

We are dedicated to sustainable transport options and we are continuously developing our way of working.





Environment and safety

To contribute to combatting the global warming, the International Maritime Organization, IMO, has set an ambitious target for future carbon dioxide emissions. The target is to reduce CO₂ emissions from shipping by at least 50% by 2050 compared to 2008 regardless of growth in maritime trade. Knowing that technical and operational energy efficiency measures are necessary, the shipping industry has discussed short-, medium- and long-term candidate measures to reach the target.

Finnlines has been on the right path as the Company's fleet has cut its CO₂ emissions by around 30% compared to 2008.

In 2019, Finnlines' vessel traffic consumed 325,647 tons of heavy fuel oil and diesel oil, representing a decrease of nearly 3% compared with 2018.

Investments in sustainability

Finnlines continues to invest in energy efficiency and sustainability when new vessels are designed and built. On the future ro-ro and ro-pax vessels, technical

innovations include an air lubrication system, which will reduce friction and hydrodynamic resistance and, consequently, reduce fuel consumption and emissions. By installing a high-powered battery bank as well as preparing the vessels for shore-side electricity, Finnlines is well heading towards its target of reaching zero emissions in port. This does not only tackle the air pollutant emissions issue but also eliminates noise pollution which will be welcomed by Finnlines' stakeholders.

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Environment and safety (continued)

On the new ro-pax vessels, light management and ventilation will be designed to enhance energy efficiency even in changing conditions. Moreover, two-speed reduction gears will improve propulsion efficiency.

Other atmospheric emissions

Finnlines operates mainly in the Emission Control Areas, i.e. the Baltic Sea, the North Sea and the English Channel, where the sulphur content limit for ship fuel oil is 0.10% in accordance with the MARPOL Convention (The International Convention for the Prevention of Pollution from Ships). Globally, the sulphur limit decreased to 0.5% on 1 January 2020. Finnlines has been well prepared to comply with the regulation as nearly all our ships are fitted with sulphur emission abatement technology.

The North Sea and the Baltic Sea will constitute a nitrogen oxide (NOx) Emission Control Area (NECA) starting on 1 January 2021. The NOx limit will apply to vessels con-

structed (i.e. keel laying) after 1 January 2021 and NOx emissions will reduce by 80% compared with the present level.

Safety and security

The land-based ship management organisation and all the ships are certified in accordance with the ISM Code (International Management Code for the Safe Operation of Ships and for Pollution Prevention). All ships and port facilities also comply with the requirements of the ISPS Code (International Ship and Port Facility Security Code).

The ships are regularly inspected and audited by the maritime administration, classification societies and by in-house auditors. Regular drills are held both internally and with authorities, such as the coast guard, border guard and local city rescue departments.

In ports, stevedoring companies have safety systems, including communication and contingency plans in case of an accident. Ports are equipped to respond to fires and oil and chemical spills.

We take safety issues into consideration in all our operations.

Environmental certification

The environmental management system, which complies with the ISO 14001:2015 standard, is audited annually in the office and onboard ships. Certification covers management and manning of all ships in Finnlines' trade as well as purchasing, newbuildings and projects and cargo and ship operations.

Stakeholders

In environmental and safety matters, Finnlines' most important stakeholders are the flag and port state administration, owners, customers, port operators, classification society and contractors, as well as the inhabitants of harbour and fairway areas.

Finnlines is represented at the technical, safety and environmental committees under the Swedish and Finnish Shipowners' Associations and co-operates with maritime colleges and research centres. The Company is an associated organisation in the EU flagship project COMPLETE (Completing management options in the Baltic Sea Region to reduce risk of invasive alien species introduction by shipping).

Finnlines has also been involved in the real time algal monitoring project, Alg@line, on its Finland–Germany route for over 20 years, providing vessels for research purposes. In 2019, the instrumentation was renewed and the ro-pax ship MS Finnmaid hosts a comprehensive trace gas measurement system.

Legislation

IMO manages international legislation on safety and environmental matters. The MARPOL 73/78 Convention contains regulations on the disposal of waste and sewage into the sea, and on the prevention of air emissions. The SOLAS Convention regulates maritime safety and security matters, including ship construction, life-saving arrangements and navigation. Port operations comply with national and international legislation.

Two similar, although separate, regimes have been introduced to reduce the carbon footprint from shipping. In Europe, the EU regulation on the monitoring, reporting and verification of CO₂ emissions became fully effective in 2018. Ship owners and operators are required to report on fuel consumption and subsequent CO₂ emissions and transport work to the European Commission. Globally, IMO's Data Collection System started in 2019 and the first reports will be submitted during the spring of 2020.

To ensure safe and environmentally sound recycling of ships, a Hong Kong Convention has been adopted within IMO, but the Convention has not yet entered into force. This is why the EU has adopted a regulation on ship recycling and inventory of hazardous materials. Finnlines has made a contract to have the inventories made by hazardous material experts during 2020.

Ballast water management

Ballast water is used to trim and stabilise ships, but it may carry harmful aquatic species and out-compete native species, disrupting fragile marine ecosystems. Exchange of ballast water has been mandatory after the entry-into-force of the IMO Ballast Water Management Convention in 2017 if no treatment equipment has been installed. However, the Baltic Sea is an exception as it does not meet the requirement of distance from shore or depth of water. All ships must be fitted with treatment equipment during a transitional period, and Finnlines has installed its first equipment on a ro-pax ship in December 2019.

Other environmental aspects

Oily waste water, 'bilge water', is generated in engine rooms. Bilge water is separated in separators and the remaining sludge is always taken ashore. The limit for the oil content of water that may be discharged into the sea is 15 ppm but many of our ships have more efficient separators. Some bilge water is also pumped ashore.

MARPOL contains restrictions concerning black water, i.e. toilet water. Finnlines' ro-pax vessels land both black and grey water to onshore municipal sewage systems. Cargo ships are equipped with sewage treatment plants.

Finnlines co-operates with waste management companies to recycle waste in an efficient manner and waste is re-processed into material or recovered as energy. The main recyclable waste types generated on board include plastics, bio waste, glass, paper, cardboard, wood, and metal. Hazardous waste is separated and taken to a designated container in the port.

Chemicals and detergents may damage our health and the environment. In 2019, a new company-wide standard for chemicals was prepared and user instructions were updated to eliminate any hazards.

Environmental aspects in port operations

Finnsteve companies focus on enhancing energy savings and on reducing air emissions and waste generation in processes, in storage operations and maintenance of machines and properties. In 2019, energy audits, which comply with the Energy Efficiency Directive and Act, were made by external consultants to assess the existing energy saving potential. Finnsteve companies hold a valid ISO 14 001 environmental certificate and an ISO 9001 quality certificate.

In 2019, the fuel consumption of the port operations totalled 1,041 tons, which includes the operations in Helsinki, Turku and Naantali. The increase of 4.5% is due to growing cargo volumes.