company SAES Investments S.A., in setting up a portfolio with a conservative investment profile, and mostly with high flexibility and redeemability, with a view to promptly covering the Group's future requirements.

Proposal to approve the Financial Statements and the allocation of the dividend

Dear Shareholders.

we hereby submit the following proposed resolution for your approval

"The Shareholders' Meeting,

- after examining the figures of the Annual financial statements of SAES Getters S.p.A., as at December 31, 2018, accompanied by the Directors' Report on operations, the Report of the Board of Statutory Auditors, the Report of the Independent Auditors AND any other documentation envisaged by law;
- after acknowledging that the legal reserve has reached 20% of share capital;
- after acknowledging the results for the year ending December 31, 2018;

resolves

- to approve the Annual financial statements of SAES Getters S.p.A., as at December 31, 2018 which closes with a profit for the year of 258,233,603.22 euro;
- to distribute a part of the net income for the year corresponding to:
 - o 1,022,300.28 euro to savings shareholders only as full recognition of the privileged dividend for 2017, by allocating them a dividend of 0.138549 euro per share;
 - 5,287,710.22 to savings shareholders only allocating them a dividend of 0.716626 per share (including an additional 0.016626 euro and 0.138549 euro as full recognition of the privileged dividend for 2018) per share;
 - o to distribute a part of the net income for the year corresponding to 10,269,945.00 euro to ordinary shares, allocating them a dividend of 0.700000 euro per share:

	euro
Net Income for the period	258.233.603
(Net exchange gains - unrealised and undistributable)	(2.889)
Distributable Net Income for the period	258.230.714
From distributable Net Income for the period	
to savings share only - as full recognition of preferred dividend for the year 2017	
- euro 0,138549 for each n. 7.378.619 savings shares	1.022.300,28
in equal measure to ordinary shares and savings shares	
- euro 0,716626 (including the increase of euro 0.016626 and of euro 0.138549 as full recognition of	
preferred dividend for the year 2018) for each n. 7.378.619 savings shares	5.287.710,22
- euro 0,700000 for each n. 14.671.350 ordinary shares	10.269.945,00
- euro roundings	0,00
For a total dividend of:	
- euro 0,855175for each n. 7.378.619 savings shares	6.310.010,50
- euro 0,700000 for each n. 14.671.350 ordinary shares	10.269.945,00
For a total maximum distribution of euro:	16.579.955,50

- to place the payment of these amounts in favour of entitled ordinary and savings shares, which will be in circulation as at April 30, 2019 (Record date) effective from May 2, 2019, with detachment of coupon no. 35; the security will be traded ex-dividend from April 29, 2019;
- to make any roundings off made at the time of payment to the reserve for Retained earnings;
- to award the President, Vice President and Managing Director, separately, all powers necessary for the implementation of this resolution."

Lainate (MI), March 13, 2019

on behalf of the Board of Directors Massimo della Porta President (Separate) Annual Financial Statements of SAES Getters S.p.A. for the year ending December 31, 2018

Income statement

	Note	2018	2017(*)
	Note	2018	2017(*)
(euro)			
Third party net sales		47,529,972	41,349,940
Intercompany net sales		9,674,804	11,337,229
Total net sales	4	57,204,776	52,687,169
Third party cost of sales		(28,919,356)	(26,656,060)
Intercompany cost of sales		(2,877,295)	(2,715,089)
Total cost of sales	5	(31,796,651)	(29,371,149)
Gross profit		25,408,125	23,316,020
Cross pront		25,406,125	23,310,020
Research & development expenses	6	(7,610,092)	(9,162,592)
Selling expenses	6	(6,987,035)	(6,196,932)
General & administrative expenses	6	(21,695,695)	(20,317,736)
Write-down of trade receivables	6	(160,245)	0
Total operating expenses		(36,453,067)	(35,677,260)
T		1 217 061	1 240 200
Intercompany royalties		1,217,861	1,348,299
Other third party income (expenses), net		(228,130)	(172,092)
Other intercompany income (expenses), net	7	4,005,806	3,313,386
Total other income (expenses), net	/	4,995,537	4,489,593
Operating income (loss)		(6,049,405)	(7,871,647)
T		21 211 521	********
Dividends	8	21,944,621	22,602,453
Third party financial income		150,076	1,408
Intercompany financial income		696,435	330,726
Total financial income	8	846,511	332,134
Third party financial expenses		(546,597)	(1,057,059)
Intercompany financial expenses		(36,190)	(12,908)
Total financial expenses	8	(582,787)	(1,069,967)
Foreign exchange gains (losses), net	9	370,553	(211,648)
Write-down of intercompany investments	10	(10,738,194)	(5,356,598)
Income before taxes		5,791,299	8,424,727
•			
Income taxes	11	(1,404,486)	(10,751,046)
Current taxes		(691,920)	(768,579)
Deferred taxes		(712,566)	(9,982,467)
Net income (loss) from continued operations		4,386,813	(2,326,319)
	10	252 946 700	(652,865)
Net income (loss) from discontinued operations	12	253,846,790	(032,803)

Statement of comprehensive income

	Note	2018	2017(*)
(euro)			
Net income (loss) for the period		258.233.603	(2.979.184)
Actuarial gain (loss) on defined benefit plans	26	45.526	(74.088)
Income tax		(10.926)	17.781
Actuarial gain (loss) on defined benefit plans, net of taxes		34.600	(56.307)
Total components that will not be reclassified to the profit (loss) in subsequent periods		34.600	(56.307)
Other comprehensive income (loss), net of taxes		34.600	(56.307)
Total comprehensive income (loss), net of taxes		258.268.203	(3.035.491)

^(*) Some amounts shown in the column do not correspond to the 2017 financial statements because they reflect both the reclassifications related to the sale of the gas purification business (finalized on 25 June 2018 and identified as "major line of business"), in compliance with the IFRS 5. Reclassifications are in Note n. 1 detailed, paragraph "Reclassifications of income statement balances as at December 31, 2017".

Statement of financial position

		December 31	December 31
	Note	2018	2017
(euro)			
ASSETS			
Non Current Assets			
Property, plant and equipment, net	13	34.179.991	29.532.288
Intangible assets, net	14	598.243	394.737
Investments in Subsidiaries and other financial assets	15	123.755.875	61.791.699
Deferred tax assets	16	1.343.704	2.067.194
Intercompany financial credits	20	49.000	49.000
Non current tax consolidation receivables	21	272.136	272.136
Other long term assets	17	68.838	62.961
Total Non Current Assets		160.267.787	94.170.015
Current Assets			
Inventory	18	7.542.000	7.432.647
Third party trade receivables		6.588.637	6.637.546
Intercompany trade receivables		5.534.113	6.305.345
Trade receivables	19	12.122.750	12.942.891
Intercompany financial credits	20	161.203.234	11.029.315
Tax consolidation receivables	21	58.165	4.328
Prepaid expenses, accrued income and other	22	2.626.121	2.933.887
Cash and cash equivalents	23	40.495.132	8.377.728
Total Current Assets		224.047.402	42.720.796
Total Assets		384.315.189	136.890.811
SHAREHOLDERS' EQUITY AND LIABILITIES			
Capital stock		12.220.000	12.220.000
Share issue premium		25.724.211	41.119.940
Legal reserve		2.444.000	2.444.000
Sundry reserves and retained earnings		4.421.539	7.404.523
Net income (loss) for the period		258.233.603	(2.979.184)
Shareholders' Equity	24	303.043.353	60.209.279
Non Current Liabilities			
Non current financial liabilities	25	12.716.795	22.384.432
Staff leaving indemnity and other employee benefits	26	6.013.177	6.951.734
Non current provisions	27	78.552	7.321
Total Non Current Liabilities		18.808.524	29.343.487
Current Liabilities			
Third party trade payables		7.769.269	6.889.467
Intercompany trade payables		472.190	716.251
Trade payables	28	8.241.459	7.605.718
Derivative instruments evalutated at fair value	32	48.476	60.286
Intercompany financial payables	29	10.316.829	7.022.503
Other payables	31	9.247.908	10.608.186
Income taxes payables	33	414.994	58.002
Current provisions	27	1.580.117	1.888.409
Bank overdraft	34	27.002.402	12.001.201
Current portion of long term debt	25	5.080.284	8.087.432
Other Financial Debts	30	530.843	6.308
Total Current Liabilities		62.463.312	47.338.045

Cash flow statement (#)

(thousands of euro)	2018	2017 reclassified (*)
Cash flows from operating activities		
Net income (loss) from continued operations	4,386,813	(2,326,319)
Net income (loss) from discontinued operations	253,846,790	(652,865)
Current income taxes	691,920	768,579
Changes in deferred income taxes	712,566	9,982,467
Depreciation	3,785,301	3,887,090
Write-down (revaluation) of property, plant and equipment	639,000	941,908
Amortization	185,666	192,338
Net loss (gain) on disposal of assets	(137,249) (253,896,016)	(40,014) 594,180
Capital gain on purification business disposal Interests and other financial income, net	(263,724)	737,833
Write-down of trade receivables	16,000	757,655
Write-down of investments and financial receivables in subsidiaries	10,738,194	5,355,564
Other income from equity investments	(21,944,621)	(22,602,453)
Accrual for termination indeminities and similar obligations	(32,787)	2,564,977
Changes in provisions	(237,061)	168,876
Changes in provisions	(1,509,208)	(427,838)
Working capital adjustments	(1,507,200)	(427,030)
Cash increase (decrease)		
Account receivables and other receivables	804,141	93,109
Inventory	(109,353)	(2,333,197)
Account payables	635,740	(1,264,108)
Other current payables	(1,759,585)	4,839,771
	(429,057)	1,335,576
Payment of termination indemnities and similar obligations	(446,314)	(256,525)
Interests and other financial payments	(850,943)	(174,513)
Interests and other financial receipts	1,832,143	328
Taxes paid	(33,782)	(767,742)
Net cash flows from operating activities	(1,437,160)	(290,714)
Net cash flows from investing activities	(0.272.400)	(2.624.510)
Purchase for tangible assets	(9,373,408)	(3,634,519)
Proceeds from sale of tangible and intangible assets	430,371	39,918 (243,170)
Purchase of intangible assets Dividends received, net of withheld	(389,172) 21,045,392	21,812,702
(Versamenti) / Riduzioni di capitale e Altre variazioni partecipazioni	(64,391,731)	(3,583,364)
Consideration for the purification business disposal, net of the disposed cash	284,339,502	(3,303,304)
Ancillary monetary charges for the purification business disposal	(28,610,489)	(594,180)
Change in other current assets/liabilities	(3,888)	9,562
Net cash flows from investing activities	203,046,577	13,806,949
Cash flows used by financing activities		
Proceeds from long term financial liabilities	0	10,133,133
Proceeds from short financial liabilities	15,000,000	5,499,677
Dividends payment	(15,434,978)	(12,250,160)
Repayment of financial liabilities	(12,697,277)	(12,000,000)
Interests paid on long term financial liabilities	(324,431)	(566,043)
Financial receivables repaid (granted) from related parties	(157,971,184)	0
Financial liabilities granted (reimburrsed) to related parties	3,294,326	2,857,531
Other financial payables/receivables	(2,571)	(1,841)
Net cash flows from financing activities	(168,136,115)	(6,327,703)
Effect of exchange rate differences	(1,355,898)	0
	(1,000,070)	
Increase (decrease) in cash and cash equivalents	32,117,404	7,188,531
Cash and cash equivalents at the beginning of the period	8,377,728	1,189,197
Cash and cash equivalents at the end of the period	40,495,132	8,377,728

^(#) Some amounts shown in the Cash flow statement includes cash flows from gas purification business from January, 1st to June, 25th and cash flows related to the disposal of the gas purification business (finalized on 25 June 2018). Details in Note n. 12 and Note n. 35.

^(*) Some amounts shown in the column do not correspond to the 2017 financial statements because they reflect both the reclassifications related to the sale of the gas purification business (finalized on 25 June 2018 and identified as "major line of business"), in compliance with the IFRS 5. Reclassifications are in Note n. 1 detailed, paragraph "Reclassifications of income statement balances as at December 31, 2017.

Statement of changes in shareholders' equity as at December 31, 2018

(thousands of Euro)

				Sundry reserves and retained earnings					
	Capital stock	Share issue premium	Legal reserve	Other reserves in suspension of tax	Revaluation reserve	Other	Total	Net income (loss) for the period	Total shareholders'equity
Balance at December 31, 2017	12,220	4 1,12 0	2,444	138	2,615	4,651	7,404	(2,979)	60,209
Allocation Fiscal year 2017 net profit						(2,979)	(2,979)	2,979	0
Dividends paid		(15,396)				(39)	(39)		(15,435)
Treasury shares cancellation									0
Income (loss) from transactions with Group companies									0
Net income for the period								258,234	258,234
Other comprehensive income (loss)						35	35		35
Balance at December 31, 2018	12,220	25,724	2,444	138	2,615	1,668	4,421	258,234	303,043

Statement of changes in shareholders' equity as at December 31, 2017

(thousands of Euro)									
				Sundry reserves and retained earnings					
	Capital stock	Share issue premium	Legal reserve	Other reserves in suspension of tax	Revaluation reserve	Other	Total	Net income (loss) for the period	Total shareholders'equity
Balance at December 31, 2016	12,220	41,120	2,444	138	2,615	10,793	13,546	6,164	75,494
Allocation Fiscal year 2016 net profit						6,164	6,164	(6,164)	0
Dividends paid						(12,250)	(12,250)		(12,250)
Treasury shares cancellation							0		0
Income (loss) from transactions with Group companies									0
Net income for the period								(2,979)	(2,979)
Other comprehensive income (loss)						(56)	(56)		(56)
Balance at December 31, 2017	12,220	41,120	2,444	138	2,615	4,651	7,404	(2,979)	60,209

EXPLANATORY NOTES

1. BASIS OF PREPARATION AND ACCOUNTING POLICIES

Basis of preparation

The mission of SAES Getters S.p.A. has changed over time, particularly in recent years due to the world recession and the significant restructuring of the Group.

As well as acting as the management and control holding company for the entire Group, the Company hosts the central R&D laboratories, in synergy with which it develops pilot production lines, selling the products of the same on its target markets.

Through the branches in Taiwan and Japan, it provides support to the sale of finished products in Far East Asia, manufactured by subsidiary and associated companies.

SAES Getters S.p.A. also operates in the field of advanced materials, particularly in the development of getters for microelectronic and micromechanical systems, of shape memory alloys and of getter materials in polymeric matrixes. Lastly, SAES has recently developed a technological platform that integrates getter materials in a polymeric matrix, which covers numerous fields of application (OLED displays, implantable medical devices and food packaging).

SAES Getters S.p.A. is controlled by S.G.G. Holding S.p.A., whose registered office is in Milan, via Vittor Pisani 27, which as at December 31, 2018 held 36.96% of the Company's ordinary shares: S.G.G. Holding S.p.A. does not exercise any management and coordination activity pursuant to article 2497 and foll. of the Italian Civil Code for the reasons illustrated in the Report on corporate governance and ownership.

The statement of financial position and the income statement have been drawn up in units of Euro, without any decimal points. These Notes comment on the main items, and unless indicated otherwise, the amounts are shown in thousands of euro.

The separate financial statements for the year ending December 31, 2018 have been prepared in accordance with the IFRSs issued by the International Accounting Standards Board ("IASB") and approved by the European Union ("IFRS"), CONSOB resolutions no. 15519 and no. 15520 of July 27, 2006, CONSOB communication no. DEM/6064293 of July 28, 2006 as well as article 149-duodecies of the Issuers' Regulations. The abbreviation "IFRS" includes all revised International Accounting Standards ("IAS") and all interpretations issued by the International Financial Reporting Interpretations Committee ("IFRIC"), included those previously issued by the Standing Interpretations Committee ("SIC").

For comparative purposes, the comparative figures for 2017 are also shown, in application of IAS 1-Presentation of financial statements.

The preparation of the separate financial statements was made mandatory by the provisions contained in article 2423 of the Italian Civil Code.

The draft separate financial statements of SAES Getters S.p.A. for the year ending December 31, 2018 and the relative publication were approved by a resolution of the Board of Directors passed on March 13, 2019.

The Shareholders' Meeting is tasked with final approval of the separate financial statements of SAES Getters S.p.A., and will be convened for April 18, 2019.

Accounting schedules

The accounting schedules adopted are consistent with those envisaged by IAS 1 - revised; specifically:

- the Statement of Financial Position has been prepared by classifying assets and liabilities as "current or non-current";
- the Income Statement has been prepared by classifying operating expenses by allocation, as this form of disclosure is considered more suitable to represent the Company's specific business, complies with the internal reporting procedures and in line with standard industry practices;

- the Cash Flow Statement has been prepared by stating cash flows provided by operating activities according to the "indirect method" as allowed by IAS 7.

In addition, as required by Consob resolution no. 15519 of July 27, 2006, as regards the income statement by allocation, income and expenses arising from non-recurring transactions or from events that do not recur frequently during the normal conduct of operations have been specifically identified; their relative effects have been stated separately at the main interim result levels.

Non-recurring events and transactions are identified primarily on the basis of the nature of the transactions. In particular, non-recurring expenses/income include cases that by their nature do not occur consistently in the course of normal operating activities. In further detail:

- income and expenses arising from the sale of real property;
- income and expenses arising from the sale of business units and equity investments included among noncurrent assets;
- expenses or any income arising from reorganisation processes associated with extraordinary corporate transactions (mergers, de-mergers, acquisitions and other corporate transactions).

On the basis of the aforementioned Consob resolution, the amounts of positions or transactions with Related Parties have been highlighted separately from the related items in these Notes.

Reclassifications of income statement balances as at December 31, 2017

The income statement balances relating to 2017, shown for comparative purposes, have been **reclassified** to reflect the impact of the sale of the gas purification business (finalised on June 25, 2018, see the Report on operations for details), considered major lines of business. In accordance with the provisions of IFRS 5, the income and the charges in 2017 relating to the business sold, together with the consulting costs related to said extraordinary transaction, have been reclassified in the appropriate item of the income statement "Income (loss) from discontinued operations", without any impact on the net profit/loss and on shareholders' equity as at December 31, 2017. See Note 12 for further details.

Note that further **reclassifications** have been made without any impact on net profit/loss and on shareholders' equity to highlight write-downs of financial assets in the Statement of profit or loss, in accordance with IAS 1.

Segment information

The Group's financial reporting is broken down into the following business segments:

- Industrial Applications;
- Shape Memory Alloys;
- Solutions for Advanced Packaging.

This structure has not changed with respect to last year.

Seasonality of revenues

Based on historical data, the revenues of the different businesses are not characterised by significant seasonal variations.

2. ACCOUNTING STANDARDS

Business combinations and Goodwill

Business combinations are recognised using the purchase method. According to this method, the assets (including intangible assets not previously recognised), liabilities and potential liabilities (excluding future restructuring) acquired and identifiable, are recognised at their fair value on the date of acquisition. The positive difference between the purchase cost and the Company's share of the fair value of said assets and liabilities is classified as goodwill and recognised as an intangible asset. Any negative difference ("negative goodwill") is instead recognised in the income statement at the time of the acquisition.

Goodwill is not amortised, but annually, or more frequently if certain specific events or particular circumstances indicate the possibility that it may be impaired, it is tested for impairment to identify any impairment losses, in accordance with IAS 36 - Impairment of assets. After initial recognition, goodwill is valued at cost, net of any accumulated impairment losses. Once goodwill has been written down, impairment losses will not be reversed.

To assess consistency, the goodwill acquired in a business combination is allocated, on the acquisition date, to the Company's individual Cash Generating Units (CGU), or to groups of cash generating units, which should benefit from synergies of the business combination, regardless of the fact that other assets or liabilities of the Company are allocated to these units or groups of units. Each CGU or group of CGUs to which the goodwill is allocated, represents the lowest level, as regards the Company, at which goodwill is monitored for internal management purposes.

When the goodwill is part of a CGU and part of the internal business of said unit is sold, the goodwill associated to the business sold is included in the carrying amount of the asset to calculate the profit or loss resulting from the sale. The goodwill sold in these circumstances is measured on the basis of the relative values of the asset sold and of the portion of the unit maintained.

If the entire business or part of the same previously acquired is sold, and said acquisition had indicated goodwill, when establishing the impact resulting from said sale, the corresponding residual value of the goodwill is taken into account. The difference between the sale price and the net assets plus the accrued conversion differences and the goodwill is booked to the income statement. The accrued profits and losses recognised directly under shareholders' equity are transferred to the income statement at the time of the sale.

Intangible assets

Development costs

Costs incurred internally to develop new products and services are considered, depending on the case, as intangible or property, plant and equipment generated internally and are recognised under assets only if the costs can be determined reliably and the technical feasibility of the product, the expected volumes and prices, indicate that the costs incurred during the development stage will generate future economic benefits.

Development costs capitalised only include expenses incurred that may be directly attributed to the development process.

Development costs capitalised are amortised systematically, starting from the start of production, for the estimated lifetime of the product/service.

Other assets with a finite useful life

Other intangible assets with a finite useful life purchased or produced internally are recognised under assets, in accordance with the provisions of IAS 38 (Intangible assets), when it is likely that the use of the asset will generate future economic benefits and when the cost of the asset can be reliably determined.

These assets are recognised at purchase or production cost and amortised on a straight line basis for their estimated useful life. Intangible assets with a finite useful life are also submitted to tests to identify any impairment losses on an annual basis, or whenever there is any indication that the asset may be impaired.

Amortisation is calculated on the basis of a straight-line criterion for the estimated useful life of the assets; the rates of amortisation are reviewed annually and are changed if the current estimated life differs from that estimated previously. The impact of these changes is recognised in the income statement on a forward-looking basis.

Intangible assets are amortised on the basis of their estimated useful life, if established, as follows:

Industrial patent rights and intellectual property rights	3/15 years / term of the contract
Concessions, licenses, trademarks and similar rights	3/25 years / term of the contract
Others	5/15 years / term of the contract

Property, plant and equipment

Property, plant and equipment are recognised at purchase or production cost or, for those in place as at January 1, 2004 at deemed cost, which for some assets is represented by the revalued cost. The costs incurred after the purchase are capitalised only if they lead to an increase in future economic benefits inherent to the asset to which they refer. All other costs (including financial expenses directly attributable to the acquisition, construction or production of the asset in question) are recognised in the income statement when incurred. The cost of the assets also includes the costs envisaged by the dismantling of the asset and the recovery of the site where a legal or implicit obligation is present. The corresponding liability is recognised, at its present value, in the period in which the obligation arises, in a fund recognised under liabilities as part of provisions for risks and charges; the recognition of the capitalised expense in the income statement is made over the useful life of the relative property, plant and equipment through the depreciation process of the same.

Depreciation is calculated on the basis of a straight-line criterion for the estimated useful life of the assets.

Land, including that relating to buildings, is not depreciated. The rates of depreciation are reviewed annually and are changed if the current estimated life differs from that estimated previously. The impact of these changes is recognised in the income statement on a forward-looking basis.

The minimum and maximum rates of depreciation are shown below:

Buildings	2.5% - 20%
Plant and machinery	6% - 33%
Industrial and commercial equipment	3% - 40%
Other assets	3% - 25%

Finance lease agreements are considered those that substantially transfer all of the risks and benefits of the property to the Company.

The assets under finance leases are recognised at the lesser between the fair value and the present value of the minimum payments due on the basis of the agreements and are depreciated on the basis of their estimated useful life.

Liabilities towards the lessor are classified as financial liabilities in the statement of financial position. The instalments are divided between the principal and interest in order to obtain the application of a constant interest rate on the residual balance of the debt. The interest included in the periodic instalments is recognised under financial expenses in the income statement for the year.

Lease agreements in which the lessor substantially maintains all of the risks and benefits related to the property are considered operating leases. Operating lease instalments are recognised in the income statement on a straight-line basis for the term of the agreement.

Impairment of assets

On each reporting date, the Company assesses if there are any indications that intangible assets with a finite useful life and property, plant and equipment and equity investments may have suffered an impairment loss.

Goodwill and intangible assets with an indefinite useful life undergo impairment testing at least once a year, or, more frequently, whenever there is any indication that the asset may be impaired.

Goodwill

Goodwill undergoes impairment testing to identify its recoverable amount on the reporting date and whenever there are indicators of problems with said item during the year. The goodwill acquired and allocated during the year undergoes impairment testing to identify the recoverable amount before the end of the year in which the acquisition and allocation took place.

To assess its recoverable amount, the goodwill is allocated, on the acquisition date, to each Cash Generating Unit (CGU) or group of CGUs, which benefit from the acquisition, regardless of the fact that other assets or liabilities of the entity acquired are allocated to these units.

If the carrying amount of the Cash Generating Unit (or group of CGUs) exceeds the respective recoverable amount, an impairment loss is recognised in the income statement corresponding to the difference.

The impairment loss is recognised in the income statement, first by reducing the carrying amount of the goodwill allocated to the CGU (or group of CGUs) and only later to the other assets of the unit in proportion to their carrying amount up to the recoverable amount of the asset with a finite useful life. The recoverable amount of a Cash Generating Unit, or group of CGUs, to which the goodwill is allocated, is the higher between the fair value less selling costs, and the value in use of the same CGU.

The value in use of an asset is represented by the present value of expected cash flows calculated by applying a discounting rate that reflects current market valuations of the time value of money and of the specific risks of the asset. The explicit future cash flows cover a period of three years and are projected for a specific period of between 2 and 12 years, with the exception of cases in which the projections require longer periods as in the case of newly-started businesses and start-ups. The long-term growth rate used to estimate the terminal value of the CGU (or group of CGUs) is assumed at a value not exceeding the average long-term growth rate of the sector, country or market in which the CGU (or group of CGUs) operates.

The value in use of Cash Generating Units in foreign currency is estimated in the local currency by discounting on the basis of an appropriate rate for said currency. The present value obtained in this way is converted into euro on the basis of the spot exchange rate on the reference date of the impairment test (in our case the reporting date of the financial statements).

Future cash flows are estimated by referring to the current conditions of the Cash Generating Unit and, therefore, neither the benefits resulting from future restructuring which the entity has not yet committed to, nor future investments to improve or optimise the CGU are considered.

For impairment testing purposes, the carrying amount of a Cash Generating Unit is calculated according to the criterion with which the recoverable amount of the Cash Generating Unit is determined, excluding surplus assets (namely financial assets, deferred tax assets and non-current assets held for sale).

After having conducted impairment testing of the Cash Generating Unit (or group of CGUs) to which the goodwill is allocated, a second-level impairment test is conducted also including centralised assets with accessory functions (corporate assets) that do not generate positive cash flows and that cannot be allocated according to a criterion that is reasonable and consistent to the individual CGUs. At this second level, the recoverable amount of all of the CGUs (or groups of CGUs) is compared with the carrying amount of all of the CGUs (or groups of CGUs), also including those CGUs to which no goodwill has been allocated, and centralised assets.

If the conditions that led to the previously recognised impairment loss no longer apply, the original value of the goodwill is not reversed, in accordance with the provisions of IAS 36 - Impairment of assets.

(Intangible and tangible) assets with a finite useful life

During the year, the Company checks whether there are indications that tangible or intangible assets with a finite useful life may have suffered impairment losses. To this end, internal and external sources of information have been considered. As regards the former (internal sources) the following are considered: the obsolescence or physical deterioration of the asset, any significant changes in the use of the asset and the economic performance of the asset with respect to that envisaged. As regards external sources, instead, the following are considered: the trend of the market prices of the assets, any negative changes in technology, markets or laws,

the trend of market interest rates, the cost of capital used to value the investments and lastly, if the carrying amount of the net assets of the Company is higher than market capitalisation.

If there are indications that both tangible and intangible assets with a finite useful life have suffered an impairment loss, the carrying amount of the asset is reduced to the relative recoverable amount. The recoverable amount of an asset is defined as the higher between the fair value, net of selling costs, and its value in use. The value in use of an asset is represented by the present value of expected cash flows calculated by applying a discounting rate that reflects current market valuations of the time value of money and of the specific risks of the asset. When the recoverable amount of a single asset cannot be estimated, the Company estimates the recoverable value of the Cash Generating Unit to which the asset belongs.

The impairment loss is recognised in the income statement.

If, subsequently, the reasons that led to the impairment loss no longer exist, the carrying amount of the asset or of the Cash Generating Unit is increased up to the new estimated recoverable amount which, in any event, cannot exceed the amount that would have been determined if no impairment loss had been recognised. The reversal of the impairment loss is recognised in the income statement.

Equity investments

Subsidiaries are enterprises over which SAES independently has the power to make the strategic decisions of the enterprise in order to obtain the relative benefits. Generally, control is considered to exist when over half of the voting rights that may be exercised in the ordinary shareholders' meeting are held directly and indirectly, also considering what is known as potential votes, namely voting rights resulting from convertible instruments. Equity investments in subsidiaries are measured at purchase price, which may be permanently reduced in the event of the distribution of the share capital or of capital reserves or, in the presence of impairment losses determined by conducting impairment tests, the cost may be reversed in future years if the reasons that led to the write-downs no longer exist.

Financial assets (other than trade receivables) and financial liabilities

Pursuant to IFRS 9, the classification and measurement of financial assets is made on the basis of the business model chosen by the Company for their management, as well as on the basis of the characteristics of the contractual cash flows of the financial assets in question.

The business models adopted by the Company are the following:

- Held to Collect: these are financial instruments used to absorb temporary cash surpluses; they are characterised by a low level of risk and mostly held to maturity. The measurement is made at amortised cost.
- Held to Collect and Sell: these are monetary instruments, bonds and equity trading instruments used for the dynamic management of cash surpluses; they are characterised by a low level of risk and usually held to maturity or sold to cover specific liquidity requirements. The measurement is made at fair value through profit and loss.

The impairment of financial assets other than trade receivables is made following the general model that identifies the expected losses on receivables in the following 12 months, or over the entire residual life if the credit risk substantially worsens.

Financial liabilities include trade payables as well as financial liabilities, including therein financial derivatives. They also include trade payables and those of a miscellaneous nature.

Financial liabilities are measured at amortised cost. These liabilities are recorded according to the settlement date principle and initially recognised at fair value, which usually corresponds to the fee received, net of settlement costs directly attributable to the financial liability. After initial recognition, these instruments are measured at amortised cost, using the effective interest rate criterion.

Trade receivables

Trade receivables are characterised by a low level of risk and are generally held to maturity; they are classified in the category "Held to Collect" and are measured at amortised cost.

Impairment testing on trade receivables is conducted using a simplified approach permitted by IFRS 9. This approach enables an estimate of the expected loss for the whole life of the receivable at the time of initial

recognition and of subsequent measurements. The estimate is made mainly by calculating the average expected uncollectability, based on historic and geographical indicators. For some receivables characterised by specific risk, specific measurements of the single credit positions are made instead.

Financial derivatives

The financial derivatives set in place by SAES Getters S.p.A. seek to cover the exposure to exchange rate and interest rate risk and to a diversification of debt parameters, which enable the cost and the volatility to be reduced to within set operational thresholds.

SAES Getters S.p.A. has decided to defer the application of the hedge accounting model envisaged by IFRS 9 and to continue to apply the IAS 39 model.

Therefore, in accordance with the provisions of IAS 39, derivative hedges are recognised according to the procedures established for hedge accounting only when:

- a) at the beginning of the hedge, there are the formal description and the documentation of the hedging relationship in question;
- b) the hedge is expected to be highly effective;
- c) the effectiveness can be reliably measured;
- d) the hedge in question is highly effective during the different accounting periods to which it pertains.

All financial derivatives are measured at fair value, as established in IAS 39.

When derivative instruments have the characteristics to be measured according to hedge accounting criteria, the following accounting treatments are applied:

- Fair value hedge If a financial derivative is designated to hedge exposure to changes in the fair value of an asset or liability, attributable to a specific risk, the profit or the loss resulting from subsequent changes in the fair value of the hedging derivative is recognised in the income statement. The profit or loss resulting from the adjustment to the fair value of the item hedged, for the part attributable to the risk hedged, changes the carrying amount of said item and is recognised in the income statement.
- Cash flow hedge If a financial derivative is designated to hedge the exposure to the fluctuation of the cash flows of an asset or liability recognised in the financial statements or of a transaction deemed as highly likely, the effective portion of the profits or losses resulting from the adjustment to fair value of the derivative instrument is recognised in a specific equity reserve (Reserve for the fair value adjustment of hedging derivatives). The accrued profit or loss is reversed from the equity reserve and recognised in the income statement in the same years in which the effects of the hedged transaction are recognised in the income statement.

The profit or loss associated to that part of the ineffective hedge is immediately recognised in the income statement. If the hedged transaction is no longer deemed likely, the profits or losses not yet realised, recognised in the equity reserve, are immediately recognised in the income statement.

For derivatives for which no hedging relationship has been established, the profits or the losses resulting from their measurement at fair value are recognised directly in the income statement.

Cash and cash equivalents

Cash and cash equivalents are recognised, depending on their nature, at nominal value.

Other cash equivalents represent short-term and highly liquid financial loans which can be promptly converted into cash, known and subject to an insignificant risk of change in their value, whose original maturity or that at the time of purchase, does not exceed 3 months.

Inventories

Inventories - represented by raw materials, products purchased, semi-finished goods, work in progress and finished products - are measured at the lower of purchase and production cost and assumed realisable value;

the cost is calculated using the FIFO method. The measurement of inventories includes direct costs of materials and of labour and the indirect costs of production (variable and fixed).

In addition, provisions are allocated for materials, finished products, spare parts and other supplies considered obsolete or slow moving, taken their future expected use and their assumed realisable value into account.

Divested assets/Assets held for sale/Discontinued operations

Divested assets, Assets held for sale and Discontinued operations refer to those business lines and to those assets (or operations) sold or being disposed of, whose carrying amount has been or will be recovered mainly through the sale rather than the continuative use of the same.

These conditions are considered to be met when the sale or the discontinuance of the disposal group is considered highly likely and the assets and liabilities are immediately available for sale in their current condition.

Assets held for sale are measured at the lower of their net carrying amount and fair value net of selling costs. If these assets originate from recent business combinations, they are measured at their present value net off selling costs.

In compliance with IFRS, the date relating to the assets divested and/or held for sale are presented in a specific income statement item: Income (loss) from discontinued operations.

Provisions relating to personnel

Staff Leaving Indemnities (TFR)

Staff Leaving Indemnities (TFR), mandatory for Italian enterprises pursuant to article 2120 of the Italian Civil Code, are a type of deferred remuneration and are correlated to the length of the employee's working life and to the remuneration received in the relative period of service.

In application of IAS 19, the TFR, calculated in this way, is considered a "Defined Benefits Plan" and the relative obligation to be recognised in the financial statements (Payable for TFR) is established by an actuarial calculation, using the Projected Unit Credit Method. As envisaged by the revised version of IAS 19, the profits and losses resulting from the actuarial calculation are fully recognised in the statement of comprehensive income in the period in which they arise. These actuarial differences are immediately recognised in profits carried forward and are not classified in the income statement in later periods.

The costs relating to the present value of the obligation for TFR resulting from the approximation of the time at which the benefits will be paid, are included under "Personnel costs".

From January 1, 2007, the 2007 Finance Law and relative implementing decrees introduced significant changes to the TFR scheme, including giving workers a choice as to the destination of their accruing TFR, to supplementary pension plans or to the "Treasury Fund" managed by INPS.

This therefore means that the obligation towards INPS and the contributions made to supplementary pension plans are considered, according to IAS 19, "Defined contribution plans", while the amounts recognised as payables for TFR continue to be considered "Defined benefit plans".

The legislative changes that have been made since 2007 have therefore led to a redetermination of actuarial assumptions and of the consequent calculations used to establish the TFR.

Other long-term benefits

Bonuses for anniversaries or other benefits linked to length of service and long-term incentive plans are discounted to establish the present value of the obligation for defined benefits and the relative cost of current work performed. Any actuarial differences, as envisaged by the revised version of IAS 19, are fully recognised in the statement of comprehensive income in the period in which they arise. These actuarial differences are immediately recognised in profits carried forward and are not classified in the income statement in later periods.

Provisions for risks and charges

The Company recognises provisions for risks and charges when, in the presence of a present, legal or implicit obligation towards a third party, resulting from a past event, it is likely that resources will be required to meet said obligation, and when a reliable estimate of the amount of said obligation can be made.

Changes in estimates are reflected in the income statement of the year in which the same arise.

Treasury Shares

Treasury shares are deducted from shareholders' equity.

Foreign currency transactions

Foreign currency transactions are recorded at the exchange rate in force on the date of the transaction. Monetary assets and liabilities in foreign currency are converted at the exchange rate in force on the reporting date of the financial statements. The exchange rate differences generated by the cancellation of monetary entries or by their conversion at rates different to those of their initial recognition in the year or to those at the end of the previous year.

Non-current items measured at historical cost in a foreign currency (including goodwill and adjustments to the fair value generated during the purchase price allocation of a foreign company) are converted at the exchange rates at the date of their initial recognition. At a later stage, these figures are converted at the exchange rate at year end.

Recognition of revenues

Pursuant to IFRS 15, a contract with a customer is only recognised if it is likely that the Group will receive the consideration it will have a right to in exchange for goods and services that will be transferred to the customer. Revenues from the sale of goods are recognised at the time at which the control of the good sold is transferred, while revenues resulting from the provision of services are recognised at the time the service is performed. Revenues are recorded net of discounts, allowances and returns.

Cost of sales

The cost of sales includes the cost of production or purchase of the products and of the goods that have been sold. It includes all costs for materials, processing and general expenses directly associated with the production, including the depreciation of assets used in production and the write-downs of the inventories.

Research and advertising costs

Research and advertising costs are charged directly to the income statement in the year in which they were incurred. Development costs are capitalised if the conditions envisaged by IAS 38 are met, already illustrated in the paragraph on intangible assets. If the requirements for the mandatory capitalisation of development costs are not met, the charges are booked to the income statement of the year in which they were incurred.

Government grants

Government grants are recognised in the financial statements in accordance with IAS 20, namely when it is reasonably certain that the company will meet all of the conditions envisaged for the receipt of the grants and that the grants in question will be received. Grants are recognised in the income statements for the period in which the costs relating to the same are recorded.

With regard to the new disclosure and transparency obligations for parties that entertain economic relations of any nature with the Public Administration envisaged by art-1, paragraphs 125-129 of Italian Law 124/2017, note that in 2018, the Company did not receive any government grants to which the above-cited Law and any later amendments apply.

The government grants that the Company received in 2018, all of which relating to research and development projects, all regard government entities of other European countries.

Current and deferred taxes

Income taxes include all of the taxes calculated on the Company's taxable income.

Income taxes are recognised in the income statement, with the exception of those relating to items that are directly debited from or credited to an equity reserve, in which case the relative tax is recognised directly in the respective equity reserve.

Deferred tax assets/liabilities are recognised according to the balance sheet liability method.

Deferred tax assets/liabilities are recognised on the temporary difference between the carrying amount and the amount for tax purposes of an asset or liability. Deferred tax assets, including those resulting from recordable tax losses and unutilised tax credit, are recognised to the extent to which future income is likely to be generated to recover the same.

Deferred tax assets on tax losses that may be carried forward are recognised to the extent to which future taxable income is likely to be generated against which they can be recovered.

Tax assets and liabilities for current and deferred taxes are offset when the income taxes are applied by the same tax authority and when there is a legal right to offset the same.

Deferred tax assets and deferred tax liabilities are calculated by adopting the tax rates that are expected to be applicable, in the years in which the temporary differences will cancel each other out.

Dividends

Dividends received are recognised in the income statement on an accruals basis, namely in the year in which the relative credit right arises, following the shareholders' meeting resolution to distribute the dividends of the investees.

Distributable dividends are represented as a change in shareholders' equity in the year in which they are approved by the Shareholder's Meeting.

Use of estimates and subjective valuations

The preparation of the Company's financial statements and of the relative notes in application of IFRSs, requires the use of estimates and assumptions from Management that have an effect on the values of financial statement assets and liabilities, as well as the disclosure of contingent assets and liabilities on the reporting date. If such estimates and assumptions, which are based on the best evaluation currently available, should differ from the actual circumstances in the future, they will be modified accordingly during the period in which said circumstances change.

Estimates and subjective valuations are used to recognise the recoverable amount of non-current assets (including goodwill), revenues, accruals to provision for receivables, obsolete and slow-rotation inventory, depreciation and amortisation, employee benefits, taxes, restructuring provision as well as other accruals and provisions. Estimates and assumptions are reviewed periodically and the effects of all changes are immediately reflected on the statement of profit or loss.

In the absence of a standard or an interpretation that applies specifically to a transaction, Company Management makes weighted subjective valuations to establish which accounting methods it intends to adopt to provide relevant and reliable information so that the financial statements:

- truly reflect the equity/financial situation, the profit/loss and the cash flows of the Company;
- reflect the economic substance of the transactions;
- are neutral:
- are prepared on prudential bases;
- are complete in terms of all relevant aspects.

The financial statement items that require greater subjectivity by the directors in drawing up estimates and for which a change in the conditions underlying the assumptions used could have a significant impact on the financial statements are: goodwill, the write-down of fixed assets, the depreciation of fixed assets, deferred tax assets, the bad debt provision, the provision for obsolete inventory, the risks provision, pension plans and other post-employment benefits.

Please refer to the relative paragraphs of the Explanatory notes for the main assumptions adopted and the sources used for making the estimates.

IFRS accounting standards, amendments and interpretations applicable from January 1, 2018

The accounting standards adopted for the preparation of the annual financial statements as at December 31, 2018 are in line with those used for the preparation of the Company's annual financial statements as at December 31, 2017, with the exception of changes to IFRSs, applicable from January 1, 2018, listed below:

IFRS 15 - Revenue from contracts with customers

On May 28, 2014 the IASB issued IFRS 15 - Revenue from contracts with customers that, together with further clarifications published on April 12, 2016, replaces IAS 18 - Revenues and IAS 11 - Construction contracts, as well as the interpretations IFRIC 13 - Customer loyalty programmes, IFRIC 15 - Agreements for the construction of real estate, IFRIC 18 - Transfers of assets from customers and SIC 31 - Revenues - barter transactions involving advertising services. The standard defines a new model of revenue recognition that applies to all contracts with customers except those that fall within the scope of other IAS/IFRSs such as leases, insurance contracts and financial instruments. The basic steps for the recognition of revenues under the new model are the following ones:

- o the identification of a contract with the customer;
- o the identification of the performance obligations of the contract;
- o the determination of the price;
- o the allocation of the price to the performance obligations of the contract;
- o the revenue recognition criteria when the entity meets each performance obligation.

Based on the analyses conducted, the Directors believe that in terms of the revenues of SAES Getters S.p.A., the following considerations can be made:

- o identification of the performance obligations of the contract based on commercial agreements in place with customers, no further performance obligations for the Company have been identified.
- o determination of the price as regards the Company, there is no variable consideration or significant financing components in the commercial agreements with customers.
- o allocation of the price to the performance obligations of the contract based on the structure of the commercial agreements in place with customers, the price can clearly be identified from the latter.
- o revenue recognition criteria when the entity meets each performance obligation according to the current revenue recognition process in place in SAES Getters S.p.A., revenue recognition takes place when performance obligations contained in the commercial agreements with customers are met.

The standard has been applied since January 1, 2018.

The analysis made to identify the types of contract covered by the new provisions and to determine the relative impact, led us to conclude that there are no significant impacts on either shareholders' equity as at January 1, 2018 or on revenues from sales as at December 31, 2018.

IFRS 9 - Financial instruments

On July 24, 2014 the IASB published the final version of IFRS 9 - Financial instruments.

The document summarises the results of the IASB project aimed at replacing IAS 39.

The standard introduces new requirements for the classification and measurement of financial assets and liabilities. In particular, for financial assets, the new standard uses a single approach based on the management of financial instruments and the contractual cash flow characteristics of the financial assets themselves in order to determine the evaluation criterion, replacing the many different rules envisaged by IAS 39. Instead, for financial liabilities, the main change regards the accounting treatment of the changes in the fair value of a financial liability designated as a financial liability measured at fair value through profit or loss, if these changes are due to changes in the creditworthiness of the issuer of the liability itself. Under the new standard, these changes must be recognised in the statement of "other comprehensive income" and not in the income statement. Furthermore, in the changes to non-substantial liabilities, it is no longer permitted to spread the economic effects of the renegotiation over the residual term of the debt by changing the effective interest rate at said date, as the relative effect must be recognised in the income statement.

With reference to impairment, the new standard requires that the estimate of credit losses is made on the basis of the expected losses model (and not of the incurred losses model used by IAS 39) using concrete information, available without unreasonable effort or expense, which include historical, current and future data. The standard requires that this impairment model applies to all financial instruments, namely to financial assets measured at

amortised cost, to those measured at fair value through other comprehensive income, to receivables deriving from lease contracts and to trade receivables.

Lastly, the standard introduces a new hedge accounting model in order to adapt the requirements of the current IAS 39 that sometimes were considered too stringent and unsuitable to reflect the risk management policies of the company. The main changes of the document regard:

- o an increase in the types of transactions eligible for hedge accounting, including also the risks of non-financial assets/liabilities eligible to be managed in hedge accounting;
- o a change in the accounting method for forward contracts and options when included in a hedge accounting relation in order to reduce the volatility of the income statement;
- o changes in the effectiveness test by replacing the current model based on the 80-125% parameter with the principle of the "economic relationship" between the hedged item and the hedging instrument; moreover, a retrospective evaluation of the effectiveness of the hedging relationship will be no longer requested.

The greater flexibility of the new accounting rules is offset by additional requests of information on the risk management activities of the company.

The standard has been applied since January 1, 2018. At the time of first application of IFRS 9, the amended back-dated method was applied. Consequently, no changes have been made to the comparative schedules and any impacts have been recognised in the opening shareholders' equity.

Based on the analyses conducted, the Directors believe that the following considerations can be made for SAES Getters S.p.A.:

o the classification and measurement of financial assets and liabilities - the main impacts of the new classification and measurement requirements mainly regard the placement of trade receivables in the new category called "held to collect".

A table with the new classification of assets and liabilities in accordance with the requirements of IFRS 9 is shown below.

(thousands of Euro)	31 december 2018	31 december 2017	Held to Collect	Held to Collect and Sell	Other
<u>ASSETS</u>					
Non current tax consolidation receivables	330	276	X		
Intercompany financial credits	161,252	11,078	X		
Trade receivables	12,123	12,943	X		
Prepaid expenses, accrued income and other	2,626	2,934	X		
Cash and cash equivalents	40,495	8,378	X		
<u>LIABILITIES</u>					
Financial payables	17,797	30,472	X		
Intercompany financial payables	10,317	7,023	X		
Trade payables	8,241	7,606	X		
Other payables	9,248	10,608	X		
Income taxes payables	415	58	X		
Derivative instruments evalutated at fair value	48	60	X		
Other Financial Debts	531	6	X		
Bank overdraft	27,002	12,001	X		

- o write-downs of receivables pursuant to IFRS 9, the Expected Credit Loss model has been adopted for outstanding receivables. With regard to trade receivables, in particular, the application of this method has entailed the specific write-down of receivables that are difficult to collect and a generic write-down for all other receivables, including those not yet due. This approach substantially corresponds to that adopted in previous years and therefore did not entail the recognition of significant additional write-downs.
- o hedge accounting the company has decided to continue to apply the rules envisaged by IAS 39 for hedge accounting, as permitted by the new IFRS 9.

Following the analyses made, the Directors assessed the impacts on shareholders' equity as at January 1, 2018 resulting from the application of the new accounting standard IFRS 9 as not significant, therefore the same

have not been included in this annual report. The application of the new standard, instead, led to the recognition of additional costs for write-downs of 50 thousand euro as at December 31, 2018, with a net impact on the profit/loss for the year of 38 thousand euro.

Classification and measurement of share-based payment transactions (amendments to IFRS 2)

On June 20, 2016 the IASB published a document entitled "Classification and measurement of share-based payment transactions (amendments to IFRS 2)", which provides some clarifications on the accounting treatment of the effects of vesting conditions in the presence of cash-settled share-based payments, on the classification of share-based payments with net settlement characteristics and on the accounting of the changes to the terms and conditions of a share-based payment that alter its classification from cash-settled to equity-settled one. The changes have been applied since January 1, 2018. The adoption of this amendment did not affect the Company's financial statements.

Annual Improvements to IFRSs: 2014-2016 Cycle

On December 8, 2016 the IASB published the document "Annual Improvements to IFRSs: 2014-2016 Cycle" that incorporates some pre-existing standards as part of the annual process to improve the same. The main changes concern:

- o IFRS 1 First-Time Adoption of International Financial Reporting Standards Deletion of short-term exemptions for first-time adopters. The amendment of this standard was applied from January 1, 2018 and concerns the elimination of some short-term exemptions provided by paragraphs E3-E7 of Appendix E of IFRS 1, as the benefit of such exemptions is deemed outdated;
- o IAS 28 Investments in Associates and Joint Ventures Measuring investees at fair value through profit or loss: an investment-by-investment choice or a consistent policy choice. The amendment states that the option for a venture capital organisation or another entity qualified as such (for example, a mutual fund or a similar entity) to measure investments in associates and joint ventures measured at fair value through profit or loss (rather than by applying the equity method) is exercised for each investment at the time of its initial recognition. This amendment has been applied since January 1, 2018;
- o IFRS 12 Disclosure of Interests in Other Entities Clarification of the scope of the Standard. The amendment clarifies the scope of IFRS 12, specifying that the information required by the standard, except for that envisaged by paragraphs B10-B16, is applied to all equity interests that are classified as held for sale, held for distribution to shareholders or as discontinued operations in accordance with IFRS 5.

This amendment has been applied since January 1, 2018. The adoption of these amendments did not affect the Company's financial statements.

Transfers of Investment Property (amendments to IAS 40)

On December 8, 2016 the IASB published the document "Transfers of investment property (amendments to IAS 40)" that contains some changes to IAS 40. These amendments clarify the requirements needed to transfer a property to, or from, an investment property. In particular, an entity shall transfer a property to, or from, investment property when, and only when, there is evidence of a change in its use. Such a change must be related to a specific event that happened and therefore should not be limited to a change in the intentions of the management of an entity.

The changes have been applied since January 1, 2018. The adoption of these amendments did not affect the Company's financial statements.

Foreign Currency Transactions and Advance Consideration (IFRIC Interpretation 22)

On December 8, 2016 the IASB published the document "Foreign Currency Transactions and Advance Consideration (IFRIC Interpretation 22)". The interpretation aims at providing guidelines for foreign exchange transactions if non-cash advances or down payments are recognised in the accounts, prior to the recognition of the related assets, costs or revenues. This document provides guidance on how an entity should determine the date of a transaction, and as a result, the spot exchange rate to be used when there are foreign currency transactions in which the payment is made or received in advance.

The interpretation clarifies that the transaction date is the earlier between:

- a) the date on which the advance payment or the down payment received are recorded in the financial statements:
- b) the date on which the asset, the cost or the income (or part of it) is recognised in the financial statements (with the cancellation of the advance or down payment received).

If there are a number of advance or down payments received, a transaction date for each of them must be identified.

IFRIC 22 has been applied since January 1, 2018. The adoption of this interpretation did not affect the Company's financial statements.

IFRS and IFRIC accounting standards, amendments and interpretations approved by the European Union but not yet mandatorily applicable, but applicable with an earlier adoption

The standards and the amendments approved by the European Union, but not yet mandatorily applicable and not adopted by the Company in advance as at December 31, 2018 are illustrated below.

IFRS 16 - Leases

On January 13, 2016 the IASB issued IFRS 16 – Leases, which is intended to replace IAS 17 - Leases, and the interpretations IFRIC 4 - Determining whether an arrangement contains a leas, SIC 15 - Operating leases incentives and SIC 27 - Evaluating the substance of transactions involving the legal form of a lease.

The new standard provides for a new definition of lease and introduces a criterion based on control (right of use) of an asset to distinguish the lease contracts from the contracts for the provision of services, by identifying the following discriminating factors: the identification of the asset, the right to replace it, the right to substantially obtain all the economic benefits arising from the use of the asset and the right to direct the use of the underlying asset of the contract.

The standard establishes a single model of recognition and measurement of the lease agreements for the lessee which provides for the record of the lease asset, including an operating lease, among the assets with a financial debt as counterpart, while providing also the possibility not to recognise as leases those contracts which refer to "low-value assets" and those leases with a duration of the contract equal to or less than 12 months. In contrast, the standard does not include significant changes for the lessors.

The standard is applicable from January 1, 2019, but earlier application is allowed.

The Company completed the preliminary project to assess potential impacts caused by application of the new standard as at the transition date (January 1, 2019). This process breaks down into different steps, including the complete mapping of the contracts that potentially may contain a lease and their analysis in order to understand their key clauses important for IFRS 16 purposes. The standard implementation process is still in the completion stage.

At the time of first application of IFRS 16, it has been decided that the amended back-dated method will be applied. Specifically, the Company chose to apply the standard retrospectively, however recognising the accumulated effect arising from application of the standard in the shareholders' equity as at January 1, 2019 according to the instructions in paragraphs C7-C13 of IFRS 16. Therefore, as regards lease agreements previously classified as operating, the Company will recognise:

- a) a financial liability, corresponding to the present value of future residual payments on the transition date, discounted using the incremental borrowing rate applicable on the transition date;
- b) a right of use corresponding to the value of the financial liability on the transition date, net of any accruals or deferrals relating to the lease and recognised in the statement of financial position on the reporting date of these financial statements.

The following table shows the impacts estimated from adoption of IFRS 16 as at the transition date.

	Impact at
	transaction date (1 January 2019)
ASSETS	
Non Current Assets	1
Building right to use	213
Automobiles right to use	381
Facilities right to use	267
Total Non Current Assets	861
Total Assets	
SHAREHOLDERS' EQUITY AND LIABILITIES	
Retained Earnings	26
Shareholders' Equity	26
Financial Liabilities for non-current lease	479
Total Non Current Liabilities	479
Current Liabilities	
Financial Liabilities for current lease	356
Total Current Liabilities	356
Total Liabilities and Shareholders' Equity	861

In adopting IFRS 16, the Company intends to exploit the exemption granted by paragraph IFRS 16-5(a) with regard to short-term leases. Similarly, the Company intends to exploit the exemption granted by IFRS 16-5(b) with regard to lease agreements for which the underlying assets are considered as low-value assets (namely the assets underlying the lease agreement do not exceed 5,000 euro when new). The agreements for which the exemption has been applied mostly fall into the following categories:

- computers, telephones and tablets;
- printers;
- other electronic devices.

For these agreements, the introduction of IFRS 16 will not entail the recognition of the financial liabilities of the lease and of the relative right of use, but the lease instalments will be booked to the income statement on a straight-line basis for the duration of the respective agreements.

Also the contracts expiring within 12 months from the transition date were classified as short term leases and their lease instalments will be recognised in the income statement on a straight-line basis.

Prepayment Features with Negative Compensation (amendments to IFRS 9)

On October 12, 2017 the IASB published the document Prepayment Features with Negative Compensation (amendments to IFRS 9). This document specifies that instruments that envisage an early prepayment option could comply with the Solely Payments of Principal and Interest test also in the event in which the "reasonable additional compensation" envisaged in the case of early prepayment is a "negative compensation" for the lender. The amendment applies from January 1, 2019, but an earlier adoption is allowed.

The adoption of these changes is not expected to have any significant impact on the Company's financial statements.

Uncertainty over Income Tax Treatments (IFRIC Interpretation 23)

On June 7, 2017 the IASB published the interpretation document Uncertainty over Income Tax Treatments (IFRIC Interpretation 23). The interpretation addresses the issue of uncertainties about the tax treatment to be adopted in respect of income taxes. In particular, the interpretation requires an entity to analyse uncertain tax treatments (individually or as a whole, depending on their characteristics) always assuming that the tax authority will examine the tax position in question, with full knowledge of all relevant information. If the entity believes it is unlikely that the tax authority will approve the tax treatment adopted, the entity must reflect the effect of said uncertainty when measuring its current and deferred income taxes. In addition, the document does not contain any new disclosure requirement, but emphasises that the entity should assess whether it is necessary to provide information on the management's considerations and related to the uncertainty inherent to the recognition of the income taxes, in accordance with the provisions of IAS 1.

The adoption of this interpretation is not expected to have any significant impact on the Company's financial statements.

IFRS accounting standards, amendments and interpretations not yet validated by the European Union

At the date of these financial statements, the competent bodies of the European Union have not yet completed the endorsement process necessary for the adoption of the amendments and the standards described below.

IFRS 17 - Insurance Contracts

On May 18, 2017 the IASB issued IFRS 17 – Insurance Contracts that will replace IFRS 4 – Insurance Contracts.

The objective of the new standard is to ensure that an entity provides relevant information that faithfully represents rights and obligations deriving from the insurance contracts it issues. The IASB developed this standard to eliminate inconsistencies and weaknesses in existing accounting practices, by providing a single principle-based framework to account for all types of insurance contracts, including reinsurance contracts that an insurer holds.

The new standard also envisages some submission and disclosure requirements to improve the comparability between the entities of this sector.

The new standard measures an insurance contract based on a General Model or a simplified version of it, called Premium Allocation Approach ("PAA").

The main features of the General Model are as follows:

- o estimates and assumptions of future cash flows are always the current ones;
- o the measurement reflects the time value of money;
- o estimates provide for an extensive use of information available in the market;
- o there is a current and explicit risk measurement;
- o the expected profit is deferred and aggregated in groups of insurance contracts at the time of their initial recognition;
- o the expected profit is recognised in the hedging period taking into account the adjustments resulting from variations in the assumptions related to the cash flows of each group of contracts.

The PAA approach envisages the measure of the liability for the residual coverage of a group of insurance contracts provided that, at its initial recognition, the entity provides that such a liability is reasonably an approximation of the General Model. Contracts with a coverage period of one year or less are automatically eligible for the PAA approach. The simplifications arising from the application of the PAA method do not apply to the assessment of liabilities for existing claims that are measured with the General Model. However, it is not necessary to discount those cash flows if the balance to be paid or settled is expected to take place within one year from the date in which the claim was filed.

The new standard must be applied to insurance contracts issued, including reinsurance contracts issued, to reinsurance contracts held and also to investment contracts with a discretionary participation feature (DPF).

The standard is applicable starting from January 1, 2021, but an earlier application is allowed only for entities applying IFRS 9 - Financial Instruments and IFRS 15 - Revenue from Contracts with Customers.

The adoption of this standard is not expected to have any significant impact on the Company's financial statements.

Long-term Interests in Associates and Joint Ventures (amendments to IAS 28)

On October 12, 2017 the IASB published the document Long-term Interests in Associates and Joint Ventures (amendments to IAS 28). This document clarifies the need to apply IFRS 9, including requirements relating to impairment, to long-term joint interests in associated companies and joint ventures for which the equity method is not applied.

The amendment applies from January 1, 2019, but an earlier adoption is allowed.

The adoption of these changes is not expected to have any significant impact on the Company's financial statements.

Annual Improvements to IFRSs: 2015-2017 Cycle

On December 12, 2017 the IASB published the document "Annual Improvements to IFRSs: 2015-2017 Cycle" that incorporates the amendments to some standards as part of the annual process to improve the same. The main changes concern:

- o IFRS 3 Business Combinations e IFRS 11 Joint Arrangements: the amendment clarifies that when an entity obtains control of a business that is a joint operation, it must remeasure previously held interests in that business. Instead, this process is not envisaged if joint control is obtained.
- o IAS 12 Income Taxes: the amendment clarifies that all of the tax consequences of dividends (including payments on financial instruments classified under equity) must be recognised in a consistent manner with the transaction that generated said profits (income statement, OCI or shareholders' equity).
- IAS 23 Borrowing Costs: the amendment clarifies that if any loans remain outstanding after the related qualifying asset is already ready for its intended use or sale, the same become part of the loan funds used to calculate borrowing costs.

The amendments apply from January 1, 2019, but an earlier adoption is allowed.

The adoption of these changes is not expected to have any significant impact on the Company's financial statements.

Amendment to IAS 19 "Plant Amendment, Curtailment or Settlement"

The document, published on February 7, 2018, clarifies that an entity must recognise a change (i.e. a curtailment or a settlement) of a defined benefit plan. The amendments require the entity to update its assumptions and to remeasure the net liability or asset resulting from the plan. The amendments clarify that after said event has arisen, an entity uses updated assumptions to measure the current service cost and the interest for the remainder of the related period following the event.

The adoption of these amendments is not expected to have any significant impact on the Company's financial statements.

Definition of a Business (amendments to IFRS 3)

On October 22, 2018 the IASB published the document "Definition of a Business (Amendments to IFRS 3)". The document provides several clarifications as to the definition of a business with a view to the correct application of IFRS 3. In particular, the amendment clarifies that while a business usually generates an output, the presence of an output is not strictly necessary to identify a business in the presence of an integrated set of assets/processes and goods. Nevertheless, to meet the definition of a business, an integrated set of assets/processes and goods must include, at least, one input and one substantial process that together significantly contribute to the ability to generate output. To this end, the IASB has replaced the term "ability to generate output" with "ability to contribute to the generation of output" to clarify that a business can exist also without the presence of all of the inputs and processes needed to generate an output.

The amendment also introduced an optional test ("concentration test") for the entity to establish whether a set of assets/processes and goods acquired is a business or not. If the test provides a positive outcome, the set of assets/processes and goods acquired does not represent a business and the standard does not require any further tests. If the test provides a negative outcome, the entity must conduct further analyses on the assets/processes and goods acquired to identify the presence of a business. To this end, the amendment added numerous illustrative examples to standard IFRS 3, to clarify the practical application of the new definition of a business

in specific cases. The changes will apply to all business combinations and acquisitions subsequent to January 1, 2020, but an early application is allowed.

The adoption of this amendment is not expected to affect the Company's financial statements.

Definition of Material (amendments to IAS 1 and IAS 8)

On October 31, 2018 the IASB published the document "Definition of Material (Amendments to IAS 1 and IAS 8)". The document introduces a change to the definition of "relevant" contained in standards IAS 1 – Presentation of Financial Statements and IAS 8 – Accounting Policies, Changes in Accounting Estimates and Errors. The objective of this amendment is to make the definition of "relevant" and introduces the concept of "obscured information" alongside the concepts of omitted or misstated information already present in the two standards being amended. The amendment clarifies that information is "obscured" if it has been described in such a way as to produce an effect on primary users similar to that which would have been produced if said information had been omitted or misstated.

The adoption of this amendment is not expected to affect the Company's financial statements.

IFRS 10 and IAS 28 - Sales or contribution of assets between an investor and its associate or joint venture (amendment)

On September 11, 2014 the IASB published an amendment to IFRS 10 and IAS 28 - Sales or contribution of assets between an investor and its associate or joint venture. The document was published in order to solve the current conflict between IAS 28 and IFRS 10.

According to IAS 28, the gain or loss resulting from the sale or transfer of a non-monetary asset to a joint venture or associate in exchange of a share in the share capital of the latter is limited to the stake held in the joint venture or associate by the other investors not involved in the transaction. In contrast, IFRS 10 requires the recording of the entire gain or loss in the event of loss of the control of a subsidiary, even if the entity continues to hold a non-controlling stake in it, including in this case also the sale or transfer of a subsidiary to a joint venture or to an associate. The changes introduced provide that in case of a sale/transfer of an asset or a subsidiary to a joint venture or an associate, the measure of the gain or loss to be recognised in the balance sheet of the assignor/transferor depends on the fact that the sold/transferred assets or subsidiary constitute or not a business, as envisaged by IFRS 3. In the event that the sold/transferred activities or subsidiary represent a business, the entity shall recognise the gain or loss on the entire investment previously held; while, in the opposite case, the portion of gain or loss related to the share still held by the entity should be eliminated. At the moment, the IASB has suspended the application of this amendment.

The adoption of these changes is not expected to have any significant impact on the Company's financial statements.

3. FINANCIAL RISK MANAGEMENT

Financial risk management objectives and policy

The main financial instruments used by the Company, other than derivatives, include short-term on demand bank deposits as well as bank loans. The Company's policy as regards these instruments entails the short-term investment of cash and cash equivalents and the funding of its operations.

Due to the above, the Company does not trade in financial instruments.

The Company also has financial assets and liabilities, such as trade payables and receivables, resulting from its operations.

In the daily running of its business operations, SAES Getters S.p.A. is exposed to the following financial risks:

- interest rate risk: resulting from changes in interest rates, related to originated financial assets and assumed financial liabilities;
- exchange rate risk: resulting from the volatility of exchange rates, which the Company is exposed to with regard to its transactions in foreign currencies; this exposure is mostly generated by sales in currencies other than the reporting one and by dividends from foreign subsidiaries;

- credit risk: represented by the risk of the non-fulfilment of commercial and financial obligations undertaken by counterparties;
- liquidity risk: related to the need to cover short-term financial commitments.

This risks are managed by:

- defining guidelines for operational management, at central level;
- identifying the most suitable financial instruments, including derivatives, to meet its objectives;
- monitoring the results achieved;
- excluding any transactions involving speculative derivative instruments.

The paragraphs below illustrate the policies to manage the above-cited financial risks and the sensitivity analyses conducted by SAES Getters S.p.A.

Interest rate risk

The Company's financial debts, both short and long-term ones, are mainly structured on a variable interest rate basis, therefore they are subject to the risk of interest rate fluctuations.

With regard to long-term financial debts, the exposure to interest rate variation is handled by way of entering into Interest Rate Swap or interest Rate Option agreements, with a view to guarantee a level of financial expenditures which are sustainable by the Company's financial structure.

The funding for the working capital is managed through short-term financing transactions and, as a consequence, the Company does not hedge itself against the interest-rate risk.

With regard to financial assets, the table below provides details of the sensitivity of the Company's pre-tax profit, assuming that all other variables are not sensitive to changes in interest rates:

	(%)	(thousands of Euro)	(thousands of Euro)
	Increase / Decrease	Effect on result before taxes	Effect on net result and net equity
Euro	+/- 1	+/-839	+/- 638
Other currencies	+/- 1	+/- 37	+/- 28
Euro	+/- 1	+/- 33	+/- 33
Other currencies	+/- 1	+/- 1	+/- 1

With regard to financial liabilities, the table below provides details of the sensitivity of the Company's pretax profit, assuming that all other variables are not sensitive to changes in interest rates:

		(%) (migliaia di euro)		(migliaia di euro)
Increase / Decrease		Increase / Decrease	Increase / Decrease Effect on result before taxes	
2018	Euro	+/- 1	-/+ 454	-/+ 345
2017	Euro	+/- 1	-/+ 464	-/+ 463

With regard to Interest Rate Swaps, the table below provides details of the sensitivity of the pre-tax profit, assuming all other variables remain stable, following a shift of one percentage point of the spot rate curve (and consequently, to changes of the relative forward rate curve):

	(thousands of Euro)	(euro)	(euro)	(euro)	(euro)	(euro)
Description	Notional amount Fair Value	l amount Fair Value	Estimated FV	Difference in FV	Estimated FV	Difference in FV
F			+1%	+1%	-1%	-1%
SAES Getters S.p.AIRS operation due date December 21,	5,000	(10.477)	67,257	86,734	(107.094)	(99.507)
2022 and Notional amount 5 Million	5,000	(19,477)	67,237	80,734	(107,984)	(88,507)
SAES Getters S.p.AIRS operation due date December 31,	£ 000	(9.220)	0	0.220	(62.402)	(54.072)
2022 and Notional amount 5 Million	5,000	(8,330)	U	8,330	(62,402)	(54,072)
SAES Getters S.p.AIRS operation due date December 31,	10.000	(20,670)	75,833	190,565	(101.200)	(172,105)
2022 and Notional amount 10 Million	10,000	(20,670)	75,855	190,363	(101,390)	(172,103)
Total effect on result before taxes		(48,477)		285,629		(314,684)
Total effect on net result and net equity	•			217,078		(239,160)

As the Company recognised its derivative instruments in the period by recording the profits or the losses resulting from their fair value measurement directly in the income statement, also the effects of a change in the above-indicated fair value would have an impact on the income statement for the period.

Exchange rate risk

The Company is exposed to the exchange rate risk on foreign transactions. This exposure is mostly generated by sales in currencies other than the reporting one. Around 39% of the Company's sales and around 9% of its operating costs are reported in a currency other than the euro.

In order to manage the volatility of exchange rates, primarily of the US dollar and of the Japanese yen, the Company has hedges in place on these currencies, whose values are periodically determined by the Board of Directors according to the net currency cash flows expected to be generated by sales. The maturities of the hedging derivatives tend to coincide with the scheduled date of collection of the hedged transactions.

The Company also sets hedges in place for specific transactions in currencies other than the reporting one.

To hedge the risk of fluctuation in the exchange rates on trade receivables denominated in foreign currencies in 2018, in April 2018 the Company signed forward contracts on the US dollar and on the Japanese yen.

With reference to the US dollar, the forward contracts (with a notional value of 2.7 million USD) have an average forward exchange rate of 1.2416 against the euro.

In relation to the Japanese yen, the forward contracts (with a notional value of 207 million JPY) have an average forward exchange rate of 131.02 against the euro.

These contracts had all expired by December 31, 2018.

The hedges against exchange rate risk are underwritten by the Company with regard to cash flows, also including the transactions of its subsidiaries; the economic effects of these contracts are then charged back on an accrual basis.

The table below shows the sensitivity to possible changes in the exchange rates of the US dollar and the Japanese yen of the pre-tax profit and the net profit/loss of the Company due to the consequent change in the fair value of current trade receivables and payables outstanding at the end of each year, maintaining all other variables fixed:

		(thousands of Euro)	(thousands of Euro)
US Dollar	Increase/ Decrease	Effect on result before taxes	Effect on net result and net equity
2018	+ 5% - 5%	(150) 166	(114) 126
	+ 5%		
2017	+ 3% - 5%	(168) 185	(167) 185

		(thousands of Euro)	(thousands of Euro)
Japanese YEN	Increase/ Decrease	Effect on result before taxes	Effect on net result and net equity
2018	+ 5%	(29)	(22)
2010	- 5%	32	25
2017	+ 5%	(38)	(38)
2017	- 5%	42	42

Commodity price risk

The Company's exposure to commodity price risk is usually moderate. The procurement procedure requires there to be more than one supplier for each commodity deemed to be critical. In order to reduce its exposure to the risk of price variations, it enters into specific supply agreements aimed at controlling the commodity price

volatility. The Company monitors the trends of the main commodities subject to the greatest price volatility and does not exclude the possibility of undertaking hedging transactions in derivative instruments with the aim of neutralizing the price volatility of its commodities.

Credit risk

Credit risk represents the Company's exposure to potential losses resulting from the non-fulfilment of obligations undertaken by commercial and financial counterparties. The Company deals mainly with well-known, reliable customers. The Sales and Marketing Department assesses new customers' solvency and periodically verifies that credit limit conditions are met.

The balance of receivables is constantly monitored so as to minimise the risk of potential losses, particularly given the current difficult macroeconomic situation.

The credit risk associated with other financial assets, including cash and cash equivalents, is not significant due to the nature of the counterparties: the Company places such assets exclusively in bank deposits held with leading Italian banks.

Liquidity risk

This risk can arise from the inability to obtain the necessary financial resources to grant the continuity of the Company's operations.

In order to minimize this risk, the Company:

- constantly monitors financial requirements in order to obtain the credit lines needed to meet its requirements;
- optimizes the liquidity management through a centralized management system of available liquidity (cash pooling);
- manages the correct balance between short-term financing and medium/long-term financing depending on the expected generation of operating cash flows.

The table below illustrates the time profile of the Company's financial liabilities as at December 31, 2018 based on non-discounted contractual payments:

(thousands of Euro)

	December 31, 2018	December 31, 2017	Difference
Less than 1 year	5,080	8,087	(3,007)
1-2 years	5,100	8,070	(2,970)
2-3 years	5,120	6,698	(1,578)
3-4 years	2,497	5,120	(2,623)
4-5 years	0	2,497	(2,497)
Over 5 years	0	0	0
Total	17,797	30,472	(12,675)

4. NET REVENUES

In 2018, net revenues were 57,205 thousand euro, up (+8.6%) compared the previous year.

The following table shows a breakdown of revenues by Business Unit:

(thousands of Euro)

Business Unit	2018	2017	Total Difference	Total Difference %	Exchange rate effect %	Price/quantit y effect %
Security & Defense	6,466	4,995	1,471	29.4%	-1.5%	30.9%
Electronic Devices	16,310	16,873	(563)	-3.3%	-1.3%	-2.0%
Healthcare Diagnostics	2,962	2,272	690	30.4%	-1.1%	31.5%
Thermal Insulation	3,412	3,816	(404)	-10.6%	-3.4%	-7.1%
Getters & Dispensers for Lamps	4,574	5,393	(819)	-15.2%	-1.8%	-13.4%
Solutions for Vacuum Systems	10,486	7,587	2,899	38.2%	-2.7%	40.9%
Sintered Components for Electronic Devices & Lasers	0	0	0	n.a.	n.a.	n.a.
Systems for Gas Purification & Handling	2,822	3,286	(464)	-14.1%	-3.5%	-10.6%
Subtotale Industrial Applications	47,032	44,222	2,810	6.4%	-2.0%	8.3%
Nitinol for Medical Devices	0	2	(2)	-100.0%	0.0%	-99.9%
SMAs for Thermal & Electro Mechanical Devices	9,148	6,934	2,214	31.9%	-0.6%	32.5%
Subtotale Shape Memory Alloys	9,148	6,936	2,211	31.9%	-0.6%	32.5%
Solutions for Advanced Packaging	0	0	0	n.a.	n.a.	n.a.
Business Development	1,025	1,529	(504)	-32.9%	-2.9%	-30.1%
Total Net Sales	57,205	52,687	4,518	8.6%	-1.8%	10.5%

For comments on the revenue trend, please refer to the Report on operations.

5. COST OF SALES

The cost of sales in 2018 was 31,797 thousand euro, up 2,426 thousand euro (+8.3%) compared to 2017: the percentage of sales represented by the same was similar to that of last year (55.6% against 55.7% in 2017).

A breakdown of the cost of sales by Business Unit and by category is provided below, compared with the figure of the previous year.

(thousands of Euro)

Business Unit	2018	2017	Total Difference	Total Difference %
Industrial Applications	24,269	22,324	1,945	8.7%
Shape Memory Alloys	6,319	5,726	593	10.4%
Solutions for Advanced Packaging	171	0	171	n.a.
Business Development & Corporate Costs	1,038	1,321	(283)	-21.4%
Total cost of sales	31,797	29,371	2,426	8.3%

(thousands of Euro)

	2018	2017	Total Difference	Total Difference %
Raw materials	10,360	10,981	(621)	-5.7%
Direct labour	7,456	6,762	694	10.3%
Manufacturing overhead	13,769	13,243	526	4.0%
Increase (decrease) in work in progress and finished goods				
illistica goods	212	(1,615)	1,827	-113.1%
Total cost of sales	31,797	29,371	2,426	8.3%

6. OPERATING EXPENSES

Operating expenses amounted to 36,453 thousand euro in 2018, in line with the previous year.

Total operating expenses are classified by category as follows:

(thousands of Euro)

	2018	2017	Total Difference	Total Difference %
Research & development expenses	7,610	9,163	(1,553)	-16.9%
Selling expenses	6,987	6,197	790	12.7%
General & administrative expenses	21,696	20,318	1,378	6.8%
Write-down of trade receivables	160	0	160	
Total operating expenses	36,453	35,677	776	2.2%

Research and development expenses amounted to 7,610 thousand euro, down by 16.9% compared to 9,163 thousand euro in 2017. A part of the change is due to that fact that in 2017, write-downs of fixed assets totalling 937 thousand euro were made, mostly relating to assets held at the Company's branch in Taiwan, which had been used for research projects conducted in collaboration with the subsidiary E.T.C. S.r.l., at present still in liquidation. Other cost reductions mostly regarded the management of patents, personnel costs and amortisation relating to the suspension at the end of 2017 of the OLET research project.

Sales costs recorded an increase of 790 thousand euro, mainly attributable to severance (919 thousand euro).

General and administrative expenses recorded an increase of 1,378 thousand euro. The higher personnel, severance and consulting costs and write-downs were partly offset by lower variable remuneration for Executive directors.

A breakdown by nature of the total expenses included in the cost of sales and operating expenses, compared with the previous year, is given below:

(thousands of Euro)

Costitem	2018	2017	Difference
Raw materials	10,360	10,981	(620)
Personnel cost	33,809	30,477	3,332
Depreciation	3,736	3,828	(92)
Amortization	186	192	(5)
Write-down of non current assets	640	941	(300)
Corporate bodies	4,015	6,202	(2,188)
Consultant fees and legal expenses	4,011	3,351	660
Audit fees (*)	295	304	(9)
Maintenance and repairs	2,303	1,927	376
Various materials	2,264	2,122	141
Operating expenses, patent registration (**)	495	996	(501)
Utilities	1,614	1,669	(55)
Travel expenses	750	675	76
Training	197	168	29
General services (canteen, cleaning, vigilance, etc.)	1,087	993	94
Commissions	161	100	61
Insurances	671	750	(80)
Telephones and faxes	96	104	(8)
Transportation fees	450	352	98
Promotion and advertising	178	118	60
Other recovery	(1,079)	(948)	(131)
Other	1,802	1,361	441
Total costs by nature	68,038	66,663	1,375
Change in inventories of semi-finished and finished products	212	(1,615)	1,827
Total cost of sales and operating expenses	68,250	65,048	3,202

^(*) Net of 288 thousands of Euro recharged to Group companies (168 thousands of Euro in 2016)

The expenses, net of the change in inventories, showed an overall increase against the previous year of 1,375 thousand euro.

The main changes regarded:

- the item "Change in inventories of semi-finished and finished products", which rose due to the use of inventory, which was increased at the end of 2017 to handle the rise in orders mainly in the Electronic Devices and SMA segments. Increases of other items directly or indirectly related to operations were also recorded, including "External costs for maintenance", "Auxiliary production materials and various materials" and "General services (canteen, cleaning, security);
- "Personnel Costs", which rose due to severance, the lesser use of social security provisions at the production plant of Avezzano (suspended from June 2017) and higher variable production costs;
- the item "Corporate bodies", which includes the remuneration of the members of the Board of Directors, both executive and non-executive, and the members of the Company's Board of Statutory Auditors. The decrease against the previous year is due to lower provisions for the variable component of remuneration for Executive Directors; in particular, note that in 2017, the provision for the long-term incentive relating to the three-year period 2015-2017 had been doubled as the performance achieved was better than the targets initially assigned. For the details on the amounts paid in terms of

^(**) Net of 362 thousands of Euro recharged to Group companies (186 thousands of Euro in 2016)

remuneration in 2018 and the comparison with the previous year, please refer to the Report on remuneration:

- "Operating expenses, patent registration" fell due to higher savings on the costs of patents;
- "Write-downs of non-current assets" fell by 300 thousand euro due to that fact that in 2017, write-downs of fixed assets (totalling 937 thousand euro) were made, mostly relating to assets held at the Company's branch in Taiwan, which had been used for research projects conducted in collaboration with the subsidiary E.T.C. S.r.l., at present still in liquidation. Note that the amount for 2018 includes the write-down of the Roncello property of 316 thousand euro, following impairment testing. This write-down is due to the strategic transition currently underway, which is changing the range of traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging.

7. OTHER NET INCOME (EXPENSES)

"Other net income (expenses)" in 2018, compared to 2017 breaks down as follows:

(thousands of Euro)

	Fiscal Year 2018	Fiscal Year 2017	Total Difference
Gain from assets sale - third parties	151	40	111
Intercompany royalties	1,218	1,348	(130)
Intercompany service fees	4,054	3,451	603
Other Income	121	158	(37)
Total Other Income	5,544	4,997	547
Loss from assets sale - third parties	(18)	0	(18)
Other intercompany expenses	(48)	(137)	89
Other expenses	(483)	(370)	(113)
Total Other Expenses	(549)	(507)	(42)
Total Other Net Income (Expenses)	4,995	4,490	505

The main components of "Other income" are the charge back of costs to subsidiaries, both relating to the use of the Company's trademarks and patents, and to the service agreements entered into by the Company and subsidiary and associated companies, which recorded an overall net increase of 603 thousand euro.

Note that the amount as at December 31, 2018 also includes a gain of 136 thousand euro, made on the sale of a machine, fully depreciated at the end of last year following the suspension of the OLET research project.

"Other expenses", instead, mostly includes the property taxes and other taxes, other than income taxes. The increase compared to 2017 is mainly due to the allocation to the risks fund of 87 thousand euro for a labour dispute with the social security entities.

8. DIVIDENDS AND NET FINANCIAL INCOME (EXPENSES)

"Dividends" breaks down as follows:

(thousands of Euro)

	Fiscal Year 2018	Fiscal Year 2017	Total Difference
Dividends from controlled companies:			
- SAES Getters USA, Inc.	3,541	2,285	1,256
- SAES Getters International Luxembourg S.A.	3,960	2,520	1,440
- SAES Getters Export Corp	14,444	11,559	2,885
- Memry GmbH in liquidazione *	0	6,238	(6,238)
Dividends from Group companies	21,945	22,602	(658)

^{*}of which 4,300 thousands euro as early dividend

The dividend of 3,541 thousand euro received from SAES Getters USA, Inc. is not related to the purification business sold on June 25, 2018.

The breakdown of "Net financial income (expenses)" is as follows:

(thousands of Euro)			
Financial income	Fiscal Year 2018	Fiscal Year 2017	Total Difference
Bank interest income	138	0	138
Other financial income	696	332	364
Realized gains on derivative financial instrumen	0	0	0
Gains from derivative financial instruments	12	0	12
evaluation at fair value	12	U	12
Total financial income	846	332	514
Financial expenses	Fiscal Year 2018	Fiscal Year 2017	Total Difference
	2010	2017	Difference
Bank interest expense and other bank charges	(455)	(982)	527
Other financial expenses	(48)	(17)	(31)
Realized losses on derivative financial instrume	(79)	(61)	(18)
Losses from derivative financial instruments	0	(10)	10
evaluation at fair value	· ·	(10)	10
Total financial expenses	(582)	(1,070)	488

Total Net Financial Income (Expenses)	264	(738)	1,002

Total financial income, which includes the interest received on loans disbursed to Group companies, rose against the previous year. The increase of "Bank interest income" relates to the higher cash and cash equivalents, following the payment received for the sale of the purification business.

The decrease of "Bank interest and other bank expenses" compared with last year is related to lower interest expense on long-term loans due to the early repayments made in the second half of the current year, following the payment received for the sale of the purification business. It should also be noted that in 2017, this item included the costs relating to the early repayment of both tranches of the loan for advanced Research and Development projects taken out in June 2015 by the Company with EIB (European Investment Bank), as well as higher interest on the same loan (372 thousand euro, including fees).

9. FOREIGN EXCHANGE GAINS (LOSSES), NET

This item breaks down as follows:

(thousands of Euro)

	Fiscal Year	Fiscal Year	Total
	2018	2017	Difference
Realized exchange gains	998	349	649
Realized exchange gains on forward contracts	6	191	(185)
Non realized exchange gains	26	23	3
Realized exchange losses	(477)	(714)	237
Realized exchange losses on forward contracts	(160)	(1)	(159)
Non realized exchange losses	(23)	(60)	37
Gains (losses) from forward contracts evaluation at fair value	0	0	0
Total Net foreign exchange gains (losses)	370	(212)	582

In 2018, net gains were recorded from exchange rate differences corresponding to 998 thousand euro.

10. WRITE-DOWNS OF INVESTMENTS IN SUBSIDIARIES AND FINANCIAL RECEIVABLES

This item includes amounts relating to the subsidiaries SAES Nitinol S.r.l. and SAES Coated Films S.p.A. (in 2017, also E.T.C. S.r.l. in liquidation and Memry GmbH in liquidation), for an overall total of 10,738 thousand euro.

The following table shows the write-downs of investment in 2018, compared with the previous year:

(thousands of Euro)								
	Fiscal Year 2018					Fiscal Ye	ear 2017	
	Investment Write-down	Comprage		Total	Investment Write-down	Coverage	Loss Coverage Reserve Utilization	
E.T.C. S.r.l. in liquidazione	0	0	0	0	641	1,450	(1,450)	641
Memry GmbH in liquidazione	0	0	0	0	4,055	0	0	4,055
SAES Nitinol S.r.l.	691	0	0	691	0	0	0	0
SAES Coated Films S.p.A.	1,735	0	0	1,735	0	0	0	0
Total	2,426	0	0	2,426	4,696	1,450	(1,450)	4,696

In 2018, the investment in SAES Coated Films S.p.A. was written down by 1,735 thousand euro following impairment testing. This write-down is due to the strategic transition currently underway, which is changing the range of traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging.

Impairment testing was also conducted on SAES Nitinol S.r.l., the results of which indicated an impairment loss of 8,969 thousand euro. Therefore the entire investment in the company of 691 thousand euro was written down, and SAES Getters S.p.A. wrote down the difference of 8,278 thousand euro on the financial receivable due to the subsidiary. The transaction is illustrated in the paragraph entitled "Subsequent events" in the Report on operations.

The financial receivables written down in 2018 and the comparison with the previous year are illustrated below:

(thousands of Euro)

	Fiscal Year 2018	Fiscal Year 2017
	Financial	Financial
	Receivables	Receivables
	Write-down	Write-down
SAES Nitinol S.r.l.	8,278	660
Other third parties	34	0
Total	8,312	660

For further details, please see Note 15.

11. INCOME TAXES

As the consolidating entity, the Company joined the national tax consolidation scheme set forth in articles 117 and foll. of the T.U.I.R. [Consolidated Law on Income Tax] with its subsidiaries E.T.C. S.r.l. in liquidation, SAES Nitinol S.r.l. and SAES Coated Films S.p.A. (previously Metalvuoto S.p.A.), effective from January 1, 2015 for the three-year period 2015-2017, and automatically renewed for a further three years. Therefore, it consolidated its taxable income with those of its subsidiaries.

Income Taxes breaks down as follows:

(thousands of Euro)

	Fiscal Year	Fiscal Year	Difference
	2018	2017	
Current taxes:			
- Italian Income Tax (Ires / Irap)	162	(111)	273
- Witholding Tax on Dividends	(854)	(658)	(196)
Total current taxes	(692)	(769)	77
Deferred taxes	(712)	(9,982)	9,270
Total Deferred taxes	(712)	(9,982)	9,270
Total Taxes	(1,404)	(10,751)	9,347

Negative figures: costs
Positive figures: proceeds

Current taxes for 2018 show a negative balance (cost) of 692 thousand euro, which is mainly represented by:

- -34 thousand euro, income taxes due to the Japanese tax authorities by the Japan Technical Service branch, which can be partially recovered as a credit for taxes paid abroad in the tax declaration of the national tax consolidation ("CNM") to which the Company belongs as consolidating entity;
- -89 thousand euro, due to IRES (separate taxation) on the income recorded in tax year 2017 by the subsidiary company Saes Getters International Luxembourg S.A., in application of provisions regarding subsidiaries (known as "CFC Legislation" dictated by art. 167, paragraph 5-bis and foll. of the T.U.I.R.);
- -854 thousand euro, as the non-recoverable portion (95%) as tax credit for the withholding tax applied abroad on dividends collected;
- -55 thousand euro, in withholding tax charged by foreign subsidiaries on payments of "management fees" that cannot be recovered as a tax credit.

Deferred taxes shows a negative balance (cost) of 712 thousand euro, represented by the recognition of differed tax on the temporary differences between the income before taxes and the taxable income for the year.

The following table shows the percentage represented by taxes of taxable income, analysing the variance with respect to the theoretical rate:

(thousands of Euro)

(thousands of Euro)				
	Fiscal Year	2018	Fiscal Year 2	2017 (*)
T	5 701		7 770	
Income before Tax	5,791		7,772	
Theorical tax rate and tax charges	(1,390)	24.00%	(1,865)	24.00%
Difference between theorical and effective current taxes				
Effect of lower tax rate on dividends	4,197		4,496	
Tax effect from other permanent differences	(2,643)		(1,507)	
Unrecognition (recognition) of deferred tax assets on fiscal losses	(1,363)		(1,052)	
Unrecognition (recognition) of deferred tax assets on temporary differences	651		(728)	
Non deductible foreign witholdings	(55)		(4)	
CFC (Controlled Foreign Companies) effect	(89)		(57)	
IRAP effect	0		0	
Income Statement Current Taxes - Fiscal Year	(692)	11.94%	(717)	9.23%
Income Statement Deferred Taxes - Fiscal Year	(651)		(9,982)	
Total Income Tax (Current / Deferred) - Fiscal Year	(1,343)	23.19%	(10,699)	137.67%
Income Statement Current Taxes - Prior years	0		(53)	
Income Statement Deferred Taxes - Prior years	(61)		1	
Total Income Taxes	(1,404)	24.24%	(10,751)	138.34%

^(*)Income before taxes of 7,772 thousands of Euro doesn't consider the reclassification to discontinued operations of 653 thousands of euro related to gas purification business costs, beacuse any adjustment has been made on taxes. Income before taxes 2017, after the mentioned adjustment, is 8,425 thousands of euro.

The percentage of EBIT represented by taxes (-1,404 thousand euro) is substantially in line with that of the previous year, net of the extraordinary effect of the write-down of the credit for deferred tax assets on previous losses made in 2017.

12. INCOME (LOSS) FROM DISCONTINUED OPERATIONS.

The income from discontinued operations was 253,847 thousand euro in 2018 and was mostly represented by the net gain generated by the sale of the gas purification business of 253,896 thousand euro (gross gain of 282,507 thousand euro)⁸, minus the cost of the sale transaction of 28,610 thousand euro, which was primarly comprised of legal and consulting expenses, the cost of incentives for the personnel employed in the business sold and the corporate personnel involved in setting the extraordinary corporate transaction in place, as well as interest, exchange rate differences and taxes and costs relating to the purification business from January 1, 2018 to June 25, 2018 (effective date of sale), of 50 thousand euro.

In 2017, the net loss from discontinued operations was 653 thousand euro, substantially coinciding with the costs relating to the sale of the gas purification business paid in advance in the previous year.

The table below shows the breakdown of the Income (loss) from discontinued operations in 2018 compared with last year.

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⁸ Coinciding with "Other income" in the table below.

(thousands of Euro)	Consolidated statement of profit or loss - gas purification business	Capital gain on purification business disposal, net of the related costs	2018	Consolidated statement of profit or loss - gas purification business	Costs related to the operation	2017
Total Net Sales Cost of Sales		0	0 0			0 0
Gross Profit	0	0	0	0	0	0
Research & development expenses Selling expenses General & administrative expenses Total operating expenses	(49,685) (49,685)	(422,915) (21,717,181) (22,140,096)	(21,717,181) (22,189,781)	(55,907) (2,778) (58,685)	0 (594,180)	S 7 7
Other income Other expenses		282,506,514	282,506,514 0			0
Operating income (loss)	(49,685)	260,366,418	260,316,733	(58,685)	(594,180)	(652,865)
Financial income Financial expenses Foreign exchange gains (losses), net		(229,220) (5,628,952)				0 0 0
Income (loss) before taxes	(49,685)	254,508,246	254,458,561	(58,685)	(594,180)	(652,865)
Income taxes		(611,771)	(611,771)			0
Income (loss) from discontinued operations	(49,685)	253,896,475	253,846,790	(58,685)	(594,180)	(652,865)

The following table provides a breakdown by nature of the costs, including both the cost of sales and operating expenses.

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	~ ~			~ ~		
Cost item	Gas Purification	Disposal 2018		Gas Purification	Disposal	2017
Cost item	business	operation	2010	business	operation	2017
Raw materials			0			0
Personnel cost		7,542,462	7,542,462			0
Corporate bodies		8,697,600	8,697,600			0
Consultant fees and legal expenses		5,846,377	5,846,377		594,180	594,180
Depreciation	49,685		49,685	58,685		58,685
Amortization			0			0
Other		53,657	53,657			0
Total costs by nature	49,685	22,140,096	22,189,781	58,685	594,180	652,865
Total cost of Sale and Operating expenses	49,685	22,140,096	22,189,781	58,685	594,180	652,865

Regarding the costs relating to the extraordinary transaction of the sale of the purification business, note that the item "Personnel costs" (7,542 thousand euro) includes the bonuses and the severance paid to employees that worked in the segment sold, as well as the remuneration of employees relating to the strategic incentive plan called the Asset Sale Plan⁹. The portion of the incentive due to Executive Directors is represented, instead, in the item "Corporate bodies" (8,698 thousand euro).

Lastly, "Consultant fees and legal expenses" (5,846 thousand euro) is comprised by the fees paid for investment banking activities, for legal assistance, for tax advice and for other appraisal activities.

Again regarding the sale of the purification business, the item "Financial expenses" (-229 thousand euro) is represented by bank fees and by the interest accrued on the credit line opened with Banca Intesa Sanpaolo S.p.A. on May 28, 2018, 38.5 million euro of which was drawn down between June 12, 2018 and June 25, 2018 in order to capitalise the newly-established company, SAES Colorado, Inc. (later renamed SAES

⁹ Monetary incentive plan addressed to Executive Directors, executives that report directly to Executive Directors and that are members of the Corporate Management Committee (a committee to which the Executive Directors provide guidelines and share objectives with their direct reports) and to other employees of the Company considered particularly important. The aim of the plan is to reward the beneficiaries with regard to extraordinary transactions relating to the sale of investments, business units, fixed assets and assets (in this specific case, the sale of the purification business), if these transactions create value and economic benefits for the Group, with a view to guaranteeing the retention of the beneficiaries and to better align their performance with the interests of the company. The plan is managed by the Board of Directors, after consulting with the Remuneration and Appointments Committee. More specifically, the Board of Directors, with the involvement of the Remuneration and Appointments Committee, must ascertain which events, in accordance with the terms and conditions of the plan, may give rise to the payment of a monetary incentive and how much said incentive should be.

Getters/U.S.A., Inc.), established for the purpose of the reorganisation of the US business, in preparation for the sale of the purification division (for further details on the legal and corporate reorganisation of the US companies, see the Report on operations, paragraph "Significant events in 2018").

"Foreign exchange gains (losses), net" (-5,629 thousand euro) includes a cost of 4,273 thousand euro relating to the derivative contract with a currency option (notional amount of 330 million USD plus a fixing at 1.1880 USD/EUR) signed with Banca Intesa Sanpaolo S.p.A. to cover exchange rate risk on the payment in dollars from Entegris, together with other foreign exchange losses recorded by the Company of 1,356 thousand euro. Lastly, "Taxes" (-612 thousand euro) is comprised of current taxes calculated on the net gain made¹⁰ on the sale of the investment in SAES Getters USA, Inc. 11 to Entegris, Inc.

The following table shows the cash flows generated by the purification business in the period between January 1 and June 25, 2018 and the net consideration (namely net of the monetary costs relating to the sale transaction, and to the cash and cash equivalents sold) resulting from the sale of the latter to Entegris, Inc.

	2018 - fr	2018 - from discontinued operations				
(euro)	Gas Purification business 1 Jan - 25 Jun 2018	Gas Purification business disposal	total			
Net cash flows from operating activities						
Net income (loss) from discontinued operations		253,846,790	253,846,790			
Depreciation of non current assets	49,685		49,685			
Net loss (gain) on disposal of assets		(4,202)	(4,202)			
Net gain on purification business disposal		(253,896,016)	(253,896,016)			
	49,685	(53,428)	(3,743)			
Change in operating assets and liabilities	0	0	0			
Net cash flows from operating activities	49,685	(53,428)	(3,743)			
Net cash flows from investing activities						
Purchase of tangible assets	(52,408)		(52,408)			
Tangible and intangible assets disposal		228,324	228,324			
Consideration for the purification business disposal		284,339,502	284,339,502			
Ancillary monetary charges for the purification business disposal		(28,610,489)	(28,610,489)			
Net cash flows from investing activities	(52,408)	255,957,337	255,904,929			
Net cash flows from financing activities	0	0	0			
Effect of exchange rate differences		(1,355,898)	0 (1,355,898) 0			
Increase (decrease) in cash and cash equivalents	(2,723)	254,548,011	254,545,288			

The following table shows the cash flows that were generated by the purification business in 2017.

¹⁰ The gain net of sales costs is subject to a limited tax rate of 5%, pursuant to the provisions of article 87 of the Consolidated Law on Income Tax (participation exemption).

¹¹ Following the legal and corporate reorganisation of the US companies, prior to the sale of the purification business (details of which can be found in the Report on operations, paragraph "Significant events in 2018"), SAES Getters USA, Inc. (later renamed Pure Gas Colorado, Inc.) became the controlling company of SAES Pure Gas, Inc. and was sold to Entegris, Inc.

	2017 -	from discontinued	operations
(euro)	Gas Purification business 1 Jan - 25 Jun 2018	Gas Purification business disposal	total
Net cash flows from operating activities			
Net income (loss) from discontinued operations	(58,685)	(594,180)	(652,865)
Depreciation of non current assets			0
Net loss (gain) on disposal of assets			0
Net gain on purification business disposal		594,180	594,180
	(58,685)	0	(58,685)
Change in operating assets and liabilities			0
Net cash flows from operating activities	(58,685)	0	(58,685)
Net cash flows from investing activities			
Purchase of tangible assets			0
Tangible and intangible assets disposal			0
Consideration for the purification business disposal			0
Ancillary monetary charges for the purification business disposal		(594,180)	(594,180)
Net cash flows from investing activities	0	(594,180)	(594,180)
Net cash flows from financing activities	0	0	0
Effect of exchange rate differences			
Increase (decrease) in cash and cash equivalents	(58,685)	(594,180)	(652,865)

NON-CURRENT ASSETS

13. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, net of depreciation, amounted to 34,180 thousand euro as at December 31, 2018. Compared to December 31, 2017, considering the impact of the sale of the purification business amounting to 229 thousand euro made for assets held for sale, recorded an increase of 4,877 thousand euro.

The changes that occurred are shown below:

(thousands of Euro)

Net Book Value	Land	Building	Plant and machinery	Assets under construction and advances	Total
December 31, 2016	588	16,096	13,239	804	30,727
Additions	0	232	2,442	961	3,635
Disposals	0	0	0	0	0
Reclassifications	0	30	539	(569)	0
Revaluations	0	(973)	(2,915)	0	(3,888)
Write-downs	0		(878)	(64)	(942)
December 31, 2017	588	15,385	12,427	1,132	29,532
Impact of the gas purification business disposal	0	0	(229)	0	(229)
December 31, 2017 reclassified	588	15,385	12,198	1,132	29,303
Additions	890	3,237	2,954	2,241	9,321
Disposals	0	(1)	(68)	0	(69)
Reclassifications	0	50	907	(957)	0
Revaluations	0	(1,057)	(2,679)	0	(3,736)
Write-downs	0	(378)	(175)	(86)	(639)
December 31, 2018	1,478	17,236	13,136	2,330	34,180
December 31, 2016					
Historical cost	588	32,229	91,464	841	125,122
Accumulated depreciation	0	(16,133)	(78,225)	(37)	(94,395)
Net book value	588	16,096	13,239	804	30,727
December 31, 2017					
Historical cost	588	32,491	93,567	1,169	127,815
Accumulated depreciation	0	(17,106)	(81,140)	(37)	(98,283)
Net book value	588	15,385	12,427	1,132	29,532
December 31, 2018					
Historical cost	1,478	35,399	96,959	2,367	136,203
Accumulated depreciation	0	(18,163)	(83,823)	(37)	(102,023)
Net book value	1,478	17,236	13,136	2,330	34,180

Note that, as at December 31, 2018, land and buildings were not burdened by mortgages or other guarantees.

In 2018, investments in property, plant and equipment totalled 9,321 thousand euro, higher than the figure for 2017 (3,635 thousand euro) mainly due to the effect of the investments made by the Company for the purchase of land and building from Mirante S.r.l., which host the registered office of SAES Coated Films S.p.A. and where the production of the same takes place, was finalised on April 6, 2018, for a purchase price of 3.5 million euro.

Furthermore, investments were made at the Lainate plant, in preparation for the installation of a new pilot production line for the advanced packaging business, with a view to accelerating the development of a new platform of products consistent with the strategic transition, currently underway, from the range of traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and able to compete in the advanced sector of sustainable packaging, as well as those in the Avezzano plant, to complete the new production line in the Electronic Devices sector and to install several production lines (SMA and Inficon pumps) transferred from the Lainate plant. More specifically, property, plant and equipment under construction and advances recorded a significant increase compared to last year, due to the purchase of two coating machines, one of which a pilot,

purchased for the advanced packaging business and to building work at the Lainate plant, carried out to adapt the same to new production requirements.

Acquisitions also included improvements and investments relating to plant and equipment used by various production and research departments.

Sales, amounting to 69 thousand euro, mostly regard the sale of a packing machine that was no longer used. Depreciation for the year, totalling 3,736 thousand euro, was slightly lower than that of the previous year (3,888 thousand euro) mainly due to the write-down of several assets classified as "Plant and machinery" recorded at the end of 2017 following the suspension of the OLET research project. The lower depreciation recorded for the "Plant and machinery" category of assets was only partly offset by the higher amount of depreciation recorded for the "Buildings" category.

All property, plant and equipment are owned by the Company and no financial lease agreement was in place as at December 31, 2018.

No financial expenses were capitalised on property, plant and equipment.

In 2018, write-downs totalling 639 thousand euro were made, 168 thousand euro of which was represented by the residual value of the assets in use by the Company for the OLET research project, suspended at the end of 2017, 316 thousand euro by the value of the property leased to the subsidiary SAES Coated Films S.p.A., written down following impairment testing, 58 thousand euro by the dismantlement of a production department located at the Lainate plant and 87 thousand euro by the write-off of some laboratory equipment built internally.

"Impact of the sale of the purification business" as at December 31, 2017 included the value of the assets of the purification laboratory located in the Lainate plant, which were sold as part of the sale of the gas purification business to the US company Entegris, Inc.

They were transferred in four shipments, accompanied by invoices, between July 2018 and October 2018.

Schedule of assets still recorded under equity pursuant to Italian Law no. 72/1983, article 10 and later Revaluation Laws (Law 413/1991 and Law 342/2000)

Note that, with regard to the assets to which specific Monetary revaluation laws used to apply, the Company decided to exercise the exemption granted by IFRS 1 "First-time application of International Accounting Standards", regarding the selective adoption of the fair value on the date of transition to International Accounting Standards. Therefore these assets are measured on the basis of the revalued cost (deemed cost), represented by the amount adjusted at the time by virtue of the revaluations made.

The net carrying amount of the revaluations made, net of depreciation, amounted on the transition date, January 1, 2004 to 460 thousand euro and 146 thousand euro categorised respectively as "Land and buildings" and "Plant and machinery".

(thousands	of	Euro)

Revaluation Laws	Land and Buildings		Plant & Machinery macchinari			nd Commercial ipment	Othe		
	Historical	Net Book Value	Historical	Net Book Value	Historical	Net Book Value	Historical	Net Book Value	Net Total
	Cost	Dec 31, 2018	Cost	Dec 31, 2018	Cost	Dec 31, 2018	Cost	Dec 31, 2018	Value
Law n. 576, Dec 2, 1975	0	0	178	0	0	0	0	0	0
Law n. 72, Mar 19, 1983	207	0	611	0	0	0	19	0	0
Law n. 413, Dec 30, 1991	540	209	0	0	0	0	0	0	209
Law n. 342, Nov 22, 2000	0	0	850	0	0	0	0	0	0

14. INTANGIBLE ASSETS

Intangible assets, net of amortisation, amounted to 598 thousand euro as at December 31, 2018, with an increase of 203 thousand euro compared to December 31, 2017.

The changes that occurred are shown below:

(thousands of Euro)

Net Book Value	Research and development expenses	Industrial and other patent rights	Concessions, licenses, trademarks and similar rights	Other intangible assets	Assets under construction and advances	Total
December 31, 2016	0	28	228	0	89	344
Additions	0	56	167	20	0	243
Disposals	0	0	0	0	0	0
Reclassifications	0	0	47	42	(89)	0
Revaluations	0	(22)	(160)	(10)	0	(192)
Write-downs	0	0	0	0	0	0
December 31, 2017	0	62	281	52	0	395
Additions	0	6	377	0	6	389
Disposals	0	0	0	0	0	0
Reclassifications	0	52	0	(52)	0	0
Revaluations	0	(51)	(135)	0	0	(186)
Write-downs	0	0	0	0	0	0
December 31, 2018	0	69	523	0	6	598
December 31, 2016						
Historical cost	183	2,019	5,328	0	89	7,619
Accumulated depreciation	(183)	(1,992)	(5,100)	0	0	(7,275)
Net book value	0	28	228	0	89	344
December 31, 2017						
Historical cost	183	2,075	5,541	62	0	7,861
Accumulated depreciation	(183)	(2,013)	(5,260)	(10)	0	(7,466)
Net book value	0	62	281	52	0	395
December 31, 2018						
Historical cost	183	2,133	5,918	10	6	8,250
Accumulated depreciation	(183)	(2,064)	(5,395)	(10)	0	(7,652)
Net book value	0	69	523	0	6	598

In 2018, intangible assets increased by 389 thousand euro (243 thousand euro in 2017) and mainly refer to the purchase of software licenses.

No financial expenses were capitalised on intangible assets. No write-downs were made in 2018.

All intangible assets are considered to have finite useful lives and are systematically amortised.

15. INVESTMENTS IN SUBSIDIARIES AND OTHER FINANCIAL ASSETS

On the reporting date, equity investments amounted to 123,757 thousand euro.

The value of the investments in subsidiaries, measured at cost, and adjusted where necessary in the event of impairment, recognised in the financial statements as at December 31, 2018, is shown in the following table:

(thousands of Euro)

Investments in Subsidiaries	Balance at December 31,	Additions	Write-down	Disposals	Balance at December 31,
	2017				2018
Direct controlled companies:					
SAES Getters USA, Inc.	6,742	0	0	(6,742)	(0)
SAES Getters International Luxembourg S.A.	38,679	0	0	0	38,679
SAES Getters (Nanjing) Co., Ltd.	6,904	0	0	0	6,904
SAES Getters Export Corp.	2	0	0	0	2
Memry GmbH in liquidazione	440	0	0	0	440
SAES Coated Films S.p.A.	5,646	3,075	(1,735)	0	6,986
E.T.C. S.r.l. in liquidazione	889	0	0	0	889
SAES Nitinol S.r.l.	691		(691)	0	0
SAES Getters/U.S.A., Inc.	0	38,262	0	(10,203)	28,059
SAES Investments S.A.	0	40,000	0	0	40,000
Indirect controlled companies:					
SAES Getters Korea Corporation	184	0	0	0	184
Total controlled companies	60,177	81,337	(2,426)	(16,945)	122,143
Joint ventures:					
SAES Rial Vacuum Srl	1,614	0	0	0	1,614
Total joint ventures	1,614	0	0	0	1,614
Total related companies	0	0	0	0	0
Total	61,791	81,337	(2,426)	(16,945)	123,757

As already mentioned in the Report on operations (paragraph "Significant events in 2018"), on February 26, 2018 the Company exercised a call option for the purchase of the entire share capital of Metalvuoto S.p.A. (subsequently renamed SAES Coated Films S.p.A.), 70% of which was already in its possession. SAES Coated Films S.p.A., based in the province of Monza Brianza, is a well-established player in the field of advanced packaging, producing metalized and innovative plastic films for food preservation. Following this transaction, the Company acquired the remaining 30% previously held by the minority shareholder Mirante S.r.l., for a consideration of 75 thousand euro. Note that the Company's financial statements as at December 31, 2017 already included a financial payable of the same amount, related to the value of the above option.

On April 5, 2018, the Company approved a payment to the capital account of 3 million euro in order to create an extraordinary reserve to cover any future losses as well as future investments opportunities.

This payment, together with the payment made in February 2018, represents the increase of the investment, corresponding to 3,075 thousand euro.

The sale of the gas purification business to the US company Entegris, Inc. was finalised on June 25, 2018. The sale regarded the US affiliate SAES Pure Gas, Inc. and the commercial structure of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. located in Shanghai that provided commercial support to SAES Pure Gas, Inc. on the Asian market.

To enable the transaction to take place, on June 15, 2018 SAES Getters USA, Inc., the controlling company of SAES Pure Gas, Inc., sold all of its assets and liabilities, excluding the above-mentioned investment, to a newly incorporated company called SAES Colorado, Inc., subsequently renamed SAES Getters/USA, Inc., which continues to belong to the SAES Group. The capitalisation of the newly established SAES Colorado, Inc. was made by means of a payment made by the Company on June 12, 2018 for a value of 45 million USD, which translates to 38,262 thousand euro. This increase is shown in the table above under "Increases". On October 30, 2018, following the repayment of the capital by SAES Getters/U.S.A., Inc. of 12 million USD, the value of the investment was reduced by the sale amount to 10,203 thousand euro.

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¹² On April 5, 2018, the Extraordinary Shareholders' Meeting resolved to change the name from Metalvuoto S.p.A. to SAES Coated Films S.p.A. in order to achieve greater recognisability on the market.

On June 25, 2018, SAES Getters USA, Inc., renamed Pure Gas Colorado Inc., the controlling company of the investment in SAES Pure Gas, Inc., was sold to Entegris, together with the business unit based in Shanghai and operating in the purification business of SAES Getters (Nanjing) Co., Ltd., represented by personnel, assets and inventory. The transaction was recorded on the Company's financial statements as the sale of the entire value of the investment in SAES Getters USA, Inc., corresponding to 6,742 thousand euro, reducing its value to zero and generating a gain, details of which can be found in Note 12.

On October 23, 2018 **SAES Investments S.A.,** based in Luxembourg, wholly owned by SAES Getters S.p.A., was formally incorporated. The purpose of the company, which has a share capital of 40 million euro corresponding to the value of the investment recognised in the financial statements of its controlling company and shown in the above table under "Increases", is to manage the liquidity resulting from the sale of the purification business, with the objective of maintaining capital for any future uses.

Pursuant to article 2427 of the Italian Civil Code, point 5, the following information is provided:

				Shareholde	ers' Equity	Fiscal Year I	Net Income			
Name	Location	Currency	Share Capital	Total	(y pro-quota	Total	pro - quota	% Shares	(B) Historical cost	(B) - (A)
SAES Getters/U.S.A., Inc.	Colorado Springs , CO	u.s.s.	33,000,000	34,931,452	34,931,452	1,931,452	1,931,452			
SALS detters/ 0.3.A., Inc.	(USA)	thousands of Euro	28,821	30,508	30,508	1,635	1,635		28,059	(2,449)
SAES Getters International Luxembourg S.A.	Lussemburgo	Euro thousands of Euro	34,791,813 34,792	45,829	41,246	8,616	7,754		38,679	(2,567)
SAES Investments S.A.	Lussemburgo	Euro thousands of Euro	40,000,000 40,000	39,750	39,750	(250)	(250)	100	40,000	250
SAES Getters Korea Corporation Corporation	Seul (Corea del Sud)	thousands of Won thousands of Euro	524,895 411	1,103,254 863	413,500 323	(408,768) (315)	(153,206) (118)	37	184	(140)
SAES Getters Nanjing Co. Ltd	Nanchino (Rep.Pop.Cinese)	Renmimbi thousands of Euro	69,121,618 8,777	123,559,654 15,690	123,559,654 15,690	49,910,038 6,392	49,910,038 6.392		6,904	(8,786)
SAES Getters Export Corp.	Delaware, DE (USA)	U.S.\$. thousands of Euro	2,500	10,255,984 8,957	10,255,984 8,957	11,255,053 9,530	11,255,053		2	(8,955)
Memry GmbH in liquidazione	Weil am Rhein (Germany)	Euro thousands of Euro	330,000 330	456	456				440	(16)
E.T.C. S.r.l. in liquidazione	Lainate (MI)	Euro thousands of Euro	75,000 75	678	678	(45)	(45)	100	889	211
SAES Nitinol S.r.l.	Lainate (MI)	Euro thousands of Euro	10,000 10	(8,959)	(8,959)	(8,969)	(8,969)	100	0	8,959
SAES Coated Films SpA	Roncello (MB)	Euro thousands of Euro	50,000	58	58	(2,847)	(2,847)	100	6,986	6,928
SAES Rial Vacuum S.r.l.	Parma (PR)	Euro thousands of Euro	200,000	509	249	51	25		1,614	1,364
Total	+			134,339	128,957	13,814	13,123		123,757	(5,200)

		Fiscal Year 2018																		
		Balance at beginning of year Changes during fiscal year										Balance a	t year-end							
Соправувате	Costo originario	Riv alutazi oni	Svahstæioni	Ripristin o di valore	Allin secil met.P.N.	Saldo al 31.12.17	Acq.SottoscrConferim.	Inco sporazioni per fa sione	Alienzzioni / Estinzioni	Rimborso di Capitale	Rá val uc <i>sz</i> żona	Svalutazioni	Ripristino di valore	Allin.secilmet.P.N.	Costo originario	Rivalutazioni	Svalutazioni	Ripristino di valose	Allin.secil met.P.N.	Saldo al 31.12.18
Controlled companies																				
SAES Getters USA, Inc.	6,690	52	0	0	0	6,742	0	0	6,742	0	0) (0	0	(52)	52	0	0	0	0
SAES Getters International Luxembourg S.A.	38,679	0	0	0	0	38,679	0	0	0	0	0) (0	0	38,679	0	0	0	0	38,679
SAES Getters Korea Corporation	184	0	0	0	0	184	0	0	0	0	0) (0	0	184	0	0	0	0	184
SAES Getters Nanjing Co. Ltd	11,797	0	4,893	0	0	6,904	0	0	0	0	0) (0	0	11,797	0	4,893	0	0	6,904
SAES Getters Export Corp.	2	0	0	0	0	2	0	0	0	0	0) (0	0	2	0	0	0	0	2
Memry GmbH in liquidazione	4,495	0	4,055	0	0	440	0	0	0	0	0) (0	0	4,495	0	4,055	0	0	440
Saes Coated Films SpA	5,190	0	0	456	0	5,646	3,075	0	0	0	0	1,735		0	8,265	0	1,735	456	0	6,986
E.T.C. S.r.1 in liquidazio ne	6,616	0	6,052	325	0	889	(75)	0	0	0	0) (75	0	6,541	0	6,052	400	0	889
SAES Nitino1 S.r.L.	671	0	0	20	0	691	(10)	0	0	0	0	691	10	0	661	0	691	30	0	0
SAES Getters/U.S.A, Inc.	0	0	0	0	0	0	38,262	0	0	10,203	0) (0	0	28,059	0	0	0	0	28,059
SAES Investments S.A.	0	0	0	0	0	0	40,000	0	0	0	0) (0	0	40,000	0	0	0	0	40,000
Joint ventures																				
SAES Rial Vacuum Srl	1,614	0	0	0	0	1,614	0	0	0	0	0) (0		1,614	0	0	0	0	1,614
Other companies																				
Conai - Consorzio Nazionale Imballaggi	0.04	0	0	0	0	0.04	0	0	0	0	0) (0	0	0.04	0	0	0	0	0.04
Total	75,938	52	15,000	801	0	61,791	81,252	0	6,742	10,203	0	2,426	85	0	140,245	52	17,426	886	0	123,757

In accordance with the provisions of international accounting standard IAS 36, an impairment test was performed on the basis of the most recent plans drawn up by top management for the period 2019-2021 and approved by the Company's Board of Directors on March 13, 2019, with a view of establishing if the equity

investments in subsidiaries had been recognised in the financial statements as at December 31, 2018 at a lower value than their recoverable amount.

On each reporting date, the Company decides if there is any evidence that an asset may have suffered an impairment loss. If the requirements are met, the entity has to estimate the recoverable amount of the asset.

With regard to the above, in assessing whether there is an indication that the investments in question may have suffered an impairment loss, indications from sources external and internal to the Group have been considered. More specifically, potential indicators of impairment have been identified in the presence of negative results of the investee company and a difference between the carrying amount of the investment and the corresponding share of shareholders' equity.

With regard to the equity investment held in SAES Investments S.A., the purpose of which is to manage the liquidity resulting from the sale of the purification business with the objective of maintaining capital for any future uses, no elements were found that led to an impairment, even though the carrying value of the investment is higher than the corresponding share of shareholders' equity.

Instead, in accordance with IAS 36 - Impairment of assets", the recoverable amount of the remaining investments that showed a higher carrying value than the relative share of shareholders' equity, was measured, in particular those held in SAES Coated Films S.p.A., SAES Nitinol S.r.l. and SAES RIAL Vacuum S.r.l.

The recoverable amount of the investments was calculated by identifying the equity value of the above-cited companies by means of the cash flows forecast in the respective business plans. These cash flows were estimated by management on the basis of the assumptions of the long-term plans, approved for each business and for the relative equity investments by the Company's Board of Directors on 14 February 2019, the medium-term forecasts prepared by Management and a terminal value.

The same assumptions reflect the best estimates made by Management with regards to the company's operations, production profiles, market context and changes in the regulatory and legislative framework. The terminal value was estimated by prudentially assuming a growth rate of zero (g-rate), and a time horizon deemed representative of the estimated duration specific to the various businesses.

The cash flow forecasts are more specifically based on the following key variables:

- change in macroeconomic variables;
- estimate of future sales volumes by business area / product family / customer;
- price and profit margin trends;
- cost of sales (including the cost of materials) by product family;
- cost of production, operating expenses and investment plan;
- discounting rates estimated by Management.

The expected rise of sales is based on Management forecasts, while the profit margin and the operating costs of the various businesses have been estimated on the basis of historic series, adjusted to reflect the expected results and the expected dynamics of market prices. The value of investments and working capital has been calculated as a function of different factors, such as future expected growth levels and the product development plan. These assumptions are influenced by future expectations and market conditions.

The resulting cash flows, calculated net of tax, are then discounted at a rate that represents the weighted average cost of the capital invested in the company being assessed (*Weighted Average Cost of Capital*, WACC), corresponding to 7%, also calculated net of tax, for the three equity investments being tested.

The results of the tests conducted are illustrated below:

- with regard to the investment held in SAES Nitinol S.r.l., the entire investment of 691 thousand euro was written down, and financial receivables due to the same investee were written down by 8,278 thousand euro. This write-down is the result of the estimated expected cash flows of the joint venture Actuator Solutions GmbH, which indicate significant elements of risk related above all to the innovative nature of the products and the size of potential customers, deemed not sufficient to recover the financial receivables due to SAES Nitinol S.r.l. Furthermore, in a sensitivity analysis, by increasing the WACC by 1 percentage point with respect to the reference value for the Group, the write-down of the investment and of the financial receivable due to SAES Nitinol S.r.l. would have been 137 thousand euro higher (from 8,969 thousand euro to 9,106 thousand euro);
- with regard to the investment held in SAES RIAL Vacuum S.r.l., the carrying amount, resulting from recent acquisitions, was confirmed on the basis of the three-year plan for 2019-2021 approved by the Board of Directors of the same company on October 16, 2018;
- with reference to the investment held in SAES Coated Films S.p.A., a write-down of 1,735 thousand euro was made. This write-down is due to the strategic transition currently underway, which is changing the range of traditional metallised products (which have increasingly become a commodity and exposed to competition from Asia) to more innovative coated products, with higher profit margins and the ablity to compete in the advanced sector of sustainable packaging. Furthermore, by conducting a sensitivity analysis, by increasing the WACC by 1 percentage point more than the reference value of the Group, the write-down of SAES Coated Films S.p.A. would have been 1,728 thousand euro higher (from 1,735 thousand euro to 3,643 thousand euro).

The estimated recoverable amount required discretion and the use of estimates by Management. The Company therefore cannot ensure that no impairment losses will emerge in the future. In fact, a number of different factors, also related to changes in the market and in demand could require the value of the assets in future periods to be redetermined. The circumstances and the events that could cause a further assessment of the existence of impairment will be constantly monitored by the Company.

16. DEFERRED TAX ASSETS

As at December 31, 2018, this item showed a positive balance of 1,343 thousand euro, against 2,067 thousand euro as at December 31, 2017 and refers to the net balance of deferred taxes relating to temporary differences between the value attributed to the assets and liabilities according to statutory criteria and the value attributed to the same for tax purposes. In the light of the evidence resulting from the long-term plans drawn up by Management, the Company prudentially decided not to reinstate the deferred tax assets written down last year.

The breakdown of deferred tax assets and liabilities recorded in the statement of financial position as at December 31, 2018 and as at December 31, 2017 respectively, according to the nature of the differences that generated the deferred taxes:

(thousands of Euro)

	Fiscal Year	2018	Fiscal Year	2017	
	Temporary	Tax	Temporary	Tax	
	tax adjustments	Impact	tax adjustments	Impact	
Deferred Tax Liabilities:					
- Capital gains from disposals	0	0	0	0	
- Termination indemnity adjustment as for IAS 19	(459)	(110)	(569)	(136)	
- Assets revaluation (fair value)	(1,998)	(480)	(2,186)	(541)	
- Depreciation / Amortization	(71)	(17)	353	84	
Deferred Tax Assets:					
- Non Operating Losses (NOLs)	0	0	0	0	
- Assets write-downs	950	228	58	14	
- Stock obsolescence	1,301	312	1,397	396	
- IAS 19 adjustments effect	561	135	1,212	291	
- Fiscally deductible costs	4,926	1,182	7,972	1,912	
- provision accruals	344	82	100	29	
- Other	49	11	64	18	
Total Deferred Tax Effects		1,343		2,067	

17. OTHER LONG TERM ASSETS

The item "Other long term assets" amounted to 69 thousand euro as at December 31, 2018 compared to 63 thousand euro as at December 31, 2017. This item is comprised by deposits paid by the Company as part of its operations.

CURRENT ASSETS

18. INVENTORY

Closing inventory as at December 31, 2018 amounted to 7,542 thousand euro, with an increase of 109 thousand euro compared to the previous year. The table below shows the breakdown of inventory by type:

(thousands of Euro)

	December 31, 2018	December 31, 2017	Difference
Raw materials, auxiliary materials and spare parts	2,928	2,654	274
Work in progress and semi-finished goods	2,248	2,604	(356)
Finished products and goods	2,366	2,175	191
Total	7,542	7,433	109

The values of inventory are shown net of the provision for obsolete inventory to adjust them to their assumed realisable value.

Changes in the provision for obsolete inventory is provided below:

(thousands of Euro)

	December 31, 2017	Provision	Release into Income Statement	Utilization	December 31, 2018
Raw materials, auxiliary materials and spare	996	105	0	(141)	960
parts					
Work in progress and semi-finished goods	254	55	0	(54)	255
Finished products and goods	148	7	0	(69)	86
Total	1,398	167	0	(264)	1,301

The "provision" column includes the value of several items of goods and products included in the inventory deemed obsolete.

The "utilization" column instead represents the value of material scrapped or sold, written down in previous years.

19. TRADE RECEIVABLES

Trade receivables as at December 31, 2018 amounted to 12,123 thousand euro, marking a decrease of 820 thousand euro compared to the previous year.

The following table shows a breakdown and changes of this item:

(thousands of Euro)

(thousands of Euro)					
	Gross Value Dec 31, 2018	Bad Debts Provision Dec 31, 2018	Net Value Dec 31, 2018	Net Value Dec 31, 2017	Total Difference
Trade Receivables vs Customers	6,749	(160)	6,589	6,130	459
Trade Receivables vs Subsidiaries	5,141	0	5,141	6,306	(1,165)
Trade Receivables vs Joint Ventures	393	0	393	507	(114)
Total Trade Receivables	12,283	(160)	12,123	12,943	(820)

Trade receivables, all of which due within 12 months, originate from normal sales transactions. Trade receivables do not bear interest and are generally due between 60 and 90 days.

The analysis conducted on trade receivables to ascertain the correspondence between their carrying amount and their realisable value, showed a problem regarding a customer called Mapper Lithography B.V., based in Holland, which at the end of 2018 declared bankrupt. The total receivable due to the Company by the Dutch customer of 144 thousand euro, was fully written down and its amount allocated to a specific liability provision.

Note that on January 28, 2019 the Company submitted a petition to be admitted as a creditor to the receiver. The Company received notification that the petition had been upheld on February 13, 2019.

It should also be noted that in application of IFRS 9, the Company made an estimate of losses on receivables based on the expected credit losses model. Using the simplified approach which envisages an estimate of the expected loss for the whole life of the receivable at the time of initial recognition and of subsequent measurements, the Company calculated the average expected uncollectability of trade receivables, based on historic and geographical indicators for all outstanding receivables, also considering receivables characterised by specific elements of risk, which underwent a specific assessment.

Based on this estimate, a write-down of trade receivables not yet due on the date of these financial statements was calculated, corresponding to 16 thousand euro, also included in the bad debt provision at the end of the year.

A breakdown of the figures as at December 31, 2018 by geographical area is shown below:

(thousands of Euro)

	Italy	UE & Other	Northern	Japan	Other Asia	Other	Total
		Europe	America				Net Value
Trade Receivables vs Customers	356	2,648	892	444	2,169	80	6,589
Trade Receivables vs Subsidiaries	2,173	0	2,162	0	806	0	5,141
Trade Receivables vs Joint Ventures	45	142	180	0	26	0	393
Total Trade Receivables	2,575	2,789	3,234	444	3,001	80	12,123

Changes in the bad debt provision are provided below:

(thousands of Euro)	2018	2017
Opening balance	0	19
Provision	160	0
Utilization	0	(17)
Released to the income statement	0	(2)
Closing balance	160	0

The following table provides a breakdown of the trade receivables, by those not yet due and past due as at December 31, 2018 compared with the previous year:

(thousands	of Euro
(tiiousaiius	or Luio,

	Total	Not vet due	Due not written down					
	Total	Not yet due	< 30 days	30 - 60 days	60 - 90 days	90 - 180 days	>180 days	
December 31, 2018	12,123	10,061	1,832	71	39	118	2	
December 31, 2017	12,943	11,721	1,002	105	49	24	42	

The carrying amount is deemed to be close to the relative fair value.

20. FINANCIAL RECEIVABLES RELATED PARTIES

The financial receivables classified under current assets refer mainly to cash pooling receivables and to loans to subsidiaries, amounting to 161,202 thousand euro as at December 31, 2018.

Note in particular that on November 12, 2018, the Company signed a loan agreement in favour of the newly-incorporated SAES Investments S.A., and paid an amount of 160 million euro into its current account on November 15. The loan, which will expire on December 31, 2019 and is automatically renewed for a year each year, envisages interest accruing on a quarterly basis, for which an annual invoice will be issued, as per the agreement, at the end of each year.

Note that this item includes the impact of the Company's waiver of the financial receivable of 8,278 thousand euro due from the subsidiary SAES Nitinol S.r.l. (see Note 10 and the paragraph entitled "Subsequent events" in the Report on operations).

21. TAX CONSOLIDATION RECEIVABLES

The non-current part of "Tax consolidation receivables" represents the credit balance towards S.G.G. Holding S.p.A. in relation to the application for a refund of the excess IRES paid by the now merged SAES Advanced Technologies S.p.A. in previous years, a request filed by S.G.G. Holding S.p.A. as the consolidator of the national tax consolidation scheme in place until December 31, 2014 and interrupted on January 1, 2015 following the decrease of the investment of S.G.G. Holding S.p.A. in subsidiaries to under the 50% threshold. The current part of "Tax consolidation receivables" includes the IRES tax credit for the year which relates to the tax consolidation with SAES Getters S.p.A. as consolidating entity, before the corresponding debt of the Company towards the subsidiaries E.T.C. S.r.l. in liquidation and SAES Coated Films S.p.A.

The balance for 2018 of 58 thousand euro, represents the Company's gross credit towards the subsidiary SAES Nitinol S.r.l., corresponding to the remuneration of the tax loss transferred to the national tax consolidation scheme, based on the agreements signed by the Companies participating in said consolidation scheme.

22. OTHER RECEIVABLES, ACCRUED INCOME AND PREPAID EXPENSES

This item includes current non-trade receivables from third parties, along with prepaid expenses and accrued income. The breakdown of the item is shown in the following table:

(thousand	e of	Furo)
(inousand	5 01	Luio)

	December 31, 2018	December 31, 2017	Difference
VAT receivables	788	1,062	(274)
Income tax and other tax receivables	804	678	126
Social security receivables	3	75	(72)
Other receivables	121	185	(64)
Total other receivables	1,716	2,000	(284)
Prepaid expenses	910	934	(24)
Total prepaid expenses, accrued income and other	2,626	2,934	(308)

"VAT receivables" is mostly comprised, 487 thousand euro (974 thousand euro in 2017), by the VAT credit that originated in 2018, with 274 thousand euro represented by the VAT requested as a refund at the time of submission of the 2018 annual VAT declaration relating to 2017. The balance also includes 8 thousand euro for IVA paid to EU members; the Company will submit an application for the refund of the same to the Tax Authorities.

The decrease of "VAT receivables" against the previous year is mainly due to the improved exploitation of the option, envisaged for regular exporters, to purchase goods and services with the tax suspended within the limits of an available ceiling.

The item "Income tax and tax receivable" includes tax credit for prepayments of income tax (of 232 thousand euro), tax credit with the Italian tax authority for withholding tax on dividends (177 thousand euro), royalties (340 thousand euro) and bank interest (36 thousand euro) and the credit with the Japanese tax authority for the prepayment of tax by the Japan Technical Services branch (12 thousand euro).

Note that the item "Other" includes a credit of 95 thousand euro (152 thousand euro at the end of 2017) which is a subsidy for energy-consuming enterprises, which Italian enterprises that have high energy consumption are also entitled to.

"Prepaid expenses" totalled 910 thousand euro, substantially in line with last year, encompasses the share of costs deferred to one or more subsequent years and is mostly represented by maintenance expenses for patents and expenses for Cloud IT services.

Please note that there are no receivables due after more than five years.

23. CASH AND CASH EQUIVALENTS AND NET FINANCIAL POSITION

The following table shows the breakdown of the cash and cash equivalents held by the Company as at December 31, 2018, mainly denominated in Euro:

(thousands of Euro)	December 31, 2018	December 31, 2017	Difference
Bank accounts	38,435	8,367	30,068
Petty cash	2,060	11	2,049
Total	40,495	8,378	32,117

A breakdown of the items making up the net financial position is provided below:

(thousands of Euro)

	De	ecember 31	December 31	Difference
		2018	2017	
Cash on hand		2	4	(2)
Cash equivalents		40,493	8,374	32,119
Total cash and cash equivalents		40,495	8,378	32,117
Current financial assets*		161,203	11,029	150,174
Bank overdraft		(27,002)	(12,001)	(15,001)
Current portion of long term debt		(5,080)	(8,088)	3,008
Other current financial liabilities*		(10,365)	(7,084)	(3,281)
Other financial debt		(531)	(6)	(525)
Total current liabilities		(42,979)	(27,178)	(15,799)
Current net financial position		158,720	(7,771)	166,491
Non current financial receivables **		49	49	0
Long term debt, net of current portion		(12,717)	(22,384)	9,667
Total non current liabilities		(12,668)	(22,335)	9,667
Net financial position		146,052	(30,106)	176,157

^{*}Including current financial receivables / debts versus Group companies and joint ventures

For the trend of the net financial position, please refer to the Report on operations.

24. SHAREHOLDERS' EQUITY

The Company's shareholders' equity amounted to 303,043 thousand euro as at December 31, 2018 marking an increase of 242,834 thousand euro compared to December 31, 2017, mainly due to the profit for the period (+261,213 thousand euro), only partially offset by the distribution of dividends by the Company (-15,435 thousand euro).

A summary of the changes occurred is provided in the Statement of changes in the shareholders' equity.

Share capital

As at December 31, 2018 the share capital, fully subscribed and paid-up, amounted to 12,220 thousand euro and consisted of 14,671,350 ordinary shares and 7,378,619 savings shares, for a total of 22,049,969 shares. The ordinary and savings shares are listed on the segment of the Mercato Telematico Azionario known as "STAR" (Securities with High Requirements), dedicated to small and medium caps that meet specific requirements with regard to reporting transparency, liquidity and Corporate Governance.

^{**} Including non current financial receivables versus Group companies and joint ventures

Capital reserves

a) Share premium reserve

This item includes amounts paid by the shareholders in excess of the par value for new shares of the Company. It amounted to 25,724 thousand euro as at December 31, 2018, marking a decrease of 15,397 thousand euro compared to December 31, 2017, due to a distribution to shareholders made in 2018.

b) Merger surplus reserve (capital share)

This item includes the share of 11 thousand euro that was allocated to the capital reserve for the surplus resulting from the merger by incorporation of SAES Advanced Technologies S.p.A. into SAES Getters S.p.A.

Legal reserve

This item refers to the Company's legal reserve of 2,444 thousand euro as at December 31, 2018 and it was unchanged compared to December 31, 2017, since the reserve had reached its legal limit.

Reserve for untaxed earnings

This item is mostly comprised by positive monetary revaluation balances resulting from the application of Law no. 72 of March 19, 1983 (1,039 thousand euro) and Law no. 342 of November 21, 2000 (1,576 thousand euro). Pursuant to Law no. 342 of 2000, the revaluation reserve has been stated net of the related lieu tax of 370 thousand euro. See the following table for further details.

Other reserves and profits carried forward

This item includes reserves of profits, net of the Legal reserve and the Reserve for untaxed earnings, and amounts to 1,659 thousand euro, broken down as follows:

- profits carried forward, net of the reserve for the application of IAS 19, amounts to 347 thousand euro;
- reserve for transition to IAS of 3,207 thousand euro, 1,709 thousand euro is available;
- reserve for surplus of the sale of treasury shares of -589 thousand euro;
- <u>reserve from transactions with Group Companies</u>, representing the difference between the assessed value
 and the carrying amount of assets sold to the Company by SAES Getters/USA Inc. of -420 thousand euro,
 deducted from shareholders' equity in compliance with standard OPI1 issued by the Italian Association of
 Chartered Accountants.

As reported in the Report on corporate governance and ownership structure enclosed to these financial statements, each share is entitled to a proportional part of the net income that it is decided to distribute, except the rights attached to savings shares.

More specifically, as described in article no. 26 of the By-laws, savings shares are entitled to a preferred dividend equal to 25% of their implied carrying amount; if in one financial year a dividend of less than 25% of the implied carrying amount has been allocated to savings shares, the difference will be made up by increasing the preferred dividend in the following two years. The remaining profit that the Shareholders' Meeting has resolved to distribute will be allocated among all shares in such a way to ensure that savings shares are entitled to a total dividend that is 3% of the implied carrying amount higher than that of ordinary shares.

Reserves subject to taxation in the event of distribution

(thousands of Euro)	Amount*
Revaluation Reserve - Law n. 72, March 19, 1983	1,039
Revaluation Reserve - Law n. 342, November 11, 200	1,576
Other Reserves	138
Reserve ex Law n. 576, 1975 - re-classified into Capita	419
Reserve ex Law n. 72, 1983 - re-classified into Capital	976
Total	4,148

^{*} included in tax base for both Company and shareholders

Availability of the main items of Shareholders' Equity

(thousands of Euro)

			Amount	Summary of detinations during prior 3 years	
Description	Amount	Destination	Available for Distribution	Loss Coverage	Other destinations
Capital Stock	12,220				
Share issue premium	25,724	a, b, c	25,724		15,396
Riserva avanzo di fusione (quota capitale)	11	a, b, c	11		
Legal reserve	2,444	b	0		
Reserves in suspension of tax					
Reserve ex Law n. 72, 1983	1,039	a, b, c	1,039		
Reserve ex Law n. 342, 2000	1,576	a, b, c	1,576		
Other reserves in suspension of tax	138	a, b, c	138		
Other Reserves and Retained Earnings (1)	1,659	a, b, c	161	2,979	8,779
Net income (loss) for the period	258,234	a, b, c	258,231		12,051
Total Shareholders' Equity	303,045		286,880		

a: capital increase

b: loss coverage

c: distribution to shareholders'

⁽¹⁾ including the IAS Conversion Reserve, amounting to 3,207 thousand Euro, which can be used in full to cover losses after all the other reserves - including the Legal Reserve - have been used, and available for distribution only up to 1,583 thousand Euro

NON-CURRENT LIABILITIES

25. FINANCIAL DEBTS

As at December 31, 2018 financial debts amounted to 17,797 thousand euro, marking a significant decrease of 12,675 thousand euro compared to December 31, 2017.

This reduction is due to the repayments of the principal made during the year (-12,697 thousand euro), details and comments on which can be found below. The Company has continued to pursue its objective of having a correct balance of the financial indebtedness, with a higher percentage of medium-long term loans compared to short-term bank debt.

The Company's financial debts are all denominated in Euro, therefore there is not exchange rate impact. The following table shows the changes in the financial debts in 2018:

(thousands of Euro)

Financial Debt						
December 31, 2017	30,472					
Amortization of fees and interests	347					
Repayments	(12,697)					
Interest payments	(324)					
December 31, 2018	17,797					

The following table shows the relative breakdown by contractual maturity. Please note that the debt with a maturity of less than one year is included in current liabilities under "Current financial debts":

(thousands of Euro)

Financial debt	December 31, 2018	December 31, 2017	Difference
Less than 1 year	5,080	8,087	(3,007)
Current portion of financial debt	5,080	8,087	(3,007)
Between 1 and 2 years	5,100	8,070	(2,970)
Between 2 and 3 years	5,120	6,698	(1,578)
Between 3 and 4 years	2,497	5,120	(2,623)
Between 4 and 5 years	0	2,497	(2,497)
Over 5 years	0	0	0
Non current financial debt	12,717	22,385	(9,667)
Total	17,797	30,472	(12,675)

The following table shows the details of loans already signed as at December 31, 2017:

Description	Currency	Principal	Timing of capital reimbursement	Timing of covenants calculation	Interest rate	Effective interest rate	Value as at December 31, 2018 (thousands of Euro)	Value as at December 31, 2017 (thousands of Euro)
SAES Getters S.p.A. Unicredit	EUR	7 (millions of euro)	quarterly with maturity date December 31, 2019	Half -yearly	Three-months Euribor plus 2.25% spread	2.57%	0	2,794
SAES Getters S.p.A. Intesa Sanpaolo	EUR	8 (millions of euro)	half-yearly with maturity date July 31, 2020	Yearly	Six-months Euribor plus 2.25% spread	2.74%	0	4,820
SAES Getters S.p.A. Intesa Sanpaolo	EUR	10 (millions of euro)	half-yearly (with fixed principal amounts) with maturity date December 21, 2022	Yearly	Six-months Euribor plus 1.20% spread	1.18%	7,966	9,948
SAES Getters S.p.A. Banco BPM	EUR	5 (millions of euro)	quarterly (with variable principal amounts) with maturity date	n.a.	Three-months Euribor plus 1% spread	1.11%	3,353	4,446
SAES Getters S.p.A. Unicredit loan	EUR	10 (millions of euro)	quarterly with maturity date March 31, 2019	Half -yearly	Three-months Euribor plus 1% spread	0.90%	6,478	8,464

As shown in the above table, and as already mentioned, on July 31, 2018 the Company repaid the entire residual amount of the long-term loan underwritten with Banca Intesa Sanpaolo S.p.A. in mid-2015 in advance (initial nominal value of 8 million euro). No penalty was paid for said transaction. At the same time, the Interest Rate Swap contract on said loan was extinguished.

On August 1, 2018 the residual amount of the long-term loan underwritten with Unicredit S.p.A. was also repaid in advance (initial nominal value of 7 million euro). No penalty was paid for said transaction.

For the sake of completeness, note that on May 28, 2018 a credit facility for a maximum of 50 million USD was set in place with Banca Intesa Sanpaolo S.p.A. The equivalent of 38.5 million euro was drawn down from the same on June 12 for the capitalisation of the newly-incorporated SAES Colorado, Inc. The facility was entirely repaid and extinguished on June 25, following the collection by Entegris.

The transaction entailed bank fees and interest totalling 229 thousand euro.

For further details on this transaction see "Significant events in 2018" in the Report on operations.

Covenants

With the exception of the loan signed with Banco BPM, the loans granted to the Company are subject to the compliance with covenants calculated on Group economic and financial figures and verified every semester (on June 30 and December 31 of each year) or annually (on December 31).

As better shown in the table below, as at December 31, 2018, all of the covenants had been met.

		Covenant
Net equity	k euro	<u>></u> 94.000
Net financial position Net equity	%	≤ 1,0
Net financial position EBITDA	%	<u>≤</u> 2,25
<u>EBITDA</u> Financial expenses	%	> 5,0

Intesa Sanpaolo loan with nominal value equal to €10 millions (*)	Unicredit loan with nominal value equal to €10 millions (**)
Value as at December 31, 2018	Value as at December 31, 2018
n.a.	341,220
(0.36)	(0.65)
(4.70)	(8.50)
21.40	n.a.

^(*) Net financial position calculated excluding financial receivables from related parties and receivables (pay ables) for derivative financial instruments evaluated at fair value (**) Net financial position calculated excluding financial receivables from related parties and receivables (pay ables) for derivative financial instruments evaluated at fair value

Based on future plans, the Group is expected to be able to comply with the covenants in future years as well.

26. STAFF LEAVING INDEMNITIES AND OTHER EMPLOYEE BENEFITS

Please note that this item includes liabilities to employees under both defined-contribution and defined-benefit plans in accordance with the contractual and legal obligations in place.

The changes and the breakdown of this item during the year were as follows:

(thousands of Euro)

	Employee severance indemnities	Other employee benefits	Total	
December 31, 2017	5,003	1,948	6,952	
Accrual (release)	60	(93)	(33)	
Indemnities paid	(428)	(18)	(446)	
Other changes	(190)	(270)	(459)	
December 31, 2018	4,445	1,568	6,013	

The amounts recognised in the income statement may be broken down as follows:

	Fiscal Year
(thousands of Euro)	2018
Financial expenses	61
Current service cost	907
Released to the income statement	(1,000)
Total cost	(33)

The item "Released to the income statement" includes the removal of the provisions relating to the three-year period 2015-2017 for the non-competition pact of the Executive Directors, following the expiry of the mandate, as the conditions for the payment of said amount had not been met. Also note the release of provisions relating to the long-term cash incentive plan of several employees, who left the company before payment of the same fell due and therefore, no longer have a right to said incentive.

The split between the obligations under defined-contribution and defined-benefit plans and the related changes occurred during the year are shown below:

(thousands of Euro)

	December 31, 2017	Financial Expenses	Current service cost	Benefits paid	Actuarial profit/loss on the obligation	Released to the income statement	Other changes	December 31, 2018
Present value of defined benefit obligations	6,952	61	907	(446)	(46)	(1,000)	(414)	6,013
Fair value of plan assets	0	0	0	0	0	0	0	0
Costs non yet recognized deriving from past obligations	0	0	0	0	0	0	0	0
Defined benefit obligations	6,952	61	907	(446)	(46)	(1,000)	(414)	6,013
Defined contribution obligations	0	0	0	0	0	0	0	0
Staff leaving indemnities and similar obligations	6,952	61	907	(446)	(46)	(1,000)	(414)	6,013

[&]quot;Actuarial profit/loss on the obligation" refers to the differences on the obligations relating to defined-benefit plans resulting from the actuarial calculation, which are immediately recognised in shareholders' equity under profits carried forward.

The staff leaving indemnity consists of the obligation, estimated according to actuarial techniques, related to the sum to be paid to the employees of the Company when employment is terminated.

Following the entry into force of the 2007 Finance Law and relative implementing decrees, the liability associated with past years' staff leaving indemnity continues to be considered a defined-benefit plan and is consequently measured according to actuarial assumptions. The portion paid to pension funds is instead considered a defined-contribution plan and therefore it is not discounted.

[&]quot;Other changes" amounting to 414 thousand euro refers to the share of the long-term cash incentive plans that will be paid in April 2019. This amount has been reclassified under short-term debts to personnel, as the amount of the debt and the date of enforcement are both certain.

The obligations under defined-benefit plans are measured annually by independent actuarial consultants according to the projected unit credit method, separately applied to each plan.

The main economic-financial assumptions used for the actuarial calculations of defined-benefit plans as at December 31, 2018 and December 31, 2017 respectively are shown below:

	December 31, 2018	December 31, 2017
Average duration of the employees subject to actuarial evaluation	>10 years	>10 years
Discount rate	1.55%	1.20%
Inflation rate	1.50%	1.50%
Expected annual salary increase rate (*)	3.50%	3.50%

^(*) Factor not considered in the actuarial appraisal of the staff leaving indemnity of the Company, as it counts more than 50 employees

Note that, as regards the choice of the discounting rate, the reference index was the Eurozone *Iboxx Corporate AA*, the duration of which is consistent with the average financial duration of the collective amount under valuation as at December 31, 2018 and of the benefit under valuation.

With regard to the demographic assumptions, ISTAT 2004 mortality tables were used as well as INPS incapacity/invalidity tables.

As regards the likelihood of employees leaving their jobs for reasons other than death, turnover probabilities were used that were consistent with previous valuations, which adopt a time horizon deemed to be representative by the company under valuation. More specifically, an average turnover rate of 2.00% was used.

The item "Other employee benefits" includes the provision for long-term cash incentive plans, signed by two executive directors and by some employees, identified as particularly important for the achievement of the Group's medium to long term corporate objectives. The three-year plans provide for the recognition of cash incentives proportional to the achievement of specific personal and Group's objectives.

The aim of these plans is to further strengthen the alignment over time of individual interests to corporate interests and, consequently, to the shareholders' interests. The final payment of the long-term incentive is always subject to the creation of value in a medium to long-term period, rewarding the achievement of performance objectives over time. The performance review is based on multi-year indicators and the payment is always subject, in addition to maintaining the employer-employee relationship with the company for the duration of the plan, also to the presence of a positive consolidated income before taxes at the expiry date of the plan.

Such plans fall into the category of defined-benefit obligations and therefore they are discounted.

The discounting rates used are shown below, which reflect the rates of return of Italian government bonds, taking the duration of the plans into account, which all expire in 2020:

Year	Discount Rate
2020 (*)	0.53%

^(*) Please note that all existing plans, both for employees and for Dicrectors, has as expiry date year 2020 $\,$

The following table shows a breakdown of the actuarial differences relating to 2018:

(thousands of Euro)	Staff leaving indemnities	Other defined benefit obligations Italy	Long term incentive plan	Total
Actuarial differences:				
Changes in financial assumptions	(159)	(19)		(178)
Changes in other assumptions (demographic assumptions, remuneration assumptions, etc.)	(30)	163		133
Actuarial gains (losses)	(190)	144	0	(46)

With regard to defined-benefit plans, the following table shows the effect on the obligation and on the amounts recognised in the income statement in the year of an increase or decrease of half a percentage point of the discounting rate:

(thousands of Euro)

	Discount rate	
	0.50%	-0.50%
Effect on the defined benefit obligation	(239)	245

Instead, the table below shows the effect on the payable for three-year cash incentive plans (both of employees and the Executive Directors) of an increase or a decrease of half a percentage point of the discounting rate.

(thousands of Euro)		Discount Rate	
	0.50%	-0.50%	
Effect on the payable for long term cash incentive plans	(7)	7	

The following table shows the number of employees by category:

	Dec 31, 2018	Average 2018	Dec 31, 2017	Average 2017
Managers	48	49	48	48
Employees and middle management	196	200	203	203
Workers	183	183	188	186
Total	427	432	439	437

This figure does not include the personnel employed at the Group companies with contract types other than employment agreements, equal to 22 units (11 units as at December 31, 2017).

27. PROVISIONS FOR RISKS AND CHARGES

"Provisions for risks and charges" amounted to 1,658 thousand euro as at December 31, 2018, slightly down by 238 thousand euro compared to December 31, 2017.

The following table shows the breakdown of and the changes in these provisions:

(thousands of Euro)

(thousands of Edio)							
	December 31, 2017	Increase	Utilization	Reclassifications	Release into income statement	December 31, 2018	
Bonus	1,739	1,364	(1,710)			1,393	
Provision for litigations	50		(45)		(5)	(0)	
Phantom Shares plan	0	70				70	
Other provisions	107	88				195	
Total	1,896	1,522	(1,755)	0	(5)	1,658	

"Bonus", in the "increase" column, includes the provision for bonuses to Company employees relating to the year. The column "usage" represents the amount of the bonuses paid to employees during the year.

In 2018, the Company used 45 thousand euro of the "Provision for litigations" allocated last year with regard to a dispute about the termination of the employment contract of a former employee. The residual amount of the provision of +5 thousand euro was released to the income statement.

The "Phantom Shares Plan" worth 70 thousand euro, represents the fair value as at December 31, 2018 allocated by virtue of a new incentive plan, based on Phantom Shares, addressed to certain executive directors and strategic executives, as approved by the Company's Shareholders' Meeting on October 1, 2018.

The purpose of the Plan is to give certain individuals the right to receive a cash incentive, proportional to the number of Phantom Shares assigned free of charge on October 17, 2018, and dependent on any increase in the value of the Company's Ordinary shares on a date in which certain pre-established events are due to take place, with respect to the assignment value. The events that may trigger the payment of the incentive are, for example: change in control of the Company; failure to renew the position of board director at the end of a term in office; revocation from the position of board director or substantial change in the relative proxies or in the role without just cause; dismissal for just cause; resignation for an objective justified reason (only for Strategic Executives); reaching the age of retirement; permanent invalidity; death; delisting.

In accordance with the criteria established by the plan's regulations, the assignment value of each Phantom Share has been established as 16.451 euro, corresponding to the weighted average of the official prices of the Company's ordinary shares recorded on the MTA (electronic equity market) organised and managed by Borsa Italiana S.p.A. on trading days that fall in the 36 (thirty-six) months prior to the assignment date.

The valuation of the Phantom Shares was made on the assignment date (October 17, 2018) reflecting the financial market conditions valid on the date in question.

The method adopted to estimate the Fair Value of the Phantom Shares adopts the Risk Neutral approach prescribed by IFRS 2, deducing the risk-free rates curve of Euroswap rates on the assignment date (October 17, 2018), through the application of the Bootstrap technique; for each option, the expected dividend rate of the underlying security was taken into account, considered as an average value of 2.89% for the entire duration of the Plan.

The Fair Value amounts, obtained for each single annual time step, were weighted on the basis of the likelihood that the events illustrated above are going to happen and differentiated by individual beneficiary.

"Other provisions" rose by 88 thousand euro, resulting from an allocation to provisions made to cover a labour dispute with a social security entity.

The balance of "Other provisions" confirms the allocation for the settlement offer of 100 thousand euro submitted by the now incorporated company SAES Advanced Technologies S.p.A., for the sole aim of avoiding the emergence of a dispute and regardless, therefore, of any valuation in this regard, in responses to a summons received following the incident that took place in 2016 at the plant of the external company that manages the disposal of waste of the same incorporated company. The amount allocated to provisions represents the best estimate of the cost needed to extinguish the obligation in place on the reporting date.

The classification of Provisions between current and non-current liabilities is provided below:

(thousands of Euro)

	Current	Non current	December 31,	Current	Non current	December 31,
	provisions	provisions	2018	provisions	provisions	2017
Bonus	1,393	0	1,393	1,739	0	1,739
Provision for litigations	(0)	0	(0)	50	0	50
Phantom Shares plan	0	70	70	0	0	
Other provisions	187	8	195	100	7	107
Totale	1,580	79	1,658	1,889	7	1,896

CURRENT LIABILITIES

28. TRADE PAYABLES

Trade payables amounted to 8,241 thousand euro as at December 31, 2018, marking an increase of 635 thousand euro compared to December 31, 2017. This increase is due to higher investments made in the latter part of the year by the Company in preparation for the installation of a new pilot production line for the advanced packaging business at the Lainate plant, plus those relating to the installation of new production lines in the Avezzano plant.

There are no trade payables in the form of debt securities.

Trade payables are all due within twelve months.

All transactions with Group companies were conducted at arm's length.

A breakdown of the figures as at December 31, 2018 by geographical area is shown below:

(thousands of Euro)

	Italy	UE & Other Europe	Northern America	Japan	Other Asia	Other	Total Net Value
Payables vs suppliers	6,989	541	164	18	57	0	7,769
Payables vs Group companies	0	0	391	0	37	0	429
Payables vs joint ventures	44	0	0	0	0	0	44
Total Payables	7,033	542	555	18	94	0	8,241

Trade payables are non-interest bearing and are usually settled at 60/90 days.

The table below shows the due dates of trade payables as at December 31, 2018:

(thousands of Euro)	Total	otal Not yet due Due			Due			
		Not yet due	< 30 days	30 - 60 days	60 - 90 days	90 - 180 days	> 180 days	
December 31, 2018	8,241	7,369	271	347	25	36	195	
December 31, 2017	7,606	6,764	477	223	52	22	68	

29. FINANCIAL DEBTS RELATED PARTIES

As at December 31, 2018, they amounted to 10,317 thousand euro, against 7,023 thousand euro in 2017 and are comprised by financial debts to Group companies due to the centralisation of the liquidity of subsidiaries through interest-bearing loan agreements and the centralised Group cash management system (cash pooling) at the Company's bank accounts.

30. OTHER FINANCIAL DEBTS TOWARDS THIRD PARTIES

The balance as at December 31, 2018 of 531 thousand euro (6 thousand euro at the end of 2017), is mainly comprised by the financial debt relating to the best estimate of the contractual adjustment of the sale price of the gas purification business (521 thousand euro). As established by the agreement signed by the parties, the price was calculated on the closing date using estimated values of working capital, cash and tax credit, while a financial liability was recognised for the difference between the estimated values and the actual values. Note that the price calculated in this way could differ slightly depending on the effective value of the tax credit of the companies sold SAES Getters USA, Inc. and SAES Pure Gas, Inc. resulting from the Tax Return Declaration relating to January 1 - June 24, 2018, to be submitted by the end of the first half of 2019.

This item also includes 10 thousand euro for bank charges not yet received at the end of the year.

31. OTHER PAYABLES

The item "Other payables" includes amounts that are not classified as trade payables, which at the end of the year amounted to 9,248 thousand euro, marking a decrease of 1,360 thousand euro compared to 2017, and break down as follows:

(thousands of Euro)

	December 31, 2018	December 31, 2017	Difference
Payables to employees (vacation, wages, staff leaving indemnity,			
etc.)	3,599	2,388	1,211
Social security payables	1,742	1,620	122
Payables for withholding and other taxes (excluding income tax)	1,234	974	260
Other	2,673	5,626	(2,953)
Total	9,248	10,608	(1,360)

The item "Payables to employees" is mainly made up of the provisions for holidays accrued but not taken and for December 2018 wages, as well as severance payments allocated at the end of the year against contractual agreements signed with several employees leaving the company following the reorganisation of the same, which will be paid in 2019. The value of the payable also includes the share of deferred remuneration, of 414 thousand euro, relating to long-term cash incentive plans, which mature during the year.

The item "Social security payables" mainly includes the payables due to INPS (Italy's social-security agency) for contributions to be paid on wages and also includes the payables to the treasury fund operated by INPS and to the pension funds.

The item "Payables for withholding and other taxes (excluding income tax)" primarily consists of the payables owed by the Company to the Tax Authorities for withholding taxes on the wages of employees and consultants.

Lastly, the item "Other" mainly includes payables of the Company for both fixed and variable Directors' remuneration (2,273 thousand euro), and for advances received on government grants for research. The decrease compared to last year is mainly due to lower payables on the variable part of the remuneration of Executive Directors. As at December 31, 2017, this item included the payable for the portion of the three-year cash incentive plan which matured and was paid in the first half of 2018 (2,800 thousand euro).

These payables are non-interest bearing and all mature within the end of next year.

32. DERIVATIVE FINANCIAL INSTRUMENTS MEASURED AT FAIR VALUE

As at December 31, 2018 the item "Derivate financial instruments measured at fair value, which represents the fair value of agreements signed by the Company with a view to fixing the interest rate on long-term bank loans, as well as the fair value of the implicit derivatives included in said loan agreements, recorded a negative balance of 48 thousand euro compared to a negative net balance of 61 thousand euro as at December 31, 2017.

The following table provides a summary of Interest Rate Swap agreements and the relative fair value as at December 31, 2018 compared to December 31, 2017:

Description	Subscription date	Currency	Notional amount (thousands of Euro)	Maturity	Interest rate	Timing	Fair value December 31, 2018 (thousands of Euro)	Fair value December 31, 2017 (thousands of Euro)
Interest Rate Swap (IRS) on Intesa Sanpaolo S.p.A. loan (****)	September 25, 2015	EUR	3,600	July 31, 2020	Fixed rate paid: 0.285% Variable rate received: sixmonth Euribor	Half-yearly	1	(20)
Interest Rate Swap (IRS) on Unicredit S.p.A. loan (****)	March 29, 2016	EUR	5.250 (*)	December 31, 2019	Fixed rate paid: 0.0% Variable rate received: three month Euribor (**)	Quarterly	-	(9)
Interest Rate Floor on Banco BPM loan (derivative embedded in the loan agreement)	December 22, 2016	EUR	5.000 (*)	December 31, 2021	If three month Euribor <0, the financing variable rate is equal to the spread	Quarterly	(8)	(12)
Interest Rate Swap (IRS) su loan Unicredit S.p.A.	April 7, 2017	EUR	10.000 (*)	March 31, 2022	Fixed rate paid: 0.0% Variable rate received: three month Euribor (***)	Quarterly	(21)	(11)
Interest Rate Swap (IRS) su loan Intesa Sanpaolo S.p.A.	April 19, 2017	EUR	5,000	December 21, 2022	Fixed rate paid: 0.16% Variable rate received: sixmonth Euribor	Half-yearly	(19)	(9)
Total							(48)	(61)

^(*) The reference amount is aligned with the amortization plan of the hedged long-term loan

In 2018, the Company did not enter into any new IRS agreements.

Note that, in the second half of 2018, as the Company had fully repaid the residual portion of the long-term loans granted by Banca Intesa Sanpaolo S.p.A. in advance on September 25, 2015 and by Unicredit S.p.A. on March 29, 2016, the Interest Rate Swaps on these loans were also extinguished. For further details see "Significant events in 2018" in the Report on operations.

The fair valuation, conducted by an independent third party, was made at market rates, in a risk neutral context and by using rate models that reflect the best practices usually adopted.

To determine the fair value, the input information used was:

- the Interest Rate Swap rate curve by maturity;
- the migration matrices of the credit rating extracted from Moody's;
- interest rate volatility surfaces extracted from Bloomberg.

The pricing was adjusted, in accordance with IFRS 13, by means of a Credit Value Adjustment (CVA, namely the adjustment relating to the risk of default of the counterparty) and a Debt Value Adjustment (DVA, namely the cost of protecting against the risk of default of the Company by the counterparty), calculated using the "Provision Model" method. In particular, to determine the counterparty risk component in the fair value, the rating opinion issued by Moody's rating agency on the issuing credit entity for the calculation of the CVA. To determine the DVA, given the objective impossibility of assigning a rating opinion for the SAES Group, the lowest rating opinion of those identified for credit entities was prudentially applied.

As the accounting requirements to apply the hedge accounting method are not met for these contracts, they are measured at fair value and the profits or losses deriving from their valuation are directly charged into the income statement.

As at December 31, 2018, the Company does not have any hedge contract in place to cover the exposure to changes in future cash flows originating from commercial and financial transactions performed in a currency other than the euro.

33. ACCRUED INCOME TAXES

This item, totalling 415 thousand euro as at December 31, 2018, includes 89 thousand euro for the amount due to the Tax Authority for IRES on income subject to separate taxation by the foreign subsidiary SAES Getters International Luxembourg S.A., in application of provisions regarding subsidiaries (known as "CFC Legislation" dictated by art. 167, paragraph 5-bis and foll. of the T.U.I.R.) and 325 thousand euro for the payable for tax consolidation of subsidiaries E.T.C. S.r.l. in liquidation and SAES Coated Films S.p.A. See Note 11 for further details.

^(**) In case of a negative three months Euribor, the contract provides for a floor equal to -2.25%

^(***) In case of a negative three months Euribor, the contract provides for a floor equal to -1,00%.

^(****) Contract settled in advance during this financial year, following the loan repayment

34. DUE TO BANKS

As at December 31, 2018 the total amount due to banks, of 27,002 thousand euro (against 12,001 thousand euro as at December 31, 2017), regarded short-term debt in the form of "hot money" loans, whose average interest rate, spread included, was around 0.042%.

35. CASH FLOW STATEMENT

The cash flow statement is presented according to the indirect method.

The net balance of cash generated in 2018 was a positive 32,117 thousand euro.

The Company's operating activities generated a negative cash flow of 1,437 thousand euro.

The cash flows generated by investing activities were 203,047 thousand euro, due in particular to the sale of the purification business. The Company also collected net dividends from its subsidiaries of 21,045 thousand euro, net of withholding tax, but had to fund investments in property, plant and equipment and financial fixed assets as illustrated in Notes 13 and 15.

The cash flows utilised in the year for financing activities were -168,136 thousand euro: following the payment received for the sale of the purification business, some loans were repaid in advance, as better illustrated in Note 25; total repayments amounted to -12,697 thousand euro, offset by the greater use of "hot money" forms of loans of 15,000 thousand euro and by higher intercompany loans of 5,369 thousand euro. Lastly, the payment of dividends amounted to 15,435 thousand euro, marking an increase of 3,185 thousand euro compared to the previous year.

The following table contains the Cash Flow Statements, showing the net cash flows relating to discontinued operations and the net cash flows relating to operating activities.

(euro)	2018
Cash flows from operating activities	
Net income (loss) from continued operations	4,386,813
Net income (loss) from discontinued operations	253,846,790
Current income taxes	691,920
Changes in deferred income taxes	712,566
Depreciation	3,785,301
Write-down (revaluation) of property, plant and equipment	639,000
Amortization	185,666
Net loss (gain) on disposal of assets	(137,249)
Capital gain on purification business disposal	(253,896,016)
Interests and other financial income, net	(263,724)
Write-down of trade receivables	16,000
Write-down of investments and financial receivables in subsidiaries	10,738,194
Other income from equity investments	(21,944,621)
Accrual for termination indeminities and similar obligations	(32,787)
Changes in provisions	(237,061)
	(1,509,208)
Working capital adjustments	
Cash increase (decrease)	
Account receivables and other receivables	804,141
Inventory	(109,353)
Account payables	635,740
Other current payables	(1,759,585)
	(429,057)
Payment of termination indemnities and similar obligations	(446,314)
Interests and other financial payments	(850,943)
Interests and other financial receipts	1,832,143
Taxes paid	(33,782)
Net cash flows from operating activities	(1,437,160)
Net cash flows from investing activities	1
Purchase for tangible assets	(9,373,408)
Proceeds from sale of tangible and intangible assets	430,371
Purchase of intangible assets	(389,172)
Dividends received, net of withheld	21,045,392
Capital injection into joint ventures	(64,391,731)
Consideration for the purification business disposal, net of the disposed cash	284,339,502
Ancillary monetary charges for the purification business disposal	(28,610,489)
	(3,888)
Net cash flows from investing activities	203,046,577
TO CHANGE II WILLIAM III III III III III III III III III	200,040,077
Cash flows used by financing activities	
Proceeds from long term financial liabilities	
Proceeds from short financial liabilities	15,000,000
Dividends payment	(15,434,978)
Repayment of financial liabilities	(12,697,277)
Interests paid on long term financial liabilities	(324,431)
Financial receivables repaid (granted) from related parties	(157,971,184)
Financial liabilities granted (reimburrsed) to related parties	3,294,326
Other financial payables/receivables	(2,571)
Net cash flows from financing activities	(168,136,115)
Effect of exchange rate differences	(1,355,898)
Increase (decrease) in cash and cash equivalents	32,117,404
Cash and cash equivalents at the beginning of the period	8,377,728
Cash and cash equivalents at the end of the period	40,495,132

ations	om discontinued oper	
	Gas Purification	Gas Purification
total	business	business 1 Jan - 25 Jun
	disposal	2018
253,846,79	253,846,790	
49,68		49,685
(4,202	(4,202)	
(253,896,016	(253,896,016)	
(3,743	(53,428)	49,685
		-
	0	0
(3,743	(53,428)	49,685
(52,408		(52,408)
228,32	228,324	
284,339,50	284,339,502	
(28,610,489	(28,610,489)	
255,904,92	255,957,337	(52,408)
	0	0
(1,355,898	(1,355,898)	
254,545,28	254,548,011	(2,723)
	0	0
254,545,28	254,548,011	(2,723)

	- continued perations
	4,386,813
	(
	691,920
	712,566
	3,735,616 639,000
	185,666
	(133,047)
	(
	(263,724)
	16,000
	10,738,194
	(32,787)
	(237,061)
	(1,505,465)
	804,141
	(109,353)
	(1,759,585)
	(429,057)
	(446,314)
	(850,943)
	1,832,143
	(1,433,417)
	(-,1,1-1)
	(9,321,000)
	202,047
	21,045,392
	(64,391,731)
	(
	(
	(3,888)
((52,858,352)
	15,000,000
	(15,434,978)
	(12,697,277)
	(324,431)
	(157,971,184) 3,294,326
	(2,571)
(1	68,136,115
	(
	22 427 00 1
(2	22,427,884
	8,377,728
	.,,

		2017 - from discontinued operations				
(euro)	2017	Gas Purification business 1 Jan - 25 Jun 2018	Gas Purification business disposal	total		2017 - continued operations
Cash flows from operating activities		2018				
Net income (loss) from continued operations	(2,326,319)			0		(2,326,319)
Net income (loss) from discontinued operations	(652,865)	(58,685)	(594,180)	(652,865)		0
Current income taxes	768,579	(23,332)	(0.1,100)	0		768,579
Changes in deferred income taxes	9,982,467			0		9,982,467
Depreciation	3,887,090			0		3,887,090
Write-down (revaluation) of property, plant and equipment	941,908			0		941,908
Amortization	192,338			0		192,338
Net loss (gain) on disposal of assets	(40,014)			0		(40,014)
Capital gain on purification business disposal	594,180		594,180	594,180		(40,014)
Interests and other financial income, net	737,833		374,100	374,100		737,833
Write-down of trade receivables	757,635			0		757,655
	5,355,564			0		5,355,564
Write-down of investments and financial receivables in subsidiaries	(22,602,453)			0		(22,602,453)
Other income from equity investments				0		
Accrual for termination indeminities and similar obligations	2,564,977			0		2,564,977
Changes in provisions	168,876			0		168,876
	(427,838)	(58,685)	0	(58,685)		(369,153)
Working capital adjustments						
Cash increase (decrease)						
Account receivables and other receivables	93,109			0		93,109
Inventory	(2,333,197)			0		(2,333,197)
Account payables	(1,264,108)			0		(1,264,108)
Other current payables	4,839,771			0		4,839,771
	1,335,576			0		1,335,576
Payment of termination indemnities and similar obligations	(256,525)			0		(256,525)
Interests and other financial payments	(174,513)			0		(174,513)
Interests and other financial receipts	328			0		328
Taxes paid	(767,742)			0		(767,742)
Net cash flows from operating activities	(290,714)	(58,685)	0	(58,685)		(232,029)
Net cash flows from investing activities						
Purchase for tangible assets	(3,634,519)			0		(3,634,519)
Proceeds from sale of tangible and intangible assets	39,918			0		39,918
Purchase of intangible assets	(243,170)			0		(243,170)
Dividends received, net of withheld	21,812,702			0		21,812,702
Capital injection into joint ventures	(3,583,364)			0		(3,583,364)
Consideration for the purification business disposal, net of the disposed cash	0			0		0
Ancillary monetary charges for the purification business disposal	(594,180)		(594,180)	(594,180)		0
Change in other current assets/liabilities	9,562			0		9,562
Net cash flows from investing activities	13,806,949	0	(594,180)	(594,180)		14,401,129
Cash flows used by financing activities						
Proceeds from long term financial liabilities	10,133,133			0		10,133,133
Proceeds from short financial liabilities	5,499,677			0		5,499,677
Dividends payment	(12,250,160)			0		(12,250,160)
Repayment of financial liabilities	(12,000,000)			0		(12,000,000)
Interests paid on long term financial liabilities	(566,043)			0		(566,043)
Financial receivables repaid (granted) from related parties	(500,043)			0		(500,045)
Financial liabilities granted (reimburrsed) to related parties	2,857,531			0		2,857,531
Other financial payables/receivables	(1,841)			0		(1,841)
Other financial payables/receivables Net cash flows from financing activities	(6,327,703)	0	0	0		(6,327,703)
Net cash nows from mancing activities	(0,327,703)	- 0	U	0		(0,327,703)
Effect of exchange rate differences	0					
Increase (decrease) in cash and cash equivalents	7,188,531	(58,685)	(594,180)	(652,865)		7,841,396
Cash and cash equivalents at the beginning of the period	1,189,197	0	0	0		1,189,197
Cash and cash equivalents at the end of the period	8,377,728	(58,685)	(594,180)	(652,865)		9,030,593

36. POTENTIAL LIABILITIES AND COMMITMENTS

The guarantees that the Company has granted to third parties, as well as the risks and the commitments towards third parties are shown below:

(thousands of euro)	31.12.2018	31.12.2017
Guarantees in favor of Group companies	0	0
Guarantees in favor of third parties	4,095	16,267
Total guarantees provided	4,095	16,267
Guarantees from third parties	0	0
Total guarantees received	0	0
Obligations for forward currency tramsactions	0	0
Obligations in favor of third parties	0	0
Total obligations	0	0

"Guarantees to third parties" groups the guarantees granted by the Company and used within the scope of the Group, against short, medium and long-term credit facilities granted by the banks to the Company and to some foreign subsidiaries, as well as a guarantee to the Tax Authorities for VAT refunds. The decrease is due to the termination of several guarantees relating to credit facilities from banks.

The following table shows the maturities of operating lease obligations outstanding as at December 31, 2018.

	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Operating lease obligations	255	117	10	9	392
Car lease obligations	208	190	20	0	418
Offices rental	101	76	76	22	276
Total	565	384	106	32	1,086

To assist the understanding of the impact resulting from the first-time application of the standard, the following table provides a reconciliation between future commitments for leases as at December 31, 2018 and the impact expected by the adoption of IFRS 16 from January 1, 2019.

Operating lease obligations at 31 dicembre 2018	1,086
Short term leas fees (exemption)	(159)
Llow-value lease fees (exemption)	(66)
Non discounted financial liabilities for leases as at January 1, 2019	861
Discounting effect	(26)
Financial liabilities for leases as at January 1, 2019	835
Present value of liabilities for financial leases at December 31, 2018	0
Financial liabilities for total leases as at January 1, 2019 following the transition to IFRS 16	835

37. RELATED PARTY TRANSACTIONS

With regard to Related Party transactions, identified on the basis of international accounting standard IAS 24 revised, and article 2359 of the Italian Civil Code, note that transactions with subsidiary, associated and joint control companies also continued in 2018. Transactions regarding the Company's ordinary business activities were performed with these counterparties. These transactions were mostly commercial, and regarded purchases and sales of raw materials, semi-finished goods, finished products, plant, tangible assets and various services; cash pooling agreements are in place with several Group companies as well as loan agreements.

All contracts were concluded at economic and financial conditions considered arm's length. See the notes of the Report on operations for further details.

38. FEES TO THE INDEPENDENT AUDITORS AND TO ENTITIES BELONGING TO ITS NETWORK

Pursuant to article 149-duodecies "Disclosure of fees" of the Issuers' Regulations, introduced by Consob with resolution 15915 of May 3, 2007, the fees that the independent auditors and the entities belonging to its network have received, separately, for the assignments of auditing and for the provision of other services, indicated by type or category, are summarised in the table below:

Business services	Supplier	Customer	Fees
Audit	Parent Company auditor	SAES Getters S.p.A.	209
Other (*)	Parent Company auditor	SAES Getters S.p.A.	12

^(*) Methodological support for the first application of IFRS 9 for the 2018 financial year

39. SIGNIFICANT EVENTS AFTER THE END OF THE YEAR

For details, please refer to the paragraph entitled "Subsequent events" in the Report on operations.

Lainate (MI), March 13, 2019

on behalf of the Board of Directors

Massimo della Porta President Summary schedule of the key figures of the financial statements of subsidiaries

2018 Statement of financial position

	SAES Getters/U.S.A., Inc.	SAES Getters Korea Corporation	SAES Getters International Luxembourg S.A.	SAES Investments S.A.	SAES Getters (Nanjing) Co., Ltd.
	(US Dollar)	(Thousands of Won)	(Thousands of euro)	(Thousands of euro)	(Renminbi)
Property, plant and equipment, net	2,363,782	0	0	0	43,404
Intangible assets, net	23,524,008	0	0	0	0
Other non current assets	15,430,403	134,929	38,188	99,832	31,823,650
Current assets	11,311,080	1,277,861	8,045	100,033	98,859,363
Total Assets	52,629,273	1,412,790	46,233	199,865	130,726,417
Shareholders' equity	34,931,452	1,103,254	45,829	39,750	123,559,654
Non current liabilities	9,129,339	0	0	160,046	0
Current liabilities	8,568,482	309,536	404	69	7,166,763
Total Liabilities and Shareholders' Equity	52,629,273	1,412,790	46,233	199,865	130,726,417

2018 Income statement

	SAES Getters/U.S.A., Inc.	SAES Getters Korea Corporation	SAES Getters International Luxembourg S.A.	SAES Investments S.A.	SAES Getters (Nanjing) Co., Ltd.
	(US Dollar)	(Thousands of Won)	(Thousands of euro)	(Thousands of euro)	(Renminbi)
Total net sales	10,316,340	, ,	0	0	42,654,354
Cost of sales	(5,472,724)			0	(26,895,606)
Gross Profit	4,843,616	358,527	0	0	15,758,748
Research & development expenses	(58,453)		0	0	0
Selling expenses	(1,447,293)	(188,015)	0	0	(9,062,315)
General & administrative expenses	(512,158)	(567,235)	(94)	(41)	(1,964,078)
Total operating expenses	(2,017,904)	(755,250)	(94)	(41)	(11,026,393)
Other income (expenses), net	(259,632)	(9,302)	0	0	52,161,812
Operating Income (loss)	2,566,080	(406,025)	(94)	(41)	56,894,167
Interest and other financial income (expenses	687,170	15,632	9,460	(209)	4,218,890
Foreign exchange gain (loss), net	55,974	(18,375)	36	0	148,507
Income before taxes	3,309,224	(408,768)	9,402	(250)	61,261,564
Income taxes	(696,028)	0	(786)	0	(11,351,526)
Net income (loss) from continuing operations	2,613,196	(408,768)	8,616	(250)	49,910,038
Net income (loss) from discontinuing operations	(681,744)	0	0	0	0
Net income (loss)	1,931,452	(408,768)	8,616	(250)	49,910,038

2018 Statement of financial position

	SAES Getters Export, Corp.	Memry GmbH in liquidation	E.T.C. S.r.l. in liquidation	SAES Nitinol S.r.l.	SAES Coated Films S.p.A.
	(US Dollar)	(Thousands of euro)	(Thousands of euro)	(Thousands of euro)	(Thousands of euro)
Property, plant and equipment, net	0	0	0	0	1,145
Intangible assets, net	0	0	0	0	44
Other non current assets	0	0	0	0	461
Current assets	12,907,406	2,093	754	27	4,568
Total Assets	12,907,406	2,093	754	27	6,218
	10,255,984	456	678	(8,959)	58
Non current liabilities	0	0	0	0	867
Current liabilities	2,651,422	1,637	76	8,986	5,293
Total Liabilities and Shareholders' Equity	12,907,406	2,093	754	27	6,218

2018 Income statement

	SAES Getters Export, Corp.	Memry GmbH in liquidation	E.T.C. S.r.l. in liquidation	SAES Nitinol S.r.l.	SAES Coated Films S.p.A.
	(US Dollar)	(Thousands of euro)	(Thousands of euro)	(Thousands of euro)	(Thousands of euro)
					44.400
Total net sales	0	0	0	0	11,480
Cost of sales	0	0	0	0	(10,128)
Gross Profit	0	0	0	0	1,352
Research & development expenses	0	0	(30)	0	(232)
Selling expenses	9,283,673	0	0	0	(1,382)
General & administrative expenses	0	(110)	(14)	(15)	(505)
Total operating expenses	9,283,673	(110)	(44)	(15)	(2,119)
Other income (expenses), net	1,952,640	68	(15)	(1)	(2,232)
Operating Income (loss)	11,236,313	(41)	(60)	(16)	(2,999)
Interest and other financial income (expenses	18,740	2	(0)	(8,871)	(153)
Foreign exchange gain (loss), net	0	(1)	0	0	0
Income before taxes	11,255,053	(41)	(60)	(8,887)	(3,152)
Income taxes	0	58	15	(82)	305
Net income (loss) from continuing operations	11,255,053	16	(45)	(8,969)	(2,847)
Net income (loss) from discontinuing operations	0	0	0	0	0
Net income (loss)	11,255,053	16	(45)	(8,969)	(2,847)

Certification of the separate financial statements of SAES Getters S.p.A.

CERTIFICATION OF THE SEPARATE FINANCIAL STATEMENTS

pursuant to article 81-ter of Consob Regulation 11971 of May 14, 1999 and subsequent amendments and additions

- 1. The undersigned Giulio Canale, as Vice President, Managing Director and Manager in charge of preparing the company's accounting documents, of SAES Getters S.p.A., hereby certifies, also in compliance with the provisions of article 154-bis, paragraphs 3 and 4, of Italian Legislative Decree no. 58 of February 24, 1998:
 - the adequacy with relation to the characteristics of the enterprise and
 - the effective application

of the administrative and accounting procedures for the preparation of annual financial statements, in the period January 1 - December 31, 2018.

2. In this regard, the following is of note:

2.1. The Administrative-Accounting Control Model of the SAES Group

- On December 20, 2012, the Board of Directors of SAES Getters S.p.A. approved the update of the Administrative-Accounting Control Model, issued on May 14, 2007, the adoption of which seeks to guarantee the alignment of SAES with the provisions introduced by Italian Law no. 262 of December 28, 2005 (hereinafter also the "Law on Savings") implemented in December 2006 with the approval of Italian Legislative Decree no. 303/06, with specific reference to obligations regarding the preparation of company accounting documents, as well as any document or disclosure of a financial nature released to the market.
- The Control Model, with reference to the organisation chart of the SAES Group:
 - o defines the roles and the responsibilities of the individuals involved at various levels in the process of preparation and/or control of the financial disclosures of the SAES Group, introducing the figure of the Manager in charge of preparing the company's accounting documents (hereinafter the "Manager in Charge");
 - o illustrates the elements comprising the administrative-accounting control system, referred to the general control environment underlying the Internal Control System of the SAES Group, as well as specific components relating to administrative-accounting disclosures;
 - o with specific reference to the latter aspect, envisages the integration of the Group Accounting Principles and the IAS Operating Procedures with a system of administrative-accounting control matrices, which describe the control activities implemented in each process;
 - o defines procedures and the frequency of the administrative-accounting risk assessment process, to identity the most relevant processes for the purposes of accounting and financial disclosures.

2.2. Administrative-accounting control matrices in SAES Getters S.p.A.

- On December 20, 2012, 9 administrative-accounting control matrices were issued, relating to the most significant processes of SAES Getters S.p.A., selected following a risk assessment conducted on the basis of the 2011 annual financial statements.
- The controls described in the above-mentioned matrices were discussed with the managers according to the organisation chart of processes that are controlled, and a process of continuous verification and alignment of the matrices to the actual operations was set in place, requiring each manager to check the application of the controls and to confirm the adequacy and effectiveness, or to report non-operational or inadequate controls, or those rendered obsolete due to changes in the internal organisation. This process, implemented in 2017, with reference to the auditing activities for the 2016 annual financial statements and the 2016 consolidated financial statements, continued in 2018, and led to a revision of controls that no longer reflected operations.

2.3. Results of the internal certification process of SAES Getters S.p.A.

- The process managers have signed and sent the Manager in Charge their "internal letters of certification", in which they confirm that they have checked the activities/processes subject to control within their scope of responsibility and that they consider them to be suitable and operationally effective to guarantee the reliability of the corresponding information flows and the processing of the relative data in accordance with the administrative-accounting procedures adopted by SAES Getters S.p.A.;
- as at today's date, the Manager in Charge, with the assistance of the Head of the Administrative Office
 of SAES Getters S.p.A., has received all 16 letters of certification required of the process managers of
 SAES Getters S.p.A.;
- The result of the process was positive, no significant irregularities were identified.

2.4. Results of audits conducted by the Internal Audit Function relating to SAES Getters S.p.A.

- The Manager in Charge requested the assistance of the Internal Audit Function for a further check of part of the controls included in the administrative-accounting matrices by an independent function with respect to the offices responsible for said controls.
- As regards said check, the Internal Audit Function checked several of the administrative-accounting
 processes during the year and verified the correct implementation of the controls to oversee the
 processes in question with the relative managers, collecting supporting documents where necessary.
 The activity has a positive outcome, as shown in the report drawn up by the head of the Internal Audit
 Function.

3. It is also hereby certified that:

- 3.1. The annual financial statements as at December 31, 2018:
- a) have been prepared in compliance with the applicable international accounting standards recognised by the European Community in (EC) regulation no. 1606/2002 of the European Parliament and Council;
- b) correspond to the entries in the accounting records and books;
- c) are suitable to represent the equity, economic and financial situation of the issue in a truthful and correct manner.
- 3.2. The Report on operations contains a reliable analysis of performance and of the profit/loss of operations, as well as the issuer's situation, together with a description of the main risks and uncertainties to which it is exposed.

Lainate (MI), March 13, 2019

The Vice President, Managing Director and Manager in charge of preparing the company's accounting documents Giulio Canale¹³

¹³ On October 17, 2018, the Board of Directors of SAES Getters S.p.A. approved the appointment of Giulio Canale as the Manager in charge of preparing the company's accounting documents, to replace Michele Di Marco.

Independent Auditors' report on the separate financial statements of SAES Getters S.p.A.



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INDEPENDENT AUDITOR'S REPORT PURSUANT TO ARTICLE 14 OF LEGISLATIVE DECREE No. 39 OF JANUARY 27, 2010 AND ARTICLE 10 OF THE EU REGULATION 537/2014

To the Shareholders of Saes Getters S.p.A.

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

We have audited the financial statements of Saes Getters S.p.A. (the Company), which comprise the statement of financial position as at December 31, 2018 and the income statement, statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements give a true and fair view of the financial position of the Company as at December 31, 2018, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/05

Basis for Opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Company in accordance with the ethical requirements applicable under Italian law to the audit of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Impairment test on investments in subsidiaries

Description of the key audit matter

The Company booked investments in subsidiaries and other financial assets for Euro 123,757 thousand as of December 31, 2018.

As required by IAS 36, the Directors, in the presence of indicators of a possible write-down of the values, carried out an *impairment test* to determine whether the investments are recorded in the financial statements at a value not higher than their recoverable amount. In consideration of this, the Directors proceeded to carry out a verification of the recoverable value of the investments held in Saes Coated Films S.p.A. (booked at a value of Euro 6,986 thousand as of December 31, 2018), SAES Rial Vacuum S.r.I. (Euro 1,614 thousand) and Saes Nitinol S.p.A. (fully written off as a result of the *impairment test*).

The Company estimated the recoverable amount by determining the present value of the future cash flows expected based on the explicit period of three years, corresponding to the business plan 2019–2021 approved by the Company's Board of Directors on February 14, 2019, for each business and mid term projections for the relative investments in subsidiaries. The Directors have also determined a *terminal value*, assuming a g-rate of zero and a time horizon deemed representative of the estimated duration specific to the various businesses.

As a result of the *impairment test*, the Directors reported impairment losses for a total of Euro 2,426 thousand. In addition, they have proceeded to write down the financial receivables toward Saes Nitinol S.p.A. for an amount of Euro 8,278 thousand.

The valuation process made by the Directors is complex and based on assumptions concerning, among others, the forecast of expected cash flows of each of the above-mentioned companies and the determination of an appropriate discount rate (WACC) and long-term growth rate (g-rate).

The most important key variables in determining the projections of the future cash flows are:

- · sales forecasts by Business Area/product family/client;
- · prices and margins trend;
- cost of sales (including cost of materials) by product family;
- · production costs, operating expenses and investment plan;
- discount rates.

Future expectations and market conditions influence these assumptions.

Considering the relevance of the investments in subsidiaries amounts recognized in the financial statements, the subjectivity of the estimates related to the determination of cash flows and the key variables of the impairment model, we considered the *impairment test* on investments in subsidiaries as a key audit matter of Saes Getters's financial statements.

Paragraph 15, "Investments in subsidiaries and other financial assets" states the disclosure on the *impairment test*, including a sensitivity analysis performed by the Directors, which illustrates the effects that may occur on the recoverable amount resulting from the changes in certain key assumptions used for the impairment test.

Audit procedures performed

As part of our audit, among other procedures, we have carried out the following, even with the support of experts:

- review of the methods adopted by the Directors for the determination of the recoverable value of the investments in subsidiaries and analysis of the methodology and assumptions used on the *impairment test*;
- understand the methodology used by the Directors on the impairment test and examination of its compliance with the referenced accounting principles;
- understand the Company's relevant internal controls on the *impairment test* process;
- analysis of the reasonableness of the key assumptions underlying the cash flow calculation, also through information obtained from Management;
- analysis of the actual figures compared to the plans in order to assess the nature of the deviations and the reliability of the planning process;
- analysis of the reasonableness of the discount rate (WACC), long-term growth rate (g-rate) and assumptions used for the terminal value (TV) calculation:
- review of the mathematical accuracy of the model used to estimate the recoverable value of the investments in subsidiaries;
- review of the correct calculation of the book value of the asset subject to impairment test;
- · review of the Directors' sensitivity analysis.

Further, we also examined the adequacy and compliance of the disclosure provided by the Company on the *impairment test* based on IAS 36 disclosure requirements.

Discontinued operations - sale of the gas purification business

Description of the key audit matter

On June 25, 2018, the Company sold the gas purification business at a sale price equal to USD 353.6 million.

The transaction was realized through the sale of the subsidiary Saes Pure Gas, Inc. and the sale of the commercial structure of the Chinese subsidiary, SAES Getters (Nanjing) Co. Ltd.

The income realized from the difference between the selling price and the carrying amount of the net assets sold, net of the transaction costs of the sale, has been classified in the income statement under "Income (loss) from discontinued operations" for an amount equal to Euro 253.8 million, in accordance with IFRS 5.

Considering the relevance of the transaction, we considered that such transaction and the related disclosure of the financial statements constitute a key audit matter of Saes Getters S.p.A.'s financial statements.

Paragraph 12, "Income (loss) from discontinued operations" states the disclosure on the sale of the gas purification business and its related effects on the financial statements.

Audit procedures performed

As part of our audit, among other procedures, we have carried out the following:

 analysis of the sale agreement and the Company documentation available on the transaction in question;

- verification of the existence of the conditions established by IFRS 5 for the purposes of recording the transaction;
- examination of the criteria used by the Directors to determine the income and charges relating to the sale of the gas purification business and the related supporting documentation;
- review of the presentation of the operation in the financial statements and the disclosure in the explanatory notes.

Responsibilities of the Directors and the Board of Statutory Auditors for the Financial Statements

The Directors are responsible for the preparation of financial statements that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of national regulations issued pursuant to art. 9 of Italian Legislative Decree no. 38/05 and, within the terms established by law, for such internal control as the Directors determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless they have identified the existence of the conditions for the liquidation of the Company or for the termination of the operations or have no realistic alternative to such choices.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with International Standards on Auditing (ISA Italia) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with International Standards on Auditing (ISA Italia), we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud
 or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that
 is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material
 misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve
 collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that
 are appropriate in the circumstances, but not for the purpose of expressing an opinion on the
 effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Directors.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the
 disclosures, and whether the financial statements represent the underlying transactions and events in a
 manner that achieves fair presentation.

We communicate with those charged with governance, identified at an appropriate level as required by ISA Italia, regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence applicable in Italy, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence and, where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditors' report.

Other information communicated pursuant to art. 10 of the EU Regulation 537/2014

The Shareholders' Meeting of Saes Getters S.p.A. has appointed us on April 23, 2013 as auditors of the Company for the years from December 31, 2013 to December 31, 2021.

We declare that we have not provided prohibited non-audit services referred to in art. 5 (1) of EU Regulation 537/2014 and that we have remained independent of the Company in conducting the audit.

We confirm that the opinion on the financial statements expressed in this report is consistent with the additional report to the Board of Statutory Auditors, in its role of Audit Committee, referred to in art. 11 of the said Regulation.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Opinion pursuant to art. 14, paragraph 2 (e), of Legislative Decree 39/10 and art. 123-bis, paragraph 4, of Legislative Decree 58/98

The Directors of Saes Getters S.p.A. are responsible for the preparation of the report on operations and the report on corporate governance and ownership structure Saes Getters S.p.A. as at December 31, 2018, including their consistency with the related financial statements and their compliance with the law.

We have carried out the procedures set forth in the Auditing Standard (SA Italia) n. 720B in order to express an opinion on the consistency of the report on operations and some specific information contained in the report on corporate governance and ownership structure set forth in art. 123-bis, n. 4 of Legislative Decree 58/98 with the financial statements of Saes Getters S.p.A. as at December 31, 2018 and on their compliance with the law, as well as to make a statement about any material misstatement.

Deloitte.

In our opinion, the above-mentioned report on operations and information contained in the report on corporate governance and ownership structure are consistent with the financial statements of della Saes Getters S.p.A. as at December 31, 2018 and are prepared in accordance with the law.

With reference to the statement referred to in art. 14, paragraph 2 (e), of Legislative Decree 39/10, made on the basis of the knowledge and understanding of the entity and of the related context acquired during the audit, we have nothing to report.

DELOITTE & TOUCHE S.p.A.

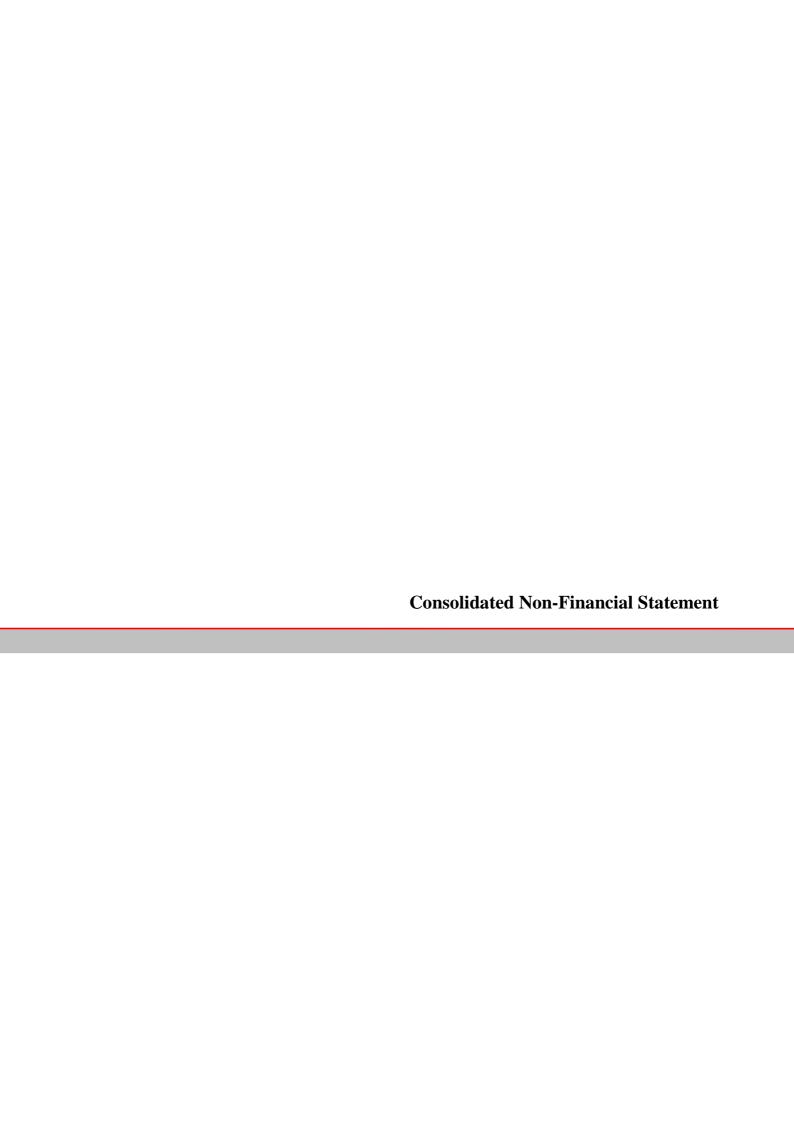
Giovanni Gasperini

Partner

Milan, Italy March 28, 2019

This report has been translated into the English language solely for the convenience of international readers.

6





CONSOLIDATED NON-FINANCIAL STATEMENT

PURSUANT TO ITALIAN LEGISLATIVE DECREE NO. 254 OF 30 DECEMBER 2016

FINANCIAL YEAR 2018

The following document is an English translation of the Italian official report. In the event of any discrepancies between the two texts, the Italian text shall prevail.

Non-Financial Statement of the SAES Group

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Letter to the stakeholders

Dear all,

The events of 2018 fall within the strategic plan that has already been in place for some years now. The plan arose from the Group's wish to reposition itself and has the final objective of growth.

The updating of Group assets in terms of technology and knowledge began with a focus on improving the knowledge of shape memory materials, which has allowed the development of the business which represents about two-thirds of Group sales today. The activities then continued with the development of knowledge in the field of organic chemistry and nanomaterials. This new technology is versatile and highly innovative and is now ripe for industrial use in various application fields. The Group has identified advanced packaging as an extremely promising field of reference.

The sale of the Group's gas purification business also fits within this strategic context.

In recent years the gas purification business provided considerably satisfying results, significantly contributing to profits and cash generation, but has always had a typical cyclical performance linked to investments in the semiconductor industry that led to significant fluctuations in revenue, which for a group of SAES's size translated into high volatility and considerable fluctuations in value. Furthermore, the technology was mature and the market began shifting from the US to China, undermining growth and results. Only strong investments and a solid presence in Asia would have allowed us to maintain leadership, however with surely inferior results compared to the very high valuation expressed by the buyer, who instead had all the cards in order to effectively manage the business and make it grow.

After the sale the Group maintained stable revenues and significant operating results thanks to the excellent performance of the memory shape alloys business in the medical field and the renewed vitality of the getter applications. The Group obtained a level of financial strength that has allowed us to embark on a path of expansion in the field of innovative packaging through a process of both organic and inorganic growth.

The packaging market is currently undergoing a profound transformation, with the gradual reduction of plastics originating from fossil fuels and their replacement with recyclable and biodegradable plastic materials which can easily be disposed of without having any environmental impact. Also pushed by regulations, the market will have to develop recyclable or compostable packaging solutions which meet the requirements of the circular economy.

Our technologies allow the use of compostable plastics and foster the development of fully recyclable packaging solutions. In addition, the knowledge we have acquired relating to gas management in

Non-Financial Statement of the SAES Group

sealed environments will allow the industry to study innovative forms of packaging that are able to maintain or improve the conservation conditions of packages' contents.

The Group is currently very financially strong and firmly positioned in anticyclical sectors with high growth potential and can therefore aim for a significant increase in revenue.

Lastly, it should be noted how our increasing development of products with lower environmental impact and for the medical business within our development strategies and sales demonstrates the Group's increasing focus on Corporate Social Responsibility. This focus is also reflected in the "Non-Financial Statement" with which we wish to share our activities with all Stakeholders in a transparent and measurable way, demonstrating the progress the Group has made and our will to continue working to meet the expectations of our employees, customers and partners, and the communities in which we operate.

Lainate, 13 March 2019

The Chairman of the Board of Directors

Mr. Massimo della Porta

Methodological note

SAES Getters S.p.A. falls within the scope of application of Italian Legislative Decree no. 254 of 30 December 2016, in implementation of Directive 2014/95/EU, which requires the annual preparation of a Non-Financial Statement aimed at ensuring understanding of the company's business, its performance, results and impact, covering environmental, social, personnel, human rights and the fight against active and passive corruption. Therefore, this document represents the Consolidated Non-Financial Statement (also "Non-Financial Statement" or "DNF") related to the companies belonging to the group consisting of SAES Getters S.p.A. and its subsidiaries (hereinafter also referred to as the "SAES Group" or the "Group"), describing their main results in terms of sustainability performance achieved during 2018 (from 1 January to 31 December). The figures relating to the previous financial year are shown for comparative purposes so as to facilitate the evaluation of the business performance. The new presentation of previously communicated comparative data has been clearly indicated as such.

As envisaged by Article 5 of Italian Legislative Decree No. 254/16, this document constitutes a separate report marked with a specific wording in order to refer it to the Consolidated Non-Financial Statement required by law.

This Non-Financial Statement was prepared in accordance with the "GRI Sustainability Reporting Standards" published in 2016 by the Global Reporting Initiative (GRI), according to the "in accordance - Core" option; the European Commission Guidelines on disclosure of non-financial information have also been taken into account, where appropriate.

The content to be reported was selected while taking into account the information considered relevant for the Group and its stakeholders, through a materiality analysis process described in the paragraph "1.3 Group Stakeholders and materiality analysis". For the purposes of a correct representation of the Group's performance and to ensure the reliability of the data, the use of estimates was limited as much as possible. The estimates, if any, are based on the best available and duly reported methods.

The data collection and control process was coordinated by the Consolidated Function, using a special package sent to the heads of all departments in charge, local offices and companies falling within the boundary of reference.

The frequency of reporting of non-financial information and publication of the Non-Financial Statement is set on an annual basis.

BOUNDARY

The boundary of the figures and economic and financial information is the same as that of the Group's Consolidated Financial Statements. With regard to qualitative information and quantitative data relating to social and environmental topics, the reporting boundary includes the line-by-line consolidated companies in the Consolidated Financial Statements of the SAES Group ¹ except for Memry GmbH that started, at the end of the 2016, preparatory activities for the closure of the company and for the transfer of production and commercial activities to other Group companies.

Furthermore, qualitative information and quantitative data on environmental topics include Group companies that manage production sites; on the other hand, companies with only commercial offices are excluded as they are not considered relevant in guaranteeing an understanding of the Group's business and the impact it has.

Note the sale of the gas purification business (Systems for Gas Purification & Handling) within the Industry Applications Business Unit of SAES. The sale was completed on 25 June 2018 and involved the affiliated American company SAES Pure Gas, Inc. and the sales organisation located in Shanghai of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. which provides commercial support to SAES Pure Gas, Inc. in the Asian market. The sale also included the purification laboratory assets of SAES Getters S.p.A. located in Lainate. Please note that SAES Pure Gas, Inc., together with the above-mentioned sales organisation based in Shanghai, SAES Getters (Nanjing) Co., Ltd., have not been included within the boundaries of the 2018 information and data relating to social and environmental aspects, given the unavailability of this information from 1 January to 25 June 2018.

Furthermore, with reference to other significant changes to the Group's structure over 2018, on 23 October 2018 the company SAES Investments S.A. was officially established, with its head office in Luxembourg and wholly-owned by SAES Getters S.p.A. The company has Euro 40 million share capital and aims to manage liquidity deriving from the sale of the purification business, with the objective of maintaining capital for possible future use.

This Non-Financial Statement was approved by the Board of Directors of SAES Getters S.p.A. on 13 March 2019; it is also subject to limited audit ("limited assurance engagement" according to the criteria indicated by the ISAE 3000 Revised standard) by the independent auditors Deloitte & Touche S.p.A. that, at the end of the work carried out, issues a specific report on the conformity of the information provided in the Consolidated Non-Financial Statement prepared by SAES Getters S.p.A. pursuant to Italian Legislative Decree no. 254/16.

-

¹ For the list of line-by-line consolidated companies, please refer to the paragraph "Scope of consolidation" in the explanatory notes of the Consolidated Financial Statements of SAES Getters S.p.A. as at 31 December 2018.

As stated in the DNF 2017, as part of the path of continuous improvement in terms of sustainability, the following table shows the current progress of the activities that the Group has developed during 2018.

• Regulation defining the Non-Financial Statement reporting process:

The SAES Group has defined specific regulations that formalise the roles, responsibilities and timing of the reporting process and definition of the Group's DNF. The procedure was approved by the Risk Control and Sustainability Committee on 6 February 2019 and the Board of Directors on 13 March 2019.

• Fight against active and passive corruption:

For some time now, the fight against active and passive corruption has been monitored by the Organisational, Management and Control Model pursuant to Italian Legislative Decree no. 231/01 adopted by SAES Getters S.p.A. In 2018 the Group began drafting an Anti-Corruption Code and a Code of Business Conduct which will be formally approved in the course of 2019. The goal of the policies is to strengthen and confirm the commitment undertaken by the Group to prevent illicit practices and promote a corporate culture based on current best practices. In support of this choice, in 2018 SAES Getters S.p.A. joined Transparency International's Business Integrity Forum. As for SAES Coated Films S.p.A. (ex Metalvuoto), preparatory activities continue for the drafting of the Organisational, Management and Control Model pursuant to Italian Legislative Decree no. 231/01: once the assessment has been completed, the company will evaluate the need or opportunity to adopt the Model.

• Supplier selection process and respect for Human Rights:

The Group requires its suppliers to sign the Code of Ethics and suppliers dealing with specific categories of minerals (gold, tin, tantalum and tungsten) to sign the Conflict Minerals Policy.

Thanks to these instruments, the Group is committed to safeguarding human rights along the entire value chain. Moreover, SAES Getters S.p.A. will undertake to define the guidelines that integrate environmental and social aspects in the assessment process of suppliers, of all subsidiaries.

A project is planned for 2019 which involves analysing the supply chain of all Group company suppliers and will lead to the preparation of a Code of Conduct for Group Suppliers. Note also that a Group HR policy has been drafted with the aim, among other things, to define the principles to follow also with reference to respect for human rights. The policy will be formally approved in 2019.

• Sustainability Risk Management:

The Group has a special ERM (Enterprise Risk Management) process developed on the basis of the COSO ERM framework. Its objectives also include an identification of the main risks associated with material aspects of sustainability for the Group, as represented at the beginning of the chapters of this document. The activity is carried out with the support of the Risk Owners involved in the process, who for their sensitivity and understanding of the processes, business and daily operations can provide

Non-Financial Statement of the SAES Group

feedback to help Management in making corporate decisions. During 2018 the Group embarked on a path to further integrate ESG risks within the corporate ERM.

The completion and finalisation of the current activities are envisaged during 2019.

Furthermore, for the next reporting year the Group intends to begin the preparation of a sustainability plan with medium and long-term goals.

Contacts:

Emanuela Foglia

Investor Relations Manager

Tel. +39 02 93178 273

E-mail: investor_relations@saes-group.com

The SAES Group, a constantly evolving story

THE SAES GROUP AT A GLANCE



160,284 (thousands of Euro) of Consolidated Net Turnover

10,988 (thousands of Euro) used in R&D equal to 7% of turnover



5 ISO 9001 certified companies

1 ISO 14001 certified company

The SAES Group invents, produces and markets new families and new compounds of "functional" materials with unique characteristics, which are used in various sectors, such as:

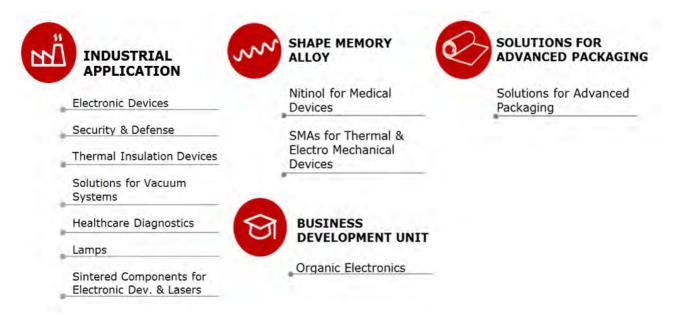
- consumer electronics;
- home automation;
- automotive;
- medical;
- particle accelerators;
- advanced packaging.

The Group has consolidated know-how and great experience and knowledge in the field of <u>Materials science</u>, which translates into the continuous development of innovative and radical ideas by the R&D department.

WHAT IS MATERIALS SCIENCE?

Materials science is the discipline that studies and invents new molecules and defines new production protocols that can be applied in various supply chains and products. Materials science is a sector that is changing the world around us and will help change it even further in the future.

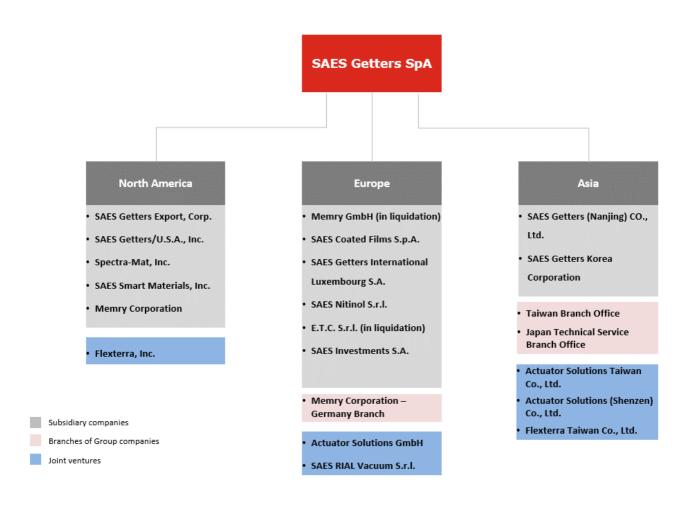
The Group is divided into 3 Business Units and 1 Business Development Unit that includes basic research projects or those under development, aimed at diversification into innovative businesses². The structure is shown below:



² For a description of the businesses and their economic and financial data, please refer to the 2018 Financial Statements of SAES Group. Recall that the gas purification business was sold in 2018 and is excluded from the reporting boundaries of 2018 data of this Non-Financial Statement, as specified in the Methodological note.

THE STRUCTURE OF THE SAES GROUP

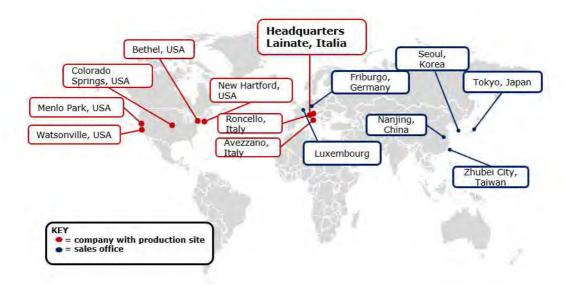
The following table shows the companies belonging to the Group as at 31/12/2018³



³ For a description of the individual Group companies and the related economic and financial data, please refer to the 2018 Financial Statements of SAES Group. Recall that the joint ventures do not fall within the reporting boundaries of this document.

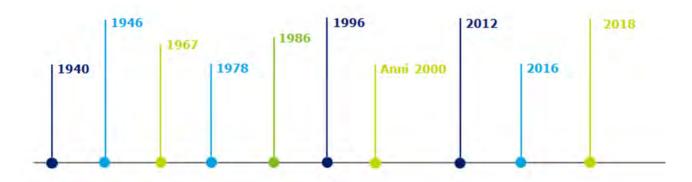
OUR PRESENCE IN THE WORLD

The SAES Group is headquartered in Lainate (Milan), Italy and is present worldwide with both production and commercial subsidiaries in Europe, the US and Asia⁴.



⁴ The geographical offices of Group companies that do not fall within the reporting boundary are excluded for the purposes of this Non-Financial Statement as described in the Methodological note of this document, to which reference should be made.

HISTORY OF THE SAES GROUP



1940: the company S.A.E.S. was established in Florence. (Società Apparecchi Elettrici e Scientifici) at the behest of the Engineer Ernesto Gabrielli.

1946: The della Porta and Canale families joined the company, in which they still currently play a leading role.

1957: S.A.E.S. patented the getter for the cathode-ray tubes of television sets, which started production on an industrial scale.

1967: New getter configurations were presented, a technology that allows the production of new products such as non-evaporable getters (NEGs) and getter pumps.

1978: After redefining the corporate structure, acquiring new companies and reaching 300 employees, S.A.E.S. became SAES Getters.

1986: SAES Getters S.p.A. was listed on the Stock Exchange.

1996: The head office of Lainate was established, currently the headquarters of the Group.

The 2000s: The Group's current structure was defined thanks to significant acquisitions and the expansion of new markets, which gave the Group its current structure.

The 2010s

2012: The SAES Group and the German company Alfmeier established a joint venture Actuator Solutions GmbH which produces devices based on SMA technology and won the "German Innovation Award" in the "medium-sized enterprises" category.

2016: SAES Getters S.p.A. created a joint venture with the Rodofil Group, SAES Rial Vacuum S.r.l., to expand its design and production of vacuum chambers.

2018: SAES Getters S.p.A. concluded the acquisition of the company Metalvuoto S.p.A., creating SAES Coated Films S.p.A., a company proposing a comprehensive and innovative offer on the flexible packaging market based on the development of active plastic films with high performance, dedicating extra attention to their biocompatibility and low environmental impact.

2018: The SAES Group sold its Californian subsidiary SAES Pure Gas Inc. and the purification business to the American company Entegris.

1. Group business management

Material aspects	Description	Sustainability risk factors	Management Procedures (MP)
ANTI- CORRUPTION	Group commitment to combat active and passive corruption through the application of policies, procedures and mechanisms for reporting potential irregularities or unlawful behaviour and specific training activities on the matter; the aspects also include the Group's transparency in relations with Political Organisations.	Correctness and transparency in the management of relations with public and private subjects, in the carrying-on of business activities	The Group also pays attention to monitoring all behaviour and negligence that, if put in place, would create the conditions constituting the risks of crime punished by the aforementioned external regulations and undertakes to provide its employees with targeted training in this area.
ETHICS, BUSINESS INTEGRITY AND COMPLIANCE	Integrity and transparency in business activities and compliance with laws and regulations; the issue includes the adoption of an Organisational, management and control model pursuant to Italian Legislative Decree 231/01 for SAES Getters S.p.A., a Code of Ethics, compliance with national and international principles and guidelines, compliance with current regulations and any specific regulations (e.g. anti-trust, monopoly, anti-competitive behaviour) where the Group operates or related to the business activity.	- Compliance with regulations and laws of reference - Integrity in running the business activities	The Group pays attention to principles such as business ethics and integrity thanks to the adoption of the Code of Ethics and of the Organisational, management and control model adopted by SAES Getters S.p.A. (pursuant to Italian Legislative Decree no. 231/2001). The Group adopts and promotes among its stakeholders a healthy, correct and consistent approach with the strategic and operational objectives so as to comply with applicable laws and regulations.

1.1. Governance and Organisation

The Board of Directors (BoD) of the SAES Group consists of 9 members, including six men and three women with an average age of 60 and ranging from 77 for the oldest member to 45 for the youngest member. The composition of the BoD as at 31 December 2018 is shown in the following table:

JOB TITLE	NAME	GENDER	YEAR OF BIRTH	EXECUTIVE (E) – NON- EXECUTIVE (NE)	IND. CODE	IND. CONSOLI- DATED FINANCE ACT	AUDIT, RISK AND SUSTAIN- ABILITY COMMITTEE ⁵	REMUNERATI- ON AND AP- POINTMENT COMMITTEE ⁶
Chairman	Massimo della Porta	M	1960	Е	-	-	-	-
Deputy Chairman, Managing Director and CFO	Giulio Canale	M	1961	E	-	-	-	-
Director	Adriano De Maio	M	1941	NE	-	X	-	M
Director	Alessandra della Porta	F	1963	NE	-	-	-	-
Director	Luigi Lorenzo della Porta	М	1954	NE	-	-	-	-
Director	Andrea Dogliotti	M	1950	NE	-	-	-	-
Director	Gaudiana Giusti	F	1962	NE	X	X	M	С
Director	Stefano Proverbio	M	1956	NE	X	Χ	M	
Director	Luciana Rovelli	F	1973	NE	X	X	С	M
	Average age							
Directors/gender			30-50 years >50 years		8	Total		
Men -		-	6 6		6			
Women				1		2	, -	3

⁵ ⁶In this column, director position within the Committee is indicated as "C" for chairman and "M" for member.

THE COMMITTEES OF THE SAES GROUP⁷

AUDIT, RISK AND SUSTAINABILITY COMMITTEE

The Audit, Risk and Sustainability Committee is responsible for outlining the guidelines that can reduce and mitigate risk, providing opinions to the Board of Directors on risk management and identification. The Committee is also responsible for overseeing issues relating to sustainability.

REMUNERATION AND APPOINTMENT COMMITTEE

The Remuneration and appointment Committee is one of the internal committees of the Board of Directors; it is responsible for preparing the Remuneration Policy pursuant to Article 123-ter of the Consolidated Finance Act; moreover, it is the body that assesses the adequacy and correctness of the Group Policy, identifying any proposals for change or improvement and monitoring its correct application.

COMMITTEE FOR TRANSACTIONS WITH RELATED PARTIES

The Committee for transactions with related parties is formed by directors who meet the independence requirements. It is chaired by the Lead Independent Director. The committee meets whenever related party transactions need to be assessed and submitted to the Committee for its opinion.

ETHICS AND INTEGRITY

The SAES Group, aware of the importance of Governance in the planning of objectives and performance of both an economic and financial nature and in terms of sustainability, undertakes to achieve a correct corporate and entrepreneurial management that makes it possible to create value for stakeholders and increase investor confidence and interest. The Corporate Governance system of the Group is in line with the recommendations contained in the Code of Self-Regulation of the Listed Companies, promoted by Borsa Italiana S.p.A. The tools used are the Code of Ethics and the Organisational, Management and Control Model according to the requirements of Italian Legislative Decree 231/2001 (hereinafter also referred to as "Model 231" or "Model")⁸.

The **Code of Ethics** of SAES Getters S.p.A., with which all the Group companies are required to comply, was updated in 2014 and aims to define a set of rules of behaviour that makes it possible to disseminate among employees a corporate culture aimed at legality, defining the principles of SAES business. The Code defines certain values such as: legality, fairness, transparency, impartiality, diligence and professionalism, information confidentiality, environmental protection and sustainable development and competition. Moreover, if the principles of the Code of Ethics are violated by temporary workers, suppliers, consultants and commercial partners, when required the service contract will be terminated.

⁷ For a more detailed description of the Committees of the SAES Group, please refer to the other sections of the 2018 Financial Statements, the 2018 Report on Corporate Governance and the Ownership Structure, in particular.

⁸ The Code of Ethics of the SAES Group (English and Italian versions) and the Model 231 of SAES Getters S.p.A. are available and can be downloaded on the website www.saesgetters.com

THE CODE OF ETHICS AND RELATIONS WITH STAKEHOLDERS

The Code of Ethics of the SAES Group pays particular attention to the relations that the Group has with some of its key stakeholders, in particular:

- requires relations with customers, suppliers and temporary workers to be transparent and non-discriminatory;
- commits the Group to maintain proactive and constant collaboration in compliance with the laws and regulations in force towards the *Public Administration*, *Supervisory Bodies*, *Trade* Associations and Judicial Authorities;
- protects equal opportunities in the selection of personnel.

The **Organisational, Management and Control Model pursuant to Italian Legislative Decree 231/2001** is the document that describes the organisational model of SAES Getters S.p.A. The Model 231, updated in 2018 (version 11), expresses the will to:

- determine, in all parties involved, the awareness of being able to incur disciplinary consequences and/or penalties in case of violation of the Model;
- reassert that the unlawful behaviour deriving from any violations of the Model are strongly condemned by SAES Getters S.p.A.;
- allow SAES Getters S.p.A. to prevent unlawful behaviour by monitoring risk areas.

SAES Getters S.p.A., as from 2017, opted for a Model 231 structured by process and no longer by category of offence, as it was originally, and composed of a general part known as descriptive, and a special part which, in turn, consists of 25 protocols. The decision to change the structure of Model 231 was made in response to the need and desire to make the Model increasingly usable and more effective in terms of "risk analysis" and identification of "risk mitigation areas", as well as control measures.

Thanks to Model 231, SAES Getters S.p.A. condemns all forms of **corruption**, also arranging a special Supervisory Body for this purpose with its own functions indicated in the Model. During 2018 SAES Getters S.p.A. adopted a specific "Whistleblowing" reporting procedure and implemented an IT platform for managing reports anonymously and confidentially. It also created a specific email inbox to collect any reports. The inbox is added to the one which already exists for the Supervisory Board.

The platform can be accessed from the company web page "Reports - Whistleblowing" under the "About Us" section. Reports can refer to the scope of offences and risk areas defined in the Organisational Model pursuant to Italian Legislative Decree no. 231/01 as well as to incidents of fraud, corruption, or other violations of the Code of Ethics, legislation and/or all those activities that can cause damage to company assets.

COMMITMENT AGAINST CORRUPTION

The SAES Group is actively engaged in combating corruption, both public and private, as provided for by national legislation. In particular, the Group actively prevents any attempt at corruption, unlawful favours, collusive behaviour and requests for personal benefits as described in the Code of Ethics that, together with Model 231, are the tools for monitoring the occurrence of corruptive phenomena.

Specifically, in 2018 the company joined the Business Integrity Forum of Transparency International, the world's largest organisation that deals with preventing and fighting corruption. The goal is to adhere to the best practices of reference and internally promote values which contrast corruption. In this regard, in 2018 the Company initiated a process that led to the preparation of an Anti-Corruption Code and a Code of Business Conduct that will be formally approved in 2019 and will be followed, still in 2019, by a Group Code of Conduct for Suppliers, as previously reported.

The Code of Ethics refers to specific duties of behaviour, also in relation to corruptive practices, potentially present in various areas of company operations. In particular, when carrying out relations with customers and suppliers, it must be considered that gifts, contributions and entertainment expenses are allowed when of modest value and without being interpreted as aimed at obtaining improper advantages. There are also company procedures that govern relations, both institutional and commercial, with national or EU public bodies, Supervisory Authorities, public officials and public servants.

THE INTEGRATED APPROACH OF THE SAES GROUP: QUALITY, ENVIRONMENT, SAFETY & ETHICS

The SAES Group aims to achieve technological excellence in full compliance with economic, social, environmental and ethical sustainability. The Group is constantly committed to improving its production and management processes by adopting responsible management that combines quality and efficiency in business development with attention to its employees and the environment. Currently, there are 5 companies of the Group with **ISO 9001 Certification**⁹, **2 production sites**¹⁰ of the Group with **ISO 14001** certification and **3 production sites**¹¹ with sector-specific certifications.

All certifications were adapted to the new versions of the standards in the course of 2018.

SAES has adopted a "Group Integrated Policy for quality, environment, safety and ethics" (hereinafter referred to as the "Group Integrated Policy"). Each subsidiary derives its own local policy from the "Group Integrated Policy".

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⁹ The ISO 9001 certified companies of the Group are: SAES Getters S.p.A., SAES Coated Films S.p.A., Memry Corp., SAES Smart Materials, Inc., SAES Getters USA, Inc.

¹⁰ SAES Getters S.p.A. is ISO 14001 certified for the plants of Lainate and Avezzano.

¹¹ The company SAES Getters S.p.A. is IATF 16949:2016 certified for the Factory of Lainate; Memry Corp. is 13485:2003 certified for the Factories of Bethel (CT) and Menlo Park (CA); for further details, please refer to Chapter 3, "Technology at the service of innovation".

The "Group Integrated Policy" is illustrated below:

in order to guarantee continuous progress and maintain its leadership in the field of vacuum technology for scientific and industrial applications, special metallurgy and materials science, as well as reaffirming its total loyalty to its traditional "core values", the SAES Group is committed to implementing an Integrated Quality, Environment, Safety and Ethics Management System based on compliance with the following principles:

- consider a fundamental element of the Group's global strategy to be the constant commitment to
 research and development of innovative products with a high technological content, through the
 adoption of modern and well-structured methods, so as to be able to satisfy and anticipate customer
 expectations and needs, guaranteeing respect for the environment and safety in use;
- concentrate its efforts on profitable businesses through actions aimed at improving economic results and maximising profits, also through the introduction of diversified products;
- combine the scientific knowledge and technical skills available within the SAES Group with those acquired through collaboration with external customers and centres of excellence, with the aim of developing "enabling" products capable of promptly and effectively meeting the demands of a market in constant development;
- adopt the most advanced international regulations and standards on quality, environment and safety, by simultaneously promoting the application and diffusion among all Group companies of a corporate culture that respects human rights and ethical principles;
- constantly enhance and promote the professional and human growth of all Group employees, involving them, informing them regularly about company objectives and programmes and ensuring safe and peaceful working conditions;
- develop a corporate culture oriented towards continuous improvement, achieved through structured processes, whose performance is constantly monitored by indicators able to measure efficiency and effectiveness in a timely manner.

CORPORATE SOCIAL RESPONSIBILITY AND HUMAN RIGHTS

The Group has the following policies on human rights and corporate social responsibility:

- Anti-Corruption Code: this policy promotes compliance with ethical standards and full compliance with national and international regulations on the prevention of corruption in all its forms, as well as the integrity, transparency and fairness in carrying out its work. The Code is applied in all Group companies and effectively integrates the Group's compliance system and, with reference to Italy, the current Organisational, Management and Control Model pursuant to Italian Legislative Decree no. 231 of 8 June 2001 adopted by SAES. The document was drafted during 2018 and will be formally approved in 2019.
- Code of Business Conduct: this policy regulates the conduct of employees, directors and consultants of the Company and Group companies in managing business (relationships with customers, conflicts of interest, sponsorships, etc.) and outlines the minimum standards that the Group's suppliers must comply with in carrying out negotiations and managing contracts with the Group companies. The document was drafted during 2018 and will be formally approved in 2019.
- Global HR Policy: this policy defines the principles the Group aspires to in the promotion of a better workplace. In particular, the document sets out the principles to be followed relating to: i) shared responsibilities, ii) child labour, iii) recruitment practices, equality and non-discrimination, iv) forced labour, v) workers' health and safety, vi) salaries, vii) rewarding, viii) work hours, ix) education, x) performance communication and staff development. The document was drafted during 2018 and will be formally approved in 2019.
- Policy on Corporate Social Responsibility (CSR): with this policy, the Group is committed to upholding human rights without any discrimination on the grounds of gender, religion or age and to ensuring that there is no child and/or forced labour for any operations or workers. These values and principles apply to all workers including students, migrants, temporary staff, employees and all other types of workers.
- Conflict Minerals: with this policy, the Group requires suppliers dealing with specific categories of minerals (gold, tin, tantalum, tungsten) to sign the Conflict Minerals policy aimed at ensuring that such materials do not come from areas where there is a high risk of human rights violations and environmental degradation.

The preparation and adoption of a **Code of Conduct for Group Suppliers** is envisaged in 2019.

1.2 Opportunities and risks

THE CONTEXT OF REFERENCE

Sustainability issues, such as the fight against climate change, environmental protection and the adoption of policies for the development and sustainable management of material resources, have become increasingly interesting for institutions and organisations around the world in recent years. In particular, in 2015 the 21st

United Nations Framework Convention on Climate Change (known as COP21) focused on regulating greenhouse gas emissions and was ratified in 2016. The climate agreement will enter into force from 2020 and represents an important step forward in defining a global strategy to combat climate change and the increase in the temperature of the Planet Earth. In 2015, the United Nations adopted a new policy for the dissemination of sustainable development issues: the Sustainable Development Goals (17 SDGs). The 17 goals, valid for the period from 2015 to 2030, involve the public and private sector in ensuring the achievement of common objectives, such as peace, security, justice, social inclusion and environmental responsibility. In 2016, by means of Italian Law Decree no. 256, the Italian legal system adopted European Directive 2014/95 - Barnier on "Non-Financial Statement", which requires public-interest companies



that meet certain criteria to provide, starting from 2017, information on the management of social and environmental issues. Therefore, organisations are increasingly called upon to carefully assess the



development of specific scenarios and the new challenges that these present, in order to be able to seize opportunities and manage the risks involved. The SAES Group operates in a dynamic environment in continuous development, both in terms of market trends and in terms of complexity and high technological content of the sector in which it operates. It is essential for the Group to properly manage and control the risks to which

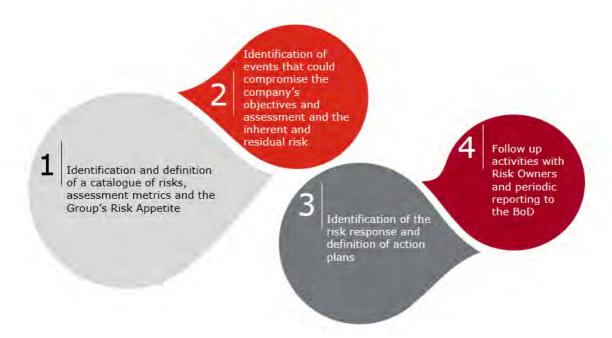
it is exposed during its business activities so as to ensure stability and balance over time and maintain lasting relations with its stakeholders.

The risk-aware management is carried out through the progressive implementation of a system that makes it possible to identify, assess and, where possible, mitigate and monitor business risks according to a precautionary approach.

In order to correctly define its risk profile, the SAES Group has adopted an Enterprise Risk Assessment process since 2012, defining and updating a risk catalogue; this operation was carried out following the requirements of the COSO Framework international standard.

The method for assessing the identified risks follows the COSO ERM framework and involves all the identified Risk Owners. The Group's objective is to ensure that the ERM strategy becomes an integral part of the assessment of decision-making processes in business planning.

THE RISK MANAGEMENT MODEL OF THE SAES GROUP



For further information on the main risk factors for the sustainability of the SAES Group and related management methods, please refer to the tables at the beginning of each chapter of this document.

1.3 Stakeholders of the Group and materiality analysis

The SAES Group recognises the importance and the need to create a transparent, two-way and constructive dialogue concerning sustainability with its customers, suppliers, shareholders, employees and all those involved in the life of the organisation. The correct approach to sustainability is one of the Group's fundamental objectives, both from a strategic point of view and in relation to the subjects with whom it interacts.

The Group pursues its interests with a view to sustainable development and environmental protection, striving for a continuous balance among economic initiatives, safety of operations from a corporate point of view and prevention of environmental risks. With this in mind, the Group decided to undertake a process that integrates into its business the assessment of all positive and negative events, through a constructive dialogue with its stakeholders.

The Group already launched a materiality analysis process in 2016 aimed at identifying the areas of greatest interest also for the purpose of developing the company business and creating value for stakeholders, with a view to long-term sustainability. On the basis of material or relevant aspects, priority indicators through which to monitor and communicate the Group's sustainability performance were identified.

STAKEHOLDER IDENTIFICATION

The Group implemented a process for mapping, identifying and prioritising the main categories of stakeholders, which has made it possible to define the Group's stakeholder map, by also identifying the level of dependence and influence on the Group.

THE MAP OF THE STAKEHOLDERS OF THE SAES GROUP



MAIN TOOLS FOR DIALOGUE WITH THE STAKEHOLDERS OF THE SAES GROUP



Company Intranet

Organisational communications

Information articles on values/products/people ("SAES In touch")

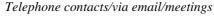


Institutional website <u>www.saesgetters.com</u>

Social network

Events and trade fairs

Online/web advertising, paper advertising in trade magazines, product brochures





Institutional website <u>www.saesgetters.com</u>

Telephone contacts/via email/meetings



Financial Statements

Information on request

Communications to be provided



Institutional website www.saesgetters.com

Conferences and seminars

Scientific communities

Social network

Telephone contacts/via email/meetings



Institutional website <u>www.saesgetters.com</u>



Institutional website <u>www.saesgetters.com</u>

Press releases

Shareholders' Meeting

Presentations of financial results

Financial Statements

Meetings with the financial community



Institutional website www.saesgetters.com

Social network

Telephone contacts/via email/meetings

MATERIALITY ANALYSIS

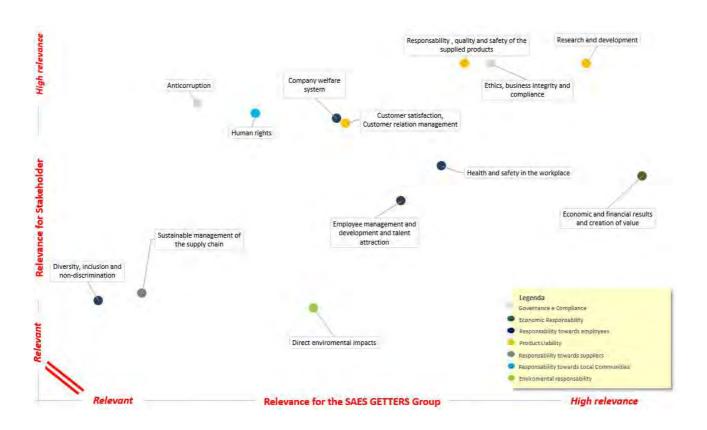
An evaluation process of relevant issues was carried out for the first time in 2017 through a materiality analysis performed internally by the management. This analysis helped to identify the significant aspects in the economic, social and environmental impacts for the Group and its stakeholders. In fact, these issues reflect the main impacts generated by the Group and its activities and are aspects which can potentially influence the feedback of its stakeholders.

During 2018, in accordance with the principles of the GRI Sustainability Reporting Standard, the materiality matrix was updated in order to confirm or revise the significant issues following internal evaluations and the involvement of certain categories of external stakeholders.

In particular, the Group expanded its analysis by involving a sample of stakeholders composed of employees and customers through the administration of a questionnaire. With regard to the economic, environmental and social impacts relating to the Group, the assessments made by management in the definition of the 2017 materiality matrix were confirmed.

The result of this process was the updating of the materiality matrix shown below:

THE MATERIALITY ANALYSIS OF THE SAES GROUP



With respect to the issues published in the 2017 DNF, which were considered material for the Group and its stakeholders, it should be noted that the topic "diversity, inclusion and non-discrimination" was found to be material, while the topic relating to "indirect economic impacts and relations with local communities" was not found to be material. It should also be noted that the topics "energy management", "waste management", "water resources and waste management" and "atmospheric emissions and climate change mitigation" were aggregated under the single issue "Direct environmental impacts" in order to rationalise the issues present in the matrix.

Furthermore, compared to the results of the 2017 materiality analysis, we note an increase in the importance assigned to the topics "management and development of employees and attraction of talent", "research and development", "economic and financial results and creation of value", "customer satisfaction, customer relationship management" and "business ethics and compliance" emerged following the engagement activities carried out.

In the coming years, the Saes Group will continue to expand the number of stakeholders involved in assessing the relevant issues so as to monitor and constantly update the matrix.

2. Economic performance and business development

Material aspects	Description	Sustainability risk factors	Management Procedures (MP)
ECONOMIC AND FINANCIAL RESULTS AND CREATION OF VALUE	Economic and financial performance of the Group, financial stability, protection of profitability and generated economic value; creation of value in the short, medium and long term also thanks to the efficient management of tangible and intangible assets (e.g. patents, production technologies, specific know-how).	- Enhancement of company assets - Achievement of growth targets defined by the Management	The Group is committed to managing its business activities responsibly by achieving sustainable profitability and growth targets, in order to generate long-term economic value that can be distributed among all stakeholders.
SUSTAINABLE MANAGEMENT OF THE SUPPLY CHAIN	Responsible management of procurement processes throughout the Group's supply chain; assessment and screening of suppliers on the basis of social and environmental performance, and promotion of behaviour and social responsibilities that encourage suppliers to adopt sustainable behaviour.	- Availability of raw materials - Quality of supplies and financial stability of suppliers	The Group develops correct, clear and transparent relations with all its suppliers based on compliance with principles of quality and cost-effectiveness in choosing them and favouring suppliers belonging to countries and communities in which it operates.
HUMAN RIGHTS	Management of activities, also along the value chain (suppliers and customers), which present significant risks in the field of human rights (forced labour, child labour, freedom of association and collective bargaining, discrimination at work) and any actions undertaken (e.g. training plans on issues related to Human Rights, Codes of Business Conduct and auditing activities).	- Respect for human rights by employees, suppliers, customers and partners	The Group has a policy on corporate social responsibility and a specific policy on the aspect of "Conflict Minerals". With these instruments, the Group supports universal human principles such as: human rights and labour rights, committing itself to their integration into its business strategy and to their observance throughout the entire value chain.

HIGHLIGHTS



Revenues of Euro 160.3 million, up by 8.9% compared to Euro 147.1 million in FY 2017

Consolidated gross profit up by 13% compared to FY 2017

Operating results of Euro 15 million, up by 65.7% compared to FY 2017



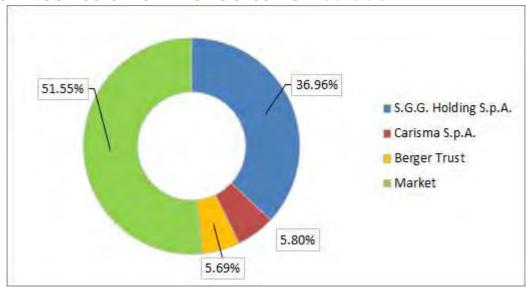
Consolidated EBITDA at Euro 26.3 million (16.4% of turnover), up sharply (43.5%) from Euro 18.3 million of FY 2017

Net financial position, following the selling of the Gas purification business, had a strong growth, improving from Euro -16.5 million of 2017 to Euro 223.3 million of 2018

2.1 Communication with the financial community

The share capital of SAES Getters S.p.A. as at 31 December 2018 amounted to Euro 12,220,000, consisting of 22,049,969 shares, of which 14,671,350 ordinary shares and 7,378,619 savings shares, with an implicit par value of Euro 0.554196 each. The shareholding structure is represented below, with regard to the ordinary shares with voting power in the shareholders' meeting.

SHAREHOLDING STRUCTURE OF THE SAES GROUP AS AT 31/12/2018



As at 31 December 2018, the majority shareholder is S.G.G. Holding S.p.A., which holds a higher share equal to 36.96% of the ordinary shares, whereas more than half of the ordinary shares (51.55%) are free-floating shares on the market. On the same date, the shareholder S.G.G. Holding S.p.A. accrued the right

under Article 11 of the Articles of Association to be able to benefit from an increased vote for a total of 6,776,065 votes, representing 42.28% of the voting rights.¹²

INVESTOR RELATIONS

The creation of value for shareholders also requires a transparent and fair relation with the financial community, which for the Group is an important element in the process of business management and development.

Meetings and conference calls were organised during the financial year with the purpose of providing periodic financial-economic information.

In addition, the Company participated in the STAR Conference organised by the Borsa Italiana S.p.A. in Milan on 27 and 28 March 2018 and in London on 23 October 2018, and on 17 and 18 May 2018 attended the event "Le eccellenze del made in Italy 2018" (The excellences of Made in Italy in 2018) organised by Intermonte S.p.A. in Genoa.

Lastly, on 5 September 2018 the Company participated in the Industrial Day organised by Borsa Italiana S.p.A. in Milan.

As confirmation of the transparency and importance that the Group gives to external communications, 26 press releases were issued during the year in addition to regular financial reporting and presentations. Presentations to the financial community, corporate documents, press releases and all information concerning the Group are available on the Investor Relations section of the website: www.saesgetters.com, both in Italian and English. Shareholders' Meeting documents, the Code of Ethics and the contacts of analysts following the stock are also available.

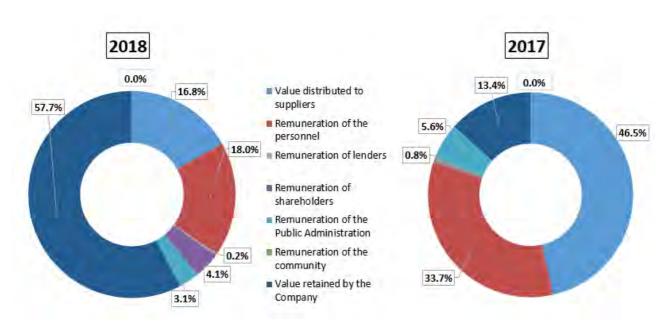
voting rights increased from 16,027,392 to 16,683,792 and the new percentage of voting rights of S.G.G. Holding S.p.A. will be equal to 40.61%.

¹² After 31 December 2018, the shareholder Carisma accrued the right to benefit from increased voting rights for 656,400 shares. Therefore, the total

2.2 Generated and distributed economic value

The creation and distribution of value for its stakeholders is a constant commitment of the SAES Group. The following chart represents the wealth produced by the Group and distributed among stakeholders in the following manner: value distributed to suppliers (reclassified operating expenses), remuneration of personnel (direct remuneration consisting of wages, salaries, employee severance indemnity and indirect remuneration consisting of social security contributions), remuneration of lenders (interest expense), remuneration of shareholders (distributed dividends), remuneration of the Public Administration (total taxes paid). The value retained by the SAES Group is represented by the result for the year net of the profits distributed to the shareholders.

DISTRIBUTION OF THE VALUE GENERATED BY THE SAES GROUP¹³



The generation and distribution of the economic value created by the SAES Group were calculated based on the results for the year ended 31 December 2018. The **economic value generated** by the SAES Group in 2018, net of reclassified costs, amounted to approximately **Euro 403 million**, up 72% on the previous year. Most of this value is represented by the **value retained by the Company** (approximately Euro 232 million, compared to approximately Euro 31 million in 2017), followed by the **remuneration of personnel** (approximately **Euro 72 million**, slightly lower than the figure for 2017, which was around Euro 79 million). **Remuneration of the**

¹³ For the purposes of graphic representation, the non-significance of the value of the Community remuneration implies that in both annuities this item has a percentage weight equal to zero. For details, please refer to the table "202-1 Statement of distribution of the economic value generated by the SAES Group" in the attachments section.

Public Administration equalled approximately **Euro 13 million** (in line with the figure in 2017), while the **remuneration of lenders** is equal to approximately **Euro 1 million** (a slight decrease compared to approximately Euro 2 million in 2017). The **value distributed to suppliers** was approximately **Euro 68 million** (a decrease of 38% compared to the previous year's data). In 2018, the **remuneration of Communities** was Euro 15 thousand compared with Euro 33 thousand of 2017, while the **shareholder remuneration** was **approximately Euro 17 million**¹⁴, unlike 2017 where the remuneration was 0.

¹⁴ The share of the remuneration of the shareholders corresponds to the allocation of the net profit dividends for the year that the Board of Directors of the Parent Company will propose to the Shareholders' Meeting.

2.3 The supply chain of the SAES Group

All procurement and distribution activities for the SAES product portfolio are based on the essential research and development activities that characterise the Group's technological offer.

Only after defining the specific technological solution for its customers does the Group procure the raw materials, semi-finished products and finished products to make the requested product and distribute it to their customers.

FROM PRODUCT RESEARCH AND DEVELOPMENT TO DELIVERY TO GROUP CUSTOMERS



To carry out its activities, the SAES Group collaborates with its suppliers to obtain the best products and essential services for maintaining high standards of excellence.

RESPONSIBLE SALES MANAGEMENT

In order to prevent and manage possible situations at risk, the Group has implemented specific rules regarding the sale of its own products with new business partners.

When acquiring a new customer, the Group has special procedures both in case of calls for tenders with Public Administration Bodies and with private individuals.

The Group's four main categories of purchases range from raw materials and semi-finished products to support services for business activities. In particular, to confirm the strong drive for innovation, the expenditure for the protection of intellectual property - a decisive asset of the SAES Group - is significant.

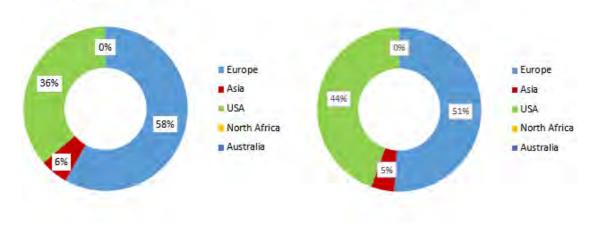
NUMBER OF SUPPLIERS AND TOTAL EXPENDITURE BY CATEGORY OF PURCHASES (2018)¹⁵

		2018	2017	
Product segment	No. of Suppliers	Value of total annual expenditure [€]	No. of Suppliers	Value of total annual expenditure [€]
Raw materials, semifinished and finished products, outsourced work	531	30,067,225	930	75,265,442
2) Utilities, facilities, canteen, clothing, services, rentals, fairs, events, marketing, travels, books, printed matter	1,693	32,709,495	1,798	30,776,428
3) Consultancy	198	10,218,688	227	5,533,089
4) Patent expenses	12	926,312	12	1,158,681
Total	2,434	73,921,720	2,967	112,733,640

DISTRIBUTION OF SUPPLIERS BY GEOGRAPHICAL AREA¹⁶

N. Suppliers 2018

N. Suppliers 2017



¹⁵ For the purposes of data comparability, recall the sale and the consequent exclusion of SAES Pure Gas, Inc. as indicated in the Methodological note.

¹⁶ For the purposes of graphic representation, the small number of suppliers from North Africa and Australia implies that both countries have a weight percentage equal to zero. For details, refer to the table "Supplier distribution by geographical area" in the attachments.

In order to contribute to the creation of value in the local communities where the Group operates, SAES Getters focuses on the purchase of goods and services from local suppliers. In particular, **69.8%** of the Group's total **purchases** are **made locally**.

In particular, the entire expenditure made by the companies present in Asia is related to Asian suppliers, 89.6% of the purchases of USA companies refer to suppliers in the USA and finally, 60.8% of the expenditure in Europe is focused on Italian suppliers.

PERCENTAGE OF EXPENDITURE CARRIED OUT ON LOCAL SUPPLIERS IN 2018 AND 2017

Geographical area	Percentage of expenditure on 2018 local suppliers	Percentage of expenditure on 2017 local suppliers
Europe	60.8%	61.9%
USA	89.6%	91.4%
Asia	100.0%	100.0%

Gruppo	69.8%	80.8%
Ciuppo	05.070	00.070

3. Technology at the service of innovation

Material aspects	Description	Sustainability risk factors	Management Procedures (MP)
RESPONSIBILITY, QUALITY AND SAFETY OF THE SUPPLIED PRODUCTS	Production and sale of high quality products through actions aimed at improving the performance, durability and safety of the products manufactured.	- Compliance with specific product standards and/or standards requested by the Customer and with law regulations.	The Group pursues the objective of continuously improving the quality and safety of its products by adopting the most advanced technological solutions.
RESEARCH AND DEVELOPMENT	Research and Development activities aimed at designing products with high technological content with a special attention to innovative solutions and sustainable applications capable of generating positive externalities for the environment, society and customers; the theme includes the implementation of eco-design criteria and the use of cutting-edge technologies, patents and know-how.	- Adequacy of the product research and development process - Retention and attraction of talents and highly qualified personnel - Product innovation - Investments in research, development	The Group continuously supports and implements research and innovation initiatives, paying particular attention to the hiring of highly qualified personnel.
CUSTOMER SATISFACTION, CUSTOMER RELATION MANAGEMENT	Monitoring of the level of customer satisfaction and implementation of a customer relation management system capable of providing indications for the development and improvement of the design, implementation and marketing of products.	- Adequate structure of the process for obtaining customer feedback - Adoption of adequate data collection tools	The innovation in production processes is closely related to the supply of cutting-edge products. The Group monitors and collects complaints relating to any problems found by its customers, paying full attention in listening to and promptly resolving any problems.

HIGHLIGHTS

2 ISO 13485 certified production

facilities

1 IATF 16949 certified production facility

More than 300 inventions over the last 70 years



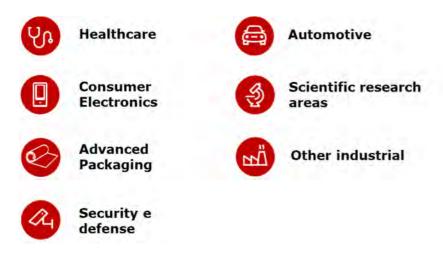
431 registered patents in Europe, Asia and U.S.A.

251 scientific articles published in conference papers

3.1 Customers and markets served

Over time, the SAES Group has become a world leader in hi-tech solutions for scientific and industrial applications requiring vacuum conditions, shape memory products and functional polymeric compounds. The Group developed a high level of know-how in component and system engineering, offering a wide range of innovative solutions for more than 1,500 customers in 2016 in around 60 different countries. The Group develops and customises the functions of the materials according to the requests of its customers, such as: blue chips, start-ups, universities and research centres, using a vertical approach in production: from raw materials to the finished product, capable of meeting the specific requirements of each customer.

THE MAIN MARKETS SERVED BY THE SAES GROUP



TECHNOLOGY IS OUR PRODUCT: SOLUTIONS FOR EVERY REQUIREMENT

THE MAIN FUNCTIONS OF OUR PRODUCTS





Actuate: moving parts of different mechanical devices and equipment

Recover: return to the stored shape of a device, recovering it even after large deformations

Shape Memory Alloys (SMA) are special materials that by their nature have two very special characteristics:

- the ability to return to their original shape even after considerable deformation (shape memory);
- considerable resistance to breakage under stress (super-elasticity).

Nitinol is one of the materials that presents these two characteristics and the SAES Group has been engaged for years in the development and production of this innovative alloy and the products made with it, ensuring internal control of the entire production chain: from alloy casting to finished components.

The exploitation of Nitinol's super elasticity property, together with its proven biocompatibility, is primarily used in medical applications, minimally invasive surgery and self-expanding medical devices such as aortic stents or heart valves, while form memory is primarily used in actuators in industrial applications.

The latter can be used where closing, opening or regulating actions are required, such as in thermo valves, thermostatic actuators or dosing systems. Thanks to their compactness, silent movement and light weight, they are particularly appreciated in sectors such as automotive, home automation and consumer electronics.



Capture: absorb and capture steam and gaseous elements inside hermetically sealed devices

The getter materials of the SAES Group are able, through a chemical reaction, to capture molecules of active gases such as oxygen, carbon dioxide, nitrogen, etc. in hermetically sealed devices, thus making it possible to improve and maintain the vacuum level required inside them.

The main families of metallic getters are shown below:

- Getter Film application of getter technology in small devices due to their reduced thickness and
 customised mouldability on different substrates. For example, the main uses are image intensifiers and
 photomultipliers, gyroscopes and other micro devices (MEMS -Micro Electro-Mechanical Systems).
- Hydrogen Getter solutions applicable to cryogenic tanks for storage of liquid gases, vacuum insulated cryogenic tubes, small-volume dewars and hermetic storage containers for hydrogensensitive products.
- Non evaporable getters (NEG) the dimensional constraints of the devices that need to maintain the vacuum, the special process temperature conditions, the need for capacity or rate of gas absorption at different temperatures etc. have led to the development of a variety of getter alloys and components, with different sizes and configurations, used in devices ranging from lamps, X-ray tubes, solar collectors, sensors, insulated panels and much more.



Dissipate: managing heat transfer and dissipation

Components in sintered materials allow good heat dissipation, a factor of great importance in small or very sophisticated devices. These components (cathode bases and special filaments) are used in the production of gas lasers, high brightness LEDs, microwave power amplifiers for radar transmitters, medical X-ray therapy, photovoltaics, etc.



Protect and seal: apply highly innovative materials to absorb gas or seal

The SAES Group provides innovative materials and solutions for the flexible packaging of products and devices in which the management of the composition of the atmosphere in contact with the product is essential for durability and correct operation. Through a solid technological base, the Group provides advanced functional chemical composites that enable it to capture water vapour, oxygen and other harmful gases and contaminants at the right time.

These materials are used in sectors ranging from food packaging, to home & personal care, nutraceuticals, the pharmaceutical industry up to consumer electronics.



Release: emit, weigh out and deposit controlled quantities and qualities of metallic vapours, gases

The Group produces components and devices capable of releasing small doses of metallic vapours for specific applications. The products of this division include certain types of **getters** and **dispensers** capable of emitting, distributing and depositing precise quantities of metal or gas vapour, such as mercury, alkaline metals and oxygen.

Some products are also designed to ensure the emission of a stable, constant and controlled electron current necessary for the operation of some electronic devices.

The main applications for these products are in electronic and photonic devices, sensors and fluorescent lamps.



Vacuum: Obtain and maintain vacuum, high or ultra-high vacuum in a specific volume or chamber

The SAES Group pumps, based on getter materials, are able to create very high **vacuum** conditions in particle accelerators and advanced analytical equipment, where space constraints limit the adoption of vacuum technologies other than getter technologies. The most important fields of use concern analytical instrumentation, vacuum systems and particle accelerators.

Other less sophisticated products are also used in vacuum thermal insulation solutions.

3.2 Innovation, research and development

The identity of the SAES Group has always been oriented towards a natural propensity to research, development and innovation of new solutions that can have commercial, technological and global value for the Group and its main Stakeholders. The technological diversification that the Group proposes, both from a production point of view and in the different sectors served, is the result of a precise strategic choice, aimed at consolidating its leadership position in the high-tech products market. In fact, more than 12% of Group employees and associates, in line with 2017, is engaged in R&D activities. In this context, the Group protects:

- the intellectual property of strategic importance;
- the selection of qualified personnel with the necessary know-how;
- the updating of design and production technologies.

The Corporate Research & Development area, in synergy with the other Companies of the Group, invests in the development of the most functional and specific technical aspects for the various subsidiaries, constantly involving the partners present at a global level. To support the strong drive for innovation, in 2018 the Group dedicated Euro 10,988 thousand to R&D activities, equal in percentage terms to approximately 7% of consolidated net turnover.

NUMBER OF PATENTS REGISTERED BY THE SAES GROUP BY GEOGRAPHICAL AREA (1999 -2018)

Geographical area	Number of registered patents
Europe	96
China	92
Japan	76
Korea	61
USA	106
Total	431

The results of this approach have allowed the Group to achieve significant results with more than **300 inventions** developed in about **70 years** of activity, and the average in the last period is about **8-10 inventions** per year protected by the registration of patent applications.

Since the fifties, the Group has linked its commercial success to the ability to continuously innovate, developing its products according to customer requirements and courageously entering cutting-edge sectors. During its history, the SAES Group perfected a series of patents that have become real milestones for the development and identity that the Group still holds today. These include patents that contributed to the development of gas purification applications in the eighties and metal alloys dedicated to advanced applications in the nineties.

Today, the SAES Group can count on a broad technological portfolio, developed over decades of research and know-how transfers, which actively supports a large number of high-tech applications and new products.

SAFETY AND QUALITY OF PRODUCTS

The Group carries out analyses and provides health and safety assessments of its products. All the products manufactured are labelled in accordance with current regulations¹⁷. These are then in accordance with the Safety Data Sheets (SDS) issued at the head office in the language of the country of use, in compliance with the local laws of the areas of use and production, and in particular with the REACH regulation in EU. The Group also adopts a restrictive policy regarding the use of hazardous substances in its products and production processes and promotes green design (Design for Environment methodology). A careful analysis of possible safety impacts on designed and manufactured products is also carried out.

QUALITY MANAGEMENT OF PRODUCTION PROCESSES

The presence of certifications attesting the Group's commitment to implementing a quality management system is considered a fundamental element in the SAES Group strategy. With regard to the quality of its production processes, the Group can boast:

- IATF 16949:2016 Certification for shape memory alloys at the Lainate factory;
- **ISO 13485:2016 Certification** for Nitinol-based products for use in medical devices at the factories of Memry Corp.

¹⁷ In particular, the products of the SAES Group are subject to regulation CLP 1272/2008 for the Italian and European markets, and to Hazcom 2012 for the US markets on finished and intermediate products.

CUSTOMER CARE: COMPLAINT HANDLING

Customer care and complaint handling are areas that the SAES Group supervises and manages on a daily basis with care. The commercial function directly manages the reports that are subsequently included, for the parent company SAES Getters S.p.A., in the online platform Customer Support Application: this tool makes it possible to manage all the steps of the process for checking and solving complaints. The Quality function manages the reports, carrying out analyses and issuing any technical report in case of need. **302 complaints** were received in 2018, mainly for non-compliant products. The figure is not comparable with that shown in the previous statement, because the data of all the SAES Group companies – not just the data of the Parent Company – has only been reported since 2018.

4. The people of the SAES Group

Material aspects	Description	Sustainability risk factors	Management Procedures (MP)	
EMPLOYEE MANAGEMENT AND DEVELOPMENT AND TALENT MANAGEMENT	Professional growth and retention of talents; development and training activities aimed at strengthening the technical, managerial and organisational skills of employees and consolidating the professionalism required by the covered role. Plans and actions aimed at attracting qualified and specialised personnel with specific technical skills related to the Group's business activities. Development of a constructive dialogue with the trade unions.	- Adequacy of the recruitment process - Retention and attraction of talents - Adequacy of personnel development and training plans - Adequacy of agreements and relations with trade union representatives and other labour organisations	The SAES Group is committed to defining professional growth objectives for all its employees, recognising the achieved merits and goals. The Group supports and encourages the carrying out of growth activities for all employees by encouraging the involvement and sharing of the Group's growth objectives among all employees. The Group is committed to establishing constructive and responsible relations with trade unions in order to develop a positive dialogue.	
COMPANY WELFARE SYSTEMS	Policies, benefits (economic and non-economic), actions to improve the well-being of employees and to create a comfortable working environment that meets the requirements and expectations of employees.	- Adequacy of welfare policies and convergence with regard to the personnel requirements and expectations	The Group is committed to reconciling the working and personal lives of its employees. The SAES Group encourages the development of policies, projects and benefits that can contribute to meeting the expectations and requirements of employees.	
HEALTH AND SAFETY IN THE WORKPLACE	Development of practices and programmes to promote safety in the workplace; promotion of specific training on health and safety of employees, monitoring and prevention of workplace injuries in order to reduce their number.	- Compliance with regulations on health and safety at work - Protection of workers' health - Adequacy of investments and training plans in health and safety matters	The Group is committed to reducing the number of injuries by engaging itself in improving the working environment and reducing the personnel absences.	
DIVERSITY, INCLUSION AND NON- DISCRIMINATION	Policies and programmes that aim to protect and ensure the promotion of diversity, inclusion and equal treatment within the Group.	- Respect and promotion of diversity - Pay equity between men and women at the same professional level - The occurrence of cases of discrimination	The Group condemns all forms of discrimination, both internal and external, and is committed to ensuring that all decisions relating to its employees are considered while taking into account the skills, knowledge and work performance of each, without any differentiation based on age, gender, sexual orientation, health, race, nationality, religious beliefs and political opinions.	

HIGHLIGHTS



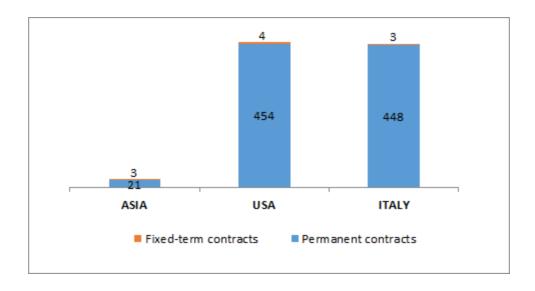
4.1 Our people

The SAES Group considers the management of its human resources to be of paramount importance as a key factor for the company's success. For this reason, the Group is active in the implementation of policies that can enhance the contribution provided by employees, developing their potential and, at the same time, the skills that can bring added value to the organisation.

At 31 December 2018, the Group's total workforce amounted to 933 people.

The Group headcount is largely concentrated in the USA (49%) and Italy (48%). The remaining portion (3%) is employed in the offices located in Korea, China, Taiwan and Japan, hereinafter referred to as "Asia".

DISTRIBUTION OF EMPLOYEES BY GEOGRAPHICAL AREA AS AT 31 December 2018



The SAES Group strongly believes in the professionalism of its employees. As a demonstration of the Group's desire to create strong and long-lasting professional relations, in 2018, about **99% of the total workforce** consisted of employees with **permanent contracts**¹⁸.

As at 31 December 2018, the Group employed **87 temporary workers** (mainly contract workers) up on 65 temporary workers in the previous year. Moreover, supporting the commitment to develop new talents during the reporting year, **12 internship opportunities/school-work alternation projects** were offered.

Compared to the professional categories, **most employees** (527) fall under the **blue collar** category, one of the key roles for achieving the high quality standards of the SAES Group's products. **White collars**, on the other hand, represent approximately **34%** of employees and, finally, the category of managers, which includes key executives and managers, corresponds to approximately **10%** of the total.

DISTRIBUTION OF EMPLOYEES BY PROFESSIONAL CATEGORY AND GENDER¹⁹

		2018		2017			
	Men	Women	Total	Men	Women	Total	
Manager	78	13	91	77	11	88	
White Collars	213	102	315	249	115	364	
Blue collars	372	155	527	462	159	621	
Total	663	270	933	788	285	1,073	

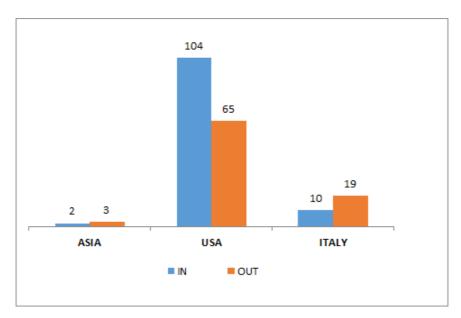
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¹⁸ Employees hired by SAES Getters USA, Inc. signed an at-will contract that, in the representation of the Group data, was classified as "permanent" because the contractual agreement does not establish a time limit for the employment relationship.

¹⁹ For the purposes of data comparability, the data include the sale and consequent exclusion of SAES Pure Gas, Inc. (as at 31/12/2017 with 160 employees) and sales organisation located in Shanghai of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. (as at 31/12/2017 with 9 employees) as indicated in the Methodological note.

With regard to turnover within the Group, **116 new employees were recruited** in 2018, compared to **87 who left** the Group.

GEOGRAPHICAL DISTRIBUTION OF EMPLOYEES WHO JOINED AND LEFT THE GROUP IN 2018



As a result of the hires made in 2018, the **hires rate**, i.e. the ratio between the number of hires and the total number of employees as at 31 December, was equal to **12%**, as can be seen in the following table.

HIRES AND HIRES RATE

	2018				2017			
	<30	30-50	>50	Rate	<30	30-50	>50	Rate
Men	27	34	16	12%	48	53	21	15%
Women	15	14	10	14%	15	15	8	13%
Total	42	48	26	12%	63	68	29	15%

Referring to the **outgoing turnover rate**, i.e. the ratio between the number of outgoing employees and the total number of employees as at 31 December, the value recorded in 2018 was 9%.

OUTGOING AND TURNOVER RATE²⁰

	2018				2017			
	<30	30-50	>50	Rate	<30	30-50	>50	Rate
Men	15	30	16	9%	32	43	17	12%
Women	8	12	6	10%	10	13	5	10%
Total	23	42	22	9%	42	56	22	11%

In all Group companies, minimum notice periods for significant operational changes in business comply with current laws, regulations and collective bargaining agreements.

4.2 Resource development and talent management

The SAES Group recognises the importance of developing and training its own resources so that they become the added value necessary to achieve a leadership position in the markets in which the Group operates. Since it is present in dynamic markets influenced by rapid technological changes, the SAES Group invests a lot of funds in research activities, which could not be carried out without the presence of highly qualified and constantly trained personnel.

The management and retention of human capital is guaranteed by the training activities provided for staff development, which amounted to **6,981 hours** in 2018, with a **per capita average** of approximately **7 hours**.

AVERAGE HOURS OF TRAINING PER EMPLOYEE BY GENDER AND EMPLOYMENT CATEGORY $(2018)^{21}$

	Me	en	Wo	men	Total		
	No. of hours	Average hours	No. of hours	Average hours	No. of hours	Average hours	
Manager	1,628	21	150	12	1,778	20	
White Collars	2,546	12	955	9	3,501	11	
Blue collars	1,248	3	455	3	1,703	3	
Total	5,421	8	1,560	6	6,981	7	

²⁰ For the purposes of data comparability, the data include the sale and consequent exclusion of SAES Pure Gas, Inc. (as at 31/12/2017 with 160 employees) and sales organisation located in Shanghai of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. (as at 31/12/2017 with 9 employees) as indicated in the Methodological note.

²¹ Note that in reference to Memry Corporation, the training hours were estimated considering the average training for each employee.

The importance of personnel training is certainly a milestone for the Group, in order to achieve excellence in the development and marketing of its products. In particular, **technical training** within the R&D Department is considered a **strategic asset**, because of the peculiarities and the innovation that characterise the products of the SAES Group. But also at a more general level, the Group objective is **ensuring that all employees are qualified** to perform their duties in order to guarantee the economic efficiency of processes, the product quality and to keep the relevant environmental and safety impacts under control.

Every year, each function manager identifies the specific training needs of his own staff in order to reach, maintain and improve adequate skills in the performance of the assigned tasks.

When identifying training needs, each manager takes into account any changes made to company processes, the level of development of the personnel, the requirements and expectations of internal and external customers.

Continuing along the same lines as the previous year, 2018 was mainly characterised by the adoption of a methodological approach, always attentive to resources, with a particular focus on external training, economic investment in managerial roles through tools such as MBA experience, Development Centre projects and individual and group Coaching sessions, as well as interventions to consolidate soft skills in line with the company strategy and the long-term business needs.

The most significant initiatives undertaken during the year of reporting are the following:

- Research & Development: MBA, Project Management, discussions on specialised topics for research and development activities (such as, for example, non-linear statistical simulation, cyclic voltammetries, food packaging and heat treatments, crystallography), internal training of new employees. In addition to these training programmes, an in-depth event focusing on radical innovation in the corporate world was created for the resources of the R&D Department and the Parent Company's laboratories.
- Health and safety, quality and environment: Safety and business risks, fire update, PAS PES PEI certification, self-propelled trucks certificates, toxic gases licences, Internal Quality Auditor AICQ, the revision of OHSAS 18001 the new ISO 45001, energy efficiency, training new employees.
- **Legal Privacy Training:** internal training provided by the Legal Department to the resources of the Italian offices, following the entry into force of the new European Regulation 2016/679 GDPR and Italian Legislative Decree 101/2018 on privacy.
- **Technical update training** in the field of industrial property/patent preparation, Operations, Taxes, Administrative, Legal and Labour law.
- Managerial training: Development Centre, Individual & Team Coaching, the effective management
 of change, managing conflict and negotiating effectively, effective meetings, public speaking,
 assertive communication, the characteristics of an effective team.
- Active ageing: pilot process for raising awareness of the entire Parent Company's workforce on the theme of active ageing (interviews with key roles and training initiatives), with the aim of creating awareness about the impact ageing has on the professional and social life of each person, in order to stimulate a positive and proactive reaction to the challenges resulting from it in terms of changes in openness, flexibility, ability to acquire new skills and motivation.

In addition to the activities outlined in the training plan, in continuity with the activities of the previous years, each function took an active part in the organisation of **on-the-job training**, in terms of instruction or coaching. The objective is also sharing company know-how with the company's youngest resources.

In the training area, the planning of activities concerning health and safety, prevention and quality is confirmed for the next reporting year, as are updates on tax, legal, administrative and labour law issues and training sessions for new employees.

Alongside the above activities, actions are envisaged which are aimed at:

- the development of technical skills, with a specific focus on priority emerging issues for the Research
 & Development Department and the Businesses;
- the strengthening and/or development of management skills on the topics economics, project management, leadership, organisation, feedback, team working, public speaking, problem solving, assertiveness and negotiation;
- the creation of individual and team development paths through Coaching and Development Centre sessions:
- the continuation of the Active Ageing project, furthering the relevant issues related to active ageing.

The Group is committed to creating a merit-based and non-discriminatory working environment that is appropriate for the development and well-being of its employees.

74% of workers receive regular evaluations of their performance and are given career development opportunities. The continuous comparison among the resources of the SAES Group contributes to the continuous improvement of the organisation.

EMDI OVEES DECEIVING	A DECLIE AD DEDECOMANCE	AND CAREER EVALUATION (2018)
RIVIPLOYERS RECEIVING	A KEGULAK PEKEUKWANCE A	AND CAREER EVALUATION (2018).

	Men	Men %	Women	Women %	Total	Total %
Manager	76	97%	13	100%	89	98%
White Collars	173	81%	75	74%	248	79%
Blue collars	236	63%	120	77%	356	68%
Total	485	73%	208	77%	693	74%

INCENTIVES AND REMUNERATION

In order to attract, motivate and retain the resources having the qualities and professional skills (technical and managerial) necessary to achieve its objectives, the SAES Group annually approves the "Remuneration Policy" which is defined in order to align the interests of top management with those of shareholders, which, by creating a strong identification with the company, pursue the challenging goal of creating sustainable value in the medium to long term.

For the reporting year, the remuneration package of executive directors and key management (meaning those resources that cover organisational roles relating to the planning, direction and control of the Group), is composed as follows:

- a gross annual fixed component (RAL), defined taking into account different factors, such as: labour market trends, the specific nature of the business in which the SAES Group works, the benchmarks of comparable companies, the role and relative responsibilities, length of service, competences, potential and career growth prospects of individual managers.
- a **variable component** divided into:
 - **MBO** (*Management by Objectives*) for the executive directors, which allows evaluating the recipient's performance on an annual basis, subject to the achievement of the "EBITDA" parameter; **PfS** (*Partnership for Success*) for managers and certain employees considered strategic, with annual disbursement, achievable based on the achievement of pre-defined business/role objectives.
 - **LTI Plan** (*Long Term Incentive Plan*), a deferred disbursement designed to retain and motivate key corporate resources and consequently allow the Company to enjoy greater organisational stability over the medium/long-term (3 years), linked to specific objectives contained in the three-year strategic plan.

Furthermore, an **incentive plan**, the so-called *Asset Plan*, was formulated during the reporting year with the purpose of paying the beneficiaries (executive directors, officers with strategic responsibilities, members of the Corporate Management Committee and employees participating in the *Partnership for Success* project) in relation to extraordinary transactions, such as the transfer of shareholding assets (patents, fixed assets, assets) of the company or a business unit if value and economic benefits are created for the Company through such operations.

The above incentive plan seeks to retain the beneficiaries and align their performance with corporate interests. The Plan is therefore a standalone incentive mechanism that considers the skills, seniority and experience of each recipient as added values in guiding and supporting the achievement of excellent strategic results.

The remuneration policy for the year 2018 lastly envisaged the activation of a **long-term plan** called the **Phantom Shares Plan** in order to remunerate managers (executive directors and members of the Corporate Management Committee) who are able to affect the company's results and increase its capitalisation.

The Plan provides for the bonus issue of a certain number of phantom shares to each beneficiary, which give him the right to receive a cash incentive payment which is parametrised in relation to the increase in the market share price on the date on which certain predetermined events occurred (such as, for example, change of control of the Company, resignation for just cause, reaching retirement age, death, delisting), with respect to the allocation value.

Also in this case, the principle objectives are the retention of the beneficiaries and better alignment of their performance with the interests of the shareholders and the Company.

4.3 Company welfare

With the aim of guaranteeing its employees a high degree of flexibility and the possibility of balancing work requirements with private life, the SAES Group offers its personnel various concrete initiatives to ensure good company welfare, such as **part-time** contracts, which benefited **16 people** in 2018, a slight decrease compared to 2017 (25 people).

To confirm the support to employees in managing the work-life balance, the Group also offers, in some of its premises, the possibility of flexible working hours, both in and out.

The Group's constant commitment to guaranteeing cutting-edge policies, in terms of working conditions, made it possible to achieve a favourable internal climate and low levels of work-related stress, thus guaranteeing Group employees a quiet place to work.

Moreover, for both full-time workers and part-time or temporary workers, the SAES Group envisages a series of benefits that vary according to the specific requirements of employees working in the various countries where the Group operates. Some of the company welfare solutions proposed by the various companies are shown below:

- life/injury insurance;
- company health insurance that envisages different levels of coverage based on the role in the company and the contract applied;
- parental leave guaranteed on the base of local legislation;
- social security system to support employees, in Italy in particular, white collars, blue collars and executives are covered both by the INPS social security system and by the supplementary scheme COMETA (for white collars and blue collars) and PREVINDAI (for executives) whose registration is optional;
- medical examinations, such as annual check-ups for key executives and regular check-ups at the company, including annual gynaecologist visits, eye tests and flu vaccines;
- **internal gym** to support the physical well-being of employees.

In addition, in 2018 the well-established *Flexible Benefits* programme continued, which provides beneficiaries with a certain amount of money to purchase a wide range of educational, welfare and/or recreation services.

4.4 Health and safety of employees

The SAES Group considers safeguarding the safety and health of its workers of primary importance and has the objective of complying not only with all the specific regulations on the matter but also of implementing an effective action aimed at prevention and continuous improvement of working conditions.

The focus of this objective is on assessing the health and safety risks associated with company activities in order to implement an effective risk prevention and management programme. These activities are carried out throughout the Group in accordance with the requirements and peculiarities of applicable local regulations.

In particular for the Italian companies, the "Risk Assessment Document" identified the appropriate prevention and protection measures and planned their implementation with the support of specialised figures.

The risk assessment was translated into a document containing:

- a report on risk assessment for safety and health at work that specifies the assessing methods used;
- identification of protection and prevention measures;
- personal protective equipment;
- the programme of the measures considered appropriate to ensure that safety levels are improved over time.

In addition to the "Risk Assessment Document", a detailed environmental and safety emergency management plan, which establishes and explains the rules of behaviour to be used in the event of fire, injury, spill of hazardous substances, natural disasters and machinery/plant malfunctions, was prepared.

A key aspect in prevention is providing the workforce with training and information. For this reason, within the scope of their specific duties and competences, each worker will receive continuous and adequate information and training on the procedures concerning first aid, fire-fighting, evacuation of workplaces and on the names of the workers responsible for applying first aid and fire prevention measures.

To encourage the sharing of problems and ideas for improvement, periodic meetings are held with Workers' Safety Representatives (RLS) related to the results of the risk assessment.

During 2018, the Group recorded 17 injuries at work, 12 of which related to men and the remaining 5 to women; data on temporary staff is also monitored and it should be noted that 4 injuries were recorded, while no cases of occupational diseases were recorded in 2018.

	2018			2017			
	Men	Women	Total	Men	Women	Total	
Injury rate ²²	10.14	11.32	10.46	14.78	10.38	13.67	
Severity index ²³	0.079	0.000035	0.07	0.06	0.0002	0.09	

The injury rate has significantly declined across the group, this is an indication of the constant attention to safety and the efficacy of the training carried out.

With regard to **absenteeism**, the value recorded in 2018 was 2%, in continuity with the previous year.

2018				2017		
	Men	Women	Average value	Men	Women	Average value
Absentee rate ²⁴	2%	2%	2%	1%	2%	1%

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²² The injury rate was calculated according to the following formula: (injuries at work/worked hours)*1,000,000. It should be noted that the hours worked by temporary workers were not included in the calculation (total number of temporary workers 87 in 2018).

²³ The severity index was calculated according to the following formula: (Lost days to injuries/working hours)*1,000. It should be noted that the hours worked by temporary workers were not included in the calculation (total number of temporary workers 87 in 2018).

²⁴ The absentee rate was calculated according to the following formula: (days of absence/working days)%. It should be noted that the hours worked by temporary workers were not included in the calculation (total number of temporary workers 87 in 2018). Note that the absentee rate in the US does not include absences due to illness.

4.5 Diversity and non-discrimination

As described in its Code of Ethics, the SAES Group condemns all forms of discrimination, both internal and external, and is committed to ensuring that all decisions relating to its employees are considered while taking into account the skills, knowledge and work performance of each, without any differentiation based on age, gender, sexual orientation, health, race, nationality, religious beliefs and political opinions. The commitment promoted by the Group is also based on the decision to employ **270 women** in its business activities, equal to 29% of the total. The figure, upward compared to 2017, shows the willingness of management to invest in a process of diversity, despite the characteristics of the industrial sector that has always been characterised by an accentuated male presence.

From the point of view of remuneration, the Group is also committed to providing fair remuneration for all its employees.

The gross minimum entry wage paid to new employees (blue collars) is higher than the local minimum wage envisaged by national law both for men and for women. In the Italian companies of the Group, in line with the previous year, the ratio stands at 1.01²⁵, that means the minimum starting wage is on average 10% higher than the minimum legal requirement. On the other hand, the value reached in 2018 in the companies operating in the United States was 1.19²⁶.

The personnel of the Group is also more concentrated in the age group that includes employees aged between 30 and 50 (48%). The other brackets contain 40% (more than 50 years old) and 11% (less than 30 years old), respectively.

DISTRIBUTION OF EMPLOYEES BY AGE GROUP

		2018				2017			
	<30	30-50	>50	Total	<30	30-50	>50	Total	
Manager	0	37	54	91	0	34	54	88	
White Collars	24	184	107	315	41	206	117	364	
Blue collars	83	228	216	527	106	288	227	621	
Total	107	449	377	933	147	528	398	1,073	

Although it invests in the promotion of diversity and internationalisation as a strategy for cultural growth, the Group recognises the importance of a management class that is able to guarantee proper business management

²⁶ The data refers to Memry Corporation.

²⁵ The data refers to Saes Getters S.p.A.

in line with local needs. For this reason, 89% of managers	are	employed i	n their	country	of	origin.	In
particular, all women managers are hired locally ²⁷ .							

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 $^{^{\}rm 27}\,\text{Locally}$ hired managers is intended as the employee's national origin

5. Our commitment to the environment²⁸

5. Our commitment to the chivironment							
Material aspects	Description	Sustainability risk factors	Management Procedures (MP)				
	Efficient energy management through actions, programmes and management systems; decrease in energy consumption from fossil fuels and promotion of the production and purchase of energy from renewable sources.	- Adequacy of plants and of energy production and management technologies - Compliance with local laws and regulations	The Group is committed to complying with the current national and international regulations in force by promoting the monitoring and reducing energy consumption of production processes through initiatives to reduce energy consumption (e.g. assessment of life cycle cost and environmental impact of civil and industrial plants, Corporate Environmental Indicators).				
DIRECT	Monitoring, prevention and reduction of greenhouse gas (GHG) emissions from production, logistics and business travel activities; other pollutant emissions such as: NOx, SOx and VOC.	- Compliance with environmental laws and regulations - Maintenance and upgrading of plants at production sites	The atmospheric emissions generated by the activities of the Group are monitored and limited in compliance with the relevant environmental regulations. The Group is committed to monitoring micropollutants emitted into the atmosphere and defines actions and measures to reduce greenhouse gas emissions.				
ENVIRONMENTAL IMPACTS	Responsible and efficient management of water resources; definition of strategies to increase efficiency in the use of water with particular attention to possible specific uses; monitoring the quality of wastewater discharges and implementing actions to improve the chemical, physical and biological quality of discharges.	- Compliance with environmental laws and regulations - Adequacy of periodic checks on wastewater discharges	The Group develops projects and initiatives to optimise water consumption, also through initiatives that facilitate the reuse and recovery of water within production processes. Particular attention is paid to monitoring the chemical and biological quality of wastewater discharges and, where necessary, the adoption of special wastewater treatment systems in line with law provisions.				
	Responsible management of hazardous and non-hazardous waste associated with the business of the Group; dissemination of a corporate culture aimed at maximising the efficiency of waste management by promoting responsible management methods and practices such as: reuse, differentiation and recycling of produced waste.	- Compliance with environmental laws and regulations - Adequacy of the waste delivery, transport and disposal service	The Group responsibly manages waste in full compliance with environmental laws and regulations, making all its employees aware of the proper delivery of waste in order to promote its recycling and recovery (e.g. waste classification and collection). Particular attention is paid to the proper management of waste from industrial processes (e.g. guidelines for the use of safer chemicals in SAES Group product and processes).				

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²⁸ The environmental figures include all the Companies of the Group included in the reporting boundary where the production sites are located. On the other hand, companies with only commercial offices are excluded as they are not considered relevant.

HIGHLIGHTS



45 Kg of CO₂ saved through specific energy saving projects



About 60% of waste produced by the Group is recycled (50% in 2017)

The units of Lainate and Avezzano are ISO14001:2015 certified

5.1 Management of environmental impacts

"Technological innovation to build the future and environmental sustainability to preserve it", this is the motto that characterises the strategy and actions of the SAES Group in relation to its business activities. In fact, the Group implemented the vertical integration of its production processes, allowing it to focus on technological excellence and on the inflexible responsibility for environmental sustainability.

Therefore, the **eco-friendly strategy** is guaranteed by the control of the entire life cycle of the products of the SAES Group and by the systematic approach adopted for the pursuit of environmental protection. This method of action, in line with the best practices of the **UNI EN ISO 9001 quality management system** certification obtained for the Group's main production sites²⁹, is based on the following points:

- measurement tools of business performance to correctly assess the impact of the organisation's production on environmental resources;
- **long-term planning** to define and implement work processes with low environmental impact, deeply innovative and based on the results of the analysis;
- **compliance** with the most important **international regulations**;
- development of advanced products, which have safe and environmentally-friendly features and limit the use of environmentally hazardous substances.

In order to strengthen its commitment to environmental issues, the SAES Group implemented an environmental management system capable of including the protection of the environment and the safety of future generations in the company's objectives. The Group's commitment is expressed through the ISO 14001 environmental management system certification, updated to the 2015 version during the course of 2018, obtained for the production plants of Lainate and Avezzano.

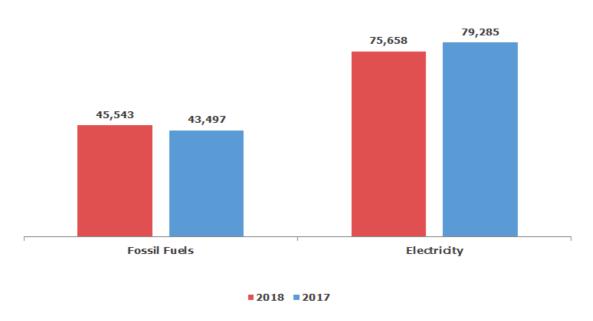
²⁹ The ISO 9001 certified companies of the Group are: SAES Getters S.p.A., Memry Corp., SAES Smart Materials, Inc., SAES Getters USA, Inc., SAES Coated Films S.p.A.

5.2 Energy consumption

At the end of 2018, the Group's total energy consumption amounted to **121,201 GJ**³⁰, slightly down compared to the previous year $(1\%)^{31}$. The main consumption derives from the use of non-renewable fuel for heating (mainly natural gas) and purchased electricity.

The electricity consumption has remained substantially stable within the same boundary, while that of natural gas increased by 3%.

ENERGY CONSUMPTION BY TYPE OF SOURCE (in GJ)



The **energy intensity value resulting from direct consumption**³² for the year 2018 equals **1.20**, a significant increase compared to the value of 2017, equal to 0.87. This figure represents the organisation's energy efficiency. The increase is due to the exit of Pure Gas from the SAES Group, which had an excellent level of energy efficiency.

Conversion factors used for the calculation of energy consumption: Source: DEFRA 2018.

³¹ For the purposes of data comparability, recall the sale and the consequent exclusion of SAES Pure Gas, Inc. as indicated in the Methodological note.

³⁰Note that, as a result of a reporting system improvement process, the 2017 data relating to the consumption of fossil fuels has been restated. For the previously published data, please refer to the Consolidated Non-Financial Statement 2017, published in the Sustainability section of the site www.saesgetters.com.

 $^{^{32}}$ The **energy intensity deriving from direct consumption** was obtained from the ratio between the value of energy consumption of fossil fuels and electricity by the organisation (in GJ) and the cost of goods sold (\mathfrak{C}), multiplied by one thousand.

With regard to the Group's commitment to reducing its energy consumption, in 2018 the organisation saved 95 GJ (45 kg of CO₂³³) through the implementation of various programmes and initiatives to reduce consumption and/or improve efficiency. For example, the headquarters and the Avezzano office have revised their water cooling systems in certain departments

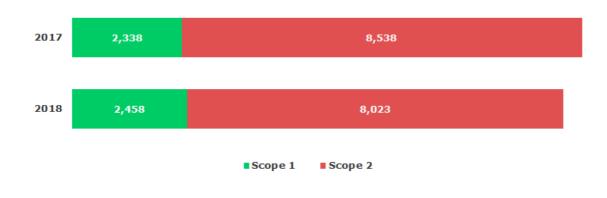
5.3 Emissions into the atmosphere

During 2018, the SAES Group produced 10,481 tons of CO₂eq ³⁴ down 4%³⁵ compared to 2017.

In reference to **direct emissions** (Scope 1), i.e. the emissions resulting from consumption relating to the use of fossil fuels, the 2018 data is equal to **2,458 tons of CO₂eq, an increase of about 5%** compared to 2017. The increase is due to an increased use of natural gas, a more accurate report of the fuel consumption of company cars, and the Group's USA companies LPG consumption.

Indirect emissions (Scope 2) deriving from the purchase of electricity remained substantially stable within the same boundary, and amounted to **8,023 tons of CO₂** in 2018.

DIRECT EMISSIONS, SCOPE 1, AND INDIRECT EMISSIONS, SCOPE 2 (IN TONS OF CO2eq)36



³³ The CO₂ savings were calculated with the Market-based method

 34 The figure for CO_2 emissions of the Group reported in this section "atmospheric emissions" refers to emissions calculated using the location-based method.

For the conversion factors used to calculate CO₂ emissions, see the table in the annexes.

Scope 2 emissions are expressed in tons of CO_2 , however the percentage of methane and nitrous oxide has a negligible effect on the total greenhouse gas emissions (CO_2 equivalents) as can be deduced from the reference technical literature.

³⁵ For the purposes of comparability of the data we recall the sale and the consequent exclusion of SAES Pure Gas, Inc as indicated in the Methodological note.

 $^{^{36}}$ Note that following a process to improve the reporting system, the CO_2 emissions, and in particular the update of the sources of the emission factors used for the 2018 calculation, the data relating to 2017 has been re-stated compared to that published in the previous Non-Financial Statement, using the new emission factors. For the previously published data, please refer to the 2017 Consolidated Non-Financial Statement in the Sustainability section of the website www.saesgetters.com.

Other types of emissions released into the atmosphere by the SAES Group are mainly NOx (nitrogen oxides derived from combustion), SOx (Sulphur oxides) and particulates, as shown in the following table.

OTHER TYPES OF EMISSIONS INTO THE ATMOSPHERE (TONS/YEAR)³⁷

	2018	2017
NOx	1.07	1.49
SOx	0.33	0.28
Particulate (PM)	0.43	0.38

In this regard, there were no significant changes.

³⁷ The boundary refers only to those companies that envisage monitoring emissions into the atmosphere as required by current regulations and are: SAES Getters S.p.A. - Lainate and Avezzano Plants, (excluding the heating systems of Avezzano), SAES Smart Materials, Inc., considered relevant to ensure an understanding of the impacts of the Group's activities.

5.4 Water consumption

The use of water resources is managed with the utmost responsibility, also through the development of policies to reduce consumption and, where possible, recirculate the water already used.

During 2018, the SAES Group consumed **73,130 m³** of water supplied by municipal water and groundwater.

COMPARISON OF 2018 AND 2017 WATER CONSUMPTION



In particular, it should be noted that the main water withdrawals are attributable to the withdrawal from municipal water (88%) and the remaining part from groundwater (12%).

5.5 Management of waste and water discharges

The waste produced by the Group totalled **1,712 tons**, a **decrease of 15%** over the previous year, mainly due to the decrease of non-hazardous waste destined for disposal, particularly in Avezzano. The waste was divided by family, assigning each a specific hazard according to the classification in this regard, regardless of the country of origin. In line with Group policy, waste is recycled whenever possible; if recycling or re-use is not possible, it is disposed of according to the type of waste. The responsible management of hazardous and non-hazardous waste is one of the most important points of the Group's environmental protection policies.

The largest portion of waste produced is for recycling (58%) and, following this, the other portions are those for disposal (36%), a residual portion for incineration (4.6%) and landfill (0.9%). With regard to the division between hazardous and non-hazardous waste, the former amounts to 330 tons (19% of the total), while the non-hazardous waste amounts to 1,382 tons, or 81% of the total.

WASTE DISPOSED BY TYPE (TONS)

		2018			2017			
	Hazardous	Non- hazardous	Total	Hazardous	Non- hazardous	Total		
Disposal	263.8	359.1	623	330.2	649.0	979		
Recycling	15.2	980.5	996	8.4	1,013.0	1,021		
Incineration	47.9	30.4	78	2.6	23.0	26		
Landfill	2.9	12.5	15	0.2	0.0	0.16		
Total	330	1,382	1,712	341.2	1,685	2,026		

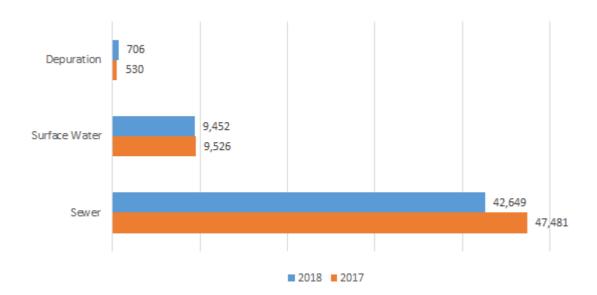
Also with regard to wastewater discharge practices, the Group applies the most advanced management practices, respecting the environment and the territory. Where wastewater treatment plants are present, the SAES Group ensures continuous maintenance of the plants and internal and external periodic analysis to check the quality of wastewater, which therefore does not present a risk to the environment.

Other forms of virtuous management are applied at the factory of the company SAES Smart Materials, Inc., which confers its wastewater to the cooling system of the Municipal incinerator, to be used instead of clean water. Other factories, more specifically Lainate and Avezzano, are instead equipped with a closed cooling circuit which allows considerable savings in the use of water.

³⁸ For the purposes of data comparability, note the sale and consequent exclusion of SAES Pure Gas, Inc as indicated in the Methodological note.

During 2018, the Group discharged **52,807 m³ of water**. The main destination of the Group's water discharge is sewerage (81%) followed by surface water (e.g. rivers and lakes) (18%) and water treatment plants (1%).

WATER DISCHARGE BY DESTINATION (m³)



Attachments

CHAPTER 1: Group business management

MATERIALITY ANALYSIS – DEFINITION OF MATERIAL ASPECTS

		Boundary		
Material aspect	Area	Where the impact occurs	Type of impact	GRI Topic Reconciliation
Ethics, business integrity and compliance	Governance and Compliance	Group	Generated by the Group	Environmental compliance; socio-economic compliance.
Anti-corruption	Governance and Compliance	Group	Generated by the Group	Anti-corruption
Economic and financial results and creation of value	Economic responsibility	Group	Generated by the Group	Economic performance, Market presence
Diversity, inclusion, non-discrimination	Responsibilitie s towards local communities	Group	Generated by the Group	Diversity and equal opportunity
Employee management and development and talent attraction	Responsibility towards employees	Group	Generated by the Group	Employment; labor/management relations; training and education; diversity and equal opportunities;
Occupational health and safety	Responsibility towards employees	Employees and collaborators of Group companies which manage production sites	Generated by the Group and directly connected through a business relationship	Occupational Health and Safety;
Company welfare systems	Responsibility towards employees	Group employees	Generated by the Group	Employment
Responsibility, quality and safety of the supplied products	Product liability	Group	Generated by the Group	Customer Health and Safety; marketing and labelling;
Research and development	Product liability	Group production sites;	Generated by the Group	N.A.

		Boundary		
Material aspect	Area	Where the impact occurs	Type of impact	GRI Topic Reconciliation
Customer satisfaction, customer relation management	Product liability	Group	Generated by the Group	N.A.
Sustainable management of the supply chain	Responsibility towards suppliers	Group, suppliers and business partners	Generated by the Group and directly related through a business relationship	Procurement practices; supplier environmental assessment; supplier social assessment;
Human rights	Responsibilitie s towards Local Communities	Group, suppliers and business partners	Generated by the Group and directly related through a business relationship	Child labour; forced or compulsory labour;
Direct environmental impacts	Environmental responsibility	Group production sites and electricity suppliers	Generated by the Group and directly related through a business relationship	Effluents and waste; water; emissions; energy

CHAPTER 2: Economic performance and business development

201-1 Table of distribution of the economic value generated by the SAES Group

Table of the Generated Value		
Determination of the Generated Value	2018	2017
	Thousands of Euro	Thousands of Euro
Directly generated economic value	402,740	234,092

Distribution of the Generated Value	2018	2017
	Thousands of Euro	Thousands of Euro
Value distributed to suppliers	67,774	108,742
Remuneration of the personnel	72,348	78,966
Remuneration of lenders	987	1,811
Remuneration of shareholders	16,580	0
Remuneration of the Public Administration	12,545	13,145
Remuneration of the community	15	33
Value retained by the Company	232,491	31,395
Generated economic value	402,740	234,092

GRI 408-1: Identification of operations and main suppliers at significant risk for incidents of child labour and measures undertaken 39 and GRI 409-1 Identification of operations and main suppliers for incidents of forced or compulsory labour and measures undertaken 40

Transactions for which the Conflict Minerals Policy has been requested to be signed								
	2018 2017							
Geographical area	Conflict Minerals compliant transactions	Total transactions	%	Conflict Minerals compliant transactions	Total transactions	0/0		
Italy	2	401	0.5	3	410	0.7		
USA	3	139	2.2	2	270	0.7		

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³⁹ and ⁴⁰ The total number of transactions indicated relates only to suppliers of raw materials, semi-finished and finished products, external processing.

GRI 204-1 Proportion of spending on local suppliers 41

SAES GROUP							
		2018		2017			
Local / foreign suppliers	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	
Purchases from the country of origin (local suppliers)	2,053	51,587,888	69.8%	2,537	91,104,230	80.8%	
Purchases from countries outside the country of origin	381	22,333,832	30.2%	430	21,629,410	19.2%	
Total	2,434	73,921,720	100.0%	2,967	112,733,640	100.0%	

EUROPE							
		2018		2017			
Local / foreign suppliers	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	
Purchases from the country of origin (local suppliers)	1,183	31,034,623	60.8%	1,248	25,078,394	61.9%	
Purchases from countries outside the country of origin	306	20,015,978	39.2%	340	15,446,122	38.1%	
Total	1,489	51,050,601	100.0%	1,588	40,524,516	100.0%	

USA							
		2018		2017			
Local / foreign suppliers	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	
Purchases from the country of origin (local suppliers)	774	19,938,550	89.6%	1,194	65,548,570	91.4%	
Purchases from countries outside the country of origin	75	2,317,855	10.4%	90	6,183,288	8.6%	
Total	849	22,256,404	100.0%	1,284	71,731,858	100.0%	

ASIA							
		2018		2017			
Local / foreign suppliers	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	No. of Suppliers	Value of total annual expenditure [€]	% of expenditure	
Purchases from the country of origin (local suppliers)	96	614,714	100.0%	95	477,266	100.0%	
Purchases from countries outside the country of origin	-	-	0.0%	-	-	0.0%	
Total	96	614,714	100.0%	95	477,266	100.0%	

-

⁴¹ Purchases from local suppliers refer to purchases carried out with suppliers belonging to the geographical area of reference (Europe, USA or Asia).

Supplier distribution by geographical area (SAES Group)

Suppliers								
		2018		2017				
C	No. of	Value of total annual	No. of	Value of total annual				
Geographical area	suppliers	expenditure by	suppliers	expenditure by				
	by category	category [€]	by category	category [€]				
Europe	1,414	37,519,922	1,513	33,613,302				
Asia	134	2,349,464	135	6,184,929				
USA	883	31,647,142	1,318	71,560,410				
North Africa	1	2,400,000	1	1,375,000				
Australia	2	5,192	-	-				
Total	2,434	73,921,720	2,967	112,733,640				

CHAPTER 3: Technology at the service of innovation

Number of Complaints by product type⁴²

Complaints								
	2018	2017						
Getters	26	29						
Shape Memory Alloy	158	4						
Vacuum Pump	30	27						
Dispenser	3	2						
Dryers	1	3						
Coated films	54	N.A.						
Cathodes	30	N.A.						
Total	302	65						

 $^{^{42}}$ For the purpose of data comparability, recall that the number of complaints relating to 2017 only refers to SAES Getters S.p.A.

Number of complaints by type

Complaints								
	2018	2017						
Non-compliant product (products with functional or dimensional problems)	220	61						
Logistics (Problems related to transport, invoicing, shipping documentation)	34	1						
Packaging (problems related to primary or secondary packaging)	48	3						
Total	302	65						

CHAPTER 4: The people of the SAES Group⁴³

GRI 102-8 Information on employees

SAES GROUP									
Total number of employees by type of contract and gender									
Type of employment contract	as at 31	December	2018	as at 3	31 December	r 2017			
	Men	Women	Total	Men	Women	Total			
Permanent	656	267	923	782	282	1,064			
Fixed term	7	3	10	6	3	9			
Total	663	270	933	788	285	1,073			

ITALY									
Total number of employees by type of contract and gender									
Type of employment contract	as at	t 31 December	2018	as a	nt 31 Decembe	mber 2017			
	Men	Women	Total	Men	Women	Total			
Permanent	332	116	448	340	117	457			
Fixed term	3	0	3	3	0	3			
Total	335	116	451	343	117	460			

ASIA									
Total number of employees by type of contract and gender									
Type of employment contract	as at	t 31 December	2018	as a	at 31 Decembe	er 2017			
Type of employment contract	Men	Women	Total	Men	Women	Total			
Permanent	14	7	21	22	9	31			
Fixed term	1	2	3	1	2	3			
Total	15	9	24	23	11	34			

USA									
Total number of employees by type of contract and gender									
Type of employment contract	as at	as at 31 December 2018 as at 31 December 2017							
	Men	Women	Total	Men	Women	Total			
Permanent	310	144	454	420	156	576			
Fixed term	3	1	4	2	1	3			
Total	313	145	458	422	157	579			

 43 It should be noted that the employees of the Italian geographical area also include the employee of SAES Getters International Luxembourg and therefore coincide with the employees of the geographical area Europe.

SAES GROUP									
Total number of employees broken down by full-time and part-time employees									
Full-time/Part-time	as at 3	1 December	2018	as at 3	31 December	r 2017			
	Men	Women	Total	Men	Women	Total			
Full-Time	660	257	917	779	269	1,048			
Part-time	3	13	16	9	16	25			
Total	663	270	933	788	285	1,073			

GRI 102-41 Collective bargaining agreements

Percentage of the total number of employees covered by collective bargaining agreements								
As at 31 December 2018 As at 31 December 2017								
Group percentage	48%	43%						
Group percentage excluding USA and Asia data ⁴⁴	100%	100%						

GRI 202-1 Ratios of standard entry level wage by gender compared to local minimum wage, by most significant operating premises

$ITALY^{45}$									
New employees	as at 31 Dec	ember 2018	as at 31 December 2017						
ivew employees	Men	Women	Men	Women					
Ratio of standard entry level wage compared to local minimum wage, by gender	1.01	1.01	1.01	1.01					

	USA ⁴⁶					
New employees	as at 31 December 2018 as at 31 December 2					
New employees	Men	Women	Men	Women		
Ratio of standard entry level wage compared to local minimum wage, by gender	1.19	1.19	1.09	1.09		

 $^{^{\}rm 44}$ Excluding USA and Asia since there are no national collective bargaining agreements.

⁴⁵ The data refers only to Saes Getters S.p.A.

⁴⁶ The data refers only to Memry Corporation.

GRI 202-2 Proportion of senior management hired from the local community, by most significant operating premises

Percentage of senior management hired from the local community								
	as at 3	1 Decembe	r 2018	as at 31 December 2017				
	Men	Women	Total	Men	Women	Total		
Group	87%	100%	89%	91%	100%	89%		
Percentage of senior management hired for	rom the loc	al commun	ity, by mos	t significan	t operating	premises		
Italy	100%	100%	100%	88%	100%	84%		
USA	67%	100%	71%	93%	100%	93%		
Asia	100%	100%	100%	100%	100%	100%		

GRI 401-1 New employee hires and employee turnover⁴⁷

	SAES GROUP											
IN												
Number of	Fron	From 1 January to 31 December 2018 From 1 January to 31 December			ber 201	7						
persons	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate		
Men	27	34	16	77	12%	48	53	21	122	15%		
Women	15	14	10	39	14%	15	15	8	38	13%		
Total	42	48	26	116	12%	63	68	29	160	15%		
				0	UT							
Number of	Fron	n 1 January 1	to 31 Decer	mber 20	From 1 January to 31 December 2017				7			
persons	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate		
Men	15	30	16	61	9%	32	43	17	92	12%		
Women	8	12	6	26	10%	10	13	5	28	10%		
Total	23	42	22	87	9%	42	56	22	120	11%		

⁴⁷ For the purposes of data comparability, recall the sale and the consequent exclusion of SAES Pure Gas, Inc. (160 employees at 31/12/2017) and the commercial structure, located in Shanghai, of the Chinese subsidiary SAES Getters (Nanjing) Co., Ltd. (9 employees at 31/12/2017) as indicated in the Methodological note.

ITALY											
IN											
Number of	From	1 January to	31 Decem	ber 201	8	From	1 January to	31 Decem	ber 201	.7	
persons	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate	
Men	1	0	3	4	1%	8	8	2	18	5%	
Women	0	6	0	6	5%	1	1	0	2	2%	
Total	1	6	3	10	2%	9	9	2	20	4%	
				OUT							
Number of	From	From 1 January to 31 December 2018				From 1 January to 31 December 2017					
persons	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate	
Men	1	5	6	12	4%	0	8	2	10	3%	
Women	0	5	2	7	6%	0	3	3	6	5%	
Total	1	10	8	19	4%	0	11	5	16	3%	

	ASIA									
IN										
Number of	Fro	m 1 Janu	ary to 31	Decembe	r 2018	Fro	m 1 Janu	ary to 31	December	r 2017
persons	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate
Men	0	0	0	0	0%	1	1	0	2	9%
Women	0	1	1	2	22%	1	1	0	2	18%
Total	0	1	1	2	8%	2	2	0	4	12%
					OUT					
Number of	Fro	From 1 January to 31 December 2018				From 1 January to 31 December 2017				
persons	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate
Men	0	1	0	1	7%	0	0	1	1	4%
Women	2	0	0	2	22%	0	0	0	0	0%
Total	2	1	0	3	13%	0	0	1	1	3%

	USA											
	IN											
	From	1 January to	31 Decembe	er 2018		Fron	n 1 January to	31 Decembe	er 2017			
	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate		
Men	26	34	13	73	23%	39	44	19	102	24%		
Women	15	7	9	31	21%	13	13	8	34	22%		
Total	41	41	22	104	23%	52	57	27	136	23%		
					OUT							
	From	1 January to	31 Decembe	er 2018		From 1 January to 31 December 2017						
	<30 years	30-50 years	>50 years	Total	Rate	<30 years	30-50 years	>50 years	Total	Rate		
Men	14	24	10	49	15%	32	35	14	81	19%		
Women	6	7	4	16	12%	10	10	2	22	14%		
Total	20	31	14	65	14%	42	45	16	103	18%		

 $GRI\ 403-2\ Accident\ types, injury\ index, severity\ index, absentee\ rate\ and\ number\ of\ work-related\ deaths\ relative\ to\ Group\ employees$

SAES GROUP								
	2018			2017				
	Men	Women	Average value	Men	Women	Average value		
Absentee rate	2%	2%	2%	1%	2%	1%		

ITALY								
		2018		2017				
	Men	Women	Average value	Men	Women	Average value		
Absentee rate	4%	5%	5%	3%	6%	3%		

ASIA									
		2018		2017					
	Men	Women	Average value	Men	Women	Average value			
Absentee rate	0%	3%	1%	0%	3%	1%			

USA								
			2017					
	Men	Women	Average value	Men	Women	Average value		
Absentee rate	0%	0%	0%	0%	0%	0%		

SAES GROUP									
no of dove		2018	T		2017				
no. of days	Men	Women	Total	Men	Women	Total			
Lost days due to injuries	96	16	112	82	85	167			
	Injuries a	nd occupation	onal disease						
		2018			2017				
no. of cases	Men	Women	Total	Men	Women	Total			
Occupational disease	-	-	-	-	-				
Injuries	12	5	17	21	5	26			
of which fatal	-	-	-	-	-				
	7	Гуре of injur	ies						
no of come			2017						
no. of cases	Men	Women	Total	Men	Women	Total			
Injuries at work	12	4	16	21	5	26			
Injuries while travelling to/from work	-	1	1	-	-	-			
Health and safety indicators									
			2017						
	Men	Women	Total	Men	Women	Total			
Severity index	0.079	0.000035	0.07	0.06	0.0002	0.09			
Injury rate	10.14	11.32	10.46	14.78	10.38	13.67			

		ITALY					
		2018			2017		
no. of days	Men	Women	Total	Men	Women	Total	
Lost days due to injuries	80	16	96	5	-	5	
	Injuries and	occupationa	l disease				
no. of cases		2018			2017		
no. or cases	Men	Women	Total	Men	Women	Total	
Occupational disease	-	-	-	-	-	-	
Injuries	4	2	6	1	-	1	
of which fatal	-	1		-	-	-	
	Тур	e of injuries					
no. of cases		2018			2017		
no. of cases	Men	Women	Total	Men	Women	Total	
Injuries at work	4	1	5	1	-	1	
Injuries while travelling to/from work		1	1	-	-	-	
	Health and	d safety indi	cators				
no. of days		2018			2017		
no. or days	Men	Women	Total	Men	Women	Total	
Severity index	0.136	0.083	0.123	0.009	-	0.006	
Injury rate	7.110	10.972	8.055	1.84	-	1.40	

		USA					
		2018			2017		
no. of days	Men	Women	Total	Men	Women	Total	
Lost days due to injuries	16	-	16	77	85	162	
	Injuries and	occupationa	l disease				
		2018			2017		
no. of cases	Men	Women	Total	Men	Women	Total	
Occupational disease	-	-	-	-	-	-	
Injuries	8	3	11	20	5	25	
of which fatal	-	-	-	-	-	-	
	Тур	e of injuries					
		2018			2017		
no. of cases	Men	Women	Total	Men	Women	Total	
Injuries at work	8	3	11	20	5	25	
Injuries while travelling to/from work	-	-	-	-	-	-	
	Health and	d safety indi	cators				
no. of days		2018		2017			

	Men	Women	Total	Men	Women	Total
Severity index	0.026	-	0.018	0.09	0.27	0.14
Injury rate	12.89	11.56	12.50	22.82	16.01	21.03

Calculation method of health and safety indexes

The injury rate was calculated according to the following formula: (injuries at work/worked hours)*1,000,000. It should be noted that the hours worked by temporary workers were not included in the calculation (87 total consultants in 2018). The severity index was calculated according to the following formula: (Lost days to injuries/working hours)*1,000. It should be noted that the hours worked by temporary workers were not included in the calculation.

The absentee rate was calculated according to the following formula: (days of absence/working days)*100.

GRI 404-1 Average hours of training per employee, broken down by gender and category

	Hours of training								
			as at 31	December 2018					
	Hours per men								
Manager	1,628	21	150	12	1,778	20			
White Collars	2,546	12	955	9	3,501	11			
Blue collars	1,248	3	455	3	1,703	3			
Total	5,421	8	1,560	6	6,981	7			

Hours of training ⁴⁸									
	as at 31 December 2017								
	Hours	Average	Hours	Average	Total	Average			
	per men	hours/men	per Women	hours/women	Hours	hours/category			
Manager	1,042	14	237	22	1,278	15			
White Collars	4,169	17	1,610	14	5,779	16			
Blue collars	4,618	4,618 10 1,032 6 5,649 9							
Total	9,828	12	2,878	10	12,707	12			

 $GRI\ 404\text{--}3\ Percentage\ of\ employees\ receiving\ regular\ performance\ and\ career\ development\ reviews$

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⁴⁸ It should be noted that with reference to Memry Corporation the training hours were estimated considering average training for each employee.

		SAE	S GROUP			
	Employees receiv	ing regular perfor	mance and care	eer developmen	t evaluation	
Number of	as at 31 December 2018					
persons	Men	Men %	Women	Women %	Total	Total %
Manager	76	97%	13	100%	89	98%
White Collars	173	81%	75	74%	248	79%
Blue collars	236	63%	120	77%	356	68%
Total	485	73%	208	77%	693	74%
Number of			as at 31 Decem	ber 2017		
persons	Men	Men %	Women	Women %	Total	Total %
Manager	73	95%	11	100%	84	95%
White Collars	204	82%	90	78%	294	81%
Blue collars	326	71%	122	77%	448	72%
Total	603	77%	223	78%	826	77%

GRI 405-1 Diversity of governance bodies and employees

	SAES GROUP								
Personnel of the Group by professional category and gender									
as at 31 December 2018 as at 31 December 2017									
	Men	Women	Total	Men	Women	Total			
Manager	78	13	91	77	11	88			
White Collars	213	102	315	249	115	364			
Blue collars	372	155	527	462	159	621			
Total	663 270 933 788 285								

	SAES GROUP							
	Personnel of the Group by professional category and age							
		as at 31 De	ecember 201	.8		as at 31 Dec	ember 2017	
Number of persons	<30 years	30-50 years	>50 years	Total	<30 years	30-50 years	>50 years	Total
Manager	0	37	54	91	0	34	54	88
White Collars	24	184	107	315	41	206	117	364
Blue collars	83	83 228 216 527				288	227	621
Total	107	449	377	933	147	528	398	1,073

SAES GROUP							
Personnel of the Group by professional category and gender							
	as at 31 Dec	cember 2018	as at 31 Dec	ember 2017			
	Men	Women	Men	Women			
Manager	86%	14%	87%	13%			
White Collars	68%	32%	68%	32%			
Blue collars	71% 29% 74% 20						
Total	71%	71% 29% 73% 27%					

	SAES GROUP						
	Personnel of	the Group by p	professional cat	egory and a	ge		
	as a	at 31 December	2018	as	at 31 December	2017	
	<30 years	30-50 years	<30 years	30-50 years	>50 years		
Manager	0%	41%	59%	0%	39%	61%	
White Collars	8%	58%	34%	11%	57%	32%	
Blue collars	16% 43% 41% 17% 46%						
Total	11%	48%	40%	14%	49%	37%	

CHAPTER 5: Our commitment to the environment⁴⁹

GRI 302-1 Energy consumption within the organisation

	Energy consumption								
	Unit of	2018		20	17				
Туре	measurement	Total Total GJ		Total	Total GJ ⁵⁰				
Fossil fuels									
Natural Gas	m^3	1,181,574	44,900	1,144,650	43,497				
Propane	m ³	832	77						
Petrol for vehicle engines	1	2,664	91						
Automotive diesel	1	12,508	475						
Electricity	Electricity								
Purchased electricity	kWh	21,016,103	75,658	22,023,679	79,285				

Total energy consumption						
Energy consumption	Unit of	2018	2017			
Energy consumption	measurement	Total	Total			
Fossil fuels	GJ	45,543	43,497			
Purchased electricity	GJ	75,658	79,285			
Total GJ 121,201 122						

GRI 302-4 Reduction of energy consumption

SAES Getters S.p.A. – Unit of Avezzano

Initiatives to reduce energy consumption

Unit of measurement

Reorganisation of the 30 °C cooling water system for machinery c/o factory "F4".
Savings calculated over 4 months (September to December)

Total energy savings

Estimate of savings achieved

Estimate of savings achieved

Estimate of savings achieved

Total energy savings

⁴⁹ The environmental data include all the Group companies included in the reporting boundary where production sites are present. However, companies with only sales offices are excluded since they are considered not relevant.

⁵⁰ It should be noted that following a reporting system improvement process, the 2017 figure regarding the consumption of fossil fuels has been restated. For previously published data, see the 2017 Consolidated Non-Financial Statement in the Sustainability section of the website www.saesgetters.com.

GRI 303-1 Water withdrawal by source

GRI 303-1 Water Withdrawai by source					
Water withdrawal					
G	TI. 14 C	2018	2017		
Source	Unit of measurement	Volume			
Municipal water	m^3	64,214	65,667		
Groundwater	m ³	8,916	10,639		
Total	m³	73,130	76,307		

305 -1/305 - 2 Direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions⁵¹

Scope	Unit of measurement	2018	2017
Scope 1	Tons CO ₂ eq	2,458	2,338
Scope 2 (Location-based)	Tons CO ₂ ⁵²	8,023	8,538
Total	Tons CO2eq	10,481	10,876

Emissions, Scope 2 (2018)				
Location-based method	Market-based method			
Tons CO ₂	Tons CO ₂			
8,023	9,605			

Emissions, Scope 2 (2017)				
Location-based method	Market-based method			
Tons CO ₂	Tons CO ₂			
8,538	10,045			

Location-based electricity emission factors					
Country	Country kg CO ₂ /kWh Source				
USA	0.421	Terna International Comparisons 2016			
Italy	0.36	Terna International Comparisons 2016			
	Market based electricity emission factors				
Country	kg CO ₂ /kWh				
USA	0.421	Terna International Comparisons 2016			

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⁵¹ Note that following a greenhouse gas emissions reporting system improvement process, and in particular the updating of the emission factor sources used for the calculation of the 2018 data, the data for 2017 have been restated compared to those published in the previous Non-Financial Statement, using the new emission factors. For the previously published data, please refer to the 2017 Consolidated Non-Financial Statement in the Sustainability section of the website www.saesgetters.com

 $^{^{52}}$ Scope 2 emissions are expressed in tons of CO_2 , however the percentage of methane and nitrous oxide has a negligible effect on the total greenhouse gas emissions (CO_2 eq) as can be deduced from the reference technical literature.

Italy	0.477	AIB 2018			
	Natural gas emission factors				
Country	kg CO ₂ eq/m ³	Source			
USA	2.04275	<u>Defra 2018</u>			
Italy	2.04275	<u>Defra 2018</u>			
	Propane emission factors				
Country	kg CO2eq/Gj	Source			
USA	59.5777	<u>Defra 2018</u>			
		Diesel emission factors			
Country	kg CO2eq/Gj	Source			
USA	68.80	<u>Defra 2018</u>			
Italy	68.80	<u>Defra 2018</u>			
	Gasoline emission factors				
Country	kg CO2eq/Gj	Source			
USA	64.94	<u>Defra 2018</u>			
Italy	64.94	<u>Defra 2018</u>			

305-7 NOx, SOx, and other types of emissions into the atmosphere

, , , , , , , , , , , , , , , , , , , ,	Other gas emissions				
2018 2017					
	Unit of Global mass		Unit of	Global mass balance	
	measurement	balance	measurement	Global mass balance	
NOx	Ton/year	1.07	Ton/year	1.49	
Particulate (PM)	Ton/year	0.43	Ton/year	0.38	
SOx	Ton/year	0.33	Ton/year	0.28	

GRI 306-1 Water discharge by quality and destination

Wastewater discharges				
		2018	2017	
	Unit of measurement	Total	Total	
Sewerage	m^3	42,648.83	47,481.55	
Surface waters	m^3	9,451.94	9,526.44	
Water treatment	m^3	706.23	529.71	
Total	m ³	52,807.00	57,537.70	

GRI 306-2 Waste by type and disposal method

31CI 300-2 Waste b	A 300-2 waste by type and disposal method								
Waste by type and disposal method									
			2018				2017		
Method of disposal	Unit of measure ment	Hazardous	Non- hazardous	Total	%	Hazardous	Non- hazardous	Total	%
Disposal	Ton	263.8	359.1	623	36.38%	330.2	649.0	979	48.32%
Recycling	Ton	15.2	980.5	996	58.15%	8.4	1,013.0	1,021	50.41%
Incineration	Ton	47.9	30.4	78	4.6%	2.6	23.0	26	1.3%
Landfill	Ton	2.9	12.5	15	0.90%	0.2	0.0	0.16	0.01%
Total	Ton	330	1,382	1,712	100.0%	341	1,685	2,026	100.0%

GRI Content Index

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103-1	Explanation of the material topic and its boundary	384
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INDEPENDENT AUDITOR'S REPORT ON THE CONSOLIDATED NON-FINANCIAL STATEMENT PURSUANT TO ARTICLE 3, PARAGRAPH 10 OF LEGISLATIVE DECREE No. 254 OF DECEMBER 30, 2016 AND ART. 5 OF CONSOB REGULATION N. 20267/2018

To the Board of Directors of Saes Getters S.p.A.

Pursuant to article 3, paragraph 10, of the Legislative Decree no. 254 of December 30, 2016 (hereinafter the "Decree") and to article 5 of the CONSOB Regulation n. 20267/2018, we have carried out a limited assurance engagement on the Consolidated Non-Financial Statement of Saes Getters S.p.A. and its subsidiaries (hereinafter "Saes Getters Group" or "Group") as of December 31, 2018 prepared on the basis of art. 4 of the Decree, and approved by the Board of Directors on March 13, 2019 (hereinafter "NFS").

Responsibility of the Directors and the Board of Statutory Auditors for the NFS

The Directors are responsible for the preparation of the NFS in accordance with articles 3 and 4 of the Decree and the "Global Reporting Initiative Sustainability Reporting Standards" established in 2016 by GRI – Global Reporting Initiative ("GRI Standards"), which they have identified as reporting framework.

The Directors are also responsible, within the terms established by law, for such internal control as they determine is necessary to enable the preparation of NFS that is free from material misstatement, whether due to fraud or error.

The Directors are moreover responsible for defining the contents of the NFS, within the topics specified in article 3, paragraph 1, of the Decree, taking into account the activities and characteristics of the Group, and to the extent necessary in order to ensure the understanding of the Group's activities, its trends, performance and the related impacts.

Finally, the Directors are responsible for defining the business management model and the organisation of the Group's activities as well as, with reference to the topics detected and reported in the NFS, for the policies pursued by the Group and for identifying and managing the risks generated or undertaken by the Group.

The Board of Statutory Auditors is responsible for overseeing, within the terms established by law, the compliance with the provisions set out in the Decree.

Auditor's Independence and quality control

We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. Our auditing firm applies the International Standard on Quality Control 1 (ISQC Italia 1) and, accordingly, maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Auditor's responsibility

Our responsibility is to express our conclusion based on the procedures performed about the compliance of the NFS with the Decree and the GRI Standards. We conducted our work in accordance with the criteria established in the "International Standard on Assurance Engagements ISAE 3000 (Revised) - Assurance Engagements Other than Audits or Reviews of Historical Financial Information" (hereinafter "ISAE 3000 Revised"), issued by the International Auditing and Assurance Standards Board (IAASB) for limited assurance engagements. The standard requires that we plan and perform the engagement to obtain limited assurance whether the NFS is free from material misstatement. Therefore, the procedures performed in a limited assurance engagement are less than those performed in a reasonable assurance engagement in accordance with ISAE 3000 Revised, and, therefore, do not enable us to obtain assurance that we would become aware of all significant matters and events that might be identified in a reasonable assurance engagement.

The procedures performed on NFS are based on our professional judgement and included inquiries, primarily with company personnel responsible for the preparation of information included in the NFS, analysis of documents, recalculations and other procedures aimed to obtain evidence as appropriate.

Specifically we carried out the following procedures:

- 1. Analysis of relevant topics with reference to the Group's activities and characteristics disclosed in the NFS, in order to assess the reasonableness of the selection process in place in light of the provisions of art. 3 of the Decree and taking into account the adopted reporting standard.
- 2. Analysis and assessment of the identification criteria of the consolidation area, in order to assess its compliance with the Decree.
- 3. Comparison between the financial data and information included in the NFS with those included in the consolidated financial statements of the Saes Getters Group.
- 4. Understanding of the following matters:
 - business management model of the Group's activities, with reference to the management of the topics specified by article 3 of the Decree;
 - policies adopted by the entity in connection with the topics specified by article 3 of the Decree, achieved results and related fundamental performance indicators;
 - main risks, generated and/or undertaken, in connection with the topics specified by article 3 of the Decree.

Moreover, with reference to these matters, we carried out a comparison with the information contained in the NFS and the verifications described in the subsequent point 5, letter a).

Understanding of the processes underlying the origination, recording and management of qualitative and quantitative material information included in the NFS.

In particular, we carried out interviews and discussions with the management of Saes Getters S.p.A. and with the employees of Memry Corporation, and we carried out limited documentary verifications, in order to gather information about the processes and procedures which support the collection, aggregation, elaboration and transmittal of non-financial data and information to the department responsible for the preparation of the NFS.

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In addition, for material information, taking into consideration the Group's activities and characteristics:

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- · at the parent company's and subsidiaries' level:
 - a) with regards to qualitative information included in the NFS, and specifically with reference to the business management model, policies applied and main risks, we carried out interviews and gathered supporting documentation in order to verify its consistency with the available evidence;
 - b) with regards to quantitative information, we carried out both analytical procedures and limited verifications in order to ensure, on a sample basis, the correct aggregation of data.
- for the following subsidiaries and sites, Saes Getters S.p.A. and Memry Corporation, which we
 selected based on their activities, their contribution to the performance indicators at the consolidated
 level and their location, we carried out site visits, during which we have met their management and
 have gathered supporting documentation with reference to the correct application of procedures and
 calculation methods used for the indicators.

Conclusion

Based on the work performed, nothing has come to our attention that causes us to believe that the NFS of the Saes Getters Group as of December 31, 2018 is not prepared, in all material aspects, in accordance with articles 3 and 4 of the Decree and the GRI Standards.

DELOITTE & TOUCHE S.p.A.

Signed by **Giovanni Gasperini** Partner

Milan, Italy March 28, 2019