



SHAPING THE GREEN FUTURE OF THE NORDIC MARINE INDUSTRY

Nordic Marina: Networking for alternative Marine Fuels and Emissions Reduction

What unites the Nordic nations? Many would mention our shared history, heritage or culture, but physically it's literally the ocean. It should come as no surprise, therefore, that for the Nordic nations it is of utmost importance to protect the oceans of the North Atlantic. All the Nordic nations rely heavily on marine industries i.e. sea transport, fisheries, aquaculture and tourism, while promoting themselves as "the Green Valley of Europe". Currently there is an increased discussion on preserving the Arctic, particularly in light of possible future transport routes across the North Pole region.

The overall goal in MARINA is to reduce emissions and increase the use of alternative fuels in the marine sector. To do so, the project created a network between key players in the Nordic countries to identify policy and roadmap recommendations for Nordic policy and decision makers on how to increase the share of alternative fuels and reduce emissions from marine applications.

It is important in all aspects to increase efficiency and reduce waste in the fragile environment of the North Atlantic. The recommendations, which will be published in Nordic Marina's white paper in early 2017, put forward goals for 2025 and also longer term goals, i.e. 2050. They specify actions, CO₂ reduction goals, national and Nordic programs, international cooperation, infrastructure and alternative fuel resources among others.

This fact sheet provides an overview of the key messages gathered at Nordic Marina workshops and defines issues relevant to each Nordic country with regard to further greening marine applications and reducing their environmental impact. It reflects on possible policy actions to encourage the adoption and further development of alternative fuels, bringing the Nordic region to the forefront in sustainable, green marine solutions. Ultimately, the goals of different stakeholders are common: maintaining clean oceans, supporting healthy port communities, contributing to achieving global, regional and national climate goals while providing sustainable supply chains for goods and services to the marine sector.



Key messages from stakeholders

- Commitment and concrete, long term engagement of government is required.
- A phase out of fossil fuel subsidies would create a more equal playing field for alternative fuels.
- There is a need for increased funding opportunities and economic incentives to tackle high capital expenditure.
- A clear need exists for infrastructure to support different fuels in harbors and existing vessels, to promote the availability of alternative fuels.
- Improvement of information flow on low emission projects to the public, influencers, decision makers and potential investors is important to raising awareness.
- Further stimulation of networks and information exchange is required on a smaller, local scale to reduce fragmentation.

Possible policy actions

- Long term policy must create an enabling environment for the transition from fossil based fuels.
- Implement green public procurement practices.
- Design and utilise policy instruments that promote innovation and competitiveness of green fuels. Introduce tax incentives for early adopters of alternative fuels and emission reduction technologies.
- Regulating harbor emissions promotes healthy port communities and provides motivation for examining alternative fuels and green technologies. Example: offer low emission vessels discounts on harbor fees (as in Amsterdam).
- Increase funding to commercialise research.
- Develop policy framework for market development of alternative fuels and infrastructure.
- Support or create public-private partnerships and networks for information sharing and collaboration.

The maritime industry is ready to go green. Governments are reacting slowly. Are you in?

NORDIC MARINA

The goal of the Nordic Marina project is to reduce the CO2 footprint of marine applications. Nordic Marina set out to achieve this through connecting relevant stakeholders and policy makers to help ensure the efficient use of resources and the reduction of GHG emissions related to marine applications.

Over the course of 2015 and 2016, Nordic Marina held seven workshops, two of which were specifically aimed at bringing together public and private stakeholders and gathering information on opportunities in the green marine fuel sector. Topics for discussion were decided upon beforehand and participants were divided into groups, each addressing one topic with the guidance of a facilitator, who also was responsible for minutes from the group's deliberation. The outcome of each workshop was an overview of barriers to new technology adoption, opportunities in marine industries and distinct means by which the barriers may be overcome.

The partners involved in the organization of Nordic Marina workshops and think tanks include but are not limited to: NCE Maritime CleanTech (NO), Tekes (FI), Danish Maritime (DK), Swedish Maritime Administration (SE), Icelandic Transport Authority (IS), Wärtsilä (SE), National Energy Authority (IS) and, acting as Nordic Marina's Secretariat, Icelandic New Energy (IS).

Marking the conclusion of its formal working period, Nordic Marina set out to compile the knowledge and feedback obtained at its workshops to produce a Nordic Roadmap for technological development and further movement toward greening the Nordic maritime sector. Nordic Marina's white paper is the product of its networking efforts and information gathering among Nordic stakeholders. It deals with not only the barriers to a greener marine industry but also, and more importantly, the great opportunities that emerge with the adoption and promotion of alternative fuels. The white paper will be made available at www.nordicmarina.com in early 2017.