

Memo to:	Memo No:	10506009-005
Nordic Council of Ministers and Norwegian Ministry of	From:	Green Shipping Corridors Phase II
Climate and Environment		project
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# Findings from the workshop "Addressing the cost gap" at DNV, Høvik 6<sup>th</sup> March 2025

## **Key findings**

Public funding and support schemes will be needed for realisation of Nordic green shipping corridors in accordance with the Clydebank declaration. The following key challenges should be addressed:

- The funding volumes available through the current Nordic public funding opportunities are in most cases far from sufficient to realise green shipping corridors.
- There is a need to provide additional public funding for implementation and scaling of existing technologies, i.e., move focus from innovation to transition.
- There is currently a lack of public funding available to address the additional cost of zero-emission fuels.
- There is currently a lack of harmonization of public funding opportunities between the Nordic countries, making it challenging to secure sufficient funding and financing on both ends of the corridor.
- Applying for EU funding is complex and time consuming, which may exclude many companies from accessing the funding.

To understand the opportunities and limitations within the various funding instruments, a dialogue with the responsible funding entities is vital. An overview of Nordic and EU funding opportunities is available in the Nordic Corridor Funding Database.

Feedback received during the workshop backed the need for and importance of a collaboration arena to discuss and learn from each other when it comes funding and financing of Nordic green shipping corridors.

#### Introduction

This memo summarises the findings from the workshop "Addressing the cost gap" that was held at DNV, Høvik 6<sup>th</sup> March 2025. The workshop was carried out as part of the Green Shipping Corridors Phase II project awarded by the Nordic Council of Ministers in 2024. In total, 54 participants were gathered, of which 20 represent financing institutions and authorities, to discuss how public funding and financing can help address the cost gaps of Nordic green shipping corridors.

Shifting from conventional fuels to zero-emission fuels for ships operating on a specific port-to-port corridor will have considerable costs, depending on corridor characteristics, the selected fuel pathway, and whether the shift to zero-emission fuels requires a newbuild or conversion of an existing ship.<sup>1</sup> In addition to vessel-specific costs, establishing a

<sup>&</sup>lt;sup>1</sup> DNV (2025), Funding opportunities for Nordic green shipping corridors, rep. no 2025-0157, Rev. 01



green shipping corridor requires substantial onshore investments and developments. Within the time frame relevant for green shipping corridors, these additional costs are not expected to be absorbed by the industry actors alone, nor through regulations and green incentives. Realization of a green shipping corridor will therefore in most cases need some kind of cost- and risk sharing measures along the value chain through public funding and financing support schemes.

The workshop was organised in collaboration with the Nordic Roadmap project and the Green Shipping Programme, with the following objectives:

- Exploring how public funding mechanisms and support schemes could contribute to realizing the first Nordic green shipping corridors.
- Bringing together industry stakeholders working to realize green shipping corridors as well as public and private funding entities.

Further details about the workshop program can be found in Appendix 1: Workshop agenda. Presentations from the workshop are available on the Nordic Roadmap project website.<sup>2</sup>

## What we did

The planning and preparation of the workshop was initiated in the autumn of 2024. An invitation to the workshop was distributed to a broad range of Nordic stakeholders in November, covering the industry actors along the whole value chain, together with public entities that could provide funding and financing throughout all development stages of a green shipping corridor. Finally, as private financing institutions play an important part in the funding and financing puzzle, they were also invited to the workshop.

All the Nordic countries were well represented at the workshop, except for Iceland. The 54 workshop attendees included ports and fuel suppliers (10 participants), shipowners, cargo owners, and equipment suppliers (7 participants), funding and financing institutions and authorities (20 participants), as well as maritime consultancies and research institutions (17 participants).

The success of such a workshop depends on the engagement of the participants and the willingness to share experiences in the discussions, as well as the organizers capability to capture the input and learning throughout the discussions. Hence, to facilitate a structured discussion, the workshop was divided into three parts:

- **Part 1** established the current picture of existing public funding and financing opportunities for Nordic green shipping corridors, based on the Nordic Corridor Funding Database<sup>3</sup> and presentations from Nordic funding entities and from the EU Waterborne Technology Platform.
- Part 2 addressed the industry's need for funding and financing of the first Nordic green shipping corridors. Experience from Stena, Wasaline and Yara involved in green shipping corridor initiatives were presented, as well as experiences from the Green Shipping Programme. The three industry actors also reported vessel-centric cost gaps, with discussions of funding needs.
- **Part 3** discussed potential ways of addressing the cost gap for a green shipping corridor through public funding and financing in a group discussion setting, focusing on the following questions:
  - o From your perspective, what are the strengths and weaknesses of existing public funding opportunities?

<sup>&</sup>lt;sup>2</sup> Workshop – Adressing the cost gap for green shipping corridors – Future Fuels Nordic

<sup>&</sup>lt;sup>3</sup> DNV (2025), Funding opportunities for Nordic green shipping corridors, rep. no 2025-0157, Rev. 01



- How could existing public funding and financial mechanisms be strengthened or reframed?
- o Is there a need for new kinds of public funding and financial mechanisms? If so, what kind?
- What should be the prioritized actions going forward?

As preparation for the workshop, a pre-read document was developed and distributed to the participants one week ahead of the workshop. The pre-read document provided the agenda for the workshop, the questions we wanted to discuss, tips for how to prepare, and links to relevant documents to provide some food for thoughts.

For Part 3, the participants were divided into 7 pre-defined groups that, too the extent possible, had representation from industry actors across the value chain and from public funding entities from different countries, with different roles to play along the development stages. To capture the input from the discussions, each group had a dedicated facilitator/scribe and a nominated group leader who had the responsibility of presenting the group's key take aways in the final plenary session.

In addition to the group discussions, input from the participants was also collected via Mentimeter questions posted during the workshop, both on screen and on paper copies in the venue area.

# What we found

The following main inputs were captured from the workshop:

- Harmonization and strengthening of Nordic funding opportunities is needed. Non-harmonised governance of
  public funding, type of funding schemes and availability across the Nordic countries is a barrier for realization of
  green shipping corridors. Also, the responsibility of the green corridor value chain is split across various Ministries
  within the Nordic countries, contributing to the lack of harmonisation. Furthermore, the funding volumes available
  varies significantly among the countries. Apart from Norway, none of the other Nordic countries appear to have the
  required volume of funding available to realise the first green shipping corridors. A collaboration between the Nordic
  countries is needed to harmonise the funding schemes, remove the current "silos" of funding opportunities, and
  ensure that sufficient funding volumes are available. This will not only bridge the cost gap but also address the
  limited time available to reach the ambitions of the Clydebank declaration.
- Continued Nordic collaboration is key. It is important to continue providing meeting arenas where stakeholders across the Nordic countries, covering industry and public- and private funding entities, can gather to discuss and share knowledge that is relevant for addressing the cost barrier of green shipping corridors.
- Current funding opportunities do not sufficiently address the additional cost related to FUELEX<sup>4</sup>. This is a challenge, as for many cases the main cost barrier is related to additional FUELEX. Hence, there is a need for new funding opportunities covering FUELEX, which should be coordinated across the Nordics with a central governance. It was noted that designing such a scheme could be challenging and costly. However, it will only be needed until EU ETS / FuelEU Maritime and upcoming IMO regulations make zero-emission fuels cost-competitive with conventional fuels.
- It is time to move funding from research and development to scaling and implementation. There is currently a lack of support after the R&D stage, which prevents implementation and scaling of green corridors. Shifting attention to implementation could also imply leaving behind the requirement of innovative solutions and new ideas as part of the project, which is often found in today's funding opportunities. The new funding criteria should instead be designed to support the transition by implementation and scaling of existing technologies.

<sup>&</sup>lt;sup>4</sup> FUELEX - Fuel expenditure during the operational phase of the vessel



- Potential new funding schemes should be simple, transparent, and flexible. When designing new funding schemes, one should take into account the complexity of a green shipping corridor project and consider organising open calls rather than fixed application windows with a given deadline for applications. It is also important to keep the simplicity and transparency that we have in many of the Nordic funding processes today (e.g., EUDP<sup>5</sup> and Enova). Creating too complex processes, as in some EU funding opportunities, may exclude many companies from accessing the funding due to lack of capacity and competence. Finally, one should explore schemes that are more open and flexible, and with less prescriptive criteria, focusing on providing funding to the best projects, rather than certain technologies.
- Collaboration between public funds and private funds and financing needs to be strengthened. Both public and private funding will be needed to overcome the cost barrier of a green shipping corridor project. By strengthening the opportunities within private financing of a project, the need for public funding will be reduced.
- Policy measures to establish a market demand are important. Efforts in building and establishing the market for zero emission transportation are important and a long-term perspective providing the necessary predictability is key. Policies should not only focus on penalties but rather explore how rewards could enable the investments needed and support the first movers. Regulations and policies should be supported by the right funding and financing schemes.
- Public funding should provide more impact than GHG reductions. It is important to discuss how new funding mechanisms could not only support reduction in GHG emissions but also help establish the value chain within the Nordic countries, e.g., develop Nordic ship building (retrofit and newbuild) and fuel production capacity. In this way, the Nordic countries will benefit from the funding e.g., by new jobs and increased energy security.
- **Commitment from governments is vital.** To create commitment from governments and national funding entities, it is important to ensure that the relevant governmental bodies have sufficient understanding of the shipping sector and how realization of the first green shipping corridors could both impact decarbonisation and create significant value for the shipping industry. Awarding the front runners will pave the way for the rest of the maritime industry to follow.

## What we recommend

Based on the input captured during the workshop, we have the following recommendations:

- 1. Strengthen the Nordic funding and financing collaboration by:
  - Develop a joint Nordic recommendation for EU ETS funds to be channelled back to the countries with the objective of supporting the maritime transition and securing sufficient funding volumes for realizing the first green shipping corridors. Here, experience from the Norwegian NOx Fund set-up could be valuable.
  - Establish a new additional Nordic funding scheme to address the barriers related to lack of funding volumes and non-harmonisation of funding schemes across the Nordic countries. A new funding scheme should seek to address the lack of funding for the additional fuel costs, but at the same time ensure funding support for cost of investments, as this will still be needed. A new funding scheme could be structured in various ways:
    - a) Establish a new cross-Nordic funding scheme based on the best of the different options across the countries and supported by a joint funding budget. The new funding scheme should be simple and transparent and have a value chain approach i.e., target Nordic green corridor projects where actors along the whole value chain are included. To continue the necessary focus on energy efficiency, criteria for the

<sup>&</sup>lt;sup>5</sup> Det Energiteknologiske Udviklings- og Demonstrationsprogram



funding scheme could include increased energy efficiency and use of shore power in ports. One could also consider including the Baltic area in such a funding scheme.

- b) Establish a co-funding agreement between the Nordic countries, with an acceptance that funding from each country could go to shipping services outside the specific nation borders.
- c) Arrange a green corridor competition, or auction, with a set of criteria to facilitate the evaluation and selection of the winning projects. This is aligned with what was proposed in the Fuel Transition Roadmap for Nordic Shipping.<sup>6</sup>
- 2. As part of building a market pull for green shipping transport, it is recommended to engage cargo owners and establish some kind of alliance as a driving force in realising green corridors in the Nordic region.
- Strengthen the Nordic collaboration platform. Learning from each other is key, hence funding should also be set aside for keeping the Nordic collaboration platform going, as proposed in the Fuel Transition Roadmap for Nordic Shipping. The platform should facilitate learning and knowledge sharing across and between industry and publicand private funding entities.
- 4. Carry out an analysis of the societal and economic impacts of developing a Nordic value chain for green shipping corridors, looking at e.g., number of jobs created, and export value generated. The analysis should also reflect upon the importance of securing energy supply for the Nordic region. Findings should be communicated to governments to build ownership and commitment to realization of green shipping corridors, and by this follow up on the Clydebank declaration signed by Denmark, Finland, Norway, and Sweden in 2021.

<sup>&</sup>lt;sup>6</sup> <u>https://futurefuelsnordic.com/the-fuel-transition-roadmap-for-nordic-shipping/</u>

# Appendix 1: Workshop agenda

#### 9.30 – 10.00 Coffee, Tea, refreshments

#### 10.00 - 10.30 Welcome and introduction to the workshop

- 10.00 10.05 Purpose and agenda for the workshop (Eirill Bachmann Mehammer, DNV)
- 10.05 10.15 Nordic perspective realization of green shipping corridors (Sveinung Oftedal, KLD)
- 10.15 10.30 Nordic Green Shipping Corridors Phase II project (Øyvind Endresen, DNV)

#### 10.30 – 12.00 Part 1 Existing funding opportunities for green shipping corridors

10.30 – 10.45 Overview of Nordic public funding opportunities for green shipping corridors (Ole Kristian Sollie, DNV)

#### 10.45 - 11.00 Coffee and tea refill

11.00 - 11.30: Short presentation from each of the Nordic countries and cross-Nordic

- Sweden (Björn Garberg, Trafikverket)
- Denmark (Trine Berg Hansen, DMA)
- Finland (Ilkka Homanen, Business Finland / Miska Kuhalahti, Finnvera )
- Norway (Rune Holmen, Enova)
- Cross-Nordic (Ditte Stiler, Nordic Energy Research)
- 11.30 11.45 EU opportunities (Jaap Gebraad, Waterborne Technology Platform)
- 11.45 12.00 Examples of private financing opportunities (Gjermund Grimsby, KLP)

#### 12.00 - 13.00 LUNCH

#### 13.00 – 14.00 Part 2 Industry perspectives – identified cost gaps from actual green corridor projects

- 13.00 13.15: Nordic Roadmap case study Umeå Vaasa (Catarina Fant, Wasaline)
- 13.15 13.30: Nordic Roadmap case study Gothenburg Frederikshavn (Julia Hansson, IVL)
- 13.30 13.45: Yara Eyde (Yang Zhang, Yara)

13.45 – 14.00: Experiences from the Norwegian Green Shipping Programme (Magnus Eide, DNV)

#### 14.00 – 15.00 Part 3 Interactive session – Public funding of the first Nordic green shipping corridors

 Workshop participants discuss potential ways of addressing the cost gap for a green shipping corridor through public funding and financing

#### 15.00-15.15 Coffee, tea refill, refreshments

15.15 - 16.00 Plenary discussion and closure