CORNELIS VROLIJK

READY FOR THE FUTURE TOGETHER

CSR REPORT 2019

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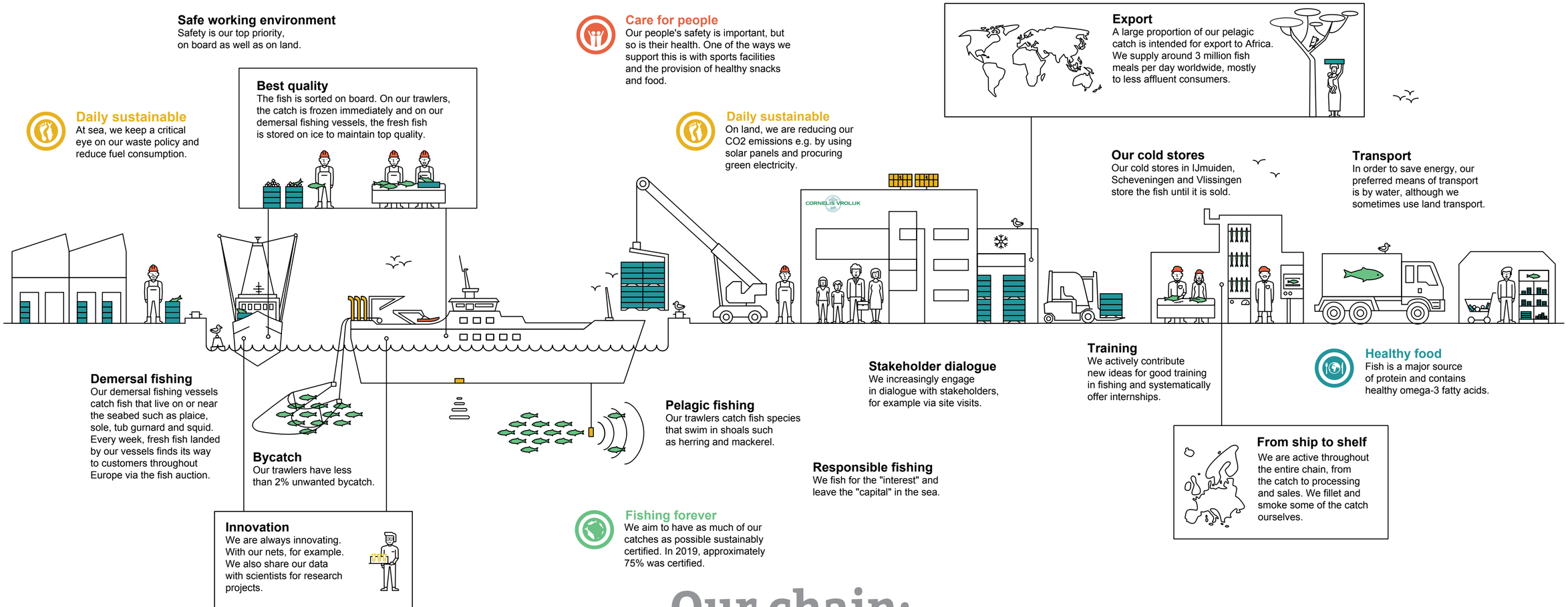
Our chain: from ship to shelf



READY FOR THE FUTURE TOGETHER

Fishing is a great occupation that has connected us with the sea for centuries. The foundations for Cornelis Vrolijk were laid in 1880, and many generations of fishermen have since landed their catch. Together, we have built the company, always with our eyes on the future, on the generation to come. Cornelis Vrolijk is based on fishing for pelagic species (such as herring and mackerel) and demersal species (such as sole and plaice), which is the focus of this report. Over the past few years, our family business has grown into a family of businesses, some of which is also discussed in this report.

The space at sea for fishing is decreasing as a result of the designation of protected areas, where a number of fishing methods are prohibited, and the large-scale installation of wind farms. We are concerned about the disappearance of the fishing grounds and believe it is important for the fishing industry to be heard within the stakeholder dialogue.

The sea is an important source of food for millions of people around the world. Our fishermen fish for human consumption and supply three million healthy and affordable fish meals every day. Approximately 70% of those are sold to less affluent people in African countries. We are proud that our fish helps provide so many people with meals.

Fish contributes to a healthy diet. To make sure that generations to come will also benefit, it is important to care for healthy fish stocks in a healthy sea. These are important pillars in our CSR policy. Collaboration with fishing scientists contributes to this aim, not only by gathering information about the stocks, but also through selective fishing. For example, in 2019, we installed pingers to prevent dolphins from being caught in our nets, and we studied the development of escape panels for seals. The reduction of our carbon footprint remains important as well. In the reporting year, we realised a 36% reduction of chemical refrigerants on our demersal fishing vessels. A good result.

In 2019, we started testing a new fishing method to replace the pulse gear. The water spray technique, where the fish are scared away from the seabed by water sprays, seems promising. Its development is still in full swing.

Like many NGOs, we have an interest in good marine management. We do not always see eye to eye on the way to accomplish this. In 2019, we signed the World Oceans Deal with Good Fish. Collaboration helps us contribute to increased knowledge of and, hence, better research into, and communication about, our fisheries.

The traceability of our fish in the supply chain is important to our customers. We safeguard the sustainability within the chain by selling our own catch through our own trading and processing businesses. For the products procured elsewhere, we are working on procedures to assess the sustainability within those chains.

We consider it important for our employees to enjoy working for us and, most importantly, returning home in good health. Safe working conditions and the vitality of our employees are, and in upcoming years will remain, important focus points. The workmanship, commitment, and health of our employees are essential to the development of our company. Together we work on becoming more sustainable and meeting our CSR targets.

Our CSR policy is always progressing, and we will continue to develop on socially relevant and fishing-related themes. Therefore, we highly value your response to this report.

The Management of Cornelis Vrolijk

Annerieke Vrolijk Arnout Langerak Peter Koets

CORNELIS VROLIJK

The foundations for Cornelis Vrolijk were laid by Frank Vrolijk, who established a herring trading business in Scheveningen in 1880. Today, Cornelis Vrolijk is an internationally operating family business that catches, farms, processes and sells fish, fish products and shrimps, always with the goal of producing high-quality food for human consumption. Our products now reach consumers in approximately 45 countries. Cornelis Vrolijk employs over 2,000 people around the world.

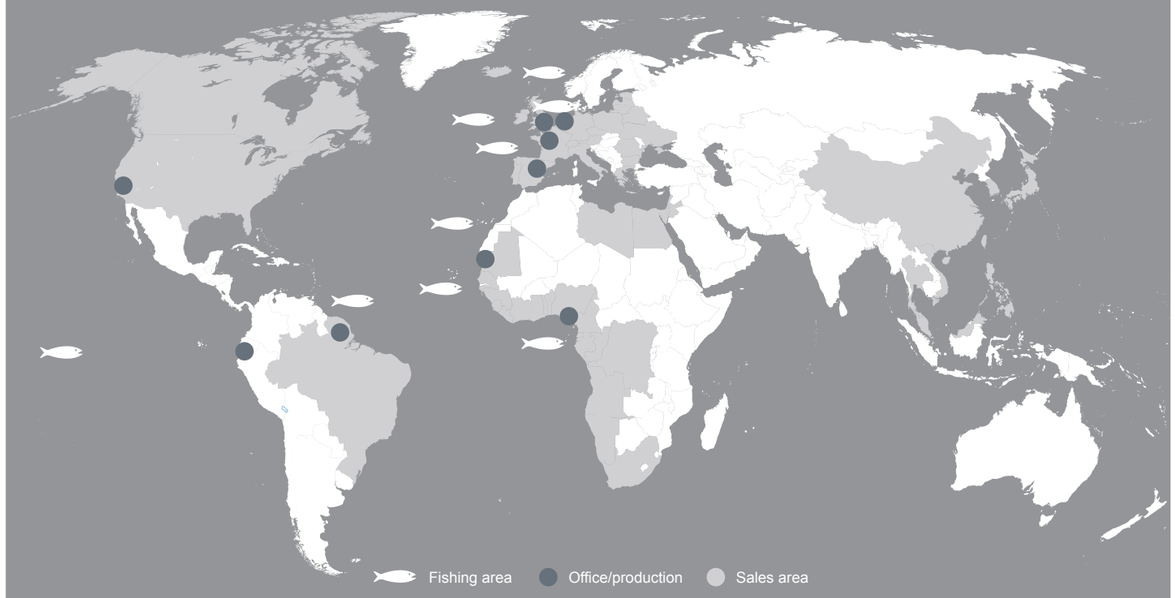
Cornelis Vrolijk has traditionally been active in the fishing for, and trade of, pelagic fish species (fish that swim in shoals, such as herring and mackerel). Most of the fishing areas are in Europe, but there are also some in Northwest Africa. The fish is frozen at sea, stored in our own cold stores, and exported worldwide. Our demersal fishing (for species living near the seabed, such as plaice, sole and squid) is concentrated on the North Sea and the Channel. Furthermore, through our stake in the fishing company with the name Marisa, we are active in the waters of Suriname.

Through partners, we are active in fishing for tropical shrimps in Nigeria and in shrimp farms in Nigeria and Ecuador. The shrimps are traded by Primstar in South European countries, as well as in Asia and the United States.

Our fish processing and trading activities are carried on by various businesses which engage, among other things, in the processing of herring and mackerel for the Northwest European market, and the processing of several flatfish species for the South European market.

This forward integration in the fish supply chain enables us to serve our own fish products from ship to shelf to both Dutch and other European consumers.

CORNELIS VROLIJK'S GLOBAL ACTIVITIES



CORNELIS VROLIJK DIVISIONS

PELAGIC AND DEMERSAL FISHING

- Cornelis Vrolijk's Visserijmaatschappij
- Jaczon
- Marisa
- North Atlantic Fishing Company
- France Pélagique

SHRIMP FISHING, FARMING AND PROCESSING

- Primstar
- Atlantic Shrimpers Ltd.

FISH PROCESSING AND TRADING

- Jac. den Dulk & Zn.
- Seafood Parlevliet
- Welmar Seafood
- Bertus-Dekker Seafood
- De Troyer

OUR MISSION

With our fishing activities we provide an important contribution to the food security of millions of people. We do this, as a family business, with a focus on future generations while maintaining healthy fish stocks, minimising environmental impact, together with committed and proud people. We stand for continuity whereby we treat the world around us with the utmost respect.

OUR CSR POLICY

For us, as a family-run business and modern fishing operation, Corporate Social Responsibility (CSR) means that we take responsibility for people and nature. The world is in flux, and there is wide social debate about a transition towards a more sustainable food system. Given their substantial benefits in relation to sustainability, fish and fish products offer opportunities here. For fish production requires little to no use of land or fresh water, and the associated carbon footprint is relatively low, compared to other high-protein products. Furthermore, fish (particularly oily fish) has many positive health aspects. In other words, we strongly believe that fish plays an important role in the human diet.

As a family business with a history of nearly 140 years, we have a long-term vision, and as such we think ahead. An important condition for the continuity of our business, from generation to generation, is a healthy financial base. However, continuity means more to us. It means being accountable to our environment, our employees, the communities in which we are active, and the fish stocks that we use. We strive to minimise the impact of our activities on the environment in order to keep the (marine) ecosystem healthy.

CSR IN OUR ORGANISATION

We strive to make CSR an integral part of the way we do business. We can see that we have made much progress in recent years, but at the same time we know that there is still much to accomplish. When preparing our policy plans, we formulate several CSR targets, which are translated into concrete projects and activities. Within each division where we launched a policy plan, we have appointed CSR ambassadors, who have played a leading role in converting these targets into actual practice.

In this 2019 CSR report, we report on our CSR activities for our pelagic and demersal fishing activities. We thereby align with the scope of the policy plans we introduced in 2015 and 2017. In addition, we pay attention to what CSR means to several other Cornelis Vrolijk divisions.

We use our internal newsletter to communicate about a variety of CSR issues and results. Actively publicising both the policy and the results achieved makes CSR visible to all our staff. We report our results in annual CSR reports to share them with everyone that has sustainable fishing at heart.

OUR FOUR PILLARS OF CSR

Our CSR policy relates to issues close to our hearts and over which we as a company have the most influence. We have researched into which issues our stakeholders consider important as well. In technical terms, we have carried out a materiality analysis (see page 48). The selected issues have been broken down into four pillars within our CSR policy plans for pelagic and demersal fishing. The pillars are Healthy Food, Fishing Forever, Daily Sustainable and Care for People.

INTERNATIONAL GUIDELINES

With our CSR policy we actively contribute to achieving the United Nations' Sustainable Development Goals (SDGs) that aim to combat poverty and accelerate sustainable global development. Our four pillars and their link with the SDGs are explained in the table below. Through our annual CSR reports, we want to communicate transparently about the sustainability issues that are material to us. Our reporting method has been inspired by the guidelines of the General Reporting Initiative (GRI).

Furthermore, we are aware of the existence of the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Corporations. We endorse the principle of these guidelines as a mechanism for taking responsibility for our supply chain as an internationally operating business. The guidelines have only limited relevance to the present CSR Report because it covers our fishing activities in Europe. The OECD Guidelines have greater relevance to our trading and processing businesses – such as Welmar Seafood and Seafood Parlevliet – because they also procure fish and shrimps from international chains. For these businesses, we are working on translating the principles of these guidelines into, for example, a sustainable procurement policy.

With our CSR policy we actively contribute to achieving the United Nations' Sustainable Development Goals (SDGs).

CSR PILLARS AND SDGS

PILLAR 1: HEALTHY FOOD

The Healthy Food pillar is about our contribution to the food security of millions of people, food safety and quality of our products. We invest time and energy in delivering top-quality fish and that is what we want to be known for.

PILLAR 2: FISHING FOREVER

Within the Fishing Forever pillar, we pay attention to sustainable fishing, focusing on healthy fish stocks and responsible fish supply chains.

PILLAR 3: DAILY SUSTAINABLE

The Daily Sustainable pillar is about reducing our carbon footprint and contributing to a circular economy. We consider waste management, energy consumption and procurement of sustainable materials.

PILLAR 4: CARE FOR PEOPLE

Our Care for People pillar describes how we invest in sustainable employment and development of our staff. We thereby strive to create a safe and pleasant working environment for our employees.

PILLAR 1
HEALTHY FOOD

SEA FISHING IS AN INDUSTRY TO BE PROUD OF. WE INVEST TIME AND ENERGY IN DELIVERING TOP-QUALITY FISH AND FISH PRODUCTS FOR HUMAN CONSUMPTION. OUR QUALITY SYSTEMS ARE BEING IMPROVED CONSTANTLY TO GUARANTEE SAFE AND HEALTHY FOOD ALL AROUND THE WORLD.

OUR AMBITION

WE WORK CONTINUOUSLY TO
IMPROVE THE QUALITY
OF OUR PRODUCTS

KEY RESULTS IN 2019

WE INSTALLED NEW QUALITY MONITORING SOFTWARE ON ALL OUR PELAGIC TRAWLERS

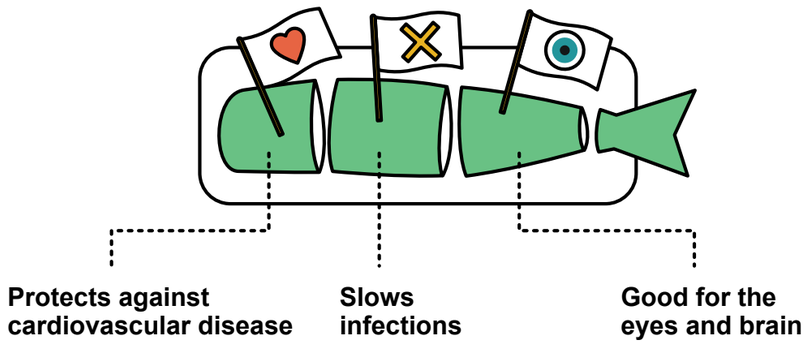
WE TESTED A PROTOTYPE OF OUR NEWLY DEVELOPED WATER SPRAY FISHING GEAR, TO REPLACE THE PULSE TRAWLING METHOD

WE OPENED OUR OWN FISH PROCESSING PLANT IN SURINAME, INCREASING QUALITY CONTROL WITHIN OUR CHAIN

FISH IS HEALTHY

Fish contributes to a healthy diet. It is rich in healthy proteins and unsaturated fats. It is commonly known that the omega-3 fatty acids in particularly oily fish reduce the risk of cardiovascular disease. But fish has many more proven positive health aspects. We are proud that our products contribute to human health. This is what drives us every day.

We use a number of fishing methods. The various target species are caught using specialised techniques. With our pelagic trawlers, we fish for species such as herring, mackerel, blue whiting, and horse mackerel. We use pulse trawlers to fish for sole, twin-riggers for plaice, and flyshooters for species such as squid, mullet and gurnard. To guarantee top quality, it is important to use the right fishing method in the right season. This is what we are good at.



OUR PELAGIC FISHING

With our pelagic trawlers, we fish for migrating fish swimming in shoals in the water column above the seabed. These species often cover long distances across the waters of Northwest Europe. The trawls used by our vessels float through the middle of the water column, without touching the seabed. This fishing method has many advantages in terms of quality, sustainability and efficient production. As herrings usually swim with herrings and mackerels with mackerels, this method allows us to target very specifically, with minimum unwanted bycatch.

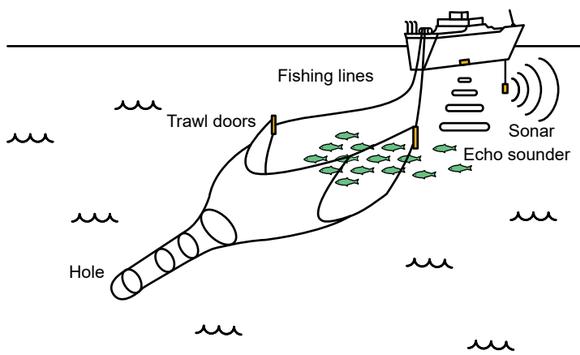
Before the trawl is lowered into the sea, the fish are traced using sonar. It then usually takes about ten to fifteen minutes of trawling to fill the net. As the fish are so briefly in the net before being hauled in, they are virtually undamaged. In addition to quality advantages, this fishing method has advantages in terms of fuel consumption and, thus, for the carbon footprint. For more information on this subject, please refer to pillar 3.

CONTRIBUTION TO FOOD SECURITY

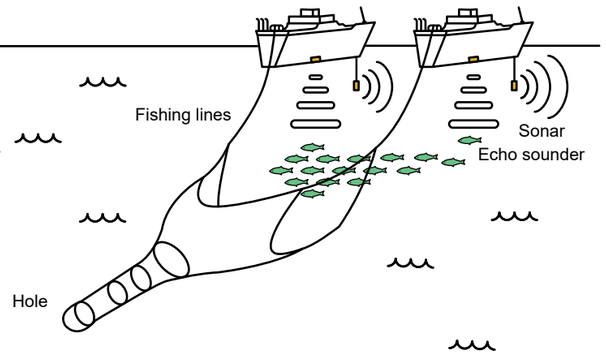
Pelagic fishing targets the largest fish stocks in the world seas. This means that the catches of our pelagic trawlers feed a lot of mouths. We fish mainly for human consumption and supply three million fish meals around the world every day, all year round. Some 70% of those are sold to less affluent countries in Western Africa. For many people there, other animal proteins are too expensive. Consumption statistics of the United Nations Food and Agriculture Organisation (FAO) show that, since the 1980s, demand for pelagic fish has doubled in Asia, and even tripled in Africa. In the same period, the level of consumption in Europe remained virtually the same. We are proud to offer so many people meals with our fish, particularly in countries where the availability of healthy food cannot be taken for granted.

PELAGIC FISHING TECHNIQUES

Pelagic trawling



Pelagic pair trawling



Seabed

OUR PELAGIC FISHING AND PROTECTED AREAS

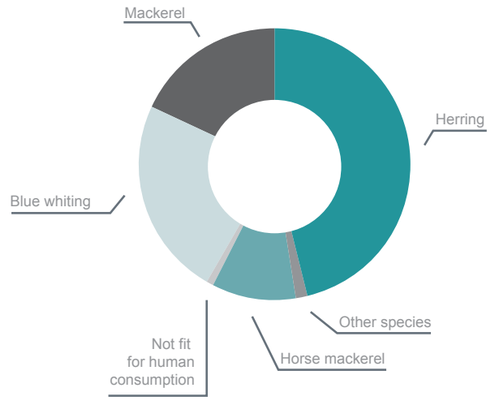
With our vessels, we follow the seasonal movements of the fish. Pelagic fish species are not restricted by boundaries and often migrate over great distances. They also swim in and out of areas that have a special status, for example to protect certain bottom-dwellers. As pelagic trawlers with their nets fish far above the seabed, pelagic fishing is usually permitted in those areas. After all, this type of fishing does not come into conflict with the nature goals.

Since pelagic fish species migrate, protected sea areas usually do not aim to protect pelagic fish species. This can be perfectly achieved by setting quotas, as pelagic fish can be very specifically targeted. In fact, it does not matter where you catch the fish, as long as, on the whole, the quotas are not exceeded. In pillar 2, we will explain in further detail how we contribute to responsible conservation of fish stocks.

PELAGIC CATCHES

With our pelagic trawlers, we fish for a limited number of target species. In 2019, herring, mackerel, blue whiting and horse mackerel represented 97.8% of the total catches. Other species, such as silver smelt, sardine or hake represented 1.4%. Occasionally, fish are caught that are not fit for human consumption, and a small percentage of the fish are damaged in the catching process. This represented a total of 0.7% of our catches in 2019. Any fish that is not fit for human consumption is sold as raw material for animal feed, so that these catches also find their way into a food chain and are not unnecessarily destroyed.

LANDINGS BY OUR PELAGIC FLEET 2019



NEW REGISTRATION SYSTEM FOR QUALITY MONITORING

In 2019, our quality managers installed a newly developed registration system for quality monitoring on board our trawlers. The dedicated quality managers (QMs) work closely together with the bridge officers and the technical crew in the engine room. They monitor to ensure that production is in compliance with HACCP protocols, and test the quality of the fish at various stages of the process. As the fish is cooled to zero degrees Celsius immediately after being caught, and then frozen on board within six to twelve hours, the quality of the fish caught remains optimum. The data collected by the quality managers by sampling the fish can now be more easily shared with crew members on board and on land as well as be shared with fishing scientists who can use the data for research purposes.

OUR DEMERSAL FISHING

With our demersal vessels (in daily practice referred to as demersal fishing vessels), we fish for species living on or near the seabed. For this type of fishing, we use trawls or seines. The fishing grounds for this type of fishing are usually relatively close, so that the smaller vessels can land fresh fish in the harbour every couple of days. In 2019, we had a demersal fleet of thirteen vessels active all year round.

Five vessels used the flyshoot method. In this fishing method, the vessel sails in a circle paying out seine ropes as it goes. The seine ropes that are towed over the seabed cause clouds of dust that herd the fish towards the net at the end of the circle. In this fishing method, the net is in the water for a relatively short period of time, so that top-quality, undamaged fish can be hauled in. This method is highly suitable for catching species such as squid, gurnard and mullet.

We had eight vessels fishing for sole using the pulse wing fishing method. We have used pulse trawlers to fish for sole for the past ten years. In this fishing method, two nets are dragged over the seabed, whereby the nets are kept open in a horizontal orientation by a sumwing, or a beam for the smallest vessels. Weak electric pulses scare the fish away from the seabed and into the net. As pulse trawling is being phased out, one of our vessels stopped using the pulse method during the course of 2019.

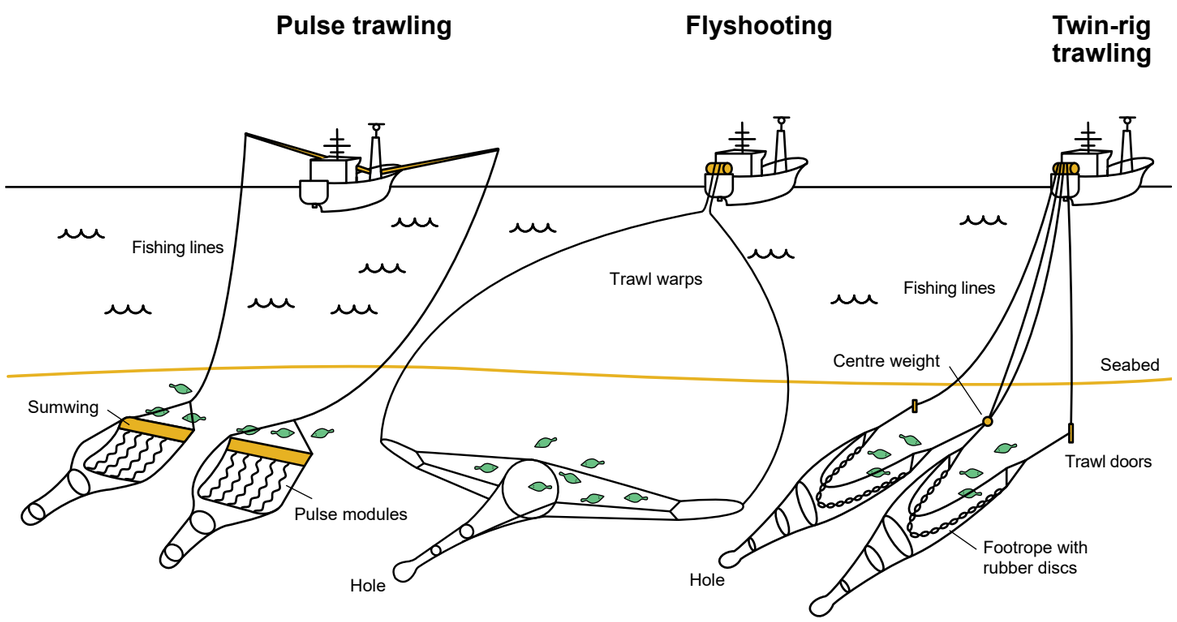
During the plaice season, two pulse trawlers with twin-rig fishing gear to target plaice. In the twin-rig fishing method, two nets are towed over the seabed, whereby the nets are kept open in a horizontal orientation by trawl doors (that work like a kind of kite). The nets roll over the seabed, using a larger mesh size than the size typically used in pulse trawling for sole.

LESS SPACE AT SEA

Over the past few decades, many protected areas have been designated to protect special bottom-dwellers. As demersal fishing vessels fish on the seabed, there may be bycatch of bottom-dwellers, such as starfish, sea urchins and sea sponges. For that reason, demersal fishing is usually incompatible with the nature conservation objectives of those areas. It is our policy to adhere to all the relevant legislation and, consequently, not to fish in areas where it is not allowed.

At the same time, we are concerned about the increase of the number of areas that are getting out of reach for our demersal vessels. The construction of wind farms contributes to this as well. In the coming years, we will, therefore, closely monitor the dialogue between users of the sea, the government and other stakeholders regarding the common use of space at sea.

DEMERSAL FISHING TECHNIQUES



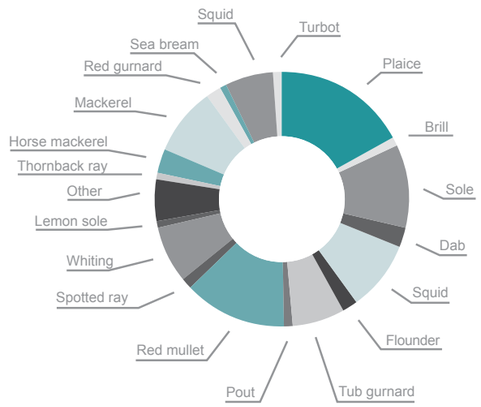
LOCAL QUALITY

Our demersal fleet lands fresh fish after relatively short fishing trips of only a few days. During the fishing trip, the fish is stored on ice. When the vessels come in early in the morning, the fish market makes preparations for the auction. Customers assess the quality of the fish in the viewing room, where the fish caught by all the vessels are on display. Subsequently, the fish are auctioned and sold to the highest bidder by crate. On the other side of the harbour building, the lorries are already waiting to load the procured lots of fish and take them to their destinations. In other words, the whole demersal fish supply chain is set up to take the fresh fish, caught locally, to the consumer as quickly as possible. It is a short and transparent chain.

DIVERSITY IN CATCH

The catches of our demersal fishing vessels comprise a great diversity in species. We distinguish between target species and bycatch species. Seasonal fishing are drawn up based on the target species. Against popular belief, bycatch is also sold at the fish auction. Examples of bycatch are turbot and brill, which find their way to the Dutch market, for example for restaurants. Other species are sold on the South European market because they are less popular in this country. So 'unwanted' in the Netherlands does not mean inedible or unmarketable.

LANDINGS BY OUR DEMERSAL FLEET 2019



WATER SPRAY DEVELOPMENT

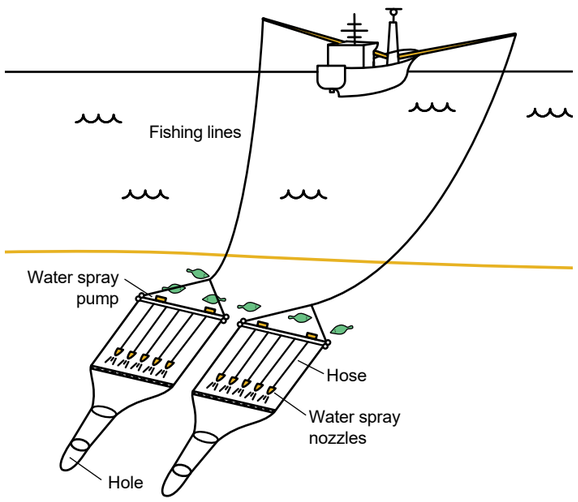
We use specialised fishing techniques to catch excellent quality. Over the past ten years, we have used pulse trawlers to fish for sole. In 2018, the European Council and the European Parliament resolved to prohibit pulse trawling. Over the next few years, the number of licences for pulse trawlers will be phased out. In 2019, this meant that one of our pulse trawlers was forced to switch to traditional fishing using chain mats. To limit contact with the seabed and save fuel, the vessel thereby uses a wing rather than a beam. By mid-2021, our other pulse trawlers will have to switch to a different technique.

Although it breaks our hearts to say goodbye to pulse trawling, we have been looking ahead since 2017 and began developing a replacement fishing method. Demand for developing an equally efficient and sustainable method with the same high quality catch as pulse trawling is high.

In the spring of 2019, we tested the first prototype for a new and sustainable fishing gear: the 'water spray gear'.

NEW DEMERSAL FISHING TECHNIQUE UNDER DEVELOPMENT

Water spray



DEVELOPMENT OF NEW 'WATER SPRAY' FISHING METHOD

In the spring of 2019, we tested the first prototype for a new and sustainable fishing gear: the 'water spray gear', on one of our small demersal fishing vessels. We designed the new fishing gear as an alternative to pulse trawling. The fishing gear is intended to fish for sole. Sole is a much sought-after fish, but is difficult to catch because it immerses itself in the substrate.

In 2018, various methods such as sound, air pressure, vibrating pokerheads, and water jets were trialed. Water jets were found to be the most effective and, as it turned out, the lower the water pressure the better the results. This led to the idea to use weak water jets to scare the sole into the net. Based on these results, in 2018, a prototype gear was developed.

During the testing phase at sea in 2019, the quantity and quality of the catches were analysed with every trawl. Although the results varied, encouraging quantities of sole, but also plaice, turbot and brill, were caught.

To study whether this new fishing method could be sustainably implemented in the EU fleet, in the summer of 2019, we submitted a proposal for a larger-scale research project under the supervision of Wageningen Marine Research with the Dutch Ministry of Agriculture, Nature and Food Quality (LNV). In December 2019, the Ministry granted a subsidy for this project.

In 2020, we will begin testing the new prototype during at least thirty fishing trips on one of our larger demersal fishing vessels. Throughout the project, we will keep active fishing companies informed of our findings and ask them to join an 'innovation study group' (yet to be set up) to contribute to further developments. After all, finding a solution to the banned pulse trawling method will offer not just our company, but the entire demersal fishing industry in the Netherlands and abroad, an opportunity to remain future-proof.

IMPROVED QUALITY IN THE CHAIN AT MARISA'S

In June 2019, we completed the construction of a fish processing plant at Marisa Fisheries, based near Paramaribo, Suriname. The plant was opened with a festive ceremony. The plant offers employment to approximately one hundred (local) employees to sort, fillet and pack the Marisa fleet catches. This helps us monitor and improve the quality of the fish in the complete supply chain, from catch to transport to the customer. Most of Marisa's fish is exported to Central America, the US and Europe.

With its demersal fleet, Marisa Fisheries targets a variety of fish species, including barracuda, snapper, kingfish, kandratiki, Spanish mackerel and corvina. The vessels land the fish at the quay near the office. Previously, the fish was transported by lorry to local fish processing companies.

Marisa's sustainability objectives are included in our CSR policy plan for demersal fishing (2017). They focus on food safety and improvement of quality on board and in the chain. But, for example, also on the implementation of sustainable fishing, among other things by using Turtle Excluder Devices (TEDs) to avoid turtle bycatch. Since 2018, we have been working on a new catch registration system so that, in the future, all fish will be traceable from catch. In addition, reduction of seabed disturbance and energy consumption is being realised by using lighter trawl doors and fishing nets.

Over the past few years, Marisa has grown substantially and the fleet has been modernised with a view to improved quality and reduced seabed disturbance and fuel consumption. The company has a total of approximately 180 employees. In 2019, Marisa has also built a new office on its own premises to accommodate the staff of the growing company.

PILLAR 2
FISHING FOREVER

HEALTHY FISH STOCKS GIVE OUR FISHING INDUSTRY A GREAT FUTURE. WE ADVOCATE RESPONSIBLE FISHING AND ACTIVELY CONTRIBUTE TO BETTER KNOWLEDGE AND SENSIBLE STOCK MANAGEMENT. WE ARE ENGAGED IN CONSTANT DISCUSSIONS ABOUT THIS WITH VARIOUS STAKEHOLDERS IN FISHING.

OUR AMBITION

WE CONTRIBUTE TO SUSTAINABLE FISHING, WITH A FOCUS ON **HEALTHY FISH STOCKS AND RESPONSIBLE FISH SUPPLY CHAINS**

KEY RESULTS IN 2019

WE BEGAN USING PINGERS ON OUR ENTIRE PELAGIC FLEET AS A PREVENTIVE MEASURE AGAINST DOLPHIN BYCATCH

WE SIGNED A WORLD OCEANS DEAL WITH GOOD FISH

WE INTEGRATED OUR CHAIN FOR PLAICE, IN ORDER TO, AS MUCH AS POSSIBLE, PROCESS PLAICE CAUGHT BY OUR OWN DEMERSAL FISHING VESSELS

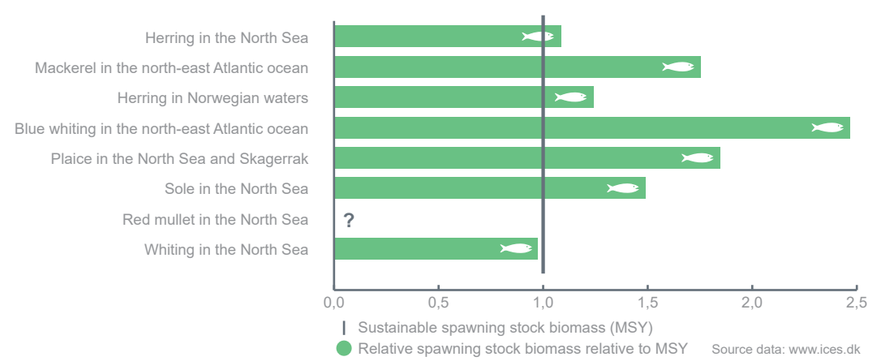
HEALTHY FISH STOCKS

For an active fishing business like ours, sustainability is firstly about preventing overfishing. One of our key objectives is, therefore, to contribute, as effectively as possible, to the promotion of sustainable fish stock management. Essential to sustainable management are solid research, sound quota setting, and compliance with quotas and other legislation. We make a positive contribution on these three points. We are pioneers in our collaboration with researchers and in the sharing of information. We also apply innovative techniques on board to promote sustainable fishing.

Since the EU Common Fisheries Policy (CFP) was reformed in 2002 and quotas have since been set more in line with scientific recommendations, overfishing in Europe has been strongly reduced and many fish stocks have been given the opportunity to recover. These positive developments in Europe are clearly shown, based on scientific data, in a research report by the Scientific, Technical and Economic Committee for Fisheries (STECF)[1]. The research report shows that the number of overfished stocks, as compared to the Maximum Sustainable Yield (MSY) was reduced from 45 to 26 stocks in the period of 2003-2018.

The chart below shows the fish stocks that are most important to us including their status in 2019 as compared to the biomass associated with MSY. Except for red mullet, all the fish stocks are around or above MSY level, qualifying as healthy. For red mullet, the estimate is uncertain. But researchers suspect that the stock is below MSY.

ASSESSMENT OF MAJOR FISH STOCKS BY ICES 2019



[1]STECF report: Monitoring the performance of the Common Fisheries Policy (STECF-Adhoc-20-01)

SETTING THE QUOTAS

Quotas are set annually to determine the maximum quantity that we as a company may catch. We benefit from a rational method for quota setting. The European Commission has set up a number of advisory councils specifically for this purpose. The advisory councils bring the different stakeholders, such as representatives of the fishing industry, anglers and conservation organisations, together to issue joint recommendations to the European institutions that decide on quotas and other fisheries regulations. One of those councils is the Pelagic Advisory Council (PELAC)[2], which is comprised of representatives of organisations from nine Northwest European countries that are active in pelagic fishing. Although we are represented by the Pelagic Freezer-trawler Association (PFA)[3] in this council, we also often participate in the meetings as we value direct contact with stakeholders. All recommendations and minutes of meetings can be downloaded from the PELAC website.

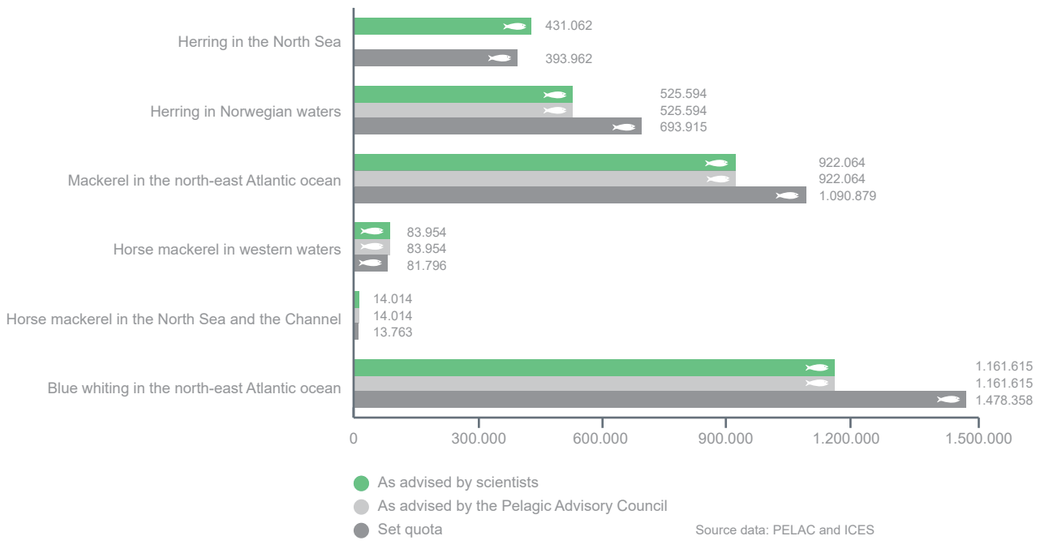
The International Council for the Exploration of the Sea (ICES) issues annual recommendations on the quotas. These are not always clear, and sometimes leave room for different options. In the PELAC, fishermen and NGOs debate those different options. Should they succeed in reaching a unanimous decision, broad-based recommendations can then be worded for the EU. For policymakers it is then more self-evident to convert those recommendations into legislation. We nearly always succeed in reaching unanimous recommendations. If not, as in 2019 with herring in the North Sea, no recommendations are issued.

The chart below shows the recommendations issued by researchers, the recommendations from fishermen and NGOs (stakeholders), including the quotas set. In 2019, a number of differences could be seen between the recommendations issued by researchers and stakeholders and the decisions made by the policymakers.

The quotas set for blue whiting, mackerel and herring in the North-east Atlantic were higher than recommended. The reason was that not all the countries could reach a joint agreement. As a result, the quotas were set for a limited group only (including the EU and Norway). A number of other countries set unilateral quotas. We are concerned about this situation and hope that the governments at the negotiation table will soon take responsibility and come to unanimous arrangements on responsible quotas.

There are also various advisory councils for demersal fishing. Relevant to us are the North Sea Advisory Council (NSAC) and the North Western Waters Advisory Council (NWWAC). We are represented in these councils by the Dutch Fishermen's Federation and Visned, the demersal trawling association. We play an active role in the Dutch Fishermen's Federation, and also often attend the NWWAC meetings to represent the Dutch fishing industry interests.

(RECOMMENDATIONS ON) FISHING OPPORTUNITIES IN 2020



[2] See www.pelagic-ac.org
[3] See www.pelagicfish.org

SOUND MSY-BASED QUOTAS

With the reforms in the Common Fisheries Policy (CFP) in 2002, the European Union decided that, where possible, quota setting had to be based on a long-term vision and on the best available scientific knowledge. The most important objective in this respect was to put a stop to the deterioration of fish stocks. In the years that followed, for many fish stocks long-term management plans were implemented, as a result of which overfishing was reduced and fish stocks started to recover.

In 2012, the CFP underwent further reforms, and a new objective was introduced: the Maximum Sustainable Yield (MSY). This objective aims at allowing the fish stocks to grow with maximum numbers of young fish every year. Because growth of the stock means that more fish can be sustainably caught.

In order to be able to calculate the related quotas on an annual basis, fishing researchers need a great deal of data on the size of fish stocks and catches for each fish species and area. But, for example, also about the age, condition and reproduction of the fish. Our fishermen on board invest a great deal of time and energy in making such data available through the PFA self-sampling programme, among other things.

Maximum Sustainable Yield (MSY). This objective aims at allowing the fish stocks to grow with maximum numbers of young fish every year. Because such increased growth of the stock means that more fish can be sustainably caught.

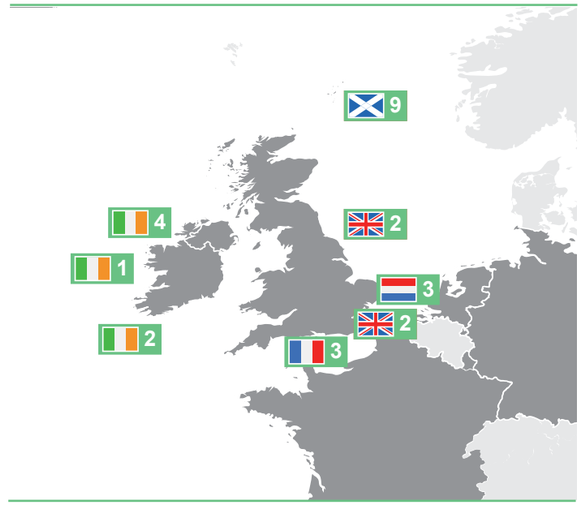
COMPLIANCE WITH LEGISLATION

Enforcement of legislation is stringently organised by national governments. As we cross borders during our fishing activities, we are faced with laws, regulations and enforcement authorities from various countries as well as from the EU. Fishing vessels are monitored by satellite and the locations of vessels can be viewed by EU authorities in real time, monitoring to ensure fishing activities only take place in permitted areas, as well as coordinating inspections at sea. For safety purposes, our vessels always have AIS transponders switched on, in order for them to be located through publicly accessible websites. The skippers report the quantity of fish on board at least once every 24 hours through electronic logbooks. When unannounced inspections occur at sea, the actual quantity of fish on board is checked and compared to the records. In addition, the vessels also frequently undergo unannounced inspections upon arrival at the harbour to check the quantities and fish species being landed.

In 2019, we had a total of 26 inspections at sea on our pelagic trawlers. During these inspections, not only were the logbooks and inventories inspected, but also the fishing gear and nets used. Not one of the inspections concluded with any comments, suggestions for improvement or fines.

Fisheries legislation is very extensive. In order to organise compliance as best we can, we began using a regulations manual in 2017 composed specifically for pelagic fishing operations. The manual is a summary of 2,100 pages of legislation which, in their original form, are impossible for the skippers to manage. In 2019, the manual was updated. Furthermore, we worked on a similar manual, specifically developed for our demersal skippers, so that they, too, will soon have all the relevant fisheries regulations at their fingertips.

INSPECTIONS AT SEA



SUSTAINABILITY THROUGH INNOVATION

By continuously developing and applying innovative techniques, our skippers and their crews are constantly working on improvement. We frequently take initiatives to improve the selectivity of our catches. For example, over the past few years, we have done research on our pelagic trawlers to reduce hake catches by using specially designed escape panels, as we had relatively little quota available for this fish species.

ESCAPE PANELS FOR WHITING

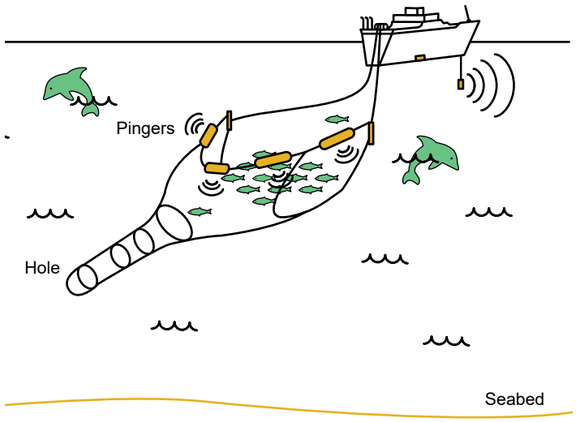
In 2019, the SCH-135 Galibier, one of our demersal fishing vessels, participated in a research project coordinated by the Dutch Fishermen's Federation, in co-operation with the Belgian Research Institute for Agriculture, Fisheries and Food (ILVO). The purpose of the project was to design an effective escape panel to reduce catches of undersized whiting.

During the project, the whiting behaviour in the fishing nets was studied. The results were promising and provided useful information on what effective escape panels might look like. We presented the research report to the Ministry of Agriculture, Nature and Food Quality (LNV). Once we receive a positive response from the Ministry, we can start a follow-up study to optimise the escape panel.

MEASURES TO PREVENT SEA MAMMAL BYCATCHES

Occasional seal, porpoise or dolphin bycatches have received increasing attention over the past few years. One of the reasons is that some seal and dolphin populations have substantially grown since the end of last century, so that they run an increasing risk of occasionally ending up in the nets of our pelagic trawlers.

Although we only sporadically see dolphins in our nets, in 2019 we decided to explore whether we could completely prevent this by using pingers on the fishing nets. The tests were successful, and so we decided to use the pingers as a preventive measure on our entire fleet. In addition, in 2019, we began research on the application of a specially designed escape panel to prevent seal bycatch. We will continue this study in 2020 and, if the results are positive, we will roll out this preventive measure in our fleet as well.



APPLICATION OF PINGERS

In 2019, we researched the use of pingers on our fishing nets. Pingers are devices that are attached to the fishing nets and that radiate an ultrasonic sound to deter dolphins. By deterring dolphins away from the vessel at the point of casting or hauling in the fishing net, we reduce the risk of inadvertently catching a dolphin in the fishing net.

The study results were positive. Although it is still early days, and we cannot yet conclude that this measure will reduce the bycatch to nil, in July 2019 we decided to start using pingers on our entire fleet as a precaution. All our Dutch vessels are now using the pingers in all their fishing areas in their fishing for various fish species. As from 2020, our French and UK vessels will also be equipped with pingers. We were already active in this field in the past, but technical limitations of the devices at the time stopped us from producing proven effectiveness. The marketing of a new generation of pingers with better technical features has now re-opened the door. These new pingers can be used down to a maximum depth of 200 metres.

In the course of 2019, we continued our research within the Dutch Pelagic Ship-owners' Association (RVZ). Based on our experiences, we will continue to promote the use of pingers by the pelagic fishing industry in 2020.

CERTIFIED SUSTAINABILITY

We are committed to demonstrating the sustainability of our catches based on independent certifications. We often succeed, but for some fish species or fishing methods, this is not (yet) feasible. Sometimes, a certificate may be revoked. Unfortunately, this occurred in 2019 for mackerel. In 2019, 76% of our pelagic catches were Marine Stewardship Council (MSC) certified. As compared to 2018, when 92% were still certified, this is disappointing.

We also obtained new certifications in 2019. In a joint application for MSC certification by fishing organisations from the Netherlands, Germany and Denmark, in which over 900 fishing vessels were represented, plaice, sole, saithe, haddock, hake, ling, megrim, tusk, whiting, Norway lobster, and prawns were certified for (parts of) the North Sea and the Kattegat/Skagerrak for a number of fishing methods. For our company, this meant that we could add five fish species to our list of certified fish (sole, saithe, haddock, hake and whiting). To note, a large part of our plaice catches had already been certified. In addition, we also obtained an MSC certification for common shrimp in 2019.

We are committed to demonstrating the sustainability of our catches based on independent certification. That often works, but for some fish species or fishing methods, this is not (yet) feasible.

SUSPENSION OF MSC CERTIFICATION FOR MACKEREL

In March 2019, the sustainable MSC certification for our pelagic fishing for mackerel was, unfortunately, suspended. The main reason for this suspension was that the auditor assessed that the international management of mackerel fishing was not in order. This meant that not only did we lose the certification, but also all of our colleagues from the relevant EU Member States (the Netherlands, Germany, France, the United Kingdom, Ireland, Denmark, Sweden, Spain, Poland, and Lithuania, as well as our colleagues from Norway, the Faroes, and Iceland lost this certification.

As a result of the strong growth of the fish stock (2005-2015), the distribution range of mackerel in the north-east Atlantic has hugely increased. All mackerel, from the Bay of Biscay to the northern waters of Iceland and Greenland, form part of a single biological population. For sustainable management, it is important for the authorities of all countries involved in mackerel fishing to reach an agreement on the total allowable catches (TACs) and on a mutual allocation key. The existing agreement on the allocation key was lost due to the increased distribution range in a northwest direction. In particular, Iceland, the Faroes and Greenland allowed their mackerel fishing to increase without limitation, and demanded a larger share in the TAC.

In 2014, the EU, Norway and the Faroes came together in a tripartite agreement. Iceland, Russia and Greenland have not acceded to that agreement, but continue to fish for mackerel. Since 2014, a TAC has been set each year based on scientific recommendations, with 15.6% of the TAC reserved by the three participating parties for the three non-participating countries. The latter have, however, set and caught higher quotas every year than what was reserved for them. As a result, the quantity caught exceeded the scientific recommendations. This has eventually cost all parties to lose the MSC certification.

We as a fishing company are not at the negotiation table. Those negotiations are conducted among governments. Any influence that we may have is indirect. Brexit will make the playing field even more complex because the UK, as a new coastal state, will obtain its own seat at the negotiation table. A solution to this complicated problem can only be found if all parties act reasonably. At the same time, it has been established that the mackerel stock is in excellent condition, and scientists are giving this stock green ticks in their recommendations. As such, we are not concerned about the sustainability of this fish species in the long term.

RESEARCH COLLABORATION

We frequently take fishing researchers on board our vessels. We also occasionally participate in scientific surveys. In 2019, as in previous years, two of our pelagic vessels participated in an acoustic survey west of Scotland, to get a better overview of the herring population. One of our demersal fishing vessels, the OD-17, participated in the 'company survey' by Wageningen Marine Research, sampling turbot and brill, because less data is available for those fish species.

In 2019, the OD-17 participated again in the self-sampling programme coordinated by Wageningen Marine Research. During eight fishing trips, the crew collected data and sampled the fish. On request, our flyshooter SCH-65 also started sampling in June but, unfortunately, after the first trip, we concluded that we could not combine the research protocol (developed for twin-rig and pulse trawlers) with the already intensive workload.

The data that we or observers on board our vessels collect is made available to the International Council for Exploration of the Seas (ICES) for stock estimates. This way, we contribute to reliable quota recommendations.

RESEARCH COLLABORATION 2019

Q	Vessel	D	Purpose of the research	O
1	SCH-135 Galibier	2	Net innovation	WUR/ILVO
1	H-225 Northern joy	6	Pulse trawling	CEFAS/WUR
1	H-225 Northern joy	6	Pulse trawling	CEFAS/WUR
1	SCH-63 Quo vadis	12	Pulse trawling	CEFAS/WUR
1	SCH-123 Zeeland	35	Catch composition	WUR
1	H-171 Cornelis Vrolijk Fzn	20	Catch composition	WUR
2	H-171 Cornelis Vrolijk Fzn	22	Catch composition	WUR
2	SCH-72 Frank Bonefaas	15	Catch composition	WUR
2	SCH-123 Zeeland	25	Catch composition	WUR
3	SCH-81 Carolien	16	Catch composition	WUR
3	SCH-24 Afrika	17	Catch composition	WUR
3	SCH-81 Carolien	21	Catch composition	WUR
4	H-72 Frank Bonefaas	24	Catch composition	WUR
-	CC-622598 Larche	-	Catch composition	IFREMER

Q = Quarter D = Days O = Observer

OCEANS DEAL WITH GOOD FISH

On 8 June 2019, World Ocean Day, we signed a 'World Oceans Deal' with Good Fish. Good Fish is a conservation organisation promoting sustainable fish production and consumption. Good Fish enters into 'World Oceans Deals' with parties in the fish supply chain that wish to contribute to its mission.

In the course of 2019, we conducted exploratory talks about how we could shape our collaboration within this deal and decided to get to work on data collection on board our flyshooters. Earlier that year, we had already tried to collect data by participating in the regular Wageningen Marine Research self-sampling programme. This attempt failed, however, because the sampling protocols for other fishing methods proved impracticable on board our flyshooters.

Flyshooting is an innovative fishing method on which currently comparatively little catch data is available for Wageningen Marine Research, a Dutch research institution. This fishing method targets demersal fish species, such as mullet and tub gurnard, for which also internationally rather limited scientific data is available. We decided, together with Good Fish, to commit to improvement of the scientific assessments, and general knowledge, of flyshooting and a number of these fish species. Together with Wageningen Marine Research, we have written a research proposal, which will focus on the development of a practicable data collection protocol for flyshooters. In 2020, we expect to be able to start up the proposed research project on board our flyshooters.

TRACEABLE FISH FROM SHIP TO SHELF THROUGH SEAFOOD PARLEVLIET

Cornelis Vrolijk has stakes in several fish processing companies. Part of the fish and shrimp processed comes from our own catches or farming. With this forward integration in the fish supply chain, we can provide Dutch and other European consumers with more certainty in terms of the responsible origin of our fish products, which is from ship to shelf.

Traceability, with certainty as to the origin of the products, is becoming increasingly important to our customers and consumers. With our presence in the entire fish supply chain, we can guarantee the quality and sustainability of the fish, from the moment that our fish is hauled in until it is processed and packed for transport to the customer.

An example is the mackerel, which is smoked and processed by Seafood Parlevliet and is procured solely from Cornelis Vrolijk trawlers. Another example is the sole, plaice, turbot, gurnard and squid that Bertus-Dekker Seafood processes for the South European market. These species are preferably procured from the Cornelis Vrolijk demersal fishing vessels.

In 2019, Seafood Parlevliet started preparing its own CSR policy plan, based on the model of the Cornelis Vrolijk CSR policy plans. In addition to transparency in the chain, this CSR policy plan addressed subjects such as a sustainable procurement policy, improvement of the sustainability of (plastic) packaging, and reduction of the carbon footprint. In 2019, Seafood Parlevliet also participated in the Sustainable Business Battle (SBB) organised by Leiden University and TU Delft. Students were invited to help think about how residual flows could be better used in order to reduce waste.

Traceability of all our products will remain an important point for attention in the coming years. To reach a higher level of transparency in those chains, we will pay extra attention to products that we do not catch or farm internally at Cornelis Vrolijk but procure from third parties in the coming years. Starting 2020, we will work on the development of a sustainable procurement policy to be applied at a structured and company-wide level.

PILLAR 3
DAILY SUSTAINABLE

CORPORATE SOCIAL RESPONSIBILITY TO US ALSO MEANS THAT WE ACTIVELY CONTRIBUTE TO THE TRANSITION TO A CIRCULAR ECONOMY AND REDUCE OUR CARBON FOOTPRINT. THIS MEANS THAT WE WILL MAXIMISE WASTE RECYCLING AND MAKE CONSCIOUS CHOICES WHEN PROCURING GOODS AND ENERGY.

OUR AMBITION

WE REDUCE OUR CARBON FOOTPRINT AND CONTRIBUTE TO A CIRCULAR ECONOMY

KEY RESULTS IN 2019

WE INTRODUCED A NEW WASTE SEPARATION SYSTEM AT THE OFFICES AND COLD STORES IN IJMUIDEN AND SCHEVENINGEN

WE REDUCED THE AMOUNT OF CHEMICAL REFRIGERANTS USED FOR EACH DEMERSAL FISHING VESSELS BY 36%

IN NIGERIA, WE PUT TWO NEW VESSELS INTO SERVICE, WHICH WILL CUT FUEL CONSUMPTION BY NEARLY 30% EVERY YEAR AS COMPARED TO THE OLDER VESSELS IN THE FLEET

ENERGY-EFFICIENT AND CIRCULAR

Cornelis Vrolijk is committed to current social topics, such as a cleaner living environment, a circular economy, and fighting climate change. We contribute to these objectives in various ways.

In 2017, we had a Life Cycle Analysis (LCA) conducted on our pelagic fish. This proved that the carbon footprint of our pelagic fish was relatively low in comparison to many other high-protein products. The LCA showed that 80% of our climate impact was related to the fuel consumption of our vessels, the electricity and gas consumption of our cold stores and offices, and the use of chemical refrigerants in the refrigeration and freezer systems. For that reason, we pay most attention to these three factors when working on reducing our carbon footprint.

In addition, we study the possibilities of making our packaging materials more sustainable and to recycle our old fishing nets and other waste flows, for example by participation of our demersal fishing vessels in the Fishing for Litter project.

The carbon footprint of our pelagic fish is relatively low in comparison to many other high-protein products.

CARBON FOOTPRINT

Kilos of CO_2 per kilo of product

Source: Food environmental impact data, RIVM 2019

REDUCED EMISSIONS

We are constantly working on reducing our fuel consumption and, thus, the emissions of CO_2 and other harmful substances. As new legislation was introduced, our pelagic trawlers have increasingly used gasoil instead of heavy oil since 2015. Our demersal fishing vessels have always run on gasoil. Gasoil has several aspects that makes it less harmful to the environment than heavy oil. By reducing the use of heavy oil, we have reduced our sulphur emissions per kilogramme of fish produced by 50%, thus contributing to a cleaner living environment.

MORE ENERGY-EFFICIENT TRAWLERS

In 2018, we set up a carbon study group to work on ways to make the vessels more energy-efficient. Our possibilities in this respect are, however, limited by the current design of the vessels. Only when overhauling a trawler (on average once or twice in its lifetime) substantial improvements can be made. Despite these limitations, we will continue to look for ways to make our vessels more energy efficient.

For the reduction of the CO_2 emissions of our fleet, we mainly see opportunities in newly-built vessels. In 2018 and 2019, France Pélagique had a new freezer trawler built. By incorporating energy-efficiency right from the drawing table, we expect that the new trawler will be able to realise a fuel reduction by 15% per kilogramme of fish as compared to existing vessels. The vessel will be put into service in 2020, to replace one of our older vessels in the fleet.

ALTERNATIVE FOR PULSE TRAWLING

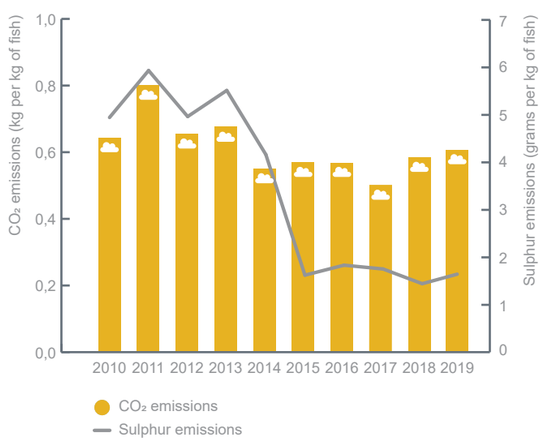
Between 2008 and 2016, fuel consumption and, thus, emissions of our fleet per kilogramme of fish was halved. This reduction was mainly the result of the implementation of pulse trawling. Over the past few years, the emissions per kilogramme of demersal fish have, on average, increased again. This can partly be explained by the fact that, during the past few years, we have also started to fish for other species, such as common shrimps, where the catching process is less energy efficient.

Another important reason is the fact that a number of vessels have been forced to switch from pulse trawling to traditional tickler chains in order to fish for sole and plaice, resulting in higher fuel consumption, despite the use of a sumwing. With a view to minimising our fuel consumption, finding an alternative to pulse trawling will be one of our greatest challenges, now and in the years to come. Therefore, we are working hard on the development of our new water spray gear.

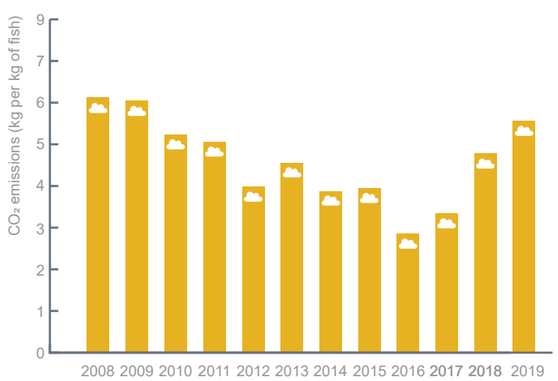
We will also explore the possibilities of applying hydrogen on board our demersal fishing vessels in the next few years. Hopefully, that will offer opportunities to reduce the emissions of our fleet in the future.

In 2018, we set up a carbon study group in order to work together on ways to make the vessels more energy-efficient

CO_2 AND SULPHUR EMISSIONS PER KG OF PELAGIC FISH



CO_2 EMISSIONS PER KG OF DEMERSAL FISH



USE OF CHEMICAL REFRIGERANTS ON OUR DEMERSAL FISHING VESSELS REDUCED BY 36%

In 2019, many improvements were implemented in the use of refrigerants on our demersal fishing vessels. Several chemical refrigerants have been replaced by a more sustainable alternative. In 2019, R448A was introduced in many systems. At this point, this is the cleanest alternative for us.

Also in 2018 and 2019, many systems were made suitable for the use of a second, secondary cooling agent: brine (salt water) or glycol. The renewed systems have reduced the use of chemical refrigerants by 36% per vessel because only part of the cooling system is filled with chemical refrigerants, while the other part is filled with brine or glycol.

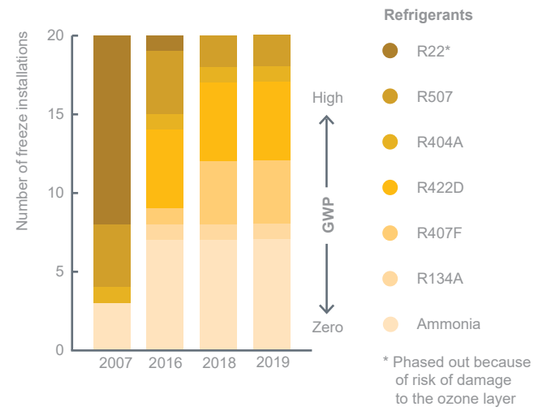
To reduce our climate impact, we have worked on a transition to more natural refrigerants that are less harmful for some ten years now. We do so in our fleet and at our cold stores. The use of R22, a substance that can also be damaging to the ozone layer, has been phased out completely and replaced by cleaner alternatives.

The chart to the right shows that, over the past few years, we have made substantial progress on our trawlers and in the cold stores. The chart for our demersal fishing vessels shows that the total amount of refrigerant required in 2019 was substantially less than in 2005, despite the higher number of vessels. In other words: we have made quite some progress on this part of our fleet.

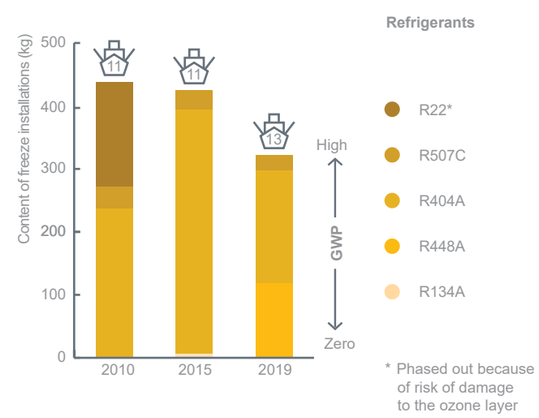
REFRIGERANTS TRANSITION

On board our trawlers, we cool the fish to zero degrees Celsius immediately after catching, then freeze it within six to twelve hours. Once landed, we store the fish in our cold stores. Our freezer systems use chemical refrigerants that, when released into the atmosphere, form a strong greenhouse gas. By carrying out preventive maintenance, we ensure the safe use of these refrigerants and where possible, we are committed to the transition to natural refrigerants.

USE OF REFRIGERANTS IN COLD STORES ON SHORE AND ON OUR TRAWLERS



USE OF REFRIGERANTS ON OUR DEMERSAL FISHING VESSELS



ENERGY CONSUMPTION ON LAND

We use different methods in order to make our energy consumption on land more sustainable. First of all, we procure electricity from sustainable sources with guarantees of origin. In 2019, that electricity originated from wind in Europe.
In addition, we generate part of our own electricity consumption using solar panels. One of our IJmuiden locations is equipped with 1,050 solar panels on the roof of the cold stores, making our office at that location energy neutral. In 2019, we conducted a feasibility study to install solar panels on the roofs of the two other locations in IJmuiden, showing positive results. Unfortunately, the application of solar panels on cold stores became a subject of discussion with insurers and therefore we could not yet install the panels.

Where possible, we have our consumption managed flexibly to link up with the supply on the energy grid. By consuming more electricity when supply from wind and sun is great, and less when there is little supply, we help stabilise the power grid and contribute to the transition to sustainable energy. Currently this is done at an IJmuiden location, but we may be able to, in the future, expand this innovation to other locations as well.

Finally, we are structurally working on a reduction of our total electricity consumption, among other things in the context of the multi-year agreement on energy efficiency (the MJA-3 social covenant), which we signed in 2016.

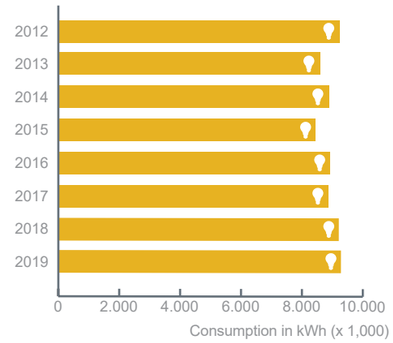
ENERGY-SAVING MEASURES ON LAND

In 2019, again, we implemented a number of energy-saving measures. For example, at two locations in IJmuiden, we replaced virtually all the gas high-pressure lamps in the freezers by LED lighting, and all our freezers and the distribution hall and the office in Scheveningen have meanwhile been equipped with LED lighting. At our Scheveningen location, three old condensers in the cold stores have been replaced by two energy-efficient condensers with frequency regulation.

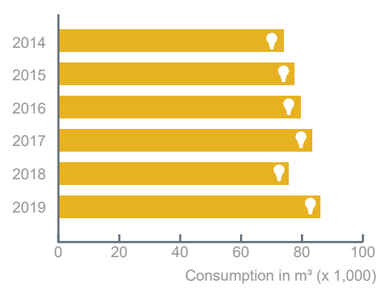
Unfortunately, we do not yet see sufficient results of our efforts over the past few years in our overall energy consumption. A further review of the consumption figures per location shows that this is mainly the result of various trends at various locations. Particularly at our older locations, we can see an increase in energy consumption. In the coming years, we will invest in energy-saving measures at these older locations.

In 2020, we will carry out a more detailed analysis of our gas and electricity consumption data and develop a plan for improvement for the older locations. Furthermore, we will make available capacity within our technical service team to pay more attention to our energy consumption on land on a structural basis.

ELECTRICITY CONSUMPTION



GAS CONSUMPTION



NEW WASTE SEPARATION SYSTEM AT OUR OFFICES

It is our goal to manage our waste responsibly and aim to maximise our recycling. In early 2019, we introduced a new waste separation system for our offices and cold stores in IJmuiden and Scheveningen. With the new system, we wish to maximise the recycling of our waste at those locations. Waste separation and recycling on board our vessels has been well-organised for quite some time.

In 2018, a recycling study group was set up. This study group visited several waste processing plants to discuss recycling solutions and to see for themselves how waste is being processed. Future partnership potential was considered based on destination recycling, as well as the working conditions at the waste processing plants.

CIRCULAR ECONOMY

The Dutch government has set the goal to be fully circular by 2050. We want to contribute to achieving that goal. In that respect, we study the use of materials all the links in our productino and supply chain.

We highly value the responsible treatment of waste from our own business processes, including on board our vessels. As our demersal fishing vessels occasionally catch waste from the sea, responsible processing for that waste is managed as well. We do so according to the Fishing for Litter method, part of this directive of the Fishing for a Clean Sea Green Deal, a social covenant that we signed in 2016. At our offices and cold stores, we also continuously review how we can have our business waste processed as responsibly as possible and maximise recycling.

SUSTAINABLE FISHING NETS

We work closely together with our net supplier to design new and innovative fishing gear. For example, a few years ago, a joint study resulted in the implementation of Dyneema, a sustainable material for nets. Dyneema is much stronger than nylon, therefore thinner threads can be used. This reduces the resistance of the fishing net in the water thereby saving fuel. The material is also less sensitive to wear or breakage giving the nets a longer life.

In 2019, the European Union adopted a new directive on reducing the effects of plastic on the environment. As part of this directive, the EU will be developing a standard for the circular design of fishing gear, promoting the re-use or recycling of fishing gear. In the next few years, we will be working together with our net supplier to contribute to this development.

NEW ASL VESSELS USE 30% LESS FUEL

Over the past few years, the ship-owner Atlantic Shrimpers Ltd. (ASL) made substantial progress innovating and modernising its fleet, using expertise available within Cornelis Vrolijk. By innovating its fleet, ASL aims for more energy-efficient sailing, quality improvement of the catch and working conditions improvement for the crew. This seamlessly fits the CSR policy introduced by ASL in May 2019.

ASL ship-owners, based in Lagos, Nigeria, specialises in tropical shrimping. Cornelis Vrolijk has had a stake in the ship-owners since the mid-1990s. Today, the fleet is comprised of 72 vessels. The catch of its key target species, the large tiger prawn, holds a Friend of the Sea label sustainability certification. The shrimps are traded and exported mostly to Europe, the US and Asia by Primstar BV trading company.

The first two newly designed vessels were delivered in Lagos in 2018. In 2019, the vessels proved their worth in actual practice, and it turned out that, during fishing, they consumed approximately 30% less fuel than the current vessels in the fleet. For that reason, we decided, in late 2019, to continue the transition to a cleaner and more energy-efficient fleet by inviting tenders for two sister vessels.

Another important focus in the CSR policy is good care for employees. With ASL, we want to set a leading example in the region in terms of offering good working conditions. We value knowledge of, and respect for, the local culture. Clear employment agreements, fair pay, and attention to safe working practices form the basis for the HR policy. Staff turnover within the company is low, and many of the employees have been in ASL's service for a long time. The vast majority of the employees have been recruited locally and trained internally. We are proud to be able to give them opportunities to develop and grow into increasingly responsible positions. ASL employs over 1,400 people.

PILLAR 4
CARE FOR PEOPLE

OUR EMPLOYEES ARE ESSENTIAL TO THE CONTINUITY OF OUR COMPANY. FOR THAT REASON, WE PAY STRUCTURAL ATTENTION TO SAFE AND PLEASANT WORKING AND LIVING CONDITIONS AS WELL AS TO THE HEALTH OF OUR STAFF. IN ADDITION, WE WANT TO MAKE A POSITIVE SOCIAL CONTRIBUTION TO THE LOCAL COMMUNITIES IN WHICH WE ARE ACTIVE.

OUR AMBITION

WE INVEST IN THE **SUSTAINABLE EMPLOYMENT AND PERSONAL DEVELOPMENT** OF OUR EMPLOYEES

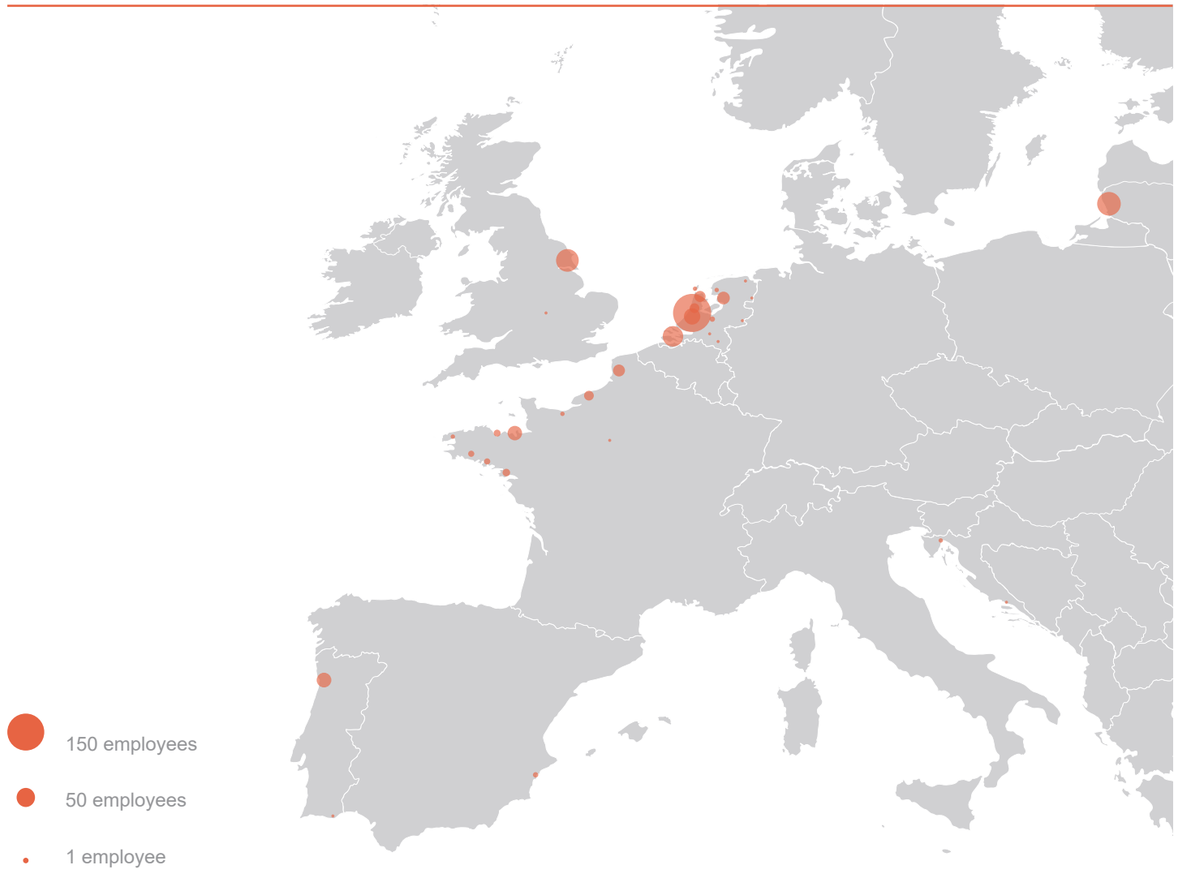
KEY RESULTS IN 2019

WE INTRODUCED A 2-TRIPS-UP-1-TRIP-DOWN ROTATION SYSTEM FOR ALL OUR LARGE TRAWLERS TO PROMOTE SUSTAINABLE EMPLOYMENT

WE SAW AN INCREASE IN THE NUMBER OF INTERNS ON OUR DEMERSAL FISHING VESSELS, AS A RESULT OF ADJUSTMENT OF THE INTERNSHIP PAY

OUR FISH PROCESSING PLANT IN MAURITANIA BECAME FULLY OPERATIONAL, CREATING OVER ONE HUNDRED LOCAL JOBS

WHERE OUR EMPLOYEES LIVE



OUR EMPLOYEES

The workmanship, commitment and loyalty of our employees is essential to the development of our company. We believe it is important for our people to enjoy going to work. We are proud of them, and their loyalty to our company is clear from the many long-service (25 or 40-year) anniversaries. To safeguard our continuity, we want to continue to secure this for the future. Cornelis Vrolijk employs over 2,000 people around the world. Our pelagic fishing activities employ around 600 people, (400 of whom are at sea). Our demersal fishing vessels employ some 80 people. The trade of fisherman is traditionally often passed from father to son, particularly in the traditional fishing villages.

Many of our fishermen live in small coastal communities, so that we, as a business, contribute to local employment. We want to make a positive social contribution for both our employees and those communities. For that reason, social engagement is an important focus within this pillar. The map above shows where the staff working in our pelagic and demersal fleets and Dutch offices live. This clearly shows the high concentration in coastal communities.

GOOD EMPLOYMENT PRACTICE

We abide by laws and regulations in everything we do. Also when it comes to the care for our employees. We want to facilitate a safe working environment for everyone who works for or with us. 'Good employment practice' as described in Dutch labour law naturally is an important basic principle. Another important legal statute is the implementation of the United Nations Work in Fishing Convention (C188 convention), as that convention specifically provides rules for people who perform work on board fishing vessels. We are proud to have played a leading role in the realisation of the C188 certification within the fishing fleet.

We go a step further than what laws and regulations require. We want to create a pleasant working environment where people can develop. A safe culture and attention to the wellbeing and personal development of our employees are important focal points. Working at sea is often physically demanding. Our ageing workers policy focuses on allowing people to enjoy their pension in good health. Through training and personal development, people are given career opportunities within the company.

SUSTAINABLE EMPLOYMENT

We believe that working on sustainable employment is an investment in the long-term relationships that we enter into with our employees. Although safety at work and prevention of accidents comes first, we also want to encourage our employees to work on their vitality.

In 2019, for example, our bicycle scheme offered our office staff a tax-efficient opportunity to purchase a bicycle. Particularly for our employees at sea, vitality is an important issue. As they perform physically demanding work on board, we want to ensure that our chefs provide nutritious meals. But they must be balanced with the physical strain and exercise on board.

One of the initiatives undertaken over the past few years was to have a dietician give our employees advice and guidance on a healthier diet. Our dietician provided workshops on board, together with the chefs, to work on healthier meals for the crew. In 2020, we will start a more integral approach to this theme.

SAFETY

We believe that providing a safe and healthy working environment is essential in the care for our people. Particularly for our employees working on board vessels or at our cold stores, safety at work is an important focus, because their working environment, with its associated risks, requires it. Increasing awareness with respect to these risks is part of the duties of our Health and Safety Department.

Frequent safety drills and proper use of Personal Protective Equipment (PPE) have our structural attention. In 2019, we changed our policy in terms of the procurement of PPE for our crew on the demersal fishing vessels. As partners in the professional partnership, they used to be responsible for the procurement of their own equipment. Instead, it has now been agreed that the professional partnership will arrange procurement, so that we, as a partner in this partnership, bear part of the costs. At the same time, this gives us the opportunity to ensure that PPE is replaced on time, and that proper quality items are procured.

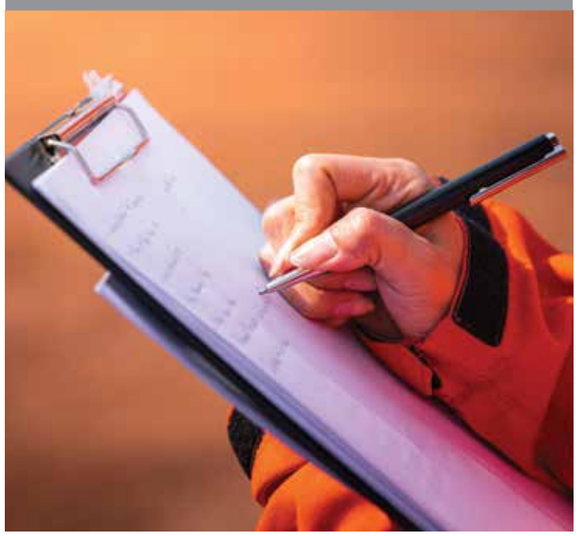
Over the past few years, we have paid a great deal of attention to systematic reporting and, thus, to lessons learned from (near-) accidents and hazardous situations on board our vessels. As a result, we can take preventive measures in our fleet. In the coming years, we will continue to work on a more structured approach to accident analysis.

LAWS AND REGULATIONS

Our personnel policy is based on the starting point of 'Good employment practice' as defined in Dutch labour law. This term refers to six principles: be prudent, do not abuse your position, substantiate drastic decisions, meet expectations, treat employees equally, and take out proper insurance.

On 15 November 2019, the Dutch government implemented the United Nations Work in Fishing Convention (C188 convention). On 15 November 2020, exactly one year later, the legislation will officially come into effect. In addition to basic principles, comparable with those described above under 'Good employment practice', that legislation mostly addresses specific issues regarding the performance of work on board fishing vessels. It includes, for example, regulations regarding accommodation, nutrition as well as working and resting times.

In 2018, we began with preparations and in 2019, we implemented all necessary changes to our French and UK trawlers and in our demersal fishing vessels. The Dutch Human Environment and Transport Inspectorate (ILT) carried out an inspection, with a positive result, showing that the vessels met the standard. In January 2020, we were the first ship-owner in the Netherlands to become C188 certified. The implementation of the new regulations went smoothly for our entire fleet. In 2020, we will seek certification of our other vessels.



AGEING WORKERS POLICY

The work on board a fishing vessel is physically demanding. Our crew members often went to sea at a young age. We have seen that, for the older employees on board, the last years of their career can sometimes be too demanding. The average age of crew members in our fleet is increasing, and we feel the need to develop a more targeted ageing workers policy. Over the past few years, we gave crew members on board a number of vessels the opportunity to work according to a two-trips-up-one-trip-down rotation system. That gave them more rest time between fishing trips, which benefited their (physical) recovery. They also experienced a better work/life balance. Younger crew members on board also saw the advantages of such a rotation system.

Sailing according to a rotation system means that we need more people for the same positions. Changing the composition of our trawler fleet in 2019 gave us the opportunity to introduce this two-trips-up-one-trip-down rotation system on all our large trawlers. This system has become our standard and has been recorded in our new company collective bargaining agreement.

TRAWLING COMPANY COLLECTIVE BARGAINING AGREEMENT

In 2019, we decided to prepare an additional company collective bargaining agreement (CAO) for our crew members who come under the Dutch Trawling CAO. The purpose of this additional CAO is to make better arrangements for our employees on a number of points, while at the same time harmonising and simplifying the wage models. This has made it easier for crew members within our fleet to switch from one vessel to another on the same terms and conditions.

The change in composition of our trawler fleet in 2019 was the perfect time to begin this process. In a mutual consultation with CNV Vakmensen trade union and a number of crew members, we were able to finalise the new CAO in a few months' time. An additional advantage of this process was that we could immediately incorporate a number of new obligations stemming from the regulations under the ILO C188 convention.

In the company CAO, we implemented a standard two-trips-up-one-trip-down rotation system, allowing the crew members to experience a better work/life balance. This way, we shape an important element of our ageing workers policy: more rest at home.

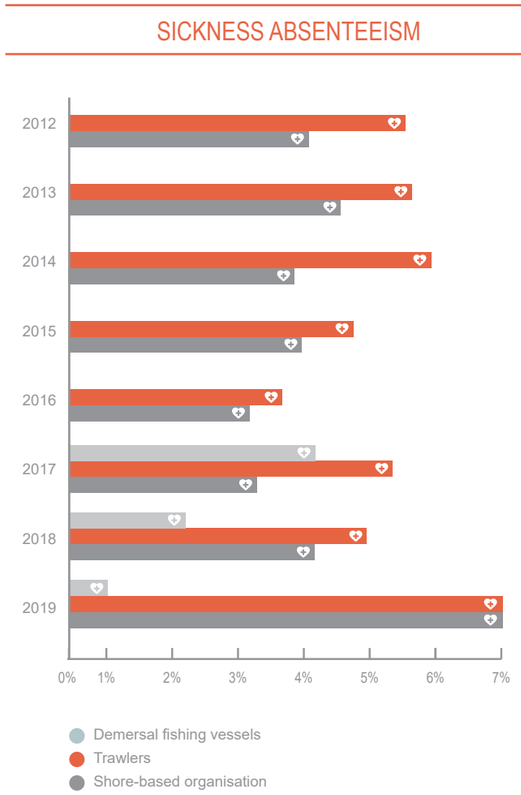
We are proud that, with this company CAO, we have realised a clear and transparent addition to the terms of employment in the Trawling CAO for our crew members on board.

SICKNESS ABSENTEEISM

Our company doctors monitor and analyse our sickness absenteeism. Since 2013 we have ensured that they record the causes of absence. Based on the (anonymised) results of their analyses, we can anticipate trends. The majority of absences have typically been due to issues in the musculoskeletal system, caused by the physical strain involved with work on board. In 2019, we saw an increase caused by a number of chronically ill employees whose cause of absence was not work-related.

The absenteeism figures are erratic from year to year because they are affected by whether or not there is any long-term absence. In recent years we have seen an increase in the number of sick reports due to mental health issues. Whether this increase is representative or caused by an increase in the recording of that cause cannot be ascertained at this point. We only recently started systematically keeping data for sickness absenteeism for the crew on our demersal fishing vessels.

It remains important to analyse our sickness absenteeism with the help of company doctors.



PROACTIVE TRAINING POLICY

In the field of training and education, we make sure that our employees complete the training programmes that are necessary for them each year. In 2019, it was mainly our French subsidiary France Pélagique (FP) that invested substantially in these training programmes. Instead of leaving the initiative up to the crew members on board themselves, they felt it was important to make training opportunities a central focus of attention. In 2019, the FP human resources department decided to prepare tailored training plans for everyone.

An active inventory among all crew members on board resulted in a huge amount of applications for a variety of training programmes, often of a technical nature or relating to safe working. For all these applications, tailored training or educational programmes were found. A total of 42 crew members (over 60% of all crew members) travelled to Concarneau, Lorient, Saint-Malo, Le Havre or Ciboure. FP assumed all the costs of lodging and training.

In addition to this large number of short training programmes, four longer educational programmes were facilitated at FP's expense. These programmes were provided to crew members who wanted to develop in the direction of a position with more responsibilities, such as bridge officer or chief engineer.

ATTRACTING YOUNG TALENT

We offer internships to fishing school students, in order to give them a chance to get to know our company, whilst giving us the opportunity to attract young talent for a career in our fleet. Many interns join our company immediately after graduation. We have many applications every year for work on our trawlers, and always have one or more interns per vessel on board. In 2019, virtually all the internships were filled. Students were doing internships at our offices and cold stores as well.

Over the past few years, our demersal fishing vessels always had ten internships available. And yet, only a few of these internships could be filled. For that reason, we strengthened our contacts with various fishing schools and, in early 2019, adjusted our internship pay. In 2019, we placed three interns. We are pleased with this step in the right direction and will continue to offer and fill as many internships as possible in the coming years.

PERSONAL DEVELOPMENT

We see that employees generally stay with us for a long period of time. This means that we, as a company, can build a great deal of specialist knowledge and can properly coach and train young people internally. We believe that attracting talent and developing the talents that we already have within our company is important for the development of our company. Over the past few years, we have paid more attention to the employees in our shore-based organisation by conducting annual interviews during which we discussed personal development goals.

We can see that it is sometimes difficult for new employees to find their way. For this reason, in 2020, we will conduct a survey to discover how we could make new employees feel at home more quickly.

INTERNS IN THE UK

In 2019, we entered into a new partnership with Humberside Engineering Training Association (HETA), a technical training centre in Hull. Since 2016, we have partnered with Hull Trinity House Academy through our subsidiary North Atlantic Fishing Company (NAFCO) for the management of internships on board our UK-flagged trawlers. This allows students in the maritime officer training programme to become acquainted with pelagic fishing. As our vessels are so technically sophisticated, we wanted to expand the partnership in the field of engineering. Through this partnership with HETA, in September 2019, five young student engineers started their internship on board the H-72 Frank Bonefaas. Beginning in the 2021/2022 academic year, HETA expects to set up a dedicated team for maritime engineering. The intention is for NAFCO to take even more young and enthusiastic engineers on board.

SOCIAL ENGAGEMENT

We as a family business feel connected with the communities in which we are active and where our employees live. We show this by sponsoring various regional sports clubs. Furthermore, we support several local events, some of them related to fishing. Sporting events that we can join in with company teams, such as running races and hiking events are also completely in line with our sponsorship policy. We, as a company also feel a broader social engagement. Various charitable causes and local welfare organisations can count on our annual support.

PARTNERSHIP WITH JINC

We not only invest money but also time within the local community. For example through our partnership with Jinc (Haaglanden and Kennemerland regions). Jinc's objective is to give children, whatever their social background, a flying start on the labour market. For that reason, they organise exploratory meetings with regional businesses, particularly for children from underprivileged neighbourhoods. This allows for children to be more aware of their opportunities on the labour market. In IJmuiden and Scheveningen, we receive groups of students several times a year. Various colleagues tell them about their work and everything involved in the fishing business. Both parties find these visits valuable.

In 2019, in co-operation with Jinc Kennemerland, we organised a tailored project in which we received students of Vakcollege Rijnmond preparatory vocational school in Katwijk for the day. Many crew members of our trawlers live in Katwijk, so these children often already know the fishing industry through their family. This day focused on a real exploration of our business in order to lower any barriers for any enthusiasts among the students to apply for an internship or job in the future.

SCHOOL VISITS THROUGH JINC IN 2019

School	Month	Location	Number of students
Tendercollege	January	IJmuiden	8
Tendercollege	January	IJmuiden	7
Heldring College	January	Scheveningen	10
Segbroek College	February	Scheveningen	10
Bassisschool De Origon	March	IJmuiden	10
Christelijk College de Populier	May	Scheveningen	12
Vakcollege Rijnmond	May	IJmuiden	40

PARTICIPATION IN THE ALPE D'HUZES

In June 2019, a group of employees participated in the Alpe d'HuZes sporting event. Alpe d'HuZes is an event in which participants try to conquer the French Alpe d'Huez up to six times by running or on bike. They do this to raise as much money as possible for the Dutch Cancer Foundation by way of sponsorship. A group of our employees had previously participated in 2014. It was such a special experience for many of them that they decided to take part again in 2019 along with the Kloosterboer company. The group of thirty participants, employed by Cornelis Vrolijk, Jaczon, Primstar, North Atlantic Fishing Company, France Pélagique, and Kloosterboer, delivered an impressive sportive achievement raising EUR 81,000 in sponsorship funds for the charity.

SOCIAL CONTRIBUTION TO DEVELOPMENTS IN MAURITANIA WITH CBP

In 2018, we opened a fish processing plant in the harbour of Nouadhibou, Mauritania. After an initial start-up period, the plant became fully operational in 2019. The plant is owned by Cap Blanc Pélagique (CBP), a partnership between Cornelis Vrolijk and Société Mauritanienne d'Armement Pélagique SARL (SMAP). CBP is the second local plant and by far the largest, that focuses on fish processing for human consumption.

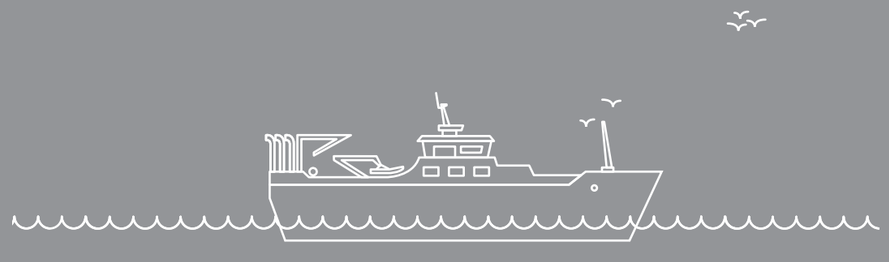
In Mauritania, over fifty per cent of fish catches are estimated to go into fishmeal. Particularly Chinese and Turkish entrepreneurs catch the fish using purse seiners, and process their catches into fishmeal, intended to feed pigs and farmed fish in their own countries. CBP, however, sells its products in Africa. This way, the fish caught in West African waters remains available to Africans. We are convinced that, with our production of high-protein foods for human consumption, we contribute to a more sustainable use of the local fish stocks.

Cornelis Vrolijk has fished in Mauritania since the 1990s, initially at the invitation of the Mauritanian government and later under the EU-Mauritania Fisheries Partnership Agreement (FPA). The next step for us was to invest in the further development of the Mauritanian fishing industry. This way, we create jobs for over one hundred people, virtually all recruited locally. Just as with all our business activities, we ensure that the basis of the employment relationship with the Mauritanians is solid. We offer them clear employment agreements, fair pay, and good working conditions.

The policy of the Mauritanian government is now gradually shifting towards more investment in the use of pelagic fish for (local) human consumption. With our local company, we want to set a leading example and further support the development towards more sustainable use of West African fish stocks.

LOOKING BACK
AND LOOKING AHEAD

WE ARE PROUD OF OUR CSR EFFORTS IN 2019, ON WHICH WE LOOK BACK IN THIS ANNUAL REPORT. PAGES 44-47 GIVE ANOTHER CLEAR OVERVIEW OF THESE RESULTS. WE CONCLUDE THAT WE HAVE MADE STEPS YET AGAIN, BUT ALSO THAT, ON SOME POINTS, WE WANT TO ACHIEVE MORE. WITH THREE EXAMPLES, WE REFLECT ON A NUMBER OF IMPORTANT CHALLENGES.



SUSTAINABLE FISHING

Our family business has a long history with an ambition to remain active for generations to come. That is why we always work based on a long-term vision. One of the key objectives of our CSR policy is to contribute to sustainable fishing and healthy fish stocks. After all, those fish stocks form the foundation for the continuity of our business. In 2019, we achieved several good results.

In 2019, we installed new monitoring software for the recording of quality data by the quality managers (QMs) on board our trawlers. Our skippers and QMs had worked on that software for nearly three years, in co-operation with the Dutch Pelagic Ship-owners' Association (RVZ). The software was intended to make it easier to share data within various departments within our company as well as with fishing researchers. The software is set up to send data, via an automated and completely standardised process, to researchers working for RVZ who then make it available for research projects. This helps increase our contribution to reliable stock estimates and responsible stock management.

Furthermore, we invested in the development of innovative escape panels for seals and took measures to prevent dolphin bycatch, by installing pingers on all the fishing nets in our fleet.

At the same time, in 2019, we lost our MSC certification for mackerel, due to factors beyond our control. The contradiction between our efforts for a positive development and this negative result is difficult to explain, both to our colleagues who are committed to responsible fishing every day and to the general public. We will continue to dedicate our efforts to sustainable certification of our fish and hope that those efforts will produce results.

REDUCING OUR CARBON FOOTPRINT

Fish generally have a relatively low carbon footprint. Our objective is to continue to reduce our carbon footprint, both on land and at sea. In actual practice, this proves difficult at times. Especially at sea, this has its challenges. Over the past few years, we have made many investments in the renovation of our trawlers by introducing eco-friendlier refrigerants, as an example.

To date, however, we have not yet succeeded in demonstrably reducing our fuel consumption. Our possibilities are limited because of the design of the existing vessels. Where we do see opportunities for further progress is putting into service newly built vessels, such as our new trawler 'Scombrus' in 2020. We expect that this new vessel will consume approximately 15% less fuel than our existing vessels. At the same time, we are also proud of the efforts made by our demersal fishing vessels team, which realised substantial adjustments on board our fleet in 2019 as in the years previously. The use of chemical refrigerants was reduced by over a third per vessel as compared to 2015. In addition, several vessels replaced the refrigerant with an eco-friendlier alternative. In the event of a leak, chemical refrigerants form a strong greenhouse gas. In the next few years, we will continue the transition to eco-friendlier refrigerants.

In 2017, we had an LCA carried out in order to map out our carbon footprint in detail. Fuel consumption is an important component of our overall carbon footprint. It does not, however, provide an overall overview, like an LCA does. Next year, we will undertake a more detailed analysis to gain a better understanding of the progress in terms of our objective to reduce our carbon footprint.

SUSTAINABLE EMPLOYMENT

We feel that our employees' health is important. Our on-board crew must also be demonstrably healthy – based on a medical examination – in order to perform their work. Over the past few years, we have offered several programmes to our crew members to improve their vitality.

For example, we carried out projects in co-operation with dieticians and organised stub-it-out workshops. As employees came up with new ideas the number of (individual) initiatives grew. We believe that this is a very positive development. However, in 2019, we also established that it was time for a more integrated and structured approach when it comes to wellbeing and sustainable employment of Cornelis Vrolijk employees. This will be shaped as from 2020.

CONTRIBUTION TO OUR PELAGIC CSR TARGETS

Pillar	Target 2022	Results in 2019	Status	Plans from 2020
PILLAR 1: HEALTHY FOOD	We work continuously to improve the quality of our products.	• Since 2019, QMs have recorded their data in new, specially designed monitoring software, installed throughout the fleet.	★★★	• Introduce new processing technology on board our newly built vessel. • Continue organising meetings for quality managers. • More communication on the health aspects of fish.
PILLAR 2: FISHING FOREVER	We contribute to sustainable fishing, with a focus on healthy fish stocks and responsible fish supply chains.	• We introduced pingers on our entire fleet as a preventive measure against dolphin bycatch. • We started research for the design of escape panels for seals. • Unfortunately, we lost our MSC certification for mackerel.	★★☆	• Continue our research for the use of escape panels for seals. • We continue to strive for sustainable certification for as much of our fish as possible.
PILLAR 3: DAILY SUSTAINABLE	We contribute to a circular economy.	• We introduced a new waste separation system at the offices and cold stores in IJmuiden and Scheveningen.	★★☆	• Together with our net supplier contribute to the development of the new EU standard for the production of circular fishing nets.
	We reduce our carbon footprint on land and at sea.	• For two other locations in IJmuiden, we conducted a feasibility study for solar panels on the roofs of those locations, with positive results. Unfortunately, we could not yet start installation because of additional requirements from insurers.	★☆☆	• Continue exploring opportunities for solar panels. • Within our technical service release capacity to pay more structural attention to our energy consumption on land.
PILLAR 4: CARE FOR PEOPLE	We promote sustainable employment of our employees.	• On our trawler fleet, we introduced a 2-trips-up-1-trip-down system creating more rest time.	★★☆	• Work on a more integrated and structured approach to the promotion of wellbeing and health of employees.
	We minimise risks of accidents.	• Attention for structural reporting of accidents.	★★☆	• Work on a more structured approach in accident prevention.
	We offer opportunities for development and optimum training.	• Throughout the company, more attention for training. • For purposes of recruitment of interns, we entered into a partnership with Humberside Engineering Training Association (HETA). • With Jinc Kennemerland we organised an exploratory day for students of Vakcollege Rijnmond preparatory vocational school in Katwijk.	★★☆	• Continue developing a more proactive training policy for our crew on board. • More attention for training and development within development interviews with our shore-based staff.

★★★ Full steam ahead ★★☆ On course ★☆☆ More action needed ☆☆☆ No progress

CONTRIBUTION TO OUR DEMERSAL CSR TARGETS

Pillar	Target 2022	Results in 2019	Status	Plans from 2020
PILLAR 1: HEALTHY FOOD	We work continuously to improve the quality of our products.	• We tested the first prototype water spray gear to replace the pulse trawling gear now in use.	★★☆	• Test the effectiveness of the water spray gear on a larger demersal fishing vessel, in order to investigate the broader use of this fishing gear.
PILLAR 2: FISHING FOREVER	We actively contribute to responsible fishing and healthy fish stocks.	• In a research project with ILVO, we studied escape panels for whiting. • We signed a World Oceans Deal with Good Fish and decided to start collecting data on board our flyshooters. • We obtained a new MSC certification for sole, saithe, haddock, hake, whiting and common shrimp.	★★★	• Discuss with the Ministry of Agriculture, Nature and Food Quality how escape panels for whiting can be introduced within EU regulations (whether or not be subject to amendments). • Start a research project together with Good Fish and Wageningen Marine Research on data collection on board our flyshooters.
PILLAR 3: DAILY SUSTAINABLE	We contribute to a circular economy.	• Participation in the Fishing for Litter programme.	★★☆	• Continue the Fishing for Litter programme and explore new initiatives which we can participate in or start up.
	We reduce our carbon footprint on land and at sea.	• We reduced the use of chemical refrigerant by an average of 36% per demersal fishing vessel. • The average energy consumption per kilogramme of fish caught by our demersal fishing vessels increased, particularly as a result of a change in the fishing gear used.	★★★	• In co-operation with a research consortium, start a feasibility study with regard to the use of hydrogen as an energy carrier. • Improve monitoring of energy consumption on our demersal fishing vessels, collecting more detailed consumption analyses. • Continue the transition to eco-friendlier refrigerants.
PILLAR 4: CARE FOR PEOPLE	We promote sustainable employment of our employees.	• Two demersal fishing vessels were inspected and certified for the C188 convention.	★★☆	• Have all other demersal fishing vessels inspected and certified for the C188 convention.
	We minimise risks of accidents.	• We implemented a new policy in terms of the procurement of PPE for our crew on the demersal fishing vessels.	★☆☆	• Continue to increase awareness about the proper use of PPE.
	We offer opportunities for development and optimum training.	• We saw an increase in the number of interns on our demersal fishing vessels, as a result of adjustment of the internship pay.	★★☆	• Intensify recruitment activities.

★★★ Full steam ahead ★★☆ On course ★☆☆ More action needed ☆☆☆ No progress

DEVELOPMENT OF OUR CSR POLICY

We are constantly working on the development of our CSR policy. We are open to feedback from our stakeholders and, regularly enter into dialogues with them about our CSR policy during their visits to our company. In the next few years, we will expand the scope of reporting CSR results throughout our company, including our subsidiaries. During this process, we will actively seek feedback from our stakeholders on our current CSR reporting.

MATERIALITY ANALYSIS AND STAKEHOLDER DIALOGUE

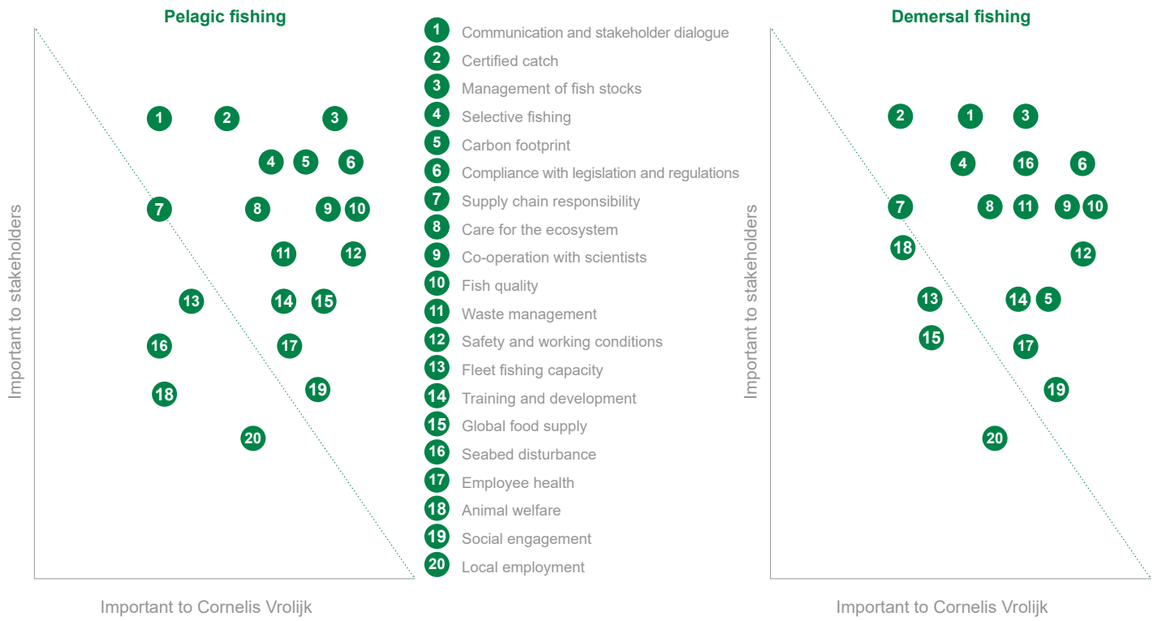
Sustainability is a broad concept. Before preparing for our CSR policy plans, we were already conducting materiality analyses to determine what subjects are important to us, but also to our stakeholders. This way, we prioritised the issues that were dealt with first. The figures below show the results of those analyses.

Our CSR policy has a permanent place in our business presentation. We advise every group that we host about how we translate CSR in practice. This often results in an interesting dialogue. In 2019, we received a total of 209 visitors during 13 visits. We enter into a partnership with our stakeholders in other ways as well. For example, in 2019, we signed a World Oceans Deal with Good Fish, an NGO dedicated to the promotion of sustainable fish consumption. In the next three years, we will work with Good Fish on data collection on board our flyshooters. And within the World Oceans Deal that we signed with them, we may explore other joint initiatives as well.

GROUP VISITS

Group	Month	Location	Persons
Dalton Voorburg students	February	Scheveningen	11
WUR students	February	IJmuiden	38
Secretary-General of LNV	February	IJmuiden	3
ICES mackerel experts	March	IJmuiden	15
Van Hall Larenstein students	March	IJmuiden	15
Alderman for Housing & Energy Transition (Municipality of Velsen) and GreenBiz	March	IJmuiden	5
Probusclub Zwijndrecht	May	Scheveningen	45
Ministries of LNV and Social Affairs and Employment (SZW)	May	Scheveningen	4
Sustainable Business Battle Students	May	IJmuiden	10
European Fishing Vessel Insurance Companies Ass.	June	IJmuiden	35
Seafood Network	September	IJmuiden	15
STC Katwijk students	October	IJmuiden	11
Solidaridad	December	IJmuiden	2

MATERIALITY MATRIX



CSR POLICY PLANS BY DIVISION

We strive to translate our CSR ambitions within all our business activities into concrete targets and activities. In 2015 and 2017, we launched the CSR policy plans for our pelagic and our demersal fishing activities respectively. The scope of the present annual report is based on that scope. We have since worked on tailored policy plans for each business activity, company and subsidiary. In May 2019, together with our partner Atlantic Shrimpers Limited (ASL), we finalised a tailored CSR policy. This policy is described in further detail on page 33.

For our fish processing companies, it is important to safeguard the origin of the fish and shrimps that they procure from international chains. Remote risk assessment in terms of ecological or social abuse within the chain requires a specific approach. Starting 2020, we will develop a sustainable procurement policy for our processing and trading activities that are in line with the relevant principles of the OECD guidelines.

CSR DEVELOPMENT IN 2020 AND BEYOND

In 2013, we started developing our CSR policy. First, we focused on pelagic pelagic fishing to launch the first step giving CSR a place throughout our company. Various divisions of our company have now developed their own CSR policy plans, and over the past few years reported the results. It will be a good time to seek structured feedback from various internal and external stakeholders, ranging from customers to NGOs, about our CSR policy and our reporting mechanisms. This will begin in 2020.

Over the past few years, CSR has continuously developed. For example, the 'international CSR language' has changed. The United Nations' Sustainable Development Goals (SDGs) are increasingly being recognised and used by parties as a foundation for sustainability policy and communication. On outlines, we have linked up to that (see page 10). Next year, we wish to delve further into the details of the SDGs to determine if and how the wording of our goals should be revised to be more in line with the SDGs.

GLOSSARY

Beam trawling	Fishing method in which the nets are kept open using a beam, and chains are used to drive the flatfish into the net.
Bycatch	Fish that is caught, not being the target species.
Demersal fishing	Fishing for species that live on or near the seabed such as plaice, sole, gurnard, mullet and squid.
Demersal fishing vessel	A fishing vessel engaged in demersal fishing.
Discard ban	Law that mandates that all commercial target species subject to a quota that are caught must be landed instead of being returned to the sea.
Fish stock	Population of fish of the same species in a particular area that reproduce together (and not with other fish stocks).
Flyshooting	Fishing method in which fish is surrounded by long warps and a net. The warps are hauled in towards the vessel and the fish are driven into the net.
Freezer trawler	Trawler with freezer facilities and cold stores to freeze and store the fish on board immediately after it is caught.
HACCP	Hazard Analysis and Critical Control Points. A risk assessment for foodstuffs.
Maximum Sustainable Yield (MSY)	The maximum sustainable yield. The theoretical maximum possible catch that can be taken indefinitely from the stocks (without jeopardising the continued existence).
Mesh size	The size of the openings in the fishing net. Normally measured as the internal distance between two knots of the same mesh with the netting stretched lengthwise.
Mesh	The opening in the fishing net formed and delimited by the fibres of the net.
Otter trawling	Fishing with nets in which trawl doors are secured at the sides to keep the fishing gear open in a horizontal orientation.
Pelagic fishing	Fishing for species that swim in shoals such as herring and mackerel.
Producer organisation	Officially accredited bodies that represent fishermen and fish farmers. Responsible for the day-to-day management of the fishing industry and playing a critical role in the EU's fishing policy.
Pulse trawling	Fishing technique in which flat fish are scared away from the seabed by weak pulses of electricity so that they swim into the net.
Quotas	Proportion of the annual maximum quantity of fish that may be caught by law, per species and per area.
RSW vessel	Vessel containing tanks of cooled seawater (0°C) to store and cool fish immediately after they are caught.
Sampling	Studying part of the catch to obtain scientific data.
Seabed disturbance	Contact with/disturbance of the seabed by the fishing gear to a greater or lesser extent.
Seine fishing	Fishing technique in which the fish are surrounded by a net trawled over the seabed.
Self-sampling	Programme in which fishermen collect information about their catch themselves for scientific research, in accordance with the researchers' protocols.
Spawning Stock Biomass	The quantity of fish in a fish stock (in tonnes) that can produce offspring.
Spawning	The depositing and fertilisation of eggs by fish.
Stock estimate	Estimating the size and condition of fish stocks based on collected data.
Stock management	Making sure that fish stocks remain in good shape (i.e. of sufficient size).
Stock size	Size and condition of a fish stock.
Sumwing	A wing profile for a fishing net, steered by the tip, of which only a small part is in contact with the seabed. Energy-efficient innovation as an alternative to beam trawling.
Target species	The species of fish intended to be caught.
Trawler	Fishing vessel that fishes with a trawl net.
Trawling	Casting a fishing net, catching fish and hauling in the net.
Twin-rig trawling	Fishing technique in which two horizontally-connected nets are trawled behind the vessel.
Water spray	New fishing method under development, in which water is used to scare fish away from the seabed.

CREDITS

TIPS OR SUGGESTIONS

If, after reading this report, you have any questions, tips or suggestions, please contact us by sending an email to: mvo@cornelisvrolijk.eu

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