

Sustainability report 2020

SHAPING THE FUTURE OF
FISH HANDLING

ITS ALL ABOUT
FISH WELFARE

THE VIEW OF AN
IOC AMBASSADOR

FOR FUTURE
GENERATIONS

ENABLING
SUSTAINABLE
FISH HANDLING



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Our heritage



The purpose of our sustainability report is to be transparent about our current sustainability performance, to communicate our future goals and to share the story on how we aim to achieve those goals.

The ocean, and the wild nature on the west coast of Norway has shaped a culture for pioneering and exploring since the pre-Viking age.

With the North Sea as highway to the world we understood that quality is a matter of life or death at sea. Our forefathers have passed on the knowledge through generations, creating a tradition for innovation.

We been raised to only harvest what we need and utilize everything that we harvest in a sustainable way. And this is a heritage MMC First Process will pass on to the generations to come.

Shaping the future of fish handling



Petter Leon
Fauske

CEO



It is a great pleasure to welcome you to MMC First Process' first complete sustainability report. This report describes how we aim to continue our growth with the Sustainable Development Goals as our compass to strengthening the company's value proposition as an enabler of the sustainable production and delivery of healthy food to more people globally.

Growing up on the western coast of Norway the sea has always been a central part of my life, as a regular source of food on my family's dinner table, as the foundation of a local industry providing employment to local men and women, and as the basis of precious childhood memories of fishing trips with family and friends.

My story is familiar to anyone growing up in our part of western Norway. This has ingrained a local culture of respect for the ocean and what it has to offer, leading to a tradition of sustainable resource management by harvesting only what we need and utilizing as much as possible of the resources we have harvested.

This ethos has been fundamental to MMC First Process from its inception and has been instrumental in developing our company to a global leader in sustainable fish handling solutions. As the climate crisis has been elevated to the most important challenge of our lifetime, we are prepared to take on more responsibility and build on our legacy to be a complete gamechanger in addressing the key sustainability challenges and opportunities facing the fishing industry globally.

To guide this mission, we have embraced the Sustainable Development Goals as our common agenda to sustainable development. We have used the SDGs to identify the most material issues for our stakeholders and where MMC First Process can have a significant impact we have made these integral to our business strategy. Consequently, our sustainability efforts are focused around three strategic pillars:

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1. Fish welfare and sustainable food production
 2. Competency and Society
 3. Sustainable value chain
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The purpose of our sustainability report is to be transparent about our current sustainability performance, to communicate our future goals and to share the story on how we aim to achieve those goals.

I am particularly proud to introduce you to our partnership with the Olympic athlete and fierce defender of the oceans, Martin Helseth, who you will meet on pp 12 of the report.

There are challenging times ahead for all of us, but there can be no excuses. MMC First Process can continue to enable our partners and customers to achieve a sustainable bio-mass industry by carefully managing our common resources and accessing new markets. I am confident that MMC First Process is part of the solution. Our ambition is to scale our solutions and share our knowledge to provide more sustainable food based on marine proteins on dinner tables globally.

If you have comments or questions about any aspect in this report, please do not hesitate to get in touch to engage with me or one of my committed colleagues.

Thank you for reading our report.

Sustainable

fish handling

– it's in

our nature

MMC First Process has unmatched competence and a wide range of technology within fish handling, processing and cooling.

This pooling of specialist expertise makes us a complete supplier to the seafood industry of advanced and sustainable system solutions for handling, processing and cooling of fish.

A **complete** supplier of **sustainable** fish handling systems in one company.

Our vision is to transform the seafood industry by offering complete and sustainable system solutions for handling, processing and cooling of fish to the seafood industry - within wild-catch and aquaculture - worldwide.

Together we want to make our customers the best in the world at managing the sea's most important food resources efficiently, sustainably and carefully to leverage our common resources in the best way for future generations. This is **our mission**.



Presence

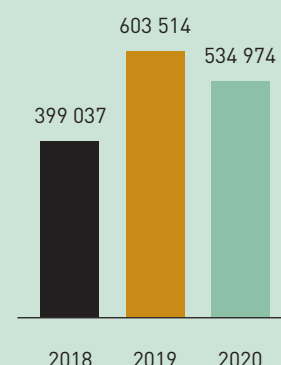
- Locations in Norway
- Agents
- Pelagic on shore
- Wellboat

Employee stats

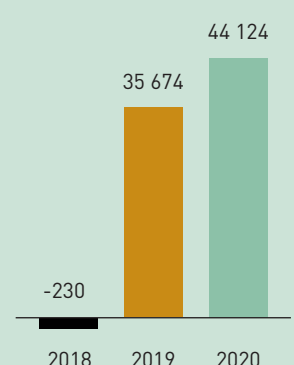
Employees	2018	2019	2020
Women	14	21	28
Men	125	135	145
Total	139	156	173

Growth of business

Revenue



EBITDA



Timeline

1986

- "Old" MMC established
- Focus on vacuum pumps

1992

- TENDOS established by Leif Gjølseth. Strong competitor to MMC
- Petter Leon Fauske started in Odim

2000

- Large merger with MMC, Odim, Fodema, Tendos [Optimar]

2003

- First Process established by Petter Leon Fauske
- "New" MMC established
- Group re-established
- Established MMC Chile

2005

- First Process established in Japan

2006

- MMC acquired Atek AS
- First Process established in Chile and Peru (2006/2007)

2008

- MMC acquired Trio Kulde AS
- Closed MMC Chile

2009

- MMC acquired Skogland AS
- MMC Peru established

2010

- MMC Green Tech AS established

2012

- Havyard Group acquired 70% of MMC

2013

- MMC Kulde merged as one company

2014

- Havyard acquired remaining shares in MMC – listed on stock market
- MMC is one of 4 business areas in Havyard
- New strategy in First Process
- New business model in First Process – Scalability

2017

- MMC merged with First Process
- New name MMC First Process AS

2019

- Credo, First Process Holding and Erle Invest acquired MMC First Process from Havyard
- MMC Green Tech sold to Havyard

2020

- Pioneering innovations in land-based fish farming for moving and handling large fish

Our legacy



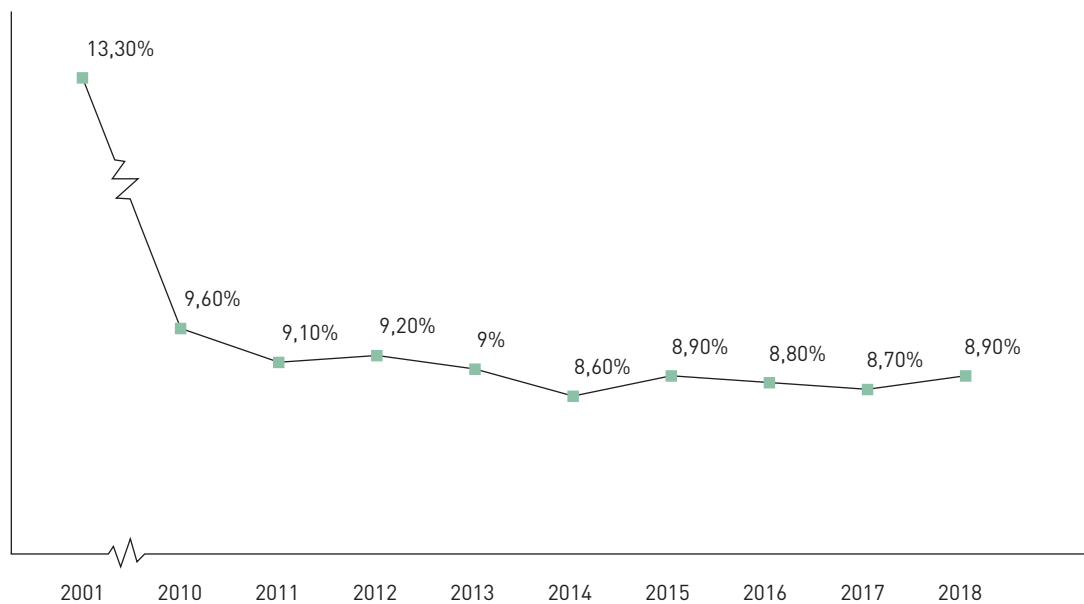
Showing responsibility is not just about capitalist profit. It is about contributing to building the responsible capital our customers need to manage society's resources.

Our legacy will be judged on the decisions that we make every day. The profound understanding of fish welfare is critical for our common future.

We have an obligation to provide those who will be managing our common wealth with the resources they require to be best at managing the ocean's and our common resources in the future.

Our goal is to shape the future for those who come after us by ensuring that our common resources in the oceans are sustainably managed for future generations. This is our commitment for future generations – and this will be our legacy.

The global challenge



The graph shows the prevalence of undernourishment in children from 2005 to 2019. 247 million children are still malnourished or suffering from hunger.

Source: <https://data.worldbank.org/indicator/>

There are nearly 8 billion people on the planet today. By 2050 there will be nearly 10 billion. There is no lack of food in the world, but the food is unevenly distributed. Today, 690 million people are uncertain where their next meal is going to come from and 247 million of children are malnourished or suffer from stunting.

The interaction between undernutrition and infection can create a potentially lethal cycle of worsening illness and deteriorating nutritional status. Poor nutrition in the first 1,000 days of a child's life can also lead to stunted growth, which is associated with impaired cognitive ability and reduced school and work performance.

One of the key conditions for promoting a sustainable world is ensuring food security and availability for all people. The United Nations sustainability goal number 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture, is the key to this. The pandemic of 2020 has further exacerbated the situation for many people across the globe.

The UN sustainable development goals (SDGs) encompass all factors to be addressed to achieve a sustainable future. Sustainable development was defined in 1987 by the Brundtland Commission and it still holds true today: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Typically, the SDG could be divided into 3 areas with some overlap:

- Environmental – the impact of our production and consumption on the world's climate and ecosystems.
- Social – the impact we make on people and cultures around us.
- Governance – promoting transparency and accountability for governments and companies

MMC First Process fully supports and will do what it can to improve sustainability for our globe. There are some development goals where MMC First Process can make a significant contribution. UN SDG 2: End Hunger, which includes improving access to nutritious food and a more secure food availability.

Why is focus on improving food availability important?

Access to a healthy diet and food security promotes well-being, reduces conflict and is the bedrock upon which all further prosperity for people relies. Not worrying about the next meal, decent education and good health are fundamental requirements to fulfilling a good life and creating a sustainable planet.

In the past decade, there has been significant progress that has seen hunger and malnutrition reduced. However, it is critical that this effort continues to include all people. Using the industrial world's traditional methods of food production, food distribution and dietary habits of the industrialised worlds is simply not possible as it would consume far too many resources. Therefore, we need to think about how we can improve resource management and production in both the developed and developing world.



Building a triple bottom line in the company is crucial, and both our customers and ourselves must see people, the planet, and profit as a whole. Today's decisions must not be made at the expense of future generations' well-being.

Eliminating hunger also means thinking differently about how we go about sourcing food and how technology and know-how can be used across the globe.

Making high quality food in physical proximity to where it is consumed is both environmentally friendly and improves certainty and predictability in the food supply.

Water is the source of life and the ocean has been providing food for people since the beginning of time. Historically, the oceans have represented an unlimited supply of food. As industrial wild catch has become ever more efficient, we have all realised that the ocean represents another resource that we must manage carefully in order to ensure a sustainable supply of food. Maintaining a careful balance is also necessary, if we are to ensure the bio-diversity upon which all things rely. By combining this knowledge with modern technology and innovation we are now able to improve and create new opportunities for the fish industry. We can improve the treatment of fish in the wild-catch industry by working towards a position where all fish taken out of water can be processed for food. The fish-farming industry can also be improved so that all the fish that is farmed can be processed as food. Finally, we can help produce bio-mass, away from natural element, on land. In turn, this opens up many opportunities for bringing steady and reliable food supply to new places in the world, so as to help people whilst reducing pressuring of the ecosystem in the oceans.

The view of an IOC Sustainability Ambassador



**Martin
Helseth**

Olympic rower

As an accomplished Olympic rower, Martin has already taken part in several international rowing competitions. To achieve this, he has to be organised and focused as he combines his contributions as an IOC Sustainability Ambassador with progressing in his studies and diligently following his training regime.

Age: 27
International track record:
9th Tokyo Olympics 2021
Silver WorldCup III 2021
Bronze WorldCup I 2018
Bronze WorldCup II 2017
Silver U23 World Championships 2016
Silver U23 World Championships 2015

In the year of the coronavirus, Martin Helseth, IOC Sustainability Ambassador, decided to relieve his boredom with a daily dive. With every dive he collected plastic from the ocean.

In summer 2020, Martin was supposed to compete in the Olympic Games in Tokyo. The buildup for the competition was suddenly put on hold and the team was sent back home from their training camp in Portugal. Martin was sent back home to Aalesund to go into quarantine and did not hold out much hope for the rest of the rowing season. The local rowing club was shut down and there was little activity, so he returned to his favourite hobby of freediving and spearfishing. He started by going out for one dive a day for a couple of months.

After witnessing at first hand what goes on beneath the surface of the water, Martin made a rule for himself. From now on he would always bring back more waste than fish from his spearfishing trips. However, after trying this out for a while he found out that it made more sense to focus on collecting waste rather than hunting. He made a deal with the local waste handling company whereby they would take care of all the waste he could collect. He also started a crowdfunding campaign, where he set up a goal of cleaning 1kg of waste for every 10 Norwegian kroner donated. At the end of the project, he had cleaned almost 7 tonnes from the areas around Aalesund and Oslo.

His main activity is rowing and during his years on the national team he has won international medals at World Cup events and in the Under-23 World Championships. He follows a strict training regime and works out between 20 and 30 hours per week. He takes no holiday to speak of. The sport enables him to see the world, meet incredible people and pursue his childhood dreams on a daily basis.

Martin has found out that he can use his position as an elite athlete to draw attention to the issues he cares about. Since childhood, he has spent much time in and around the sea and he is now very worried about human impact on our seas, waterways and oceans. He has therefore become an IOC Sustainability Ambassador and an EU Climate Pact Ambassador through an organization called "The Big Plastic Pledge", which was started by British sailor Hannah Mills. She started the organization after witnessing the bad water quality, and the amount of plastic in the water, during the Rio Olympics in 2016.

In 2020 Martin entered into a partnership with MMC First Process, to assist the company in its work of promoting and contributing to a sustainable world. Martin will be advising MMC First Process on its sustainability strategy and will act as our compass, helping us to stay on course as we navigate our way through sustainability and the promotion of our products. Martin grew up in the north-west of Norway and has always loved nature. MMC First Process and Martin share the common vision of making the most out of nature.



"To compete globally, we have to travel. However, I have suggested changes. For example, holding several competitions in one place in a shorter timeframe. I also try to avoid flying, if possible, preferring train, car or even my own bicycle", says Martin.

"I take great pleasure in being out in the open air and I am mindful that the level of resources we extract from nature for our own consumption needs to be kept as low as possible – and we must make use of everything we harvest," says Martin. This basic view of how to treat our common resources is strongly shared by MMC First Process.

"Why plastic, I ask. Why not something else?" "Plastic is visible, and it clearly does not belong in the sea. It is easy for people to understand. Everyday choices matter as we try and work out how we can secure a sustainable future for young people. Martin buys much of his food from a shop that sells food that is close to its expiry date and food that has errors in the packaging, or for other reasons cannot be sold in a regular supermarket. He drives an electric moped and voices his opinion in IOC panel discussions.

"I do what I can, both in my everyday life and in any forum where my voice can be heard. The changes that are required should happen as part of people's everyday lives and we should all make choices that promote sustainability. The same goes for companies – every company must do what it can to be sustainable. MMC First Process is in a great position to do its part: namely to promote and develop technology to make sure we take good care of the fish we produce".

MMC First Process has an ambitious goal; that of being "A complete game changer". It involves paying maximum attention to fish welfare and optimising our clients' processes to ensure that as much as possible of the fish caught in the ocean or farmed in controlled environments ends up as high-quality food for people. This is a goal that we expect Martin to hold us to and help us to achieve.

"There are many serious issues with industrial food production, but it is a hugely important part of the sustainable food equation. MMC First Process is using technology, experience and their basic ethos to achieve the highest possible standards. I hope that I can make a contribution to this important journey," says Martin.

It's all about fish welfare

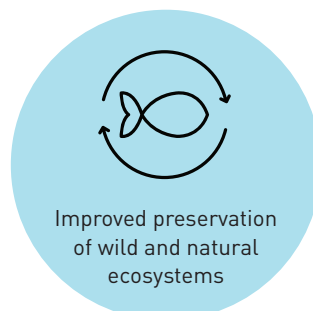
MMC First Process builds systems and machinery for handling live fish in all phases of their lives. Through continuous development and research in collaboration with academia and other partners we continue to refine and improve the fish handling process. By excelling at what we do, we enable our customers and partners to increase the amount of finished product and the number of meals they can produce.

Within land based or ocean-based production, MMC First Process can help stabilize and create a predictable and sustainable food supply in areas of the world where it is needed.

Fish is the most farmed vertebrate in the world today. Billions of fish are being farmed for food and the industry is growing. By focusing on improving condition for the fish we accomplish

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1. More efficient business and employee satisfaction
 2. Improved food standards
 3. Improved preservation of wild, natural ecosystems
-

In addition to improved animal welfare and better preservation of wildlife, the knowledge and experience we have gained by focusing on fish welfare has helped us to hone our processes for the benefit of fish-farming generally and an expanding client base all over the world.







To maintain optimal fish health, reduce stress and fight diseases, it is of the utmost importance to handle the fish gently. As a world leader in live fish handling, we have developed system solutions to handle fish in a sustainable and gentle way. We continuously work to promote good fish health, maintain fish welfare and safeguard the environment when developing our products and solutions for handling and transportation of live fish.

The number one challenge in the wild-catch and fish farming industry is to make sure the fish you handle survive the processing before slaughter. The fish should remain calm and comfortable right up until it is taken out of the water in order to improve quality. Fish welfare is essential to optimise production, extract the most value from the biomass being managed and finally ensure high quality food that is ready for human consumption. We should include a reflection on the respectful treatment of living fish: Our aim is to kill only what we eat and make the process as humane as possible for the fish.

Our aim is to only slaughter the fish that will become food and see that no other fish is killed or destroyed due to inadequate handling. By promoting fish welfare and the humane treatment of fish we ensure this objective.

By enabling and making it possible to farm fish in ever more exotic locations, our industry becomes a real contender and enabler for addressing food security and nutrition to help achieve UNSDG number 2: Zero Hunger.

Carbon footprint of farmed Atlantic salmon vs other proteins

25 kg CO2e - Beef	
6.5 kg CO2e - Pork	
4.3 kg CO2e - Poultry	
3.2 kg CO2e - Salmon	

Kg CO2 equivalents per kg product
(complete supply chain)

Source: <https://ourworldindata.org/food-choice-vs-eating-local>



Business not as usual



From left: Eivind Vinje and Roy Glomset

Innovative fish welfare solutions

Innovation and creativity have been at the core of our business since we started. In a high-tempo industry and a business that offers multiple opportunities and challenges, we have established a separate, dedicated interdisciplinary R&D department. This is an important structural initiative to enable us to take the next big steps forward.

"From the start of an R&D project through to its completion, we continuously review our goals and ambitions for fish welfare and biomass security," says Eivind Vinje, VP R&D. "We set the bar high as we seek to live up to our own and our customers' social responsibilities. We create traceability and transparency by using data and digitalization in our solutions. This enables us to discuss facts and identify areas of improvement."

Our design thinking also involves being able to deliver sustainable solutions, where future improvements are retrospectively compatible as far as possible. The whole solution must then be resilient enough to last throughout the full life cycle of the supported system and its surroundings. This requires high-quality engineering and good material choices, as well as defensible ethical and moral choices throughout the process. Every new R&D project has to be authorised by management, and the sales and technical departments, before it starts. This thorough process helps us to ensure that the products and services we develop for the future provide value for our customers, take care of the fish and have the minimum environmental impact for future generations.

We have significantly strengthened our R&D department to take advantage of an interdisciplinary team. Our customers are demanding more sustainable and transparent solutions and with our passion for technology we aim to be ahead of the curve,” concludes, Vinje.

Making sustainability profitable

One of the systems we in MMC First Process have worked hard at in recent years is a pump that moves fish gently and with minimum energy use. This is a project where social and environmental responsibility have been prioritised throughout.

“First and foremost, this is about fish welfare and the quality of the end product,” says Roy Glomset, R&D Manager.

“Our main focus during the development of new products is always on fish welfare and sustainability and we use an independent third party to document this. This is why we have been working closely with Sintef Ocean and Møreforskning throughout this project.

We aim to help our customers to make fuller use of the raw material, by handling the fish as gently as possible throughout the pumping process. We therefore set ourselves the target of developing sustainable fish handling solutions for the seafood industry and saw clear potential for using this type of pump to transport live fish, if we could solve one or two problems along the way. We have been working on the system for several years and have supplied the RID Fish Welfare pump for use in many installations in the pelagic industry. We have gained invaluable knowledge, and this has helped us to develop the pump so that it can also handle large, live fish.

The pump is patented and unique in its kind. It has no impellers, valves or other obstructions that can damage the fish on their journey from A to B. The transition from vacuum to pressure is smooth.

In 2020 Møreforskning and Fylkesnes Fisk joined us for an experiment where we ran live salmon through the pump. To measure fish welfare, blood samples were taken from all the fish and analysed for lactate, which is an indicator of stress. We were again pleasantly surprised by the results, which



Helge in front of the newly built 500 cbm large tank that will be used for testing and developing equipment for water purification.

showed how gentle the new pump is with the fish and how little stress it causes. In fact, the report shows that the stress level in the fish was well beneath the recommended threshold. This project shows that focus on fish welfare and sustainability creates real and measurable value for our customers through increased quality and biomass security,” says Glomset

Enabling sustainable fish handling

Helge Birkeland, Director of Engineering, says that it all fits together. “Sustainability is also about building things that last, so we need to consider the whole life-cycle. Everything in an R&D project, from start-up to completion and maintenance must be thought through, so that the equipment functions as intended, is simple to maintain and can be updated when necessary.

There are many established truths in the industry and they cannot all be taken as read. Some will say that a certain type of equipment functions brilliantly, while others say that it simply doesn’t meet user requirements. It is therefore important”, he says, “that as development proceeds, we have the opportunity to test out equipment, refute strong but weakly-founded opinions and arrive at solid solutions.”

As head of design and engineering in MMC First Process, Birkeland believes that he and the Engineering Department are living through exciting times.

“It is very satisfying to be an engineer at the moment. It can be compared with being in the offshore industry during the 1990s, as there are constant new developments. There is still plenty of scope for innovation and we have a heavy responsibility to ensure that our customers, as managers of communal resources, can constantly improve what they do. This is our way of supporting sustainable fish handling,” concludes Helge Birkeland.

How do we take part?



"To eat from a sustainable source where the fish welfare is maintained gives great taste with good conscience."

Per Helge Devold

Per Helge
Devold

CMO

INTRODUCTION TO SUSTAINABILITY IN MMC FIRST PROCESS

MMC First Process is a world-leading manufacturer of fish handling equipment for customers in the wild-catch, aquaculture industries. For MMC First Process, now as ever, sustainability means safeguarding the welfare of the fish during handling and reducing wastage. To maintain the highest quality, we always seek to ensure that the conditions for live fish passing through our systems are as good as possible. We also do our best to minimise waste and maximise the amount of the fish that ends up on the dining table or is processed for other nutritional purposes.

In practical terms, our approach starts with Fish Welfare Design Thinking and continues through manufacture and deployment of equipment to training our customers in the efficient and sustainable use of our systems. In every part of the production chain, the top priority is the welfare of the fish. We always try to make sure that they suffer as little stress and injury as possible in transit, by using techniques that range from the extensive use of sensor technology to making minor adjustments to the sheet metal work in a transport tunnel to avoid protrusions.

We interact with our customers on an ongoing basis to obtain feedback that helps us to continually improve our products and improve fish welfare and sustainability. This joint approach helps to create a more sustainable fishing industry, where we can be proud partners and our customers' success is also our success.

Our approach in MMC First Process is underpinned by our cultural background on the west coast of Norway. Our heritage is bound up in the resources of the ocean and we feel instinctively that our future depends on it. At a time when the sustainability of ocean resources is a world priority, MMC First Process is willing to take up the challenge and play its full part in ocean husbandry. We want sustainable management of marine resources to be at the core of our legacy.

Our contribution is to ensure that the fish caught in the ocean or farmed in the fish pens is treated decently and with as little waste as possible, so that as much as possible goes to human consumption. The choices we have made in formulating this strategy are based on our mission, which is to: Enable our customers to become the best in the world at managing the sea's most important food resources effectively, sustainably and carefully.

Business target

Enable our customers to become the best in the world at managing sea's most important food resources effectively, sustainably and carefully

Sustainable fish handling

Fish welfare and food production



Competence and collaboration



Sustainable value chain



Fish welfare approved program

Strategy

Transforming the seafood industry by offering complete and sustainable system solutions for the handling, processing and cooling of fish for the seafood industry

WHAT IS OUR FOCUS?

There are many sustainability themes that are applicable to MMC First Process. By carefully analysing our stakeholders' priorities through a materiality assessment we have selected key themes where MMC First Process can have the greatest impact. By focusing on a select number of themes we can maximise our impact on the sustainability goals.

For each theme, we have defined clear objectives to focus our efforts and have chosen methods to measure our progress. All initiatives and change processes are prioritized, based on their ability to influence progress as defined by the measures chosen.

Fish welfare and food production



Description	<ul style="list-style-type: none">· MMC First Process enables increased maritime food production through improved fish welfare and quality both within farming and wild catch. We will continually develop and improve systems to increase the share of useful fish.
Objectives	<ul style="list-style-type: none">· Data driven focus on fish welfare· Reduced loss and waste in food production· Transform industry through research and development· Reduce fish death within fish handling· Increase quality of wild catch· 100% use of residual raw material

At the root of MMC First Process' contribution to the SDGs is the way MMC First Process enables others to provide increased food security by developing improved hardware, software and processes. Our goal is for all bio-mass to survive and become food of the highest quality. This aligns closely with the needs of our customers, based on a more sustainable production. Both in wild-catch and aquaculture, our solutions improve fish welfare.

Ambition -> No dead fish

Fish welfare is also an ethical and moral choice and this choice is steeped in our heritage. By carefully considering the fish welfare, we remain true to our heritage and can focus on our customer's value chain and the end result: Superior quality fish products.

The process of improving fish welfare starts at the design table and ends with deployment and training of our customers.



At MMC First Process, we develop systems that ensure biomass security, and solutions for gentle and safe fish handling. The program defines how the systems are built and used to maintain fish welfare and quality.

DESIGN AND MODELLING

Our employees aim to be the best in the world at designing fish handling systems. There is continuous improvement and MMC First Process applies design thinking processes to ensure we are ahead of the curve and ensure the fish remain alive and healthy as long as possible.

In the drawing process we consider every single detail of our system with fish welfare in mind. Our documentation and quality control system is such that all parts of the drawings are checked for missteps and errors – not only with regard to operational design, but also to fish welfare.

TECHNOLOGY AND ENGINEERING

When converting a drawing to an actual product our engineers are expert welders, down to the smallest detail. Depending on the application of the process, metals and methods of welding are chosen – with fish welfare in mind. The weld seams exposed to fish are particularly monitored and quality assurance protocols are applied in every step of the process. Whilst also continually reducing surplus metal, we ensure all sharp edges are ground and the finished product is fish welfare friendly.

DEPLOYMENT AND CONTINUOUS SERVICE

After delivery and implementation of MMC First Process's systems we educate and support our partners and customers to make sure that the systems are used to their full potential. Extensive training programs and support functions are implemented so that the fish handling processes are of the highest quality.

The installation of our systems is a documented process with a complete quality control regime. MMC First Process has developed separate production and control documentation to promote and secure continued development of fish welfare.

Competence and collaboration



Description

- Contribute to developing the seafood industry with systems and solutions for sustainable management and development of maritime protein
- Improve fish welfare globally by being fact-based and challenge assumptions in the sector
- Strengthen the sector's reputation and contribute to increased understanding of our sector's role in global food production

Objectives

- Develop methodology to document standard of living for fish
- Contribute to increased competence in the business by training in our equipment – to improve fish welfare
- Initiate and participate in joint research and development projects to increase the industry's technological capabilities

MMC FIRST PROCESS AND THOSE AROUND US

We depend on a large array of partners, suppliers and experts to create our solutions. We also want to give something back to the communities we operate. Therefore, this section is divided in two: the innovation process and the knowledge sharing with other communities.

COOPERATION: INNOVATION

Multiple disciplines and specialists are required to ensure we improve our products and services. We work with the research community to better understand the effects our products have on fish. We work closely with our customers and are able to draw on their expertise.

Below is the story of how we created and installed our solutions for a British customer.

Cutting pumping systems to secure fish welfare

In 2020 we launched a new patented fish pump to improve fish welfare. In June 2020, researchers from Sintef Ocean visited our test plant at our site in Aalesund. They ran tests using fish with sensors attached to measure and analyse any pressure surges and shocks through the pump. Prior to this we had also run tests using delicate foods such as tomatoes, eggs and cucumbers etc.

We have worked closely and effectively with Sintef Ocean and Møreforskning throughout the project, and all of us have gained valuable knowledge. Having these research resources available in our network is important in our endeavour to be a world leader in the handling of live fish.

In September 2020, Møreforskning and Fylkesnes Fisk joined us for an experiment where we ran live salmon through the pump. To measure fish welfare, blood samples were taken from all the fish and analysed for lactate, which is an indicator of stress. With the cooperation of the scientific community and our engineers we successfully completed the testing phase, which proved how gentle the new pump is and how little stress it causes to the live fish.

TAKING OUR KNOW-HOW TO OTHERS

When installing a new plant or process in other locations across the globe, we seek to leave a positive footprint on the local community where we operate. We train local tradesmen and help build local knowledge of welding and sourcing and an infrastructure for service and repairs. We find that by making sure the local business community is vested in our processes and way of thinking, we increase awareness of how we try to soften the industry's impact on local nature, our genuine interest in sustainability and how local businesses can benefit from this.

Complementary to this local focus is that we avoid spare parts being sent around the globe and help maintain up-time of our client's systems despite the long distance between the installation site and MMC First Process' factories in Norway and the Baltics.

MMC First Process in Chile

Upon contracting a large land-based aquaculture installation in the south of Chile, we wanted to ensure the processes and services we provided would be well maintained and serviced by people with the right skillsets. Instead of basing service intervals on people flying into Chile we partnered with a Chilean construction firm to build the plant and perform service and maintenance.

The long R&D process in MMC First Process means that the products we supply are carefully engineered to optimise fish welfare, take good care of the bio-mass that our customers manage and that the systems work as designed. To ensure this knowledge, skillset and ethos is maintained in Chile we chose to work with a Chilean engineering group that matches our commitments. In forming this partnership, we have been able to share our specialized know-how and helped introduce this knowledge to the south of Chile.

Mechanical engineers based locally are trained and coached to perform the job to our specification. Channelling resources and know-how into the local population improves local market conditions and improves relationships with the local population. We are proud of our operations in Chile and the exciting opportunities they presents for both MMC First Process and for our partners.

"We are relying on partners who work to improve fish quality at every stage in the fish handling process," says Diego Lages, Global Sales Director at Marel. "With MMC First Process we have a first-class partner who shares our principles and sincere drive to improve fish handling."

MMC First Process's goal is create systems to improve fish welfare through traceability and transparency, so that the industry can acquire data to improve the conditions of fish from cages to live transport to processing plants.

Marel is a global leader in transforming the way food is processed. They provide solutions, systems, software and services to the fish processing industry to support the production of high quality, safe and affordable food.

Marel and MMC First Process has worked together for many years where Marel's services dovetails with our services. Both Marel and MMC First Process have the goal of making sure fish are treated in the best possible way to uphold quality and take advantage of the bio-mass produced and processed.

"We are relying on partners who work to improve fish quality at every stage in the fish handling process," says Diego Lages, Global Sales Director at Marel. With MMC First Process we have a first class partner who share our principles and sincere drive to improve fish handling.

The next part of the value chain, that after MMC First Process has delivered the fish alive to the processing plant, is the filleting and packing of fish to market. Keeping the fish as healthy and calm as possible is vital to maintaining quality throughout the processing of fish. The streamlining of the entire process is crucial and has repercussions throughout the value chain. By working closely with Marel systems and software we can view a much larger part of the value chain as a whole and improve in areas not previously considered. By working closely together, we improve quality and soundness in the entire value chain.



"We are confident that MMC First Process's know-how and our technology will create added value for our customers and enable us to develop sustainable solutions and systems." Says Diego Lages

"To improve fish welfare we must consider the part of the value chain that comes after our services," says Petter Leon Fauske. "Marel is a trusted partner who takes the whole value chain into consideration to ensure optimal usage of the bio-mass we work hard to maintain."

MMC First Process's and Marel's shared vision of fish welfare also has a larger dimension. Food waste is a multi-faceted challenge with implications for every part of the value chain; from waste in the traps and during catch, to waste at the dinner table.

"Much of farmed and wild-catch fish is lost for a variety of reasons," says Rakel Eva Sævarsdóttir, Sustainability Specialist at Marel. Together with MMC First Process we can discuss industrywide challenges and work together to find solutions to minimize waste and optimise sustainability during catch, transfer and processing of fish.

Marel – transforming the pelagic industry



We strive to maintain quality, and the quality battle starts at the moment when the fish are caught.

Sustainable value chain



Description	<ul style="list-style-type: none"> Customer care, fish welfare and the environment will always be our top priorities. MMC First Process will strive to reduce both our own and our partners and client's environmental footprint.
Objectives	<ul style="list-style-type: none"> Limit use of virgin and non-renewable material and reduce waste in production Ensure decent working conditions and sustainability in our supply chain Improve use of digital solutions and services Reduce emissions in production Reduce emissions in our supply chain Reduce emissions related to end-of-life handling of our systems Gradually improve the utilisation of global resources

INTRODUCTION

MMC First Process aims to be a forerunner in reducing carbon emissions and promoting material and resource efficiency in its supply chain. The company aims to intensify this by increasing its engagement with key partners on relevant issues and continuing to increase supply chain transparency related to decent working conditions and the well-being of the employees.

Whereas the two other strategic themes are very much about MMC First Process as an enabler for sustainable food production and distribution, the Sustainable supply chain theme involves ensuring that the systems we ourselves provide have as little negative impact as possible, by transitioning from a linear to a circular economy. We will do this by focusing on three main areas:

Reducing greenhouse gas emissions by:

- Limiting use of virgin and non-renewable materials and reducing waste in production
- Improving the use of digital solutions and services
- Ensure decent working conditions and sustainability in our supply chain

MATERIAL USE AND CIRCULAR DESIGN

As a producer of systems including both hardware and software, MMC First Process' choice and use of material in our products is our most significant contribution to climate change. Although we will continue to challenge our manufacturing partners on this issue, we acknowledge that our systems designers have a key role in choosing low impact materials, limiting material use, and - by designing modular systems built to facilitate service and repair - ensuring long service life.

We believe that through our close and long-term relationships with our customers and partners, MMC First Process can be a driving force in the exchange of information and ideas that is fundamental to the design, production, testing and improvement of functionality and resource efficiency of our systems. The ultimate result will be reduced climate impact.

DIGITAL SOLUTIONS AND SERVICES

As the pandemic has accelerated the use of remote work and demonstrated the benefits of reducing travel, MMC First process will intensify its focus on designing systems and solutions to enable remote monitoring and servicing of our systems in use. This will both increase our service level to our customers as well as reducing direct emissions related to air travel by our service staff.

By implementing effective monitoring and control of system performance our service technicians will be able to ensure correct use of the equipment in use, enabling customers to increase fish welfare as well as limit the GHG emissions related to their operations with MMC First Process equipment. By relentless focus on less steel and more bytes, our ambition is to significantly improve the sustainability performance of our own operations, in our supply chain and of our customers.

SUPPLY CHAIN TRANSPARENCY

It is of paramount importance to MMC First Process that we can trust our supply chain to provide safe and decent working conditions and that any breaches are identified and reported to initiate corrective actions if needed.

This is the reason we have decided that all direct suppliers to MMC First Process must sign our updated Code of conduct, including the commitment to collaborate and to be fully transparent with auditors that will be employed to verify compliance with the expectations and requirements described in our Code of Conduct.

They are father and son and share both a workplace and a vision: to manage our common resources for the benefit of future generations. That is true sustainability.

Asbjørn Tråseth (48) and Bjørn-Inge Tråseth (26) both work with well boats in MMC First Process. Both focus on equipment and new technology that will contribute to sustainable biomass management and fish welfare.

My whole life

"My whole life has been dedicated to developing better and better systems for protecting fish welfare. For me, sustainability in this job is about ensuring that the fish are still fit and well after passing through our systems. That is my absolute top priority," says Asbjørn who has worked in several departments since the start-up, in 1997, of the firm that has evolved into MMC First Process.

Enormous expertise

There are few others who share his enormous expertise and total understanding of fish welfare. He is dedicated and is always on the lookout for new and better solutions. His mobile phone is proof of this. Where others have pictures of current events, family, friends and holidays Asbjørn mainly has pictures of bolts, pumps, pipes and valves.

Junior inspired by senior

"It is no coincidence that I ended up here. My dad inspired me early on. I accompanied him on a number of jobs and quickly understood that this was very exciting. Dad says he has never had a boring day at work and neither have I," says Bjørn-Inge who started as an apprentice in 2012.

Worldwide

The youngster from Herøy now lives in Ålesund and is the Field Service Engineering Supervisor. The job has taken him to many countries in the world, training crews on board well-boats where MMC First Process has supplied equipment and systems. His work involves coordinating the start-ups, testing systems and making everything work as intended.

Knowledge transfer from generation to generation

"When challenges crop up it is good to be able to ring my father for advice and draw on his knowledge," says Junior. Knowledge transfer between generations is also an important form of sustainability. Future success depends on knowledge and expertise being handed down.

Found the right industry

Bjørn-Inge does not rule out taking a break from his job to take some years of further education, but is convinced that like Asbjørn he has found the industry that suits him best. Senior and Junior worked together in the service department for a period. Asbjørn is now in Sales Engineering.

Important and valuable

"I will always work with fish and fish welfare because I find it meaningful, valuable and very exciting. Meaningful and valuable because it is all about managing our resources in a very important industry. Exciting because new technology means that we can continuously develop ourselves and our systems and raise fish welfare and sustainability to new heights. No, I have no plans to move to new pastures," says Bjørn Inge.

Best in the industry

Two vital parameters - fish welfare and sustainability - go hand in hand at MMC First Process. They aim to be the best in the industry. The system developments worked on by Asbjørn and Bjørn-Inge will help to secure fish welfare, fish logistics, quality and value creation.

Future generations

The company is investing heavily in new technology and system solutions that maximise protection of fish welfare and the environment. In both aquaculture and ocean fishing, biomass management must be efficient, gentle and safe. The company has 30 years of accumulated expertise. This is now being built on by younger generations with new perspectives and new technology. Their initiatives will benefit our successors in the future.

Fish health is sustainability

"Keeping fish healthy is important, not only for the fish, but also for the quality of the food that goes to consumers. By developing good technical solutions that protect fish welfare, we also create value for our customers. The better we manage the fish, the better the quality of the end product. That is what sustainability is about," say Asbjørn and Bjørn-Inge Tråseth.

Game Changers

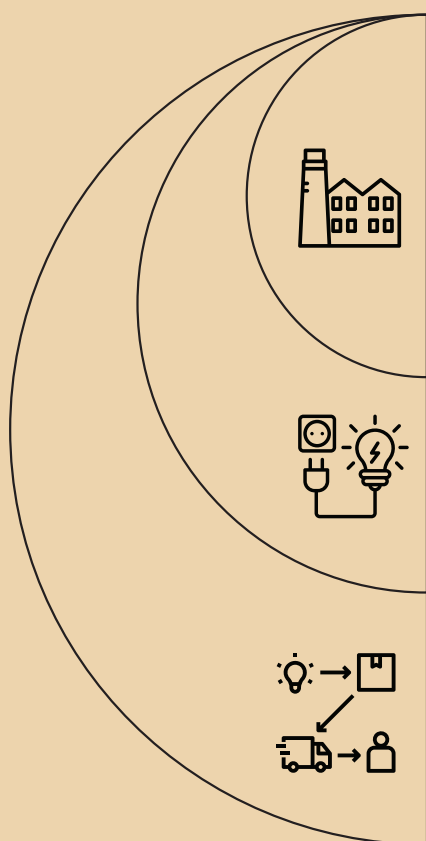
Father and son are two of the company's 175 Game Changers and they have contributed to MMC First Process being a world leader in systems for handling, processing and cooling in the fish industry. "You don't have to work here for very long before you begin to understand that fish welfare and sustainability is a vital part of our DNA. We are all fully committed to it," says Asbjørn Tråseth.

Two generations - one goal



Our forefathers have passed on the knowledge through generations, creating a tradition for innovation. And this is a heritage we will pass on to the generations to come. Says Bjørn- Inge

Our green house gas emissions measured



Scope 1:

Emissions resulting from activities directly linked to production

Scope 2:

Emissions resulting from indirect emissions such as heating and electricity usage

Scope 3:

Emissions as a consequence of the products and services we purchase from our supply chain.

Ton CO ₂ Equivalents	2019	2020
Scope 1	126	68
Scope 2	3	5
Scope 3	45 000	38 000
- of which is related to business travel	432	144

Scope 1 emissions are down both relative to revenue and nominally from 2019 to 2020. The main reason for the decline is the reduction of business-related travel and less interactions with our counterparties, which resulted in less driving of company cars.

Ton CO ₂ Equivalents per mln NOK revenue	2019	2020
Scope 1	0.19	0.13
Scope 2	0.00	0.01
Scope 3	67.87	71.03
- of which is related to business travel	0.65	0.27

Scope 3 is down from 2019 to 2020. These are emissions accounted for our suppliers across the globe. As a result of less activity in 2020 compared to 2019 the emissions are nominally reduced, but relative to revenue they are increased. This is expected as the emissions and supply chain is not correlated linearly to our activity.

Global sustainability frameworks

TEN PRINCIPLES

Customer care, fish welfare and the environment will always be our top priorities, and the ten principles in the UN Global Compact match perfectly with our own ambitions in MMC First Process.

UN Global Compact's mission is to generate an international movement for sustainable companies, and encourage companies and organizations to align their strategies and operations with ten universal principles on human rights, labour standards, the environment and the fight against corruption. A further aim is to promote the UN Sustainable Development Goals (SDGs).

Joining the United Nations Global Compact represents a further step forward, as we develop the sustainability strategy.



EU TAXONOMY

In 2020, MMC First Process conducted a EU Taxonomy screening ("the Taxonomy") for the first time.

The purpose of the screening was to:

- 1) understand if MMC First Process conducts business today that is defined as a green activity in the Taxonomy, or
- 2) what the future holds for MMC First Process with regard to the future development and expansion of the Taxonomy.

Whatever the industry or business, the Taxonomy is based on the following 6 environmental objectives:

- 1) climate change mitigation
- 2) climate change adaptation
- 3) sustainable use and protection of water and marine resources
- 4) transition to a circular economy, waste prevention and recycling
- 5) pollution prevention and control
- 6) protection of healthy ecosystems

Based on the objectives there are 3 conditions to comply with to be considered a green business:

- 1) contribute substantially to at least one of the six environmental objectives
- 2) do no significant harm to any of the other environmental objectives
- 3) comply with Minimum Social Safeguards

Result of screening

MMC First Process' activities is not per 2020 defined as green by the taxonomy. MMC will continue to monitor future developments of the screening criteria to early understand what it might mean for our business activities.

Moving the sea onto land



Salmon Evolution uses innovation and technology to make the whole salmon farming process sustainable. It involves making choices and decisions our grandchildren will be proud of.

"We are a Norwegian land-based salmon farming company driven by a desire to deliver the world's most tasty, healthy and sustainable salmon to a growing market. We'll achieve that by promoting a culture where profitability and sustainability reinforce each other. Our concept is based on preserving and reusing marine resources and on minimising our environmental footprint," says CEO Håkon A. Berg.

For him personally, good ethical choices and social responsibility are moral issues. Salmon Evolution was founded to be sustainable throughout and this also makes sound financial sense. MMC First Process products are at the heart of our solutions. Good fish logistics and fish welfare are the keys to ensuring that the fish will thrive and grow as quickly as possible," says Berg.

Industrialisation

The land-based installation will be large enough to ensure that this is not just fish farming, but full-scale industry. The installation is being built in an old gravel quarry at Indre Harøy near Molde. It will be built in three phases with 7900 tonnes of slaughter volume in the first phase. The total volume will therefore be an impressive 31,500 tonnes.

Near the tolerance limit

"We are moving 'the sea' onto land because we have a problem that has to be solved. If we are going to offer significantly more of the world's healthiest and best protein, we have to extend the ocean potential using innovation and technology. The world needs more food, produced in a way that we can answer for and which can be repeated and developed. If one looks at marine fishery resources as a starting point, one can see that they are being utilised close to maximum capacity. The density of aquaculture in the sea is already very high and this presents a number of challenges. The sea has reached its tolerance limit. One of the most interesting solutions to this problem is therefore land-based," says Berg.

Vision and values hit the mark

Salmon Evolution's production concept and aspiration to solve global problems by investing in land-based aquaculture is attracting extensive attention.

"We notice that our vision, values and ideas are attractive to many, not least young people. All who apply for jobs with us want to be a part of something that makes sense, something bigger than themselves," says a deeply-committed CEO who is passionate about sustainability in all its aspects.



I want to be a part of something that makes sense, says Håkon André Berg.

This means that the focus on fish welfare and fish health is extremely intense. Ensuring that the fish have a good life is not just humane, it leads to an excellent final product and first-class financial results.

Fish welfare

"When we move the fish onto the land, the salmon must be kept in conditions that are as good and natural as possible. A land-based installation is advantageous and facilitates good fish welfare. We have full traceability, because we know what the fish have eaten and the conditions in which they have lived. We are well-equipped to control the living environment for the fish, so we can look after their welfare and thus achieve good food safety. The better one treats the fish, the better the quality, the better the growth and the better the healthy end product for the consumer," says Berg, who comes from Molde and is father to two children. He took over the top job in Salmon Evolution after being the company's CFO.

Has control

Salmon Evolution has not yet produced a single fish. The first slaughter will be at the end of 2022 or the beginning of 2023. Berg fully accepts that there are challenges, but is quietly confident about the process and the way ahead. He does not for one moment regret taking a chance on a company that is willing to assume a heavy social responsibility in its desire to bring a new and sustainable dimension to the industry.

This is important

"Although this was a risky project at the beginning, and we had much to prove, I never doubted that I wanted this more than a job in a larger, more established enterprise. I want to help to solve one of our biggest global challenges, which is to eradicate hunger. We can also give the salmon a much more dignified life and contribute by providing healthy food to all who need it. This makes sense. It is extremely important and fires me with passion and enthusiasm every day," says Håkon A. Berg.

For future generations



Pål
Brynsrud

Chairman



At Credo Partners, we are immensely proud to be partnering with the founders and managers of MMC First Process in enabling the scaling up of this global leader in live fish handling, and in building the company for the future.

Feeding a world with a growing population and demand for healthier proteins, and at the same time in a more sustainable fashion, is a great challenge where growth in aquaculture, and better and more responsible use of wildcatch resources, is set to play a very significant part.

This will require major investments in technology. MMC First Process has proven skills in partnering with the sharpest players in developing solutions in this space.



Pål got to know the region when he studied alongside people from Sunnmøre. He fell in love with the local nature and way of life, so the love affair started early and has been with him ever since.

Investing in R&D and organizational capabilities for the long term is an obligation for us as owners – both to our employees and society at large. We are fortunate to work in the West Coast region of Norway, where people through centuries have been shaped by a tough climate and where decent living could come through nothing else but hard work. And where nature is deeply valued. So long-term thinking is second nature.

I have the privilege of being Vice Chair of the Board of UWC International, a movement of non-profit schools in 18 countries that select their 16-18 year old students through national committees in 160 countries. Many are extremely active and engaged in sustainability and justice issues.

Educating future leaders is one way to create a more sustainable society. Enabling the world to feed itself in a better way is another.

I hope you will find this report interesting reading, and encourage you to give us feedback, should you have any.

ENABLING SUSTAINABLE FISH HANDLING

