Environment

Stolt-Nielsen focuses on minimising the impact our operations have on the environment. We also understand that our shareholders, customers, business partners, employees and the communities in which we operate expect us to show our commitment to protecting our planet.

Indicator	Stolt Tankers	Stolthaven Terminals[1]	Stolt Tank Containers[2,3]
GHG emissions Scope 1	-0.2% ↓ (2024: 1,604,097 MT[4]) (2023: 1,607,205 MT[4])	14.4% ↑ (2024: 34,933 MT) (2023: 30,541 MT)	-0.8% ↓ (2024: 7,704 MT) (2023: 7,766 MT[5])
GHG emissions Scope 2	3.9% ↑ (2024: 251,687 MT) (2023: 242,326 MT)	-33.5% ↓ (2024: 6,861 MT) (2023: 10,321 MT)	11.1% ↑ (2024: 1,606 MT[6]) (2023: 1,446 MT[6])
GHG emissions Scope 3	29.8% ↑ (2024: 33,520 MT[7]) (2023: 25,822 MT[7])	–	19.7% ↑ (2024: 373,589 MT[8]) (2023: 312,180 MT[8])
GHG emission intensity (AER)[9]	-4.4% ↓ (2024: 10.26) (2023: 10.73)	–	–
Sulphur oxide emissions	0.0% ↔ (2024: 2,079 MT) (2023: 2,078 MT)	–	–
Nitrogen oxide emissions	-12.0% ↓ (2024: 40,680 MT) (2023: 46,244 MT)	–	–

Performance key

↑ Increase from prior year ↓ Decrease from prior year ↔ No change from prior year

1. Includes wholly owned terminals only.
2. Includes wholly owned depots only.
3. Data is calculated using the EcoTransIT data measurement tool, which follows the internationally accepted GLEC framework and ISO 14083 calculation standards.
4. Including Scope 1 GHG emissions from Stolt Tankers' ships that are part of E&S Tankers' fleet. The total number of ships included in the calculation was 105 in 2023. For 2024, 101 ships are included for the full year, two ships for six months and one ship for nine months as ships left the fleet during the year.
5. Restated due to a miscalculation in the prior year.
6. STC Scope 2 figures includes emissions from purchased electricity.
7. Includes emissions as defined in categories 1, 2, 3, 4, 6, 7 and 9 of the GHG Protocol. Year-on-year increase driven by greater availability of data from the supply chain for categories 1 and 2.
8. Includes emissions from transporting tank containers by sea, road, river and rail covering Scope 3 category 4 as defined by the GHG Protocol.
9. Stolt Tankers uses the Annual Efficiency Ratio (AER) to measure the intensity of its carbon emissions. The AER measures carbon emissions relative to a ship's capacity and distance travelled.

Stolt Tankers

Sustainability ambitions

- Reduce Scope 1 carbon intensity by 50% (relative to 2008 levels) by 2030
- Reach net zero CO_2e emissions by 2050, in line with the IMO's target

Annual Efficiency Ratio (AER)[1]

Gramme CO_2 emitted per dwt of capacity and distance travelled

1. Includes Stolt Tankers' ships that are part of the E&S Tankers fleet, from 2021.

For 2024, two of the UN's Sustainable Development Goals (SDGs) remained central to Stolt Tankers' sustainability programmes: Climate Action and Life Below Water. These are the areas where we can have the greatest impact.

Stolt Tankers has a dedicated sustainability team that ensures environmental considerations are integrated into business processes and that we actively contribute to industry discussions and sustainability regulations and innovations.

We have specific working groups for several regulations – including the CSRD, the Carbon Intensity Index (CII), use of biofuel, and FuelEU. This ensures that we are prepared for our fleet to be compliant with all relevant environmental regulations.

Award winners

Stolt Tankers' efforts received positive recognition during the year. We received a Gold EcoVadis rating, which places us in the top 5% of all companies evaluated. We also retained our B- Carbon Disclosure Project (CDP) rating. Forty of our ships that called at US ports during the past three years were eligible for the US Coast Guard's QUALSHIP 21 certification, with three ships receiving additional E-Zero recognition for meeting specific environmental compliance standards. Additionally, 98 of our ships also received environmental excellence awards from the Chamber of Shipping of America.

Measuring emissions

Stolt Tankers' operations are the largest contributor to SNL's greenhouse gas emissions. Our ambition is to reduce our Scope 1 emissions by 50% by 2030 (compared to 2008 levels).

We have established processes for measuring Scope 1 emissions across the fleet, as well as Scope 2 emissions for our four largest offices in Houston, US; Singapore; Rotterdam, the Netherlands; and Manila, Philippines. This year, we expanded our capabilities for measuring carbon emissions using the Sea Cargo Charter framework to help customers better understand the environmental impact of their supply chains. Customers can now download their carbon emissions related to the services they buy from us via our customer portal.

The key indicator used for measuring our progress is the Annual Efficiency Ratio (AER). In 2008 our baseline AER was 15.68. AER calculates carbon intensity across the fleet in line with International Maritime Organization (IMO) and shipping industry reporting. Our AER for 2024 was 10.26, a 4.4% improvement over 2023 and a 34.6% improvement over the 2008 baseline. Our data is verified by the world's leading maritime classification society, DNV, via its online Veracity platform, and covers 100% of our fleet's voyages.

Scope 2 emissions, which arise as an indirect result of our activities, increased 3.9%. Scope 3 emissions also increased as availability of data from across our supply chain improved.

We continued our efforts to reduce Scope 1 emissions through the deployment of innovative energy-efficient technologies, use of biofuels and optimising voyages. For example, during 2024 we used more than 13,000 tonnes of waste-based biodiesel on ships travelling between Europe and the US, lowering CO_2 emissions on these voyages by 32,000 tonnes. However, despite energy-efficiency measures, use of biofuels and a reduction in fleet numbers, total Scope 1 emissions were in line with 2023 as transit difficulties around the Red Sea significantly increased the distance of some voyages.

Sustainability continued

Environment

The EU has introduced several new initiatives to further reduce carbon emissions from shipping. We have successfully implemented the Emissions Trading Scheme (ETS) and FuelEU Maritime Regulation for all our ships trading within the EU.

Pioneers and innovators

We are pioneering the use of graphene coatings on propellers to enhance their performance and reduce fouling buildup. This improves fuel efficiency and protects wildlife from noise pollution related to our ships. In 2024 we coated 26 propellers, bringing the total across our fleet to 55. In February 2024, we ordered six stainless steel parcel tankers through our joint venture with NYK Line. These are designed to maximise fuel efficiency by using modern engine design, hull form optimisation, a wide range of energy-saving devices, and shore power connection. The added benefit is that they can also be converted for future methanol propulsion.

Protecting marine biodiversity

We have a responsibility to protect the biodiversity of the wider marine ecosystem. Stolt Tankers follows Ballast Water Convention D-2 requirements, which dictate the maximum levels of viable organisms allowed to be discharged into the ocean. In addition, we have fitted ten ships with In-Transit Cleaning of Hull (ITCH) units, bringing the total number of ships in service with such devices to 22. The ITCH device cleans micro-fouling from the body of the hull, reducing marine growth build-up, improving fuel efficiency and protecting biodiversity.

Wastewater

We continued to work with Stolthaven Terminals in Houston, US, to treat wastewater at shoreside. In 2024, 5,762m^3 of tank wash water was voluntarily directed to our onsite wastewater treatment plant, rather than being disposed of at sea. In addition, initial layby tank cleaning saved 159 tonnes of fuel as the number of times ships sailed out of port was reduced (compared with 11,046m^3 of tank wash water and 413 tonnes of fuel saved in 2023).

Waste management

All waste from ships – including hazardous waste – is disposed of in line with the International Convention for the Prevention of Pollution from Ships (MARPOL). During 2024, no waste was sent to landfill from Stolt Tankers' shipping operations. Waste from our ships was 4,712m^3 (2023: 4,367m^3), and was managed through a combination of recycling, co-processing and incineration. We are working to end single-use plastic water bottles onboard by improving potable water facilities on our ships.

Regrettably, we had one significant spill during the year resulting in the release of ten litres of fuel overboard.

When recycling ships, Stolt Tankers only selects yards that work in accordance with the International Maritime Organization's (IMO) 2009 Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships (HKC), which will come into full force on June 26, 2025. Stolt Tankers has a director on the Board of ITOPF, an organisation that specialises in preparedness for, and response to, accidental marine spills.

We are also a founding member of the Ship Recycling Transparency Initiative, an online platform reporting ship recycling practices against a set of predefined criteria. When our ships arrive for recycling, an accredited auditor verifies that each ship has been properly prepared, including an assessment of any hazardous materials, before issuing a Ready to Recycle certificate. No ships were sold for recycling in 2024.

Giving back

In 2024, Stolt Tankers and its partners NYK Line, CMB Tech, Tufton, and Farvatn Capital donated a total of $110,000 to three non-profit organisations, covering three environmental projects focused on carbon sequestration (capture and storage), promoting biodiversity and developing marine ecosystems.

Our team in Manila, the Philippines planted a total of 1,900 mangrove saplings, which not only help absorb carbon from the atmosphere but also act as a natural barrier against coastal erosion, storms and tsunamis.

Details of our community projects can be found at: stolt-nielsen.com/news-insights/.

Industry collaboration

We are actively involved in shaping policy on maritime sustainability, where possible, through our continuing membership of industry bodies such as InterTanko and ITOPF. We also joined the Global Maritime Forum this year.

We continue to support the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping through its secondee programme, where Stolt Tankers colleagues join cross-industry project teams to explore innovations in this space.

Stolthaven Terminals

Sustainability ambitions

- Reduce Scope 1 and 2 carbon intensity by 50% relative to 2018 baseline by 2030
- Reach net zero CO_2e emissions by 2050

Stolthaven Terminals is committed to reducing its environmental footprint across all operations and creating a sustainable organisation. Our global sustainability team includes one representative at each of our wholly owned terminals responsible for driving and measuring initiatives.

During 2024, our Scope 1 emissions increased 14% to 34,933 MT (2023: 30,541 MT) mainly due to the need to store and handle more products that require heating and/or vapour treatment. We were pleased to see our Scope 2 emissions fall significantly to 6,861 MT (2023: 10,321 MT), reflecting our ongoing efforts to source electricity from renewable sources.

Award winners

Stolthaven Terminals' sustainability performance was awarded EcoVadis Gold status in 2024, moving from a Silver rating the previous year. We improved our overall score by ten points, with increases in all areas: environment, labour and human rights, ethics, and sustainable procurement. We are ranked in the top 1% for sustainability performance in the warehousing and storage industry. Additionally, our terminals in Moerdijk, the Netherlands, Dagenham, UK and our joint venture in Lingang, China hold International Sustainability and Carbon Certification (ISCC), a globally recognised standard in the biofuels and energy industry.

Investing in emissions reduction

Stolthaven Terminals' carbon emissions are relatively low, yet we continued our ongoing reduction initiatives as part of our commitment to climate action. Our decarbonisation strategy is focused on supporting the energy transition, investing in innovative technology and enabling our terminals to develop their own decarbonisation journeys. Six of our terminals buy electricity from renewable sources. This year, we continued our programme to install energy-efficient LED lighting across all sites and to improve energy efficiency at our terminals by regularly reviewing and replacing equipment with more efficient solutions.

Some products stored at our terminals can emit vapours, so we use several techniques to prevent these from entering the atmosphere, including vapour recovery systems, scrubbers, flares, internal floating roofs and nitrogen blankets. New tank designs feature higher design pressure, which further reduces emissions as more vapour is kept in the tank. At our new joint venture terminal in Taiwan, all tanks are fitted with rooftop condensers to minimise volatile organic compounds (VOCs).

Supporting customers' sustainability ambitions

We are actively involved in providing solutions and evaluating potential projects linked to the green energy transition, through which we can improve our energy footprint and support customers to do the same. We are developing a carbon mapping tool that will allow us to provide visibility to customers on emissions and environmental impact related to the storage of their products.

We are positioning ourselves to provide storage solutions for hydrogen, ammonia and green methanol, including jetty access for bunkering, export, import and transportation. These low- and zero-carbon new energies have a critical role to play as the shipping, storage and logistics industries move from traditional petroleum-based marine fuels to greener alternatives.

Green ammonia is being widely explored as a possibility for decarbonising the shipping industry and reducing greenhouse gas emissions in power and heat generation. It has good potential as a hydrogen carrier over long distances because it is easily liquefied and has a higher hydrogen density compared to other low-carbon hydrogen carriers.

During 2024 Stolthaven Terminals, in cooperation with Global Energy Storage (GES), was selected to design, build and operate a green ammonia terminal in Pecém, in the State of Ceará, Brazil. We are also developing a pilot-scale flow battery at our Houston, US terminal. These projects are subject to final Board approval.

Sustainability continued

Environment

In the UK, we are partnering with cooking oil supplier and collector Olleco, to process used cooking oil (UCO) collected from restaurants and food production sites. Construction has started on a state-of-the-art UCO processing plant at our Dagenham terminal. The product will then be transferred to our storage tanks before it is converted into renewable, low-carbon biodiesel fuel.

As biofuel production increases and demand for these feedstocks grows, Stolthaven Terminals is supporting the supply chain by providing local transportation, aggregation, storage, product pre-treatment and bulk shipments to our customers' refineries for biofuel production. And, by working with our sister companies, Stolt Tankers and Stolt Tank Containers, we can provide integrated end-to-end solutions that deliver further efficiencies to our business and to our customers.

Caring for the local environment

Outside of our day-to-day operations, our people are engaged in efforts to support local communities and organisations to reduce and remove waste in the environments surrounding our facilities. For example, our Dagenham terminal in the UK diverts all non-hazardous waste away from landfill, and our joint venture terminal in Westport, Malaysia collects waste which is reused by local third parties.

Stolt Tank Containers

Sustainability ambitions

- Reduce Scope 1 and 2 carbon intensity at wholly owned depots by 50% relative to 2020 baseline by 2030
- Reach net zero CO_2e emissions by 2050

Stolt Tank Containers (STC) is reducing greenhouse gas (GHG) emissions across its operations. This includes testing and implementing new systems, exploring more sustainable fuels and modes of transport, and partnering with customers and external stakeholders to reduce emissions.

We continue to progress our *Moving Towards a Sustainable Future* programme, which focuses on two UN Sustainable Development Goals: Responsible Consumption and Production and Climate Action.

We use the GHG Protocol, the Global Logistics Emissions Council (GLEC) framework and the ISO 14083 standard (formerly EN16258), for calculating and declaring energy consumption and GHG emissions.

Customer emissions

Transporting our customers' products is by far the largest contributor to our emissions. STC measures the intensity of its Scope 3 emissions in terms of CO_2e emitted per tonne and kilometre (g CO_2e/tkm) transported. Although overall Scope 3 emissions increased in 2024 due to an increase in the number of shipments, emissions intensity fell from 9.0g CO_2e/tkm in 2023 to 8.85g CO_2e/tkm as customers moved to more sustainable transport options.

To support customers to reduce their Scope 3 emissions while transporting products, we have developed an emissions reporting tool that allows customers to monitor the carbon footprint of their shipment and identify more sustainable transportation options. For the emissions calculations we use the EcoTransIT tool, which is GLEC accredited and ISO 14083 compliant.

Own operations emissions

During 2024, we continued to improve our measuring and reporting capabilities for energy, waste management and Scope 1 and 2 emissions at our wholly owned depots using BearingPoint's emissions calculator. Our internal 'emissions dashboard' helps us to find areas where we can further reduce our impact on the environment. Our Scope 1 emissions decreased 1%, mainly as a result of a decrease in the number of tanks heated. Scope 2 emissions increased due to an increase in the number of tanks cleaned and repaired within our own depots year on year.

We renewed our membership of Smart Freight Centre (SFC) and are taking part in the Clean Cargo Working Group, which aims to reduce the environmental impact of global goods transportation and promotes responsible shipping. We have used SFC guidelines to include sustainability requirements in our ocean freight and trucking tenders. We also participate in the GLEC working group.

Where possible, we use renewable energy and biofuels across our operations. At our wholly owned depots in Kaoshung, Taiwan and Mumbai, India we have installed solar panels. In Moerdijk, the Netherlands, we are using wind energy electricity and biodiesel. At Grangemouth, UK, 100% of the energy is sustainable, supplementing the biodiesels already in use. Our Singapore depot switched from diesel to natural gas in 2023 and our depot in Houston, US buys renewable energy certificates (RECs), allowing us to track the wind power we buy.

Sustainability continued

Environment

Maintenance and recycling

We constantly improve our maintenance and repair processes to ensure tank containers can be used safely and sustainably over many years. Unlike flexibags, which are discarded after each shipment, the average lifespan of our tank containers is around 20 years and at the end of their life we recycle more than 90% of the materials. In comparison, on average, each flexibag is the equivalent of 7,500 single-use plastic carrier bags going to landfill.

Waste and wastewater

We are constantly looking for ways to improve our cleaning processes at our depots to make them safer and more environmentally friendly.

The wastewater recycled in our wholly owned depots in Moerdijk, the Netherlands; Singapore; Tianjin and Zhangiagang, China; and Grangemouth, UK is reused for cleaning tanks. This is aligned to our ethos on responsible consumption and production.

Awards and certifications

In 2024, all our depot staff received training to raise awareness of our sustainability ambitions, and to connect these to local practices. STC achieved an EcoVadis Gold rating for 2024, placing us in the top 5% of companies in the supply chain industry for overall sustainability performance.

We also renewed our ISO 9001 Quality Management Systems, ISO 14001 Environmental Management Systems and ISO 45000 Occupational Health certifications for our global and our Chinese companies, and recertified Safety and Quality Assessment for Sustainability (SQAS) for our European tank cleaning sites.

Stolt Sea Farm

Sustainability ambitions

- Reduction of fish products in our ongrowing feed (relative to 2019 levels) by 2030: 65% reduction for sole and 50% reduction for turbot
- Reach net zero CO_2e emissions by 2050

At Stolt Sea Farm (SSF), sustainability is fundamental to our strategy and operations. Our business strategy is underpinned by a focus on taking special care of the environment and the communities in which we operate.

We have identified five UN Sustainable Development Goals (SDGs) to which we can contribute most: Responsible Consumption and Production, Climate Action and Life Below Water, aligned to SNL's priorities; plus Good Health and Wellbeing, and Sustainable Cities and Communities.

We made good progress towards our ambition to reduce fish products in our ongrowing feed. Since 2019 we have seen a 40% decrease in fish products in our feed for turbot and a 25% decrease for sole. We are working with external partners to significantly reduce the amount of fish required in our feed for sole.

Lower-impact food production

Seafood has one of the lowest carbon footprints of all animal-based protein sources. We seek to reduce emissions across our operations and supply chain.

SSF measures total energy and fuel consumption, and we closely monitor and manage the use of these resources. During 2024, energy consumption at SSF's operations was 57,515 MWh (2023: 56,363 MWh) driven by increased volume, however we are driving efficiency, as energy consumption per kilogramme of fish produced reduced to 6.82 kWh (2023: 6.95 kWh).

We are also contributing whole lifecycle data for turbot to an initiative in Spain to monitor the carbon footprint of key species produced in the country. The aim is to educate the value chain and consumers about the carbon footprint of aquaculture fish produced in Spain.

This year, to support reducing waste to landfill, we opened a Valorisation Room at our farm in Lira, Spain, as part of our participation in the European LIFE REFISH project which aims to reduce waste and optimise the use of by-products and co-products from aquaculture activity.

Fish welfare and responsible farming

In line with our commitment to the UN SDG of Responsible Consumption and Production, SSF focuses on responsible farming and transparency. We closely manage and monitor fish welfare, submitting our production processes to rigorous external and internal controls. This year, the fish welfare team and other core operational teams received tailored training in fish behaviour and the use of welfare indicators.

SSF is contributing to the development of good practice guides for fish welfare with the Aquaculture Business Association of Spain (APROMAR). Several guides have already been published, including a generic guide and specific ones for sea bass, sea bream and trout. In 2025 we will contribute to the guide for turbot.

Food safety

As a responsible producer of high-quality seafood, we have a strong commitment to food safety. This year, we renewed GLOBALG.A.P. certifications for all operations and International Featured Standards (IFS) and Specific Self-inspection Systems food safety certifications at our processing plant in Lira, Spain. We shared our experience in the safe production of seafood at an international seminar hosted by GLOBALG.A.P. at the Seafood Expo Global in Barcelona, Spain.

We also renewed our ISO 9001 and 14001 certifications, for Quality Management and Environmental Management, respectively.

Sustainability continued

Environment

During 2024, SSF received a globally recognised sustainability certification from the Aquaculture Stewardship Council (ASC). This recognises the need to promote responsible fish farming that respects fish, people and the planet. Its standards for farms and seafood production are developed and continually reviewed in partnership with NGOs, academics, farmers, retailers and aquaculture experts.

This year we held an unannounced food safety incident simulation to replicate real-life conditions. The exercise was designed to challenge members of our crisis response team to take appropriate action to manage a serious incident. We shared learnings from this exercise so that we are well prepared for any future incidents.

Engaging with local communities

In 2024, we continued our support of local organisations to build stronger relationships with our communities. We contributed to several education projects in partnership with a local school in Tocha, Portugal, raising awareness of environmental issues and of the importance of preserving and promoting traditional fishing activities.