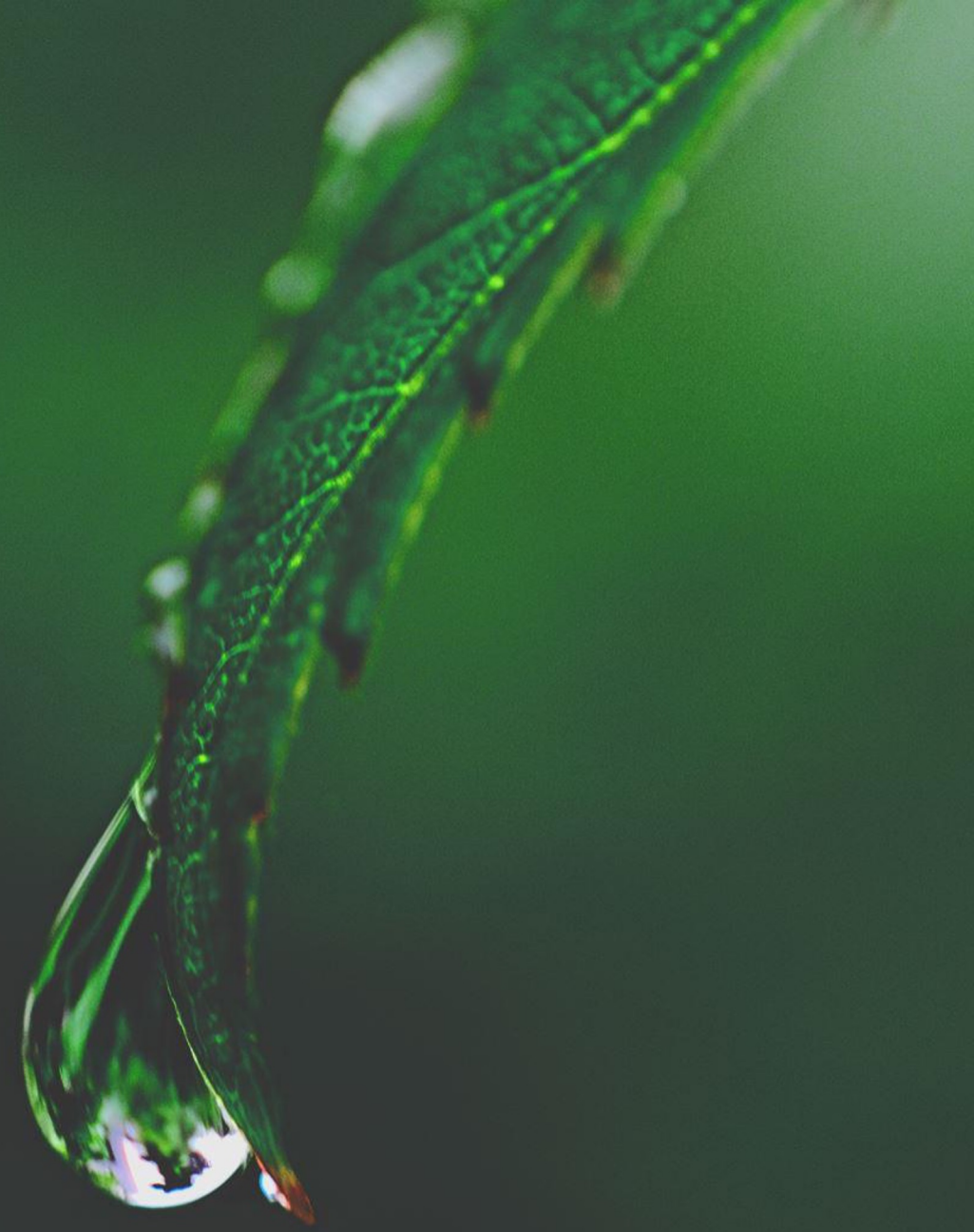




**Nordic activities and
intensified co-operation**

Herkko Plit

December 2023



P2X Solutions: Forerunner of green hydrogen and power-to-x production

Privately held Finnish company established in 2020 by world-class business developers and energy experts

Producer and distributor of green hydrogen and e-fuels (e-methane, e-methanol and e-ammonia)

First plant operational in 2024, 1 GW of electrolysis capacity by 2031

Awarded as one of the most promising startups in Finland

Customers in industry & transport in Finland and abroad



We are scaling up our hydrogen and e-fuel production systematically to 1 GW by 2031 to enable the green transition of our industrial and mobility customers



2026: TBA



2026: Joensuu 30 MW



2024: Harjavalta 20 MW



2022: Harjavalta 20 MW



Green hydrogen

Green methane

Green methanol

Green ammonia

We will be able to deliver green hydrogen and synthetic methane already in summer 2024.





Largest challenges in energy sector

Distribution



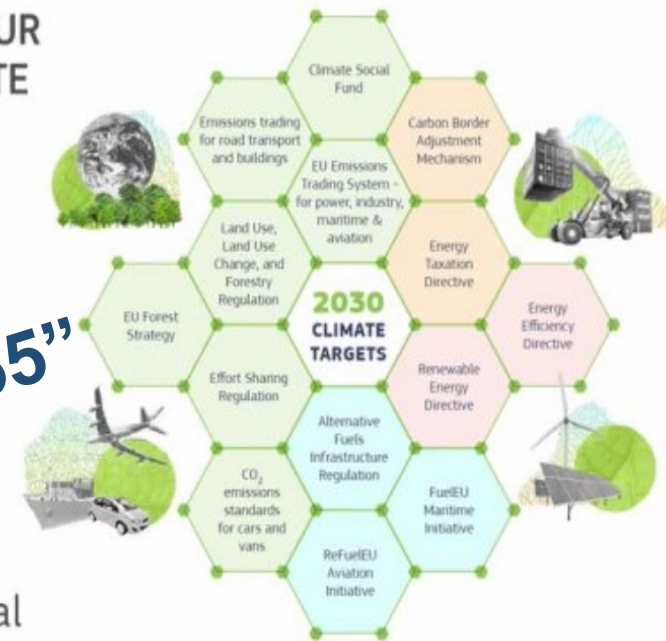
Storage



Political momentum

EUROPEAN GREEN DEAL

REACHING OUR
2030 CLIMATE
TARGETS



"Fit for 55"

#EUGreenDeal



BothH₂nia

European
Hydrogen
Forum



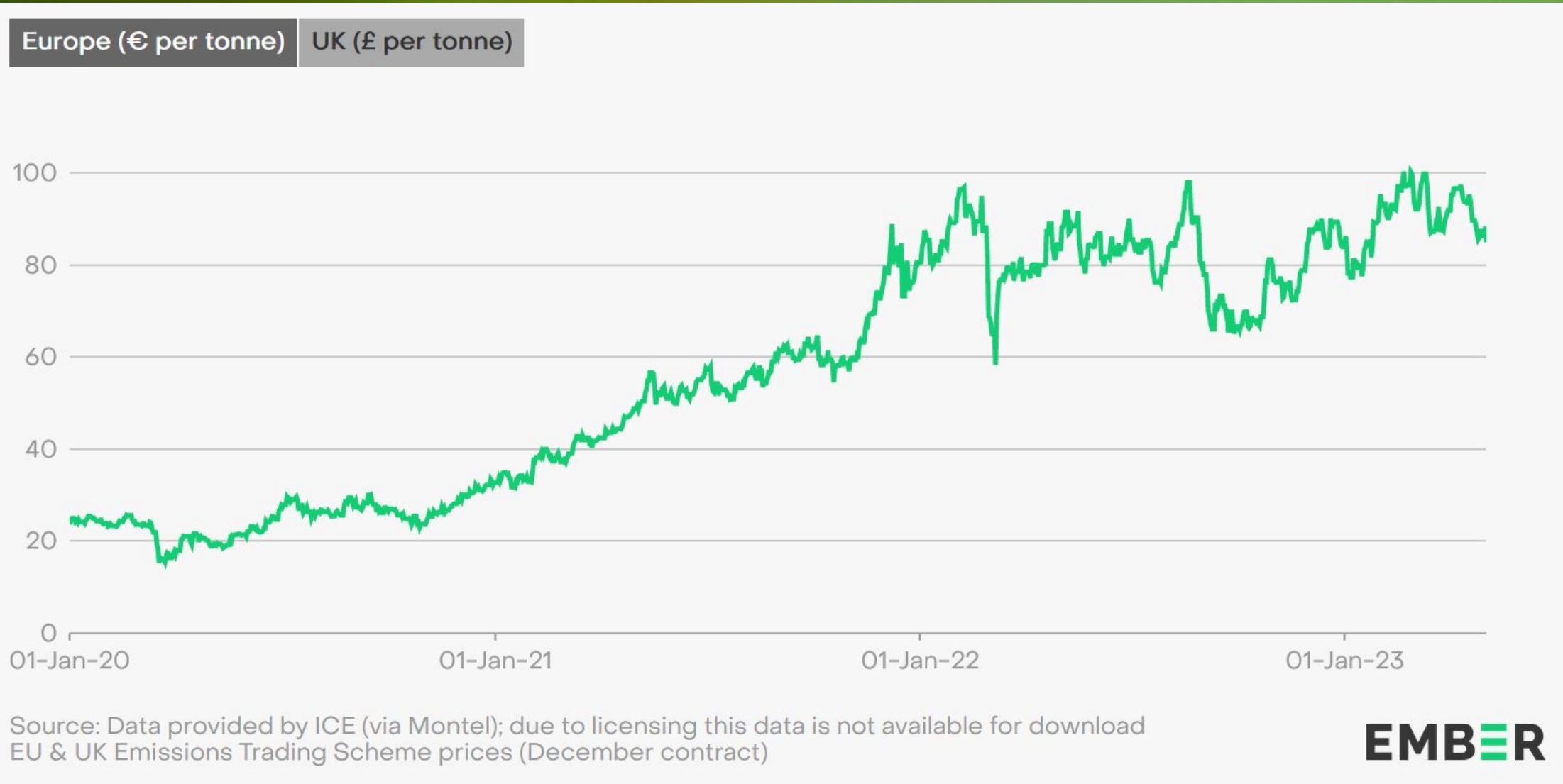
#euhydrogenforum

H₂cluster
FINLAND



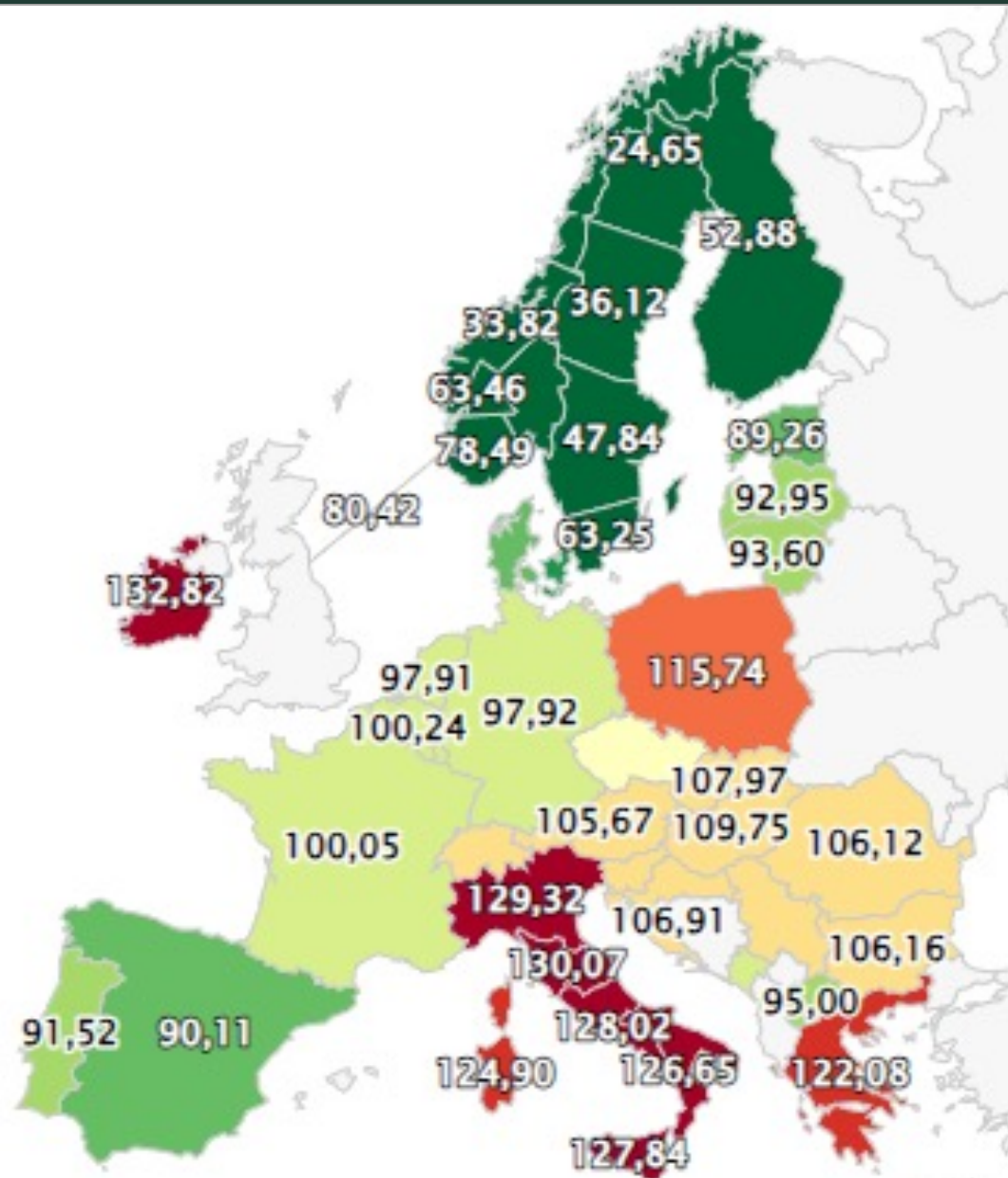
COP²⁸
UAE

Carbon will have price




Nordics - Favourable location

- Nordic countries are having in general cheapest electricity prices in Europe
- Electricity price covers almost 50% of OPEX of green hydrogen unit



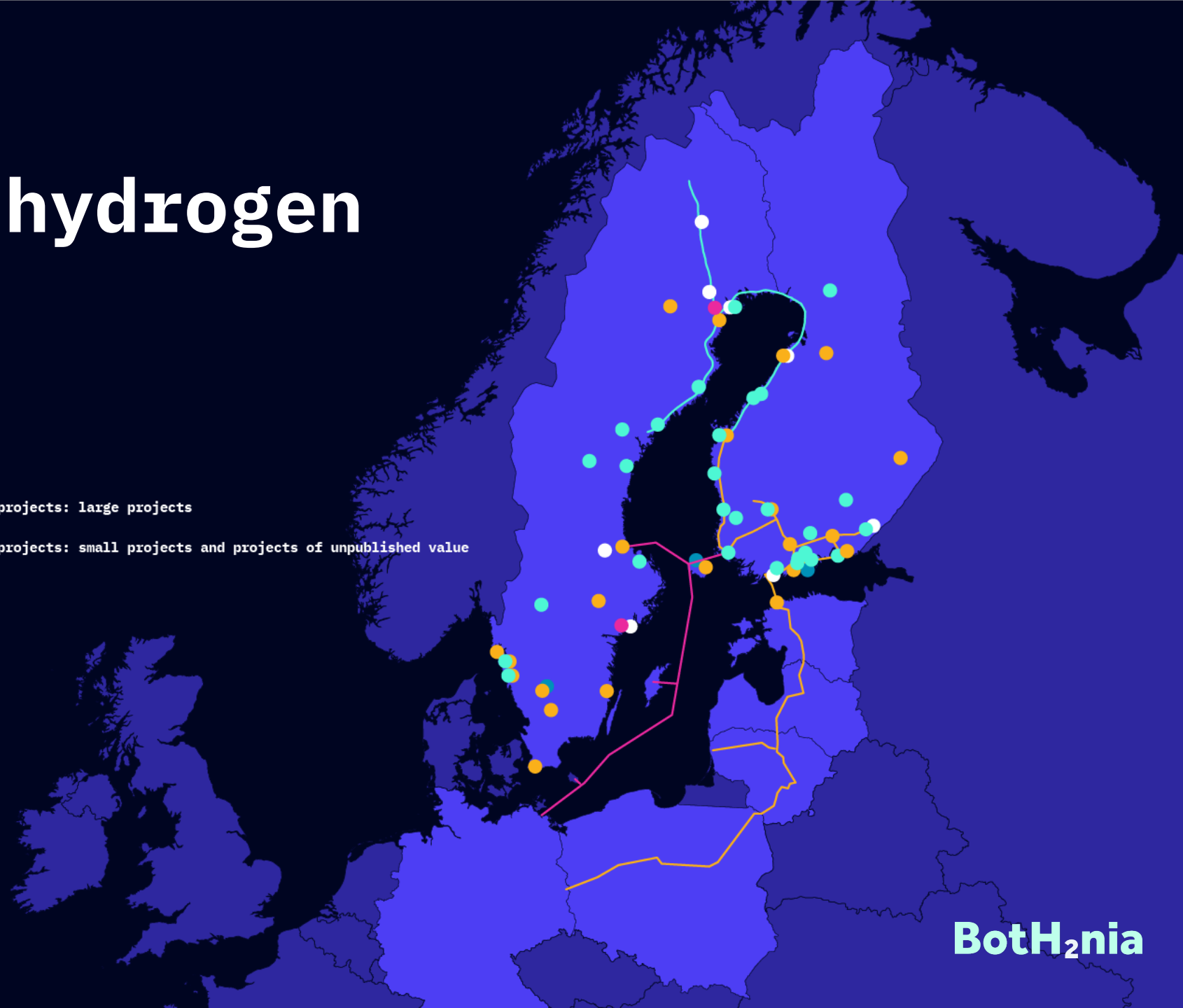
YTD electricity prices 10-2023

An aerial photograph of a large, blue lake surrounded by a dense green forest. The water is calm, and the trees are lush. In the bottom left corner, there is a circular inset showing three wind turbines against a sunset sky. A semi-transparent grey box with white text is overlaid on the right side of the image.

**Nordic strength:
Our 100 % renewable
synthetic fuels are produced
from wood, wind & water**

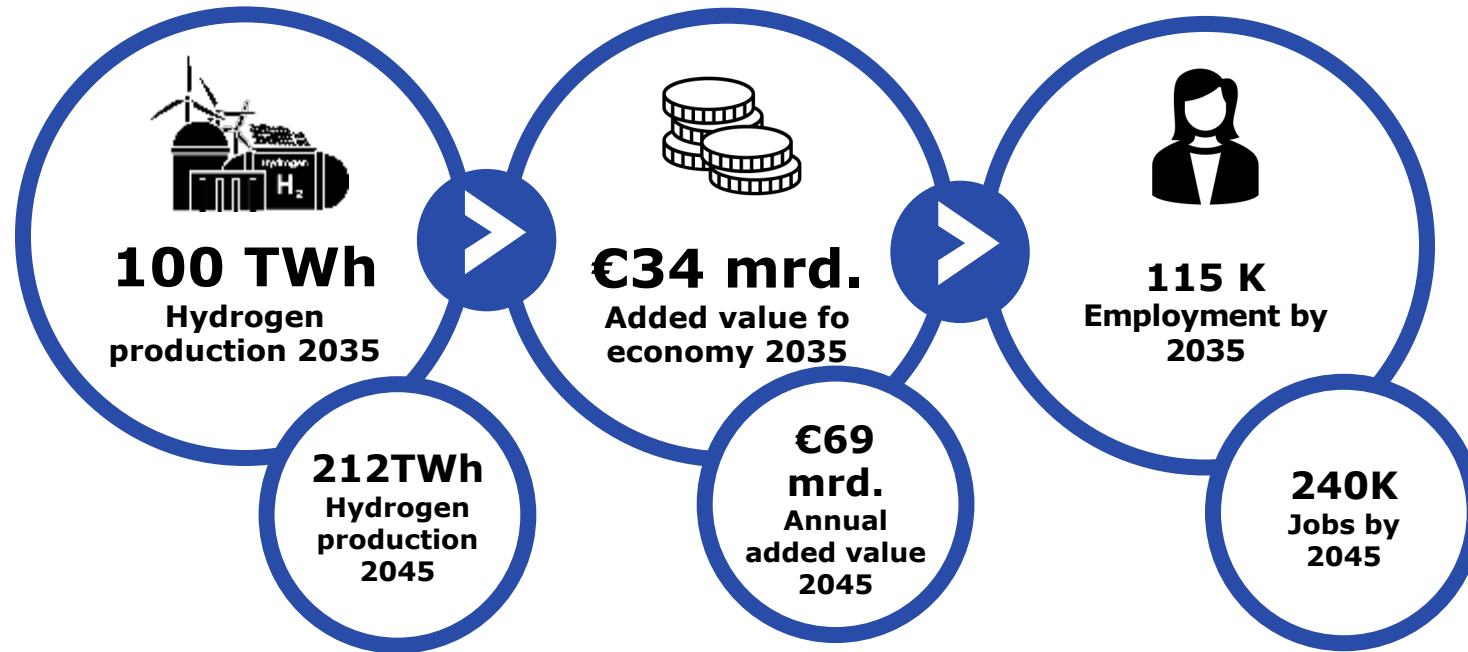
Announced hydrogen projects

- Announced hydrogen and synthetic fuels production projects: large projects
- Announced hydrogen and synthetic fuels production projects: small projects and projects of unpublished value
- Hydrogen steel production projects
- Infrastructure projects
- Other hydrogen projects
- Baltic Sea Hydrogen Collector (BHC)
- Nordic-Baltic Hydrogen Corridor (NBHC)
- Nordic Hydrogen Route (NHR)



Finland as Leading Ecosystem on Hydrogen Economy in Europe in 2035

H₂ opportunity and benefits



Nordic success: 1+1 is much more than 2

- Nordic countries are having the best needed resources for Hydrogen Economy
- France and Germany and other European and non-european countries want to become hydrogen giants as well – harsh global competition
- After start of Ukrainian war European self-sufficiency on energy crucial – all hydrogen cannot be imported from outside Europe
- Pipeline infrastructure cost effective way of distributing energy
- High value chain also as target – steel industry, mobility, hard to abate sector,...
- We need to join our forces to bring critical mass and Nordic voices heard at Brussels and globally
- Main goal: Nordic optimisation instead of local or municipal sub-optimisation
 - Thus, greater wins and gains for all regions
 - However, local valleys and initiatives also important





Thank you!



Herkko Plit
Founder & CEO
P2X Solutions Oy
+358 50 462 0788
herkko.plit@p2x.fi

