



# ENVIRONMENTAL REPORT 2017



A FOOTPRINT WE ARE PROUD OF

“We will leave behind a footprint we are proud of, contribute to sustainable development and create positive change through our operations.”



Being the world leader in exploration travel comes with a great responsibility. With focus on innovation, technology and concrete measures – sustainability is a part of every detail of the Hurtigruten operation.

Hurtigruten has been exploring some of the most challenging waters in the world since 1893, tracing our roots back to the Norwegian polar heroes. We are now facing one of the greatest and most difficult challenges in our 125-year history: Climate change, plastic waste and unsustainable mass tourism are altering vulnerable ecosystems and threatening wildlife.

Building on our passion, competence and heritage, Hurtigruten – with our

dedicated crew and staff - is determined to make a difference. We will leave behind a footprint we are proud of, contribute to sustainable development and create positive change through our operations.

Hurtigruten aims to raise and set standards for the whole industry to follow, as we enter a new era of expedition cruising and adventure travel driven by sustainability.

A handwritten signature in blue ink, appearing to be 'DS'.

DANIEL SKJELDAM  
CEO Hurtigruten  
November 2018

# UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

— In 2015, United Nations agreed upon and adopted the 2030 Agenda for Sustainable Development, and its 17 Sustainable Development Goals. The Sustainable Development Goals (SDGs) consist of 17 goals and 169 targets. The

goals create a common global agenda for sustainable development for states, business and civil society and apply equally to all nations, including highly developed nations like Norway.

## Hurtigruten uses UN's goals as a framework

— Hurtigruten is a responsible business and we are making a valuable contribution towards achieving the SDGs, and ensuring a sustainable future for generations to come. We take this commitment seriously and therefore use the SDGs as a framework for sustainability, helping us to map positive and negative impacts on key sustainability indicators relevant to our business, the local communities in which we operate, and to the wider global community. Hurtigruten also embraces the SDGs as a key driver for

innovation, helping to identify and develop solutions the global community needs and can use to achieve sustainable development.

Our business touches both directly and indirectly on many of the 17 UN Sustainable Development Goals. Through a materiality assessment, involving staff and selected external stakeholders, it became evident that Hurtigruten has the most impact on five of the SDGs: 9, 11, 12, 13 and 14.



## Provide safe, unique, active and sustainable travel experiences that create lifelong memories

— These are our impact goals – goals that we believe we can have the most positive impact on both society and our business, now and in the future. The goals form the basis of our sustainability strategy to 2030. This report is the first regarding our commitment to the five sustainability goals. We have narrowed the scope to environmental impact. Starting in 2017, we will review our reporting scope to include more sustainability indicators.

portant enabler for us when it comes to meeting our objectives under each impact goal. Working closer with industry partners, research institutions, local communities and supply chain partners is necessary to have the positive environmental impact we aspire to. We are proud of the work we do, each and every day, and strive to leave a net positive sustainable footprint, both at sea and in the coastal communities where our business is an important bloodline.

In addition to the five impact goals, effective collaboration and partnerships (SDG 17) are an im-

# HURTIGRUTEN – A DRIVING FORCE FOR **INNOVATION** IN EXPLORATION TRAVEL



— **HURTIGRUTEN ARE TAKING THE LEAD** and setting the standard for innovation and infrastructure in our industry. We are driving developments in shore-based electricity, hybrid technologies and fuel innovation in order to minimize emissions both at sea and in port.

Due to the long distances travelled on our exploration voyages and our pledge to put safety first, we are focusing on innovations within cleaner fuel technologies and hybrid technology.

In February 2017, we began the construction of the world's most advanced, modern and environmentally friendly expedition ships, MS Roald Amundsen and MS Fridtjof Nansen. Both vessels will use hybrid technology, a key milestone in our effort to innovate more sustainable exploration travel.

A total reduction in fuel consumption and hence CO<sub>2</sub> emissions are the main gains. *Innovative hybrid technology, in combination with improved hull and bow design, will reduce emissions from the ships by up to approximately 20%.* The ships will start operating in 2019 and 2020.

Hurtigruten will also retrofit up to nine ships sailing the Norwegian coast. This allows us to optimize full use of battery power and utilize LNG, a much cleaner fuel that simultaneously enhances the safety of guests and our crew in the event of extreme weather or mechanical failure. *The use of innovative and efficient LNG engines will reduce CO<sub>2</sub> emissions by up to 25% compared with 2015 levels.* The combination of battery packs and shore-based power will reduce CO<sub>2</sub> emissions by up to another 8%.

## FUEL REDUCTION

— Significant fuel reduction measures have been introduced. This has both considerable positive environmental and cost effects. From 2012 to 2017, we reduced energy consumption in our fleet operations by some 8%.

## REUSING HEAT

— We reuse heat from engine coolant and the vessels' exhaust systems to warm on-board hot water tanks, saving approximately 108 Gigawatt hours (GWh), fleet wide each year. This is the equivalent of 6,700 Norwegian households. During Antarctic and Antarctica explorer operations, our vessels produce their own fresh water through on-board desalination and purification technology.

## LNG RETROFIT

— Hurtigruten will undergo a historic fleet modernization during the next years, reconstructing six 90-class vessels from traditional diesel engines to hybrid power combining LNG and electricity. This will result in major reductions in emissions, and compliance with Marpol Annex VI, Tier III.

## REDUCING EMISSIONS

— Today annual emissions from one 90-class vessel operating along the Norwegian coast amount to 20,278 tonnes CO<sub>2</sub> and 412 tonnes NO<sub>x</sub> (based on 355 days in operation). After the LNG retrofit, CO<sub>2</sub> emissions from our six 90-class vessels will be reduced in total by approximately 32,850 tonnes CO<sub>2</sub> and 3,787 tonnes NO<sub>x</sub>.

## CARGO

— In 2017, Hurtigruten transported 95,000 tons of cargo along the Norwegian Coast. Due to Norway's geography, this results in a substantial reduction to emissions and road traffic, estimated as the equivalent of 4,900 lorries.

## SHORE-BASED ELECTRICITY

— In 2017, four of our ships had technology installed enabling them to utilize shore-based electricity. The rest of the fleet sailing the Norwegian Coast will be retrofitted by 2021. In 2017, we continued to lobby local authorities in key ports to provide infrastructure that will enable us to power our vessels. As a result of this work, we started to use shore-based electricity in Bergen in 2018, and encourage other local authorities to quickly follow Bergen's lead.

Hurtigruten have been working hard to adapt our existing fleet to use shore-based electricity, and completed a shore-based power installation on MS Spitsbergen in 2017. We are working with the authorities along the Norwegian coast to establish infrastructure that allows us to utilize shore-based electricity in our ports of call. Through collaboration with the authorities in Bergen, we started connecting to shore-based electricity while docked in Bergen in 2018.

These efforts will significantly reduce emissions of CO<sub>2</sub> and NO<sub>x</sub>, and improve air quality around the port.

## BALLAST WATER TREATMENT SYSTEMS

— In 2017, we retrofitted MS Fram, MS Midnatsol and MS Spitsbergen with ballast water treatment systems. We are in compliance with the Ballast Water Convention and related laws in the areas we sail.

Hurtigruten are also investigating the possibility of using bio-fuel in our operations.



MS Spitsbergen is one of the ships ready to use shore-based electricity in Bergen.

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# WHICH SDG TARGETS ARE WE DELIVERING ON?

## 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



**9.4** Upgrade infrastructure and retrofit our industry to make it sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies.

## 13 CLIMATE ACTION



**13.2** Integrate climate change measures into policies, strategies and planning.

**13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

## Facts & figures

By using shore-based electricity in Bergen (pictured), we will reduce our NOx emissions by 2.5 tonnes and produce 150,000 kg fewer CO2 emissions each year per ship.

The transition to LNG will further reduce our NOx emissions by up to 90%.

The transition to LNG will further reduce our CO2 emissions by up to 25%.

Warming water on our ships through heat transfer from the engine room saves us 108 GWh of energy. That's the equivalent of 6,700 households.

We reduced the amount of bottled water we transport from 460,000 to 182,000 bottles between 2015 and 2017.



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# HURTIGRUTEN – STEWARDS OF NATURAL HERITAGE AND BIODIVERSITY

— **WE TAKE OUR ROLE AS CORPORATE CITIZENS SERIOUSLY.** Our operations generate approximately 2.5 billion Norwegian kroner for local communities, companies and operators along the Norwegian coast each year. We are committed to ensuring that this is not at the expense of the natural environment and cultural heritage sites we visit along the way.

Association of Arctic Expedition Cruise Operators **AECO** 



Hurtigruten are members of AECO, an organization dedicated to managing responsible, environmentally-friendly and safe tourism in the Arctic. We are also members of IAATO, an organization that advocates and promotes safe and environmentally-responsible travel to the Antarctic. One of our commitments as members of these organizations is to promote public awareness and concern for conservation of the

environment and its associated ecosystems. We do this by providing training to crew and our guests about such issues as biosecurity, as well as working closely with excursion organizers and local communities.



Our destinations include 28 UNESCO sites. Our philosophy is that the sites look better after we leave than when we arrived. On our excursions and hikes, our Expedition Team members and guests pick up waste, making our operations a year-round cleanup effort. In addition, we participate in the Clean Up Svalbard programme, cleaning beaches along the coastline of Svalbard. We also involve our guests in cleanups at all destinations. We strongly believe that, in cooperation with our guests, we can make a substantial contribution.



## **THE HURTIGRUTEN FOUNDATION**

— In 2015, we established the Hurtigruten Foundation, which provides funding to grassroots organizations and NGOs working to protect the natural environment and cultural heritage of the areas we sail in, conserving biodiversity and promoting deep respect for nature. This is important in order to ensure that our future guests can enjoy the same meaningful travel experiences as our current guests.

## **GREEN STAY OPTION = 5 NOK**

— We donate five Norwegian kroner to the Hurtigruten Foundation for each night a guest chooses our Green Stay option. In addition, funds received through donations and other activities on board are forwarded to the Hurtigruten Foundation.

## **DONATIONS FROM OUR STAFF**

— Our staff choose to donate a yearly amount to the Hurtigruten Foundation instead of receiving Christmas gifts. Staff members at the Tromsø office has also invited staff and clients from Kirkens Bymisjon (The Church City Mission) in Tromsø to a Christmas dinner on one of our ships.

## **POLAR BEARS ON SVALBARD**

— The Hurtigruten Foundation cooperates with the Norwegian Polar Institute, the main research organization focusing on polar bears living on Svalbard. Funds from the Hurtigruten Foundation are allocated to support field research, without interfering with the institute's autonomy. In return, the Norwegian Polar Institute shares updated information with Hurtigruten. This enables us to share accurate information with our guests.

In 2017, we supported several local initiatives including Saksa Tourist Association, Nordkapp and Area Tour Association, Association of Greenlandic Children, and conservation projects in the Falkland Islands, South Georgia and Antarctica.

# WHICH SDG TARGETS ARE WE DELIVERING ON?



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**11** SUSTAINABLE CITIES AND COMMUNITIES



**11.4** Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

## Facts & figures

We routinely run internal training for our crew on protecting the natural environment and preserving cultural heritage.

## HURTIGRUTEN ARE PROUD MEMBERS OF:



THE HURTIGRUTEN  
FOUNDATION ARE PROUD  
CONTRIBUTORS TO:

- Falklands Conservation
- South Georgia Heritage Trust
- UK Antarctic Heritage Trust
- The Association of Greenlandic Children
- Clean Coast Norway
- The Polar Citizen Science Collective
- Saksa Tourist Association
- Nordkapp and Area Tour Association
- The Norwegian Polar Institute (cooperation)
- Kirkens Bymisjon (The Church City Mission) Tromsø



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# HURTIGRUTEN – HELPING GUESTS MAKE MORE **SUSTAINABLE** CHOICES

— **A GROWING NUMBER OF OUR GUESTS** want to make more sustainable choices, including when they travel. By engaging guests and collaborating with our suppliers, we aim to reduce waste and develop smarter services and products.

Hurtigruten are collaborating with our suppliers to gain efficiencies in all value chains for the products and services we offer passengers.

## **NORWAY'S COASTAL KITCHEN**

In 2017, we were nominated for the EMBLA Nordic Food Award for our food and beverage concept, “Norway’s Coastal Kitchen”. A key feature of this concept is that ingredients are sourced locally and delivered directly from the farm to the nearest port, thus minimizing emissions from transportation.

## **FRESH FOOD FROM LOCAL PRODUCERS**

We receive daily deliveries at each of the 34 ports we stop at along the Norwegian coast. Around 80% of the food and drinks we serve

come from Norwegian suppliers, and nearly half of these are delivered on board directly from farms, fisheries and producers en route. In addition to the environmental benefits of locally sourced produce, this provides our guests with fresh, high-quality food throughout their stay.

## **MSC CERTIFIED**

We only serve species approved by the World Wildlife Fund’s (WWF) Seafood Guide. In 2017, we made the decision to become Marine Stewardship Council (MSC) certified, and this has been implemented in 2018.

We continue to increase our guests’ knowledge and provide information around key topics ensuring that they become even better ambassadors for sustainable travel and exploration.



## WHICH SDG TARGETS ARE WE DELIVERING ON?

### 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



**12.5** Substantially reduce waste generation.

**12.6** Adopt sustainable practices and integrate sustainability information into reporting cycles.

**12.8** Ensure that people have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

**12 B)** Develop and implement tools to monitor sustainable development impacts for sustainable tourism, which creates jobs, promotes local culture and products.

### *Facts & figures*

In 2017, we were nominated for the EMBLA Nordic Food Award. Around 80% of the food we serve comes from Norwegian suppliers.

Rørvik farm, a local farm on the north-western coast, delivers 3 million eggs each year directly from the farm. After the laying hens have finished producing eggs, they are served as food on board.

Hurtigruten serves over 4 million meals each year.



# HURTIGRUTEN – TAKING A STAND ON WASTE

## — OUR AMBITION IS TO BECOME THE WORLD'S FIRST PLASTIC-FREE CRUISE LINE.

We aim to achieve this through a complete ban on non-recyclable and single-use plastics from 2018, and by recycling 100% of the recyclable plastic waste we produce throughout our operations.

Hurtigruten is removing all single-use plastic where possible. In 2018, all plastic straws, drink mixers, plastic cups, coffee lids and plastic bags were removed from all Hurtigruten ships.

### TESTING BIO OIL

We have substituted the use of certain lubricants and oils with more eco-friendly alternatives for maritime operations. We are currently testing the use of bio-oil in the shaft seal of the propulsion system on some vessels.

### RECYCLING WASTE

Hurtigruten have entered into a partnership with Retura, one of Norway's leading waste and recycling companies. The goals of this partnership are to install better sorting facilities on board and to ensure adequate infrastructure at key ports to collect and recycle waste from our operations.

In 2017, our ships collectively produced nearly 2,000 tonnes of waste. We managed to sort 45% of this waste on board. The amount of waste pro-

duced and sorted varies considerably from vessel to vessel, depending on the length and type of voyage, and on the sorting facilities installed on board. In addition, training staff and guests is critical to achieving our goal of both reducing waste and significantly increasing the amount of waste sorted for recycling on board.

### LECTURES TO INCREASE KNOWLEDGE

Our coastline cleanup campaigns aim to increase our guests' awareness of the issue of waste, particularly plastic waste. On every explorer voyage, we present lectures about micro-plastic and how it pollutes the oceans. This is to further increase our guests' knowledge about the issue, encouraging them to become even better ambassadors for sustainable travel and exploration.

### MINIMIZING FOOD WASTE

In 2017, we made the decision to join "Matvett", a Norwegian organization supporting the hotel and catering industry in meeting the UN Sustainable Development Goals target of halving food waste by 2030. A number of measures have been implemented in 2018 to reduce food waste. In fall 2018, we began implementing electronic food waste monitoring, improving our control of food waste.

We have set ourselves a goal of reducing food waste by 30% by 2021.

# WHICH SDG TARGETS ARE WE DELIVERING ON?

## 12 RESPONSIBLE CONSUMPTION AND PRODUCTION



**12.3** Halve food waste.

**12.4** Achieve environmentally sound management of chemicals and all wastes throughout their life cycle.

**12.5** Substantially reduce waste generation

**12.6** Adopt sustainable practices and integrate sustainability information into reporting cycles.

**12.8** Ensure that people have the relevant information and awareness for sustainable development and lifestyles in harmony with nature.

**12 B)** Develop and implement tools to monitor sustainable development impacts for sustainable tourism, which creates jobs, promotes local culture and products.



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## Facts & figures

In 2017 we sorted 45% of all waste on board.

In 2018, all plastic straws, drink mixers, plastic cups, coffee lids and plastic bags will be removed from all Hurtigruten ships.

## 14 LIFE BELOW WATER



**14.1** Prevent and significantly reduce marine pollution.



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# HURTIGRUTEN – MAKING THE CRUISE INDUSTRY **MORE SUSTAINABLE**

— **HURTIGRUTEN IS DRIVING THE GLOBAL CRUISE INDUSTRY TOWARDS MORE SUSTAINABLE OPERATIONS.** To achieve this, we are challenging the industry through political advocacy and investing in innovation within energy and fuel technologies.

## **MINIMIZING OUR IMPACT**

Our industry primarily impacts climate change through emissions from vessels, especially SO<sub>x</sub>, NO<sub>x</sub> and CO<sub>2</sub>. In addition, other pollutants such as particulate matter and black carbon may contribute to global warming. The effects of climate change on wildlife habitats, especially in the Arctic and Antarctic regions, pose a considerable risk to the environment.

## **BAN ON HEAVY FUEL OIL**

Hurtigruten is an important commercial actor in the Arctic and Antarctic regions. We will continue to use our leverage at an industry and political level to fill in the gaps and raise the bar internationally. In 2017, we continued to lobby for a complete and global ban on heavy fuel oil (HFO) in the Arctic. We implemented our own voluntary ban on HFO on all of our own vessels more than a decade ago. In 2017, we joined the Clean Arctic Alliance, a global campaign to implement a complete ban on HFO in Arctic waters by 2020. We believe the shipping industry must be frontrunners in promoting regulations that will secure sustainable Arctic growth.



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# REDUCING NO<sub>x</sub>-EMISSIONS

— **IN THE PERIOD 2009-2017, HURTIGRUTEN IMPLEMENTED MORE THAN 30 NO<sub>x</sub>-REDUCING MEASURES IN THE FLEET.** The total annual environmental benefit of the measures is a reduction in emissions of around 680 tonnes of NO<sub>x</sub> and 19,000 tonnes of CO<sub>2</sub>. Fuel consumption is also reduced by around 5,950 tonnes as a result of these measures. In total, Hurtigruten has contributed approximately 180 million Norwegian kroner to the NO<sub>x</sub> fund.

NO<sub>x</sub> is an indirect greenhouse gas, and a significant source of air pollution, smog and acid rain. In Norway, the main sources of NO<sub>x</sub> emissions are combustion of fossil fuels in oil and gas, and industry on land and at sea. In 2008, the Norwegian authorities introduced a tax on NO<sub>x</sub> emissions. The purpose was to cut NO<sub>x</sub> emissions in industry and fulfil Norway's obligations under the Gothenburg Protocol. The NO<sub>x</sub> Fund was established, and all revenues return directly to the industry for emission reduction measures.

A new NO<sub>x</sub> agreement has been signed for the period 2018-2025, and provides the basis for further development of technology and markets towards a low-emissions society.

## COOPERATION WITH BELLONA

Hurtigruten has a long-standing cooperation with Bellona, an independent non-profit organization that aims to meet and fight climate challenges by identifying and implementing sustainable environmental solutions. Hurtigruten and Bellona have worked together to enable shore-based electricity. Together, we lobby politicians and other decision-makers to make shore-based electricity available along the Norwegian coastline. Additionally, we work together on developing and introducing green technical solutions in our operations.

# WHICH SDG TARGETS ARE WE DELIVERING ON?

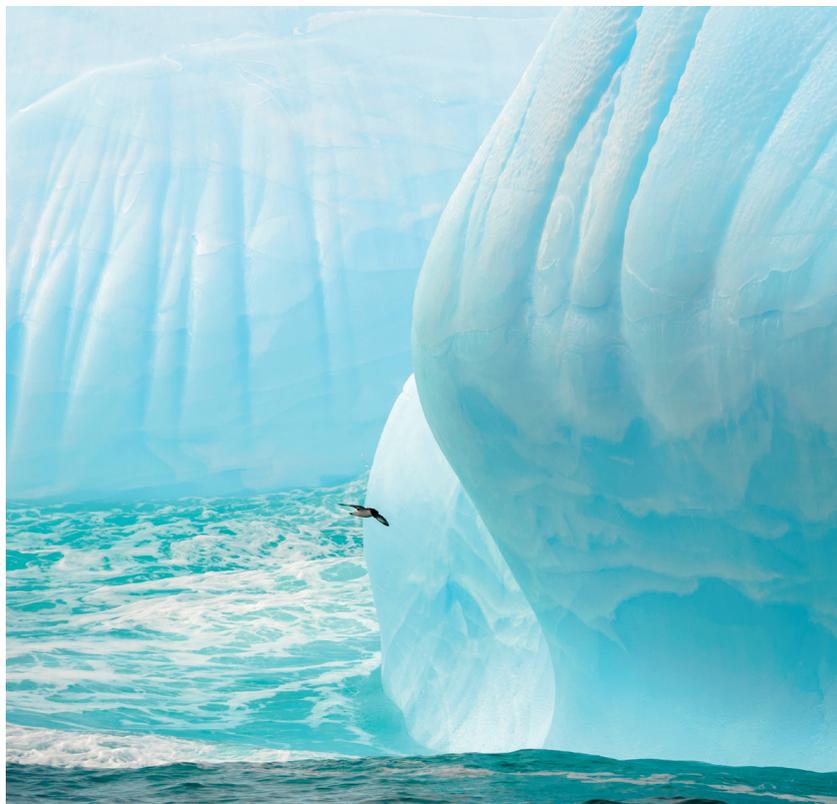
## 13 CLIMATE ACTION



**13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.

**13.2** Integrate climate change measures into policies, strategies and planning.

**13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.



## Facts & figures

From 2012 to 2017, we reduced our CO2 emissions by 8% per nautical mile.

From 2012 to 2017, we reduced energy consumption by 7.6%.

Hurtigruten is fighting for a ban on heavy fuel oil in the Arctic and all Norwegian waters, including Svalbard.



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# HURTIGRUTEN - CONSCIOUS STEWARDS OF THE OCEANS

— **WE AIM TO USE THE SEAS AND MARINE RESOURCES SUSTAINABLY.** To achieve this, we ensure compliance with relevant laws and are conscious about what we add to the sea and what we take out.

Hurtigruten are concerned about the increasing threat that pollution, resource depletion and climate change have on our oceans. We can already observe the impact that some of these threats are having on biodiversity and natural habitats in the Arctic and Antarctic regions of the planet.

## MICRO-PLASTIC

Hurtigruten are also concerned about our potential impact on the growing problem of

micro-plastic in the oceans, particularly when it comes to packaging and use of single-use plastics.

## MARINE RESOURCES

Hurtigruten are conscious consumers of marine resources and only source fish and seafood that are approved by WWF's Seafood Guide. In 2017, we made the decision to certify our operations according to the MSC standard, a key milestone in securing sustainable sourcing of fish and seafood that we serve on board.

# CONTRIBUTING TO RESEARCH



—— **HURTIGRUTEN HAS BEEN** measuring sea temperature, salinity levels and algae growth for over 80 years, as part of an ongoing collaboration with the Norwegian Institute for Marine Research and the Norwegian Institute for Water Research (NIVA). MS Trollfjord has installed a sensor system called Ferrybox. Once every minute, the FerryBox system measures temperature, salinity, oxygen, chlorophyll, organic carbon and particle content at a depth of four metres along the route. The data are then transferred via satellite to NIVA and used by researchers for monitoring natural variability in the ocean and human impacts on the ocean including climate change.

We will continue to work closely with research partners to provide robust data for the areas in which we sail, further forwarding our understanding of changes occurring in our oceans, and driving a research-based approach to seeking solutions to challenges.

## **OIL SPILL IDENTIFICATION**

Hurtigruten cooperate with Ocean Visuals. Ocean Visuals' OWL™ system is currently installed on board MS Trollfjord. The laser equipment makes a measurement every 50 metres on voyages between Bergen and Kirkenes. The system uses data gathered to identify and classify hydrocarbons present in the water by fuel type. MS Trollfjord and MS Midnatsol have made approximately 5 million measurements so far, identifying 40 incidents of oil spillage and two leaks from installations on shore. The Norwegian Coastal Administration is notified immediately of such instances. Ocean Visuals are in the process of expanding operations and believes the cooperation with Hurtigruten can have a substantial effect on oil spill identification worldwide.

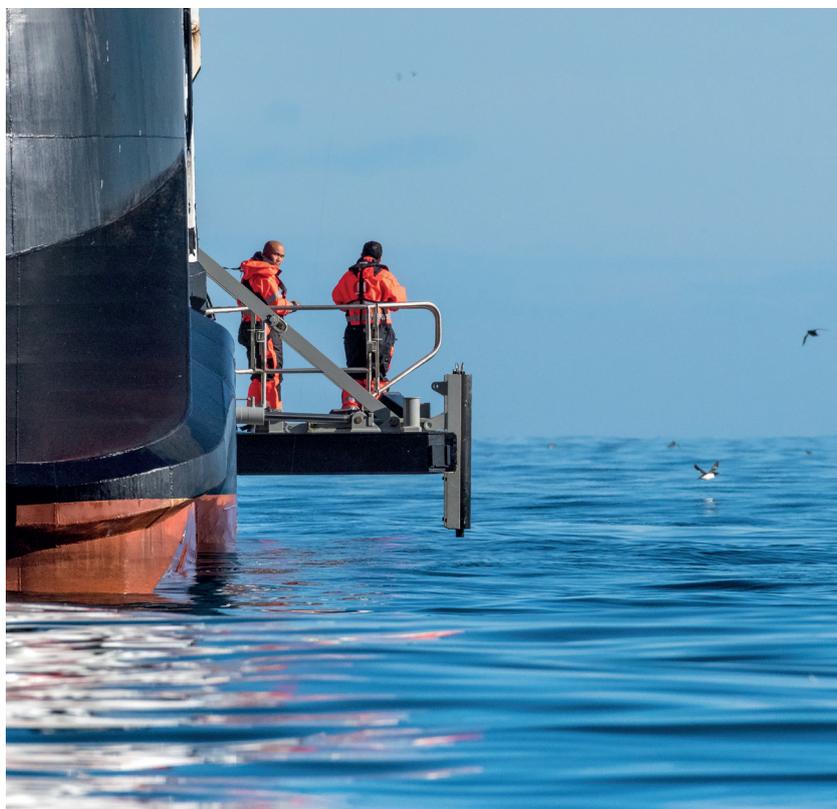
# WHICH SDG TARGETS ARE WE DELIVERING ON?



**14.1** Prevent and significantly reduce marine pollution.

**14.2** Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration, to achieve healthy and productive oceans.

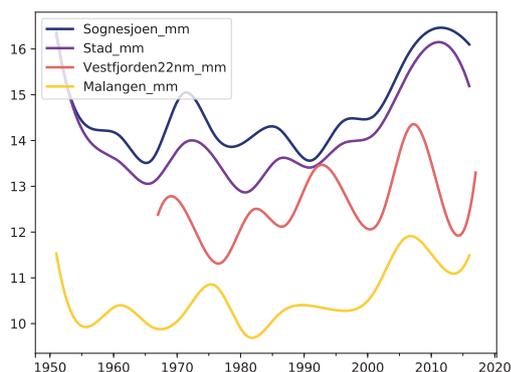
**14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels.



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## Facts & figures

Equipment installed on MS Trollfjord and MS Midnatsol have made 5 million measurements of water quality along the Norwegian coast, identifying 40 incidents of oil spillage.



Since the 1930s, Hurtigruten has measured water temperatures along the Norwegian coast. This graph shows the result of over 80 years of measures.



[www.hurtigruten.com/sustainability](http://www.hurtigruten.com/sustainability)