



# SUSTAINABILITY REPORT

## STENA AB 2015



# 2015 AT A GLANCE

With care, innovation and efficient performance as their guiding principles, our 15,000 employees around the world work every day to create value for our customers in Ferry Operations, Offshore Drilling, Shipping, Property and Adactum. Here is a selection of events from our operations during 2015.



## UNITED STATES

23 of Northern Marine Group's vessels operating in US ports have been awarded QUALSHIP 21 status (Quality shipping in the 21st century) by the US Coast Guard. The status can be seen as a seal of quality for ship operators.



## GLOBAL

Stena had almost 400 officer students on its vessels during the year. Annual spending on education is SEK 160 million.



## SÃO PAULO

Envac, a subsidiary of Stena Adactum, worked on the installation of two vacuum systems in Sao Paulo during the year. Envac's solutions are space-saving and drastically reduce the number of heavy waste transportation in the area.







#### SWEDEN

Stena Property offers over 300 young people summer jobs where they can work on different activities within the company's property portfolio.

#### KIEL/GOTHENBURG

The pilot project for the world's first methanol-powered ferry, *Stena Germanica*, was launched in March.

#### SCOTLAND

Northern Marine Group and Stena Association of Maritime Institutions (STAMI) have jointly produced the brochure "All Aboard – Cultural Awareness at Sea" to increase cultural awareness on board. The brochure is distributed to all onboard staff.

#### TIANJIN

The keel for Mercy Ships' new vessel *Atlantic Mercy* was laid at Xingang shipyard in Tianjin, China. Stena RoRo has been involved in the design and is project manager for the construction of the vessel. *Atlantic Mercy* will be the world's largest civilian hospital ship.



#### SINGAPORE

The IMOIIIMAX tanker *Stena Impression* was delivered and named in February. The vessel consumes 10–20% less fuel than an average vessel of a similar size.

#### SOMALIA

Stena's support for the UN project in Somalia, which is aimed at strengthening civil society and offering alternative livelihood opportunities in order to reduce piracy, entered its final phase. This project is being run in cooperation with six other shipping companies (BP, Maersk, Shell and the Japanese trio MOL, NYK and K Line).

# THIS IS STENA AB



REVENUE, MSEK  
**36,417**



ACTIVITIES ALL OVER  
**THE WORLD**



**15,000<sup>1)</sup>**  
EMPLOYEES



**173<sup>2)</sup>**  
VESSELS INCLUDING  
NEWBUILDINGS



**26,400<sup>3)</sup>**  
RESIDENTIAL AND  
COMMERCIAL UNITS



**96**  
WIND  
TURBINES

1) Including seagoing personnel  
2) Owned, chartered and managed  
3) Owned and managed

## BUSINESS CONCEPT

By using our competence in, above all, service, trading and ships, to make money in the business areas Ferry Operations, Offshore Drilling, Shipping, Property, New business and Finance.

To create new companies for the future.

To take care of our most important asset in the long term, our customers, in such a way that we contribute to their development as well as that of society.

## ABOUT THIS REPORT

This sustainability report is complementary to the annual report and annual review. Sustainability at Stena is based on three pillars:

- financial responsibility, which contributes to economic development;
- environmental responsibility, where the goal is to reduce our impact on the environment;
- social responsibility, where we shall act ethically in everything we do.

This report contains examples and key indicators relating to the Stena Group's work in these areas. The information in this report concerns Stena AB.

# OUR BUSINESS AREAS

## FERRY OPERATIONS

The Ferry Operations business area consists of Stena Line, one of the world's largest ferry operators, focusing on freight and passengers. Stena Line operates 22 routes in Europe, with 37 vessels, and also owns five ports.

## SHIPPING

The Shipping business area consists of Stena Bulk, Stena RoRo, Northern Marine Group and Stena Teknik.

### STENA BULK

Stena Bulk is one of the world's leading tanker operators, with world-wide operations, and controls 109 vessels for the transport of crude oil, refined petroleum products, vegetable oils and gas (LNG).

### STENA RORO

Stena RoRo provides RoRo and RoPax vessels, technical expertise and project management to customers across the world, and controls a fleet of 19 vessels.

### STENA TEKNIK

With its competence and experience, primarily in shipbuilding, ship operation and contracting, Stena Teknik contributes to solutions for all business areas in the Group.

### NORTHERN MARINE GROUP

With about 7,300 dedicated seagoing employees, the company runs a fleet of 144 vessels from a large network of international offices.

## OFFSHORE DRILLING

Offshore Drilling consists of Aberdeen-based Stena Drilling, a world leader in the design, construction and operation of oil rigs and drillships.

## PROPERTY

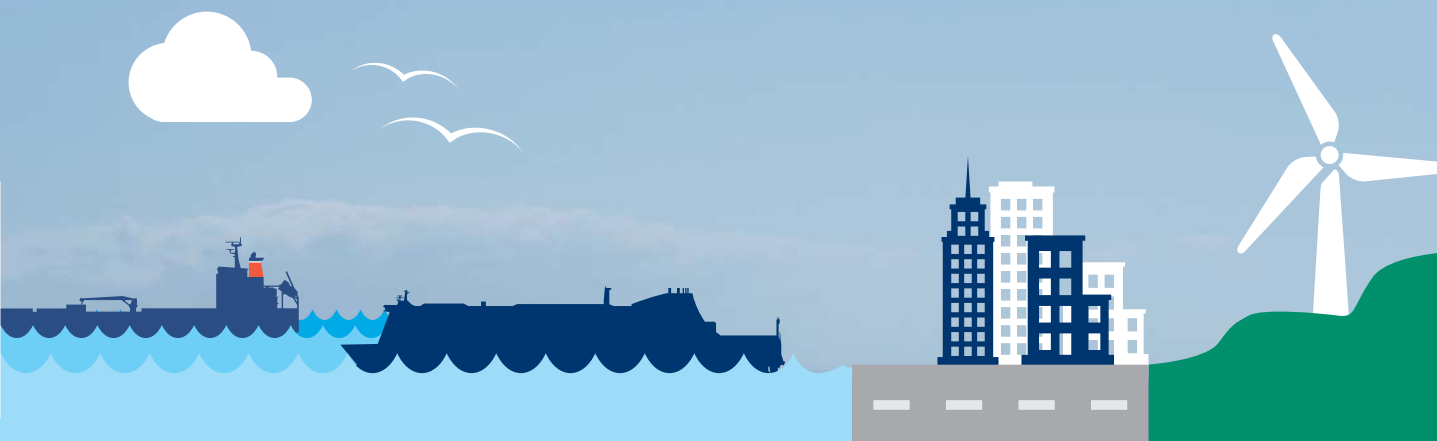
The Property business area consists of Stena Fastigheter, one of the largest privately owned real estate companies in Sweden, and Stena Realty BV. The portfolio consists primarily of rental units in Sweden, but also contains commercial properties.

## ADACTUM

Stena Adactum makes long-term investments in listed and unlisted companies, with the goal of building strong companies that can be platforms for new business areas in the Stena Group. The business area consists of the subsidiaries Stena Renewable, Ballingslöv, Blomsterlandet and Envac, and ownership interests in Gunnebo and Midsona.



MORE INFORMATION ABOUT ALL OF THE BUSINESS AREAS CAN BE FOUND IN STENA AB'S ANNUAL REVIEW.





# SUSTAINABILITY FOR STENA

Stena's sustainability work is based on the Group's common values, and is focused primarily on issues related to the environment, safety, community involvement and employees.

The Stena Group contributes to society in various ways. Activities in Shipping and Ferry Lines involve the transportation of goods, vehicles, raw materials and passengers. The transport stimulates increased trade and ensures that some of the global energy needs are met. Stena is also a major producer of renewable electricity in Sweden and provides many people with safe accommodation in the Group's properties. Stena companies provide work for 15,000 people and they are important as customers of many suppliers in the shipping industry, particularly shipyards where newbuildings are carried out.

## Priority sustainability issues

The sustainability issues identified as most important for Stena are related to the environment, safety, community involvement and employees. This report presents examples of how Stena AB works on sustainability in these areas.

Environmental sustainability is mainly about energy efficiency measures on land and at sea aimed at reducing consumption and therefore the impact on the environment. Shipping is the most environmentally friendly mode of transport in relation to cargo volume, and about 90% of world trade is conducted over the oceans. However, there are major advantages – both environmental and economic – to be gained from improving the efficiency of operations and reducing energy consumption. Innovation and new approaches are an important part of the work in this area.

Stena has a vision of zero accidents and systematically prioritises safety work in order to safeguard the work environment for employees, and also to increase the safety of passengers and transported goods, and accommodation in the Group's properties.

Stena is involved in and takes responsibility for society and the development of the industries in which it operates. Community involvement is demonstrated by a long list of local activities in the areas where the Group's companies operate and by support of selected international projects. The focus is on engagement where there is a reciprocal exchange.

Employees are the Group's most important asset. Stena works to ensure its employees are developed and emphasises how important it is that they should have the right skills.

*"Stena's business is only sustainable if we all contribute to the success of our customers and society every day through care and performance."*

Dan Sten Olsson



## SUSTAINABLE BUSINESS IS LONG-TERM BUSINESS

At Stena, we work to ensure that the next generation will have it better than we have, just as our predecessors did before us. Financial profits are important and are a prerequisite for all business, but they only show one dimension of the business. To understand the real value of the business, we also need to measure other things, such as benefits for citizens, environmental impacts and social factors. Only then can we understand whether the business is sustainable and viable.

This report is our way of providing an overview of the business from a sustainability perspective. Indicators and exact figures are reported for different parts of the Group, but we also want to highlight other things that are part of our efforts to be a responsible company. Innovation and Performance are two important concepts for us at Stena, but the foundation of everything is Care.

Take Care

Gothenburg, April 2016  
Dan Sten Olsson

stena  
Principles,  
convictions and  
basic values for  
Stena AB



Stena's three core values, Care, Innovation and Performance, are the foundation of the sustainability work in the Group. The focus on innovation is to a large extent the driving force in the work on energy efficiency at sea and ashore, and contributes to a reduced environmental impact. Ethical behaviour in every aspect of the Group's operations contributes to care for employees and society. Safety and quality characterise the performance of all tasks.

### Stena's core values are the basis for sustainability work

In order to reduce the Group's impact on the environment and ensure ethical conduct, while also contributing to economic development, the goals for Stena's sustainability work are based on the Group's core values of care, innovation and performance.

Safe, sustainable and environmentally sound operations are important and a cornerstone of Stena's brand. All employees have management's full support in breaking a chain of events that could lead to an accident or risk of environmental damage.

### The code of conduct guides operations

Stena's code of conduct sets out guidelines for ensuring operations are conducted in an ethically, socially and environmentally sound manner. The Group's code of conduct was updated and supplemented in 2015. The code can be read in its entirety at [www.stena.com](http://www.stena.com).

In addition to requiring compliance with the law in the countries in which Stena and its subsidiaries operate, the code of conduct addresses Stena's obligations in relation to

business partners and employees, communication with stakeholders, information security, human rights, environment and safety, and the procedure in the event of a conflict of interest.

The code of conduct is now being converted into an e-learning course covering all employees. Employees who discover something that is contrary to Stena's values, code of conduct, policies or the law are able to report this anonymously through a whistleblower service. The service is provided by an external partner and all submitted information is encrypted, which further strengthens the anonymity.

### Organisation of sustainability work

Sustainability work is governed by Stena's Group-wide environment and safety policy and code of conduct. Each individual company is responsible for formulating its own environmental and safety goals, based on its own operations. The companies have individuals who are responsible for environmental and safety work, and for following up the results at company level. There is a function responsible for sustainability issues at corporate level.

## RESPONSIBILITY IN OUR BUSINESS RELATIONSHIPS

By building long-term relationships with our customers, suppliers and subcontractors, we are committed to delivering high quality and best-value services.

Our responsibility is to meet the highest safety standards. Trust is the basis of all our relationships in society.

We are committed to meeting our customers' expectations in respect of responsible business practices.

We have high standards of corporate social responsibility, which we share with our business partners. We may withdraw from a business relationship if we feel that the standards we uphold are not being met by a business partner.



## OUR PRIORITY SUSTAINABILITY AREAS



### ENVIRONMENT

Stena works for sustainable and ecologically sound use of resources in order to increase the efficiency of energy use and minimise waste and greenhouse gas emissions.

[Learn more on page 12.](#)



### SAFETY

Stena has a vision of zero accidents and makes safety work a priority in order to safeguard the work environment for employees and to increase the safety of customers.

[Learn more on page 18.](#)



### COMMUNITY INVOLVEMENT

Stena works actively in various industry organisations to influence the development of regulatory and competitive conditions for the different companies.

[Learn more on page 22.](#)



### EMPLOYEE ENGAGEMENT

Care, innovation and performance are watchwords for Stena. Through constant development, the Group's employees contribute to sustainable business.

[Learn more on page 24.](#)

# SUSTAINABILITY IN NUMBERS

Here we present Stena's sustainability efforts in figures, in the form of a range of economic, environmental and social indicators.

The indicators presented in this sustainability report are complementary to Stena's annual report. All indicators are reported at an aggregate level for the entire Group and provide an overview of the Group's development financially, environmentally and in terms of personnel. The financial and social indicators are taken from the annual report.

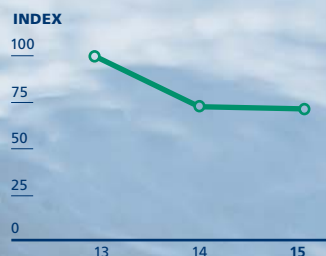
The vessels covered by the environmental indicators in the sustainability report are those that are controlled, leased or owned by Stena companies. These include several diverse types of vessels, from tankers and ferries to drillships. All of these vessels have different trading patterns, making

it difficult to obtain accurate comparative figures. For this reason, the environmental indicators are reported in absolute figures for the total fleet.

The number of vessels included in the report has increased by two since the previous year. Despite this, fuel consumption and carbon dioxide emissions have decreased for the fleet as a whole. Emissions of sulphur into the air have been reduced by 15% as a result of the move to cleaner fuel.

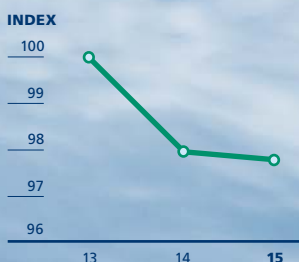
All shipping companies in the Group have an annual fuel consumption reduction target of 2.5%. Consumption per vessel decreased by 2.8% between 2014 and 2015.

## DECREASED FREQUENCY OF INJURIES



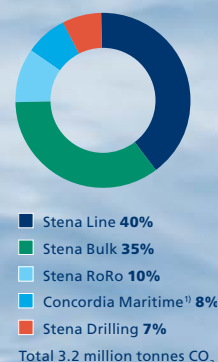
The graph shows the overall health and safety development within the Group in the form of an indexed value for Lost Time Incident Frequency (LTIF). Depending on the type of business, LTIF is measured differently. See page 18 for each of the business area's LTIF development.

## REDUCED FUEL CONSUMPTION



Stena's fleet is becoming increasingly efficient. In 2015, fuel consumption per nautical mile was 2.25% lower than in 2013.

## VESSELS' CO<sub>2</sub> EMISSIONS 2015, %



<sup>1)</sup> Concordia Maritime is a public company with Stena Sessan as its majority owner.

## ENVIRONMENTAL INDICATORS<sup>1)</sup>

| Energy consumption                               | 2013   | 2014   | 2015   |
|--|--------|--------|--------|
| Number of vessels in the report                  | 91     | 91     | 93     |
| Total distance sailed (1,000 nm) <sup>2)</sup>   | 5,545  | 5,848  | 5,823  |
| Total fuel consumption on vessels (1,000 tonnes) | 1,012  | 1,045  | 1,039  |
| Total energy consumption on vessels (TJ)         | 40,968 | 42,694 | 42,996 |

| Greenhouse gas emissions                 | 2013  | 2014  | 2015  |
|--|-------|-------|-------|
| CO <sub>2</sub> emissions (1,000 tonnes) | 3,134 | 3,239 | 3,230 |

| Other emissions                          | 2013 | 2014 | 2015 |
|--|------|------|------|
| NO <sub>x</sub> emissions (1,000 tonnes) | 62   | 67   | 63   |
| SO <sub>x</sub> emissions (1,000 tonnes) | 25   | 27   | 23   |

1) Refers to Ferry Lines, Offshore Drilling and Shipping. The vessels in this report have been limited to those for which Stena has operational control over fuel purchasing, speed etc. Vessels that are leased to external customers are not included. With effect from 2014, LNG is included in fuel consumption and emissions. The year 2013 has therefore been recalculated.

2) For Stena Drilling's units, distance sailed are not registered.

## SOCIAL INDICATORS

| Employees                         | 2013   | 2014   | 2015   |
|-----------------------------------|--------|--------|--------|
| Number of employees <sup>1)</sup> | 11,348 | 11,231 | 10,416 |
| Women (%)                         | 29     | 28     | 29     |
| Women on the Board (%)            | 20     | 22     | 27     |
| Women in Executive management (%) | 12     | 22     | 22     |

1) Employees with a permanent employment contract with Stena companies. The above figures do not include contract workers or seagoing staff with various types of temporary contracts.

## FINANCIAL INDICATORS

| SEK millions                               | 2013         | 2014         | 2015         |
|--|--------------|--------------|--------------|
| Sales                                      | 30,240       | 33,563       | 36,417       |
| EBITDA <sup>1)</sup> excluding asset sales | 7,947        | 9,646        | 10,118       |
| <b>Profit before tax</b>                   | <b>2,148</b> | <b>2,799</b> | <b>4,504</b> |

1) Earnings before interest, taxes, depreciation and amortisation.

# TECHNOLOGY RESHAPES THE SHIPPING INDUSTRY

The shipping industry is facing changes, and one of the driving forces is the development of new technology. Tom Boardley, Executive Vice President at Lloyd's Register gives his view on the future trends of the industry.

"Shipping is by far the most economic and efficient way of transporting goods, especially with regards to environmental aspects like pollution. The nature of the shipping business is very cyclical and growth has been quite slow since the financial crisis. The forecast is that this trend will continue, and that the market will not be great for a few more years. This puts pressure on companies, as efficiency plays a more important aspect in successful operations.

Our future will continue to be driven by technology. Intense competition encourages greater sophistication in the use of technology and operational efficiency in order to gain commercial advantages. A lot of the new technology has reached a level of maturity to be used in the shipping industry, for example, advancements in ship system design and operation is being used to enhance safety, as well as financial and commercial performance.

Increasing public awareness of the environment and climate change will continue to put pressure on governments to respond with regulatory policy, which also drives technological development, for example when it comes to using alternative fuels.

There are already several regulations in place in this area, and more are to be expected in the future. Most efforts right now are connected to emissions regulations and ballast water. There is a growing use of LNG and other alternative fuels in areas requiring greater environmental protection. These areas are growing and becoming increasingly connected with each other. However, it is costly to rebuild ships, and the alternative

fuels are mainly used in new ships being constructed. In the coming years there will still be many "old" vessels in use, running on "old" fuels.

Shipping companies do not have to be huge to be successful, but they do need to have a great technical expertise and knowledge. Financial aspects are of course also important, but the technical side is vital for a successful service.

We will see an increasing number of smart ships in the future. New technology, like robotics, could be very useful in dangerous situations, for example when inspecting tanks. It will probably also be used in during the hazardous parts of ship construction. However, it is not expected that robotics will replace the human crew on a ship. The cost of the crew is small compared to the total cost, it is not likely that we will see unmanned vessels in the near future.

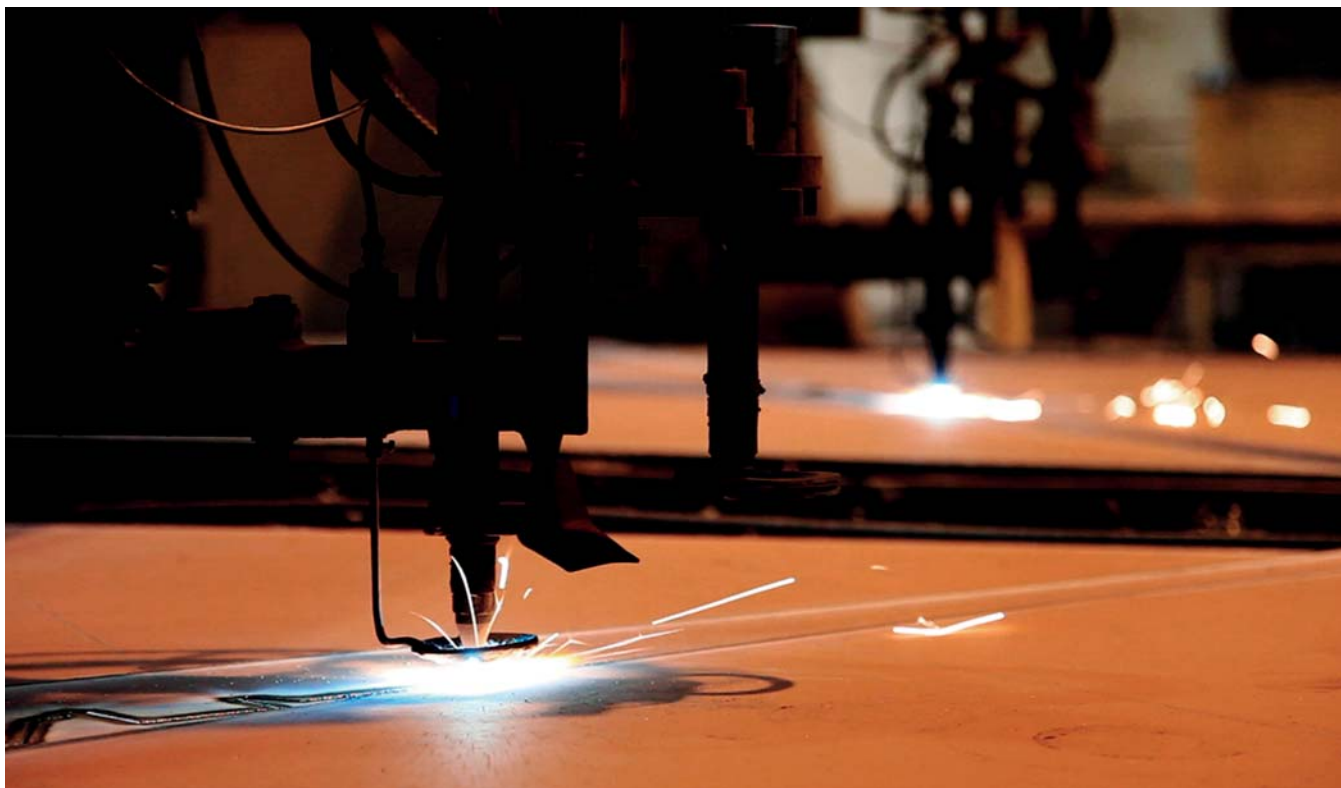
On this note, there is a risk for an increasing shortage of maritime skills and resources. The development of new technologies could, however bring opportunities for future careers for seafarers. More sophisticated ships will enable new and different roles, which hopefully will be appealing to coming generations and contribute to make seafaring an attractive career option again.

Shipping is by far the most economic mode of transportation, with little environmental damage. In a longer perspective, the outlook for global fleet growth is positive. Nations will continue to trade, and as developing countries grow, they will trade more than today. Following this, we can expect a bright future for shipping."



A LONGER CONVERSATION BETWEEN TOM BOARDLEY  
AND HARRY ROBERTSON, TECHNICAL DIRECTOR AT  
STENA TEKNIK, CAN BE FOUND AT [STENA.COM](http://STENA.COM)





Tom Boardley,  
Executive Vice President, Lloyd's Register

## LLOYD'S REGISTER

Lloyd's Register is the world's largest and oldest international company for the classification of ships, and is one of the classification societies often engaged by Stena's shipping operations. In addition to ship classification, the company also collects and issues various types of marine information. The report "Global Marine Technology Trends 2030", describing future trends in the shipping area, was published in 2015.

# REDUCED ENVIRONMENTAL IMPACT IN ALL AREAS OF THE BUSINESS

Stena works for sustainable and ecologically sound use of resources, abiding by the precautionary principles for the protection of the environment, in order to prevent pollution, increase the efficiency of energy use and minimise waste and greenhouse gas emissions.

## PRIZE-WINNING METHANOL PROJECT

On 1 January 2015, a new directive came into force for shipping in the Baltic Sea, the North Sea, the English Channel and the coasts of North America. Under the new rules, the maximum permissible sulphur content for marine fuels used in the areas is 0.1%, compared with 1% previously and 3.5% in the rest of the world. One way to reduce sulphur emissions further is to use alternative fuels such as methanol. Use of methanol also reduces emissions of particulates and nitrogen oxides compared with conventional marine oil. The Stena Line ferry *Stena Germanica* has been converted to run on methanol in a pilot project that started in 2015. The project has been acknowledged with several awards during the year:

- Green Ship Technology – GST Ship Owner of the Year Award
- Innovation Award 2015 at the Swedish Maritime Day
- Outstanding Green Initiative Award at the 2015 Global Business Excellence Awards in the UK
- Pegasus Prize 2015 from Transportföretagen
- Shippax Award 2016

## STENA ELEKTRA WILL BE POWERED BY BATTERIES

The *Stena Elektra* project, which Stena Teknik launched in 2013, involves developing a vessel concept for the world's first plug-in hybrid ship partially powered by electricity. The vessel will be capable of being charged with shore-based power when berthed, and running on electricity in port and through the archipelago, and then switching to diesel, methanol or natural gas (LNG) in open water. In coastal areas, emissions will be reduced to zero, while operating costs will also be drastically reduced.

*Stena Elektra* is basically a passenger and cargo ferry, 200 metres long, with a capacity of over 3,000 lane metres. The battery pack on board will be one of the largest battery installations in the world with a pack of lithium-ion batteries the size of two containers. It provides 10 MWh of electricity when fully charged, which is sufficient to power the ship for 30 minutes.

To test the usage of battery power further, a pilot study was initiated on *Stena Jutlandica*, where the plan is to use battery power to reduce the load on the auxiliary engines at start-up of the ship and during loading and discharging. Within the framework of this project, the auxiliary engines will be partially powered by electric batteries.

## NORTHERN MARINE GROUP CERTIFIED UNDER ISO 50001

Northern Marine Ferries (NMF), a subsidiary of Northern Marine Group, and the 21 ferries it operates, will be certified under the ISO 50001 energy management system in 2016. The purpose of this ISO standard is to optimise and improve the efficiency of energy consumption. Northern Marine Management, and the 79 tankers it operates, is already certified under ISO 50001.



## CERTIFICATION OF THE OFFICE BUILDING IN HOUSTON

Stena Realty's new office building in Houston has been designed to minimise adverse environmental impacts. The design focuses on resource efficiency, such as reduced water consumption and ensuring responsible use of resources in the construction phase, in order to achieve the best possible work environment for the tenants. The building is certified under LEED Silver Certification, which benefits both Stena and the tenants.

## TURNING STENA LINE'S FOOD WASTE INTO BIOGAS

Stena Line has been working for several years in a structured way to reduce food waste on its ferries. This is done by means of more efficient planning of purchasing and menus, and also by separation of food waste. Food waste was previously discarded with other combustible waste, but for some time now this waste has been separated and sent for combustion or biogas production. One tonne of food waste can produce biogas equivalent to 110 litres of petrol. The advantages for the vessel include reduced waste costs and a better work environment for kitchen staff as the work involves less heavy lifting.

*Stena Line's total use of shore-based power in 2015 contributed to reduced oil consumption and avoided CO<sub>2</sub> emissions of 13,000 (12,763) tonnes, equivalent to the annual emissions from 4,200 cars.*



## A SUSTAINABLE BUSINESS CONCEPT

Stena Renewable's wind farms are involved in the transition to a renewable energy system and therefore a better environment. In the hour it takes to read this report, Stena Renewable's wind turbines will have produced sufficient electricity to drive an electric car more than 505,000 kilometres, or nearly 13 circuits of the earth.



## GEOHERMAL HEATING PROJECT IN MALMÖ REDUCES CARBON DIOXIDE EMISSIONS BY 67%

In 2016, Stena Fastigheter is conducting a large geothermal project in Malmö which includes 940 apartments. The project will reduce annual carbon dioxide emissions by about 750 tonnes, or 67%. This corresponds to the annual emissions for 3,500 cars.



*"Care – We respect the world around us by being aware of our dependence, caring for our relationships and using the resources of the world sustainably and with care."*

*From "Principles, convictions and basic values for Stena AB".*



## REDUCED ENVIRONMENTAL IMPACT FROM PROPERTIES

Stena Property's biggest environmental impact comes from the use of energy in the form of electricity, heating and water for homes and premises. The focus is therefore on reducing energy consumption. The target is a 20% reduction between 2010 and 2020. Electricity consumption has already fallen by 20.1% and heating by 12.8% in the period 2010–2015. In addition, Stena Property only buys green electricity for all of its properties.

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## E-LEARNING FOR REDUCED ENVIRONMENTAL IMPACT

In 2015, Stena Line introduced the Save environmental e-learning course for its seagoing personnel. To date, over 2,400 persons have completed the training, which aims to increase employees' awareness of how they can contribute to a reduced environmental impact in the course of their work. On completion of the training, the employees discussed in their working groups what specific changes they can make to reduce their environmental impact.

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## PROCEDURES FOR ENERGY EFFICIENCY

Blomsterlandet, which is owned by Stena Adactum, is conducting an energy saving project called Energy hunters. Employees are given information and involved in the process of making changes in their daily work that contribute to reduced energy consumption. These may include climate control indoors, efficient use of lighting and similar measures. The goal is that all 52 stores will participate in the work and achieve annual energy efficiency of at least 10%.

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## LED LIGHTING REDUCES ENERGY CONSUMPTION

Over 250 lights on board *Stena Drillmax* were replaced with LED lights during the year. These consume about one-third of the electricity the previous lights consumed. The total savings will be over 560,600 kWh, equivalent to the annual consumption of 23 family households. In addition to the energy savings, the new lights require less maintenance, resulting in reduced maintenance costs.

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## NORTHERN MARINE GROUP'S ENVIRONMENTAL WORK RECOGNISED

Northern Marine Group received the Environmental Achievement Award for environmental excellence performance 2015 from the Chamber of Shipping of America.

ONE ELECTRIC CAR CAN MAKE  
**13 CIRCUITS**  
OF THE EARTH ON THE ELECTRICITY PRODUCED  
BY STENA RENEWABLE DURING ONE HOUR

# THERE ARE MANY AREAS WHERE REDUCED ENVIRONMENTAL IMPACT AND ENERGY SAVINGS CAN BE MADE ON A VESSEL



## ENGINES AND PROPELLERS

- By regulating the exhaust pressure, the amount of air injected into the fuel tanks can be matched exactly with the engines' load and the vessel's speed, thereby reducing fuel consumption.
- Optimisation of the adjustable propeller blades contributes to reduced energy consumption.
- By changing the ship's propeller, its size and design can be optimised based on the vessel's average speed. This has resulted in energy savings of between 5% and 10%.
- Frequency controlled pumps and fans – applies mainly to the seawater pumps and engine room fans.
- Installation of regulators on the main engines to control the supply of fuel.
- Insulation of heating pipes in the engine room allows some of the heat to be recycled on board, thereby reducing fuel consumption.



## THE HULL

- Cleaning of the hull (and propellers) reduces fouling. This results in less friction, which in turn leads to reduced fuel consumption.
- Optimisation of the hull draft between bow and stern, which helps to reduce energy consumption.
- By changing the ship's bulbous bow, the bulb size can be optimised based on the vessel's average speed.



## AREAS ON BOARD THE VESSEL

It is not only a vessel's engines that are powered by fuel. Lamps, refrigerators, ovens, heating and ventilation – all consume fuel and in doing so also affect the environment.

- Installation of induction cookers in the kitchen areas on board, instead of stoves that are left on all of the time because they are slow to start up.
- Installation of LED lights on board – e.g., on car decks. In some cases they are linked to motion detectors so that they do not need to be on when no one is in those areas.
- Cabin windows with solar film that blocks out 82% of the sun's radiant heat. The result is less fuel consumption in the ship's cooling system.







## MEASURES CARRIED OUT ON SHORE

- An energy management system (EMS) is a commercial tool used by shore-based employees to monitor the ships' energy consumption and to enable best practice to be applied between various ships.
- By adjusting the schedule, the ship's average speed can be adjusted, which also affects fuel consumption.
- In several of the ports where Stena Line operates, it is possible to connect the vessels to shore-based power when they are berthed. This allows the auxiliary engines on board to be turned off, which saves oil and helps to reduce emissions. A project is also in progress in the Port of Gothenburg which involves one of the ferries (*Stena Danica*) being connected to the district heating network when she is berthed.



## EMPLOYEE TRAINING

- An e-learning course has been developed for personnel on Stena Line's ferries to educate them about how they can contribute to reducing energy consumption on board, both in the course of their work and by making some changes to their behaviour.
- For vessels of the same model, competitions are sometimes arranged between them to see which vessels use the least fuel. Different shifts on the same ship sometimes compete with each other. In addition to the honour of winning, there is sometimes prize money in the pot.
- Fuel management systems (FMS) are installed on board on all Stena Line's owned ferries. An FMS is similar to a trip computer that measures fuel and energy consumption. The system is used by the crew in the engine room and on the bridge and by some of the shore-based office staff. The system can show both real-time and historical fuel consumption.



# SAFE OPERATIONS AT SEA AND ASHORE

Stena has a vision of zero accidents and makes safety work a priority in order to safeguard the work environment for employees, and also to increase the safety of passengers and transported goods. This also applies to accommodation in the Group's properties.

## CONTINUED IMPROVEMENT IN SAFETY

Lost Time Injury Frequency is a measure of workplace safety used for the crew on board. The number of LTI (injuries that leave the employee unable to work the following day) are reported per million exposure hours worked.

The definition for the employee being unable to work the following 24 hours applies to the shipping companies NMG, Stena RoRo, Stena Bulk and Stena Line, while Stena Drilling, has a 72-hour time frame, in accordance with industry practice. This is because they are working far out at sea, which means it may take longer to get the employee to a hospital.

## JOINT SAFETY EXERCISE

In March 2015, Stena Line carried out a major safety exercise in cooperation with the emergency services, health services and the police. An accident was staged on *Stena Scandinavica*, for the purpose of practising dealing with an emergency, but also to practise taking care of passengers afterwards. The exercise ended with a mock press conference. The focus of the exercise was to review existing procedures on board for extreme emergencies, as well as shore-based procedures, and communication.

Stena Line's onboard personnel are put through safety drills every week. In addition to the major exercise in March, Stena Line also performed several exercises on board its vessels during the year, in cooperation with local emergency services, coastguards in different countries, the military and police.

| Health and safety, LTIF  | 2013 | 2014 | 2015 |
|--------------------------|------|------|------|
| NMG                      | 0.36 | 0.58 | 0.41 |
| Stena Roro               | 0.77 | 0.39 | 0.41 |
| Stena Drilling           | 0.58 | 0.00 | 0.29 |
| Stena Bulk               | 0.18 | 0.18 | 0.00 |
| Stena Line <sup>1)</sup> | 2.19 | 1.82 | 1.80 |

1) Including service staff for passengers

# 1,768

**SAFETY DRILLS WERE CARRIED OUT ON BOARD  
STENA LINE'S FERRIES IN 2015**





## SAFETY AT HEIGHT

A dangerous operation at a wind farm is wind blade inspection. The inspections are normally performed by one person inspecting the blade that runs parallel to the wind turbine tower as they reel from the top of the tower. To increase safety and quality, Stena Renewable has investigated the feasibility of using drones to carry out wind blade inspections. Testing of this solution is in progress. The hope is that in a few years' time drones will be able to supplement manual inspections, thereby increasing quality and reducing costs.

*All employees are encouraged to continuously make risk assessments, and to discontinue an operation if there is the risk of an accident. Continuous safety drills are carried out in all parts of the business.*



AT THE END OF 2015, 70% OF  
STENA DRILLING'S SHIPS AND RIGS  
HAD NOT HAD A LTI ON BOARD IN

# 3 YEARS

## A SAFE LIVING ENVIRONMENT

Stena Property conducts systematic safety work in the areas of management and new construction. In new construction and refurbishment, there is always an agreement clarifying the work environment responsibility during planning and production. Safety is always a standing item at all steering group and building meetings, and inspections are conducted continuously.

A new digital fire protection programme will be introduced at all locations during 2015–2016. In parallel with this, all caretakers have undergone training. Continuous fire patrols ensure that no flammable materials are stored in stairwells and corridors, that escape routes are not blocked and that they are working properly.



*"Care – Having a continuously safe operation is the best way of showing respect for people."*

*From "Principles, convictions and basic values for Stena AB".*



## HIGHER INFORMATION SECURITY REQUIREMENTS

As digitalisation increases, information security is becoming an increasingly important area on which to work. Stena has therefore developed its own Management System for Information Security. With the new management system, Stena takes a holistic approach to information security for all parts of the organisation and all information assets that Stena owns or manages. All information must be classified based on its value to the company.

An e-learning course was developed in 2015 aimed at increasing employees' awareness of information security risks. The e-learning has been completed by 30% of all employees to date.

## FIRE SAFETY WORKING GROUP

All Stena vessels comply with national and international regulations, and have a strong focus on fire safety. To ensure that efforts in this area continues at a high level, Stena formed a special fire safety working group in 2015. The purpose of the group's work is to further investigate potential risks, primarily on car decks, and to design measures to reduce the risk of fire. A fire safety concept will be developed, and this will ensure a common level of fire safety in operations, maintenance and crew training.

## PROACTIVE SAFETY WORK AT SEA

Northern Marine Group (NMG) operates 144 vessels and employs about 7,300 seafarers. Their safety is the highest priority, which is why rigorous safety work takes place continuously on board all vessels. For more than ten years, NMG has worked in accordance with a process called Behaviour Based Safety (BBS), which is a proactive way of analysing and preventing work-related incidents and accidents. In 2015, this proactive approach was also introduced on all of the ferries operated by the subsidiary Northern Marine Ferries. NMG works on the basis of a vision of zero accidents and incidents. This resulted in about 9,000 potential accidents and incidents being avoided in 2015 by the crew's observations and changes of behaviour. This is an increase of over 1,000 observations compared with 2014.

## INCREASED FOCUS ON POTENTIAL RISKS

During the year, Stena Line implemented a concept called "Last Minute Risk Assessment" for all seagoing personnel. The aim is to raise awareness among employees and to get them to conduct a risk assessment before starting their work duties, in order to avoid accidents and dangerous situations.

## SAFETY CAMPAIGNS WITH DIFFERENT THEMES

The focus of NMG's safety work in 2016 will be reducing the number of accidents caused by falling objects, or crew members stumbling, falling or slipping.

## E-LEARNING TO REDUCE THE ACCIDENTS

In 2015, Stena Drilling continued its safety work by developing and implementing an e-learning course with a focus on increasing risk awareness with regard to hand and finger accidents among employees. The e-learning has taken place on board half of Stena Drilling's fleet and a reduction in the number of reported hand and finger accidents has already been noted.

**AT THE END OF 2015, IT WAS**  
**498 DAYS**  
**SINCE THE LAST LTI IN STENA  
RENEWABLE'S OPERATIONS**

# AN ACTIVE ROLE IN SOCIETY

Stena works actively in various industry organisations to influence the development of regulatory and competitive conditions for the different companies.

Claes Berglund, Director of Public Affairs and Sustainability in the Stena Group explains how he works to ensure that laws and regulations that come into force are tailored to the shipping industry.

“Stena strives to be a responsible company that contributes to the development of society. Our basic philosophy is that we do not just want to adapt, but also participate in shaping the future.

Therefore it is important for us to be in close dialogue with the authorities and societal functions, either directly or through various interest organisations.

At global level, the shipping industry is regulated by the UN’s International Maritime Organisation (IMO). Safety, environment and the work environment are priority areas, and Stena contributes through participation in interest organisations. At EU level, we work through interest organisations, and engage in dialogue mainly with the Commission but also with individual parliamentarians. At national level, we work primarily in Sweden

and the UK, as most of our operations are in these countries. We are engaged through industry organisations, such as Ship-owners’ associations in different countries, but also through chambers of commerce and collaboration with educational institutions. We are also active in a number of international sectoral organisations, such as Intertanko and Interferry.

The areas that are most important in shipping are emissions into the air and water and safety.

Another of our tasks in society is to reflect shipping’s image in a broader perspective towards other stakeholders. We are keen to help explaining the maritime industry’s importance to the economy and the development of society. Stena takes great responsibility for promoting the entire maritime industry through various forms of engagement, such as Sjöfartsforum, an association for the Swedish maritime cluster, with representatives from ports, shipping companies and technology providers, and Maritime UK, which is the equivalent in the United Kingdom.”



Claes Berglund lectures on safety in shipping at the International Maritime Organisation.

## M/S REN STRÖM CLEANS THE CITY CENTRE

Stena Line is one of the companies that, together with the City of Gothenburg, Göteborg Energi and Innerstaden Göteborg, are behind *M/S Ren Ström*, a cleaning boat used to keep the canals of Gothenburg centre clean. The vessel was upgraded in 2015 and is now powered by local electricity generated from solar cells.



## WIND BONUSES SUPPORT LOCAL ASSOCIATIONS

Each year, Stena Renewable distributes almost SEK 1 million in so called wind bonuses to various associations in the local community where the company's wind farms are located. Through the wind bonuses, Stena Renewable demonstrates that wind power makes a difference and that the company wants to help develop the local community. Many examples of what wind bonus recipients have spent their money on can be found on Stena Renewable's website.



## RELATIONSHIP MANAGEMENT®

To develop sustainable residential environments and workplaces where people are happy and stay for a long time, Stena Property has developed its own concept – Relationship Management®. In specific terms, this means that the company works on a large number of social projects and activities to create safe, stable and comfortable living environments. The focus is on children and young people and on various initiatives in the areas of school, work and meaningful leisure.

The initiatives include offering summer jobs each year to at least 300 young people living in Stena Property's areas. In addition, there are a number of other projects such as planting days, family days, "library in the laundrette" and community centres. In 2015, Stena Property was named Property owner of the year by Fastighetstidningen. An important reason for the award was the company's work on Relationship Management® and social sustainability.

## INVOLVEMENT IN ASSOCIATIONS

Stena has had long involvement in various associations which in different ways are linked to its operations, such as:

**H.M. KING CARL XVI GUSTAF'S FOUNDATION FOR YOUNG LEADERSHIP** was established prior to His Majesty King Carl XVI Gustaf's 60th birthday, and is run by the Scout Movement. The purpose of the foundation is to promote youth leadership training in the Scout movement and other youth activities. Within the framework of the training, mentoring is offered and scholarships are also awarded to young leaders from business, public and non-profit sectors. Stena has supported the foundation since it was established ten years ago, both financially and in the area of training by providing mentors.

**OCEAN HEALTH INDEX** is a collaborative effort consisting of 65 researchers from different disciplines and 23 different institutions that work to present the status of the ocean in several different areas. Ocean health and productivity is measured based on ten indicators on everything from biodiversity to the ocean's ability to store carbon dioxide. As the ocean is a vital natural resource for Stena's operations, Stena has participated in and supported the work financially since 2012.

**STAMI, STENA ASSOCIATION OF MARITIME INSTITUTIONS**, is a network of ten maritime institutions from around the world who meet a few times a year to exchange experiences and best practices from their operations. The aim is to disseminate and share shipping knowledge in the world. The importance of shipping as a mode of transport is increasing, which means that there is a growing need for well-trained seafarers. STAMI also works to improve quality and set common standards for maritime training.



# A BUSINESS BUILT ON ENGAGED EMPLOYEES

Care, innovation and performance are watchwords for Stena. Through constant development, the Group's employees contribute to sustainable business.

## STENA VOICE

Stena Voice is the Group's regular employee survey, in which employees answer questions about their work situation. The survey questions relate to work environment, performance management, human resources and leadership. The survey is conducted every 12 or 18 months, depending on the company, and is measured on a scale of 1–5 (5 being the highest possible rating and 1 the lowest).

Stena Voice is a structured method of identifying improvement potential. Each unit or work group selects one or more focus areas and creates action plans for these areas. The action plans are followed up regularly.

| Stena Group excl. Stena Line                   | 2012 | 2013 | 2015 |
|--|------|------|------|
| Performance appraisal (percentage of staff), % | 83   | 85   | 91   |
| Stena Voice results                            | 4.46 | 4.47 | 4.52 |
| Departments with over 4.0 in Stena Voice       | 89   | 91   | 94   |
| Stena Voice response rate, %                   | 99   | 99   | 99   |

| Stena Line                                     | 2013 | 2014 | 2015 |
|--|------|------|------|
| Performance appraisal (percentage of staff), % | 72   | 71   | 71   |
| Stena Voice results                            | 4.11 | 4.09 | 4.12 |
| Departments with over 4.0 in Stena Voice       | 69   | 65   | 70   |
| Stena Voice response rate, %                   | 93   | 93   | 94   |

## CONTINUING DEVELOPMENT OF THE LEADERSHIP PROGRAMME

The global Stena Leadership Programme was conducted in 2015, with 120 managers and specialists in Stena AB taking part. The programme, which is a way of developing skills and highlighting development opportunities, is tailored to Stena and has a strong link to business acumen. Participants came from 11 of the companies in the Stena Group, representing 16 different countries. About 20% of the participants were women. As a continuation, the 120 individuals who went through the leadership programme will be offered short courses/training sessions to continue to strengthen their skills and contribute to further personal development.

Grow, a new leadership programme for a further 100 employees begins in 2016. The Grow programme will be linked with previous leadership programmes and will focus on a combination of business acumen and leadership. In this programme, the target group are potential successors to the 120 identified key positions. The aim of the two leadership programmes is for the participants to develop themselves, their employees and their business.

# 1,000

**CADETS HAVE PARTICIPATED IN NMG's CADET PROGRAMME SINCE IT WAS STARTED IN 1988**

## NORTHERN MARINE GROUP CADET PROGRAMME FOR YOUNG SEAFARERS

Northern Marine Group (NMG) started its cadet programme in 1988, and about 1,000 cadets have completed the programme since then. The aim is to develop and support young seafarers through their education, enabling them to become confident and competent seafarers. Through practical training, they are given the opportunity to put their theoretical knowledge into practice.



*The Stena Group employs 15,000 employees worldwide. They are found in a variety of roles and positions and at many different types of workplaces. Common to the Group's operations are a focus on cooperation, health and safety and continuous development.*

## FOCUS ON FITNESS

The health and safety of employees is of great importance, and Stena encourages physical exercise and fitness. Many workplaces offer the opportunity for joint training, gyms, and in some cases sponsoring events such as races.

*"I have just completed the three-year cadet programme, which has involved a great deal of practical exercises. Now I want to continue working within Northern Marine Group, and hopefully become chief engineer in the future."*

*Stephen Lees, cadet programme 2012–2015*





# Care Innovation Performance



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