The Nordic Hydrogen Valleys Conference

Nothing is Too Big For the Smallest Atom

Nordic Energy Research

Workshop

The Nordic Hydrogen Valleys Conference

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Norsk Hydrogenforum

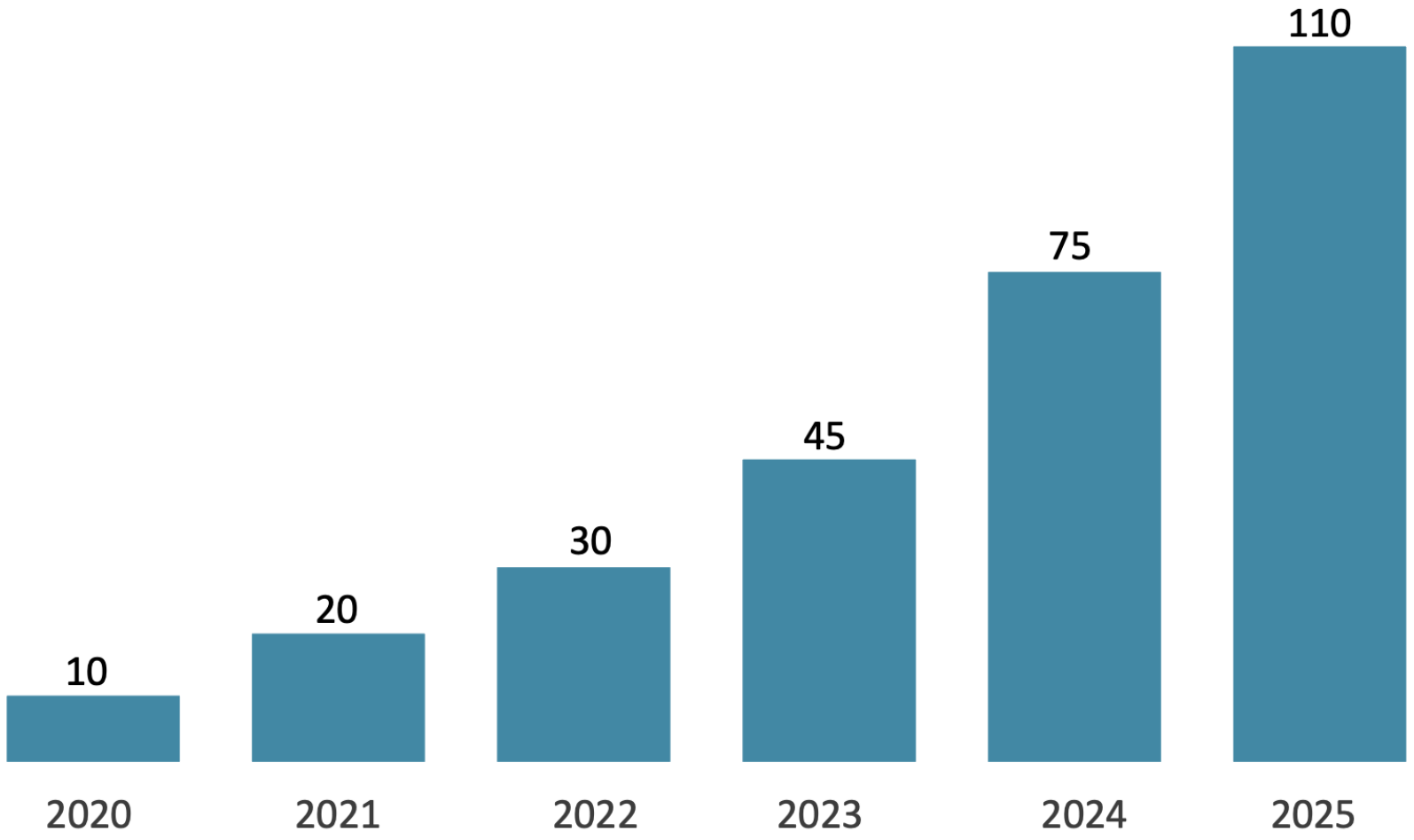
Next Wave I – IV
Hydrogen Truck Deployment and Zero Emission Tradelines

Lin April Løstegård, Project Manager

Trondheim 29.04.26

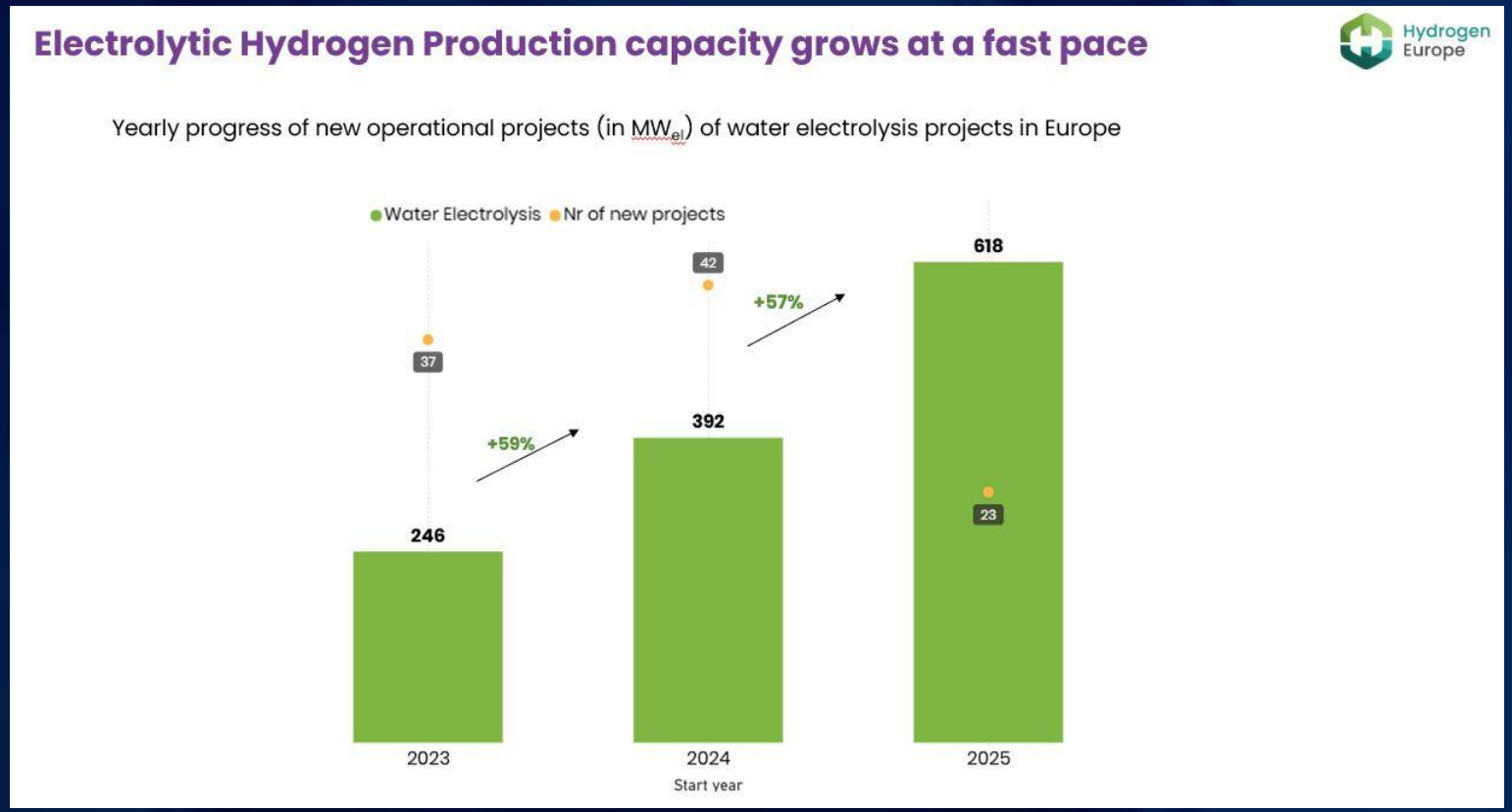
Global investments increase by at least 50 % each year

Total investments in production, distribution, use and storage of hydrogen (bn. USD)



Source: Hydrogen Council, Global Hydrogen Compass 2025

Europe is reaching scale at fast pace, despite delays and regulatory uncertainty



- 822 MW took FID in 2025.
- In total, more than 5 GW *clean* hydrogen has reached FID.
- Average size increased from 3,5 MW in 2024 to 9,8 MW in 2025.
- Average size of FIDs taken in 2026: 140 MW.

Europe had more than 600 MW electrolysis capacity in 2025. Source: Hydrogen Europe.

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Aktuelt / Nyheter /

Miljødirektoratet: – Utslippskutt på over 90 prosent er mulig innen 2050

I Miljødirektoratets ferske analyse Klimatiltak i Norge 2026 går det frem at svært lave utslipp av klimagasser i Norge er mulig i 2050. – Det forutsetter kraftige grep, sier Hilde Singsaas, direktør for Miljødirektoratet.

11 Feb 2026

Foto: NHF | Klima- og miljøminister Andreas Bjelland Eriksen og miljødirektør Hilde Singsaas.

Landscape at a glance

(2024 numbers in brackets)

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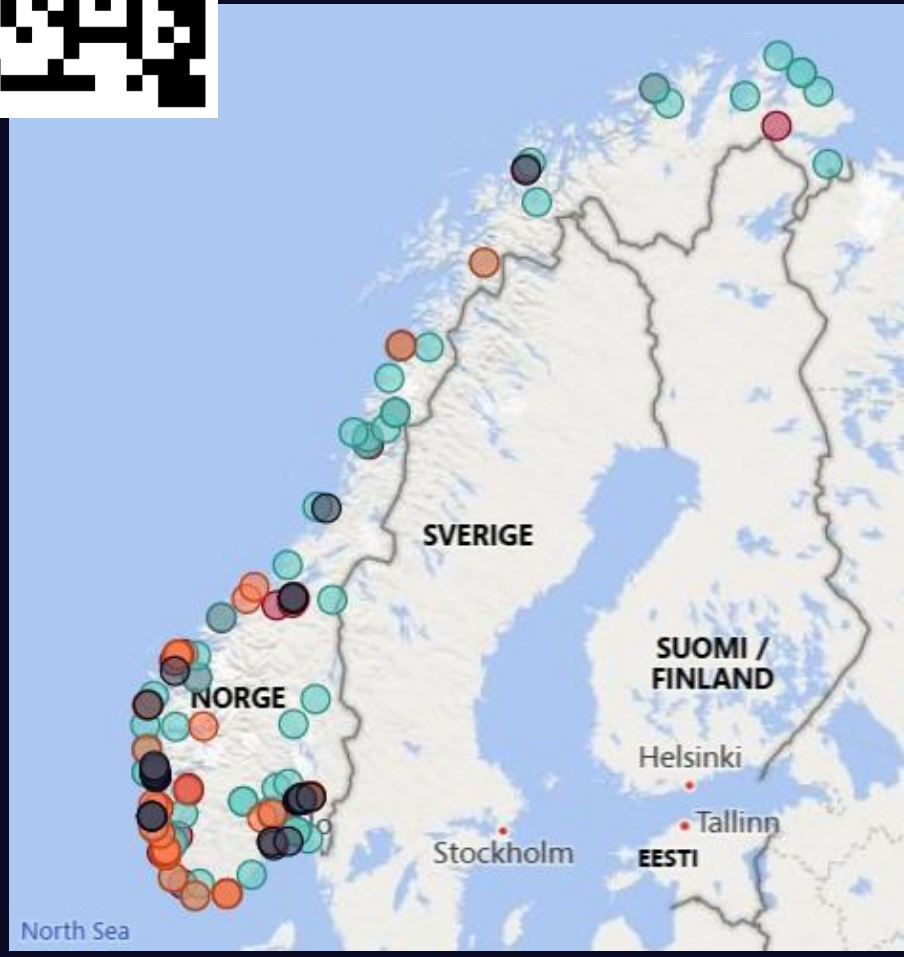
Total number of projects

217 (212)

Number of projects by project type*

Production	66 (75)
Consumption	63 (52)
R&D	110 (90)
Technology	43 (41)

*Each project may belong to multiple categories.



There are projects in 69 (82) of Norway's 357 municipalities.

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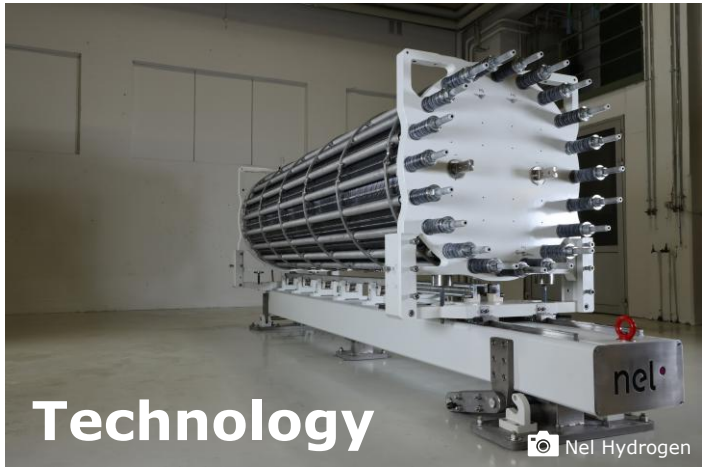
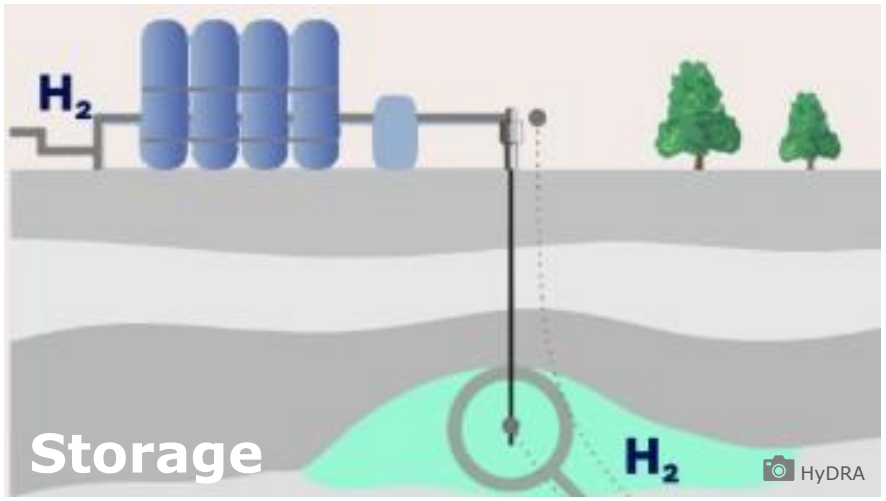
Progress across the entire value chain





Ships are being built in more segments

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GMI Group

Eidesvik

Torghatten


Viking Cruises

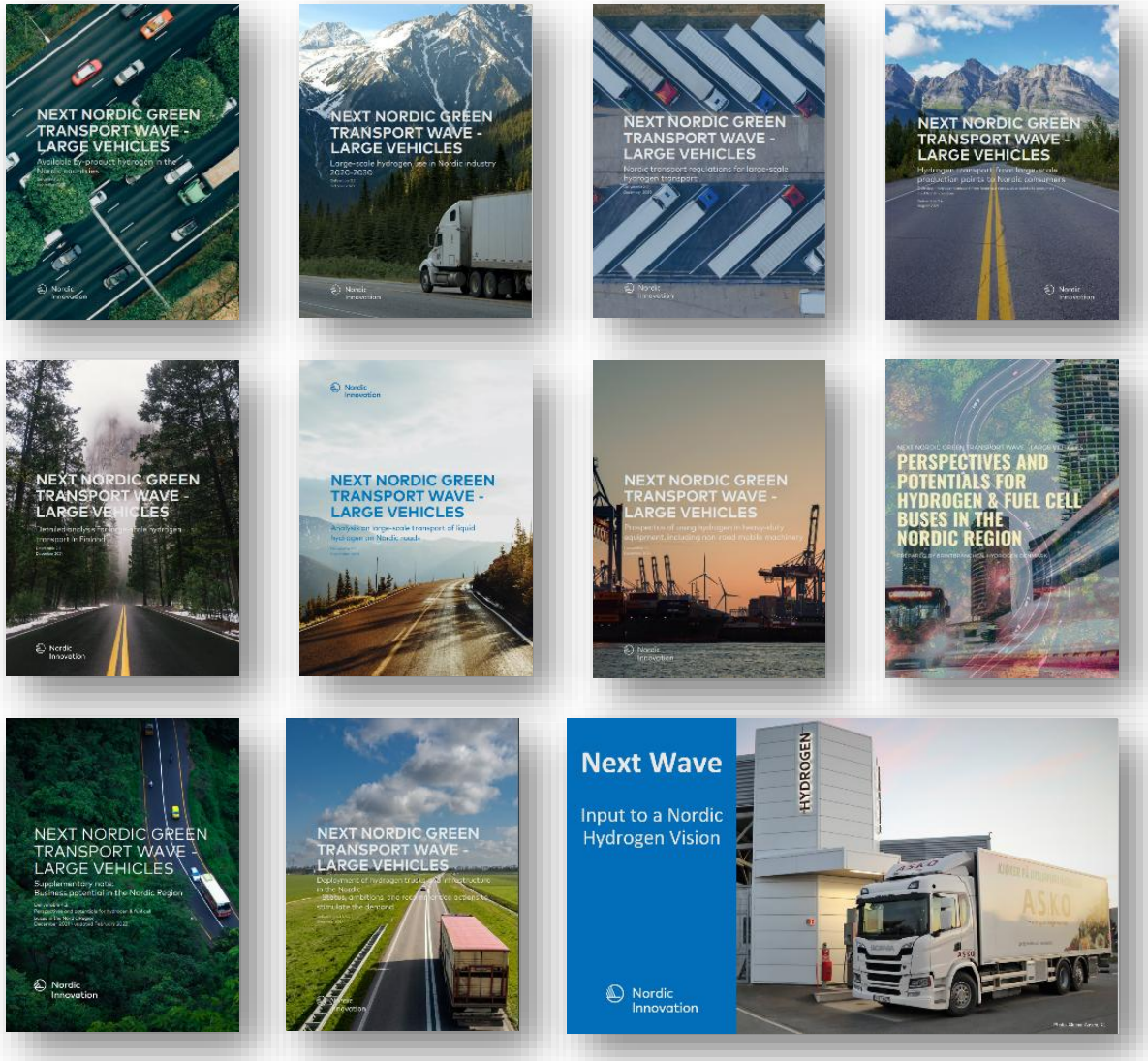
Heidelberg Materials

Yara

Amon Maritime

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

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_2 vessels between Norway and the Netherlands and H_2 trucks on both ends. Aiming to create a "zero emission tradeline". Nextwave III focused 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.
- Project period: 01.02.2025 - 31.10.2026

Partners

Project Manager

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ÍSLENSK NÝORKA ehf

VÄTGAS SVERIGE

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samskip

SINTEF

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VTT

Next Wave

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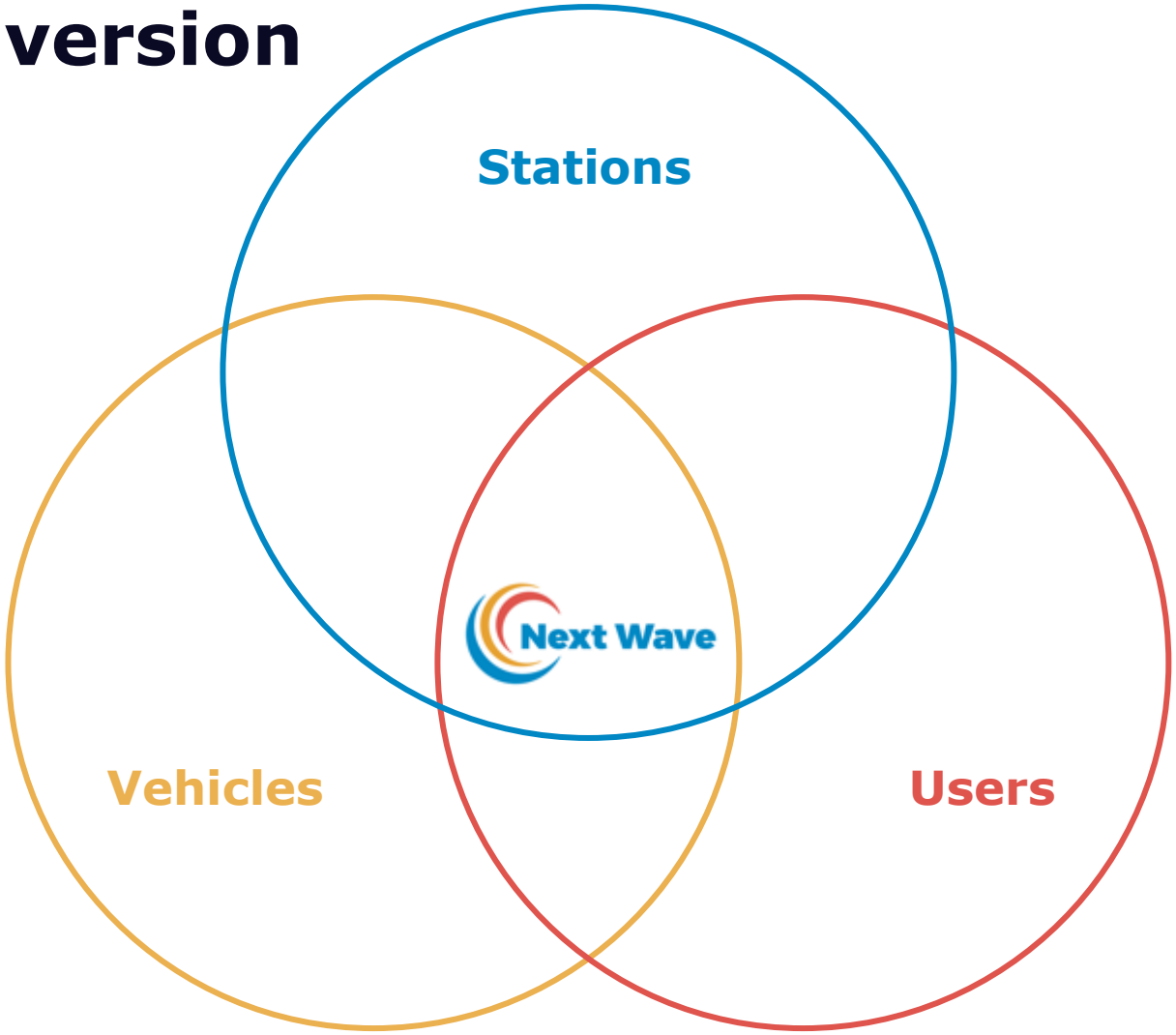
The simple version



Differences between the Nordic countries

THE NORDIC´S

Government incentives

What is needed to stimulate the uptake of H_2/electrofuels larger vehicles

Deliverable 6.4

Differences between the Nordic countries

Stamina - Predictability

A H_2 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_2 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 were:

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 of 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

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With construction ongoing, the first milestones have been reached.

How to scale further?

- **Predictability** is key – let’s build on existing framework!
- **Create demand**: CO2-fee, public procurement and climate reduction requirements.
- Support programs must evolve as market goes from pilot to **scale**.
- Full participation in **EU** legislative **framework** and **programs**.
- Need **policy** in all Nordic countries regarding hydrogen

NORDIC COOPERATION

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