



# Nordic Collaboration is decarbonizing heavy-duty transportation

Lin April Løstegård, Project Manager

Luleå

22.01.25

# Members of Norwegian Hydrogen Forum

Industry												
												
												
												
												
												
Sub-contractors												
												
R&D												
Organisations												
Authorities												

# Updated project overview

Number of projects in total

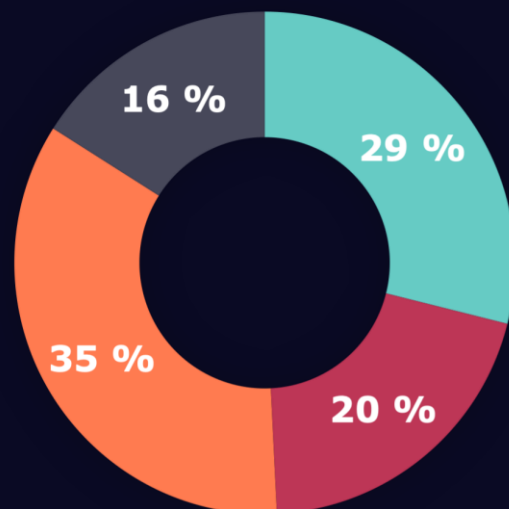
212

## Different types of projects

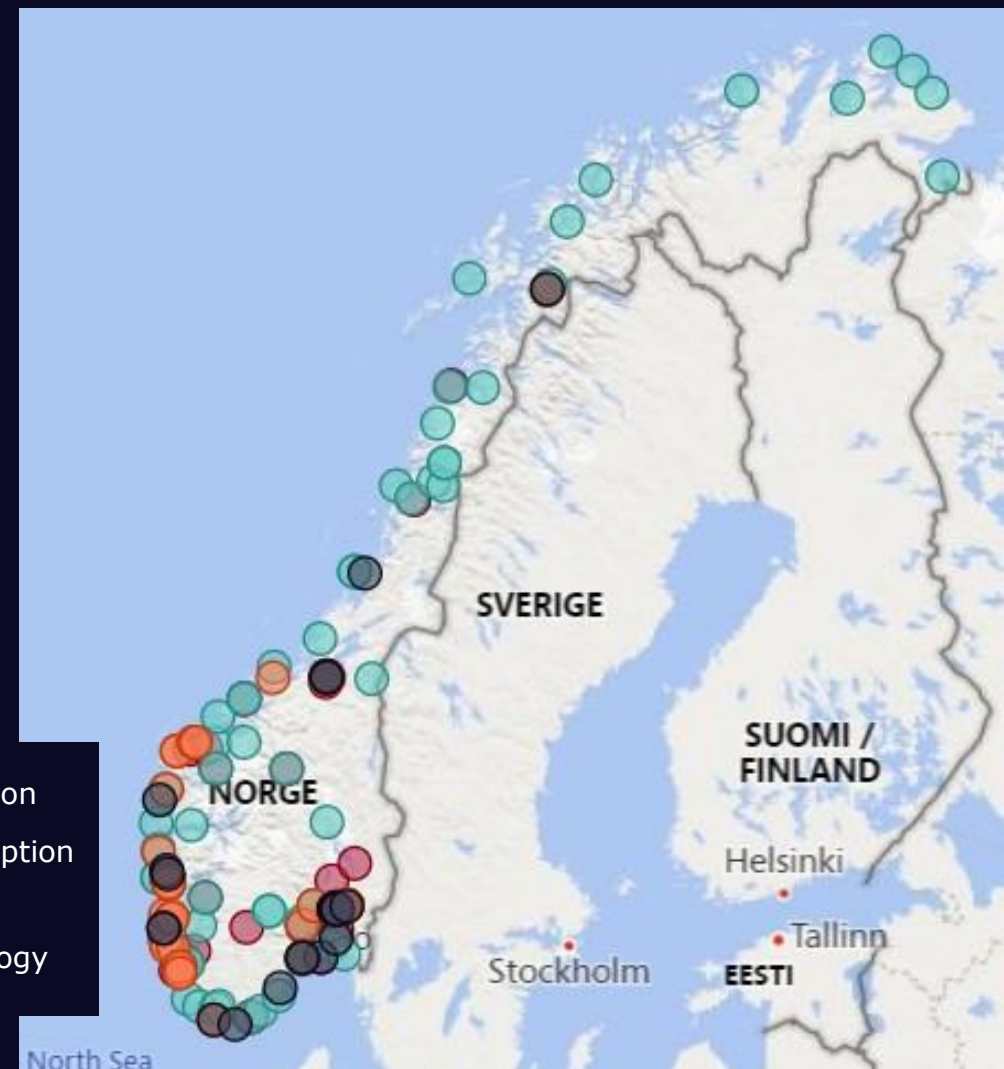
Production	75
Consumption	52
R&D	90
Technology	41



Projects in 82 municipalities



- Production
- Consumption
- R&D
- Technology



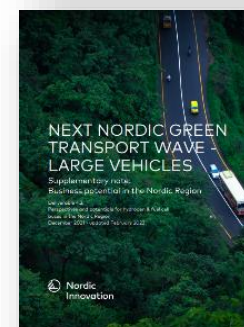
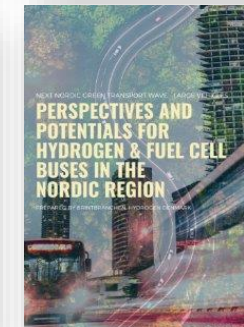
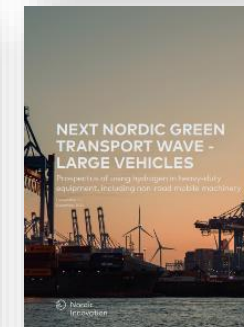
## Planned production volume in tonnes

Number of projects	Year	Planned production (tonnes)		
		Total	Renewable	Low-carbon
75	2025	14 300	10 500	3 800
	2030	1 300 000	1 070 000	230 000
	2035	2 500 000	1 300 000	1 200 000
	2040	4 785 000	1 300 000	3 485 000



# A Unique Nordic Overview

- Available by-product hydrogen
- Large-scale hydrogen use in the industry
- Transport regulations for large-scale hydrogen road transport
- Practical large-scale hydrogen road transport solutions
- Detailed analysis - Finish large-scale road transport business case
- Large-scale road transport of liquid hydrogen
- Hydrogen in heavy-duty equipment and non-road machinery
- Perspectives and potentials for hydrogen and fuel cell buses
- Deployment of hydrogen trucks and infrastructure
- Overview of the Nordic's Government incentives
- Input to the Nordic hydrogen vision



# Next Wave III

## – currently ongoing

### SUMMARY

Key – to get the first truck projects off the ground and bring all needed stakeholders together

Connect the marine industry and the trucking industry together and open the dialogue for zero emission tradelines.

Samskip will have H<sub>2</sub> vessels between Norway and the Netherlands in 2025/26 timeframe and H<sub>2</sub> trucks on both ends. Aiming to create a “zero emission tradeline”. Nextwave III focuses on non- and technical barriers in creating such a tradeline.

## Samskip Launches its Next-Generation Zero-Emission Short Sea Container Vessels

20. March 2023



SAMSKIP, global logistics solution providers with offices in 24 countries, is venturing into “zero carbon emission free shipping services” by contracting Two Hydrogen fuel powered vessels to provide service its west European routes by signing a ship building contract with the leading Indian shipyard Cochin Shipyard Ltd.

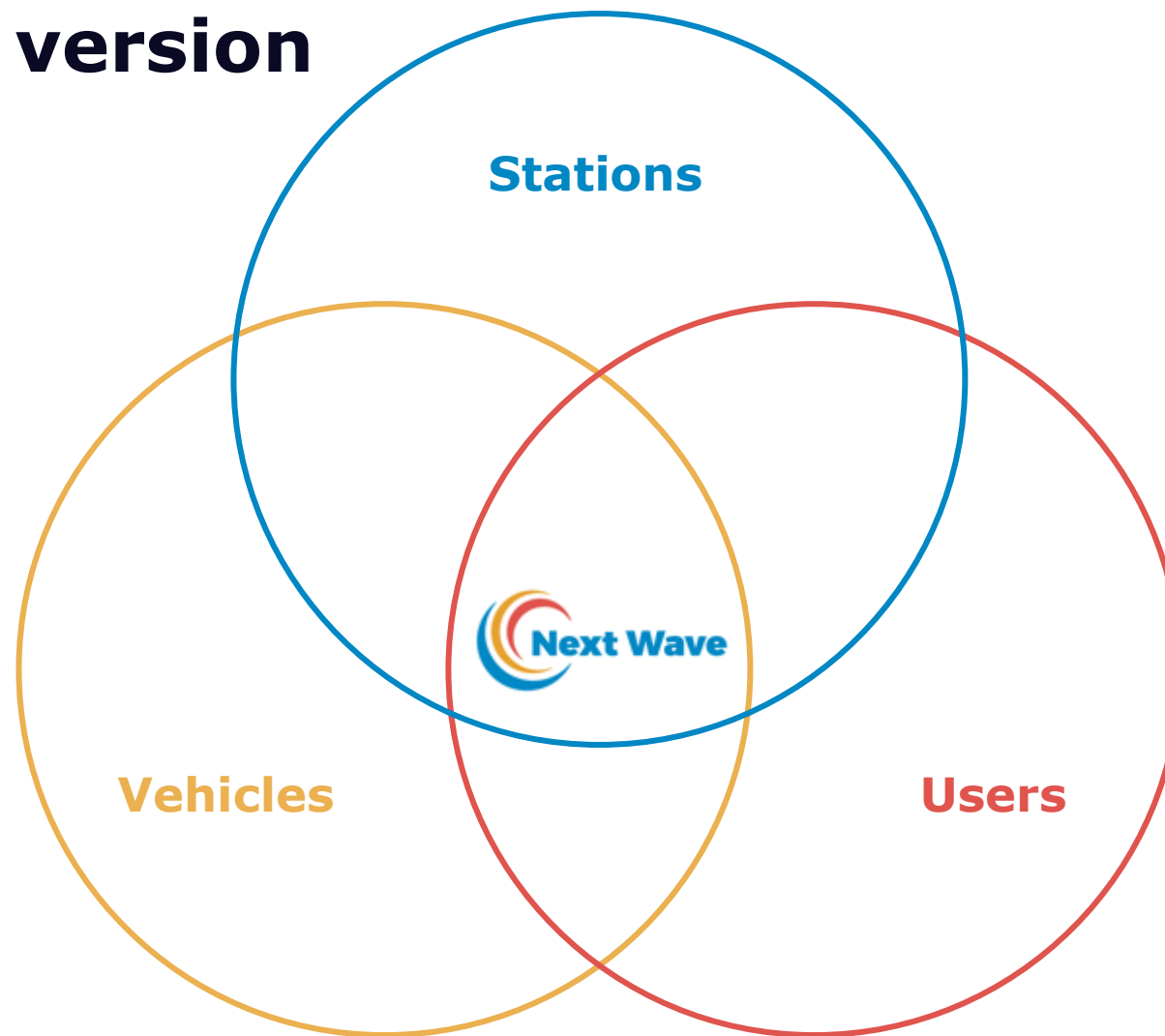


## Next Wave IV



- Strengthen the efforts to deploy hydrogen trucks and stations throughout all Nordic countries.
- Reduce the barriers to achieve zero-emission tradelines between the Nordics and the continent.
- Continue to inform politicians about the need for a stronger cooperation between the Nordic countries to foster zero-emission transport.

# The simple version





# Differences between the Nordic countries

Aktuelt / Nyheter /

## 12 nye hydrogenstasjoner får støtte i Sverige

Det svenske Naturvårdsverket har bevilget 224 millioner svenske kroner til 12 nye hydrogenstasjoner som del av EUs satsning på tungtransport.

25 sep. 2024



Foto: NHF | Jan Carsten Gjerløw (NHF) og Björn Aronsson (Vätgas Sverige)

Foto: MAN

# Differences between the Nordic countries



# Stamina - Predictability

A H<sub>2</sub> truck project takes years to get going

- A truck OEM needs to be convinced a certain no. of trucks can be deployed
- Infrastructure provider, both H<sub>2</sub> producer and dispenser, must be onboard and convinced that the deployment will happen. It takes 12-24 months to establish such infrastructure
- Customers for a fleet of vehicles must sign at the same time to buy vehicles that don't even exist.
- Authorities must provide incentives/grants for a project that will not be executed until in 12-24 months. Also land for infrastructure
- Operation environment/policy must be clear for the coming 3-5 years

Nordic Innovation realised this and supported the efforts through  
3 continuing Nextwave (project) phases

*The results are:*





# Largest deployment of zero emission trucks in the world

## Iceland and Norway

The pioneering role of Iceland and Norway was instrumental in getting the project off the ground

- Iceland will deploy a minimum of 20 trucks starting from Q2 2025
- Norway aims to deploy up to 100 trucks starting from Q1 2025
- These numbers might not sound high. 20 trucks in Iceland are equivalent to 4.200 trucks in Germany or 20.000 trucks in USA, based on population
- 20 trucks use the same amount of fuel as over 1.000 passenger vehicles – saving 700.000 l. of diesel annually





# NORDIC COOPERATION



Thank you for the attention!

Lin April Løstegård  
[la@hydrogen.no](mailto:la@hydrogen.no)



Norsk  
Hydrogenforum

[hydrogen.no](http://hydrogen.no)

