



# VIKING LINE and the environment

Viking Line endeavours to provide seagoing passenger services in an environmentally sound way by using the best possible technology that is available and by working in accordance with the principle of sustainable development. The focus of our environmental efforts is to follow existing regulations and prevent environmental damage in our operations.

The desire to promote and work towards a cleaner environment is visible in our operations and permeates our corporate culture.



National legislation and international agreements are the basis for the Company's environmental work. Through a long-term, active commitment to the environment, the Company has developed environmental activities that extend beyond what is stipulated by the rules in force for passenger services on the Baltic Sea. Viking Line's environmental work focuses on its vessel operations, where the largest gains can be made when it comes to safeguarding our environment. The Group's Head Office and all its vessels are certified in compliance with ISO 14001 environmental management standards. In addition, the Viking Line organization and all vessels are certified according to the International Safety Management (ISM) Code, which sets safety and pollution prevention standards.

Most shipping-related regulations aimed at protecting the environment are international. The most extensive set of environmental protection regulations is the International Convention for the Prevention of Pollution from Ships (MARPOL 73/78), which was devised by the International Maritime Organization (IMO), a United Nations agency.

## Energy consumption and atmospheric emissions

Viking Line's vessels use only low-sulphur fuel with a maximum sulphur content of 0.5 per cent by weight, in order to reduce sulphur dioxide (SO<sub>x</sub>) emissions. According to an annex to MARPOL 73/78, effective from July 1, 2010 the sulphur content of marine diesel oil and fuel oil may not exceed 1.0 per cent in the Baltic Sea.

Viking Line has implemented various programmes to reduce nitrogen oxide emissions from its vessels. Catalytic cleansers have been installed on three of the Company's vessels and Humid Air Motor (HAM) technology on one vessel. HAM is a globally unique method that reduces nitrogen oxide emissions by lowering the combustion temperature of vessel engines. This temperature reduction is achieved by adding vaporized seawater to the combustion process.

Viking Line has an internal programme to reduce exhaust gas emissions. In this programme, vessel operating staff and the Company's technical department are working to introduce fuel-efficient methods of manoeuvring vessels.

Starting on January 1, 2010, all Viking Line vessels that are berthed in port for more than two hours use marine diesel oil with a sulphur content not exceeding 0.1 per cent during their entire period in port (in compliance with the European Union's directive 2005/33EC).

## Discharges to water

Viking Line vessels discharge neither waste nor bilge water into the sea. In order not to burden the Baltic Sea with nitrogen, phosphorus and oil, the Company's vessels pump all their wastewater ashore, including bilge water. Two main types of wastewater are formed on the vessels: grey water and black water. Black water is wastewater from toilets, and grey water comes from showers and other washing activity. Bilge water, which contains oil, originates in the engine rooms of vessels. MARPOL regulates management of black and bilge water. Discharge of black and bilge water into the sea is permitted when the water meets certain specified criteria. Discharges of grey water are not regulated by legislation.

## Solid waste management

All solid wastes generated aboard Viking Line vessels are brought ashore for subsequent recycling, re-use, combustion, depositing in landfills, composting or other waste management by an approved recipient.

On the Viking XPRS, equipment has been installed to make efficient sorting and collection of biowastes possible.

## Other environmental aspects

Instead of using environmentally hazardous tin-based paints on the bottoms of vessels, their hulls are brushed by divers several times each year. Purchasing and use of chemicals are governed by internal environmental standards. A list of products approved for use at Viking Line is being compiled at Group level. Environmentally friendly alternatives are used as far as possible.

## Audits

To ensure that Viking Line meets environmental certification standards, continuous internal audits of its operations are



KEY FIGURES	2009/2010 Nov 1 – Dec 31 14 months	2008/2009 Nov 1 – Oct 31 12 months
Passengers	7,324,047	6,390,213
Cars	694,503	601,254
Cargo units	128,659	102,670
Total distance (000 km)	1,330	1,144
<b>Resource consumption (m<sup>3</sup>)</b>		
Fuel	141,437	121,453
Lubricating oil	928	853
Urea	1,938	2,206
Fresh water	431,799	384,152
<b>Emissions (tonnes)</b>		
Nitrogen oxides (NO <sub>x</sub> )	5,156	4,399
Sulphur oxides (SO <sub>x</sub> )	1,227	1,266
Carbon dioxide (CO <sub>2</sub> )	438,355	373,862
<b>Residual products (tonnes)</b>		
Solid waste for combustion	2,303	1,793
Waste sent to landfills	1,679	1,667
Waste for recycling	1,666	1,537
Biowaste	510	163
Hazardous waste	46	48
<b>Wastewater pumped ashore (m<sup>3</sup>)</b>		
Grey and black water	367,324	335,889
Bilge water	11,645	10,691
<b>Waste oil (m<sup>3</sup>)</b>		
	3,192	2,460

conducted. In addition, Det Norske Veritas – an independent certification body – performs yearly external audits of the environmental management system in order to verify compliance with the established objectives. In addition, the maritime administrations of Sweden and Finland perform continuous ISM Code-related audits concerning both environmental and safety functions.

### Environmental collaboration

Viking Line participates actively in the task of saving the Baltic Sea by supporting and collaborating with the Baltic Sea Action Group (BSAG). This collaborative effort was announced in May 2009 during the launch of the Baltic Sea Action Summit, which was organized in Helsinki in February 2010. The effort will include practical projects in keeping with the overall objectives of the Helsinki Commission's new Baltic Sea Action Plan.



In conjunction with its 50th anniversary, Viking Line also made a donation to the Baltic Sea Action Group. Viking Line is participating in the Swedish Shipowners' Association (SRF) and Ports of Sweden's joint project in which the long-term goal is that by cooperation and with systems thinking achieve the EU Commission's vision of zero emissions in the Baltic Sea. Within the project over 50 illustrative examples of operations made by shipping companies in order to improve the Baltic Sea Environment will be presented. As one of the examples of good environmental performance Viking Lines closed system for handling waste water is presented.

### Viking Line and safety

Viking Line is responsible for the safety of both its passengers and employees and does everything to ensure all of them a safe and a secure voyage. Regardless of their requirements and wishes, everyone should be able to enjoy their voyage without having to worry about safety. The Company's vessels are equipped with modern technology and equipment that meets the latest standards, and its employees have the knowledge and practical skills that are needed in case of emergency situations.

### International requirements

The International Safety Management (ISM) Code and the International Ship and Port Facility Security Code (ISPS) of the Safety of Life at Sea (SOLAS) convention establish standards for Viking Line's safety and security work. The Company is responsible for ensuring that its vessels, their crews and its land-based organization fulfil the rules in force for passenger and cargo services. National maritime authorities oversee vessel safety equipment, fire-fighting capabilities, communications equipment, stability and safety systems. The independent certification bodies Det Norske Veritas and Lloyd's Register inspect the strength of each vessel's hull as well as the condition of its mechanical and electrical systems and its operating safety.

On board Viking Line's vessels, preparedness is maintained by a safety and security organization that undergoes continuous drills and training in its tasks. In compliance with ISM Code requirements and laws on protection against accidents, the land-based organization maintains an emergency response capability to provide support to vessels.

### Environmentally friendly alternatives

The duty- and tax-free shops on board Viking Line's vessels offer a wide range of environmentally friendly products – including cosmetics, clothing, wines and handbags. The sales staff will be happy to tell you about them. In the Food Garden restaurants on board, we have water units that produce our own drinking water. Carbonation can be added if desired. The water is tapped by our waitstaff and is served in old-fashioned half liter bottles with snap-on seal tops. The bottles are re-usable. As the advertisement partly explains, organic fair trade coffee is served on board Viking Line's vessels. Löfbergs Lila is the producer of this new kind of coffee. It is grown in compliance with the European Union's organic food standards, under which such practices as the use of artificial fertilizers and spraying with chemical pesticides are prohibited.

