Hydrogen Cluster Finland

Position on the Revised EU Hydrogen Strategy and Future Hydrogen Mandates

Finland has one of the most competitive environments to produce green and low-carbon hydrogen and derivatives. The realization of Finland's significant investment potential depends on EU regulatory signals.

Hydrogen Cluster Finland calls for political commitment and regulatory consistency.

1) Set long-term trajectory: Set a clear EU hydrogen demand trajectory to 2040 and beyond. Ensure predictable target implementation across Member States to create a genuine European hydrogen market.

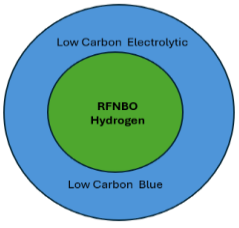
2) Confirm transport sector targets: Confirm continuation of RED III RFNBO transport targets until 2040. Confirm ReFuel EU Aviation targets. Confirm targets and increase RFNBO-ambition in FuelEU Maritime in 2030s.

3) Create fit-for-purpose industry targets: Replace existing RED III RFNBO industry target with targeted lead market approach that incentivizes competitive lead-markets and early movers.

- Focus on IAA Lead Market Sectors (such as green steel) that demonstrate potential. Target also other industrial key grey hydrogen consumers with tailored incentives to maintain competitiveness.
- Expand book and claim (ticket market) between EU member states to the industry to enable flexibility and cost-effectiveness in fulfilling the industry target.

4) Make resilience bankable: Create resilient energy system that protects EU from geopolitical risks and dependencies by increasing EU domestic production.

5) Simplify the framework with "onion model": Create simpler rules for hydrogen production. Each type of H2, including in addition to the currently approved RFNBO and low-carbon H2 also potential turquoise, white and bioenergy-based H2, should be allowed to fulfill targets with a different multiplier, where RFNBO receives the highest multiplier.



Finland is ready for ambitious 2040 decisions

While development of the hydrogen economy has progressed slower than anticipated, signs of stronger investment appetite are emerging as the first binding RFNBO mandates are entering into force. Therefore, Europe is at a decisive point in the development of its hydrogen economy. Hydrogen Cluster Finland believes that the answer is not to weaken Europe's hydrogen ambition, but to make the existing framework fit-for-purpose.

Europe needs commitment, consistency and courage

Europe needs *commitment* to the targets already agreed, *consistency* and predictability in the regulatory framework that companies have relied upon when preparing investments, and *courage* to create the markets that will turn Europe's hydrogen ambitions into industrial reality while supporting European resilience.

Finland is committed to produce 10 % of European hydrogen

Finland is committed to produce at least 10% share of the European clean hydrogen and its derivates and is also willing to export products to Central Europe. Synthetic e-methane sales from Finland to Germany have already started to flow due to the ambitious RED III transport targets adopted by Germany. Finland is exceptionally well positioned to contribute. Our abundant clean electricity potential, industrial capabilities, biogenic CO_2 resources and developing hydrogen infrastructure can provide renewable and low-carbon hydrogen and hydrogen-derived products to the wider European market. Simultaneously, Finland provides an excellent location for energy intensive industries committed to decarbonize.

The revised EU Hydrogen Strategy should establish a pathway towards climate neutrality in 2050

Regulatory stability matters as much as ambition. Companies have developed projects, and allocated development capital based on the established regulatory framework. Reopening fundamentals risks delaying investments.

The Commission is developing the new Hydrogen Strategy in parallel with the post-2030 renewable energy framework and the implementation of the EU's 2040 climate target. This provides an opportunity to connect hydrogen policy directly to Europe's long-term industrial, energy and climate architecture. *EU and Finland are ready for hydrogen.*

Finland's hydrogen economy in a nutshell

~60
hydrogen economy projects

~1.5 Mt
potential hydrogen production capacity per year

~€25 bn
in investments

ABO Energy (Nivala, Oulu)
Aliceco (Kokkola, Raahe)
Alva (Jyväskylä)
Arctic Sisu (Kotka)
Aurelia Turbines Kokkola)
Blastr (Inkoo)
Convion (Espoo)
CPC Finland (Kristiinan-kaupunki)
EIT Inno Energy (Kuopio)
Energie-quelle (Oulu)
EPV Energia (Vaasa)
ET Fuels (Ranua)
Fortum (Loviisa)
Freija AS (Imatra, Nokia)
GNE (Naantali, Pori)
GNH (Kemi)
Helen (Helsinki)
Hycamite (Kokkola)
Kemira (Sastamala)
Kokkolan Energia (Raahe)
Liquid Sun (Espoo)
LSJH (Salo)
Luoto Energia (Rauma)
Norsk eFuel (Imatra, Rauma, Tornio)
Norwegian Hydrogen (Tornio)
Orkla (Åland)
Oulun Energia (Oulu)
OX2 (Sastamala)
P2X (Harjavalta, Joensuu)
Plug Power (Kokkola, Kristiinankaupunki, Porvoo)
Raahen Monivoima (Raahe)
Ren-Gas (Kerava, Kotka, Lahti, Mikkeli, Pori, Tampere)
Solar Foods (Lappeenranta, Vantaa)
Solvay Chemicals (Kouvola)
STR Tecoil (Hamina)
TE H2 & Aliceco (Luoto)
Verso Energy (Oulu, Tornio)
VetyAlfa (Kemijärvi, Rovaniemi, Utajärvi, Vaala)
Vireon (Jyväskylä)

