

SUSTAINABILITY IN EVERYTHING WE DO!



SALMAR
Passion for Salmon



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SalMar's corporate culture is constantly evolving, and builds on the success factors that have been cultivated within the company since its inception in 1991. Although the company's culture is affected by both external and internal framework conditions, it remains firmly anchored in a few overarching principles, in particular a strong focus on good husbandry, operational efficiency and safe food production.

SalMar is one of the world's largest producers of farmed salmon, and the world's largest producer of farmed organic salmon. The company aims to be the lowest-cost producer of salmon. This goal can be achieved only through sustainable biological production. SalMar's vision is: "Passion for Salmon".

Over several years of work and refinement, SalMar has arrived at the following tenets, which reflect its corporate culture, values and attitudes:

- **What we do today we do better than yesterday**
- **The job is not done until the person you are doing it for is satisfied**
- **Focus on the solution**
- **The job we do today is vital to the success of all**
- **We care!**
- **Sustainability in everything we do**

SCOPE OF THE REPORT

The report covers those Norwegian companies in which SalMar's shareholding and operational liability exceeded 50 per cent in 2016. This is the third report which focuses exclusively on the environment and corporate social responsibility. In addition, SalMar publishes a comprehensive annual report.

The report has been prepared on the basis of the principles required by GRI (Global Reporting Initiative). On the last page, you will find an thematic overview of the GRI index and our reporting related to this. Any questions relating to this edition should be addressed to Sustainability and Nutrition Manager Merete G. Sandberg or IRO Runar Sivertsen.

SalMar's tenets run like a red thread through this report, and create a framework for its disposition. Each chapter is introduced by a brief text linking its contents to one of the company's tenets.

1. Passion for Salmon



2. The CEO's address



For SalMar, 2016 was a very good year. Profits rose to a level never previously achieved, driven by very high salmon prices in an unprecedented strong market. Substantial value was created for shareholders, employees and society. At the same time, the year was full of contrasts and unpredictable turns. While the strong market and record high profits coloured the company's external image, internally the organisation was working intensively to handle considerable fish health challenges as well as to take important steps to prepare the company for the future. It is therefore with great satisfaction we now have embarked upon a new year, strengthened in our conviction that these efforts has made the company better equipped than ever take on future opportunities and challenges.

In the financial year covered by this report, SalMar's financial value creation reached a level never previously achieved. The Group generated gross operating revenues of NOK 9,030 million, made an Operational EBIT of NOK 2,432 million and a net profit of NOK 2,651 million. The exceptionally high earnings in 2016 follow several years of very strong profitability, and demonstrate the financial potential that SalMar has after many years of expansion and positioning as one of the leading companies in the international salmon farming industry.

Rising production costs – the trend must be reversed

The rising production cost experienced in recent years continued in 2016. This is a trend we are very dissatisfied not to have been able to reverse.

SalMar has been recognised as the most cost-effective publicly listed aquaculture company. This recognition has been achieved because we always have been able to work on our production costs and operate efficiently. This is an ability and a position we are determined to maintain. In today's situation, this place a particular demand on those of us who manage the company. We must be able to separate good performance on the production and cost side from margins and profitability created by chance and circumstances that inflict on us from the outside. In 2017 our firm target is to reverse the rise in production costs.

Biological challenges – the future depends on sustainable solutions

At the same time as 2016 has been characterised by profit-

ability, the year has been very challenging on the biological side. The contrasts have been considerable. The biological challenges have particularly been hitting us in our Central Norway segment, where we had to deal with a significant outbreak of ISA as well as a very demanding salmon lice situation throughout the summer and autumn.

SalMar has a highly skilled and very experienced operational organisation. Through the continuous acquisition of new expertise, this organisation has developed considerable competence in the handling of various biological challenges. Such challenges have been, and will always be, part of the reality of fish farming. However, the size and intensity of the challenges that we encountered during a few hectic months in the summer of 2016 put the organisation to a severe test. In hindsight, we can record that both the ISA outbreak and the lice situation were handled very well given the prevailing circumstances. The difficulties were resolved by the entire organisation. The whole enterprise, both on land and at sea, came together to optimise the solution to a demanding situation. I would like to take this opportunity to express my gratitude for the sacrifices and hard work that the organisation did put in during the past year to optimise the company's operations and take care of and optimize value in all areas.

For years, the struggle to combat salmon lice has been the industry's biggest challenge. Like in many previous years, huge resources and efforts were devoted in 2016 to find means that could bring the sector closer to a solution. Like many others, I am of the opinion that there is no single solution to this challenge. What will ultimately succeed is a combination of different means, in which technology, biology, production processes and production paradigms all play a contributing role. Eventually such a multi-faceted approach will enable the sector to operate with no unfortunate impacts from or on salmon lice.

Like many other companies, SalMar made significant changes in the way it dealt with salmon lice in 2016. The change involved a transition away from using medicinal delousing methods, to the application of non-medicinal methods (NMM). The majority of non-medicinal methods are still at the early stages of development, with clear elements of R&D. The outcomes and consequences we have seen through the year, including high mortality, must be seen in this perspective. *The experience and new response capabilities on NMM*

we have built through 2016 should make us better equipped to handle challenges with salmon lice in the coming years. The general transition to non-medicinal methods that we saw in 2016 also represents a shift towards more sustainable solutions to the challenges posed by lice. For everyone, such a move should be welcomed.

Investments in the future – SalMar in front

SalMar has always been known as a company that breaks new ground in the development of modern salmon farming. This is a tradition that will be continued and reinforced in the years ahead.

The solutions to the challenges confronting the industry will increasingly prove difficult to find in the traditional toolbox that the industry has used until now. The aquaculture sector has arrived at a point where the application of innovation and out-of-the-box thinking is a condition for further development and growth. Crucial to the success of such innovation is the ability to connect the knowledge and experience we have today with new technologies and production patterns in a way that they together, can shape tomorrow's fish farming industry. When developing new solutions the requirement for sustainability is an important part of the criteria which takes us continuing steps further.

In 2016, SalMar has been engaged in two major investment projects which will help to take the company into the future. One of these projects is a forward-looking investment in modern technology for the production of smolt. In 2017, we will complete construction of a new hatchery in Senja, with the capacity to produce up to 20 million smolt. In Follafooss, a new extension will bring capacity at the facility to 20 million smolt. In total we are investing NOK 800 million in these two sites. In a first phase, our objective for the facilities is to secure control of our own production of high-quality smolt. Later, these investments will form the basis for further progress in production of larger smolt and smolt of varying sizes which, will enable a further optimisation and streamlining of today's already efficient production paradigm.

Aquaculture Stewardship Council – standard (ASC)

The ASC standard is characterized as the strictest sustainability standard for salmon farming. Throughout the year we have proceeded our work with certification of our localities and received eleven new site certificates. SalMar has by the end of 2016 a total of 18 fish farms ASC-certified, and is waiting to receive one more in the beginning of 2017.

The standard sets very strict requirements, in some cases more stringent than Norwegian legislation, terms including environmental impact, safety, communication with stakeholders, to transparency and more. This standard is difficult to achieve because it requires considerable resources in preparation and attention to detail. Transparency about results is important and further information can be found continuously on our website. This standard helps SalMar to go even further in order to live up to one of our postulates – Sustainability in everything we do.

Ocean Farming – in 2017 we take the salmon to the ocean Throughout 2016, SalMar's subsidiary Ocean Farming has

been working on the construction of the first prototype of SalMar's Ocean Farm. The construction project is now getting close to completion. Our vision, that SalMar will be the company which takes the salmon to the ocean, is about to be realised.

The Ocean Farm is scheduled to be completed and operational so that the first fish can be transferred to the installation in the early autumn of 2017. The facility underpins SalMar's drive and determination to lead the way in technologies for sustainable seafood production. The Ocean Farm is ground-breaking in this respect.

Although the conclusion of the construction project is a significant milestone for SalMar, it really represents just the first step in the long-term effort to develop Ocean Farming. *In many ways, it is now that the work actually begins, with the systematic accumulation of knowledge and adaptation of the technology to the physical elements as well as to the salmon on the salmon's terms in its own natural element.* In SalMar, we have no illusions that this will be achieved without a struggle. On the contrary, we are prepared that it could be very challenging. This is also why we have put together a team of the most experienced and highly skilled employees we have to be responsible for operation of Ocean Farm in the critical first phase. We are also very pleased to be working in close cooperation with leading centres for maritime technology, in particular Kongsberggruppen, which are supporting us in the implementation and application of new, ground-breaking technology for open-ocean fish farming.

Passion for Salmon

'Passion for Salmon' is our vision. It is our commitment, our shared focus on ONE SalMar and farming salmon on the salmon's own terms that will contribute to SalMar's further development and keep us moving forward.

We will become 'the world's best aquaculture company'. That is something we dare to say that we are aiming for, and are actually not far from realising. It will demand a lot from us, and success may be measured in many ways. We must be the best in terms of sustainability, fish welfare, technology, leadership, salmon lice management and a lot of other areas which are central for our business.

For our operational facilities, we have two simple but clear objectives:

1. On the farming side, we will produce our fish at the lowest cost by having the best operational efficiency.
2. On the sales and processing side, we will strive to achieve the best possible price for our salmon and ensure optimal yields.

Together, this represents the very heart of SalMar: We farm our salmon on the salmon's terms, while our sales and processing operations maximise its value once it is brought ashore. This is a winning formula, which we have used for many years, and which will continue to be our foundation in the years to come.


Trond Williksen, President & CEO



3. Sustainability in everything we do



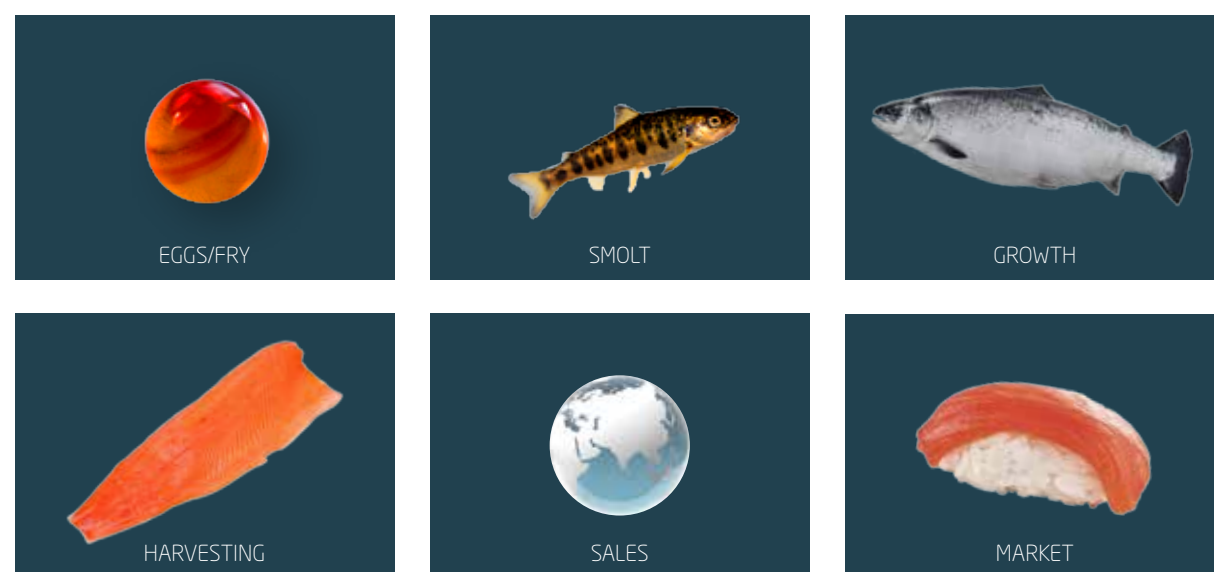
Although Salmon farming is one of the most sustainable and environment-friendly ways of producing food, the process poses a number of environmental challenges. The Group focuses on resolving those challenges through continuous development of its operations and investment in new technology.

SalMar will safeguard its long-term profitability and growth through sustainable fish farming and industrial operations, and by acting as a responsible corporate citizen. For SalMar, sustainability is about maintaining high ethical and business standards, and contributing to a greater awareness of the environment in which we operate day to day. We protect the environment and ensure that it is managed in a way that benefits future generations.

Core businesses and segments

SalMar's core business is the farming, processing and sale of Atlantic salmon. The Group's activities extend along the entire value chain from broodfish and the production of roe, to the freshwater and marine phases, harvesting, processing, sale and distribution. SalMar has been growing since its foundation in 1991. In 2016 it produced 115,600 tonnes of salmon in Norway, the equivalent of around 1.6 million nutritious and delicious dinner portions per day.

The salmon are raised in clean water and under controlled conditions at fish farms in Møre & Romsdal, Trøndelag, Troms and Finnmark. The Group has harvesting and processing facilities in Frøya (InnovaMar) and Aukra (Vikenco AS). In all, the Group has a presence in 35 municipalities in Norway.



TRACEABLE SUPPLY CHAIN

BROODSTOCK

The broodstock are the parent fish which provide the eggs and sperm (milt) required to produce new generations. The fertilised eggs take 60 days to hatch when placed in an incubator kept at eight degrees Celsius.

EYED SALMON EGGS

After 25-30 days in the incubator the eggs have developed to the stage where the eyes of the salmon are clearly visible as two black dots inside the egg.

FRY

The egg hatches when the eggshell cracks open, liberating the baby fish (fry) inside. When it hatches the fry is attached to a yolk sac, which provides it with the sustenance it needs during its first few weeks of life. From now on the fish's growth and development will all depend on temperature.

INITIAL FEEDING

When most of the yolk sac has been absorbed, the fry can be moved from the incubator into a fish tank. They are now ready for initial feeding. The water temperature is kept at 10-14 degrees Celsius, and the fry are exposed to dim lighting 24 hours a day. The initial feeding period lasts for six weeks. As they grow the fry are sorted and moved to larger tanks. Well ahead of their "smoltification" all the fish are vaccinated before being shipped by wellboat to the fish farm's marine net-pense.

SMOLTIFICATION

The process whereby the juvenile fish transition from a life in freshwater to a sea-going existence is called smoltification. During this process the fish develop a silver sheen to their bellies, while their backs turn a blue-green colour. Their gills also change when the juvenile fish turns into a smolt.

ON-GROWING

The farming of fish for human consumption takes place in net-pens, large enclosed nets suspended in the sea by flotation devices. In addition to a solid anchorage, net-pens require regular cleaning and adequate measures to prevent the farmed fish from escaping. Growth in the net-pens is affected by feeding, light and water quality. Here too the fish are sorted as they develop and grow.

HARVESTING & PROCESSING

A year after transfer to the marine net-pens, the first fish are ready for harvesting. The fish are transported live by wellboat to the processing plant. There the fish are kept in holding pens, before being carefully transferred to the plant itself. The fish are killed and bled out using high tech equipment, and always in accordance with applicable public regulations. After harvesting the salmon is subject to various degrees of processing.

SALES

The fish is sold either as whole gutted salmon (fresh or frozen), fillets, in individual portions or a wide range of other products, which are distributed to markets around the world.



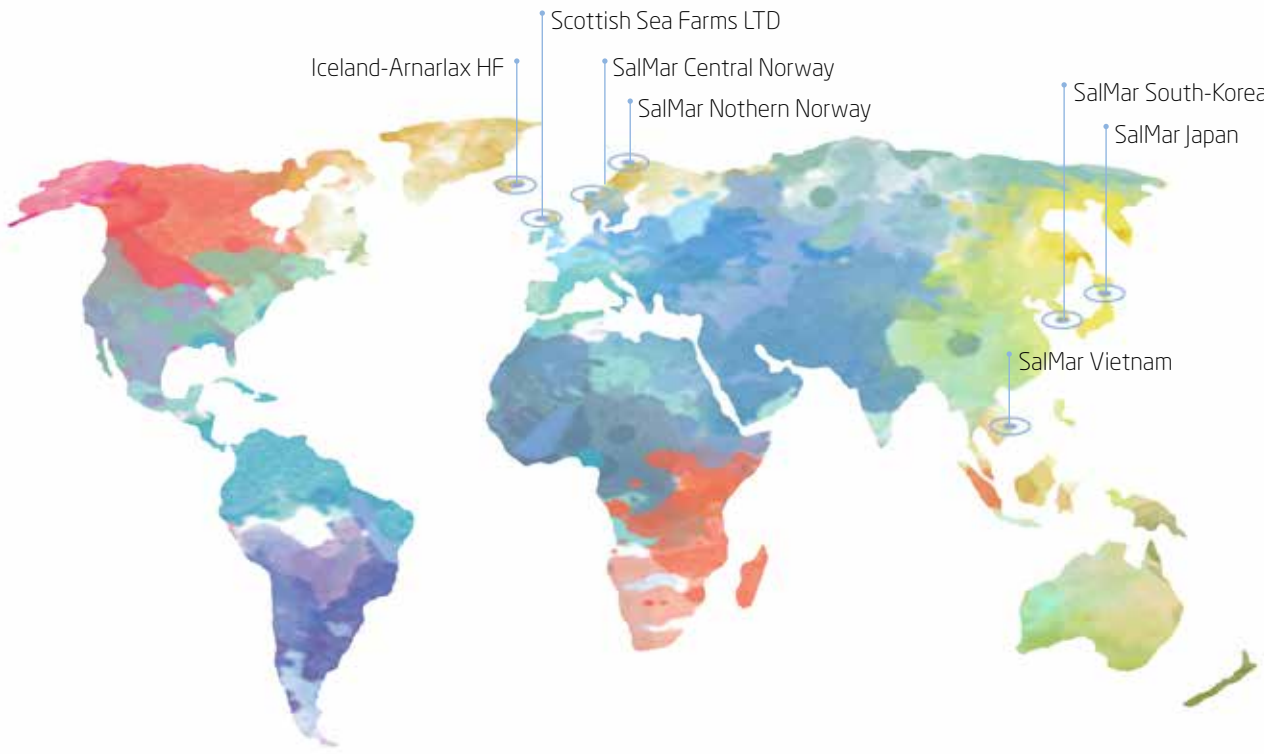
ABC of Fish Farming

Broodfish

This is SalMar

SalMar is one of the world's leading producers of Atlantic salmon. The Group have significant farming operations in both central and Northern Norway, as well as 50% ownership in Scottish Sea Farms and 34% of Arnarlax Hf at Iceland. SalMar also operate a comprehensive harvesting and VAp facility in Central Norway at the company's headquarter at InnovaMar on Frøya and on Vikenco at Aukra.

Learn more about SalMar at www.salmar.no



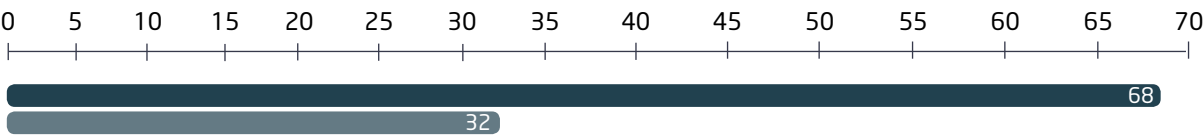
Financial calendar 2017

4th Quarter 2016 results: 15th February 2017
1st Quarter 2017 results: 10th May 2017
Annual General Meeting: 6th June 2017
2nd Quarter 2017 results: 24th August 2017
3rd Quarter 2017 results: 15th November 2017

SalMar holds quarterly presentations open to the public. The presentations will take place at 08.00 CET at Hotel Continental in Stortingsgaten 24/26 in Oslo, Norway.

The annual general meeting will be held at Frøya. Please note that the dates are subject to change. Changes will be communicated.

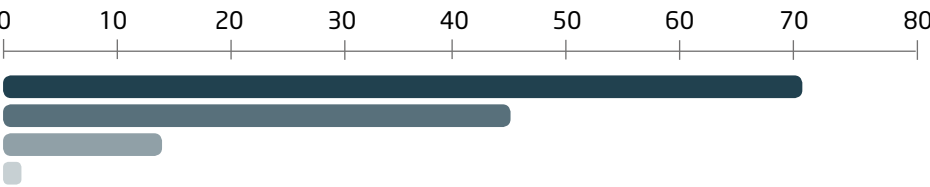
Geographical distribution of SalMar's 100 wholly owned licenses in Norway pr. 31.12.2016:



SalMar Central Norway
Trøndelag and Nordmøre

SalMar Northern Norway
Troms and Finnmark

Harvest volume* 2016 by geography, gutted weight pr. 31.12.2016:
* gutted weight



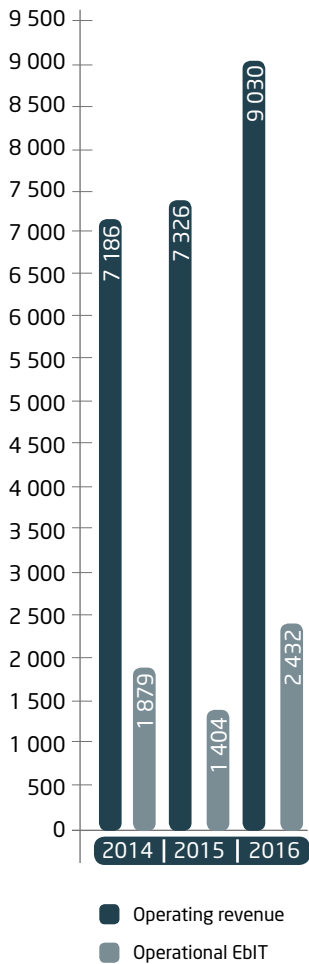
SalMar Central Norway
70 500 tons

SalMar Northern Norway
45 200 tons

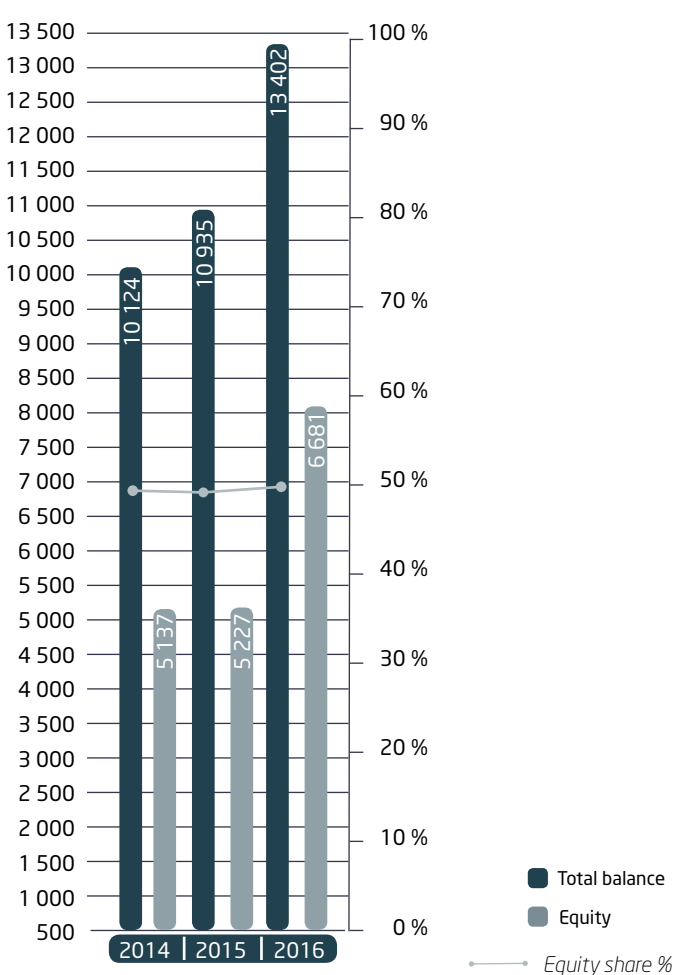
Scottish Sea Farms Ltd¹
14 000 tons ¹ SalMar's 50 % share

Arnarlax HF¹
1 400 tons ¹ SalMar's 34 % share

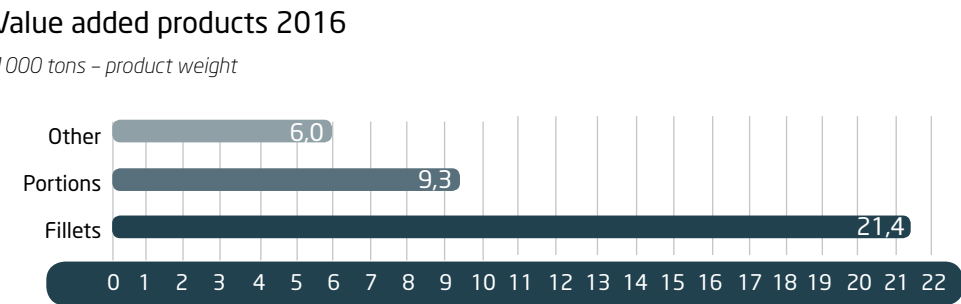
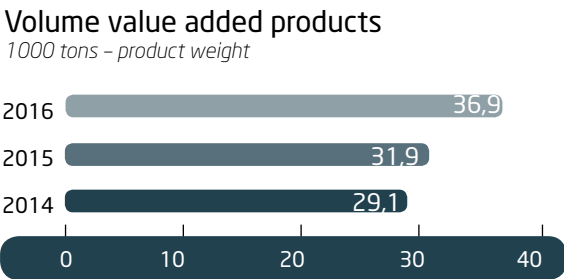
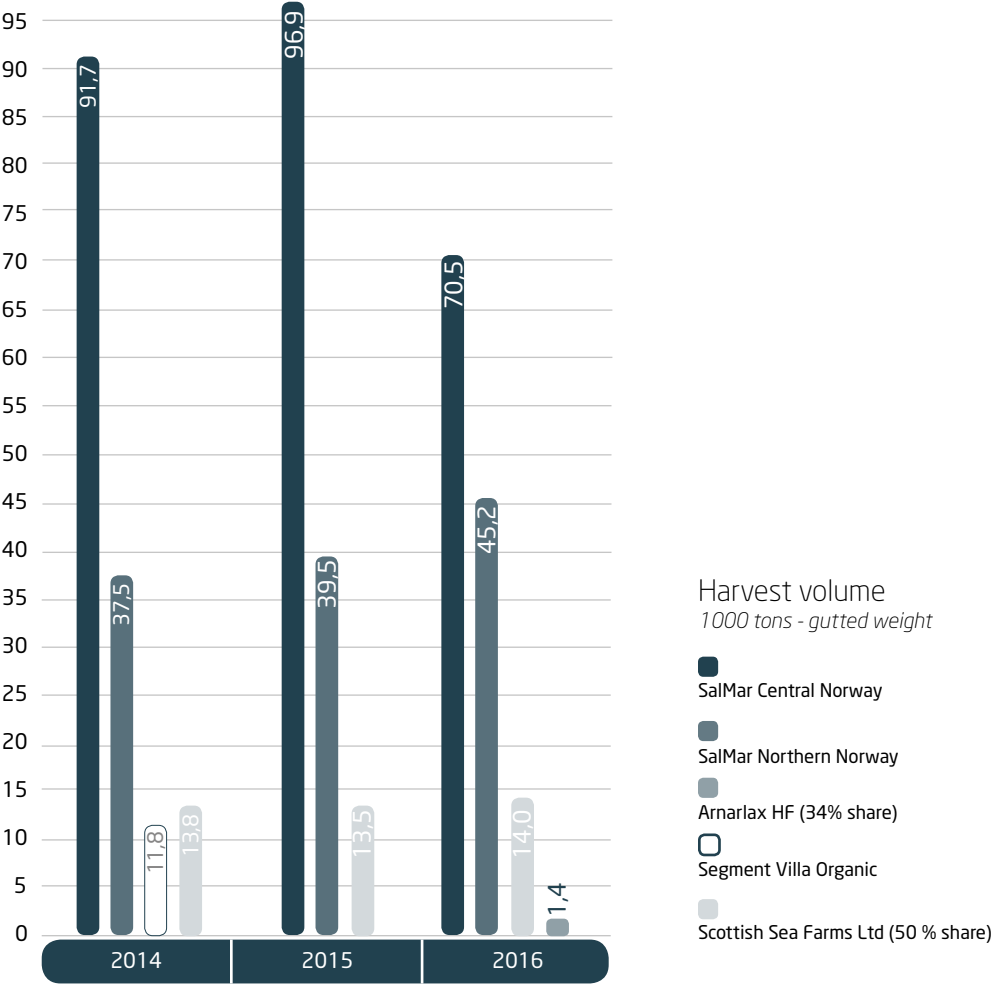
Operating revenue and Operational EBIT NOK mill.



Balance sheet and Equity NOK mill.



Harvest volume and value added products 2016



SalMar around the world



Direct sales to approx.
40 nations worldwide!

ROE/SMOLT/JUVENILES:

Central Norway:

- SalMar Settefisk
- Langstein Fisk AS (cleaner fish)

Northern Norway:

- Troms Stamfiskstasjon AS

FARMING:

Central Norway:

- SalMar Farming AS

Northern Norway:

- SalMar Nord AS

UK:

- Norskott Havbruk AS - 50%
(Scottish Sea Farms Ltd)

Iceland:

- Arnarlax HF - 34%

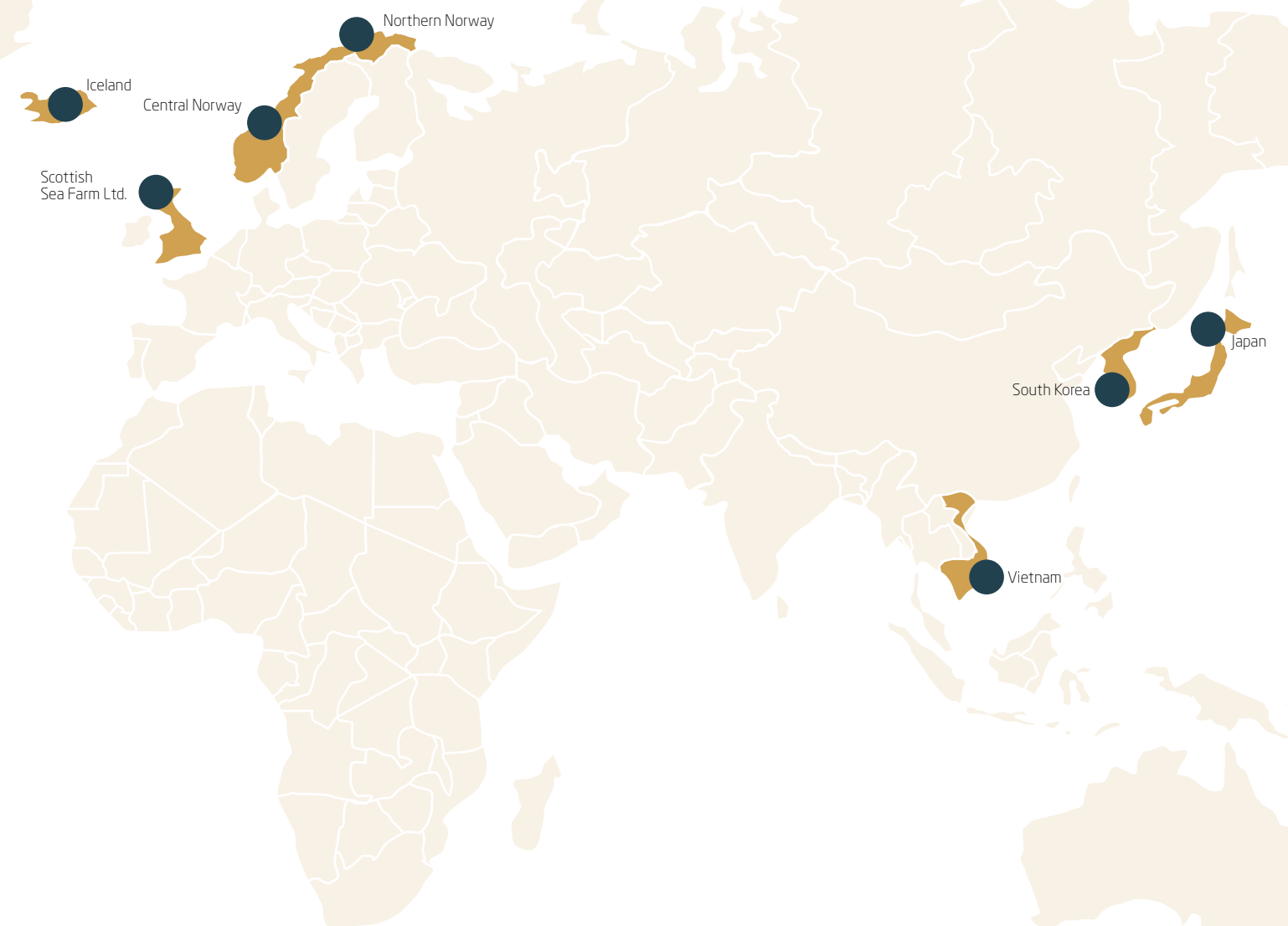
PROCESSING

Central Norway:

- InnovaMar facility (ST-423)
- Vikenco AS (M-200)

SALES & DISTRIBUTION:

- SalMar Sales AS
(Frøya and Ålesund, Norway)
- Vikenco AS
- SalMar Japan
- SalMar Sales Korea
- SalMar Vietnam



SalMar ASA

The salmon produced by SalMar is sold either through its own sales organisation or through close business associates. Systematic efforts in the area of traceability and control ensure that SalMar's salmon is of high quality in terms of both nutritional value and food safety. SalMar supplies a wide range of fresh and frozen salmon products.

The business is organised into three segments handling biological production and one company handling processing and sales. SalMar ASA is headquartered in Frøya, South Trøndelag, Norway.

In 2016, SalMar sold directly to over 40 countries. SalMar's most important market in 2016 was Europe, with Lithuania, Poland and Sweden as the largest national markets. The second largest market was Asia, where Vietnam, South Korea, Japan and Singapore were major national markets. Over the past two years, North America – particularly the USA – has become an important market for SalMar.

Leadership of the sustainability effort

The Group's CEO is ultimately responsible for SalMar's environmental footprint and for its efforts to increase its sustainability. SalMar has dedicated quality departments, which monitor and assess the work being done within this area. However, the activity is coordinated by management teams within the segments Fish Farming, and Processing and Sales. Systematic risk assessments are carried out at the overarching level and in all departments to ensure that SalMar as a group is able to implement necessary precautionary measures. Management of each department is responsible for ensuring that monitoring activities are performed and reported, and the quality managers at the various companies follow up and support departmental and operative leaders in this area. Quality managers and other quality assurance staff take an active part in regular management meetings at all levels in the company. Quality, safety, fish welfare and the environment are -regular issues discussed at these meetings.

Environment policy

SalMar's facilities are situated in rural areas along Norway's coast, with clean water and good natural conditions for the salmon. Large and small coastal communities are important bases for SalMar's workforce and operations. The Group is conscious of the benefits it derives from the communities and environment along the coast. This recognition underpins SalMar's systematic efforts to fulfil its responsibilities as an employer, producer, supplier of healthy food, user of the natural environment and administrator of financial and intellectual capital.

SalMar takes a holistic view of its fish farming operations, and the organisation strives to be energy efficient and implement climate-friendly solutions. SalMar is the world's largest producer of organic salmon, but its conventionally farmed salmon is also produced in accordance with strict health, safety and environmental standards.

CDP reporting

SaMar is working systematically to minimise its carbon footprint. Each year, it produces an environmental balance sheet, showing the changes in its operations' impact on the environment. Carbon Disclosure Platform (CDP) has become the leading international system for climate and environmental reporting, encompassing strategy, climate and energy performance, initiatives and improvements. SalMar will report to CDP for the year 2016.

Focus areas and targets

For SalMar, it is important to focus on the operational areas with the greatest potential for environmental impact. The potential for increased sustainability is greatest within these parts of the value chain:

- 1. Safety in the workplace
- 2. Preventing the escape of fish / limiting the number of escaped fish
- 3. Good fish welfare
- 4. Sustainable feed
- 5. Minimal emissions and good environmental conditions beneath and around the facilities
- 6. Food safety
- 7. Increased level of processing

The table below shows the results for 2013-2016 and the sustainability targes set for 2017.

Table 1: Sustainability targets

FO	Sustainability targets	Target for 2017	Result. 2016	Result. 2015	Result. 2014	Result. 2013
1	Safety in the workplace					
	Fatalities	0	0	0	0	1
	LTIs (Lost time injuries)	0	26	45	42	26
2	Preventing the escape of fish/ limiting the number of escaped fish					
	No. of fish escaped	0	5859	2	376	70
3	Good fish welfare					
	Marine-phase survival rate, from release to harvesting (last harvested generation)	>95%	88,2%	89,2%	89,9%	87,1%
4	Sustainable feed					
	Fish Forage Dependency Ratio – shows our dependence on raw materials deriving from wild fish					
	FFDR (fishmeal) – kg wild fish per kg salmon produced	<0,45	0,47			
	FFDR (fish oil) – kg wild fish per kg salmon produced	<1,80	1,94			
5	Minimal emissions and good environmental conditions beneath and around the facilities					
	Modelling – On-growing Fish Farms – Monitoring (MOM-B) as an indicator of good environmental conditions. No. of active sites with MOM-B ≤2 (measured at max. production)	100%	89%	80%	90%	93%
6	Food safety					
	SalMar continuously monitors and takes samples to ensure that the food produced is safe for the consumer. Never in the company's entire history has any incident affected the consumer. SalMar carries out annual call-back tests.					
7	Increased level of processing					
	SalMar aims to replace as much as possible of the gutted fish sent to market with pre-rigor fillets.					
	Value added products (1000 tonne product weight)		36,9	31,9	29,1	24,6

SalMar has embarked upon a process to clarify the expectations that its various stakeholders have with regard to the company. So far, interviews with a selection of SalMar's stakeholders have taken place. The input from the various groups and from internal strategy processes has been analysed, and the results have determined the choice of focus areas. Analysis of the emphasis which the stakeholders place on the various focus areas will continue, and SalMar is open to their adjustment. The Group's targets will be further refined and made even more specific.

To contribute to the development of a healthy corporate culture and maintain the company's integrity, the board has drawn up a code of conduct. All employees have been made aware of SalMar's ethical and social responsibility guidelines, which are the subject of discussion at annual seminars at the SalMar School. The code of conduct details SalMar's attitude to business ethics and corruption, the working environment and community relations. Routines for the notification of wrongdoing are highlighted during internal training sessions. A high ethical standard in all aspects of the business is non-negotiable, and forms the very foundation for SalMar's entire HSE strategy. SalMar's tenets describe the behaviours and actions required of all employees. At any given time, the SalMar culture is embodied and shaped by its employees. Their good attitudes and actions have always made a significant contribution to SalMar's success. The company's code of conduct and tenets can be found on SalMar's website: www.salmar.no.

The SalMar Standard

Stable environmental conditions are crucial to the health and welfare of the salmon being farmed. To protect the environment and facilitate long-term operations, extensive monitoring and R&D activities are undertaken. Every part of the operation is risk assessed in terms of sustainability, and appropriate measures are set out in procedures and

instructions. To monitor compliance with the guidelines that have been drawn up for sound operations, measurements are taken and internal audits performed. SalMar has developed its own standard for best practice. The SalMar Standard sets the bar high, and the number of sites which meet it is published in monthly KPIs.

Dialogue with stakeholders

SalMar has a number of different stakeholders, and is keen to maintain a good dialogue with all of them, for example, through face-to-face meetings, the media, annual reports, stock market notices, sustainability reports, adverts, R&D projects and our website www.salmar.no. Dialogue with stakeholders takes place both locally and at the corporate level. Understanding that we can only succeed if we work together, and treat each other with candour and respect is an explicit part of SalMar's principles for all dialogue.

The stakeholders to be included in SalMar's future sustainability reporting efforts are determined by the extent of their influence over the organisation. We aim to engage our stakeholders in an effective manner, while ensuring that they experience their contact with SalMar as providing added value. Important steps in the process include winning acceptance for the issues selected, illuminating different perspectives with regard to impact, identifying challenges, accumulating external impressions and sharing knowledge.

The identification of stakeholders with whom SalMar will engage in dialogue results from several processes:

- Public authorities which administer the public interest in the area and grant licences to operate.
- Selection and approval of suppliers and engagement in R&D is determined by management teams in the various parts of the company.
- Identification of the NGOs with which SalMar will have direct contact is determined by Group Management.

The table below shows the various stakeholder groups that are included in SalMar's analyses.

Table 2: SalMar's stakeholders

SalMar's stakeholders			
Internal influence	Business associates	Customer groups	External influence
Employees	Suppliers of goods	Customers in Norway	Central government / regulatory authorities
Shareholders/investors	Suppliers of services	Customers abroad	Certification bodies
Group management	R&D partners	Customers organic products	Industry associations
		Customers with own standards	Local authorities (councils)
			Groups of local residents
			NGOs
			Research establishments



Caring about our co-workers, business partners and local communities is one of SalMar's core values. SalMar employees shall show they care, and their actions shall be rooted in a sense of responsibility, consideration and a desire to do their best. That we care has a positive impact on our biological and financial key figures, our HSE performance and our relations with the rest of society. In this chapter we present the sustainability targets that cover the workforce and society. In addition, we present results associated with business ethics.

The workforce

In 2016, SalMar employed a total of 1,357 full-time equivalents. This is 56 full-time equivalents more than in 2015. 1229 of them were permanently employed and 24,6 per cent of the permanent workforce are women. The percentage of women is considerably higher at the Group's harvesting and processing facilities than at its hatcheries and fish farms. SalMar's workforce is made up of people from around 25 different countries. To ensure good integration and a shared platform for communication, the working language is Norwegian. Language tuition is a high priority, and SalMar has a dedicated Norwegian language teacher attached to the production plant in Frøya.

The Group's code of conduct includes a clearly stated policy with respect to the promotion of diversity and equality. SalMar accepts no discrimination of employees, shareholders, board members, customers or suppliers on the basis of ethnicity, nationality, age, gender or religion. Respect for the individual is the cornerstone of the company's policy. Everyone shall be treated with dignity and respect, and shall not be unfairly prevented from carrying out their duties and responsibilities. This attitude springs from acknowledgement that a relatively even gender balance and ethnic diversity contributes to a better working environment, greater adaptability and better results in the long term.

Two employee representatives sit on SalMar's board of directors. Further information about the board's membership may be found in the annual report.

Safety at work

Working at SalMar shall be safe. The company works systematically with risk management and training to protect its workforce. Nevertheless, the company experienced some serious incidents involving staff in 2016, though none led to permanent injury or loss of life. A total of 26 lost time injuries (LTIs) were recorded in 2016. This is a sharp decrease compared with previous years. There were 45 LTIs in 2015 and 42 in 2014. The same positive trend can be seen in the H-figures (H1 = LTIs per million hours worked), which fell from 21.8 at the close of 2015 to 12.6 in 2016.

Continued focus on our internal industrial safety capability is important to reduce the number of personal injuries in 2017. All parts of the Group have an industrial safety representative, and two industrial safety inspections are carried out in each department every year. A total of 98 safety inspections were carried out throughout the Group in 2016. These have uncovered important areas for improvement to further reinforce workplace safety.

All serious accidents are investigated to prevent similar incidents occurring in the future. In 2016, members of our central technical staff department have undergone training to enable them to investigate such incidents. Nevertheless, prevention remains the most important factor. At SalMar, we place great emphasis on ensuring that hazardous operations are well planned. Operational plans are drawn up before any work commences, and associated safe work analyses (SWA) are performed for those taking part. The focus on mapping of our overall risk picture is the most effective measure we can implement to reduce the probability of personal injuries occurring. In 2016, we worked systematically on risk assessments, and tools for risk planning, evaluation and assessment are now used systematically by the vast majority of the organisation. This work will continue in 2017.

HSE performance is followed up systematically through targets and action plans. On the basis of overarching targets, each individual division and department has defined its own local subtargets. Management has an obligation to monitor performance and evaluate progress, as well as the need for new measures and focus areas. All employees are covered by a company health service in the vicinity of their workplace. The Group ensures that everyone receives the training necessary to perform their tasks.

The Working Environment Committee also plays a key role in our HSE activities. The committee comprises selected representatives of management and nominated employees. The three elected industrial safety representatives from farming, processing and administration participate and represent all employees. The committee reports to the Group's governing bodies and the employees' trades union organisations.

	2016	2015	2014	2013
Fatalities	0	0	0	1
Lost-time injuries (LTI)	26	45	42	26
H1 - No. of LTIs per million hours worked	12,6	21,8		

Sickness absence

Considerable efforts were made to reduce sickness absence in 2016. As a result, the sickness absence rate fell by 2.23 percentage points from 2015 to 2016. Overall sickness absence in 2016 totalled 5.24 per cent, compared with 7.47 per cent in 2015. Short-term sickness absence also fell slightly, from 2.3 per cent in 2015 to 1.9 per cent in 2016. A high percentage of SalMar's workforce are engaged in industrial processing operations, and this segment pulls up the sickness absence figures. Nevertheless, the largest reduction in sickness absence in 2016 was achieved in the processing segment.

	2016	2015	2014	2013
Sickness absence in %	5,2	7,5	5,8	5

Training and arenas for development

New recruits to SalMar receive HSE training through induction courses, operational seminars and the SalMar School. All employees shall have received training in how to report wrongdoing or causes for concern within the company, and shall know that they are safe from reprisal if they do so. The procedure for reporting concerns is described in the management system, which is available to all employees.

The SalMar School is our arena for developing individual competence and our corporate culture. We discuss operational issues and hold seminars for all employees to create the world's best aquaculture company. In 2016, we established, for the first time, separate arenas for leadership development through a series of management development programmes. Underpinning all our activities in this area, are our shared management principles and tenets – which enable us to develop even more SalMarites.

The level of risk associated with the work being performed every single day at SalMar means that training and having the right competence is vital. Training is provided internally and in the form of external courses. Day-to-day follow-up and on-the-job learning are, nevertheless, the most important sources for individual growth.

In 2016, we have focuses particularly on risk, and have brought in external instructors to provide risk analysis training to large parts of the organisation. This has been implemented in improvements to our platform for corporate governance (called EQS). This has now become an essential tool in the ongoing management of the company and constitutes a good tool for monitoring and managing risk.

Society

SalMar endorses wholeheartedly the principles set out in the Universal Declaration of Human Rights. Those aspects which relate to our operations, eg protection against discrimination and the right to form a trade union, are included in the Group's code of conduct and several other governing documents.

SalMar has a presence in local communities up and down the Norwegian coast, and is attentive to developments in villages

and local districts. At the start of 2017, we had operations in 35 different municipalities along the Norwegian coast. It is important for our employees that the local communities in which they live have the necessary infrastructures and opportunities for leisure activities. For SalMar, it is crucial that the Group is able to operate at locations offering good growing conditions for our fish stocks. SalMar is actively engaged in numerous local projects. It is also important for SalMar to participate in local arenas for the exchange of views and information, and to take part in planning processes. Salmon farming is still considered a 'young' industry, and it is important to ensure that local decision-makers and other local residents are informed about our operations and plans for development. Through active participation in business associations and the public debate, SalMar contributes to important sustainable development processes in Norway.

Sponsorships and donations

To give something tangible back to the local communities in which the Group operates, SalMar supports a number of local clubs and voluntary associations through the SalMar Fund. The following causes have been given priority with regard to the allocation of funds:

- Village development initiatives aimed at children and young people
- Competence development for the leaders of clubs and voluntary associations
- Youth work
- Further development of existing cultural initiatives of a general nature
- Establishment and promotion of young entrepreneurship



Rosenborg partner

In 2013, SalMar became a sponsor of the football club Rosenborg Ballklubb (RBK). This partnership continued in 2016 and 2017. In addition to profiling SalMar, the partnership includes a separate programme for children and teenagers, and the development of grassroots football clubs in Trøndelag. RBK has highlighted the partnership through the SalMar Sports Ground and the SalMar Academy. The objective is to help transfer competence from Rosenborg to grassroots clubs in Trøndelag County in the form of good training sessions to promote player and trainer development.

Business ethics and the reporting of wrongdoing

To date, SalMar has not received any reports of corruption or other violations of its code of conduct. Nor has any wrongdoing been reported internally.

What counts is what the individual employee does today – every day. At SalMar we are very conscious that every action and every day is important, and that success depends on the individual and collective efforts of the entire workforce.

In this chapter we will present the day-to-day efforts being made to achieve the Group's sustainability targets for fish welfare and the external environment, and report on our current status.



5. The job we do today is vital to the success of us all



Preventing the escape of fish

SalMar has a clear goal of zero escaped fish. Although there were no major incidents involving the escape of fish in 2016, six episodes were recorded. In total, 5,859 individual fish escaped from the Group's fish farms. All the episodes occurred as a result of fish handling. Three episodes involve one to three fish, while two episodes involved 40 and 50 fish, respectively. One episode involved the escape of 5,764 fish. These non-conformances have been dealt with internally and remedial measures implemented. Success in escape prevention efforts derives primarily from effective day-to-day operation of the sites. However, investments in R&D and more secure equipment have also played a part. The R&D effort to reduce the risk of escaped fish harming wild fish populations is described in more detail in chapter 7: *What we do today we do better than yesterday; and chapter 8: Focus on the solution.*

	2016	2015	2014	2013
No. of escape incidents	6	2	4	2
No. of fish escaped	5859	2	376*	70

*of which 20 lumpfish

Our facilities have been upgraded and equipped to withstand the conditions prevailing at locations exposed to extreme

weather conditions. The most important factor for preventing the escape of fish will, nevertheless, be the people performing their day-to-day tasks and handling the fish. For many years, competent co-workers have focused intently on preventing the escape of fish or at least keeping the number of escapees to a minimum. Daily inspections and checks of the facilities, as well as systematic follow-up of non-conformances and risk factors, are key elements in this effort. The careful planning of tasks and the sharing of information will also play an important role in maintaining this positive trend.

Fish welfare

Fish health and fish welfare are two important focus areas at SalMar. SalMar's entire philosophy rests on the presumption that good health is a precondition for the salmon to thrive and achieve their maximum potential. This in turn is a precondition for achieving good financial results. In our view, the best indicator of fish welfare is the fishes' rate of survival from their transfer to the sea until harvesting. SalMar's target is for 95 per cent of the fish to survive this period. The figure below shows the accumulated survival rate at SalMar's facilities for the generations held at sea during 2016. When the last of the most recent generation of fish (2014G) was harvested in June 2016, it had achieved a survival rate of 88.2 per cent. By comparison, the 2013 generation, which was fully harvested the year before, had a survival rate of 89.2 per cent.

% accumulated survival from transfer to sea, per generation in 2016

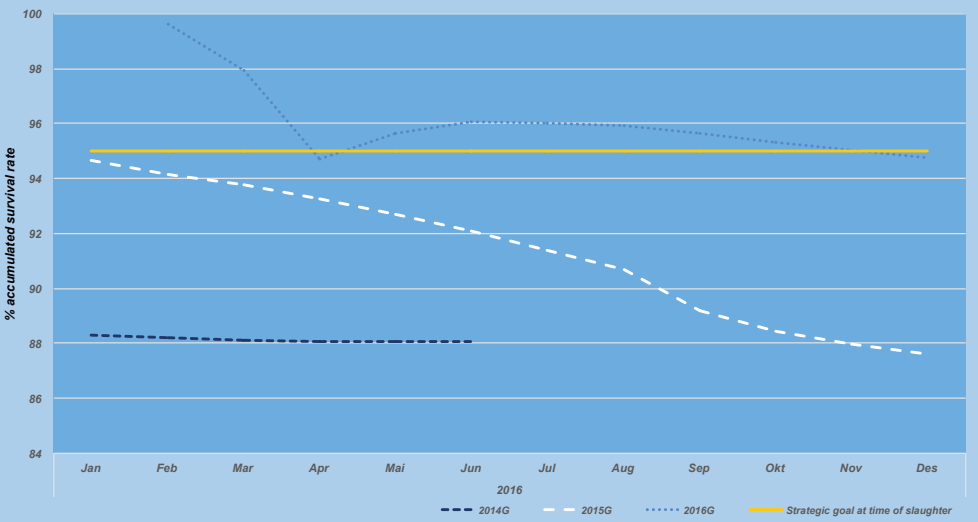


Fig. 1: Month-on-month survival rate per generation from its transfer to the sea in 2016. At the close of 2016, much of the 2015 generation had been harvested, while the 2016 generation was transferred to sea in the period February to October 2016, and will be harvested in 2017.

Antibiotics

Resistance to antibiotics is a growing problem worldwide. To prevent the development of resistance it is important that all food producers do what they can to keep the use of antibiotics as low as possible. The Norwegian monitoring programme for antibiotic resistance (NORM-VET 2015) concludes once again that the use of antibiotics in the production of Norwegian salmon is extremely low. Indeed, it is far lower than for all other farmed livestock. Antibiotics were used at SalMar's Norwegian facilities on a few occasions to increase

the survival rate and improve fish health at the hatchery concerned. This involved use of 30.8 kg of antibiotics in 2016. The treatment corresponds to 0.233mg of active ingredient per kg of live salmon produced by the Group as a whole. The very low use of antibiotics continues (see Table 3). In addition, 1.1 kg of antibiotics was administered to lumpfish held in a dedicated production facility, due to bacterial infections. We are now working on development of vaccines tailored to this species.

Table 3: Shows consumption of antibiotics (milligrams of active ingredient) per kg live salmon produced in 2013-2016.

	2016	2015	2014	2013
Milligrams of active ingredient per kg live weight	0,233	0,167	0,213	0,221

Important steps to keep down the use of antibiotics include the vaccination of fish, ensuring good day-to-day fish welfare and upholding the zoning boundaries between gener-

ations of fish. Fig. 2 shows the sharp reduction in the use of active ingredients, as well as the growth in the volume of farmed salmon in Norway from 1992 until 2015.

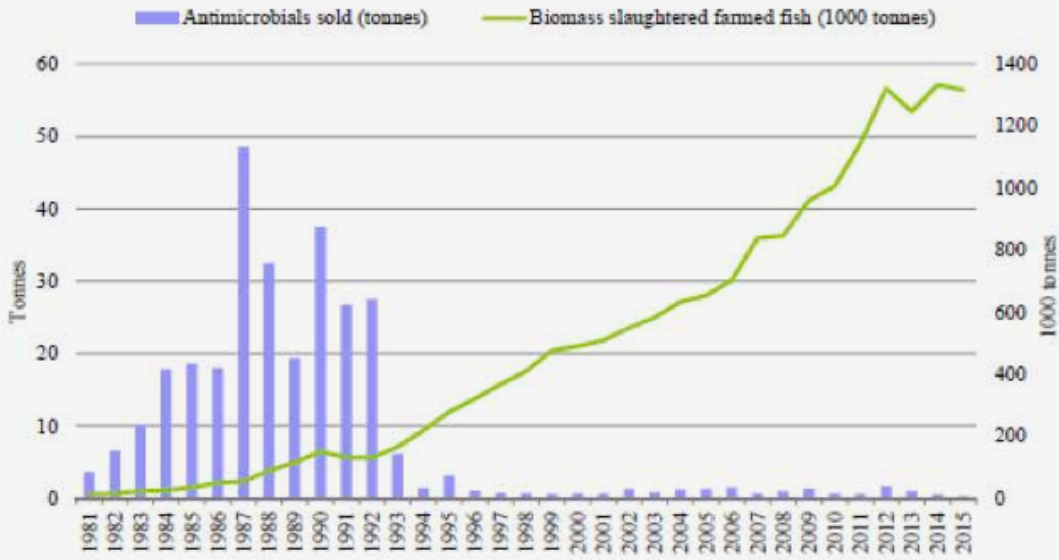


Fig. 2 Total sales (kg) of active ingredients, antimicrobial substances given to farmed fish in Norway in the period 1981-2015, as well as the volume of farmed fish harvested during the same period. (NORM/NORM-VET 2015)

Sea lice and delousing methods

2016 was another challenging year with regard to sea lice, and SalMar has worked hard to keep lice numbers under control at our facilities. The two most important reasons for our success in this area are the improved quality of our own lumpfish production, and a major investment in non-medicinal delousing methods. We have established a substantial non-medicinal treatment capacity, which has allowed us to significantly decrease the amount of medicines used, particularly in our Central Norway segment. Our quantities of bath treatments against sea lice has been reduced with 77% from 2015 to 2016. This will continue in 2017. Our biggest challenges in this work relate to fish welfare, since we are still finding it difficult to predict which populations have a reduced tolerance for the treatment. This is an area that is being put under the microscope by the industry, suppliers and research centres, and we expect good progress to be made in 2017.

SalMar has not made use of chitin synthesis inhibitors in its efforts to combat sea lice in 2016, in line with the Group's strategy regarding this controversial product group.

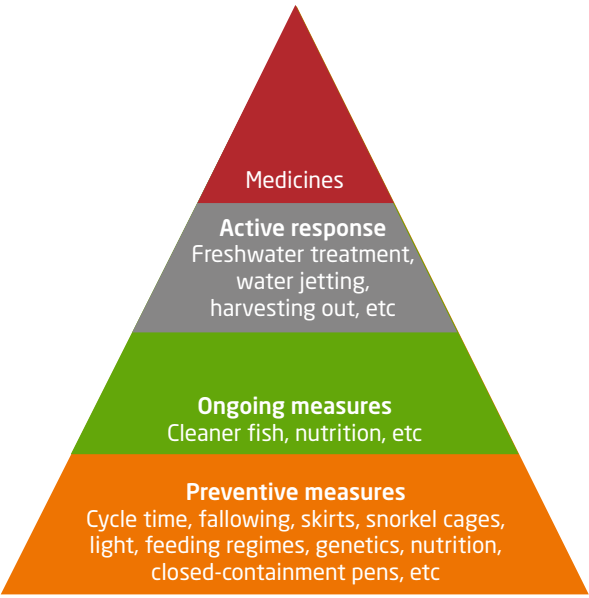


Fig. 3: Visualisation of the strategy to combat sea lice

Green licences

Following the Norwegian authorities’ 2013/2014 round of licence allocations and at the close of 2016, SalMar had a total of 16 ‘green’ licences. Eight of these are purchased ‘Green-B’ licences and eight are ‘Green Converted’ licences. The terms of the green licences set stricter limitations on the number of salmon lice and the number of medicinal delousing treatments, as well as a stronger focus on escape prevention. SalMar has focused particularly on the use of cleaner fish, in the form of farmed lumpfish, to control sea lice levels, and the use of a more secure net-pen construction. We have also emphasised participation in a salmon surveillance project in Trøndelag’s salmon rivers, in order to assist in the development of methods and expertise related to the tracking and mapping of escaped farmed salmon in rivers. So far, experience from the operation of these sites has been good. The technical equipment selected works in accordance with expectations, while it has been more challenging to achieve the desired results from the use of lumpfish in the Central Norway segment. A separate report has been published summarising SalMar’s experience and evaluating the operation of its green licences.

Effective feed utilisation

Second only to the fish themselves, feed is the most important input factor in the production of farmed salmon. The nutritional value, consistency and taste of the feed are important. Equally important, however, is correct dosing to ensure that the feed is utilised as effectively as possible and keeps the fish healthy. SalMar has focused heavily on competence development and specialisation for those responsible for feeding the fish. In 2016, the SalMar Feed School held a series of seminars specifically for the staff who feed the fish. Further skills development and dissemination of best practices within the company is the objective.

Feeding is monitored using underwater CCTV cameras, and is adapted to the fish in each cage. The benefits of correct feeding include optimal growth, a low feed factor, reduced emissions, fish that thrive and have a greater resistance to disease, low mortality, smaller variations in fish size, less harvesting waste and higher quality fish flesh. The equipment and the feed must be appropriate, but the competence that has been built up in SalMar with regard to feed and feeding is a significant factor for the achievement of good results.

Systematic monitoring of the feed’s chemical, physical and biological quality

SalMar uses an all-round feed that optimises production and promotes good fish health. In other words, a high-value salmon feed that ensures good growth, a low feed factor and meets the fishes’ nutritional needs. In 2016, almost 170,000 tonnes of dry feed pellets were used in SalMar’s salmon farming operations. In addition, a modest volume of feed was used for the company’s own production of lumpfish.

The biological value of the feedstuffs used in the hatcheries and marine-phase fish farms was verified through their fat, protein, phosphorous and fibre content. SalMar performs routine controls on the feeds’ physical quality on receipt to iden-

tify non-conformances (dust & crumbs, floatability and oil ooze), and measurements indicate a stable level of dust and crumbs at less than 0.5 per cent in recent years. This shows that emissions caused by dust and crumbs are minimal.

We continue monitoring the feed products’ biological value and uptake through digestibility measurements from our own farms. We measure at chosen reference sites with a special focus on today’s key feed products and new products/ suppliers. In addition, the data are used as a project tool in the field and in controlled benchmarking projects, which we conduct as required. In 2016, we have shown a consistently high utilisation (digestibility) of the feeds used in SalMar’s fish production.

Sustainable feed

The feed is formulated to meet the salmon’s nutritional requirements, and raw materials are combined to achieve an optimal solution for fish health, effective growth, sustainability and price. No genetically modified raw materials are used in the feed, nor have any genetically modified raw materials been found in feed used by farmed salmon in Norway.

Use of marine raw materials in the feed

The Norwegian aquaculture industry uses fish meals and fish oils only from lawful and regulated fisheries. Today, the proportion of marine products in the feed stands at approx. 20-28 per cent. SalMar requires all its feed suppliers to buy marine raw materials that comply with the International Fish Meal and Fish Oil Responsible Supply Standard (IFFO RS)¹, are MSC-certified² or equivalent. This is to ensure the sustainability of the fisheries from which the ingredients derive. For 2016, 90 per cent and 94 per cent, respectively, of the marine raw materials used by our two largest feed suppliers were certified in accordance with the IFFO RS standard.

As a measure of feed sustainability, we have elected to present here the Fish Forage Dependency Ratio (FFDR). This quantifies our dependence on wild fish stocks as raw materials in our feed. This is done by assessing the volume of live fish from small pelagic fisheries that is required to make the amount of fish meal or fish oil needed to produce one unit of farmed salmon. The lower the FFDR we can achieve, the more salmon we can produce on the basis of a globally limited supply of marine raw materials.

According to the ASC standard, feed is deemed to be sustainable if its FFDR (fish meal) is <1.35 and its FFDR (fish oil) is <2.95. In 2016, SalMar achieved an FFDR (fish meal) of 0.47 and an FFDR (fish oil) of 1.94 on average per kg of salmon fed with feed from our main suppliers Skretting and EWOS³. Both these values are far below the ceiling specified in the ASC standard.

Fish Forage Dependency Ratio	2016
FFDR (fish meal) kg per kg salmon produced	0,47
FFDR (fish oil) kg per kg salmon produced	1,94

In 2016, the largest sources of marine raw materials in the feed were blue whiting, anchovy and sprat, as well as herring and whitefish offcuts. Overall, by-products (offcuts and trimmings) accounted for 20 per cent and 34 per cent, respectively, of the raw materials used by our two largest feed suppliers. This proportion has risen sharply in recent years. The feed companies’ own sustainability reports document this in further detail.

Use of soya in the feed

Vegetable raw materials have become an important ingredient in fish feed. Vegetable-based proteins currently make up 35-45 per cent of the feed. At SalMar, we require our feed suppliers to purchase soya from sustainable sources that are certified in accordance with ProTerra, RTRS or equivalent environmental standard. This means that the soya is not farmed in areas threatened with deforestation, and has not been genetically modified. The Norwegian aquaculture industry currently purchases approx. 0.3 per cent of the world’s soya production. To promote the sustainable farming of soya, SalMar’s main feed supplier in 2016, Skretting, used only ProTerra-certified soya – the strictest certification scheme. In addition, Skretting takes part in several sustainability partnerships, including the Round Table on Responsible Soy, the ProTerra Network, the Roundtable on Sustainable Palm Oil, the Aquaculture Stewardship Council and IFFO’s Responsible Supply Standard.

Emissions and energy consumption

Emissions of nutrient salts

The seabed beneath all sites is inspected regularly to see whether/to what extent the surroundings have been affected by our operations. This is done through MOM-samples (Modelling – On-growing Fish Farms – Monitoring). In addition, monitoring of the feed’s digestibility helps to indicate the scale of nutrient salt emissions from a particular site. In 2016, 89 per cent of our operational sites achieved a score of ≤ 2 in connection with MOM-B sampling undertaken during maximum production⁴ (80 per cent in 2015). Since we take account only of samples taken at maximum production, there will be some variation from year to year. We are working continuously to find the optimal locations for our farms, such that we can realise our objective of having all our operational sites with a MOM-B score of < 2. This is a challenging goal, and will take some time to achieve, since we are dependent on new locations being allocated and cleared. All sites had a satisfactory MOM-B score before the release of new fish stocks.

Together with the Norwegian Seafood Federation (Sjømat Norge), other fish farmers and research institutions, SalMar monitors large areas to see whether fish farming operations are having a regional impact. See chapter 7 What we do today we do better than yesterday for further details. No long-term impact on the seabed or shorelines around SalMar’s facilities

⁴ MOM-B test complies with Norwegian Standard NS9410. We use active sites in 2016, where samples at max. production were taken.

has been identified. The Institute of Marine Research’s latest Risk Assessment of Norwegian Aquaculture (2015) states that emissions of nutrient salts create no risk of eutrophication along the Norwegian coast, although this may be an issue in certain sheltered areas. SalMar’s facilities are not located in sheltered areas, but are largely sited in localities with extremely good water flow. The choice of location is the outcome of a thorough process, including checks that it does not conflict with protected areas or the interests of other stakeholders, etc.

Greenhouse gas emissions and energy consumption

SalMar has reviewed its energy and carbon footprint, based on the aggregated energy consumption of its day-to-day operations. The climate balance sheet presents a general overview of the company’s greenhouse gas emissions, translated into carbon equivalents (CO₂e), and is based on reported data from internal and external systems. SalMar’s energy and climate balance sheet has been drawn up by the company CO₂focus AS, and the analysis is based on the recognised international GHG protocol (“The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard”). The emissions included are those over which SalMar has operational control and can implement measures to influence in the future.

2013 has been chosen as the starting point for future efforts to monitor and reduce the impact on the climate of SalMar’s operations. Changes in recent years have included the construction and start-up of a new factory in Frøya, and the acquisition of numerous undertakings. These changes are presented in the annual reports for the years in which they took place.

The industry’s largest source of emissions is the production of feed, in which respect we refer to the feed producers’ reported targets and results. Table 4 below shows SalMar’s direct consumption of fossil fuel and electricity, as well as overall carbon emissions. From 2015 to 2016 we see a small increase in the overall carbon emission level (+6%), deriving from an increase in emissions related to fuel, while electricity consumption decreased. Because the overall biological biomass production was reduced in 2016 without the workload being reduced, the climate gas intensity per ton fish has increased in 2016.

SalMar used 5 367 000 liter fossile fuel (195TJ) and 42 842 MWh electricity (154TJ) in 2016.

¹ The Marine Ingredients Organisation <http://www.iffonet.net/>
² Marine Stewardship Council <http://www.msc.org/>
³ Calculated in accordance with the ASC standard and using underlying figures from Skretting and EWOS.

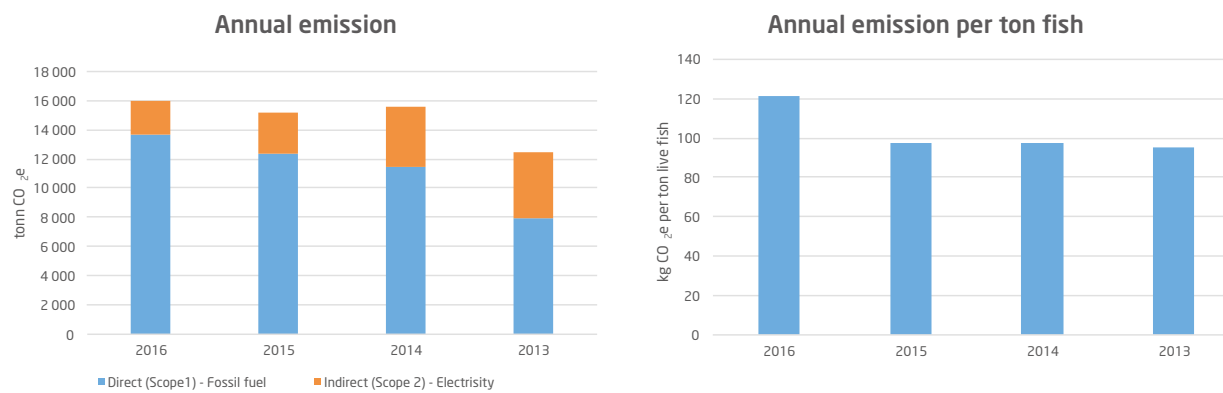


Fig. 4: Total carbon emissions and carbon emissions per tonne live weight 2013-2016 (Scope 1 and 2).

Table 4 Key figures from the climate balance sheet

		2016	2015	2014	2013
Energy consumption					
Direct (Scope 1) - Fossil fuel	TJ	195	173	161	112
Indirect (Scope 2) - Electricity	TJ	154	159	164	146
Total energy consumption	TJ	349	333	325	258
Green house gas emission (GHG)					
Direct (Scope 1) - Fossil fuel	tCO ₂ e	13 621	12 350	11 471	7 957
Indirect (Scope 2) - Electricity	tCO ₂ e	2 399	2 835	4 137	4 537
Total CO ₂ -emission (Scope 1 og 2)	tCO ₂ e	16 020	15 185	15 608	12 494
Upstream activity (Scope 3) ⁵	tCO ₂ e	12 310	11 149	9 821	8 767
Intensities					
Energy	GJ/ton live fish	2 651	2 141	2 021	1 969
Green House Gas emission	kgCO ₂ e / ton live fish	122	98	97	95

SalMar has an agreement with its main provider of electrical power, which guarantees that 27.0 GWh of the power delivered derives from renewable sources. Green certificates covers 63 per cent of the power consumed in 2016. In 2015 and 2016, SalMar Farming continued a major energy conservation project, whose objective is to supply as many fish farms as possible with onshore-generated electricity. This means that those farms located close enough to land for it to be feasible will have power cables laid out to the floating

structures. Such measures benefit the environment through a reduction in direct emissions from diesel generators.

Waste and recycling

All SalMar departments have a waste-management plan, which stipulates the receiving facilities approved for various types of waste. Packaging and used fish farming equipment, such as collars, nets and mooring devices are delivered to undertakings that reuse the materials.



6. The job is not done until the person you are doing it for is satisfied



⁵ Includes Upstream emission we have operational control over from Scope 3: Emissions related to transport of live goods and commuting.

Salmon production is a collaborative process, in which the individual elements are mutually dependent and understanding the customer – whether internal or external – is vital. In this chapter we will focus on SalMar's suppliers, products and markets. Food safety and more processing are focus areas for sustainable development at SalMar. Both issues will be discussed in detail in this chapter.

The value chain

The farming of fish is the part of the value chain in which SalMar has the greatest impact on the environment. Our efforts with respect to the environment and sustainability will therefore be focused primarily on its biological production. SalMar produces its own roe and smolt, but was still obliged to buy in some of its fish stocks in 2016. In addition to a strong internal focus on sustainable production, we therefore make demands on our suppliers.

The most important input factor, in addition to roe and smolt, is the feed that the fish eat. Since the largest feed suppliers in 2016, Skretting and EWOS, both publish their own sustainability reports, please refer to these for further information. For SalMar, the most important sustainability issue relating to fish feed is digestibility and nutritional value. The composition of the feed must ensure the effective utilisation of the raw materials, good fish welfare, good fish growth and thereby a shorter marine-phase production time and minimal emissions. In addition, it must contain high levels of important amino-acids and other nutrients.

Other important suppliers of significance to SalMar's environmental footprint include producers of equipment, electrical power, chemicals and packaging, as well as maintenance, wellboat and fish-health service providers. Several of the suppliers in the above-mentioned categories participate in sustainability improvement projects along with SalMar. For example, SalMar has run two major projects relating to the electrification of our marine-phase operations, the Onshore Power Project and the construction of a new electrically powered workboat.

Customers

Proximity to markets and customers is important for SalMar. Our customers are global, and include exporters and importers of various sizes, as well as major processing companies and supermarket chains. Through the sale of our products, the Group has contacts in numerous countries worldwide.

SalMar is certified in accordance with the following customer and third-party standards: HACCP, BRC, IFS, ASC, Debio, Krav, Global G.A.P., Kosher, Carrefour, IWAY and MSC (for the sales segment).

Aquaculture Stewardship Council (ASC) Standard

The Aquaculture Stewardship Council (ASC) is an independent, international non-profit organisation, which was founded in the Netherlands by WWF and IDH (Sustainable Trade Initiative). The ASC Standard was drawn up after several rounds of discussions called the "Aquaculture Dialogues". Representatives from several aquaculture and fish processing companies, suppliers, supermarket chains, independent organisations, government and regulatory institutions, and various research establishments from around the world took part in the discussions. These efforts laid the foundations for the creation of the world's strictest sustainability standard, which was published in 2012.

The mission of the ASC Standard is to bring aquaculture one step closer to the sustainable, environmentally and socially responsible production of salmon. This is achieved through effective market mechanisms that create value along the entire value chain. By choosing ASC-certified salmon, consumers can be assured that they are buying salmon from a responsible farmer.

With more than 400 auditing criteria within seven main categories, the ASC Standard is difficult to achieve. It demands substantial resources with respect to documentation and reporting, before, during and after certification. In the past year, SalMar undertook 15 ASC audits, including both first-time audits and annual follow-ups. At the close of 2016, SalMar had a total of 18 fish farms with ASC certification, and expects to certify one more at the start of 2017. This means that, in the past year, we have increased the number of ASC-certified sites by 11, compared with the same time 12 months earlier. In addition, SalMar has been certified in accordance with the ASC's Chain of Custody scheme. Openness regarding our performance is a key aspect of the standard. Further details can be found on our website www.salmar.no, and the ASC's website www.asc-aqua.org. With effect from June 2017, a new and stricter version of the ASC Standard will come into effect. Compliance with this will put us one more step closer to becoming one of the world's most sustainable food producers.

Products

Local processing enables SalMar to offer a wide range of first-class, fresh, frozen and organic salmon products.

Salmon and health

Norwegian salmon contains a number of nutrients which make it an important component of a balanced diet. Norwegian salmon is a healthy and tasty food. Salmon is safe to eat, and is one of our most analysed foodstuffs.

The World Health Organisation (WHO) has published a thorough report on both the risks and benefits of eating salmon. The report concludes that eating oily fish, like salmon, reduces the risk of cardiovascular disease. It is the products' fat composition, with a high content of the omega-3 fatty acids EPA and DHA, but also vitamin D, Selenium and easily digestible proteins, which contribute to this health benefit. The report warns of higher mortality rates if too little seafood is eaten. The biggest challenge with respect to seafood consumption remains the fact that people in general eat too little of the important nutrients provided by fish. The Norwegian Scientific Committee for Food Safety (VKM) provides recommendations to the Norwegian Food Safety Authority. The VKM has concluded that it is well documented that oily fish protects against cardiovascular disease, and has a positive impact on the neural development of babies, both before and after birth. The positive effects of eating seafood far outweigh any potentially negative impact. The VKM report further documents that that dietary supplements containing fish oil do not give the same health benefits as eating fish⁶.

The Norwegian Directorate of Health issues dietary guidelines to the Norwegian population. Other countries have similar bodies that advise their citizens. The Norwegian Directorate of Health recommends a varied diet, and oily fish, such as salmon, is an important part of a varied and balanced diet.

Food safety

SalMar's production is subject to Norwegian regulations for food production, and our facilities are regularly inspected by the Norwegian Food Safety Authority (NFSA). In 2016, we received a total of 92 visits from the NFSA. In addition, the Group has its own sampling programme, under which feed and finished products are analysed and tested for a number of factors. The NFSA's monitoring, performed by the National Institute of Nutrition and Seafood Research (NIFES), shows very little foreign matter in farmed fish, and no samples were found to exceed threshold values in the most recently published reports for 2014 and 2015. Further details regarding the nutritional content and status with respect to contaminants, etc, in Norwegian seafood, please visit the Seafood Data section on NIFES's website or search the Food Composition Table available from www.matportalen.no.⁷ Both of these are official databases.

SalMar produces healthy and tasty foods that are easy to prepare. SalMar's products are based on first-class raw materials, and the quality is maintained right through the value chain until the salmon reaches the consumer. Thorough training at all levels with regard to procedures is important to maintain the high quality of SalMar's products. Production is organised such that the demands of different standards and customers are met. We perform regular internal audits, and welcome the public authorities, certification agencies and customers to carry out external audits and inspections. Food safety and the regulations relating thereto are taken extremely seriously.

In 2016, there were no violations of the regulations governing safe food.

Audits performed in accordance with customer and third-party standards are important to document that the products are safe and healthy for the consumer, and have been produced in accordance with the requirements and expectations demanded of modern food production. In 2016, 212 external audits of SalMar's sites/departments were carried out by the regulatory authorities, customers or third-party certification bodies. A further 59 internal audits were carried out during the year.

SalMar has defined routines for the follow-up of customer complaints, and the Group has informed its customers of how they should proceed if a product they have bought does not meet their expectations. All products can be traced back through the production process, and a well-trained team is on hand to deal with any complaints from consumers.

Pre-rigor fillet

SalMar supplies both fresh and frozen pre-rigor fillets. SalMar's investment in pre-rigor filleting is an important strategy with respect to energy consumption, transport-related emissions, 100 per cent exploitation of the raw material and the creation of local jobs.

Pre-rigor filleting means that the fish is harvested and filleted the same day, before the fish goes into rigor mortis. This processing strategy enables delivery to the market 2-6

days earlier than has been the norm. This way of handling fish has a number of advantages:

- Fresher fish to the customer
- Firmer muscle texture, better colour, less gaping and lower drip loss
- Longer shelf-life in the market
- No need to store and mature the fish before filleting and boning

For more information on the environmental benefits of SalMar's investment in pre-rigor filleting, see chapter 8 Focus on the solution.

Organic salmon

SalMar is the world's largest producer of organically farmed salmon. Organic salmon is supplied year round, and production is vertically integrated from the broodfish and roe down to the finished processed products. Local processing means that we can deliver a wide variety of first-class fresh and frozen organic salmon products. SalMar supplies both pre- and post-rigor organic salmon. A high content of marine oils means that this salmon is an exceptionally good source of EPA and DHA. Developments have been extremely positive since the very beginning, and the market's demand for organic salmon is increasing.

In 2009, SalMar was certified for the farming, processing and sale of organic salmon, and the Group's first organic salmon was harvested in March 2011. Today, SalMar has five licences for the production of organic salmon, and it is produced by the subsidiary SalMar Farming AS in Møre & Romsdal. To qualify as organic, the salmon must be produced within the framework of the EU's regulations, and must be approved by Norwegian organic foods certification body DEBIO.

Frøyas

Since 2011, SalMar ASA has produced finely sliced, sashimi-quality fish under the brand name Frøyas. Every single fish that is used by Frøyas is handpicked, and only the best boneless pieces of salmon are used. After slicing, the fillets are packed within 1-4 hours to ensure maximum freshness and taste.

The objective is to offer a salmon product that maintains the same quality and taste as it had on the day it was caught right up until its use-by date – normally 11 days. To maintain this level of quality, Frøyas uses a unique packing, transport and refrigeration process. The majority of fish products are transported under ice in polystyrene boxes. These are difficult and expensive to dispose of. In contrast, Frøyas' products are transported in recycled cardboard boxes that are chilled using dry ice, which ensures optimal temperature control. The dry ice evaporates slowly, and the cold is transferred directly to the product. This ensures that the product is kept below zero degrees until it arrives at the supermarket. To prevent frost damage, Frøyas' salmon is protected by a layer of cardboard, which ensures that the salmon does not come into contact with the dry ice. As the dry ice evaporates, the salmon maintains a constant temperature that keeps its freshness.

Frøyas uses 40 per cent less plastic in its packaging than competing products, and takes less space in the supermarket chiller cabinet. For consumers, this efficient packaging results in less refuse and more space in their refrigerators. For more information, see: www.froyas.com.

⁶ <http://www.vkm.no/> "Nytte- og risikovurdering av fisk i norsk kosthold" [Utility and Risk Assessment of Fish in Norwegian Diets]

⁷ <https://sjomatdata.nifes.no/#search/> og www.matvaretabellen.no http://www.matportalen.no/verktoy/tilsynsresultater/trygg_oppdrettsfisk-2



7. What we do today we do better than yesterday



Our processes must be continually developed and improved if the company is to reach its objectives. Further development and growth is closely linked to collaboration with SalMar's stakeholders. In this chapter we focus on our R&D projects and on third-party collaborations to increase sustainability, and we provide some examples of the work being done.

Research and Development

Norway's aquaculture industry has experienced fantastic growth and development. This has been possible because of the industry's unquenchable desire to improve and develop new, safer and more efficient ways of producing salmon. In such a perspective, research and development (R&D) is essential, and the industry has depended on close cooperation with the public authorities, educational and research establishments, and industry bodies. SalMar is an important contributor to the development of the industry, and gives high priority to the advancement of knowledge within its areas of operation.

The extent of involvement in R&D has been growing, both through trade associations and through internal efforts with development licenses and related projects.

In 2016, SalMar has continued to focus on lice control and the welfare of its fish stocks, and this has been reflected in our R&D activities. We remain committed to helping the industry gain as much sector-specific knowledge as possible and effectively mobilise its shared resources. In 2016, for example, SalMar has played an active role in the establishment of the Sea Lice Task Force under the auspices of the Norwegian University of Science and Technology (NTNU). This is a collaboration between the NTNU and many industry players, particularly in central Norway, whose objective is to take a wide-ranging look at the lice problem. At the time of writing, the programme is still being put together, and the aim is to establish a broad and close collaboration with several other research environments.

SalMar's contacts with the NTNU have been growing in scope in recent years, which the company considers to be only natural. We are also keen to help in the education of tomorrow's scientists, and students constitute a considerable resource who demonstrate a strong commitment to the aquaculture sector.

We have also continued to work closely with the feed industry, where a lot of exciting developments are taking place at the moment. This includes new raw materials and a great deal of new knowledge. In 2016, we completed successful field trials, which have given us new insight into specific issues relating to nutrition and efficiency. These are key issues, to which greater attention will be paid in the next few years.

Our Industrial PhD student's work continues to make good progress, and is closely monitoring our activities in the field of fish health and PD infections. This work will conclude in 2019.

Active use of R&D licences

SalMar has been actively engaged in partnerships with R&D establishments for many years. This also includes collaboration on the operation of R&D licences. The scale and professionalism relating to important development tasks has increased, and continues to increase. SalMar sees itself as a

professional, but demanding partner, whose aim is to ensure that the results of any trials are as relevant as possible, and that plans and protocols take account of the practical realities of fish farming. SalMar has dedicated personnel who organise and assist research establishments in their efforts, at the same time as operational staff gain more and more experience in how best to safeguard research results under busy day-to-day operating conditions. Proximity to the research, with opportunities to influence both its planning and areas of focus are important sources of motivation for SalMar. The development of vaccines, optimisation of medication, feeding and nutrition, and technological issues relating to large-scale operations are examples of important areas for further research.

Increased focus on genetics

SalMar has a growing focus on breeding and genetics through the 'Rauma Broodstock'. At the close of 2016, we entered into a new collaboration in support of our increased focus on genetics. Over the next few years, we will increase the strength and structure of the team working in this strategically important area. We will have more to report in the years ahead, but in 2016 we conducted successful trials relating to natural resistance to PD infections and growth in general. The change in focus and intensity of our efforts in this area is a natural consequence of the Group's desire to control the value chain and safeguard the continued development of our products and the long-term future of our business.

Safer workplaces

The build-up and discharge of static electricity in the feed pipes used in the aquaculture industry represents an HSE challenge. Under certain, partially unknown, circumstances, a high current can build up in the feed pipes. This current is discharged when the pipes are cut or – on some occasions – when someone moves around in their vicinity. SalMar has been a driving force for, and active participant in, a Norwegian Seafood Research Fund (FHF) project that resulted in a set of guidelines for the use and handling of feed pipes, which was published in 2013. SINTEF Energy was the lead R&D institution, while project management was performed by ACE.

R&D – escape of fish

Partnership for wild salmon

SalMar cares about wild salmon, too. And we are keen to ensure that aquaculture can coexist with those who make their living from wild salmon fishing in those areas in which we operate. SalMar is involved in several projects to monitor the influx of escaped fish in the country's salmon rivers. The largest of these projects aims to monitor the status of wild salmon and record escaped farmed salmon in the Orkla, Gaula, Nidelva, Stjørdalselva, Verdalselva and Skauga

rivers. In addition to SalMar, the partners in the project are the organisation Elvene rundt Trondheimsfjorden, while the Norwegian Veterinary Institute acts as project manager. The material collected is made available to the Norwegian Institute for Nature Research (NINA), the Norwegian Environment Agency and the County Governors' environment departments. Students at the Norwegian University of Science and Technology (NTNU) have also become interested in the material, and are currently examining the possibility of using it in master's level dissertations on wild salmon. The monitoring effort is organised into several subprojects. Scale samples from all fish caught in the rivers are sent for analysis to the Norwegian Veterinary Institute, and the results are distributed electronically as they are obtained via SMS and the internet. If a large number of farmed salmon is identified in the wild breeding population, the project will – in collaboration with the regulatory authorities – assess whether it is possible to implement remedial measures.

In Troms, we are participating in the Wild Salmon Industry Collaboration Project through Dyrøyseminar/Nordavind Utvikling. The project covers the following rivers and watercourses: Vardnesvassdraget, Tennelva, Ånderdalsvassdraget, Grasmyrvassdraget and Salangsvassdraget. The organisation Norsk Villaksforvalting is managing the project, whose aim is to monitor the status of the rivers and implement measures to increase the number of wild salmon in them. In addition, we work closely with Laukhelle Lakselv in Senja with respect to monitoring and emergency preparedness. The same applies to Målselv.

With regard to advice and practical initiatives relating to wild salmon, we also work closely with NINA, Ferskvannsbiolegen and Skandinavisk Miljøundersøkelser AS.

The tracking project FARMSALMTRACK, which aims to

establish a system capable of tracking escaped farmed salmon, is coming to an end. In addition to SalMar, this initiative has involved fellow fish farming enterprises Lerøy and Marine Harvest, the Norwegian Seafood Federation, the Norwegian Veterinary Institute, the Norwegian Seafood Research Fund (FHF) and the aquatic research facility VESO. During the year, it is hoped that this effort will determine which method should be used to trace escaped farmed salmon back to their owner.

Our impact on coastal locations

SalMar is taking part in a major research project entitled Environmental Responses to Organic and Inorganic Effluents from Aquaculture (ERA). The project is led by the Institute of Marine Research and includes a large team of Norwegian and international scientists. The objective is to gain new insight into our impact on coastal locations, which are often a mix of hard and soft seabeds. New knowledge and documentation are required, since the bulk of the previous research has been done on locations in fjord systems, which have quite different environmental conditions than those found in more open coastal waters. An extremely large data set has been collected at a total of 46 stations. The project now possesses the largest volume of material globally that examines the link between aquaculture and the environment over an entire generation. Its focus is to: 1) Develop models that can predict the effect of aquaculture on the marine ecosystem. 2) Develop new tracking methods that can trace emissions from aquaculture out into the marine environment. 3) Measure the effect of today's aquaculture on the structure and function of hard, mixed and sandy seabed sediments.

SalMar considers this work to be important for the company itself, but also because it provides the regulatory authorities with more knowledge and better tools that can be used to

manage the aquaculture sector successfully in the future. Although the results are not yet official, there are clear indications of extremely good conditions at the SalMar facilities that are taking part in the study. We will come back to this in subsequent reports.

Technology and people

In conjunction with suppliers and research institutions, SalMar is involved in several projects to reduce the risk of fish escaping. These projects cover both the development of new technologies and operating procedures. SalMar works closely with AquaCulture Engineering (ACE), and is involved in several projects being undertaken at our sites. See below for more information about ACE. With respect to suppliers, our work with Aqualine to develop safer -cages based on an integrated design concept is of particular importance.

Aqualine AS has improved cage technology by developing a new concept for cage systems made from plastic. SalMar was actively involved in this project, along with other major aquaculture companies, and made sites available for testing. In addition, Sintef Fiskeri og Havbruk, ACE and Sintef Marintek were hired in connection with the testing and documentation of prototypes. For SalMar it was important to develop a concept which focused on the way the different parts of the fish farms interrelated. A further objective was to reduce the risk of wear between the net and the other components, improve working conditions on the collar for greater efficiency and safety, increase the lifespan of the equipment and reduce costs, as well as develop equipment suitable for use in exposed locations. The Midgard System meets the requirements outlined here, and went into normal operation at SalMar's sites in 2013. Experience so far has been good, and we have experienced no unwanted incidents with the Midgard System.

In addition to its continuous efforts to maintain a high level of quality, the human factor as a reason for fish escapes is followed up in the Norwegian Seafood Research Fund (FHF) project entitled Human Factors and Escapes from Salmon Farms. The project aims to establish a knowledge platform for the development of solutions to prevent human error from resulting in the escape of fish. The project concluded in 2014, but experience deriving from it is continuously included in the ongoing development of SalMar's new management system.

Through the Ocean Farm facility that is currently under construction, see Chapter 8, many new technological principles will be tested in a full-scale pilot. Among other things, the facility itself will be equipped with new types of sensors, which will make new data available to our operators.

Electrification of the aquaculture industry

SalMar is striving to make the aquaculture industry more environment friendly, and has set itself to become more energy efficient. Use of onshore power at its sea farms and electrically powered boats are two examples of the projects we are working on.

Onshore power

SalMar Farming has a project underway to run electrical cables from onshore out to our sea farms, and in 2015 and 2016, 13 sites have replaced their diesel generators with onshore power. Undersea cables have been laid, and the combined reduction in diesel consumption for these sites is stipulated to be the equivalent of 6,896,000 kWh. In addition to a decrease in emissions, this is an important initiative with respect to occupational health and safety, not least as regards noise from the diesel generators.

World's first electric workboat - Elfrida

In 2016, SalMar Farming put the world's first completely electric aquaculture workboat into operation. It is a 13.5 m catamaran that was built in Frøya by Ørnli Slipp. Siemens supplied the battery pack, which is based on many years' experience from hybrid offshore vessels and electric ferries. The workboat will be used at one of our sites, Kattholmen, and expands the range of applications for electrically powered vessels.

The project, which is described as an important pilot project in the effort to electrify the aquaculture industry, has received financial support from Enova, a Norwegian government agency tasked with promoting energy efficiency and the development of climate-friendly technologies. Challenging waters and varied weather conditions demand robust solutions. This is a boat that can recharge from onshore power supplied to the feed pontoons, thereby cutting consumption of fossil fuels and eliminating both exhaust gases and noise pollution. The Elfrida will, in all other respects, have the same properties as any other 13.5 m catamaran.



Elfrida, our first electric workboat



ACE, AquaCulture Engineering, was established in 2006 and manages three R&D licences on behalf of Sintef Ocean. In April 2009, ACE and SalMar signed a cooperation and operation agreement, under which SalMar Farming AS undertakes the commercial operation of the licences in association with its own sites.

ACE focuses on the aquaculture industry's main challenges, eg lice, escapes, HSE and emissions, by uniting research establishments, suppliers and producers in large-scale projects, whose main aim is to develop and test new aquaculture technologies. Users are often national and international scientists and others who wish to perform practical experiments and tests under controlled conditions that are as realistic as possible.



Any employee faced with a challenge or difficulty has a responsibility to help come up with a solution. Every challenge represents an opportunity for progress. In this chapter we highlight some examples of internal development projects.

Employee involvement

It is important that all employees contribute their opinions and suggest ways to improve things if SalMar is to develop and continually progress. To facilitate this, regular meetings are held in each department to plan ahead and review what needs doing. Large parts of the Group make use of a scheduled meeting scheme, which focuses on individual action plans and close follow-up of each individual employee.

Sustainable smolt production

Robust and viable smolt are among the most important pre-conditions for high performance once they are transferred to the sea and for a high-quality end product. SalMar's goal is that more than 95 per cent of the fish transferred to its sea farms will survive until harvested. To achieve this, SalMar's hatcheries work systematically to promote smolt quality. In recent years, the average size of the smolt that are transferred from the hatcheries to the sea has increased by 30 per cent. Particular efforts are devoted to achieving consistently good water quality and temperature control, optimal oxygen conditions, a good environment in the tanks in which the juvenile fish are kept, good sorting routines and sound fish health.

SalMar invests heavily in making this part of its production process as sustainable as possible. So when new facilities are built or existing ones upgraded, particular importance has been attached to environmental measures – in the form of waste water treatment and, not least, the prevention of escapes from the hatcheries. SalMar has a zero-tolerance policy with respect to escapes from its hatcheries.

Below, we present two major investments in the area of smolt production at SalMar.

Ultramodern new smolt facility in Senja, Troms

In 2016, SalMar has built one of the world's largest and most modern smolt production facilities in the Tranøy district of Senja. The facility, which covers a floor space of approx. 12,300m² and has a tank capacity of around 17,000m³, will be able to produce 15 million smolt per year, 4 million of which will be large smolt weighing more than 200g. The facility plays a key role in SalMar's efforts to become self-sufficient in smolt in Troms and Finnmark.

In December 2016, SalMar put the first two departments of the new facility into operation, and as at March 2017, four out of a total of eight departments have gone into production. All departments are scheduled for completion during the spring, and the first smolt are due to leave the facility as underyearlings in September 2017.

This hatchery, too, has been build using recirculating

aquaculture technology (RAS), with approx. 97 per cent purification and reuse of the production water. This means that the facility uses as little water as a standard throughput hatchery producing around 1 million smolt. Water consumption has therefore been reduced more than 10-fold. The production water is heated using heat pump technology, and all waste water from the plant will be cleansed using particle filters. An ultramodern drying unit will be used, so that all the sludge produced by the facility will be dried to a 90 per cent dry solid, which can be sold on as a soil improvement agent and/or as a raw material for other manufacturing industries.

When planning and constructing the facility, emphasis has been placed on creating separate hygienic, infection-prevention zones between all the departments, where staff and materials must be sluiced in. All intake water, both fresh-water and seawater, is filtered and disinfected before it passes into the system to reduce the risk of infection.

The facility will have a staff of around 15 highly qualified employees.

Follafoff

SalMar Settefisk AS's Follafoff hatchery was established in 1985. Over the years, the facility has been significantly expanded and modernised. Today, it is a hypermodern production facility, licensed to produce 20 million smolt per year. Utilisation of alternative energy resources is crucial for the facility.

By means of heat exchangers, the hatchery exploits the energy from the waste water produced by the cellulose plant MM Karton FollaCell AS, which is located right next door. Energy corresponding to around 20 million kWh is extracted in this way. This energy is used to heat the production water used in the hatchery.

The hatchery's production water is obtained from the Follafoff Power Plant. A turbine has been installed in the supply pipe to the hatchery. As a result, up to 1.5 MW of electrical power is derived from the water supply before the water is used for fish production.

The hatchery was originally built as a traditional flow-through facility, with a water consumption of up to 60,000 l per minute (3,600 m³/hour). Since 2007, however, four departments have been established with recirculating technology that permits up to 97 per cent of the water to be purified and reused. Today, around half of the hatchery's output is produced in these recirculation departments. This means that an increase in production from approx. 5 million smolt per year to around 13 million smolt per year has been achieved with no increase in overall water consumption.

Because RAS technology enables a large production volume with little water consumption, it offers unique opportunities to control and manage water quality. This applies in particular to optimisation of the water temperature without using large amounts of energy for heating.

All waste water from the hatchery is cleaned using particle filtration before being released into the recipient. Sludge from the waste water treatment plant is delivered in accordance with applicable emission standards to farmers who mix it with traditional animal manure for spreading on the fields as a soil improvement measure.

Smolt from the hatchery are delivered to SalMar's own fish farms – primarily in central Norway. In recent years the hatchery's smolt have performed very well in the marine phase, not least with respect to survival rates. The hatchery is measured on the smolt survival rate 90 days after transfer to the sea farms. The last two generations of smolt have achieved a 97.2 per cent (14-G) and a 97.5 per cent (15-G) survival rate, respectively. The final figure for the 16-G fish has not yet been calculated, but for 16-G underyearlings, the survival rate after 90 days is 98.5 per cent.

In June 2016, the Follafooss facility started construction of three new RAS departments, which will together double the available production volume at the site. These new departments are scheduled for completion in October 2017, following which production capacity at Follafooss will increase to 20 million smolt per year. Around 20 per cent of these will weigh 250g. Because these departments also use RAS technology, with the purification and reuse of the production water, overall water consumption will not rise, and the growth in production will take place without any material increase in overall discharges to the recipient.

Innovation with respect to feed and feeding

Through 2016, Salmar has been working to optimise feeding at our production sites. We still have a strong focus on optimising feeding during the first 12 weeks at sea, and to have the greatest possible feed availability during this period. This is important to achieve a healthy and robust fish.

In 2016, we continued our focus on feeding centres, such that, at the close of 2016, SalMar had three feeding centres which remotely feed several sites from central control rooms. We have one feeding centre at Lysnes in Senja, one in Fosen and one in Smøla. At the Lysnes facility, we have also gained approval for the establishment of a teaching and demonstration licence.

The remote feeding concept has increased our focus on feeding, and is considered an important step in achieving good growth, short turnaround and good MAB and site utilisation. It also allows for a greater focus on the competence of the employees who perform one of the important core tasks at SalMar. Facilitating their access to real-time data, and tailoring optimal reporting and support tools are also areas to which the company is devoting resources.

SalMar is working with its suppliers on new, alternative oil raw materials that will reduce the environmental footprint of SalMar's fish farming operations.

In-house production of cleaner fish

SalMar is making extensive use of so-called 'cleaner fish' to control sea lice numbers. SalMar's facility at Langstein in Trondheimsfjord produces cleaner fish that are then transferred to our sea farms. Based on our positive experience so far, this use of cleaner fish will continue. The facility is currently being expanded to boost production capacity with effect from the autumn of 2017. Partnerships relating to the production and use of ballan wrasse have also been entered into. This will provide us with a new weapon in our battle against sea lice, particularly during the hot season.

InnovaMar from dream to reality

Since SalMar's inception in 1991, harvesting and processing have been a key part of the Group's strategy. InnovaMar, one of the world's most innovative and cost-effecting facilities for the landing, harvesting and processing of salmon, went into operation in 2011. The plant covers an area of 17,500m², and cost around NOK 550 million to build and equip.

InnovaMar comprises two departments (harvesting and processing), and a great deal of effort was made to challenge traditional solutions. Innovative production technologies increase the quality of the final product, reduce costs and improve working conditions for the staff. The plant can produce around 150,000 tonnes of salmon per year.

In 2014, SalMar started using a new arrangement of holding pens outside the harvesting plant. The facility comprises eight cages, which can each hold 350 tonnes. The facility is staffed around the clock, and features CCTV surveillance and continuous monitoring of oxygen and temperature levels in all cages. The size of the new facility has increased InnovaMar's flexibility, since fish of different sizes and from different locations can be made available to customers.

Increased sustainability through high degree of value added products

SalMar has a spoken ambition of a high degree of value added products, meaning increased production of fish filets instead of whole fish. This involves reduced need for transport and energy and contributes significant to sustainability in the value chain.

Finished products are prepared online as pre-rigor items, which affords great savings in the form of a reduced need for handling and input factors. Online production avoids the need to keep whole fish in containers filled with ice/slush in cold storage for 2-6 days. It also reduces the amount of labour and trucks needed for their internal handling and transport. The product is kept in production zones only for as long as it takes to process the finished item from whole fish. This avoids any increase in the temperature of the raw material,



Innovamar, vårt hovedkontor på Frøya, som også rommer vårt slakteri og videreforedlingsaktivitet

which is already chilled from the harvesting plant, and saves further use of ice to reduce the temperature of the finished item to the desired 2°C level. In addition to environmental benefits, online production of pre-rigor fillets is also advantageous with regard to increased freshness and maximum exploitation of the raw material. SalMar aims to turn as much as possible of the salmon into pre-rigor fillets.

	2016	2015	2014	2013
Value added products (1000 tons product weight)	36,9	31,9	29,1	24,6

By-products (head, spine, offcuts) go directly to Nutrimar via internal conveyers/pipes, which ensures a high degree of freshness and usable volume when processing this raw material. It also means that there is practically no need for input factors relating to its transport and handling.

Product development and packaging solutions

To reduce emissions and costs associated with the transport of fish, SalMar has focused heavily on the export of pre-rigor fillets instead of whole fish. This reduces the weight by around 40 per cent, and consequently the need for transport, since only those parts of the product that the customer

makes use of are sent by road. Increased processing therefore results in fewer heavy goods vehicles on the road, and fewer emissions. Since fillets are cut before distribution to the market, we live up to the principle of supplying the right quality to the right customers. Any fillets downgraded due to quality issues will be transformed internally into appropriate 'secondary products'. In addition, all offcuts from the production of fillets at SalMar's facilities InnovaMar in Frøya and Vikenco in Aukra are sent to Nutrimar for further processing. As a result, 100 per cent of the raw material is exploited. See the presentation of Nutrimar AS later in this chapter.

Today, around 30 per cent of SalMar's finished pre-rigor products are packed in reusable crates. This provides savings in the form of a reduced need for ice and the disposal of polystyrene boxes. SalMar is working actively to increase the proportion of products transported in reusable crates. A project is currently underway to identify optimal packaging solutions in connection with the export of pre-rigor fillets. Reusable crates, shipments without ice and packaging technologies that provide complete bacteriological security are all included in the project, which will continue on into 2015. The project is also investigating recyclable cardboard packaging and transport without ice. Eliminating the ice would reduce both weight and volume, and thereby the level of emissions produced during transport.



Making complete use of the raw materials

Nutrimar was set up in 2007. Its objective was to take better care of the raw material produced by SalMar AS. Traditionally, acid was added to much of the waste raw material from salmon harvesting plants and then sold on as low-grade ensilage.

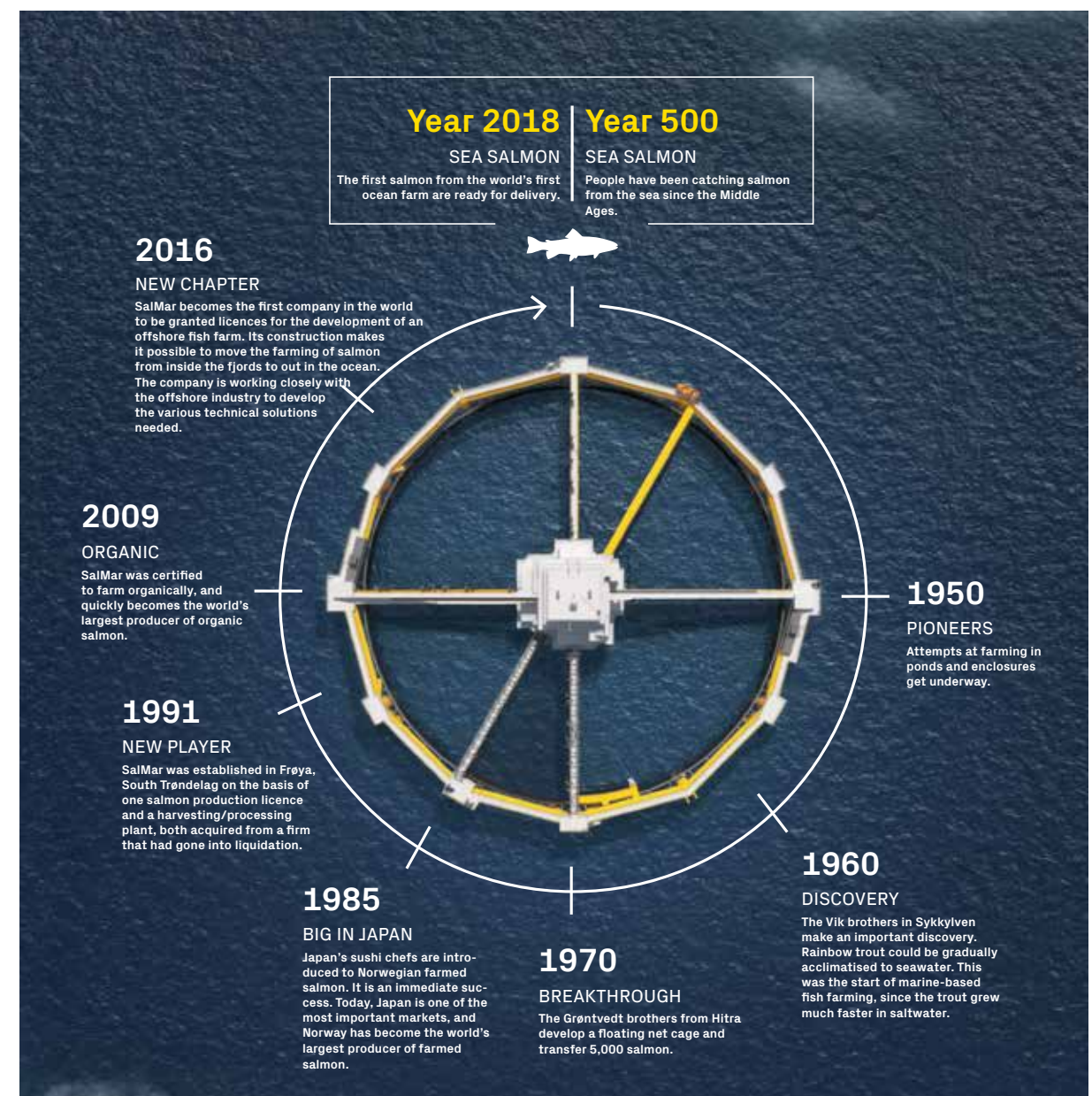
Today, Nutrimar accepts and processes 100 % of the production waste from InnovaMar. We also accept all the production waste from the Vikenco harvesting plant.

The raw material comprises day-fresh guts, heads, spines and offcuts from harvesting and processing. The products

currently produced include oil, protein concentrate and meal. All these products are sold as ingredients in the commercial production of animal feeds, including fish feed and petfood.

Nutrimar has embarked upon construction of a new plant, which will go into operation in 2017. The new factory will make even more high-value oils and proteins for both human and animal consumption.

For further details, see www.nutrimar.no



Creuna. Foto: Getty images

Ocean Farming – we bring the salmon back to the ocean

On 28 February 2016 the Norwegian Directorate of Fisheries awarded the first eight development licences to Ocean Farming AS, a part of the SalMar Group. This is a full-scale pilot project, in which SalMar is collaborating with other organisations within the aquaculture and offshore industries.

The pilot Ocean Farm installation is currently under construction, and the aim is to place it in position and transfer fish into its net pens in the third quarter 2017. The development licences have been granted for a period of seven years, but may be converted into ordinary production licences before that time if the objectives and the criteria stipulated by the Directorate of Fisheries have been met.

Ocean Farm 1 ushers in a new era for the aquaculture industry. It is based on the very best of Norwegian fish farming and offshore technologies, and is the solution to many of the challenges linked to sustainable growth in the aquaculture sector.

Dimensions:

Height: 68m
Diameter: 110m
Volume 250,000m³

Contributes to sustainable growth

For SalMar, one of the preconditions for sustainable growth in the aquaculture industry is being able to use new locations that provide good conditions for the farming of fish – typically areas that are less affected by tidal fluctuations, and where the direction of the water current is more stable. The purpose of the project is to develop technologies that can make this possible. Initial assessments began in 2012, with various technical solutions being evaluated over the next three years. This has resulted in a finished design specification for the Ocean Farm concept. If this first full-scale pilot facility is successful, it could help to resolve the challenges to growth being experienced by the aquaculture industry.

Each year, SalMar reports on its activities in the field of corporate social responsibility and sustainability on the basis of the guidelines issued by the international organisation, the Global Reporting Initiative (GRI). Reporting takes place via this report, SalMar's annual report and other information published on our website.

The sustainability reporting for 2016 includes data for a number of 'Disclosures' from GRI's guidelines, all Core elements are included and some additional. An overview of which disclosures the reports cover is presented in the table below. The report, except from the economic figures and the GHG balance sheet, is not externally evaluated.

GENERAL DISCLOSURES (GRI 102)

Omission from
GRI-requirement

Organizational profil		
102-1	Name of the organization	Salmar ASA
102-2	Activities, brands, products, and services	Farming of Atlantic salmon, conventional and organic. Farming of trout.
102-3	Location of headquarters	Kverva, 7266 Kverva, Norway
102-4	Location of operations	Page 16-17
102-5	Ownership and legal form	Salmar ASA is a public limited company that is listed on the Oslo Stock Exchange. For further information, see Annual Report for 2016.
102-6	Markets served	Page 16-17 Annual Report, note 23 to the financial statement
102-7	Scale of the organization	Annual Report p. 4-7
102-8	Information on employees and other workers	Page 21-22 partly
102-9	Supply chain	Page 30
102-10	Significant changes to the organization and its supply chain	Page 37-38 and 41 Annual Report Page 12-15 and 45
102-11	Precautionary Principle or approach	Page 18
102-12	External initiatives	Page 6-7 and 30
102-13	Membership of associations	Norwegian Seafood Federation, Confederation of Norwegian Enterprise (NHO), OrAqua – Organic Aquaculture, Federation of European Aquaculture Producers (FEAP),
Strategy and Analysis		
102-14	Statement from senior decision-maker	Page 6-7
Ethics and Integrity		
102-16	Values, principles, standards, and norms of behavior	Page 21-22 and www.salmar.no – Corporate Governance
Governance		
102-18	Governance structure	Page 18 and Annual Report p. 31-39
102-19	Delegated authority	Page 18
102-20	Executive-level responsibility for economic, environmental, and social topics	Page 18
Stakeholder engagement		
102-40	List of stakeholder groups	Page 19
102-41	Collective bargaining agreements	79,6% of the employees
102-42	Identifying and selecting stakeholders	Page 19

102-43	Approach to stakeholder engagement	Page 19
102-44	Key topics and concerns raised	Page 19
Reporting Profile		
102-45	Entities included in the consolidated financial statements	Page 5 and Annual Report Annual Report, note 6 to the financial statement
102-46	Defining report content and topic Boundaries	Page 18 and 19
102-47	List of material topics	Page 18 and 19
102-48	Restatements of information	not done
102-49	Changes in reporting	Page 5, none
102-50	Reporting period	Page 5
102-51	Date of most recent report	2015
102-52	Reporting cycle	Yearly
102-53	Contact point for questions regarding the report	Page 5
102-54	Claims of reporting in accordance with the GRI Standards	Page 42
102-55	GRI content index	Page 42-43
102-56	External assurance	Page 42
Management Approach (GRI 103)		
103-1	Explanation of the material topic and its Boundary	Page 17-28, partly
103-2	The management approach and its components	Page 18 -28, Annual Report p. 27-29 partly
103-3	Evaluation of the management approach	Page 18 -28, Annual Report p. 27-29 partly
Environmental (GRI 300)		
301-1	Materials used by weight or volume	Page 31
302-1	Energy consumption within the organization	Page 27-28 partly
302-3	Energy intensity	Page 27-28
302-4	Reduction of energy consumption	Page 27-28, and p. 35-38 partly
302-5	Reductions in energy requirements of products and services	Page 37-38 partly
303-3	Water recycled and reused	Page 27-28
305-1	Direct (Scope 1) GHG emissions	Page 27-28
305-2	Energy indirect (Scope 2) GHG emissions	Page 27-28
305-3	Other indirect (Scope 3) GHG emissions	Page 27-28
305-4	GHG emissions intensity	Page 27-28 partly
305-5	Reduction of GHG emissions	Page 18 and 24
306-3	Significant spills (Fish escapees)	Page 31
Social (GRI 400)		
403-1	Workers representation in formal joint management –worker health and safety committees	Page 18, 20 and 21 partly
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Page 18, 20 and 21 partly
404-2	Prandrams for upgrading employee skills and transition assistance prandrams	Page 21 partly
404-3	Percentage of employees receiving regular performance and career development reviews	Page 21 partly
Society		
205-3	Confirmed incidents of corruption and actions taken	Page 22, Annual Report p. 29 partly
Customer health and safety (GRI 416)		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	Page 29-31

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