

How the Nordic experience can help Europe transition to zero-emission shipping

Event Report

May 2022

Summary

To understand the role of Nordic cooperation and the EU's Fit-for-55 package in decarbonising maritime transport, the Mission of Norway to the EU and the European Federation for Transport & Environment (T&E) organised a dedicated seminar on Thursday, 17th March in Brussels. The event was sponsored by the Nordic Council of Ministers. The event took place in hybrid format with around 50 audience members attending in person at Norway House, accompanied virtually by around two hundred others. The moderator of the Event was Aoife O'Leary of Opportunity Green.

The event was opened by **Rolf Einar Fife, Norwegian Ambassador to the EU**. Mr Fife welcomed audience members, before handing the floor to **Espen Barth Eide, Norwegian Minister of Climate and Environment**, for the first part of the event, looking at how Nordic governments promote green shipping.

Mr Barth Eide stressed the important position that the maritime sector occupied in Norway. Mr Barth Eide noted that, since 2018, Norway has increased its number of electrical ferries from 1 to 80. Ferries are prevalent in Nordic countries and they have important advantages when it comes to electrification: we know both their departing and arrival port; enabling us to ensure that the correct infrastructure to power these ferries is present.

Mr Barth Eide emphasised that the Ukrainian geopolitical crisis should accelerate the phasing out of coal and gas, rather than slowing it down. If Europe does not have enough fossil fuels to substitute Russian gas, transitioning to sustainable energy altogether should be the preferred option. This, he said, was a case where Europe's security and climate agendas overlap.

Finally, Mr Barth Eide suggested that it was important to look at the total emissions of each fuel: not just what pollutants come out of the engine, but also fugitive emissions elsewhere in the supply chain, like during extraction, transport and storage. As industries show great interest in adopting greener solutions, the challenge for politicians is no longer to tell industries about an upcoming green transition, but rather to pave the way for clear, transparent and easily applicable regulations.



Next, **Terhi Lehtonen, State Secretary, Ministry of the Environment of Finland**, spoke about her nation's commitment to the Paris Agreement. At COP26 in Glasgow, Finland signed a declaration calling for the IMO to mandate a zero-emission shipping target by 2050.

Lehtonen stressed her country's support for the Commission's proposal to include maritime transport in the ETS and FuelEU Maritime Regulation but noted the challenge of operating ships in icy conditions, as more fuel is needed in such an environment. However, this should not be an excuse not to be ambitious, she added. Finland has envisioned many cost effective opportunities to reduce emissions, for which renewable energy and energy efficiency are key. Lehtonen also envisions even more cooperation among Nordic countries to exchange best practices.

Then, **Rikke Wetter Olufsen, Deputy Director of the Danish Maritime Authority** reminded the audience that “the sea does not divide us but rather unites us”, meaning that collective efforts are needed for a successful greener transition. If concrete actions are not taken, she stated, emissions from shipping could increase by up to 50% by 2050. To effectively tackle emissions, the Danish Maritime Authority is currently focused on two key areas: job regulations and innovation.

Ms Olufsen argued that job regulations are crucial to ensure a level playing field and long-term incentives for green investments. She pointed to the establishment of the world's first energy island in the Baltic Sea as an example of successful innovation and regional cooperation. On the island, power plants will collect generated wind power and distribute it to seven countries. The surplus power will be converted into hydrogen and green fuels, which will then be used in the transport sector, including ships.

Ms Olufsen then highlighted that 13 climate partnerships supported by the Danish government are playing a role in reducing emissions, while also strengthening industries competitiveness. As part of this programme, the government agreed to allocate 25% of green investments to electrify ferries. This will contribute to reducing national emissions by 70% by 2030 and go carbon neutral by 2050. Ms Olufsen said that the lesson that can be drawn by the Danish experience is that public and private partners should cooperate to increase innovation and find solutions. The key is to be concrete and build on mutual trust.

In the next section of the event, Nordic industry stakeholders took the floor to speak on regional cooperation projects to foster green shipping. Firstly, **Nathaniel Fritiof, a Senior Consultant at the classification society DNV**, presented their “Nordic roadmap for the introduction of sustainable zero carbon fuels in shipping”, a research project financed by the Nordic Council Minister with a budget of 2,4 million euro and a duration of 4 years. The project aims to reduce barriers to implementation and to establish a roadmap for all Nordic regions. Mr Fritiof stated that in order to establish an effective Nordic roadmap, DNV has focused on a number of different areas, including fuel life-cycle assessments, a review of regulatory frameworks and a roadmap for Nordic decarbonisation.

Next up, **Jakob Steffensen, Director of Innovation at DFDS**, set out DFDS's decarbonisation strategy. He stated that their approach is to work in cooperation with other companies to gain additional technical expertise on best sustainable shipping technology. DFDS has been actively researching more sustainable fuel solutions, concluding that hydrogen powered ships are best suited for shorter routes. Ammonia, on



the other hand, is most suitable for cargo ferries. Mr Steffensen said that DFDS is currently developing a new type of ship working on 4 small ammonia powered engines which are going to generate electricity and, in turn, power the ship. These ships are expected to be able to sail from Rotterdam and New York. Finally, Mr Steffensen added that green corridors were an important step forward for regional cooperation.

Marte Tyldum, Director for Sustainability at Kongsberg Maritime, was next to take the floor. She noted that Kongsberg Maritime is currently involved in a cross-country project with businesses and governments from Scotland, Denmark, Norway, France, Germany and the UK, working together to promote hydrogen vessels. She noted that they are also looking at decarbonising sailing fleets as well as their work on improving the energy efficiency of individual vessels. She said that one lesson to be drawn from their research is that not all vessels are suitable for hydrogen and that other energy carriers were also needed.

Kaj Portin, general manager for sustainable fuels and decarbonisation at Wärtsilä, spoke next. He argued that decarbonisation of the marine sector requires a mixture of green fuels, energy efficiency and the optimisation of the logistic chain. Mr Portin noted that Wärtsilä is currently involved in the development of many cutting-edge projects, including a new methanol powered engine - which will be ready by 2023: the world's first ammonia powered four-stroke combustion engine, which will be ready in May 2022 and a groundbreaking green ammonia tanker, which will be ready in 2024.

In the final section of the event, a panel discussion looked into the shipping files in the 'fit for 55' legislative package and asked how the Nordic experience could help contribute to the European debate. Panel members were: **Jörgen Warborn MEP (EPP, SE)**, **Jytte Guteland MEP (S&D, SE)**, **Damien Meadows (EU Commission, DG Clima)**, **Fanny Lossy (ECSA)** and **Faig Abbasov (Transport & Environment)**.

Mr Warborn, currently responsible for 'reshaping' the Commission's fuel standard proposal, known as 'FuelEU Maritime' kicked off the panel, stating that he was supportive of the Fit for 55 targets and believes that industries should lead the way in the transition. Ms Guteland, shadow rapporteur of the ETS Maritime file then noted that the current priorities of the Socialists & Democrats group were to set a price on carbon through ETS and promote innovation, for which the ETS funds will be crucial.

Damien Meadows agreed that funds from the ETS will be crucial. He mentioned that there is already one and half billion euros available in the Innovation Fund that shipping can benefit from. In the future, he continued, the Innovation Fund may amount to over 30 billion euros. Pointing to DFDS, he revealed that they are already getting technical support from the Commission to produce hydrogen ferries. He also mentioned Norway as a frontrunner and key player in the green transition, with many examples of Norwegian industries building technologies used across the world. Fanny Lossy of ECSA went next to note their support of the ETS for shipping and repeated that revenues will be important to retain competitiveness in the sector.



Turning to FuelEU Maritime, Mr Warborn highlighted the need for technology-neutrality and coherence between the files, in particular between FuelEU Maritime and the Alternative Fuel Infrastructure Regulation. Ms Guteland responded by saying that ambition in the FuelEU Maritime Regulation was too weak. She believes that the proposed targets for the greenhouse gas intensity of fuels should be more ambitious and that an e-fuel target of 6% by 2030 would ensure the proposal sets the path to zero-emission shipping by 2050.

For ECSA, the priority in terms of fuel is to ensure that all fuels are available in the EU market, including e-fuels. This means, Ms Lossy added, that there should be a shared responsibility between ship owners and fuel suppliers and that ports should be mandated to supply all fuels, not just LNG. On e-fuels, Mr Abbasov highlighted that green e-fuels are needed to decarbonise the sector, yet the Commission did not promote green hydrogen or limit the uptake of fossil LNG in its proposals. This, he argued, gives an advantage to those types of fuels which are cheaper and not necessarily greener. Since the regulation is now in the hands of co-legislatures, T&E concurs with Ms Guteland that the best way to promote truly sustainable and scalable marine fuels is by mandating a dedicated e-fuels sub-quota in the FuelEU Maritime Regulation. Here, he argued, funds would be important in the form of Carbon Contracts for Difference (CCfDs) as green fuels are currently multiple times more expensive than conventional fuels.

Discussion then turned to the role of fossil fuels in the context of the Russian invasion of Ukraine. Mr Warborn argued that there is a place for gas in the transition to green fuels, stressing that not all of the gas used in Europe is imported from Russia. Ms Guteland stressed the need to end Europe's dependency on Russian gas and transition to a green economy even faster. Mr Abbasov agreed, underlining that shipping has not traditionally relied on gas, so creating a new demand in that sector would threaten European security as well as delaying the decarbonisation process.

Panelists agreed the twin needs of energy security and climate ambition were important and made more relevant in face of the Russian war. They concluded that decarbonisation was the urgent priority and that stakeholders should work with policy-makers to make that zero-emission shipping a reality as soon as possible.

To conclude the proceedings, Mr Barth Eide made concluding remarks. He noted that as the world moves towards a more sustainable future, we must answer the question of how fast we can make the economy renewable, sustainable and circular. We need to accelerate innovation and investments to drive a greener economy forward. There is a need to plan green, the Minister argued, so investing now in new gas-powered ships that will sail for decades might not be a good idea.

Further information

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