Green Fuels –
Opportunities for new energy partnerships

Northern Power business forum on February 13th, 2025

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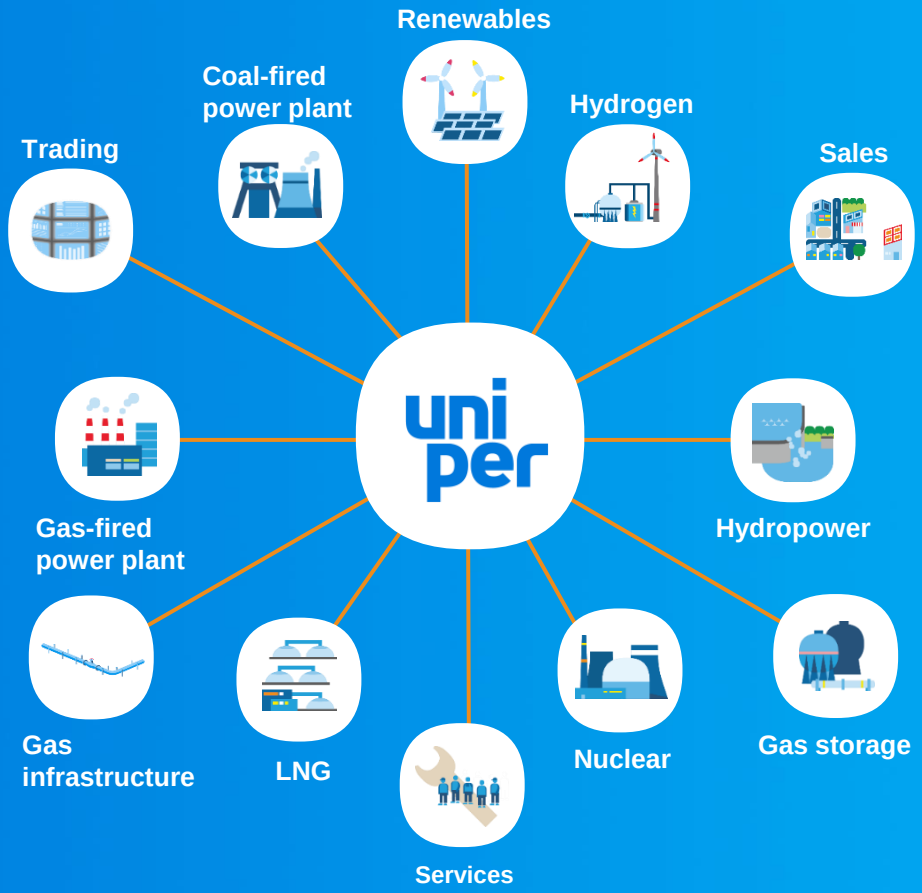
Uniper at a glance

- **7,000 employees** ensure security of supply in Europe
- Active in more than **40 countries**
- **~ 22.4 GW** generation capacity
- Entire business to be carbon-neutral by **2040**
- Gas portfolio consisting of roughly **200 TWh**
- **€6.3 billion** adjusted EBIT (FY 2023)



Source: Company in brief | Uniper

Massive all-embracing transformation is needed

NEW technologies

Various elements of transformation are “first of its kind”

NEW regulations

Economical feasibility not yet achieved, implementation of subsidies/regulatory incentives required

360º view

Holistic approach needed to overcome “chicken and egg dilemma”

Jointly working

Successful decarbonization only possible by joining forces and realizing projects based on strong partnerships

Shaping the green energy future

Our growth platform New Green Power and Gas (NGPG) concentrates on the future energy system

We develop and build hydrogen and green fuel projects, low-carbon and carbon-free gas-fired power plants, and energy storage solutions for decarbonization.

NGPG is also responsible for building Energy Transformation Hubs, by cross-development of different projects at the same site
Through these growth clusters:

- **Hydrogen**
- **Green Fuel**
- **Infrastructure**
- **Clean Dispatchable Power**
- **Industrial Customer Solutions**

Green fuel as game changer for the transport sector

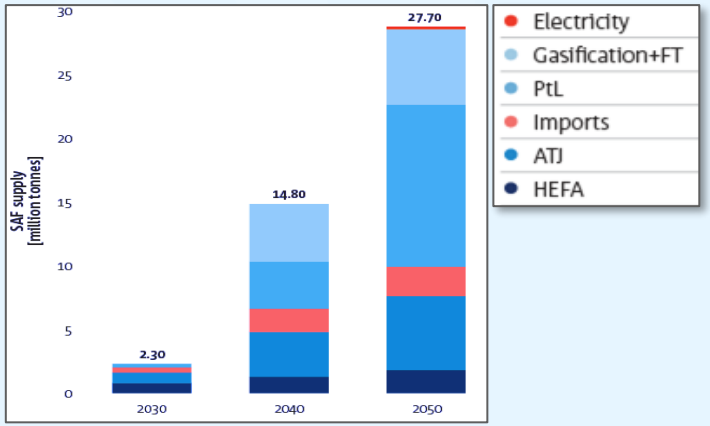
The decarbonization of energy supply in various sectors is an important future trend

The European markets will depend on the import of green fuels and gases. In particular some sectors are hard to decarbonize and thus rely on green fuels like green methanol, ammonia or sustainable aviation fuels (SAF).

Meanwhile natural gas is and will remain an important driver for the security of energy supply as well as the decarbonization of the European energy system at least for the next decade.

Steep increase in demand and production of green fuels forecasted – two examples

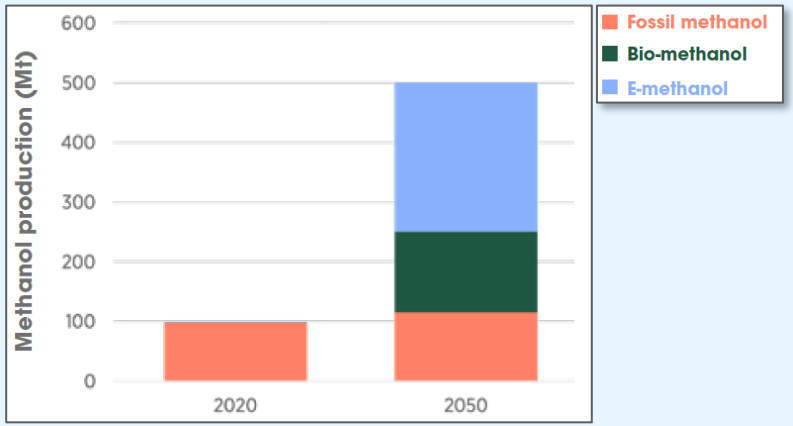
Sustainable aviation fuel for decarbonization of aviation



ReFuelEU modelled SAF supply per production pathway in the EU27

Source: European Aviation Environmental Report 2022, European Union Aviation Safety Agency, 2023

Methanol is an important fuel for transportation and feedstock for chemical industry

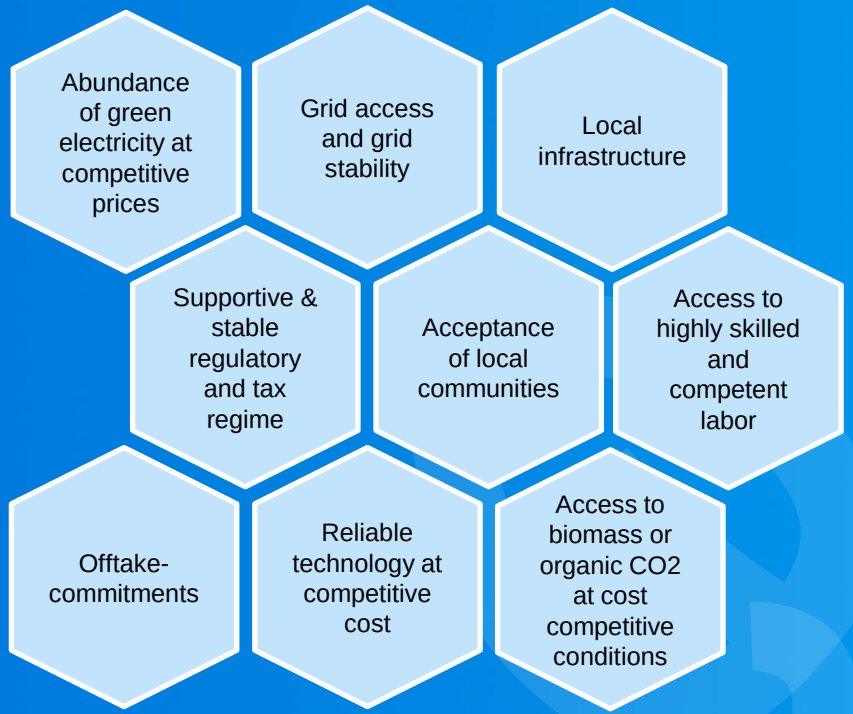


E-methanol: Produced from CO_2 and renewable power, projected to develop to 350 Mt/a over 30 years

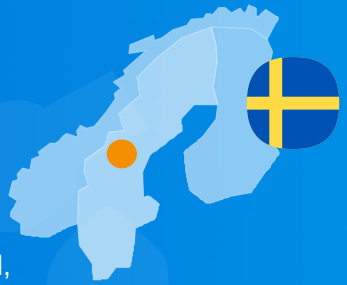
Bio-methanol: Produced from biomass and renewable power, projected to develop to 135 Mt/a over 30 years

Source: Innovation Outlook : Renewable Methanol, International Renewable Energy Agency, 2021

Successful and commercially viable implementation of green fuel projects depends on several key factors



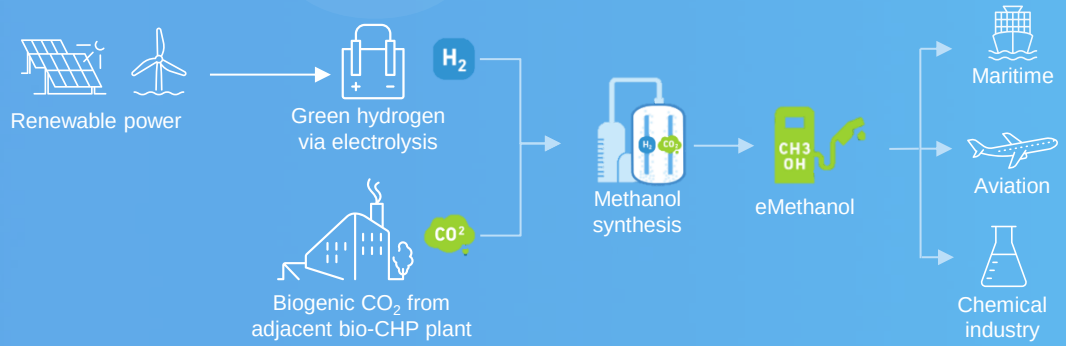
uniper NorthStarH2

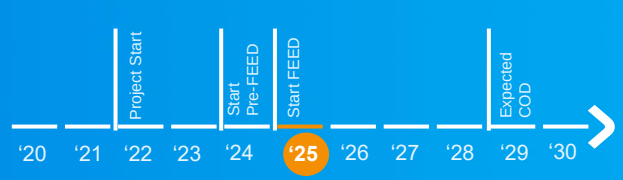


Develop, build and operate a “Power-to-Methanol” (eMethanol) plant at the Lugnvik industrial site in Östersund, Sweden to upcycle 160,000 tonnes of biogenic CO_2 per year while annually consuming 1.4 TWh of renewable electricity

Producing eMethanol to replace fossil fuels and drive the green transformation of hard-to-abate sectors including the maritime, aviation and chemical industries

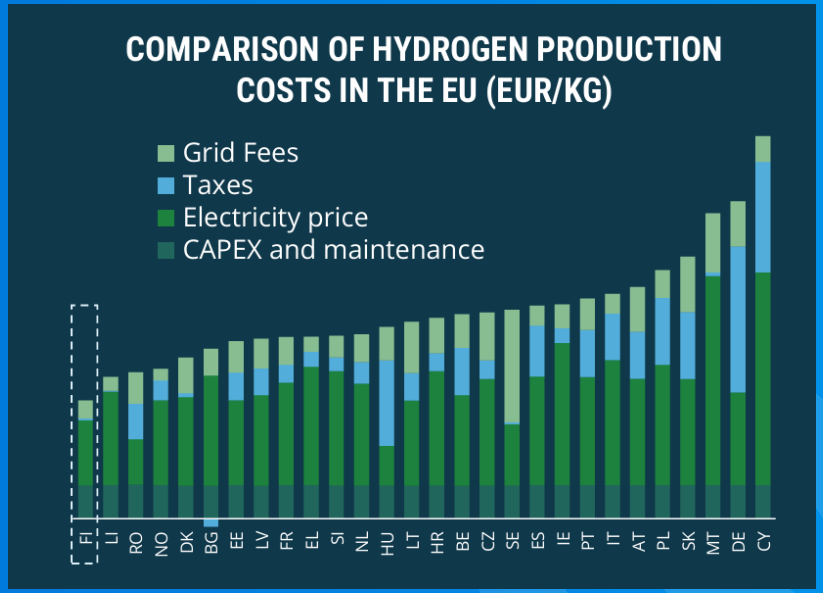
112 kt
yearly eMethanol production volume





COD: start of commercial operation

Finland scores well on several criteria important to produce H2 and H2 derivatives…



Source: Hydrogen Europe, 2024

…opening up potential opportunities for new energy partnerships.