

TOWARGS Strategy of

Zero

Strategy of Danish Shipping 2022-24



Towards zero

Every five minutes, a Danish-operated ship calls at a port somewhere in the world and contributes to connecting markets and keeping world trade flowing. Moreover, a significant part of the Danish-operated fleet plays a key role in making the green transition happen through its contribution to the development of new energy sources. This by being part of the building and servicing of offshore wind parks all over the world and by actively developing solutions for capturing CO2. Methods include CCTS (carbon capture, transport, and storage) and CCTU (carbon capture, transport, and utilisation), which can be used for developing new green fuels and removing CO2 from the atmosphere.

This is our business. But we are much more than that. We have an ambition - and an obligation - to push for new green transition of our industry as well as to pull by creating a demand for new green fuels and to work hard for a sustainable and green future. That would empower us to tackle the biggest global challenge of our generation - climate change.

Due to the size of Danish shipping, we make a significant positive contribution and impact in Denmark, Europe, and worldwide. So far, we have integrated more people into international trade, thereby contributing to lifting millions of people out of poverty and securing the world's supply of food, medicine, environmental technologies, trainers, iPads, IT equipment, energy products, bulk cargo in the form of raw materials, etc. Whether it is the United Nations' Sustainable Development Goals shipping has an impact on, or we contribute to keeping the supply chains working smoothly, we are aware of our carbon footprint.



The Danish shipping industry touches upon all 17 UN Sustainable Development Goals, but has the highest impact on these four goals.

This requires action, and the transition has started.

For Danish shipping companies - whether they operate container ships, tankers, ferries, rigs, or offshore vessels - the green transition requires massive investments, new skills, technology, and energy infrastructure. It will be challenging and at the same time provide new business opportunities.

To succeed, we need the right framework conditions and know-how, as well as the courage and ability to look ahead. Fortunately, Denmark has a strong track record in providing competitive framework conditions, while cutting-edge maritime expertise enables Danish shipping companies to remain competitive in an ever-changing world. These elements are the backbone of Danish global leadership within shipping.

Danish Shipping aims to use this strategy to secure our members' global competitive position and increase our focus significantly on achieving substantial and sustainable reductions in global greenhouse gas emissions. We strive to show how shipping can be transformed into a zero-emissions industry while sustaining international trade.

We have set the course towards a greener future. The time has come for a little less conversation and a whole lot more action.

In 2020 Danish Shipping made a commitment towards zero emissions by 2050. The time has come to accelerate this transition.

Purpose

Our purpose with this strategy is to:

"Accelerate the global transition of shipping towards zero emissions"

Accelerate means that we want to be the frontrunner in setting new ambitious targets for the global shipping industry, working for international binding regulations, and contributing to finding the practical solutions that will bring the emissions from global shipping into line with the Paris Agreement.

Global means that the world is our workplace; 95% of our activities are outside Denmark and 75% are outside the EU. We are, therefore, working for ambitious regulations that can provide a global level playing field and a global solution to tackle climate change.

We have set the ambition of Danish shipping to be climate neutral by 2050 without use of compensation.

This means that we need to have a significant number of net zero-emission Danish-operated ships on the water before 2030.

Transition entails facing a shift in line with the change from coal- to diesel-powered vessels some 100 years ago. This decade will be decisive and cooperation between scientists, energy suppliers, engine manufacturers, investors, cargo owners, shipowners, and legislators are key. We want to continue building strong alliances and seeking new types of partners and coalitions of the willing; ones who share our commitment to move the industry towards a green energy transition across all segments.

Shipping indicates that we are looking at every segment, from large container ships to passenger ferries, offshore service vessels and rigs. And the ambition will also involve shippers, investors, operators, etc.

Towards zero emissions means we have set the ambition of Danish shipping to be climate neutral by 2050 without use of compensation. The road towards net zero emissions by 2050 entails that:

- → By 2030, at least 5% of the Danish-operated fleet will be capable of running on well-to-wake net zero-emission fuels such as green hydrogen, green ammonia, green methanol, and advanced biofuels.
- → All newbuildings ordered by Danish shipowners from 2030 are to be made ready for net zeroemission fuels or other zero-emission means of propulsion.

This means that we need to have a significant number of net zero-emission Danish-operated ships on the water before 2030.

Our purpose with this strategy sets our commitments for the medium- and long-term future - specifically for 2030 and 2050 - and will be guiding our activities going forward. This strategy will set out targets that in the short term - specifically within the next three years - will bring us closer to realising our ambitions. In other words, this strategy should provide the next steppingstones for moving towards zero. Our short-term targets will be presented below.

Three strategic focus areas

- **1. Green shipping green energy** is a key focus point of the strategy. Despite its transforming nature, it cannot stand alone. We will also focus our resources on maintaining and building a strong Competence hub and on Providing solutions Solving problems for our members.
- **2. Competence hub** is about strengthening the role of Denmark as a hub for global cutting-edge competences in green and commercially viable shipping.
- **3. Providing solutions Solving problems** is about Danish Shipping's work to solve the challenges our members face in their daily business and securing competitive frameworks.

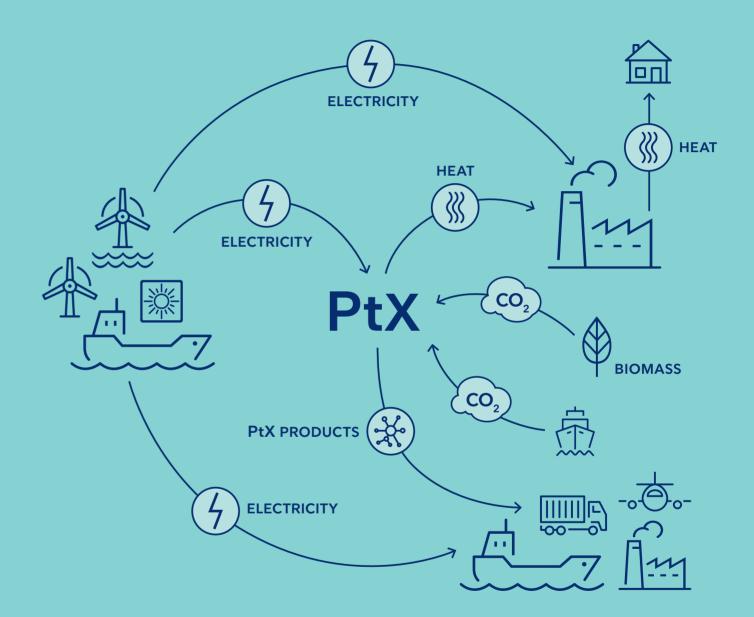
Across the three focus areas of our work, we want to ensure that Danish shipping is perceived as value-creating and contributing to society, and as part of the solution to the climate challenge. To that end, we will show the value creation and societal impact of the shipping and offshore business and we will increase our efforts and capability to set the national, European, and global agenda - and not just respond to it.

1. Green shipping - green energy

The greatest challenge for shipping in the years to come is addressing our role in curbing climate change. The climate agenda has the power to turn our industry upside down, to change traditional business models, and to determine the future legitimacy of the shipping industry as the backbone of world trade. At the same time, new opportunities arise following society's general energy transition. Green energy from offshore wind farms has been a success story in Denmark and the establishment of energy islands with PtX production has gained renewed focus at both national and European level. As such, the Danish shipping sector is actively engaged in offshore wind, the development of transport and storage solutions of captured carbon, as well as utilisation of CO2 in PtX over time.

We want to accelerate the global transition of the industry towards climate neutral shipping and find ways to overcome the relevant regulatory, financial, and political barriers to achieving this goal.

All these challenges need to be addressed in parallel by making Danish shipping more efficient by using known technologies, while paving the way towards net zero-emission shipping by introducing and scaling new green fuels and zero-emission propulsion.



Source: Partly Danish Energy and partly Danish Shipping.

We will be the frontrunner in working for a timely and ambitious regulation that can drive global GHG reductions to achieve our goal of being carbon neutral by 2050 with several net zero-emission ships on the water before 2030. This is not going to be easy, but demand from consumers, investors, cargo owners, and civil society will help pave the way.

Denmark can utilize and build on existing strong competences in shipping and offshore energy to become a global leader in the transport and storage of CO2 for storage and utilisation. The Danish shipping sector wants to be a key driver of this journey.

Finally, the proliferation of offshore wind as an energy technology will be immense in the years to come. We want to continue to support and further develop the global presence of Danish world class competences within this sector. This means working on market access, common and high standards, and promotion of the specific Danish maritime competences in offshore wind abroad.



















Targets:

New ambitious reduction targets towards 2050 in the final GHG strategy in 2023. The new targets should be founded on science and be in line with the Paris Agreement.

Increasing Danish shipowners' contribution to global offshore wind capacity and carbon capture projects.¹

To achieve these targets, we must:

- → Ensure order in our own house. We must strengthen the transparent emissions reporting from our members as well as the associated analysis. And work to influence international standards and reporting schemes, building on transparency across all segments.
- → Push for more ambitious IMO targets accompanied by robust regulation. We will set the agenda by providing relevant analysis and continuing work to get the IMO's Data Collection System to include the actual transport work and evaluate ships' efficiency on this basis.
- → **Deliver tangible marks** on European regulation, including 'Fit for 55' initiatives which could also serve as vehicles for progress at IMO level.
- → **Advise and strengthen members** in navigating and positioning themselves, as well as supporting them in the increased level of reporting in relation to the overall climate agenda.
- → **Support Danish shipowners** in unleashing the potential of offshore wind and CCTS/CCTU.
- → **Form new alliances.** If we want to accelerate change, we must engage with other partners and make alliances with the energy sector, ports, investors, cargo owners, energy suppliers, and other stakeholders.
- → **Engage in Mission Innovation.** We must strengthen our engagement in the Mission Innovation led by Denmark, the USA, and Norway to facilitate the first zero-emission ships. Close cooperation with the Danish Maritime Authority will be key, not least to have the first zero-emission ships flying the Danish flag.

Measured by operated fleet.

2. Competence Hub

Shipping is an extremely competitive business with a high degree of specialisation and an increasing demand for skilled people and new competences - competences that include a green transitional mind-set. Denmark is a strong hub for maritime and innovative skills. We will work to strengthen Denmark's position as an education centre of excellence in green mindsets and in digital and analytical skills at the required level to take on the climate agenda at sea and onshore.

Danish Shipping will build on the Danish educational heritage to create an innovative and talented future workforce by collaborating with the maritime education sector. Danish shipping will increase our offers of internships at sea, acknowledging our responsibility to maintain and secure a future supply chain of Danish maritime competences.

We will strive to ensure the right competences that underpin growth of our members' present and future business in all areas of the sector from deep sea shipping to offshore wind.

We will work to create attractive career opportunities at sea and ashore and to increase opportunities to develop lifelong careers in shipping.

Internship guarantee was

350 interns
annually in the 2018-21 strategy

In Towards Zero 2022-24 it is
400 interns annually

10

Targets:

Maintain and develop a strong supply chain of competences to the shipping industry.

Guarantee and deliver at least 400 internships at sea a year to cater for growth in the Danish fleet, including the offshore sector.

To achieve these targets, we must deliver:

- → **A strong brand and image**. Ensure that shipping's brand and image are attractive to ensure recruitment and retention.
- → Maritime skills. Ensure that Danish maritime skills are competitive and meet the sector's skills needs, with a green and offshore-related mindset in the future by supporting the maritime schools and universities in developing and updating their educational programmes to include green skills, digitalization, and analysis strategies.
- → **Fleet competences.** Our aim is to employ at least 7,500 Danish seafarers at the end of the strategy period. Approximately the same level as before the coronavirus pandemic.
- → **Maritime Courses.** Promote the shipping industry among universities and schools especially in the Science, Technology, Engineering and Mathematics (STEM) area specifically also through dedicated maritime courses.
- → Commercial skills. Focus on getting enough young people admitted onto the Copenhagen Business School's Shipping & Trade course and on student completion opportunities. A further focus will be on including content that will provide skills related to the transition of shipping. We will continuously evolve the educational programme at Danish Shipping Education and strive to train 40 shipping trainees a year. We will work to provide education tracks for people trained in the shipping industry.
- → **A drive on diversity.** Sharpen our focus on driving diversity in the shipping industry.







3. Providing solutions - Solving problems

A shipping company or a group of companies may encounter specific challenges that require timely dialogue with Danish, European, and international public authorities, and decision makers. The challenges may have many faces: Piracy, people rescued at sea, pandemics, trade barriers, employment conditions, crew related matters, protectionism, and more. Some of the problems are unique while others keep coming back. This requires a commitment from the secretariat to ensure further flexibility and agility in our efforts to be at the forefront of solving these problems and constantly prioritising help for our members.

A competitive business environment for shipping head offices and the merchant fleet is a prerequisite for achieving our long-term ambitions. Without commercially and financially strong companies, we cannot influence the global shipping industry in a green and sustainable direction, and we cannot maintain the high value employment and export activity. It is therefore crucial to constantly secure competitive framework conditions and develop the maritime framework.

The attention from decision makers on the shipping industry's challenges cannot be taken for granted, so an ongoing effort is needed to keep shipping issues relevant and, on the radar, both nationally and internationally.

Targets:

Securing competitive framework conditions and support continued growth of the Danish merchant fleet and shipping industry.

Solve our members' day-to-day problems.

To achieve these targets, we must:

- → **Practice individual troubleshooting**. Constantly dedicate resources to help members with their unique problems. Examples are flag state approvals of ships, market access issues, COVID-19 travel restrictions, piracy, acknowledgement of seafarers as key workers, tax issues, as well as help highlighting agendas in the media and handling negative media coverage.
- → Adjust our services to new business models in the shipping industry. We will ensure new ways of delivering services to our members to maintain and strengthen our position as a strong maritime nation.

- → **Take concrete action on recurring problems.** When a problem keeps coming back, we will assess how we can work towards a long-term solution. The assessment will be followed by a concrete action plan.
- → **Set the agenda.** We will strive to be more agenda-setting nationally and internationally in our work to ensure that we tackle members' issues more proactively.
- → **Keep and develop our member-focused culture.** We want to strengthen our member-focused culture by engaging in an ongoing dialogue with our members about their current situation, problems, needs and business ambitions/opportunities.

Realised growth for the Danish Flagged Merchant Fleet 2021-2022



Vessels with Danish flag include all merchant vessels flying the Danish flag independently of membership of Danish Shipping.

Strategic goal set for end 2021: 10% increase in number of Danish-flagged vessels and 10% increase in gross tonnage for Danish-flagged vessels.

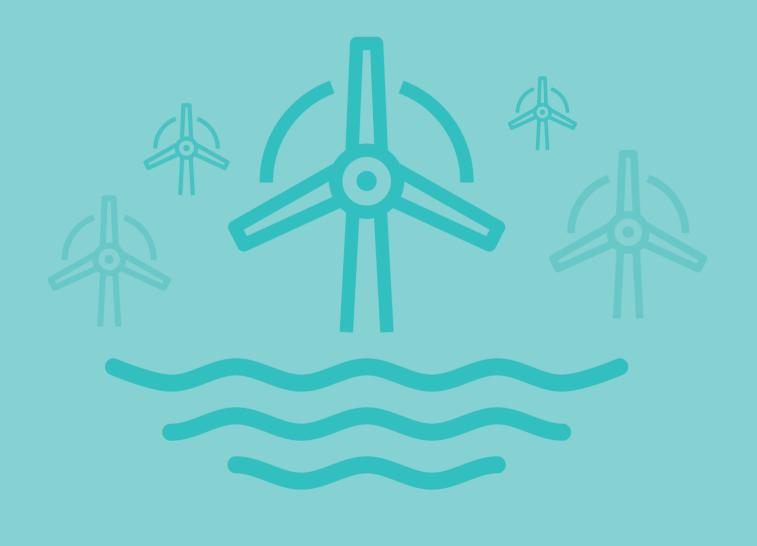
Realised growth for the Danish Operated Merchant Fleet 2021-2022



Vessels operated from Denmark include all merchant vessels operated from Denmark independently of membership of Danish Shipping.

Source: Seaweb

"Accelerate the global transition of shipping towards zero emissions"







Danish Shipping Amaliegade 33 DK-1256 Copenhagen K T: +45 3311 4088 www.danishshipping.dk