Norwegian Hydrogen Forum

The Norwegian Hydrogen Landscape

HySchool Days 14.april 2026

Members of Norwegian Hydrogen Forum

Norwegian Hydrogen Forum

Industry

Statkraft, equinor, Shell, Linde, nel, hystar, HEXAGON PURUS, UMOE ADVANCED COMPOSITES, YARA, AIR LIQUIDE, DNV, aibel, Å ENERGI, Akershus energi, Viken Hydrogen, NTE, VARANGER KRAFT, Norwegian Hydrogen, HYDS Hydrogen Solutions, GREENH, GREENSTAT, Meraker Hydrogen, Glomfjord Hydrogen, Gen$_2$ Energy, HydePoint, Fortescue, FUELLA FUTURE OF FUEL, HY2GEN NORGE AS, HyCarrier, north ammonia, Milestone Zero, PROVARIS, HELINOR ENERGY, Corvus Energy, POWUNIT, PowerCell Group, HRP, Honeywell, GLOCAL GREEN, worley, TEKY, Marketplace, BPT Billington Process Technology, Futurum Narvik kommunes næringsselskap, Hydrogen Storage, CerPoTech Ceramic Powder Technology, OTECHOS, HOERBIGER because performance counts, HydraServ, HARTING Pushing Performance Since 1945, flowtec Instrumentation · Pumps · Solutions, bürkert FLUID CONTROL SYSTEMS, TOLCON Gasleiringer for husholdning og industri, Jarotech as ENGINEERING ENERGY, auma Solutions for a world in motion, ALFA LAVAL, Håland Instrumentering AS, STAHL, JUMO, Holta & Håland HOLTA & HÅLAND SAFETY AS, Swagelok, HAAKON ELLINGSEN, SLÅTTLAND, Parker, Vergia, VIREON, westgass, APPLIED HYDROGEN, NAPOP, TOYOTA, LITRA, ASKO – vi forsyner Norge med mat, VIKING, LH2 SHIPPING

R & D

SINTEF, NORCE, IFE, FFI Forsvarets forskningsinstitutt, USN Universitetet i Sørøst-Norge, UiO : Universitetet i Oslo, Høgskulen på Vestlandet, NTNU

Organisations

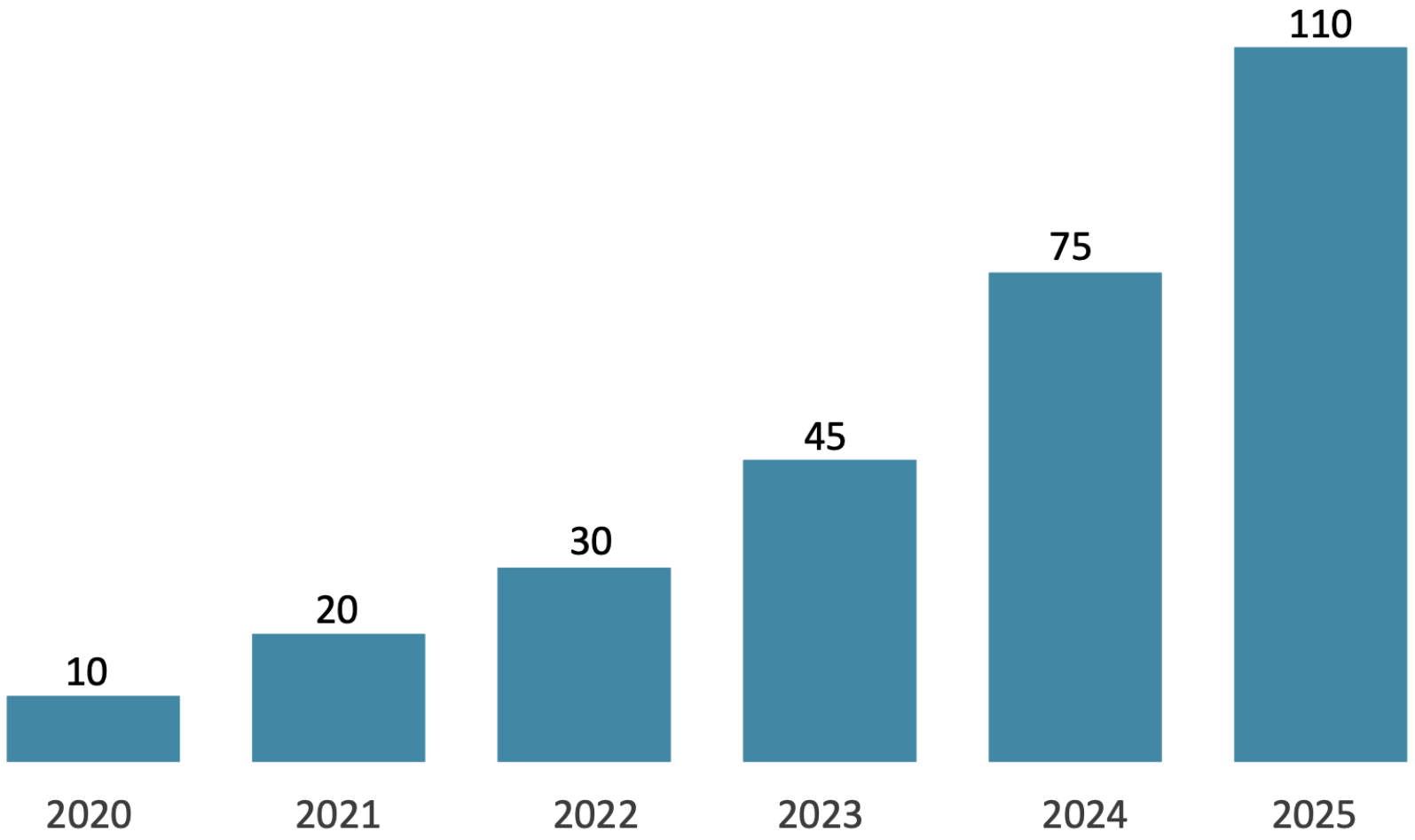
Standard Norge, Fornybar Norge, Småkraft Foreningen, EGN ENERGIGASS NORGE, bil Bilimportørenes landsforening, KUNNSKAPSBYEN LILLESTRØM, ZERO, STYRKE

Authorities

Sjøfartsdirektoratet Norwegian Maritime Authority, Justervesenet

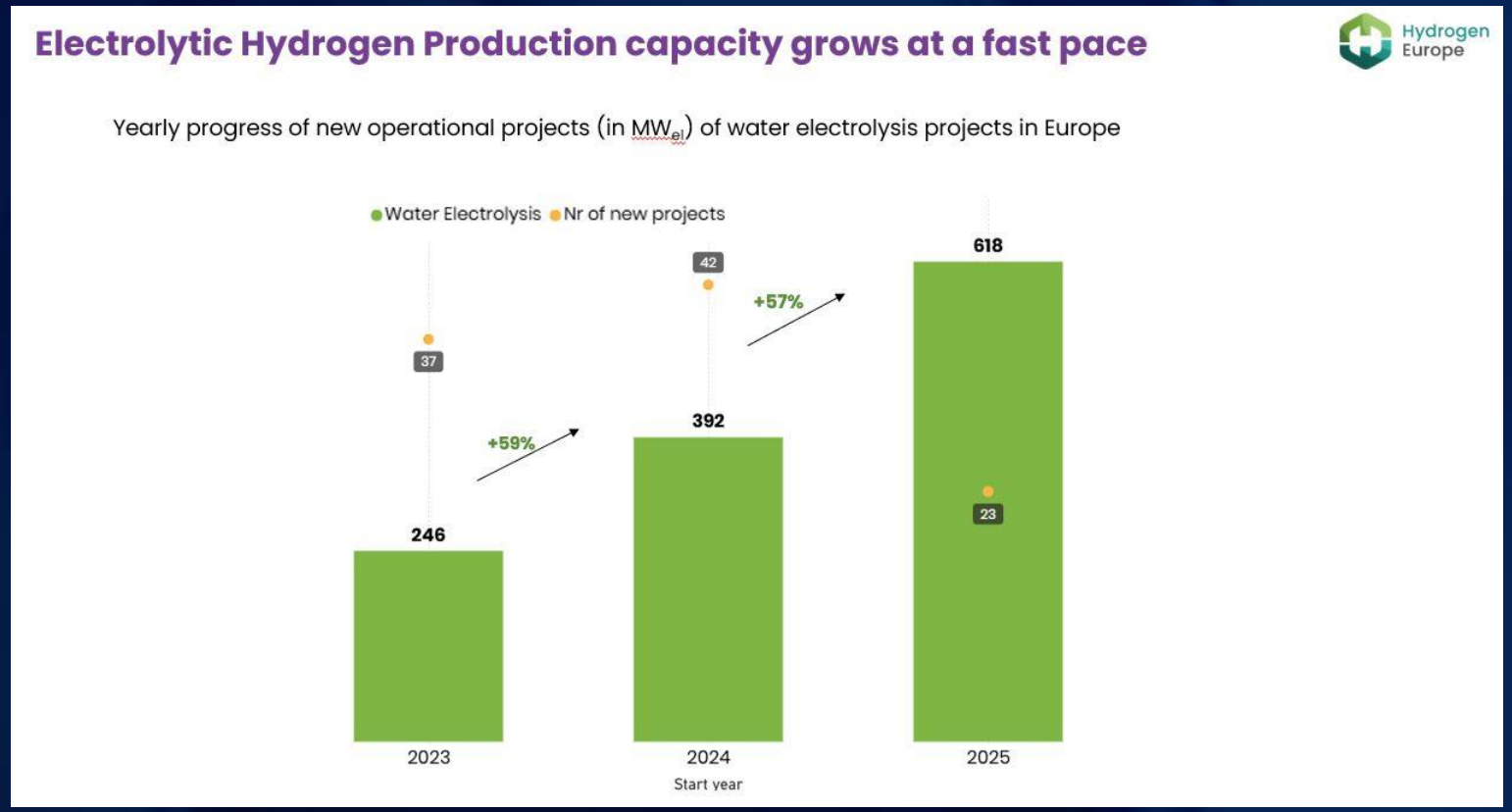
Global investments increase by at least 50 % each year

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.

Norwegian Hydrogen Forum

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.

Norwegian Hydrogen Forum

Landscape at a glance

(2024 numbers in brackets)

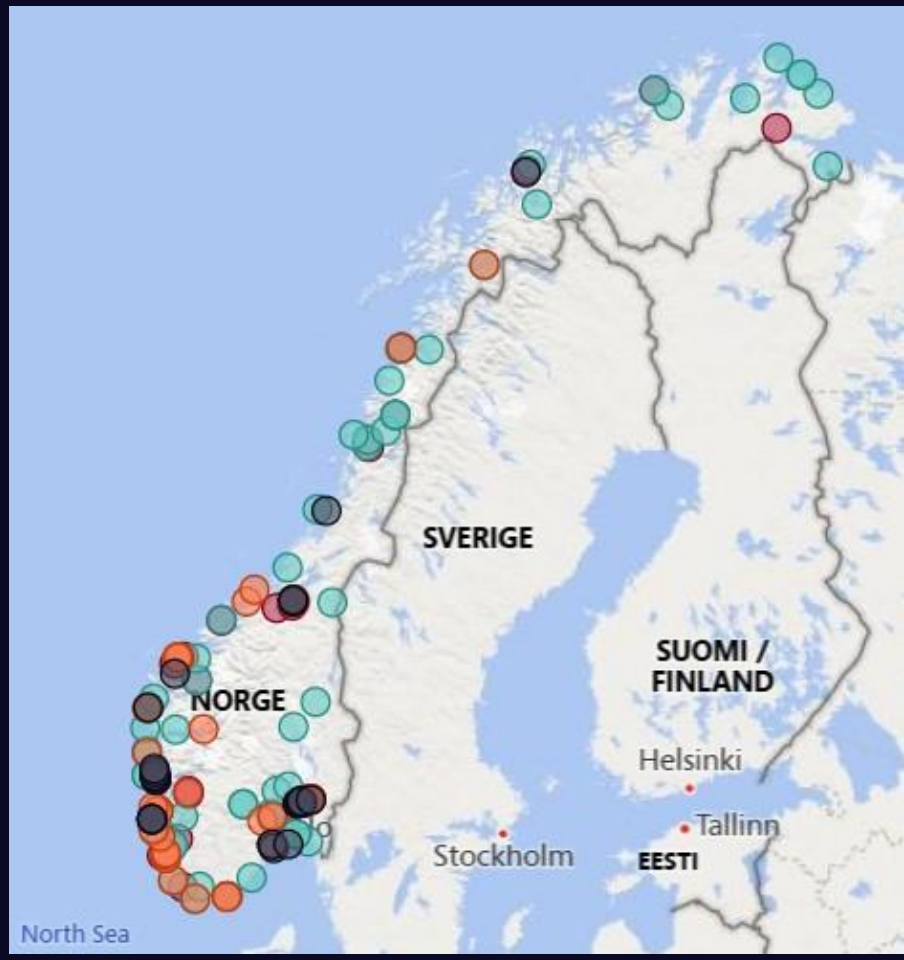
Total number of projects

217 (212)

Number of projects by project type*

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

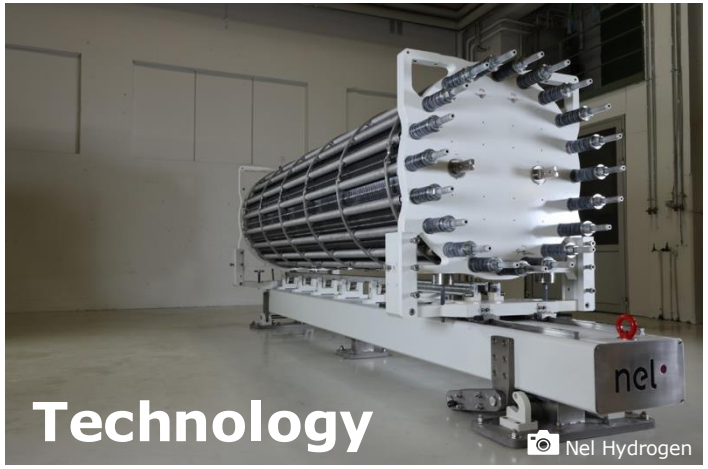
*Each project may belong to multiple categories.

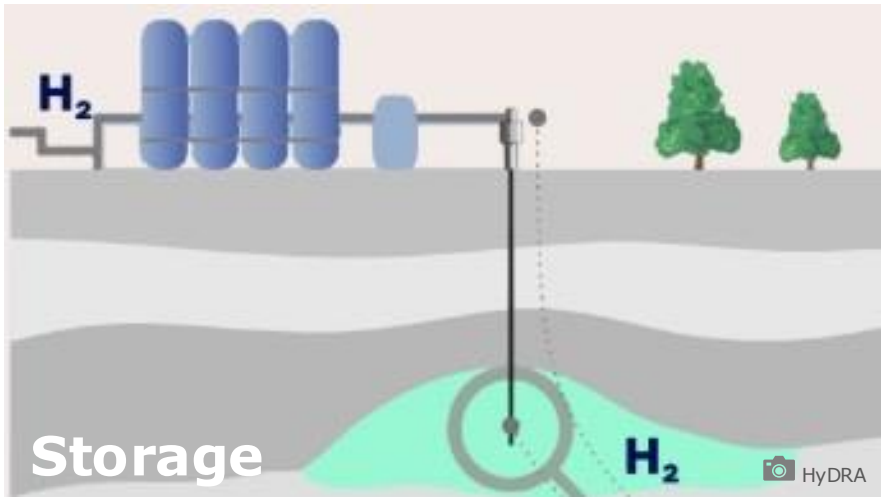


There are projects in 69 (82) of Norway's 357 municipalities.

Norwegian Hydrogen Forum

Progress across the entire value chain





Ships are being built in more segments

Norwegian Hydrogen Forum

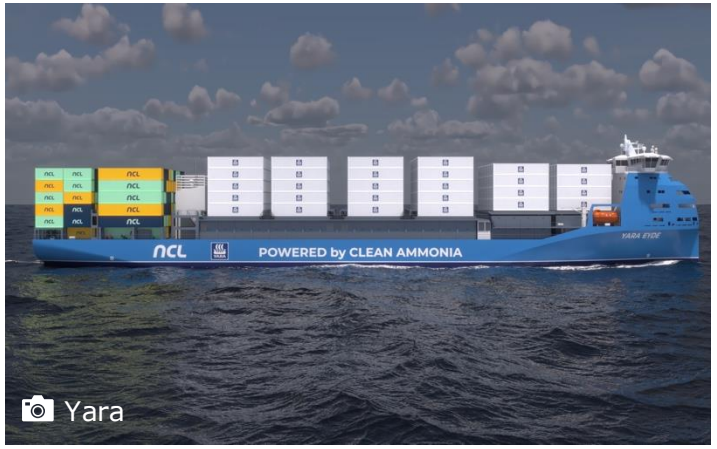
GMI Group

Eidesvik

Torghatten


Viking Cruises

Heidelberg Materials



Yara

Amon Maritime

Norwegian Hydrogen Forum

Industrial piloting

Several piloting and demo projects are ongoing, such as in recycling of aluminium, fertilizers, reinforcing steel, titanium slag and high-purity pig iron, asphalt, and others.

Prime minister Jonas Gahr Støre attended the opening of Yara's 24 MW PEM-electrolyser in June 2024.
Photo: Yara

Yara's fertiliser plant at Herøya, Porsgrunn.
Photo: Herøya Industripark

Norwegian Hydrogen Forum

Feasibility study for hydrogen at airports

- Avinor and the Civil Aviation Authority of Norway initiate feasibility study for hydrogen at a Norwegian airport.
- Through the international test arena for zero and low emission aircraft, they will establish infrastructure for storage, distribution and refuelling of hydrogen.
- Inviting manufacturers, operators, suppliers and consortia to participate.
- EU Innovation Fund supports retrofit of 15 Cessna aircraft for testing in Norway from 2028.

Photo: ZeroAvia

More information at: om.avinor.no/barekraft-i-avinor/testarena

Enova supports hydrogen production for maritime offtake along the entire coast

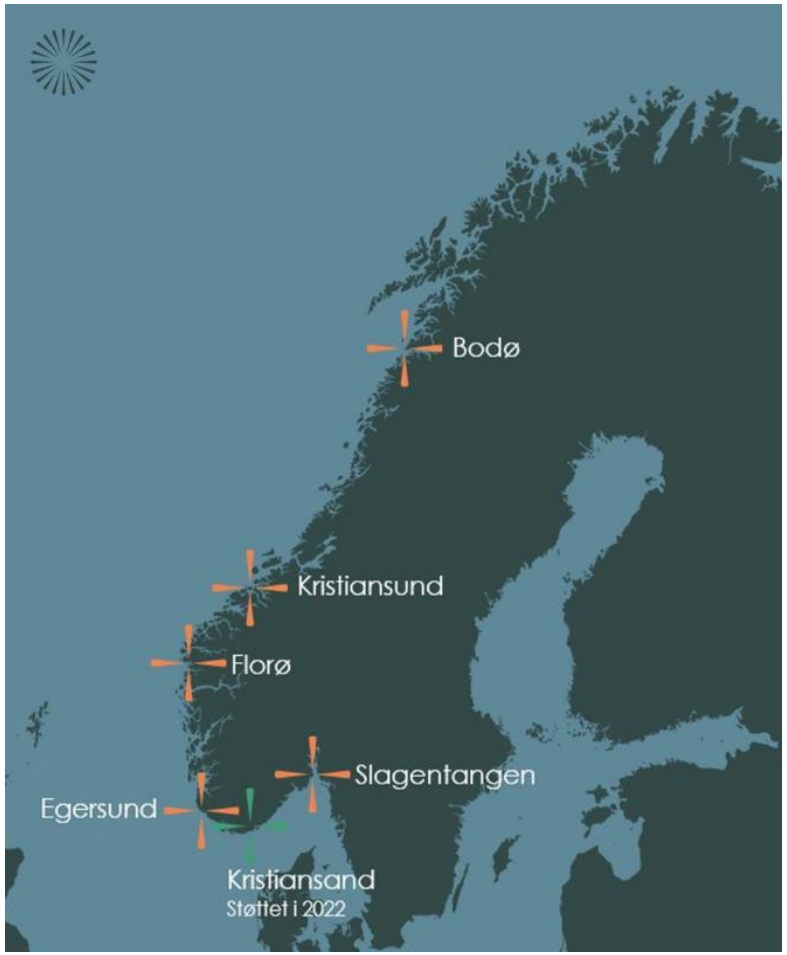


Illustration of maritime hydrogen hubs supported by Enova.

- Enova has allocated support to a total of 10 production facilities in two allocation rounds.
- 7 have reached Final Investment Decision (FID):
  - Bodø, Kristiansund and Slagentangen by GreenH, 40 MW (2025).
  - HyFuel in Florø and Kaupanes in Egersund by HYDS, 40 MW (2025).
  - Agder Hydrogen Hub by Greenstat, 20 MW (2024).
  - Neptun Glomfjord Green Ammonia by Neptun Tromsø and Greenstat, 20 MW (2024).

GREEN INVESTMENT

Norwegian Hydrogen with Investment Decision at Rjukan

By Fuel Cells Works
March 31, 2025 at 10:32 AM EDT

Listen 1:44

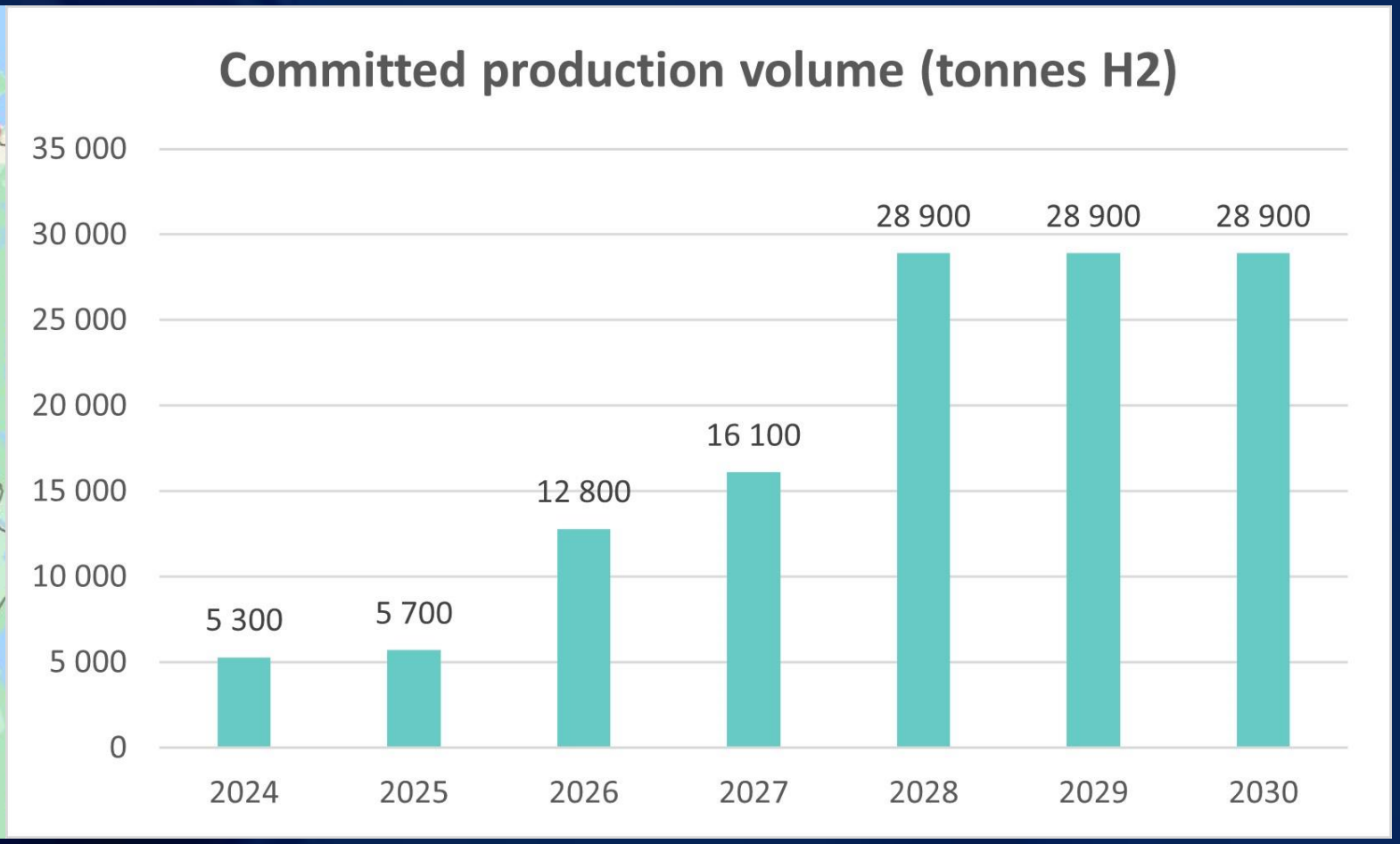
Illustration of the hydrogen plant at Rjukan. Image rights: Norwegian Hydrogen

Norwegian Hydrogen has now made the investment decision for a new hydrogen plant in Rjukan, Telemark in Norway. This is part of the company's strategy, which includes existing production of green hydrogen and several new projects currently under development across the Nordic region.

Norwegian Hydrogen lines up maritime buyer for its green H_2 project

Deliveries of liquid hydrogen are expected to begin in 2028

Production towards 2030: Increased number of FIDs



23 of 66 projects have reached Final Investment Decision (FID). This is nine more than in 2024. With the investments made so far, annual volumes of renewable and low-carbon hydrogen production will reach almost 29.000 tonnes before 2030. Numbers include hydrogen derivatives and recent FIDs in November 2025.

Enova’s funding programs

	Ongoing	Ended in 2025
	General program for emission reductions in industry: Max 30 million € each for hydrogen production and use.	
	Dedicated programs for H2 & NH3 vessels. Max 80% of additional cost or 30 mill. €, bi-annual competitive bidding until 2028.	Hydrogen production and bunkering, max 80% or 42 mill. €, only one allocation round; Ammonia infrastructure, max 80%, (only one allocation round).
	Dedicated program for zero-emission excavators. Max 60% of documented cost or 5 mill NOK. Monthly application deadlines.	
	Dedicated program for zero-emission heavy-duty vehicles. Max 60% of additional cost. H2 advantage vs. battery due to lower TRL. Monthly deadlines.	Hydrogen refuelling stations (HRS). Can be opened again later

Norwegian Hydrogen Forum

Other funding opportunities

- **Norwegian Research Council**
- **Innovation Norway**
- **Export Finance Norway (Eksfin)**
- **SIVA**
  - Research and innovation infrastructure
  - Industrial catapults

- **CO2 compensation in industry**
  - *Avoid carbon leakage from participation in ETS.*
  - *Up to 7 billion NOK per year in total.*
  - *40 % of compensation must be used on energy efficiency and emission reduction measures.*
- **EU Innovation Fund**
- **Horizon Europe**

The Research Council of Norway

Innovation Norway

Eksfin NO
EKSPORTFINANSIERING NORGE

siva

CINEA

Norwegian Hydrogen Forum

Important policy tools

- «Polluter pays principle» – Norway has had a **carbon price** since 1991.
  - 1.639 NOK per tonne in 2026. 3.400 NOK in 2035?
- Draghi report and *Inflation Reduction Act* (IRA) highlight importance of **tax credits**.
  - What will the government-appointed tax commission recommend?
- **Public procurement** has been an essential tool to stimulate decarbonisation, innovation and technology development in the maritime sector.
  - Since 2024, there is a general requirement to weigh climate and environmental impact 30 % in public tenders.
- **Requirements**: to reduce emissions and introduce zero emission technology at construction sites and domestic shipping segments.

EU Regulatory Framework

Norwegian Hydrogen Forum

Directive / Regulation	Implementation status
Renewable Energy Directives II and III • Delegated Acts defining renewable hydrogen (RFNBO) • Binding RFNBO-targets in industry and transport • Guarantees of Origin	• RED II included in EEA agreement in July 2025. • Norwegian law on sustainability and emission criteria for alternative fuels pending. • RED III under consideration.
RefuelEU Aviation 1.2 % binding target for synthetic fuels by 2030 and 35 % by 2050.	• To come into effect from 2027 at the latest.
FuelEU Maritime and ETS 1 • Carbon pricing • GHG saving targets and specific quotas for RFNBO	• FuelEU: Transposition and enforcement is ready, waiting for approval in Iceland. • ETS 1: maritime included since 2024.
AFIR, ETS 2 • Max 200 km between hydrogen refuelling stations on TEN-T core network + urban nodes • Carbon pricing	• Public hearing on proposed law on infrastructure for alternative fuels. Unclear how many urban nodes Norway will have. • ETS 2 from 2028
ETS 1 and 2, CBAM, NZIA, IAA • Carbon pricing inside internal market and on imported goods • Permitting and procurement of strategic technologies	• ETS 1 in effect. ETS 2 from 2028. • CBAM from 2027. • NZIA: Disagreement concerning jurisdiction on Norwegian Continental Shelf (NCS).
Hydrogen and decarbonised gas package • Tariffs, access to infrastructure and consumer rights • Blending allowance in grid, gas quality • Delegated Act defining low-carbon hydrogen	• Considered EEA-relevant and acceptable with some adjustments. • Transposition pending.

Norwegian Hydrogen Forum

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.
- Enova's programs must evolve as market goes from pilot to **scale**.
- Full participation in **EU** legislative **framework** and **programs**.

Lin April Løstegård
lal@hydrogen.no

Norwegian Hydrogen Forum

hydrogen.no