

2020

Supplement to the Integrated Report

Consolidated Non-financial Disclosure
pursuant to Legislative Decree 254/2016



Supplement Financial Statements Integrated 2020

Consolidated
Non-financial Disclosure
in accordance with Italian Legislative
Decree no. 254/2016

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CIRCULAR ECONOMY

		OVERVIEW		PLAN 21 - 30		
ACTION	KPIs	2020	2022	2026	2030	
WATER implement actions to reduce water consumption in capture and distribution processes, reduce water dispersion and improve the quality of water returned to the environment	Linear water losses (m3/km/days) - average	24.4	22.8	20.7	19.2	Stakeholder engagement and materiality analysis
	Total population equivalent served (treatment) - thousands	577	643	1,078	1,898	
	Percentage of Population Equivalent (PE) without access to sewage treatment (% of total PE at 12/31/2016 in the municipalities served)	17.5%	8.0%	3.7%	0.8%	
	Number of intelligent sensors installed for water service - cumulative figure	87	134	242	370	
	Percentage of new generation water service meters installed	22%	49%	75%	92%	
	Reduction in water consumption from aqueducts in electrical distribution - Unareti perimeter - % reduction compared to 2020 consumption (455,000 m³)	-	-29%	-37%	-59%	
WASTE RECOVERY AND TREATMENT Improve the recovery process of waste collected (including through their transformation into energy) and promote separate waste collection	Municipal waste differentiated collection rate (%)	71.1%	72.0%	74.0%	76.0%	Financial capital
	% differentiated collection Milan	62.6%	63.5%	66.5%	70.0%	
	% municipal waste collected in landfill	0.3%	0%	0%	0%	
	Per capita undifferentiated waste reduction (t/inhabitant)	163	160	139	117	
	Waste sent for material recovery (Mt) ¹	1.0	1.2	1.7	2.2	
REDUCTION POLICIES WASTE PRODUCTION Reduce the production of waste through a prevention, reduction and reuse policy	Territories where waste prevention and reduction actions are active (% of total population served)	89%	>85%	>85%	>85%	Manufacturing capital
	Number of <i>partnerships</i> launched for circular economy initiatives	7	18	31	38	
REAL ESTATE Ensure maximum energy efficiency through BAT also for the assets of the Group	LEED certification new <i>building</i> A2A	-	-	achievement		Natural capital
	Energy efficiency projects in <i>buildings</i> of the Group	-	Headquarters Porta Vittoria	A2A Lighthouse Tower		
DISTRICT HEATING Help reduce the environmental impact of the cities, paying close attention to air quality, implementing district heating and district cooling	Thermal storage capacity for TLR (cubic metres)	7,620	20,020	27,020	27,020	Human capital
	Energy from thermal waste / renewables for the TLR (TWh _t)	1.4	1.6	2.3	2.9	
	Share of heat from renewables and waste recovery (% of total)	50%	52%	67%	73%	
	CO ₂ emissions avoided thanks to TLR (t/a)	-225,218	- 272,662	- 429,654	- 502,185	
	NO _x emissions avoided thanks to TLR (t/a)	-241	-724	-1,864	-3,313	

¹ KPI included in the A2A Sustainable Finance Framework: 1.4Mt by 2024, 1.7Mt by 2026.

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ENERGY TRANSITION

		OVERVIEW		PLAN 21 - 30		
ACTION	KPIs	2020	2022	2026	2030	
RENEWABLES Increase the proportion of energy produced from renewable sources	Total installed RES capacity (GW) ²	2.1	2.2	3.6	5.7	Operational sustainability targets 21-30
	Share of RES in total net production	31%	31%	36%	58%	
EMISSIONS Develop actions aiming to reduce the environmental footprint, like direct and indirect emissions of greenhouse gases	Scope 1 emission factor (gCO _{2eq} /kWh) - perimeter in line with target approved by SBTi ²	310	322	283	226	Stakeholder engagement and materiality analysis
	Emissions Scope 2 (ktCO _{2eq})	29	16	-	-	
	Total methane emissions avoided from distribution networks - cumulative values with respect to 2015 (tCO _{2eq}) - Unareti perimeter	49,231	63,305	123,732	229,493	
SUSTAINABLE MOBILITY Develop sustainable internal and external mobility solutions	Number of electric charging points - cumulative 21-30	-	650	3,254	6,062	Financial capital
	Charging service contracts <i>Emoving</i> (number)	-	6,002	62,013	200,000	
	Cumulative avoided emissions 21-30 - <i>Emoving</i> (t)	-	6,046	151,179	674,124	Manufacturing capital
	Vehicles of Networks & District Heating BU with low environmental impact (methane gas and electric powered) (% of total)	37%	81%	82%	92%	
	Low environmental impact collection and street cleaning vehicles (Euro 6 vehicles, methane gas, electric) (% of total)	49%	58%	74%	81%	
SMART NETWORKS Develop solutions to offer a better information access infrastructure (Smart Grid) and improve the network resilience and to contribute to the growing electrification of consumption	Percentage of users with 2G electricity smart meter (Unareti)	10%	48%	99%	100%	Natural capital
	User interruptions in LV - SAIFI (#/year/POD)	na	1.33	1.04	0.97	Human capital
	Installed capacity of the electricity grid (MVA) - Unareti perimeter	4,208	4,706	5,726	6,343	
	Investments in Smart Grids (mln €) - cumulative value 21-30	-	86	256	426	
GREEN ENERGY - END-USE ENERGY EFFICIENCY Contribute to the reduction of emissions of end customers through the sale of green energy and the development of energy efficiency measures for public and private real estate assets	Green electricity sold to the market (TWh)	3.9	5.7	10.3	16.0	Relational capital
	CO ₂ gasfree sold (Mm ³)	-	53	226	311	
	Loyal customers with energy efficiency services (Customers with a service/product in addition to the commodity)	1.1%	2.3%	10.2%	18.6%	
	Cumulative avoided emissions 21-30 - VAS products (HVAC, PV systems) (t)	-	2,437	87,590	425,282	The Acsm Agam Group
	Cumulative avoided emissions 21-30 - Energy efficiency b2b - ESCo (t)	-	124,812	352,148	530,357	
	Cumulative avoided emissions 21-30 - VAS products for condominiums and commercial buildings (t)	-	4,456	20,329	38,591	The AEB Group

² KPI included in the A2A Sustainable Finance Framework.



DIGITAL

		OVERVIEW		PLAN 21 - 30		
ACTION	KPIs	2020	2022	2026	2030	
QUALITY To maintain high quality standards of the services supplied by keeping high Customer Satisfaction levels	Interventions on Group sites for evolved interactivity - number/year	15	20	25	30	Operational sustainability targets 21-30
	Digitalization of <i>Customer Care</i> : digital contacts of total	21%	30%	31%	37%	
	<i>Customer Satisfaction</i> Amsa (Milan/Municipalities)	7.77	>7.5	>7.5	>7.5	
	<i>Customer Satisfaction</i> Aprica	7.88	>7.5	>7.5	>7.5	
	<i>Customer Satisfaction</i> Call Center A2A Energia	> sector national average	> sector national average	> sector national average	> sector national average	
	Number of active supplies bollett@mail - MARKET BU (thousands)	1,046	1,496	3,244	4,886	
SMART CITIES Support the development of the smart city in the territory in which the Group operates, including through new business models that exploit the technological component (Smart Grids and big data)	Gas cabins, isolation boxes, 2nd ele cabinets and IP poles enabling 5G, FWA and smart sensors	0	20	470	10,000	Financial capital
	Data analytics projects for municipalities and utilities in the field of safety, mobility and air quality	0	3	20	150	Manufacturing capital
INNOVATION AND R&D Develop investments in research and development, increasing the number of partnerships with international research centres and universities. Develop new technologies, patents for technological innovation.	Experimentation projects and PoC launched, consistent with the objectives of the Sustainability Plan	18	22	25	25	Natural capital
	Number of innovation projects (or investments) related to the SDGs	-	90%	100%	100%	
	Investments in <i>start-ups</i> (new investments and <i>follow on</i>) through a <i>Corporate Venture Capital</i>	4	5	6	6	
	Initiatives of <i>crowd sourcing</i> of ideas and solutions (e.g <i>scouting</i> , <i>innovation brokers</i> ,...) to address sustainability goals	-	10	15	15	
	Number of internal people involved in <i>idea generation</i> and <i>corporate entrepreneurship</i>	-	1,000	3,000	3,000	
	Number of initiatives to engage the scientific community and universities to research innovative ideas and solutions for the Group		3	5	5	
ICT - CYBER & O.T. SECURITY Infrastructure development and improvement projects of IT/OT/IoT/IIoT platforms and applications Adoption of defence mechanisms and protection against logical, viral attacks	Achievement certification <i>Cybersecurity</i> ISO27001 (ICT)		Achievement (2021)			Human capital
	Achievement certification <i>Cyber Resilience</i> ISO22301		Achievement			
	Inclusion of ESG logics in reputational analysis / <i>Due diligence</i>	-	30%	90%	90%	
	Number of group assets subjected to <i>vulnerability analysis</i> (cybersecurity) - cumulative figure	-	5	15	25	

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PEOPLE INNOVATION

ACTION	KPIs	OVERVIEW		PLAN 21 - 30		
		2020	2022	2026	2030	
HEALTH AND SAFETY Consolidate the training and prevention plan to reduce injuries and develop new initiatives for worker health and safety	Employees with health promotion initiatives (% of total employees)	15%	25%	50%	100%	Stakeholder engagement and materiality analysis
	Inspections of road worksites (number)	3,961	4,000	5,550	6,500	
	Weighted injury index	9.9	8.6	5.6	4.6	
MbO and PERFORMANCE MANAGEMENT Add sustainability objectives to the MbO sheets (correlation between Management remuneration and Sustainability KPIs)	Employees with formally assigned objectives (% of total employees)	10%	15%	50%	100%	Financial capital
	Extension tool for <i>continuous feedback</i>	7%	50%	50%	100%	
TRAINING Implement training routes aimed at optimising and requalifying competences and professional development (including on matters such as sustainability, anti-corruption and human rights)	Employees involved in training on sustainability and SDGs (% of employees to whom content is made available)	60%	70%	100%	100%	Manufacturing capital
	Employees involved annually in role training	60%	60%	60%	60%	
	no. of hours per capita of role training (of employees trained)	10	10	10	10	
	Average level of approval of training (scale from 1 to 5: modified in 2020)	4.3	>4	>4	>4	
ORGANIZATION WELLNESS Implementation of the best business organization systems for effective development of all work processes	Average hierarchical depth	3.87	3.83	3.70	3.50	Natural capital
	Average size of organizational structures	9.73	10.10	11.00	13.00	
	<i>Span of Control</i> average	3.23	3.31	3.50	4.00	
	Degree of process updating	23%	25%	29%	35%	Human capital
	Degree of organizational review	46%	44%	40%	35%	
INTERNAL ENGAGEMENT Develop a systematic listening system to employees, promoting dialogue and collaboration	Employees involved in engagement campaigns (% of the total)	60%	80%	100%	100%	Relational capital
	Actions implemented out of the total number of those proposed in the <i>engagement</i>	100%	100%	100%	100%	
	Employees involved in <i>Survey/pulse</i> (number)	4,500	7,500	9,000	12,000	
WELFARE, DIVERSITY AND EQUAL OPPORTUNITIES Develop innovative welfare policies, also in connection with the promotion of gender equality, and optimise competences through a generational bridge that allows for the transfer of knowledge and experience between the junior and senior populations	Women in positions of responsibility (% of total managers)	21%	23%	26%	30%	The Acsm Agam Group
	Women on Group Boards of Directors (% of total)	26%	30%	35%	40%	
	Women in succession plans (% of total)	18%	20%	26%	30%	
	Women in the final shortlist (% of total)	21%	25%	30%	35%	
	Training on D&I issues (% of employees to whom content is made available)	50%	100%	100%	100%	The AEB Group
	Employees with disabilities involved in specific support/inclusion projects (% of total employees) Protected categories)	0%	25%	80%	100%	
	Hours worked in <i>Remote Working</i> (% of total)	na	3%	11%	21%	

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ACTION	KPIs	OVERVIEW		PLAN 21 - 30		
		2020	2022	2026	2030	
RESPONSIBLE PROCUREMENT Develop initiatives aiming to spread the culture of health and safety at work amongst contractors and other suppliers. Develop Green Procurement policies	Incidence of sustainability criteria in the vendor rating process	>15%	>20%	>25%	>30%	Stakeholder engagement and materiality analysis
	Value of orders assigned to certified suppliers	85%	85%	87%	90%	
	Value of orders assigned to suppliers with sustainability requirements (ISO14001, SA8000, ISO45001)	>60%	>60%	>65%	>70%	
	Value of orders assigned to financially sound suppliers(D&B Rating 1-2)	>70%	>75%	>80%	>85%	Financial capital
	Value of orders placed with suppliers evaluated with ESG indicator	50%	60%	75%	90%	
	Corrective actions taken following unsuccessful audits	83%	88%	91%	92%	
	Inspections of road worksites (number)	3,961	4,300	5,910	6,900	
TRANSPARENCY AND STAKEHOLDER ENGAGEMENT Develop integrated reporting and an adequate information system for planning and control Develop external stakeholder engagement activities, strengthening the relationship with the territory	Territories involved in <i>multi stakeholder engagement</i> initiatives / year	1	5	8	10	Manufacturing capital
	Develop impact assessment analyses on the territories of competence	-	1	3	5	
	Implementation of <i>stakeholder engagement</i> policy and activation of shared monitoring tool for <i>stakeholder engagement</i>		Launch in 2022			Natural capital
	Group events CO ₂ free (offset through credits)	0%	30%	100%	100%	
	Percentage of posts published on the Group's <i>social</i> profiles related to ESG issues	>65%	>75%	>90%	>90%	
	Sponsorships with initiatives to raise awareness of SDGs issues	34%	50%	70%	90%	Human capital
EDUCATION Consolidate and, where possible, improve the environmental education and promote the awareness of risks associated with climate change in the public opinion	Teachers registered in the education portal of A2A	1,700	2,000	2,200	2,500	
	Employees engaged by environmental culture initiatives	-	60%	100%	100%	Relational capital
	Stakeholders involved in <i>Environmental Education</i> initiatives	24,000	26,000	30,000	35,000	
DISADVANTAGED GROUPS Promote beneficial tariffs or other solutions for users in difficulty (e.g. Banco dell'Energia)	Design of a multi-year plan for Banco dell'Energia that develops synergies and encourages its expansion throughout the country, as well as consolidating its presence in the areas where the Group has its roots		Launch in 2022			

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		OVERVIEW		PLAN 21 - 30		
ACTION	KPIs		2020	2022	2026	2030
RISK MANAGEMENT Verify that the system used to identify, manage and prevent business risks adequately covers sustainability risks (and, in particular, social-environmental risks), also in organizational terms	Identify ERM risks on all material issues		-	100% risks covered	100% risks covered	100% risks covered
	Identification and assessment of risks related to the <i>Green Deal</i>		-	20% risks covered	100% risks covered	100% risks covered
BUSINESS ETHIC Implement all the best national and international measures and initiatives for the dissemination of <i>compliance</i> within the Group	Activate a <i>whistleblowing</i> channel with a <i>Whistleblowing</i> Committee to monitor it		-	Launch (2021)		
	Training projects per year on <i>compliance</i> issues		-	2	2	2
	Employees trained on the Code of Ethics		81%	>80%	>80%	>80%
	ISO37001 Certification (<i>Anti-corruption</i>)				Achievement (2024)	
SUSTAINABILITY IN PLANNING AND INVESTMENT PROCESSES Inclusion of ESG logic in investment planning and evaluations for	Percentage of 'sustainable debt' over total		28%	>40%	>60%	>70%
	Identify projects classified as "sustainable" when defining the <i>budget/plan</i> , according to SDGs/ESGs/classification logics Taxonomy with indication of performance KPIsESG		-	100% (2021)		
	Develop a timely analysis of investors' and analysts' ESG expectations			definition of a <i>checklist of ESG best practices</i> (2021)		
ESG RATING Participation in <i>assessment</i> to assessESG performance of the Group, and implementation of activities for continuous improvement of the <i>rating</i>	Improve the score in at least 2sustainability ratings/year		100%	100%	100%	100%
SUSTAINABILITY GOVERNANCE Ensure the integration of ESG issues into management models, corporate strategy and purpose.	Number of meetings per year of <i>Induction</i> to BoD/CST on emerging sustainability issues			1/year in the three-year period 2021-2023		
	Define a <i>Diversity&Inclusion Policy</i>			(by 2021)		
	Define a <i>Policy</i> on Human Rights			by 2022		
	Define a <i>Policy of Responsible Procurement</i>			(by 2021)		

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Figure 1 Stakeholder engagement initiatives activated in 2020

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Consumer Associations	<ul style="list-style-type: none"> Meetings (physical, call, web) Work groups/committees 	Environment BU <ul style="list-style-type: none"> New waste-to-energy plant project Sharing of a draft charter of the quality of Brescia environmental services
		Corporate BU <ul style="list-style-type: none"> New waste-to-energy plant project Possible synergies on environmental education and sustainability projects, end of the protected market, circular economy and energy transition Working Tables <i>Circular Economy</i> Periodic meeting with the Joint Control Body of the A2A ADR Body
Environmental Associations	<ul style="list-style-type: none"> Meetings (physical, call, web) Conventions, press conferences, events 	Market BU <ul style="list-style-type: none"> New anti-fraud project Possible joint projects on the promotion of electric mobility and sustainability ACSM AGAM presentation and activities in the territory Complaint management Bill reading and consumption reconstruction
		Networks & District Heating BU <ul style="list-style-type: none"> New water service tariff structure - TICS Presentation of investments and sharing of water cycle projects Possible joint water-related projects In-depth analysis of water cycle issues, with periodic meetings Meetings with consumer associations and association bodies for the extension of the joint conciliation protocol to the companies of the ACSM AGAM group
Environmental Associations	<ul style="list-style-type: none"> Meetings (physical, call, web) Conventions, press conferences, events 	Environment BU <ul style="list-style-type: none"> Sludge drying and phosphorus recovery project Transition Brindisi hub San Filippo del Mela asbestos poster OFMV plants Environmental landscape of the Brescia area Synergies for hydroelectricity in Valtellina and clarification on Garda purification plant Presentation of the environmental meter project for the city of Milan Enhancement of A2A <i>best practices</i>
		Corporate BU <ul style="list-style-type: none"> Possible synergies on common projects Meetings new summits Reconversion of the Monfalcone thermoelectric plant Working Tables <i>Circular Economy</i> Participation in conferences and initiatives organized by the associations
Environmental Associations	<ul style="list-style-type: none"> Meetings (physical, call, web) Conventions, press conferences, events 	Generation and Trading BU <ul style="list-style-type: none"> Waste treatment plants in the Messina area Use of gas in energy transition and the Brindisi project Reconversion of the Monfalcone Thermoelectric Plant and update on hydrogen selection Hydroelectric plants in Valtellina
		Market BU <ul style="list-style-type: none"> Energy efficiency certificates Possible synergies on common projects Energy efficiency project presentation Plan of meetings in the territory Participation in conferences and initiatives organized by the associations
Environmental Associations	<ul style="list-style-type: none"> Meetings (physical, call, web) Conventions, press conferences, events 	Networks and District Heating BU <ul style="list-style-type: none"> Gavardo treatment plant and hypothesis of synergies on Montichiari plant enlargement Participation in conferences and initiatives organized by the associations

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Trade associations/professional orders	<ul style="list-style-type: none"> Meetings (physical, call, web) Work groups/Committees Plant tours 	Corporate BU <ul style="list-style-type: none"> Hydroelectric concessions Fish restocking of Passante Lake Meetings new management New waste-to-energy plant <i>Circular Economy</i> Reconversion of the Monfalcone plant Participation in conventions and initiatives organized by trade associations
		Generation and Trading BU <ul style="list-style-type: none"> Investments in Sicily Plant requirements for the criticality of biomass from Xylella-infected olive tree explantation Brindisi site project as a territorial support initiative
Companies	<ul style="list-style-type: none"> Meetings (physical, call, web) 	Networks & District Heating BU <ul style="list-style-type: none"> Modernization of building columns Participation in conventions and initiatives organized by trade associations Visit to the North Plant for district cooling
		Environment BU <ul style="list-style-type: none"> Regulatory amendments in the definition of the environmental hygiene tax/tariff Priolo Gargallo (SR) treatment plant Possible collaboration between A2A Ciclo Idrico for the restoration of water networks
Shareholders/Investors	<ul style="list-style-type: none"> Meetings (physical, call, web) 	Corporate BU <ul style="list-style-type: none"> Hydroelectric concessions Possible <i>partnership</i> opportunities IoT Projects Valtellina Hydrogen Working tables <i>circular economy</i> Support for activities in the Brescia area
		Market BU <ul style="list-style-type: none"> Electric car charging stations
Local community/citizens	<ul style="list-style-type: none"> Meetings (physical, call, web) Plant visits Studies/Surveys Conventions/press conferences/events 	Networks & District Heating BU <ul style="list-style-type: none"> District heating network extension
		Corporate BU <ul style="list-style-type: none"> Update on strategic options Presentation 2019 Results and 2020-2024 Strategic Plan Guidelines Meetings new summits Meetings on ESG issues Meetings to present 2020 results Meetings on Covid-19 effects and A2A initiatives 2020 Shareholders' Meetings Divisional meters and water cycle pricing
Customers	<ul style="list-style-type: none"> Meetings (physical, call, web) Plant visits Studies/Surveys Conventions/press conferences/events 	Environment BU <ul style="list-style-type: none"> Meetings with citizens at the Mobile Office Meetings for information and good practices for proper waste collection Workshop exhibition "The game of 4R - Reduction, Reuse, Recycling, Recovery" Survey on the quality of the environmental hygiene service provided by APRICA Support to the cleaning activities of areas and parks by citizens, voluntary associations and companies Awareness-raising activities for citizens on separate collection of plastic waste Distribution of the new Guide to Differentiated Waste Collection to about 700,000 households in the Municipality of Milan
		Corporate BU <ul style="list-style-type: none"> Meetings with local businesses for activities in the territory
Customers	<ul style="list-style-type: none"> Meetings (physical, call, web) Plant visits Studies/Surveys Conventions/press conferences/events 	Networks & District Heating BU <ul style="list-style-type: none"> Natur.Acqua route
		Market BU <ul style="list-style-type: none"> Inauguration of charging points for electric cars in the province of Brescia <i>Customer Satisfaction</i> Measurement Survey Internal survey of the Energy Link benefits programme Internal survey of online services prior to renewal of customer area Surveys and polls on energy efficiency, cogeneration and service quality
Customers	<ul style="list-style-type: none"> Meetings (physical, call, web) Plant visits Studies/Surveys Conventions/press conferences/events 	Networks & District Heating BU <ul style="list-style-type: none"> <i>Customer satisfaction</i> of district heating customers

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Employees		Environment BU <ul style="list-style-type: none">• Respect project• Innovation project aimed at improving the efficiency of collection rounds to reduce the number of kilometres travelled, with a consequent reduction in fuel consumption and CO₂ emissions
		Corporate BU (whole Group) <ul style="list-style-type: none">• <i>Call4Ideas</i>• Remote WorkSurvey to assess the impact of "emergency" remote work on people's operations• <i>Young Talent</i> Program - Programme of training and engagement initiatives for potential young people in the Group• <i>Induction Program</i> - Digital <i>onboarding</i> path for new hires• GEA Project, for the promotion of <i>gender equality</i>activities and initiatives• Covid 19 Emergency Plans and Business Continuity Committee• Covid 19 emergency social shock absorbers• Materiality analysis survey• <i>Virtual meeting</i> with CEO and Chair• <i>CEO Road Show</i> to visit sites and meet employees (Caivano and Acerra, San Filippo del Mela, Monfalcone, Brescia control room)• Banco dell'Energia to raise funds for people in need• A2A <i>Goals</i>, a game to spread knowledge about sustainability issues• Presentation of financial results by the CEO and CFO• Launch of the "<i>New Ways of Working</i>" programme• <i>Community role model</i>• <i>Tech Camp: workshops</i> for employees' children• Theoretical and practical programme of application of <i>Lean</i>philosophy and methods
	• Meetings (physical, call, web)	
	• Work groups/ committee	
	• Plant visits	
Institutions and regulatory bodies	• Studies/Surveys	• "LGH e Lode" initiative and awarding of scholarships to particularly deserving children of employees
	• Focus Groups	• <i>Workshop</i> on staff business processes(<i>supply chain</i> , planning and control, HR)
	• Conventions, press conferences, events	• <i>Digital Academy: focus group</i>
		• Survey of training needs and satisfaction with training activities
		• New INA2A <i>User Experience</i> Presentation
		• IncontriamociINA2A community
		• Communication and information campaign to update employees on all initiatives and decisions taken by the company regarding the emergency period and kit distribution
		• Mistral project aimed at optimizing/containing paper consumption
		• IL@b Project
		• Storytelling of projects and initiatives by employees
		• Pilot initiative new ways of operational involvement through private/personal devices (mobile phones and email)
		• LiHS programme, aimed at developing the culture of safety within the organization through a cascading path
		• HR <i>Flash Report</i> Project
		• ONA Project (<i>Organizational Network Analysis</i>)
		• Pilot for the launch of the "back to work" application in order to test how to book workstations
		• Anytime Feedback pilot project
		• Upskilling programme for the creation of a culture of Excellence
		• Involvement of employees in leaving incentives LGH
		• Project for digitalizing staff service contracts
		• IdentitA2A Project for the effective, innovative and agile management of the Group's roles and competencies
		• <i>Safety Monday</i>
		• Meetings with SBs
		Market BU
		• " <i>Challenge the future</i> " online event
		• " <i>Contact Center Meeting</i> online event
		Networks & District Heating BU
		• <i>Networking Project Festival</i>
		• Pilot project to involve the Digital Talents of the Networks & District Heating BU in cross projects
		• Meetings to support the <i>change management</i> process
		• Sharing of new organizational structure and illustration of <i>business</i> projects

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
		Environment BU <ul style="list-style-type: none">• Support in the process of drafting and approving the PEF for the urban hygiene service• Meetings on the waste sector aimed at defining scientific contributions from the CESISP Study Centre - Bicocca University• Meeting on the A2A circular economy model and visit to the Brescia waste-to-energy plant• Meetings for presentation of Aprica <i>Customer Satisfaction</i> survey in Brescia and for possible synergies in the waste and <i>smart city</i>sectors• Potential public/private synergies for waste plant for Palermo• Sharing AMSA <i>Customer Satisfaction</i> Survey• Observatory on the waste-to-energy plant• Delegation visit of the ARERA Waste Directorate
		Corporate BU <ul style="list-style-type: none">• Possible synergies and collaborations• Speeches at the Conseil de Cooperation economique of the European Union on the emerging themes of the <i>Green Deal</i> (energy transition and innovative technologies)• Working groups on the development of the hydrogen supply chain• European project H2020 Big Data• Future of the Call Center of Varzi (PV)• Visit to the TU of Brescia by a delegation of members of the Lombardy Region Environment Commission• Circular Economy in A2A• Update on the organization of the "Giro d'Italia" event• Development of district heating and environmental services by Amsa in the municipality of Bresso• Update of the energy quota addendum for the municipalities of Valtellina• Possible initiatives to support activities on the territory in Valtellina• New contract for environmental services in the Municipality of Chiavari• Development of the network of electric stations for e-bikes in Valtellina• Covid Emergency Management Meeting• Project for the reconversion of the A2A thermoelectric plant in Monfalcone• <i>Advocacy</i> and promotion of the activities of A2A Energy Solutions• Meetings for the installation of charging stations in Valtellina• Update on territorial issues (land development and hydroelectric concessions) and investments in the Friuli Venezia Giulia Region• Tourism development activities Lumiei Valley• Visit Grottaglie landfill plant• Proposals to involve citizens and associations in sharing the Bedizzele plant project in the territory• Meetings on Coal Phase Out• Meetings on Smart Cities• Meetings on Electric Mobility, Energy Efficiency, White Certificates• Meetings on energy transition and decarbonization, Iorawan grid, exceeding protection and district heating• Waste Management AMSA• Environmental Observatory Presentation• Meetings for Brindisi plant on reconversion project• Meetings to present A2A activities• Meetings on hydroelectric concessions• Hydroelectric development Abruzzo• AMSA cleaning services and worker health protection issues• Presentation of Projects in Sicily• Taranto Area Projects• Meetings with new A2A management• School Project in Brescia• Meetings on campaigns, activities and initiatives in Brescia• Burying of A2A duct for optical fibre• Fraele Towers Lighting Project• Illustration of the <i>Rewardheat</i>project• Milan - Brescia and Bergamo district heating plan, with focus on Aler buildings• District heating project from A2A thermoelectric plant in Cassano d'Adda• Waste-to-energy plant Milan
	• Meetings (physical, call, web)	
	• Work groups/ Committees	
	• Plant visits	
	• Studies/Surveys	
	• Focus Group	
	• Conventions/press conferences/events	

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Institutions and regulatory bodies		Corporate BU <ul style="list-style-type: none"> Support for territorial initiatives Amsa activities Municipality 8 Milan Circular economy Public Water Plants in Campania Green Deal and Recovery Plan PPE procurement meetings Water cycle and aqueduct safety District heating A2A new headquarters project Gas tenders Hydroelectric and hydrogen concessions Meetings new management Air Quality Schools Sensor Project Meetings for activities related to the management of the Covid-19 emergency in the company (rapid swab tests) Social Sport Projects Brescia
	<ul style="list-style-type: none"> Meetings (physical, call, web) Work groups/ Committees Plant visits Studies/Surveys Focus Groups Conventions/press conferences/events 	Market BU <ul style="list-style-type: none"> Potential synergies in the <i>Smart city</i> sector in Catania. Meetings for European Mobility Week Meetings on the A2A Energia temporary store in Brescia and the Christmas programme Meetings on the recharging stations project in the province of Brescia (Municipality of Pontevico, Municipality of Chiari, Municipality of Manerbio) Generation and Trading BU <ul style="list-style-type: none"> Reconversion of the Monfalcone thermoelectric plant Presentation of the Integrated Study on Otter and Fish Seeding in Lake Ampollino Verification of geological criticalities at the Magisano and Albi hydroelectric plants Presentation of Investments in Sicily Updates on the development of authorization procedures for conversion projects and OFMW Meetings for collaboration in the project "Less Asbestos in the Mela Valley" Activation of dialogue tables to identify circular economy solutions for the Brindisi site and potential waste recovery plant project Updates and meetings on the authorization process underway at San Filippo del Mela Update on the procedure for the future waste management procedure of the SRR Presentation of conversion projects and their functionality with respect to PNIEC objectives Progress of the procedure to modify the biomass plant in Sant'Agata di Puglia (FG) Meetings on Brindisi hub Meetings on the OFMW and CCGT authorization procedures, on the Air Quality Regulatory Plan and on the Waste Regulatory Plan in Messina Possible institutional synergies for biomass plant project in the Province of Lecce for Xylella issue Potential plant synergies in Sicily Networks & District Heating BU <ul style="list-style-type: none"> Developments in the regulation of services and innovative configurations in the energy sector;(energy communities and flexibility services provided by DSOs) Meetings on 2G smart meter roll-out plan Resilience Plan 2020-2022: Visit Cogeneration plant for district heating Canavese Presentation of solutions, prospects and problems for strengthening the heat production network in Milan and the surrounding municipalities Reduction of CO2 emissions associated with district heating development Proposal for participation in a European call on production of energy services and renewables through big data Big Data Horizon 2020 project sharing Meetings for new water cycle tariff Water supply projects

STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Media	<ul style="list-style-type: none"> Meetings (physical, call, web) Conventions/press conferences/events 	Environment BU <ul style="list-style-type: none"> Measures adopted at the Brescia waste-to-energy plant during the health emergency period Corporate BU <ul style="list-style-type: none"> Activities in the Como area Support for activities in the Sondrio area Meetings new management Quarterly results Networks & District Heating BU <ul style="list-style-type: none"> Progress of work on decarbonization
Network & International Associations	<ul style="list-style-type: none"> Meetings (physical, call, web) 	Corporate BU <ul style="list-style-type: none"> Activities to prepare the <i>Regulatory Breakfast</i> on the EU Green Deal Possible synergies and collaborations Presentation of new management Presentation in Brussels of A2A Position Paper at Ambrosetti Forum 2020 Market BU <ul style="list-style-type: none"> Participation in E-Mob 2020
Schools and Universities	<ul style="list-style-type: none"> Meetings (physical, call, web) Plant visits Studies/Surveys Focus Groups Conventions/press conferences/events 	Environment BU <ul style="list-style-type: none"> Waste reduction, correct differentiate, Plastic Free and presentation of the creative contest to involve young people "A mural for the environment" Educational meetings and workshops on the circular economy and reuse, less waste production for schools from childcare to first-grade secondary schools; creative contest "Missione plastica zero" Environmental education in Brescia Meetings on energy and waste Promotion of environmental education projects for schools in the areas where LGH operates Corporate BU <ul style="list-style-type: none"> Recruiting activities, training, webinars, career days and meetings at major universities Training activities, meetings, webinars and talks at universities on sustainability, public affairs, HR and diversity issues Plant visits Training meetings on various topics for school teachers of all types and levels (Agenda 2030, Sustainability, IoT, Gas network, Electricity market, A2A history, Renewable energy) Educational workshops aimed at primary and secondary schools in some areas affected by energy production plants (Carnia, Monfalcone, Chivasso, Valchiavenna and Valtellina, Cassano d'Adda) on the topic of quality education School activities satisfactionsurvey Contribution to the organization of meetings of the Permanent Observatory on Regulation of Università Cattolica Focus Group on efficiency and energy saving Health and safety, energy efficiency: pilot project of indoor air quality sensors installed in 10 classrooms in the city of Brescia Video on EDUTV for youth orientation Meetings for possible new initiatives with schools Generation and Trading BU <ul style="list-style-type: none"> Horizon project for a gas ferry for the Strait of Messina Possible plant synergies in Sicily Networks and District Heating BU <ul style="list-style-type: none"> Regulations and developments in competitive procedures for the award of natural gas distribution concessions
Unions	<ul style="list-style-type: none"> Meetings (physical, call, web) Focus Groups 	Group <ul style="list-style-type: none"> Covid-19 Emergency Environment BU <ul style="list-style-type: none"> Covid-19 emergency: social shock absorbers and solidarity

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STAKEHOLDERS INVOLVED	MODE OF COMMUNICATION AND INVOLVEMENT	ISSUES ADDRESSED DURING ENGAGEMENT ACTIVITIES, IDENTIFIED BY BU
Multi-stakeholders	<ul style="list-style-type: none"> Meetings (physical, call, web) Work groups/ committee Plant visits Studies/Surveys Focus Groups Conventions, press conferences, events Listening Forum 	Environment BU <ul style="list-style-type: none"> Awareness-raising activities on differentiated packaging collection Environmental Counter White certificates working table OFMV plants Participation in conferences and seminars Visit to the plant by the Lombardy Region Territory Commission with a Thai delegation AMSA Customer Satisfaction Survey Working table on the quality charter for environmental hygiene services San Benedetto Po Energy Efficiency Certificates Flue gas recovery project for Brescia waste-to-energy plant Compost Distribution Distribution of welcome kits to contribute to the social housing project "Abitare Merezate" Structural changes to services for domestic and commercial users Optimized container development for carton collection operations Snow plan presentation Aprica Service Charter
		Corporate BU <ul style="list-style-type: none"> Energy, Water and Waste Days. Conferences and meetings with institutional and business representatives Focus Groups on various topics (Combating climate change, Combating waste, Renewable energy, Sustainable mobility, Efficient use of water, Circular economy) Meetings with associations for ADR Organization of training course for joint conciliators in the water and district heating sector Possible collaborations and synergies on shared themes Participation in conferences and seminars Water bottle delivery primary schools of Brescia Presentation of the results of the IPSOS survey on the perception of the city and the quality of A2A services Television broadcast "Our Energy for the Environment" in collaboration with Brescia local television station Via Milano redevelopment project in Brescia ForumAscolto Brescia Inauguration of murals created in 3 first-grade secondary schools in the city of Milan following the creative contest "A mural for the environment" Assessment of carbon adjustment tax mechanism "Cremona Night of Light" project Partnership agreement Sustainability Development Center Sensors schools Brescia Presentation of Sustainability Reports 2019 in Milan, Friuli Venezia Giulia, Valtellina and Valchiavenna, Brescia, Bergamo Materiality analysis survey
		Generation and Trading BU <ul style="list-style-type: none"> Plan for the relaunch of the Brindisi Research Citadel. Possibility of receiving biomass from the removal of dried olive trees due to Xylella. Replacement of asbestos from building roofs by photovoltaic Energy Transition
		Market BU <ul style="list-style-type: none"> Possible partnerships on electric mobility Electric mobility and charging stations Interventions in Sicily for photovoltaic Role of heat pumps in energy efficiency and impact on emissions Memorandum of understanding between the Valtrompia Mountain Community and A2A Energy Solutions
		Networks & District Heating BU <ul style="list-style-type: none"> Presentation of the A2A Ciclo Idrico Investment Plan Municipality of Milan district heating Decoration project of Unareti electrical substations in Brescia Dialogue for possible synergies on digital issues Fugitive emissions Market regulation and operator sanctions New business opportunities for district heating Development of new district cooling business, implementation of new heat storage, decarbonisation Progress of the Lombheat project Aquarius project for tracing leaks in the water network Valtrompia treatment plant

Financial capital

Figure 2 Statement for calculating the global added value - millions of euro [GRI 201 - 1_4]

	2018	2019	2020
+A) Production value	6,494	7,324	6,862
Revenues from sales and services (- revenue adjustments)	6,270	7,121	6,668
Change in inventory of products in progress, semi-finished products and finished products	0	0	0
Change in contract work in progress	1	1	0
Other revenue and income	223	202	194
Government grants	0	0	0
-B) Intermediate production costs	4,740	5,397	5,010
Raw materials and consumables consumption	344	431	401
Energy and fuel consumption	3,038	3,607	3,038
Costs for services	985	1,150	1,281
Other operating expenses	93	74	100
Accruals to bad debt provision - current receivables	25	15	30
Provisions for risks	-5	21	64
Other write-downs of fixed assets	160	9	5
Other operating expenses	136	124	122
Material own work capitalised	-36	-34	-31
GROSS CORE VALUE ADDED	1,754	1,927	1,852
-C) Financial balance	4	2	0
Financial income	16	16	12
Financial expenses other than interest on loans	-16	-18	-12
Unrealised gains and losses on equity investments in associates	4	4	0
-D) Auxiliary and extraordinary components	56	-2	1
+/- auxiliary balance	42	-6	0
+/- extraordinary balance	14	4	1
GROSS GLOBAL VALUE ADDED	1,814	1,927	1,853
- Depreciation and amortisation	463	502	555
NET GLOBAL VALUE ADDED	1,351	1,425	1,298

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Figure 3 Statement for distributing the gross global added value - millions of euro [GRI 2011]

	2018	2019	2020
REMUNERATION OF PERSONNEL	492	521	526
Wages and salaries	428	448	451
Employees' leaving entitlement (TFR)	31	31	31
Other costs	33	42	44
REMUNERATION OF EQUITY CAPITAL	190	222	245
Profits distributed	180	218	241
Net Income attributable to minority Interests	10	4	4
REMUNERATION OF DEBT CAPITAL	116	112	81
TRANSFERS TO THE GOVERNMENT	322	332	254
Direct taxes for the Treasury	148	152	74
Other taxes and duties for the Treasury	1	1	1
Social security charges	173	179	179
TRANSFERS TO THE LOCAL COMMUNITY	67	67	69
Direct taxes for local authorities	30	30	28
Local taxes and duties	33	32	33
Sponsorships	1	2	1
Contributions to AEM and ASM foundations, aid, donations and charity	3	3	7
COMPANY REMUNERATION	627	673	678
Reserves	164	502	555
Amortization	463	171	123
GROSS GLOBAL VALUE ADDED	1,814	1,927	1,853

Figure 4 Gross operating margin by business unit - millions of euro

	2018	2019	2020
Generation and Trading	370	301	270
Market	206	229	220
Environment**	268	268	282
Networks & District Heating*	410	461	456
Corporate	-34	-36	-24
Total	1,231	1,234	1,204

* As of 2019, A2A Smart City has been included in the Networks and District Heating BU.

** From 2020, the International BU has been included in the Environment BU.

Figure 5 Balance Sheet - millions of euro

	2018	2019	2020
Net fixed assets	6,131	6,470	7,067
Working capital	302	335	507
Assets/liabilities held for sale	112	-	14
Net capital employed	6,545	6,805	7,588
Equity	3,523	3,651	4,166
- Attributable to the Group	3,135	3,289	3,537
- Attributable to minorities	388	362	579
Net debt	3,022	3,154	3,472
Total sources	6,545	6,805	7,588
Gross debt	3,692	3,620	4,516

Figure 6 Main financial indicators

	2018	2019	2020
Turnover by permanent worker (millions of euro)	0.54	0.6	0.53
EBITDA per permanent worker (millions of euro)	0.1	0.1	0.09
Average number of permanent workers	12,136	12,198	12,907

Figure 7 CAPEX (capital expenses) - millions of euro

	2018	2019	2020
Generation and Trading	57	88	76
Market	21	32	64
Environment	105	96	174
Networks & District Heating*	286	363	373
Corporate	31	48	51
Total	500	627	738

* As of 2019, the A2A Smart City BU has been included in the Networks and District Heating BU.

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Figure 8 Share performance

	2018	2019	2020
Average capitalization (millions of euro)	4,763	5,011	4,143
Capitalization at Dec. 31 (millions of euro)	4,926	5,238	4,087
Average volumes	9,807,945	9,593,175	12,072,133
Average share price* (euro per share)	1.520	1.599	1.322
Maximum share price* (euro per share)	1.687	1.805	1.896
Minimum share price* (euro per share)	1.392	1.434	1.000

* Euro per share (source: Bloomberg).

Manufacturing capital

Energy production

Figure 9 Average availability factor for all plants [G4 - EU30]

	2018	2019	2020
A2A average availability factor (%)			
Traditional coal-powered	80%	91.4%	96.8%
Traditional heavy fuel oil	80%	79.8%	81.7%
Combined cycle natural gas	87%	86.8%	84.4%
Run-of-the river hydroelectric	86%	86.3%	86.2%
Basin hydroelectric	85%	89.8%	91.0%
Storage hydroelectric	87%	71.4%	83.8%
LGH average availability factor (%)			
Run-of-the river hydroelectric	90%	85%	90%

Figure 10 Electricity produced fed into the grid divided up according to plant type and source – GWh [G4 - EU2]

		2018	2019	2020
Generation and Trading Business Unit	Thermoelectric plants	10,671	10,910	9,760
	Hydroelectric plants	4,464	4,534	4,388
	Photovoltaic plants (including energy consumed)	63	122	126
Networks and District Heating Business Unit	Cogeneration plants	285	268	264
Environment Business Unit	Waste-to-energy plants (including biogas) and natural gas boilers	1,183	1,192	1,288
Total		16,666	17,044	15,827

Figure 11 Heating energy produced fed into the grid divided up according to plant type and source – GWh

		2018	2019	2020
Environment Business Unit	Waste-to-energy plants (including biogas) and natural gas boilers	1,403	1,478	1,530
Networks and District Heating Business Unit	Cogeneration plants, natural gas thermal, heat pumps, biogas, solar panels	1,213	1,140	1,125
Generation and Trading Business Unit	Heat recovery	33	36	36
Total		2,649	2,654	2,691

Electricity distribution

Figure 12 Extension of electricity distribution service [G4 - EU4]

	2018	2019	2020
Km of electricity network	15,014	15,359	15,472
of which underground cable	12,976	13,362	13,451

Figure 13 Extension of the gas distribution service

	2018	2019	2020
Km of natural gas network	11,193	11,240	9,852

Figure 14 Losses in the grid*

	2018	2019	2020
Electricity (GWh) from distribution*	299	301	250
Methane (Mm ³) from distribution*	na	na	1.444
Heat (GWh) dispersed	na	na	542

* The figure is estimated.

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Figure 15 Electricity, heating energy and gas released to the network

	2018	2019	2020
Electricity distributed (GWh)	11,747	11,573	10,497
Distributed heating and cooling energy (GWh)	3,130	3,079	3,146
Distributed natural gas (Mm³)	2,425	2,356	2,300
Transported natural gas (Mm³)	372	350	355

Figure 16 Public lighting

	2018	2019	2020
Light points (no.)	232,368	275,950	327,923

Integrated water cycle

Figure 17 Procurement and distribution

TECHNICAL DATA	2018	2019	2020
Wells (no.)	190	190	190
Sources (no.)	275	255	269
Drinking water conversion plants (no.)	122	123	122
Total network length (km)	4,010	4,019	4,044
Water delivered to the user and accounted for (Mm³)	54	54	54
Water extracted (Mm³)	94	93	92
Network losses and water not booked (Mm³)	41	37	36

Figure 18 Collection and treatment

TECHNICAL DATA	2018	2019	2020
Sewers - network length (km)	2,567	2,569	3,911
Waste water treated (Mm³)	52	51	52
Purifiers (no.)	61	57	59

Waste management

Figure 19 Waste collected

	2018	2019	2020
Tonnes	1,584,955	1,618,000	1,527,000

Figure 20 Waste treated by type of plant* - kt

	2018	2019	2020
Waste-to-energy plants	1,790	1,806	1,790
Landfills	455	182	120
Bio-drying plants and production of RDF	545	539	509
Recovery of materials and processing	997	1,024	1,190
Total	3,787	3,551	3,609

* All incoming waste to the Group's plants is considered. The 2020 portion of waste disposal, net of intermediation (369 kt) and elisions (-816 kt) is 3,162 kt. Waste treated in plants managed on behalf of third parties (Acerra waste-to-energy plant and Caivano SSF plant) is not included.

Figure 21 Intermediated waste

	2018	2019	2020
Tonnes	216,374	220,368	183,460

District heating and heat

Figure 22 Heating energy sold

	2018	2019	2020
Heating/cooling energy (GWh)	2,620	2,564	2,604

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Figure 23

	2018				2019				2020			
	USERS* (no.)	VOLUMES SERVED (Mm ³)	Network development** (double pipe) km	Apartment equivalents	USERS* (no.)	VOLUMES SERVED (Mm ³)	Network development** (double pipe) km	Apartment equivalents	USERS* (no.)	VOLUMES SERVED (Mm ³)	Network development** (double pipe) km	Apartment equivalents
Province of Bergamo	647	7.0	74.8	29,100	672	7.2	75	30,000	692	7.3	77	30,500
Province of Brescia	20,584	42.3	670.7	176,200	21,313	42.5	672	177,100	20,513	42.6	678	177,700
Province of Milan***	3,495	52.6	339.4	219,021	3,585	52.8	343	220,083	3,990	54.8	363	228,183
Province of Cremona	741	6.6	76.9	27,500	749	6.6	77	27,600	754	6.8	77	28,317
Province of Lodi	214	2.9	26.6	12,200	227	3.1	27	12,700	232	3.1	27	12,735
Total	25,681	111.4	1,188.4	464,021	26,546	112.2	1,195	467,483	26,181	115	1,222	477,435

* May not coincide with a single housing unit.

** The network is intended as the sum of heat transmission, distribution and supply pipes.

*** Province of Milan has also included the district heating service of Linea Green, at Rho Nord and Rho Sud.

Smart City

Figure 24 Smart City - Smart Land Services - number

	2018	2019	2020
Municipalities served	2	24	184
Services offered	7	40	126
Video cameras	2,013	2,174	5,919
Camera Control Stations	51	51	51
Break-in sensors	5,025	5,025	7,974
Fire sensors	3,373	3,373	3,885
Access and presence readers	841	841	1,074
SoS stations	250	250	250
Variable message panels	15	15	15
Digital islands	29	29	37
Wi-Fi antennae	1,198	1,198	1,887
IOT Sensors	216	216	7,197
Environmental sensors	118	148	159
Smart bins	6,663	12,880	12,870
Smart land sensors	62	125	239
Smart parking sensors	711	2,580	1,861

Natural capital

Figure 25 Percentages of electricity generated by type of source [G4-EU2]

	2018	2019	2020
Renewable sources (hydraulic, renewable fraction of waste*, biogas, solar)	31%	31%	33%
Coal	12%	6%	1%
Natural gas	49%	55%	58%
Oil products	4%	4%	4%
Non-renewable fraction of waste	4%	4%	4%

* The share of electricity from biodegradable waste is calculated for each waste-to-energy plant and derives from both an analytical procedure and a lump-sum estimate with reference to the Ministerial Decree of July 6, 2012.

Figure 26 Energy Performance [GRI 302-3; G4 - EU11]

	2018	2019	2020
Average yield of thermoelectric plants	45%	47%	49%
Yield of high-performance natural gas combined cycles	51%	51%	52%
Yield of multi-fuel plants	32%	31%	29%
Average yield of fossil fuel cogeneration plants	77%	80%	81%
Average electricity produced from 1 t waste (kWh/t)	754	759	746
Average heating energy produced from 1 t waste (kWh/t)	780	823	855
Specific water demand for total production (l/kWh _{eq})*	0.38	0.31	0.30

* Demand means the total quantity of water withdrawn, including the reuse of wastewater, required for the operation of the plant. The specific requirement for total production is computed based on the ratio of total water usage for thermoelectric production to total thermoelectric production. This amount does not include water used for open-cycle cooling, which is then returned to the original water body.

Figure 27 Global impact indicators

	2018	2019	2020
Total emissions of gases harmful to the ozone layer (KgR11eq)	1.0	0.4	0.0
Total acidifying emissions (tSO _{2eq})	3,409	2,927	2,168

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Figure 28 Indicators of impact due to the purchase and use of fuels - (Scope 3)

	2018	2019	2020
Carbon footprint (tCO _{2eq} /year)	933,332	853,467	695,408
Water footprint (thousands of m ³ water)	20,597	20,383	17,721

Figure 29 Environmental sanctions [GRI 307-1]

	2018*	2019**	2020***
Number	18	25	32
Value (euro)	66,314	83,962	106,272

* All sanctions relate to breaches of authorization measures or administrative inaccuracies.

** All sanctions relate to infractions of authorization measures or administrative inaccuracies that did not result in any damages or concrete temporary or permanent danger to the environment. The number also includes some disputes referring to past years but with penalty paid in 2019. The process of classifying sanctions within the Group has been improved.

*** All sanctions relate to infractions of authorization measures or administrative imprecisions that did not result in any damages or concrete temporary or permanent danger to the environment. The number also includes some disputes referring to past years but with penalty paid in 2020. The expanded scope resulted in a higher total number of sanctions.

Water stressed areas

Figure 30 Group water withdrawal in water-stressed areas [GRI 303-3_5]

	2018	2019	2020
Water withdrawn for process consumption (thousands of m ³)	From aqueducts	30	37
	From wells	254	246
	From third parties - fresh water	24	47
	From surface water body - salt/sea water	591	707
	Total	899	1,037
Derived and returned water (thousands of m ³)	From surface water body - fresh water for hydroelectric production	462,580	493,067
	From surface water body - salt/sea water	255,358	272,471
	Total	717,938	765,538
Water withdrawn for distribution to water service users (thousands of m ³)	na	19,692	20,240

Figure 31 Effluents, returned water and distributed drinking water A2A Group, in water stressed areas [GRI 303-4]

	2018	2019	2020
Industrial waste water discharged (thousands of m ³)	Discharged into coastal waters/channels	673	736
	Total	673	736
Water recovered (thousands of m ³)	Recovered in the production cycle	680	827
	% of total water withdrawn	78%	80%
Water returned (thousands of m ³)	Derived water - fresh water	462,580	493,067
	Derived water - salt/sea water	255,358	272,471
	Total	717,938	765,538
Public water supplied to water service users (thousands of m ³)	na	9,179	7,176

NOTE: Salt/sea water is defined as marine or salt water with a concentration of dissolved solids (measured as sodium chloride) >1000 mg/l. The areas with the greatest water stress are the Calabria Region, the Sicily Region, the Abruzzo Region, the areas of the Mountain Communities in the Province of Brescia.

Natural capital in the Environment Business Unit

Resources and materials used

Figure 32 Resources used - Environment Business Unit

	2018	2019	2020
Fuel (TJ)			
Natural gas	694	724	750
Oil (heavy fuel oil and diesel)	71	66	73
Waste, biomass and SFF	21,095	21,035	22,224
Biogas (from landfills and treatment facilities)	484	428	463
Automotive fuels (TJ)			
Petrol	7	6	6
Diesel	504	492	463
Methane	111	145	147
Energy			
Plant self-consumption, electricity	na	na	254
Electricity consumed (GWh), withdrawn from the grid	54	58	67
of which renewable	na	na	64
Heat consumed for heating premises	na	na	31
of which renewable	na	na	21
Chemical products and materials (t)			
Mineral acids	1,565	1,642	1,997
Water additives/conditioners	260	360	1,897
Ammonia (solution)	6,196	5,002	5,589
Lime and solid neutralisers	33,152	32,176	34,937
Active carbon	1,422	1,566	1,495
Cement, sand and inert materials	188,808	219,165	360,771
Sodium chloride	283	280	449
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	1,370	939	1,181
Sodium hydroxide (solution)	2,260	2,316	3,256
Methanol, solvents and other products	2,461	516	992
Oils and lubricants	100	126	112
Urea (solution)	1,704	2,138	1,977
Total chemical products	239,583	266,172	414,653

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Withdrawals

Figure 33 Water withdrawal - Environment Business Unit [GRI 303-3]

		2018	2019	2020
Water withdrawn for process consumption (thousands of m³)	Aqueduct	511	511	467
	Well	3,160	3,134	2,942
	Total	3,671	3,643	3,409
Water used per unit of energy produced - m³/MWh (waste-to-energy and biomass plants)		1.17	1.11	0.98

Water discharges

Figure 34 Effluents, returned water and distributed drinking water - Environment Business Unit [GRI 303-4]

		2018	2019	2020
Industrial waste water discharged (thousands of m³)	In the sewer	503	535	417
	In surface water body (fresh water)	919	1,333	1,735
	Total	1,421	1,868	2,152
Water recovered (thousands of m³)	Recovered in the production cycle	401	384	457
	% of total water withdrawn	11%	11%	13%
Water returned (cooling) (thousands of m³)	In surface water body (fresh water)	713	764	742
Pollutant discharges into surface water (t)	BOD	20	20	38
	COD	47	49	141

Waste

Figure 35 Special waste produced - Environment Business Unit [GRI 306-2_4]

	2018	2019	2020
Special non-hazardous (t)	529,422	490,684	585,540
Special hazardous (t)	111,751	115,267	113,944
Total special (t)	641,173	605,951	699,484
Sent for recovery (% of total)	52%	55%	47%

Emissions

Figure 36 Total emissions – Environment Business Unit [GRI 305-1_2_6_7]

	2018	2019	2020
CO ₂ from combustion processes (t)	1,209,825	1,163,222	1,141,439
Biogenic emissions	1,087,985	1,183,778	1,488,149
CO ₂ from motor vehicles (t)	43,434	44,646	42,612
CO ₂ indirect from energy acquisition (t)			
Location based ²	17,148	17,341	19,133
Market based ²	na	28,085	4,215
Fluorinated gases (t CO _{2eq})	524	303	329
NO _x (t)	883	851	811
SO ₂ (t)	36	53	73
Powders (t)	6.2	7.0	9.0
Methane (CH ₄) - biogas losses released in landfills (t CO _{2eq})	90,188	78,701	43,042
Dioxins (grams - toxic equivalency)	0.039	0.032	0.029
Dioxin-like PCBs (polychlorinated biphenyls) (grams - toxic equivalency)	0.0079	0.0070	0.0090

Figure 37 Percentage of energy produced from waste-to-energy in relation to total production Environment Business Unit [G4-EU2]

	2018	2019	2020
Heating energy from waste-to-energy and biogas process	55%	58%	59%
Electricity from waste-to-energy and biogas process	7%	7%	8%

1 Source of emission coefficients for natural gas/methane, diesel and oil, petrol and waste: Ministry of the Environment and Protection of Land and Sea, National Standard Parameter Table, 2019.

2 The reporting standard used (GRI Sustainability Reporting Standards 2018) provides two different approaches for calculating Scope 2 emissions: Location-based and market-based. The "Location-based" approach involves the use of a national average emission factor related to the specific national energy mix for power generation (source of emission factors: TERNA, International Comparisons, 2017).

3 The market-based approach involves the use of an emission factor defined on a contractual basis with the electricity supplier. Given the absence of specific contractual agreements between the Group companies and the electricity supplier (e.g. purchase of Guarantee of Origin certificates), the emission factor relating to the national "residual mix" (source of the AIB European Residual Mixes 2017 (Version 1.13, 2018-07-11)) was used for this approach.

Natural capital in the Generation and Trading BU

Resources and materials used

Figure 38 Resources used - Generation and Trading Business Unit
[GRI 301-1; GRI 302-1_2; GRI 303-5]

	2018	2019	2020
Fuel (TJ)			
Natural gas	56,336	64,339	62,604
Coal	19,577	9,604	1,177
Oil (heavy fuel oil and diesel)	9,342	9,787	8,835
Automotive fuels (TJ)			
Petrol	2.09	2.03	2.79
Diesel	5.44	4.31	5.46
Methane	0.00	0.01	0.00
Energy			
Electricity for plant self-consumption (GWh)	na	na	378
Electricity withdrawn from the grid (GWh)	162	177	202
of which renewable	na	na	202
Heat consumed for heating premises	na	na	4
of which renewable	na	na	-
Chemical products and materials (t)			
Mineral acids	251	204	236
Water additives/conditioners	130	133	232
Ammonia (solution)	1,067	557	270
Lime and solid neutralisers	23,615	14,676	10,250
Active carbon	2.7	0	0
Cement, sand and inert materials	0.5	0	0
Sodium chloride	9.25	0	4
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	87	67	68
Sodium hydroxide (solution)	192	180	186
Methanol, solvents and other products	39	23	21
Oils and lubricants	86	95	113
Total chemical products	25,479	15,935	11,380

Withdrawals

Figure 39 Water withdrawal - Generation and Trading Business Unit [GRI 303-3]

	2018	2019	2020	
Water withdrawn for process consumption (thousands of m³)	From Aqueduct	104	99	85
	From Well	3,144	2,347	1,922
	From surface water body - fresh water	210	218	282
	From third parties - fresh water	24	47	54
	From surface water body - salt/sea water*	591	707	618
	Total	4,073	3,418	2,961
Derived water for hydroelectric use (thousands of m³)	From surface water body - fresh water for hydroelectric production	3,158,093	3,082,634	3,108,050
	From surface water body - fresh water for cooling	871,287	910,481	842,788
Derived and returned cooling water (thousands of m³)	Surface water body - salt/sea water* for cooling	532,300	424,753	278,798
	Total	1,403,587	1,335,234	1,121,586
Water used per unit of energy produced - m³/MWh (thermoelectric plants)	0.38	0.31	0.30	

* Salt/sea water is defined as marine or salt water with a concentration of dissolved solids (measured as sodium chloride) >1,000 mg/l.

Water discharges

Figure 40 Water withdrawn and returned - Generation and Trading Business Unit [GRI 303-4]

		2018	2019	2020
Industrial waste water discharged (thousands of m³)	In the sewer	281	207	188
	In surface water body (fresh water)	1,919	3,990	4,090
	In coastal waters/salt water channels*	1,532	1,412	1,161
	Total discharged water	2,200	5,609	5,438
Water recovered (thousands of m³)	Recovered in the production cycle	1,258	1,374	770
	% of total water withdrawn	31%	40%	26%
Water returned (hydroelectric derivation) (thousands of m³)		3,158,118	3,082,634	3,108,050
Water returned (cooling) (thousands of m³)	In surface water body (fresh water)	871,287 **	910,481	842,788
	In coastal waters/salt water channels*	532,300	424,753	278,798
	Total	1,403,857	1,335,234	1,121,586
Pollutant discharges into surface water body (thousands of m³)	BOD	20.3	6.1	4.8
	COD	45	18	15

* Salt/sea water is defined as marine or salt water with a concentration of dissolved solids (measured as sodium chloride) >1000 mg/l.

** The 2019 figure from the previous document has been changed due to detection of material error.

Waste

Figure 41 Special waste produced - Generation and Trading BU [GRI 306-2_4]

	2018	2019	2020
Special non-hazardous (t)	47,842	27,802	23,953
Special hazardous (t)	3,113	3,405	16,202
Total special (t)	50,955	31,207	40,155
Sent for recovery (% of total)	92.4%	79.6%	54.2%

Emissions

Figure 42 Total emissions - Generation and Trading Business Unit [GRI 305-1_2_6_7]

	2018	2019	2020
CO ₂ from combustion processes (t)	5,700,406	5,228,056	4,260,787
CO ₂ from motor vehicles (t)	553	467	607
CO ₂ indirect from energy acquisition (t)			
Location based*	51,045	52,736	57,573
Market based**	na	85,527	1,244
Fluorinated gases (t CO ₂ eq.)	1,193	1,440	1,250
NO _x (t)	2,060	1,886	1,416
SO ₂ (t)	1,135	747	393
Powders (t)	109	49	31
Other metals (Sb + As + Pb + Cr + Cu + Mn + Ni + V + Sn+Cd+Ti) (kg)	215	48	237
Dioxins (grams - toxic equivalency)	0.006	0.002	0.000

* See notes on page 35.

** See notes on page 35.

Natural capital in the Networks & District Heating BU

Resources and materials used

Figure 43 Resources used – Networks and District Heating Business Unit [GRI 301-1; GRI 302-1_2; GRI 303-5]

	2018	2019	2020
Fuel (TJ)			
Natural gas	3,830	3,297	4,039
Coal	1,781	1,805	1,075
Oil (OCD, diesel)	0.1	0.1	0.1
Biogas (from group purification plants)	6	12	10
Automotive fuels (TJ)			
Petrol	10	10	10
Diesel	18	18	18
Methane	9	9	9
Energy			
Electricity for plant self-consumption (GWh)	na	na	40
Electricity distributed (GWh)	118	114	108
of which renewable	na	na	99
Heat consumed for heating premises*	na	na	2
of which renewable	na	na	0
Heat energy (GWh - purchased from external sources)	456	464	464
Chemical products and materials (t)			
Mineral acids	674	628	601
Water additives/conditioners	8,141	8,235	9,098
Lime and solid neutralisers	1,910	1,225	841
Active carbon	94	72	67
Sodium chloride	10.8	21	19
Technical gases (nitrogen, CO ₂ , hydrogen, oxygen)	140	141	190
Sodium hydroxide (solution)	198	196	170
Methanol, solvents and other products	740	998	1,011
Odorants	57	58	57
Oils and lubricants	48	57	35
Urea (solution)	528	668	529
Total chemical products	12,541	12,299	12,618

* The value for the Networks and District Heating BU also includes heat consumed for industrial uses.

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Withdrawals

Figure 44 Water withdrawal - Networks and District Heating Business Unit [GRI 303-3]

		2018	2019	2020
Water withdrawn for process consumption (thousands of m ³)	From Aqueduct	728	721	800
	From Well	511	623	640
	Total	1,239	1,344	1,440
Derived and returned water (thousands of m ³)	From surface water body - fresh water	22	3	0.1
	From aquifer	1,559	1,716	2,179
	Total	1,581	1,719	2,179
Water used per unit of energy produced - m ³ /MWh (simple boilers or cogenerators)		0.33	0.35	0.35
Water withdrawn for distribution to water service users (millions of m ³)		94	93	92

Effluents

Figure 45 Discharges, water returned - Networks and District Heating Business Unit [GRI 303-4]

		2018	2019	2020
Industrial waste water discharged (thousands of m ³)	In the sewer	355	370	308
	In surface water body (fresh water)	251	216	229
	Total discharged water	606	586	537
Water recovered (thousands of m ³)	Recovered in the production cycle	3.1	11.0	12.0
	% of total water withdrawn	0.3%	0.8%	0.8%
Water returned (cooling) (thousands of m ³)	In surface water body (fresh water)	22	3	-
	In the aquifer	1,559	1,716	2,179
	Total	1,581	1,719	2,179
Public water supplied to water service users (millions of m ³)		54	54	54
Pollutant discharges into surface water (t)	BOD	1.2	1.1	0.9
	COD	3.2	5.3	6.6

Waste

Figure 46 Special waste produced - Networks and District Heating Business Unit [GRI 306-2_4]

	2018	2019	2020
Special non-hazardous (t)	38,979	37,198	35,837
Special hazardous (t)	321	333	467
Total special (t)	39,299	37,531	36,304
Sent for recovery (% of total)	91%	88%	82%

Emissions

Figure 47 Total emissions - Networks and District Heating Business Unit [GRI 305-1_2_6_7]

	2018	2019	2020
CO ₂ from combustion processes (t)	392,712	377,631	329,704
CO ₂ from motor vehicles (t)	2,541	2,575	2,539
CO ₂ indirect from energy acquisition (t)			
Location based*	37,237	33,970	30,713
Market based**	na	55,092	1,399
Fluorinated gases (t CO _{2eq})	960	776	1,173
Methane (CH ₄) - losses from natural gas distribution networks* (t CO _{2eq})	43,154	45,204	28,875
NO _x (t)	179	133	101
SO ₂ (t)	129	117	73
Powders (t)	0.7	0.2	0.2

* See notes on page 35.

** See notes on page 35.

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Natural capital in the Corporate BU

Resources used

Figure 48 Resources used - Corporate Business Unit [GRI 301-1; GRI 302-1_2; GRI 303-1]

	2018	2019	2020
Water (thousand m³)	168	177	143
Electricity distributed (GWh)	14	14	12
of which renewable	na	na	12
Heat consumed for heating and cooling premises	7	6	7
of which renewable	na	na	2
Fuel (TJ)			
Methane	25	26	18
Fuels (TJ)			
Petrol	2.9	3.6	2.6
Diesel	48	48	24
Methane	3.2	1.0	0.7

Waste

Figure 49 Special waste produced - Corporate Business Unit [GRI 306-2_4]

	2018	2019	2020
Special non-hazardous (t)	169	135	209
Special hazardous (t)	93	18	8
Total special (t)	262	153	217
Sent for recovery (% of total)	98.5%	99.8%	56.7%

Emissions

Figure 50 Total emissions - Corporate Business Unit [GRI 305-1_2_6_7]

	2018	2019	2020
CO ₂ from combustion processes (t)	1,425	1,450	1,013
CO ₂ from motor vehicles (t)	3,927	3,827	1,997
CO ₂ indirect from energy acquisition			
Location based*	4,377	4,027	21
Market based**	na	6,530	89
Fluorinated gases (t CO ₂ eq.)	552	165	35

* See notes on page 35.

** See notes on page 35.

Human capital

Composition of personnel

Figure 51 Personnel by category and type of contract [GRI 102-8; 405-1]

	2018			2019			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Managers	146	29	175	147	27	174	145	26	171
Supervisors	485	145	630	507	156	663	510	164	674
White-collar workers	3,213	1,421	4,634	3,266	1,464	4,730	3,337	1,524	4,861
Blue-collar workers	4,992	202	5,194	5,104	199	5,303	5,267	201	5,468
Permanent workers	8,836	1,797	10,633	9,024	1,846	10,870	9,259	1,915	11,174
Fixed-term workers	518	45	563	402	22	424	246	57	303
Managers	1	1	2	1	1	2	3	1	4
Supervisors	2	-	2	1	-	1	1	-	1
White-collar workers	32	32	64	16	15	31	28	42	70
Blue-collar workers	483	12	495	384	6	390	214	14	228
Total	9,354	1,842	11,196	9,426	1,868	11,294	9,505	1,972	11,477
of which workers with part-time contracts	75	275	350	112	275	387	115	262	377
of which workers with full-time contracts	9,279	1,567	10,846	9,314	1,593	10,907	9,390	1,710	11,100
Workers with non-standard contracts* (temporary/interns/ collaborators)	118	40	158	156	66	222	111	52	163

* Workers under non-standard contracts do not include consultants.

Figure 52 Personnel by type of contract applied [GRI 102-41]

	2018	2019	2020
Executive contracts	177	176	175
Electrical contracts	3,473	3,511	3,488
Single natural gas and water contracts	1,567	1,579	1,545
Commercial contracts	453	490	545
Municipal sanitation contracts	4,556	4,673	4,797
FISE contracts	735	804	872
Chemical contracts	178	0	-
Haulage contract	4	58	4
Other contracts	53	3	51
Total	11,196	11,294	11,477

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Figure 53 Employees in service

	2018	2019	2020
Average number of employees in service	11,104	11,311	11,431

Figure 54 Personnel by workplace [GRI 102-8]

Region	2018			2019			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Abruzzo	50	5	55	49	5	54	51	6	57
Calabria	77	1	78	78	1	79	75	1	76
Campania	193	17	210	197	18	215	197	19	216
Emilia Romagna	54	10	64	47	7	54	45	6	51
Friuli Venezia Giulia	149	5	154	143	4	147	125	4	129
Lazio	3	2	5	3	2	5	7	5	12
Liguria				57	4	61	83	5	88
Lombardy	8,508	1,770	10,278	8,531	1,795	10,326	8,563	1,895	10,458
Marches	8	4	12	7	4	11	7	4	11
Piedmont	100	22	122	107	22	129	107	20	127
Puglia	47	2	49	43	1	44	85	3	88
Sicily	160	4	164	156	5	161	157	4	161
Veneto	4	-	4	4	-	4	-	-	-
International	1	-	1	4	-	4	3	-	3
Total	9,354	1,842	11,196	9,426	1,868	11,294	9,505	1,972	11,477

Figure 55 Number of hires and turnover rate, by age, gender and contract type [GRI 401-1]

Age brackets	2018			2019			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Permanent workers	336	67	403	438	86	524	528	120	648
Up to age 30	130	26	156	169	40	209	220	62	282
From 31 to 40	114	26	140	124	30	154	162	43	205
From 41 to 50	61	12	73	83	10	93	94	11	105
Over 50	31	3	34	62	6	68	52	4	56
Fixed-term workers	473	44	517	338	15	353	285	62	347
Up to age 30	188	22	210	131	14	145	125	40	165
From 31 to 40	141	12	153	102	1	103	69	14	83
From 41 to 50	97	5	102	82	0	82	77	8	85
Over 50	47	5	52	23	0	23	14	0	14
Total	809	111	920	776	101	877	813	182	995
Percentage of new employees out of total workforce	8.44%	6.05%	8.22%	8.23%	5.41%	7.77%	8.55%	9.23%	8.67%

Figure 56 Workers leaving, by gender [GRI 401-1]

ITALY	2018			2019			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Retirement	251	9	260	267	21	288	358	30	388
Voluntary resignation	149	27	176	198	30	228	148	37	185
Decease	10	1	11	14	0	14	18	0	18
Dismissal	53	2	55	68	17	85	70	19	89
Other (e.g., end of fixed-term contract)	318	25	343	161	14	175	221	13	234
Total	781	64	845	708	82	790	815	99	914
Turnover rate*	8.15%	3.49%	7.55%	7.51%	4.39%	6.99%	8.57%	5.02%	7.96%
Voluntary turnover rate**	3.07%	1.57%	2.82%	4.11%	2.03%	3.76%	5.32%	3.40%	4.99%

* The turnover rate was calculated according to the following formula: (departures) / (employees) at December 31.

** Intended as the ratio of voluntary outgoing employees (including retirement) to total employees.

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Figure 57 Workers leaving, by age bracket [GRI 401-1]

ITALY	2018					2019					2020				
	Up to 30	31-40	41-50	Over 50	Total	Up to 30	31-40	41-50	Over 50	Total	Up to 30	31-40	41-50	Over 50	Total
Retirement	-	-	-	260	260	0	0	0	288	288	0	0	0	388	388
Voluntary resignation	41	41	37	57	176	52	68	39	69	228	47	56	47	35	185
Decease	-	1	4	6	11	0	1	3	10	14	0	0	4	14	18
Dismissal	8	12	20	15	55	10	16	29	30	85	4	9	15	61	89
Other (e.g., end of fixed-term contract)	143	92	60	48	343	68	57	32	18	175	76	53	55	50	234
Total	192	146	121	386	845	130	142	103	415	790	127	118	121	548	914
Turnover rate*	19.96%	6.50%	3.40%	8.23%	7.55%	12.99%	6.34%	3.13%	8.71%	6.99%	11.18%	4.85%	3.77%	11.67%	7.96%
Voluntary turnover rate**	4.20%	1.93%	1.28%	4.10%	2.82%	4.90%	2.95%	1.15%	5.69%	3.76%	4.14%	2.30%	1.46%	9.01%	4.99%

* The turnover rate was calculated according to the following formula: (outgoing) / (employees) at December 31.

** Intended as the ratio of voluntary outgoing employees (including retirement) to total employees.

Welfare and Diversity

Figure 58 Personnel by age bracket and gender [GRI 405-1]

ITALY	2018									2019									2020								
	Managers		Supervisors		White-collar workers		Blue-collar workers		TOTAL	Managers		Supervisors		White-collar workers		Blue-collar workers		TOTAL	Managers		Supervisors		White-collar workers		Blue-collar workers		TOTAL
	U	D	U	D	U	D	U	D		U	D	U	D	U	D	U	D		U	D	U	D	U	D	U	D	
Up to age 30	-	-	-	-	235	147	541	6	929	-	-	1	2	271	154	569	4	1,001	-	-	2	1	332	196	597	8	1,136
From 31 to 40	5	-	83	27	562	404	1,103	48	2,232	7	-	89	26	600	407	1,068	41	2,238	10	1	94	28	720	464	1,079	38	2,434
From 41 to 50	45	17	154	55	819	445	1,736	100	3,371	49	16	162	65	775	434	1,697	93	3,291	42	13	158	71	721	432	1,673	100	3,210
Over 50	97	13	250	63	1,629	457	2,095	60	4,664	92	12	256	63	1,636	484	2,154	67	4,764	96	13	257	64	1,592	474	2,132	69	4,697
Total	147	30	487	145	3,245	1,453	5,475	214	11,196	148	28	508	156	3,282	1,479	5,488	205	11,294	148	27	511	164	3,365	1,566	5,481	215	11,477

Figure 59 Personnel by protected categories [GRI 405-1]

Protected categories	2018			2019			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Pro.Cat. (Art.18 para.2 Law 68/99)	36	18	54	36	15	51	34	14	48
People with disabilities	326	97	423	302	87	389	277	74	351
Total	362	115	477	338	102	440	311	88	399

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Figure 60 Personnel by position and company seniority [G4-EU15]

Company seniority	2018						2019						2020					
	Managers	Supervisors	White-collar workers	Blue-collar workers	TOTAL	%	Managers	Supervisors	White-collar workers	Blue-collar workers	TOTAL	%	Managers	Supervisors	White-collar workers	Blue-collar workers	TOTAL	%
Up to age 10	61	199	1,387	2,348	3,995	35.7%	61	213	1,481	2,323	4,078	36.1%	62	217	1,716	2,398	4,393	38.3%
From 11 to 20	62	168	862	1,607	2,699	24.1%	65	193	934	1,705	2,897	25.7%	67	213	1,022	1,786	3,088	26.9%
From 21 to 30	39	139	1,351	1,212	2,741	24.5%	38	120	1,200	1,085	2,443	21.6%	34	108	1,071	994	2,207	19.2%
Over 30	15	126	1,097	523	1,761	15.7%	12	138	1,146	580	1,876	16.6%	12	137	1,122	518	1,789	15.6%
Total	177	632	4,697	5,690	11,196	100.0%	176	664	4,761	5,693	11,294	100.0%	175	675	4,931	5,696	11,477	100.0%

Figure 61 Personnel by educational qualification

	2018				2019				2020			
	Men	Women	Total	%	Men	Women	Total	%	Men	Women	Total	%
Undergraduate degree	1,022	570	1,592	14.22%	1,143	619	1,762	15.6%	1,280	703	1,983	17.3%
Secondary school diploma	3,672	921	4,593	41.02%	3,711	924	4,635	41.0%	3,828	960	4,788	41.7%
Vocational degree	661	73	734	6.56%	635	66	701	6.2%	635	60	695	6.1%
Compulsory schooling	3,999	278	4,277	38.20%	3,937	259	4,196	37.2%	3,765	246	4,011	34.9%
Total	9,354	1,842	11,196	100%	9,426	1,868	11,294	100%	9,508	1,969	11,477	100%

Personnel training and development

Figure 62 Training delivered by role [GRI 404-1]

	2018		2019		2020	
	Number of hours	Average hours per employee	Number of hours	Average hours per employee	Number of hours	Average hours per employee
Managers	9,313	52.6	5,583	31.72	2,288	13.07
Supervisors	35,099	55.5	29,307	44.14	14,398	21.33
White-collar workers	116,255	24.7	101,068	21.23	89,311	18.11
Blue-collar workers	66,996	11.8	65,331	11.48	42,499	19.31
Total	227,663	20.3	201,289	17.82	148,496	12.94

Figure 63 Training delivered by gender [GRI 404-1]

	2018		2019		2020	
	Number of hours	Average hours per employee	Number of hours	Average hours per employee	Number of hours	Average hours per employee
Men	186,109	19.9	170,427	18.08	119,347	12.56
Women	41,554	22.6	30,862	16.52	29,149	14.78
Total	227,663	20.3	201,289	17.82	148,496	12.94

Figure 64 Health and safety training

	2018	2019	2020
Training hours	102,776	96,067	66,722

Figure 65 Cost of training

	2018	2019	2020
€	2,520,072	1,800,839	1,433,437
% of training costs covered by inter-professional funds	29%	37%	37%

Figure 66 Employees trained in the year (percentage of total)

	2018	2019	2020
%	85%	81%	73%

Figure 67 Attendance of training courses

	2018	2019	2020
no.	57,209	54,465	99,208

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Figure 68 Percentage of employees who regularly receive performance assessments [GRI 404-3]

	2018	2019	2020
%	49%	49%	50%

Figure 69 Third-party employees that have undergone relevant health and safety training

	No. employees involved	Training hours provided
2018	1,291	3,876
2019	3,702	6,176
2020	808	1,373

Health and safety at work

Figure 70 Data on injuries* [GRI 403-2]

	2018	2019	2020
Decease	0	0	0
No. of incidents (excl. during travel)	521	461	325
Men	485	436	308
Women	36	25	17
of which with severe consequences**	na	na	7
No. of days absence	12,710	11,238	10,312
Average duration	24.21	24.38	31.73
Frequency index FI	29.14	24.95	17.69
Severity index SI	0.71	0.61	0.56
Incidence index II	8.0	7.4	4.3
Commuting accidents	90	86	50

* When calculating indices, only professional accidents, that result in at least one day of absence, not including the day of the event, are considered. Medications and precautionary absences and unrecognised accidents are therefore excluded. Professional accidents also include those that occur in transit, with or without a vehicle. The table counts all injuries involving employees.

FI = frequency index (no. accidents × 1,000,000: hours worked).

SI = severity index (no days of absence × 1,000: hours worked).

II = incidence index (no accidents × 1,000: headcount) – it is calculated on the number of commuting accidents.

Commuting accidents: accidents suffered by workers while commuting from home to work and vice-versa (but not while in service).

** Severe injury: Injury resulting in death, hospitalization with a reserved prognosis or first prognosis of more than 40 days.

Figure 71 Incident indices of contractors and subcontractors for construction and maintenance works [GRI 403-2_G4-EU17]

	No. of hours worked by contractors	No. Deceased	No. of accidents	No. of accidents with severe consequences	Days lost	Frequency index	Severity index
2018	2,264,294	0	22	na	169	9.72	0.07
2019	4,492,370	0	25	na	278	5.56	0.06
2020	2,945,274	0	22	2	736	7.47	0.25

Figure 72 Percentage of workers represented in formal health and safety committees [GRI 403-1]

	2018	2019	2020
Percentage of the total	100%	100%	100%

Absenteeism

Figure 73 Number of working days lost by gender [GRI 403-2]

	2018		2019		2020	
	Men	Women	Men	Women	Men	Women
Illness	98,515	18,166	106,409	18,946	125,453	17,649
Unpaid leave/absence	6,008	698	6,414	1,028	4,585	494
Company strikes	-	-	-	-	-	-
National strikes	626	73	30	3	5	1
Accidents	12,390	1,391	11,355	1,062	10,876	682
Total	117,539	20,327	124,208	21,039	140,919	18,826
Total days worked by the workforce in the reporting period	2,424,831	457,695	2,488,184	465,105	2,532,261	489,561
Absentee Rate	5%	4%	5%	5%	6%	4%

* It should be noted that the figures presented in this table refer solely to working days lost due to accidents and not to calendar days lost, which are used to calculate the severity index.

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Figure 74 Health data by BU

	B.U. Generation and Trading			B.U. Market			B.U. Environment			B.U. Networks and District Heating			Corporate			TOTAL		
	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020	2018	2019	2020
Visits as per 81/08	746	672	548	260	337	195	5,880	5,790	5,143	1,226	1,361	1,192	513	536	266	8,625	8,696	7,344
Tox visits	166	114	180	60	27	24	2,120	2,292	2,120	285	368	369		12	1	2,631	2,813	2,694
Assessments	1,833	1,797	1,325	277	406	194	11,045	13,686	9,539	2,533	2,885	1,740	494	632	266	16,182	19,406	13,064
Influenza Vaccination	35	13	84	39	71	170	223	274	550	198	304	567	129	227	341	624	889	1,712
Vaccinations	79	11	8	42	18	6	851	1,497	1,283	314	174	97	2	18	3	1,288	1,718	1,397
Site inspections	16	17	16	6	7	11	54	67	44	31	35	24	12	8	13	119	134	108
Reporting occupational illness	5	8	3	0	0	0	4	11	9	0	1	0	0	0	0	9	20	12
Health provisions	17	17	17	5	5	5	27	27	27	9	9	9	7	7	7	65	65	65
Specialist visits		0	0		0	0	68	125	26	7	5	0		0	0	75	130	26

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Figure 75 Rate of days lost* (total number of days lost for injury or illness out of total working hours by the workforce in the reporting period) [GRI 403-2]

	2018			2019			2020		
	Men	Women	General total	Men	Women	General total	Men	Women	General total
Days lost to accidents	12,390	1,391	13,781	11,355	1,062	12,417	10,876	682	11,558
Total workable hours of the workforce in the reporting period	17,613,164	3,346,340	20,959,504	18,063,290	3,386,063	21,449,353	18,265,462	3,568,847	21,834,309
Total hours worked by the workforce in the reporting period	15,279,598	2,694,030	17,973,628	15,693,976	2,801,174	18,495,150	15,459,541	2,908,822	18,368,362
Lost day rate	0.07%	0.04%	0.07%	0.06%	0.03%	0.06%	0.06%	0.02%	0.05%

* Days lost means days on which work cannot be performed due to an occupational accident or occupational illness. They are not counted if there is a partial return to working activity. Occupational illness" is defined as an illness caused by the working environment or professional activity (e.g., stress or regular exposure to harmful chemical substances) or resulting from an accident.

Figure 76 Return to work and retention rates after parental leave*

	2018		2019		2020	
	Men	Women	Men	Women	Men	Women
Employees who took parental leave	325	208	338	219	312	168
of whom, employees who returned to work in 2019	302	176	0	0	0	0
of whom, employees who returned to work in 2020	22	19	328	183	308	150

* Employees who did not return to work relative to 2018 have not necessarily resigned, but are continuing their leave.

Figure 77 Union membership

	2018	2019	2020
	n°	n°	n°
Members of Trade Unions	4,834	4,831	4,749

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Figure 78 Hours of strikes

	2018	2019	2020
Total strike hours	502	237	42

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Benefits and remuneration

Figure 79 Contributions to Recreational and Welfare Circles

	2018	2019	2020
Total (€)	5,097,116	5,325,796	5,522,525

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Relations with customers

Electricity and natural gas sales service

Figure 80 Electricity supply contracts by type of market

	2018	2019	2020
Protected market	547,994	476,269	429,707
Free market	586,998	749,554	890,070
Total	1,134,992	1,225,823	1,319,777

Figure 81 Electricity supply contracts by type of customer [G4 - EU3]

	2018	2019	2020
Domestic	914,937	946,223	961,835
SME	133,237	139,574	152,167
Large customers	52,563	82,158	135,805
Condominiums	34,255	34,498	37,458
Public lighting		23,370	32,512
Total	1,134,992	1,225,823	1,319,777

Figure 82 Gas supply contracts by type of market

	2018	2019	2020
Protected market	698,406	597,714	548,400
Free market	542,554	645,009	699,146
Total	1,240,960	1,242,723	1,247,546

Figure 83 Gas supply contracts by type of customer [G4 - EU3]

	2018	2019	2020
Domestic	1,161,611	1,159,003	1,162,058
SME	63,722	67,482	58,819
Large customers	6,582	7,663	17,754
Condominiums	9,045	8,575	8,915
Total	1,240,960	1,242,723	1,247,546

Figure 84 Geographic breakdown of electricity sales volumes

	2018	2019	2020
Lombardy	76%	65%	53%
Rest of Italy	24%	35%	47%

Figure 85 Geographic breakdown of gas sales volumes

	2018	2019	2020
Lombardy	88%	72%	78%
Rest of Italy	12%	28%	22%

Figure 86 Number of A2A Energia fidelity programme adhesions

	2018	2019	2020
Adhesions	40,522	98,298	124,834
Increase (percentage)	-86%	143%	27%

* Number of customers and prospects enrolled in the Energy Link programme ended May 2020.

Figure 87 Cerved Energy Monitor survey on the level of satisfaction of A2A Energia customers

Service supplied	Business segment	2017			2018			2019		
		CSI	Market standard	Position*	CSI	Market standard	Position*	CSI	Market standard	Position*
Gas	Domestic	90.1	89.4	3 of 7	93.3	92.0	1 of 7	91.9	92.9	2 of 7
	VAT reg. & SME	92.4	92	1 of 6	93.8	93.4	1 of 6	94.7	94	1 of 6
Electricity	Domestic	91.1	89.7	3 of 8	91.7	91.1	5 of 9	92.2	91.6	3 of 9
	VAT reg. & SME	90.7	89.5	2 of 10	91.1	91.7	3 of 10	93.1	93	4 of 11

A2A Energia				
Service supplied	ARERA target	2018	2019	2020
Percentage of successful calls	>=80%	96.7%	93.5%	92.4%
Accessibility of lines and services (time when line is free vs operator presence time)	>=80%	100.0%	99.8%	98.7%
Average waiting time on the telephone	<=240"	122	160	129

Figure 88 Electricity and natural gas complaint trends

	2018	2019	2020
A2A ENERGIA - Number of complaints	3,550	4,281	5,792
LINEA PIÙ - Number of complaints	1682	1,766	-
YADA (NeN) - Number of complaints	-	-	39
LUMENERGY - Number of complaints	-	6	9
A2A ENERGIA - percentage complaints out of average no. of customers	0.18%	0.20%	0.23%
LINEA PIU' - percentage complaints out of average no. of customers	0.56%	0.55%	-
LUMENERGIA - percentage complaints out of average no. of customers	-	0.05%	0.08%
YADA (NeN) - percentage complaints out of average no. of customers	-	-	0.51%

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Figure 89 Electricity bill cost trends (in euro) for a typical household*

	A2A ENERGIA			YADA ENERGIA (NeN)	ASM ENERGIA
	2018	2019	2020	2020	2020
Sales services	274.78	253.92	198.72	264.68	237.80
Network services	204.03	231.75	218.46	218.44	259.50
Tax	21.82	21.79	21.94	21.79	22.88
VAT	50.06	50.75	43.91	50.49	51.82
Total	550.69	558.20575	483.03	555.40	572.00

* For electricity, the Authority took as an example a resident domestic use contract, with 3 kW of available power and an average annual use of 2,700 kWh.

Figure 90 Cost trends in the natural gas bill in euro for a typical household*

	A2A ENERGIA			YADA ENERGIA (NeN)	ASM ENERGIA
	2018	2019	2020	2020	2020
Sales services	454.70	419.18	309.33	337.93	323.20
Network services	224.25	248.71	239.12	234.22	242.70
Tax	224.68	224.68	224.68	224.68	232.00
VAT	182.61	180.63	159.27	147.45	148.10
Total	1,086	1,073.20	932	944.28	946.00

* For gas, domestic use with independent heating in the north-east and an annual use of 1,400 m3 was taken as the example by the Authority.

Figure 91 Office visits

	2018	2019	2020
Total number of customers served	246,409	240,354	134,399
A2A Energia	170,513	168,054	89,065
Linea Più*	75,896	72,300	41,481
Lumenergia	-	-	3,853
Average office waiting time in minutes			
A2A Energia	06:18	12'54"	5'30"
Linea Più*	09:51	10'30"	4'42"
Lumenergia		na	na

* From May 1, 2019, Linea Più was incorporated into A2A Energia. As a result of this transaction, the 2019 figures have been included in A2A Energia figures.

Figure 92 Number of electricity and gas contracts with the Bollett@mail service

	2018	2019	2020
A2A Energia	367,018	458,659	916,534
Linea Più*	66,315	76,122	
Lumenergia	-	1,362	1,457
ASM ENERGIA	-	-	4,971
Yada Energia	-	-	16,629
Total	433,333	536,143	939,591
Increase over previous year (%)	30.5%	23.7%	75.3%

* From May 1, 2019, Linea Più was incorporated into A2A Energia. As a result of this transaction, the 2019 figures have been included in A2A Energia figures.

Figure 93 Number of visits to the commercial websites

	2018	2019	2020
Total number of visits	4,153,558	5,135,493	10,269,646
Registered with the online counter	391,626	425,985	517,168
Number of self-metering*	na	72.3%	61.0%

* The estimated value does not include self-metering received through the APP.

Figure 94 Green energy sold (GWh)

Market segment	2018	2019	2020
Government	2%	2%	5%
Mass market	45%	51%	33%
Others	53%	47%	62%
Total GWh	2,229	2,276	3,858

* The estimated value does not include self-metering received through the APP.

Electricity and natural gas distribution service

Figure 95 Extension of the electricity distribution service [G4 – EU3_EU4]

	2018	2019	2020
Customers connected	1,183,035	1,190,375	1,204,394

* Weighted average number of POD active during the year calculated on the basis of ARERA and CSEA provisions and valid for tariff purposes.

Figure 96 Extension of the gas distribution service* [G4 – EU3_EU4]

	2018	2019	2020
Customers connected	1,511,748	1,502,645	1,420,545

* Weighted average number of PDR active during the year calculated on the basis of ARERA and CSEA provisions and valid for tariff purposes.

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Figure 97 Technical quality of electricity [G4 – EU29_EU28]

Milan												
Service continuity indicator	High density area			ARERA 2020 objective	Medium density area			ARERA 2020 objective	Low density area			ARERA 2020 objective
	2018	2019	2020		2018	2019	2020		2018	2019	2020	
Average annual minutes of outage per LV user due to long outages without notice	27.61	32.81	33.80	25	24.42	34.55	47.11	40	N/A	N/A	N/A	N/A
Average annual number of outages per LV user due to long outages without notice	1.39	1.51	1.57	1.52	1.46	1.76	1.98	2.04	N/A	N/A	N/A	N/A

Brescia												
Service continuity indicator	High density area			ARERA 2020 objective	Medium density area			ARERA 2020 objective	Low density area			ARERA 2020 objective
	2018	2019	2020		2018	2019	2020		2018	2019	2020	
Average annual minutes of outage per LV user due to long outages without notice	7.39	8.81	8.91	25	16.97	22.48	23.71	40	31.65	29.45	30.19	60
Average annual number of outages per LV user due to long outages without notice	0.76	0.83	0.84	1.00	1.67	2.29	2.64	2.00	3.10	3.07	2.64	4

Figure 98 Technical quality of electricity [G4 – EU29_EU28]

Cremona												
Service continuity indicator	High density area			ARERA 2020 objective	Medium density area			ARERA 2020 objective	Low density area			ARERA 2020 objective
	2018	2019	2020		2018	2019	2020		2018	2019	2020	
Average annual minutes of outage per LV user due to long outages without notice	2.44	9.10	7.00	25	N/A	N/A	N/A		27.90	12.90	24.00	60
Average annual number of outages per LV user due to long outages without notice	0.13	0.29	0.40	1	N/A	N/A	N/A		0.78	1.24	1.50	4

Figure 99 Electricity emergency service - Milan and Brescia [G4 – EU28]

Service continuity indicator	MILAN			BRESCIA		
	2018	2019	2020	2018	2019	2020
No. MV customers with more than 6 interruptions per year for high density areas	25	12	29	-	0	2
No. of MV customers with more than 8 interruptions a year for medium-concentration areas	-	0	0	5	4	4
No. MV customers with more than 9 interruptions per year for low density areas	-	Na	N/A	12	3	18

In the event of an electricity shortfall, Terna - National Electrical Network requests that distributors implement a scheduled rotating outage plan in order to avoid a general blackout. There are five levels of severity of electricity shortfall used to determine the number of users involved and the frequency of outages. Terna informs customers of the outages, which have a maximum duration of 90 minutes, with advance notice of 30 minutes, and they may occur at any time during the hourly periods indicated, not necessarily at the beginning of each period. The scheduled outage plan prepared by A2A Reti Elettriche, by day and time slot, is available from the company's website.

Figure 100 Commercial quality of electricity: specific indicators for the Milan-Brescia area [G4 – EU21]

Specific indicators	ARERA Level Res. 646/15	Services provided on the indicated timetable (%)			Average time to execute the service (days)		
		2018	2019	2020	2018	2019	2020
Time to prepare estimate for work on the network	15 working days for LV 30 working days for MV	98.40%	96.34%	98.02%	6.89	7.83	6.63
Execution time for simple work	10 working days for LV 20 working days for MV	98.66%	98.22%	96.92%	5.43	5.46	5.78
Execution time for complex work	50 working days	99.46%	99.03%	98.03%	10.21	13.21	15.13
Activation time for LV/MV supply	5 working days	99.68%	99.44%	99.37%	0.62	0.63	0.6
Supply de-activation time	5 working days for LV 7 working days for MV	99.59%	99.57%	99.24%	0.64	0.64	0.57
Reactivation time following suspension due to non-payment	1 working day	99.70%	99.75%	99.72%	0.08	0.08	0.07
Observance of time bracket for appointments	2 hours	99.45%	99.27%	99.57%	na	na	na
Time to restore service following failure of meter equipment during business days from 8 AM to 6 PM on the LV network	3 hours	81.87%	76.58%	85.27%	2.31	02:39	2.42
Time to restore service following failure of meter equipment during non-working days from 6 PM to 8 AM on the LV network	4 hours	93.73%	90.43%	94.54%	2.11	02:28	2.07
Time to report results of testing of LV/MV meter equipment	15 working days	92.45%	75.35%	97.76%	10.62	11.86	6.92
Time for notifying the result of the verification of voltage	20 working days	84.62%	65.38%	76.92%	20.93	21.31	22.23

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Figure 101 Commercial quality of electricity: specific indicators for the Cremona area
[G4 – EU21]

Specific indicators	ARERA Level Res. 646/15	Services provided on the indicated timetable (%)			Average time to execute the service (days)		
		2018	2019	2020	2017	2019	2020
Time to prepare estimate for work on the network	15 working days for LV 30 working days for MV	98.64%	100%	100%	4.39	4.96	3.44
		81.82%	100%	100%	20.91	18.60	10
Execution time for simple work	10 working days for LV 20 working days for MV	99.45%	100%	100%	2.62	2.28	2.54
			100%	100%		0	9
Execution time for complex work	50 working days for LV 50 working days for MV	100%	100%	100%	16.50	20.64	20.47
		100%	100%	100%	10.50	22.57	1
Activation time for LV/MV supply	5 working days	99.96%	99.6%	100%	0.31	0.35	0.28
		100%	100%	100%	3	2.33	5
Supply de-activation time	5 working days for LV 7 working days for MV	99.98%	99.80%	99.02%	0.43	0.56	0.54
		100%	100%	-	6	1	-
Reactivation time following suspension due to non-payment	1 working day on zeroed 1 working day reduced 15%	99.83%	99.64%	98.18%	0.08	0.1	0.14
				100%			0
Observance of time bracket for appointments	2 hours	100%	100%	100.00%	-	-	-
Time to restore service following failure of meter equipment during business days from 8 AM to 6 PM on the LV network	3 hours	100%	100%	100%	1h and 22 min	1h and 13 min	1 h and 6 min
Time to restore service following failure of meter equipment during non-working days from 6 PM to 8 AM on the LV network	4 hours	100%	100%	100%	1h and 48 min	1h and 27 min	1 h and 23 min
Time to report results of testing of LV/MV meter equipment	15 working days	78%	100%	100%	9.67	8.38	4.25
				-			-
Time for notifying the result of the verification of voltage	20 working days	NA	NA	NA	NA	NA	NA

Figure 102 Commercial quality of electricity: general indicators for the Milan-Brescia area
[G4 – EU21]

Type of service	ARERA level - LV	Services provided on the indicated timetable (%)		
		2018	2019	2020
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	96.59%	95.40%	96.78%
Type of service	ARERA level - LV	2018	2019	2020
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	99.50%	98.86%	99.17%
Type of service	ARERA level - LV	2018	2019	2020
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	100%	100%	100%
Type of service	ARERA level - LV	2018	2019	2020
Minimum percentage of detailed responses to written complaints or requests for information provided within the maximum period of 30 calendar days	95%	na	100%	100%

Operational sustainability targets 21-30

Stakeholder engagement and materiality analysis

Financial capital

Manufacturing capital

Natural capital

Human capital

Relational capital

The Acsm Agam Group

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Figure 103 Technical quality of natural gas [G4 – EU21]

	Base level	Base level	Base Effective 2018						Base Effective 2019						Base Effective 2020					
			Milan	Brescia	Bergamo	Cremona	Lodi	Pavia	Milan	Brescia	Bergamo	Cremona	Lodi	Pavia	Milan	Brescia	Bergamo	Cremona	Lodi	Pavia
Annual percentage of the high and medium pressure network inspected	30%	90%	75%	100%	100%	100%	100%	100%	72%	0%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%
Annual percentage of the low pressure network inspected	20%	70%	65%	70%	100%	100%	100%	100%	56%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Annual number of leaks located per km of network inspected	0.8	0.1	0.15	0.08	0.06	0.01	0.03	0.05	0.22	0.12	0.04	0.04	0.02	0.03	0.08	0.10	0.01	0.00	-	0.01
Annual number of leaks located in response to reports from third parties per km of network	0.8	0.1	0.17	0.05	0.03	0.03	0.01	0.02	0.17	0.08	0.02	0.03	0.01	0.02	0.15	0.07	0.01	0.02	0.01	0.02
Conventional number of measurements of degree of natural gas odorant per thousand end customers	0.19	0.5	0.95	1.81	2.23	1.70	1.80	1.10	0.95	1.73	1.88	1.70	1.80	1.10	0.96	1.85	1.41	1.70	1.80	1.10

Operational sustainability targets 21-30

Stakeholder engagement and materiality analysis

Figure 104 Gas emergency service [G4 – EU21]

	2018	2019	2020
Annual number of calls to the switchboard with a time to arrival of the team at destination <= 60 min			
Milan	98.65%	98.37%	99.68%
Brescia	99.90%	100.00%	96.14%
Bergamo	100.00%	100.00%	100.00%
Cremona	99.60%	99.90%	99.90%
Lodi	100.00%	100.00%	100.00%
Pavia	100.00%	100.00%	99.80%

Figure 105 Gas commercial quality: general indicators [G4 – EU21]

Services provided on the indicated timetable (%)	ARERA level	UNARETI			LD RETI			ASVT		
		2018	2019	2020	2018	2019	2020	2017	2019	2020
Percentage of requests to perform complicated jobs which were completed within a maximum of 60 working days	90%	97.69%	98.71%	98.61%	100.00%	98.00%	98.00%	na	100.00%	100.00%
Percentage of justified replies to written claims or information requests communicated within a maximum of 30 working days	95%	97.37%	97.54%	98.64%	100.00%	98.00%	92.00%	100.00%	100.00%	100.00%

Figure 106 Gas commercial quality: specific indicators: Milan, Brescia, Bergamo and Chieti Area [G4 – EU21]

Type of service	ARERA levels Res. 574/13 of 01/01/2014	UNARETI			LD RETI		
		2018	2019	2020	2018	2019	2020
Estimate time (simple work)	15 working days	93.96%	94.07%	98.92%	9.37	8.46	4.68
Execution time (simple work)	10 working days	80.41%	96.37%	96.58%	8.34	6.84	6.85
Estimating time (complex works)	30 working days	96.39%	95.70%	95.28%	14.89	13.77	12.03
Supply activation time	10 working days	99.88%	99.84%	99.85%	3.1	3.18	3.19
Supply de-activation time	5 working days	99.58%	99.66%	98.10%	2.8	2.75	3.07
Reactivation time following suspension due to non-payment	2 working days	98.14%	98.87%	98.56%	1.15	1.12	1.11
Observance of time bracket for appointments	2 hours	99.83%	99.85%	99.80%	N/A	N/A	N/A
Time to notify results of testing of meter equipment	20 working days	77.08%	93.18%	88.06%	15.6	10.87	10.96

Financial capital

Manufacturing capital

Natural capital

Human capital

Figure 107 Gas commercial quality: specific indicators for ASVT [G4 – EU21]

Type of service	ARERA levels Res. 574/13 of 01/01/2014	UNARETI			LD RETI		
		2018	2019	2020	2018	2019	2020
Estimate time (simple work)	15 working days	100.00%	100.00%	100.00%	4.45	4.66	4.26
Execution time (simple work)	10 working days	100.00%	100.00%	100.00%	1.04	0.94	1.48
Estimating time (complex works)	30 working days	N/A	100.00%	100.00%	N/A	1.00	7.19
Supply activation time	10 working days	99.89%	99.88%	99.87%	1.74	3.00	2.95
Supply de-activation time	5 working days	100.00%	99.23%	98.67%	1.88	2.20	2.16
Reactivation time following suspension due to non-payment	2 working days	100.00%	99.61%	100.00%	0.52	0.50	0.32
Observance of time bracket for appointments	2 hours	99.74%	99.77%	99.84%	N/A	N/A	N/A
Time to notify results of testing of meter equipment	20 working days	80.00%	100.00%	75.00%	26.20	18.50	15.00

Relational capital

The Acsm Agam Group

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Figure 108 Gas commercial quality: specific indicators for LGH [G4 – EU21]

Type of service	ARERA levels Res. 574/13 of 01/01/2014	UNARETI			LD RETI		
		2018	2019	2020	2018	2019	2020
Estimate time (simple work)	15 working days	99.61%	99.00%	100.00%	4.43	4.13	3.42
Execution time (simple work)	10 working days	99.50%	97.00%	96.00%	3.14	3.67	3.67
Estimating time (complex works)	30 working days	100.00%	100.00%	100.00%	6.08	7.58	2.62
Supply activation time	10 working days	99.83%	90.00%	100.00%	3.19	3.03	2.97
Supply de-activation time	5 working days	96.85%	95.00%	97.00%	2.60	2.66	2.86
Reactivation time following suspension due to non-payment	2 working days	98.10%	95.00%	90.00%	1.23	1.27	1.26
Observance of time bracket for appointments	2 hours	99.12%	99.00%	99.00%	0.00	na	na
Time to notify results of testing of meter equipment	20 working days	59.65%	83.00%	73.00%	20.72	16.63	19.51

Integrated water service

Figure 109 Extension of the integrated water service [G4 - EU3]

	2018	2019	2020
Municipalities served by Integrated Water Service	95	95	95
Municipalities served by aqueduct service	86	86	86
Customers served aqueduct	217,781	217,545	222,451
Inhabitants of municipalities aqueduct service*	664,503	667,094	667,736
Inhabitants of municipalities sewage service	652,754	657,628	655,430
Inhabitants of municipalities treatment service*	640,967	643,385	643,673

* The 2019 figures have been updated to correct a calculation error.

Figure 110 Call center quality [GRI 102-43_44]

A2A CICLO IDRICO			
	2018	2019	2020
Service accessibility rate (free lines with respect to operator presence time)	100%	100%	100%
Number of calls to the call centre	94,205	119,803	161,221
Average telephone waiting time for calls from end customers (sec)	72	152	177
Percentage of successful calls	94.06%	87.86%	86.68%

Figure 111 Quality of the A2A Ciclo Idrico and ASVT service

data in days	A2A Ciclo Idrico			ASVT		
	2018	2019	2020	2018	2019	2020
Response time to requests for estimate for connection to the aqueduct	10.5	9.06	8.49	2.73	3.92	3.91
Response time to requests for estimate for connection to the sewers	9.64	9.72	10.55	0.85	2.27	2.35

(*) Time charged to the operator.

District heating and heat management

Figure 112 Transformations made by the heat management service*

	2018	2019	2020
Transformations (no.)	28	37	6
Capacity installed (kW)	17,400	11,015	627

* These refer to replacement of methane with methane with a condensing boiler, of methane with district heating, of diesel with methane with a condensing boiler and of diesel with district heating.

Integrated waste cycle

Figure 113 Population served by the urban sanitation service [G4 - EU3]

	2018	2019	2020
Municipalities served	215	218	223
Population served (thousands)	3,376	3,449	3,507

Operational sustainability targets 21-30

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Human capital

Relational capital

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Integrated waste cycle

Figure 114 Customer Satisfaction of the urban sanitation service carried out by AMSA (average vote)

Service	2018	2019	2020
Urban waste collection	7.74	8.31	8.3
Road and pavement cleaning and washing	7.57	7.39	7.15
Emptying of large road bins	7.32	7.46	7.33
Cleaning of market areas	7.61	8.33	8.16
Cleaning of green areas	7.52	7.3	7.12
Cleaning and collection during and after events	7.61	7.98	7.68
Cumbersome waste collection	7.88	8.83	8.89
Clarity and completeness of the communication on separate collection	7.61	8.06	7.97
Toll Free Number	7.9	8.17	8.17
Amsa counter	7.63	- *	7.36
Website	7.68	7.22	7.17
App Puliamo	8	- *	7.83
Recycling	7.78	8.5	8.43
Snow service	7.56	7.64	7.32

* The counter and app satisfaction ratings are not statistically significant due to the low number of respondents.

Figure 115 Customer Satisfaction of the urban sanitation service carried out by Aprica (average vote)

Service	2018	2019*	2020 (**)
Overall satisfaction with the service	7.84	7.69	7.95
Urban waste collection	8.29	8.14	7.95
Home collection of cumbersome waste	8.7	6.8	8.45
Vegetable oil collection	8.61	-	8.18
Ecological platform	8.67	8.68	8.27
Road and pavement cleaning	7.44	6.8	7.47
Road bins	7.62	7.09	7.61
Toll Free Number	8.55	7.97	7.55
Website	8.03	7.72	7.72
Office	8.79	8.2	8.28

* The figure includes households in Como, Brescia and Gardone (Bergamo not included because the search is from 2018).

Figure 116 Paid services: waste disposal and other specific services for individuals [G4 - EU3]

Customers served	2018	2019	2020
Amsa	9,899	5,661	4,370
Aprica	1,375	1,248	1,229
La.Bi.Co. Due	260	331	0
LGH Group	744	633	637

Figure 117 Waste disposal service [G4 - EU3]

	2018	2019	2020
Municipalities served (no.)	992	1,000	1,007
Companies served (no.)	3,150	6,406	6,407

Figure 118 Quality of the call centre

AMSA		APRICA	
Accessibility of lines and services (time when line is free vs operator presence time)	100%	Accessibility of lines and services (time when line is free vs operator presence time)	100%
Accessibility of lines and services (time when line is free vs operator presence time)	28	Average waiting time (minutes seconds)	107
Percentage of successful calls	98%	Percentage of successful calls	88%

Conciliation management

Figure 119 ADR A2A-Consumer associations conciliation procedures

2020 FIGURES ISSUES OF DISPUTES RECEIVED	ELECTRICITY	%	GAS	%	DUAL FUEL	%	TOTAL REQUESTS ELE/GAS/DUAL	%	WATER	%
Invoicing	5	56%	5	42%	1	50%	11	48%	4	100%
Market	1	11%	0	0%	0	0%	1	4%	0	0%
Contracts	0	0%	1	8%	1	50%	2	9%	0	0%
Late payment and suspension	1	11%	2	17%	0	0%	3	13%	0	0%
Size	1	11%	4	33%	0	0%	5	22%	0	0%
Damages	1	11%	0	0%	0	0%	1	4%	0	0%
General total	9	100%	12	100%	2	100%	23	1	4	1

2019 FIGURES ISSUES OF DISPUTES RECEIVED	ELECTRICITY	%	GAS	%	DUAL FUEL	%	TOTAL REQUESTS ELE/GAS/DUAL	%	WATER	%
Invoicing	14	29%	7	15%	0	0%	21	44%	1	25%
Market	0	0%	2	4%	0	0%	2	4%	0	0%
Contracts	0	0%	1	2%	1	2%	2	4%	0	0%
Late payment and suspension	0	0%	1	2%	0	0%	1	2%	0	0%
Size	7	15%	14	29%	0	0%	21	44%	3	75%
Connections, works and technical quality	1	2%	0	0%	0	0%	1	2%	0	0%
General total	22	46%	25	52%	1	2%	48	1	4	1

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Relations with suppliers

Figure 120 Number and value of orders by supply type [GRI 204-1]

Type	2018		2019		2020	
	No. orders	Amount (€)	No. orders	Amount (€)	No. orders	Amount (€)
Supplies	7,058	350,425,198	2,381	299,853,423	3,355	550,916,448
Works	2,233	489,485,553	1,922	341,424,019	1,641	535,916,303
Services	7,062	484,878,866	4,318	477,256,457	5,486	542,210,382
A2A Group orders	16,353	1,324,789,616	8,621	111,839,354	10,482	1,629,043,132
LGH orders	3,767	150,408,338	2,650	114,846,305	2,060	101,910,000

* There are also other types of orders for A2A only (Delocalized, Direct, Decentralized, OIA/CIA) for which 4,413 documents were issued for a total value of 137,498,477 euro.

Figure 121 Geographic breakdown of orders [GRI 204-1]

% ordered	2018	2019	2020
Lombardy	62.7%	59.6%	66.9%
Other regions of Italy	28.9%	36.5%	30.7%
EU	7.5%	3.4%	1.8%
Non EU	0.9%	0.4%	0.6%

Figure 122 Suppliers with at least one A2A Group certification

	2018	2019	2020
Total suppliers with at least one certification	2,306	2,767	3,018
of which activated with order	1,144	1,092	1,113
Value of orders issued on total orders	82%	83%	80%

Figure 123 Validated suppliers, by type

A2A Group qualified suppliers	2018	2019	2020
Large business (more than 250 employees)	317	295	335
Medium business (50-250 employees)	729	770	911
Small business (10-50 employees)	1,641	1,572	1,796
Micro business (1-10 employees)	1,523	1,382	1,542
NA	362	210	299
Total	4,572	4,229	4,883

DISPUTE MANAGEMENT

Employees

A total of 86 labour disputes were in progress or concluded in 2020 involving employees of A2A Group companies (excluding AMSA and including the LGH group), of which 7 concerned the assessment of the illegitimacy of dismissals for just cause or dismissals for justified subjective reason, 1 concerned the assessment of the illegitimate exclusion of the claimant from the business unit disposed of to one of the companies of the A2A Group with the consequent right to the establishment of an employment relationship subordinate to the latter company from the date of disposal of the business unit. In addition, 26 claimants requested for payment of salary differences other than requests for a higher level of classification, 14 claimants applied for a finding that the sale of the business unit was unlawful, with the result that it was reinstated in the transferor company, while 8 claimants applied for a finding that they were entitled to a higher level of classification and order to pay the relevant differences in remuneration. Then there were 4 claimants who took legal action to request compensation for the damage caused by the demotion of which 1 also requested a finding that the measure of secondment ordered against the latter was unlawful. In addition, in 2020, 2 cases were pending concerning the determination of the entitlement to compensation for damages arising from occupational illness or accident. The remaining causes concerned various requests (such as appeals of conservative disciplinary proceedings).

With regard to AMSA, there were a total of 90 labour disputes in progress or concluded in 2020, of which 9 concerned the assessment of the illegitimacy of dismissals for just cause or justified subjective reason and 5 concerned the assessment of the illegitimacy of dismissals for exceeding the period of conduct. In addition, 18 claimants challenged the fixed-term contracts and 5 fixed-term workers required the verification of the violation of the preferential right by the employer company in the subsequent permanent recruitments, 12 requested a determination of the right to recognition of the higher classification and an order for payment of the relevant salary differences, 10 a determination of fictitious interposition of labour and determination of the right to the establishment of an employment relationship and 7 a determination of the unlawfulness of the transfer of a business unit. The remaining cases concerned various requests, such as requests for payment of salary differences other than requests for a higher level of classification and appeals of conservative disciplinary proceedings.

Suppliers

There were 17 labour disputes in progress or concluded in 2020 initiated by workers of contracting firms that worked on contracts awarded by A2A Group companies (excluding AMSA and including the LGH Group). There were 3 proceedings for compensation for damages resulting from occupational diseases or injuries allegedly contracted during the contract work while 1 claimant took legal action to obtain compensation for various damages.

Moreover, 1 claimant claimed the ascertainment of the right to the establishment of a subordinate contract of employment with the customer company and 12 claimants summonsed the contractor, their employer, to court as well as the A2A Group/LGH company as customer, so as to obtain, by virtue of the joint liability pursuant to Art. 29 of Italian Legislative Decree 276/2003 and Art. 1676 of the Italian Civil Code, their sentencing to pay the salary differences claimed or remaining salaries.

As far as Amsa is concerned, during 2020, 8 workers took legal action so that the contracting company and AMSA - the latter jointly and severally liable pursuant to Art. 29 Legislative Decree 276/2003 and Art. 1676 of the Italian Civil Code in as customer - were sentenced to the payment of the salary differences claimed by the same.

Non-compliance with environmental regulations [GRI 307-1]

During 2020, 24 environmental proceedings were in progress or concluded; of these, 5 proceedings were closed, 11 are new proceedings (of which five were closed during the year) and 13 were already in progress (11 relating to LGH S.p.A. group companies); these proceedings are related to: (i) allegations of violations of provisions contained in the respective Integrated Environmental Authorizations (A.I.A.), (ii) certain alleged irregularities in waste management and (iii) alleged non-compliance with other legal or regulatory requirements.

With regard to the 5 proceedings, closed in 2020:

- Following a joint inspection visit to the Coccaglio plant by the ATS, ARPA, Forestry and Fire Brigade, the plant manager was charged with a number of violations of A.I.A. regulations; the latter was then admitted to pay the administrative fee and the violations were cancelled;
- The manager of the Cava Verde landfill in Montichiari, who had been charged by ARPA with failure to comply with certain environmental regulations, has been admitted to pay the administrative fee;
- In relation to a hypothesis of irregularity contested to the manager of the Rodengo Saiano

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plant concerning wood biomass, which according to ARPA did not fully have the characteristics of virgin biomass, the payment of a fine was ordered that was made with the consequent administrative settlement of the fine and closure of the proceedings.

- The NOE of Brescia challenged non-compliance with environmental regulations in relation to the ecological island in Paratico and, in another case, for an ecological platform in Cremona. In both cases, the fines were closed following payment of an administrative fee and the related dismissal.

Customers [GRI 206-1]

2020 ended with 64 open legal proceedings relating to billing disputes, due to the application of excise duties on electricity (2010/2011 years) and gas supplies, incorrect detection of consumption due to malfunctioning of the meters, incorrect configuration of the available power of the electricity supply, incorrect termination of supply and, more generally, the failure and/or incorrect detection of consumption of electricity, gas and/or water service. There was also 1 ongoing case involving damages claimed due to delays in the activation of supply.

Finally, a dispute continued in 2020 with a customer of AMSA, A2A Ambiente and Aprica, which is claiming contractual termination for excessive costs incurred.

In 2020, a dispute continued against Linea Più (now AEN) for the payment to a user of the costs incurred by the latter for the restoration of gas supply.

Community [G4 - EU25]

At end 2020, there were 87 cases in which citizens requested compensation, for the most part of fairly small value, for financial damages or damages to property or things, while there were 38 cases seeking compensation for physical damages in respect of personal injuries; these include 1 relating to a fatal road accident involving a Group company (an operative vehicle cleaning a cycle path).

Finally, 5 cases of alleged infringements of property rights and 1 case of alleged damage to neighbouring crops from previous years are pending.

The Acsm Agam Group

Group Profile

The Acsm Agam Group includes 11 companies and is divided into 4 *Business Units* (BUs):

- Networks BU includes the companies that deal with:
 - water service and gas distribution for the provinces of Monza, Como and Varese;
 - only gas distribution in the provinces of Lecco and in Veneto;
 - gas and electricity distribution in the province of Sondrio.
- Environment BU deals with waste collection activities (in the province of Varese and Como) and waste-to-energy (Como);
- Sales BU to which the Group companies operating in the sale of natural gas and electricity refer;
- Energy and Smart Technologies BU oversees the activities of energy efficiency, electricity generation, heat management, new innovative and smart city services, public lighting and district heating.

AENV Farmacie s.r.l., which operates three pharmacies in the city of Sondrio, should also be added to these BUs.

The merger by incorporation of Lario Reti Gas into AARGA S.p.A. took effect from January 1, 2020, and on the same date, the company changed its name to Lereti.

As of January 1, 2020, the effects of the merger by incorporation of Enerxenia into Acel Energie S.r.l. became effective.

Governance

The Company is listed on the Italian stock exchange in Milan and has adopted, since 2016, the Corporate Governance Code promoted by Borsa Italiana. The company's Corporate Governance structure is based on the traditional organizational model. Currently, all Group companies adopt their own Organization, Management and Control Models in accordance with Italian Legislative Decree 231/2001 (MOG), covering 100% of the Group's employees.

In addition to the control instruments provided for in the Legislative Decree, 231/2001, the Company has adopted a Code of Ethics, which also contains the main elements of its human rights policy: In 2020, there were no cases of corruption and no cases of corruption are pending.

The Group companies are monitored with regards to risks connected with corruption. In accordance with the provisions of the Company's Code of Ethics, the Group does not allow active or passive corruption or collusion of any nature or form. In 2020, there were no cases of corruption and no cases of corruption are pending.

Moreover, the company policy does not provide for the payment of contributions of any kind to parties or politicians.

During 2020, the integration of the mapping of the main non-financial risks into the Enterprise Risk Management system was started. Please refer to the Group's NFD for further details.

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Economic value generated and distributed

Figure 124 Statement of distribution of gross global value added - millions of euro

	2019	2020
Remuneration of personnel	55.11	54.52
Remuneration of risk capital	14.70	16.41
Remuneration of borrowed capital	0.65	0.93
Transfers to the government	9.17	10.83
Transfers to the local community	3.20	2.47
REMUNERATION OF THE COMPANY	301.44	310.22
GROSS GLOBAL VALUE ADDED	384.27	395.38

Figure 125 Capex - Percentage of Total (%)

	2020
Group infrastructure investments (M€)	73.2
Networks BU	46%
Energy BU	23%
Environment BU	9%
Sales BU	3%
Corporate	19%

Efficient infrastructure management

Figure 126 Installed capacity

INSTALLED CAPACITY	2018	2019	2020
Electricity (MW _e)	45	46	48
Thermal (MW _t)	245	245	250

Figure 127 Energy production

ENERGY PRODUCTION	2018	2019	2020
Electricity (GWh _e)	149	149	78
Thermal (GWh _t)	300	301	286

Figure 128 Distribution of natural gas

Distribution of natural gas	2018	2019	2020
Natural gas distributed (Mm ³)	621	610	591
Gas network extension (km)	3,247	3,258	3,277

Figure 129 Electricity Distribution

Electricity distribution	2018	2019	2020
Electricity distributed (GWh)	161	161	153
Electricity losses in the grid (GWh)	4	4	4
Extension of the electricity distribution service (km)	556	560	570
of which underground cable (km)	427	403	413

Figure 130 Heating energy released to the network

Heating energy released to the network	2018	2019	2020
Heating energy distributed (GWh)	191	197	195

Figure 131 Integrated water service

Integrated water service	2018	2019	2020
Wells (no.)	96	98	97
Springs (no.)	168	189	189
Drinking water plants (no.)	18	18	20
Total network length (km)	1,659	1,694	1,695
Water delivered to the user and booked (Mm ³)	28	28	29
Water extracted (Mm ³)	43	44	43
Network losses and water not booked (Mm ³)	15	16	15

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Figure 132 Municipal waste collected

Urban waste collected	2018		2019		2020	
	Tonnes of waste	% differentiated collection	Tonnes of waste	% differentiated collection	Tonnes of waste	% differentiated collection
Province of Varese	31,265.00	81%	78,272.48	75.56%	78,192.58	75%
of which Municipality of Varese	40,207.00	69%	40,109.92	69.9%	38,396.23	71%
Province of Como	4,568.00	75%	4,533.62	72.1%	5,825.04	72%
TOTAL	76,040.00	75%	82,806.10	74%	84,017.62	74%

Environmental responsibility

Figure 133 Water withdrawal* - (thousands of m³)

Source of withdrawal	2019	2020
Surface water	21,212	20,773
- of which in water stressed areas	0	0
Groundwater	21,643	20,311
- of which in water stressed areas	0	0
Third-party water	926	1,098
- of which in water stressed areas	0	0
Total volume of water withdrawn	43,780	42,182

* Salt/sea water is defined as marine or salt water with a concentration of dissolved solids (measured as sodium chloride) >1,000 mg/l.

Figure 134 Water Discharge* - (Thousand m³)

Destination of discharges	2019	2020
Surface water	0	20
- of which in water stressed areas	0	0
Third-party water	806	784
- of which in water stressed areas	0	0
Total volume of water discharged	806	804
Public water supplied to water service users (Mm³)	28	29

* Salt/sea water is defined as marine or salt water with a concentration of dissolved solids (measured as sodium chloride) >1,000 mg/l.

Figure 135 Resources used

Resources used	2018	2019	2020
Fuel (GJ)	1,986	1,663	1,990
Automotive fuels (GJ)	2,188	43	44
Electricity (GWh)	46	44	42
Chemical products and materials used (t)	6,269	3,797	7,597

Figure 136 Emission of greenhouse gases - t

	2018	2019	2020
Direct emissions (Scope 1)	144,359	117,116	162,862
Indirect emissions (Scope 2) - Location Based *	14,632	15,793	13,442
Indirect emissions (Scope 2) - Market based **	18,729	21,261	20,520

* See notes on page 35.

** See notes on page 35.

Figure 137 Pollutant emissions

	2018	2019	2020
Nitrogen oxides (NO _x) (t)	82	66	76
Sulphur oxides (SO _x) (t)	0.6	0.3	0.4
Powders (t)	0.1	0.1	0.2
CO (t)	22	25	28
Fluorinated gases kg	13	19	27

Figure 138 Total waste generated

	2018	2019	2020
Non-hazardous waste (t)	17,475.44	12,971.56	19,282.41
Hazardous waste (t)	2,232.90	1,726.66	2,827.76
Total (t)	19,708.33	14,698.22	22,110.17
Sent for recovery (% of total)	93%	93%	89%

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Responsible management of people

Figure 139 Breakdown of employees and collaborators by gender

No. people	2018			2019			2020		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Employees									
Permanent	627	219	846	663	233	896	645	228	873
Temporary Contract	14	5	19	6		6	4	1	5
Total	641	224	865	669	233	902	649	229	878
of which with part-time contract	5	46	51	5	42	47	4	42	46
Collaborators	39	19	58	26	12	38	na	na	42

Figure 140 New hires, outgoing and turnover rate

New hires, outgoing, Turnover	2018	2019	2020
Hires	36	88	52
Outgoing	30	51	76
Turnover* %	4%	6%	9%

* The turnover rate was calculated according to the following formula: (outgoing) / (employees) at December 31.

Figure 141 Percentage of workers represented in formal health and safety committees

	2018	2019	2020
%	100%	100%	100%

Figure 1432 Accidents at work

	2018	2019	2020
Decease	0	0	0
Accidents at work	26	38*	27
of which with severe consequences	na	na	2
Rate of recordable accidents at work	na	26.61	18.59
Rate of severe accidents at work	na	na	1.38

The figure presented in the Acsm Agam Group 2019 Sustainability Report has been restated following the exclusion from the calculation of four accidents, the files of which had been closed and subsequently reopened during 2020.

Figure 143 Breakdown of employees by professional category, gender and age group

ITALY	2018					2019					2020				
	Managers	Supervisors	White-collar workers	Blue-collar workers	TOTAL	Managers	Supervisors	White-collar workers	Blue-collar workers	TOTAL	Managers	Supervisors	White-collar workers	Blue-collar workers	TOTAL
Men	20	36	218	366	641	21	40	217	391	669	17	39	218	375	649
Women	2	14	208	1	224	2	13	217	1	233	1	17	210	1	229
Total	22	50	426	367	865	23	53	434	392	902	18	56	428	376	878
<30	-	1	35	23	59	0	0	35	32	67	0	0	17	21	38
30-50	7	27	252	168	454	7	33	247	180	467	8	33	263	180	484
>50	15	22	139	176	352	16	20	152	180	368	10	23	148	175	356
Total	22	50	426	367	865	23	53	434	392	902	18	56	428	376	878

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Figure 144 Company population is covered by collective bargaining

	2018	2019	2020
%	100%	100%	100%

Figure 145 Training hours provided by gender

	2019		2020	
	Number of hours	Average annual hours of training per employee	Number of hours	Average annual hours of training per employee
Men	8,145.00	12.17	7,484	11.53
Women	2,014.00	8.64	3,302	14.42

Figure 146 Hours of training broken down by professional category

	2019		2020	
	Number of hours	Average annual hours of training per employee ⁴	Number of hours	Average annual hours of training per employee ⁵
Managers	517.25	22.49	518	28.77
Supervisors	1,095.00	20.66	2,136	38.14
White-collar workers	4,405.50	10.15	6,234	14.56
Blue-collar workers	4,141.25	10.56	1,898	5.05

⁴ The average number of hours per capita was calculated on the total number of employees in the Group's workforce.

⁵ The average number of hours per capita was calculated on the total number of employees in the Group's workforce.

Relations with shareholders

Figure 147 Customer relations

Number of PDRs and municipalities served by the gas distribution service	2018	2019	2020
PDR	314,066	314,210	313,458
Municipalities served	88	88	88
Number of users and municipalities served by the electricity distribution service	2018	2019	2020
POD	25,757	25,809	25,779
Municipalities served	4	4	4
Number of users and municipalities served by the municipal sanitation service	2018	2019	2020
Users	154,858	185,140	196,500
Municipalities served	19	30	42
Municipalities and customers served by the water service	2018	2019	2020
Municipalities served by aqueduct service	37	37	37
Customers served aqueduct	83,178	83,613	85,214
Inhabitants served by aqueduct	312,958	312,958	314,775
Users connected to the district heating service	2018	2019	2020
Users	623	629	633
Contracts by type of gas sales service provision	2018	2019	2020
Protected market	165,184	142,503	121,481
Free market	101,094	111,711	125,179
Total	266,278	254,214	246,660
Volumes sold (Mm ³)	na	466	431
Contracts by type of electricity sales service provision	2018	2019	2020
Protected market	18,196	16,229	14,814
Free market	42,791	55,137	69,988
Total	60,987	71,366	84,802
Volumes sold (GWh)	na	379	369

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Supply Chain

The Group adopts a register of suppliers (divided into product categories) whose qualification criteria do not constitute barriers to entry. Each selection procedure must be carried out in accordance with the widest possible conditions of competition. There are no evaluations of suppliers, who intend to qualify, on environmental or social issues. Almost all orders are from Italian suppliers, of which over 75% are based in Lombardy. In addition, 1,179 suppliers were activated with at least one order as at December 31, 2019, all in the Group's register of suppliers.

Figure 148 Number of Group orders by type

Orders	2018		2019		2020	
	No.	€	No.	€	No.	€
Supplies	863	19,258,619	1,031	25,965,199	1,068	29,088,825
Works	164	17,553,382	181	24,473,247	152	40,072,364
Services	1,078	23,930,446	1,366	49,987,597	1,354	63,433,462
Sponsorships	96	270,049	56	291,455	75	444,537
Other	12	272,923	36	456,866	-	-
Total	2,213	61,285,419	2,671	101,174,364	2,649	133,039,188

Disputes

No disputes have arisen with Group customers (with the exception of those relating to debt collection in which the company is a claimant), either for non-compliance linked to impacts on consumer health and safety or for supply services and related marketing activities.

There are no legal actions for recourse due to sanctions by the AGCM for causes related to anti-competitive conduct or unfair market practices.

With respect to the management of *privacy*, in 2020, the Group did not record evidence of theft of information on customer data, or complaints from private individuals or institutions regarding possible violations.

The AEB Group

Group Profile

The AEB Group represents an industrial company rooted in the social and economic fabric of Brianza and has been operating since 1910 in the public utility services sector. The Group consists of AEB SpA (the parent company) and the four companies involved in the main *businesses*:

- **Gelsia** deals with the sale of methane gas and electricity, the construction of cogeneration plants, district heating networks, building heat management and photovoltaic systems;
- **Retipiù**, a company that distributes methane gas and electricity, and is active in the public lighting sector and *smart cities* services;
- **Gelsia Ambiente** is the Group company that manages environmental hygiene services.

On November 1, 2020, AEB A2A entered the share capital of AEB with a 34% share against a contribution in terms of gas distribution *assets* and the entire shareholding in the company **A2A to Public Lighting**, which serves more than 2.2 million inhabitants on the national territory.

Governance

The Group has a Code of Ethics that aims to ensure that the activities of each Group company are inspired by the principles of fairness, transparency, diligence, honesty, loyalty, sustainability, efficiency and legality and presupposes compliance with the applicable legal and administrative provisions in force and observance of company regulations and procedures. The purpose of the Code is therefore to provide general ethical-behavioural guidelines to be complied with in the performance of activities and to help prevent the commission of offences connected with the crimes referred to in Legislative Decree no. 231/01 (hereinafter also referred to as the "Decree").

In 2020, there were no cases of corruption and no cases of corruption are pending. Moreover, the company policy does not provide for the payment of contributions of any kind to parties or politicians.

Economic value generated and distributed

Figure 149 Investments by business unit

Group infrastructure investments (M€)	32.2
Corporate BU	4.3%
Market BU	24.5%
Environment BU	14.6%
Networks & District Heating BU	56.6%
Total	100.0%

Figure 150 Installed capacity

2020	
Electricity (MW _e)	10
Thermal (MW _t)	150

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Figure 151 Energy production

	2020
Electricity (GWh _e)	14
Thermal (GWh _t)	64

Figure 152 Natural gas distribution

	2020
Natural gas distributed (Mm ³)	346
Gas distribution network extension (km)	2,849

Figure 153 Electricity distribution

	2020
Electricity distributed (GWh)	130,794
Electricity losses in the grid (GWh)	4,709
Extension of the electricity distribution service (km)	252

Figure 154 Heating energy released to the network

	2020
Heating energy distributed (GWh)	68
District heating network extension* (km)	16

* The network is intended as the sum of heat transmission, distribution and supply pipes.

Figure 155 Heating energy released to the network

	2020
Gelsia Ambiente	
	Tonnes of waste % differentiated collection
Province of Monza and Brianza	184,111 80.6%

* The reporting standard used (GRI Sustainability Reporting Standards 2018) provides two different approaches for calculating Scope 2 emissions: Location-based and market-based. The location-based approach involves the use of a national average emission factor related to the specific national energy mix for power generation (source of emission factors: TERNA, International Comparisons, 2017).

** The market-based approach involves the use of an emission factor defined on a contractual basis with the electricity supplier. Given the absence of specific contractual agreements between the Group companies and the electricity supplier (e.g. purchase of Guarantee of Origin certificates), the emission factor relating to the national "residual mix" (source of the AIB European Residual Mixes 2017 (Version 1.13, 2018-07-11)) was used for this approach.

Environmental responsibility

Figure 156 Resources used

	2020
Resources used	
Fuel (TJ)	340
Automotive fuels (TJ)	52
Electricity (GWh)	5
Chemical products and materials used (t)	50

Figure 157 Emission of greenhouse gases (t)

	2020
Direct emissions (Scope 1)	20,412
Indirect Emissions(Scope 2) - Location Based*	1,310
Indirect emissions(Scope 2) - Market based**	2,145

* See notes on page 35.

** See notes on page 35.

Figure 1598 Special waste produced (t)

	2020
Non-hazardous waste	164
Hazardous waste	41
Total	205

Responsible management of people

Figure 159 Breakdown of employees and collaborators by gender

	2020		
	Men	Women	Total
Employees			
Permanent	497	126	614
Temporary Contract	8	1	9
Total	505	127	623
of which with part-time contract	3	30	33
Workers with non-standard contracts* (temporary/ interns/collaborators)	48	13	61

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Figure 160 New hires, outgoing and turnover rate

	2020
Hires	30
Outgoing	72
Turnover	11%

Figure 161 Injuries to employees by gender and days lost

	2020			
	AEB	GELSIA	GELSIA AMBIENTE	RETI più
Number of deaths	0	0	0	0
No. accidents at work	1	0	24	1
Men			24	1
Women	1	0	0	0
Accidents with severe consequences	0	0	0	0
Frequency index FI	8.1	0	5.38	5.38
Severity index SI	0.28	0	0.04	0.04
Incidence index II	0	0	2.52	7.58
Commuting accidents	0	0	1	1

Figure 162 Breakdown of employees by professional category and gender

No. people	2020				
	Managers	Supervisors	White-collar workers	Blue-collar workers	Total
Men	6	26	99	366	497
Women	1	7	112	6	126
Total	7	33	211	372	623

Figure 163 Company population is covered by collective bargaining

	2020
%	100%

Figure 161 Training hours provided by gender

2020	No. employees trained	Shareholdings	Number of hours	Average annual hours of training per employee
Men	434	903	5,089	10.08
Women	83	194	1,041	8.20

Figure 165 Hours of training broken down by professional category

2020	No. employees trained	Shareholdings	Number of hours	Average annual hours of training per employee ⁶
Managers	6	23	229.5	32.8
Supervisors	33	84	323.5	9.8
White-collar workers	121	288	1,588	7.5
Blue-collar workers	357	702	3,989	10.5

Relations with shareholders

Figure 166 Customer relations

Number of PDRs and municipalities served by the gas distribution service		2020
PDR		285,995
Municipalities served		97
Number of users and municipalities served by the electricity distribution service		
POD		26,048
Municipalities served		1
Number of users and municipalities served by the municipal sanitation service		
Users		414,229
Municipalities served		26
Users connected to the district heating service		
Users		530
Public lighting (net of A2A Public Lighting points)		
Light points		7,059
Gas sales service (number of contracts)		
Protected market		73,910
Free market		63,805
Total		137,715
Total gas sales (Mm ³)		260
Electricity sales service (number of contracts)		
Protected market		8,409
Free market		55,509
Total		63,918
Total sales of electricity (GWh)		488

⁶ The average number of hours per capita was calculated on the total number of employees in the Group's workforce.

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Supply Chain

The Group adopts a register of suppliers (divided into product categories) whose qualification criteria do not constitute barriers to entry. There are no evaluations of suppliers, who intend to qualify, on environmental or social issues. The geographical origin of orders could not be identified. In addition, 786 suppliers were activated with at least one order as at December 31, 2020, all in the Group's register of suppliers.

Figure 167 Number of Group orders by type

2020		
Orders	No.	€
Supplies	597	14,865,823
Works	137	5,267,474
Services	1,335	29,864,027
Total	2,069	49,997,324

Disputes

At the end of 2020, Gelsia Ambiente S.r.l., in relation to the management of an ecological platform owned by the municipality, received a warning from ATO MB for discharging first rain water into the public sewerage system in violation of the requirements contained in the single authorization. Gelsia Ambiente requested a hearing from the ATO. The Authority granted the hearing, which was held on 12/21/2020. Developments are awaited. The company had already scheduled the necessary work but was awaiting permission from the owner.

In February 2017, Gelsia S.r.l. filed an appeal with the Lazio Regional Administrative Court against a penalty imposed on it by the AGCM for alleged unfair commercial practice. The lawsuit is still pending, pending the scheduling of a hearing for arguments. In the meantime, the company paid the penalty subject to repetition.

At December 31, 2020, there were six disputes with employees, including five at Gelsia Ambiente (four judicial and one out-of-court) and one at RetiPiù S.r.l. (out-of-court).

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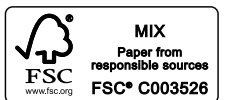
We would like to thank all our colleagues of A2A who worked on the preparation of this Report.

Graphic design and layout:

SERVICEPLAN
MERCURIO GP

Printing:

AGEMA S.p.A.



Milan, April 2021

