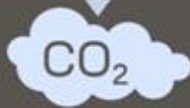


Nordic Roadmap For Future Fuels

futurefuelsnordic.com



DNV

WHEN TRUST MATTERS



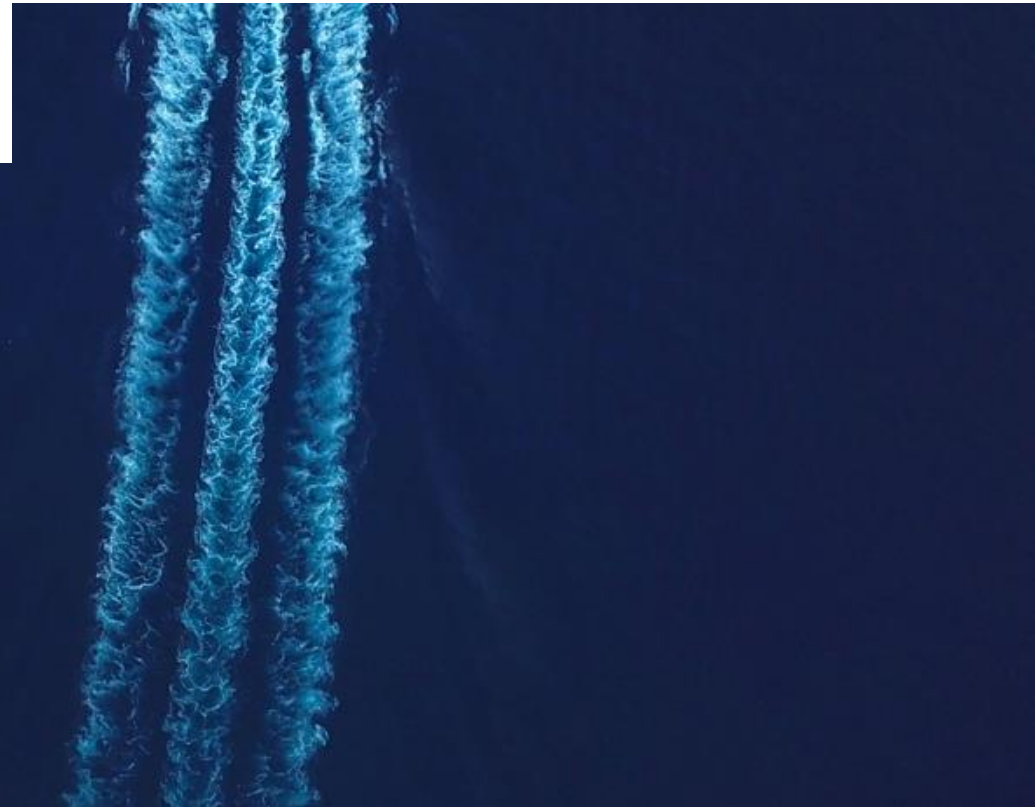
WHEN TRUST MATTERS



**Nordic Council
of Ministers**

Nordic Roadmap project overview

Øyvind Endresen, DNV, Project manager



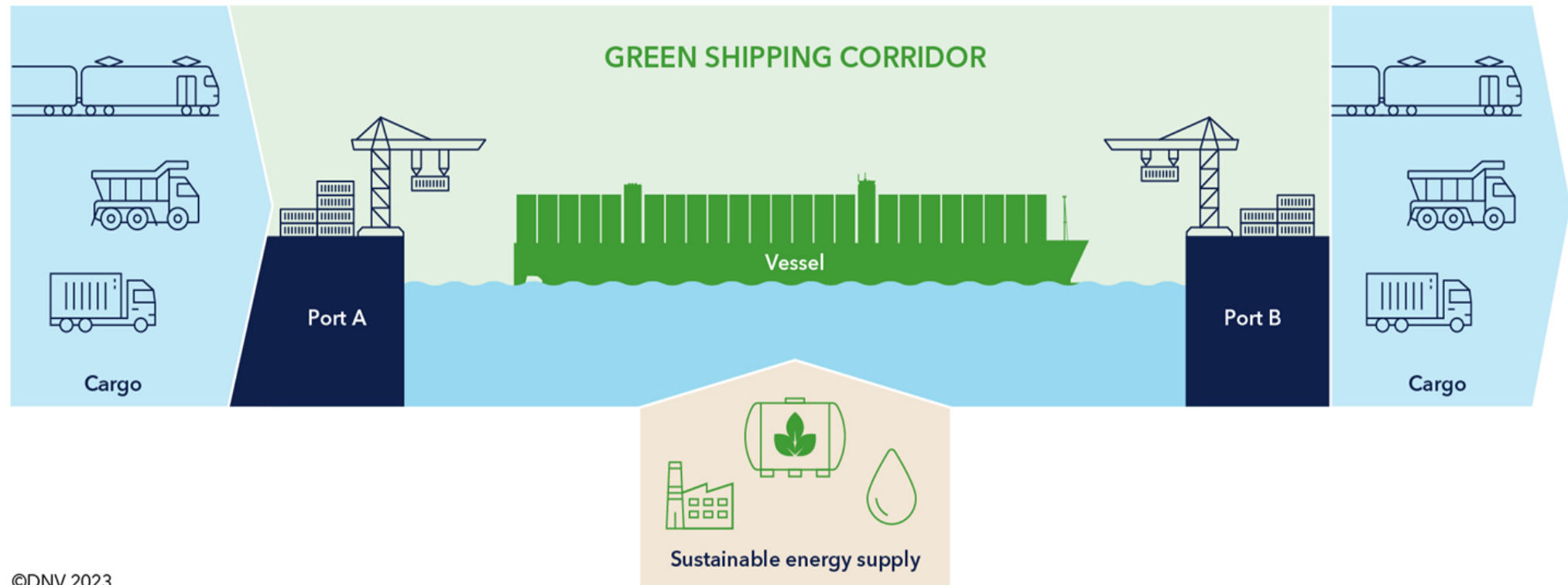
The Nordic commitment

- ❖ **Declaration on Zero Emission Shipping by 2050** (COP26, November 2021)
 - ❖ **Clydebank Declaration for green shipping corridors** (COP26, November 2021)
 - ❖ **Ministerial Declaration on zero emission shipping routes between the Nordic countries** (May 2022)
 - ❖ **Joint Statement by the Nordic Prime Ministers on a Sustainable Ocean Economy and the Green Transition** (August 2022)
- + The 2023 IMO Strategy on Reduction of GHG Emissions from Ships

What is a green shipping corridor?

Clydebank Declaration (COP26):

“Green shipping corridors are zero-emission maritime routes between two (or more) ports”



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The Nordic roadmap project (2022-2025)

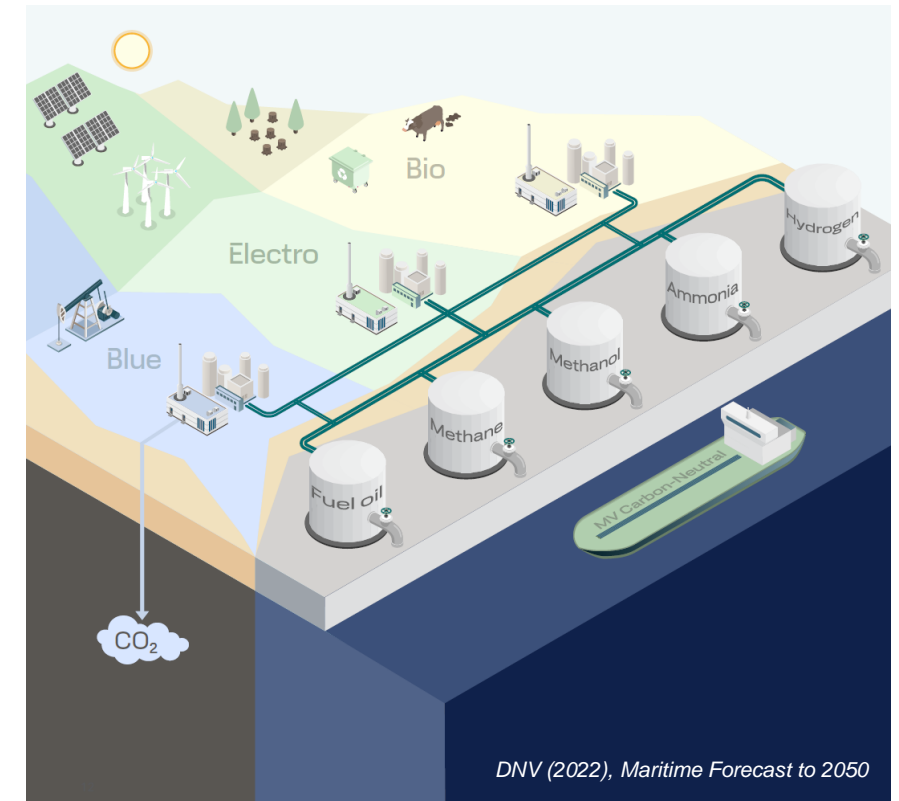
Nordic collaboration coordinated by DNV and funded by the Nordic Council of Ministers

Overall aim:

*Reduce **key barriers** to implementation and establish a common roadmap for the whole Nordic region and logistics ecosystem towards zero-emission shipping.*

Objectives:

- Gain **technical knowledge** and regulatory development
- Establish a **Nordic collaboration platform** and **green shipping corridor pilot studies**
- Develop a **Nordic fuel transition roadmap**



Contact persons:



Eirill Bachmann
Mehammer

Task Leader
Collaboration
Platform & Pilots



Øyvind
Endresen

Project
Manager

More than 50 partners

Contributing partners:



Supporting partners:



We are welcoming more partners!
For more information,
visit the project website:

<https://futurefuelsnordic.com/>



Ten technical deliverables to date



Key highlights from our deliverables

81 potential green corridors identified

140 fuel production assets

LCA for 28 green fuel and propulsion combinations

Technical and regulatory analysis for ammonia, hydrogen and methanol

6 green corridors short-listed

3 key bottlenecks for fuel uptake

3 key bottlenecks for fuel uptake

Barriers identified

- **Cost** remains a significant challenge
- Lack of **fuel availability** and bunkering infrastructure
- Lack of **safety requirements** onboard and on shore for ammonia and hydrogen, limiting early uptake

Actions to overcome barriers

- **Cost- and risk-sharing** mechanisms such as procurement policies, green financing, and Contract for Difference (CfD)
- Creating a common **Nordic playground**:
 - Unified approach to matters relating to alternative maritime fuels safety
 - Promoting green fuel infrastructure
 - Building a market for green cargo transport, with standardized GHG emission accountability

Focus for the rest of the Nordic Roadmap project



Green shipping corridor pilot studies

- Ongoing work to establish **3 pilot studies** (techno-economic feasibility studies)
 - Public-private **collaboration** with **high visibility**
 - Network of **contributing partners**
 - **Pilot owner** – decides the scope of the pilot study
 - **Pilot facilitator** financed through Nordic roadmap
- **Expected outcome of each pilot study**
 - Established partnership
 - Assessed specific corridor and relevant fuels
 - Identifying critical bottlenecks
 - Preparing the ground for a real-life corridor

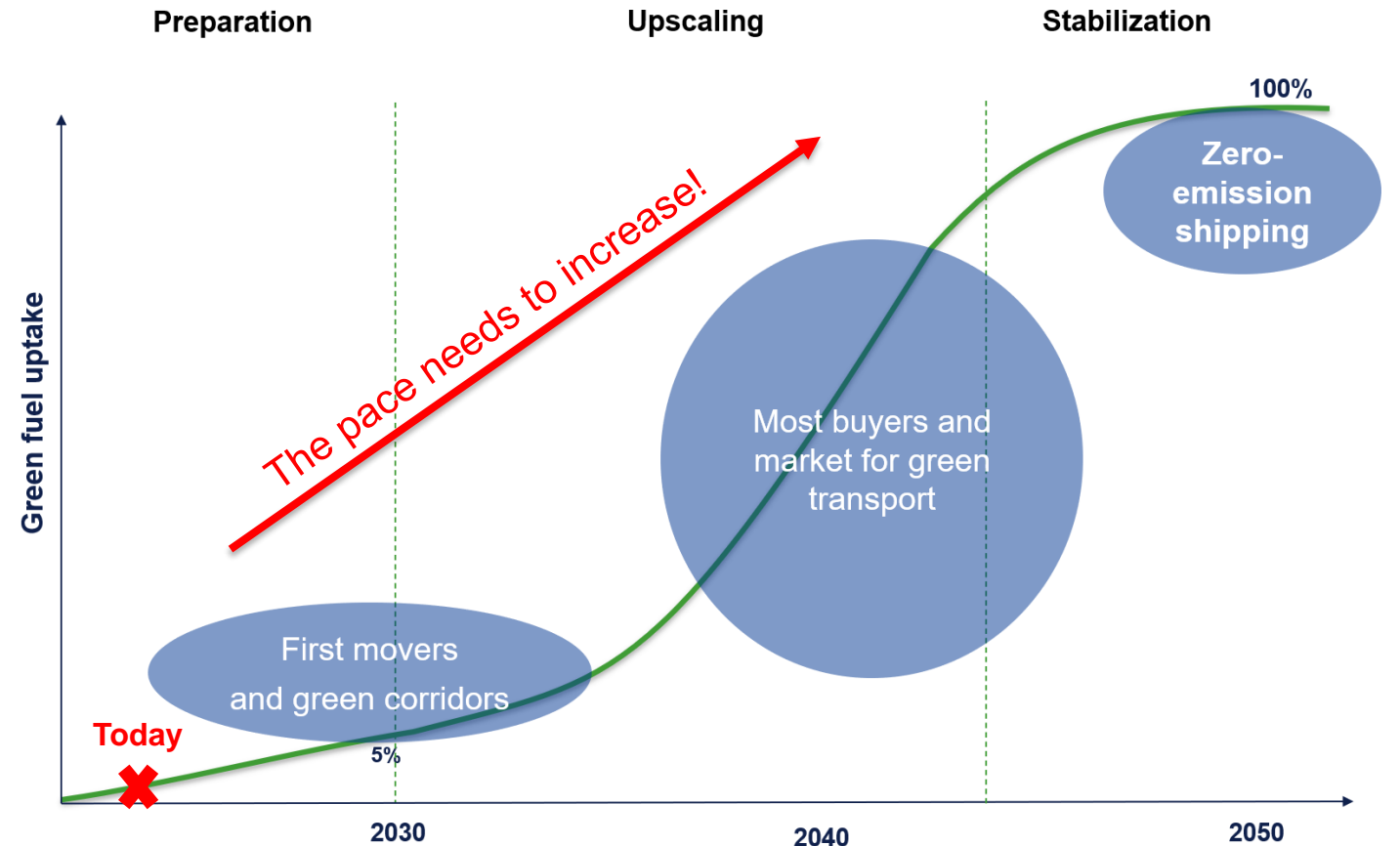


Nordic Fuel Transition Roadmap

Aims to **accelerate** the uptake of green fuels

- Assumes that the fuel transition follows an **S-curve**
- Details **stakeholder actions** to overcome barriers
- Identifies **green shipping corridors** as key enablers for acceleration

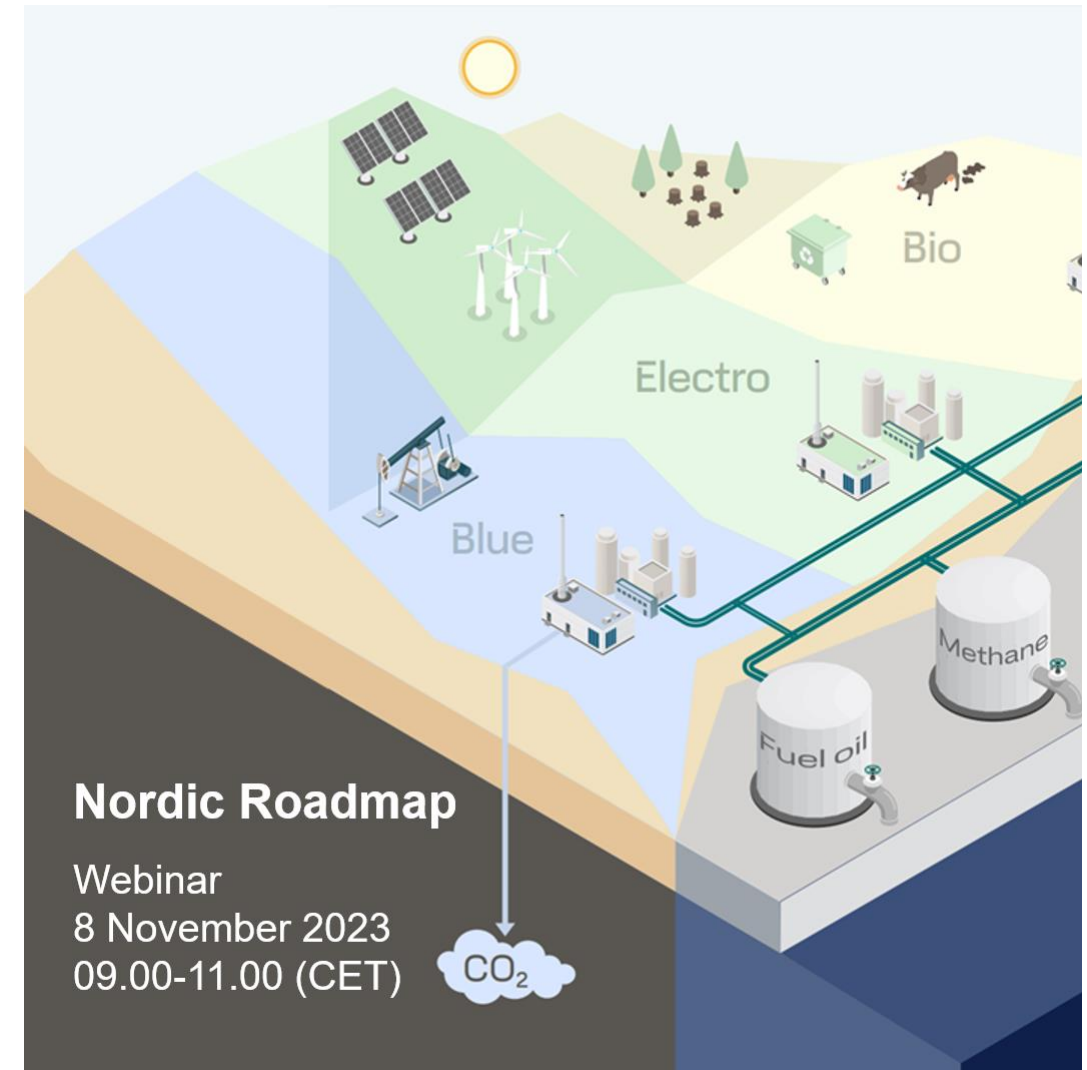
Critical for success to get **input** from all players in the maritime value chain



The S-curve can describe the market development of many new technologies, including up-take of LNG and battery powered ships

Conferences & Events

- [Kick-off Conference](#) in Oslo, 15 November 2022
- [Conference in Helsinki](#), 3 May 2023
- [Workshop in Reykjavik](#), 3 October 2023
- [Webinar](#), 8 November 2023, 09.00-11.00 (CET)
- Workshop in Gothenburg, 11 April 2024
SAVE THE DATE!
- Conference in Denmark, autumn 2024



For more information contact:

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