Market Insights and Demand for Carbon in e-Fuels

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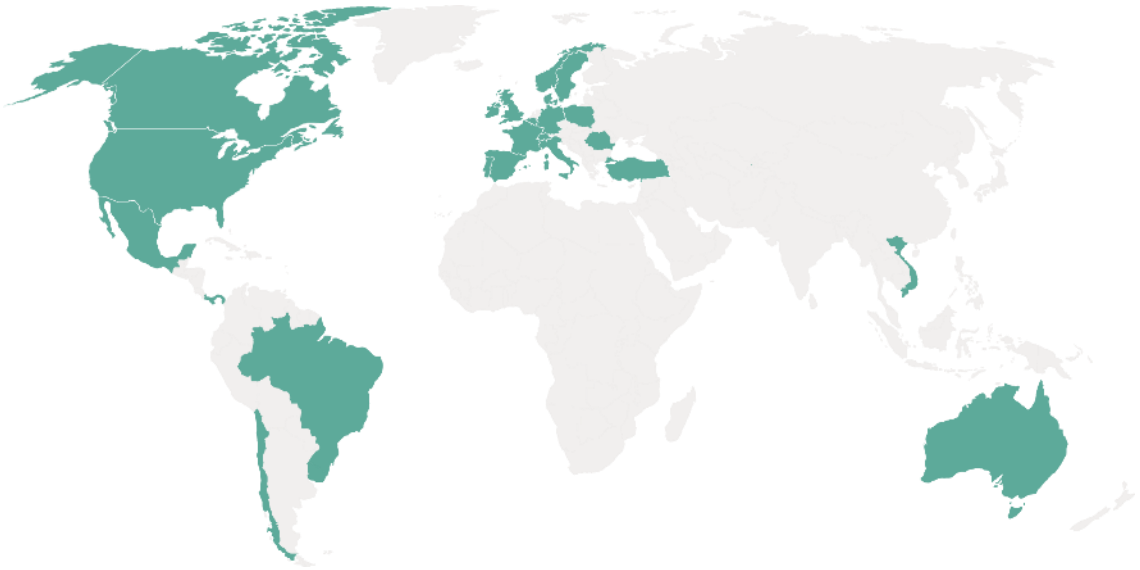
RES Nordics

RES at a glance

+40
YEARS'
experience in renewable energy

24
COUNTRIES
worldwide

#1
WORLDWIDE
The world's largest independent renewable company



29GW
projects developed and/or constructed

45GW
operational assets supported

OVER 4,500
world leading experts

SOLUTIONS

- Development
- Construction
- Services
- Digital solutions

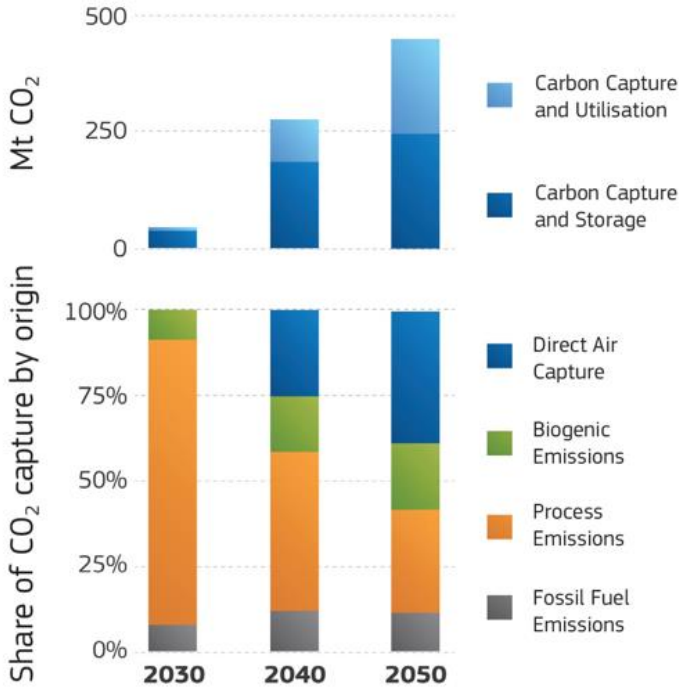
TECHNOLOGIES

- Wind
- Solar
- Storage
- T&D
- Green hydrogen

The CCU e-fuel run

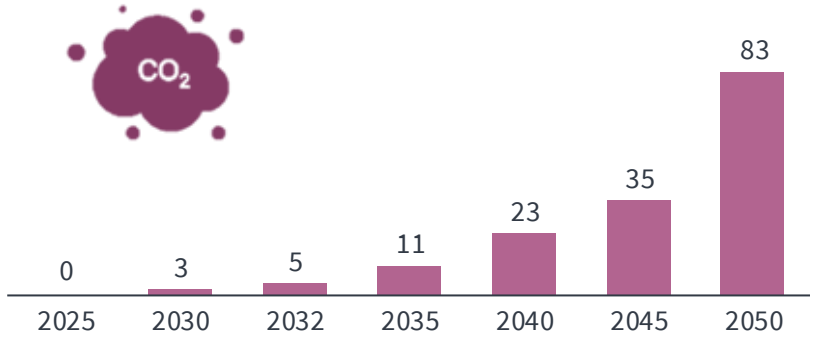
The start: CO_2 demand for e-fuels and products

Indirect electrification of carbon-based chemicals, long-distance aviation and maritime



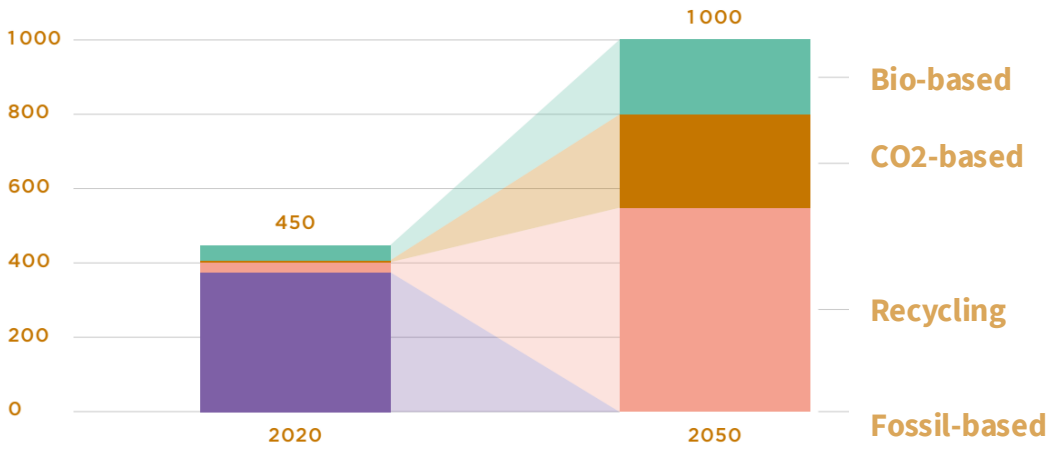
EU Industrial Carbon Management Strategy

Projected CO_2 demand linked to ReFuelEU Aviation sub-quota (Mt CO_2)



Assumptions: Historical kerosene demand from Eurostat. Kerosene demand growth of 1.6% CAGR based and 0.8 % CAGR for fuel efficiency improvement based on EUROCONTROL scenario. SAF yield in 2030 of 75% increasing to 80% in 2050

Global demand for chemicals and chemical materials (Mt Carbon)



The obstacles

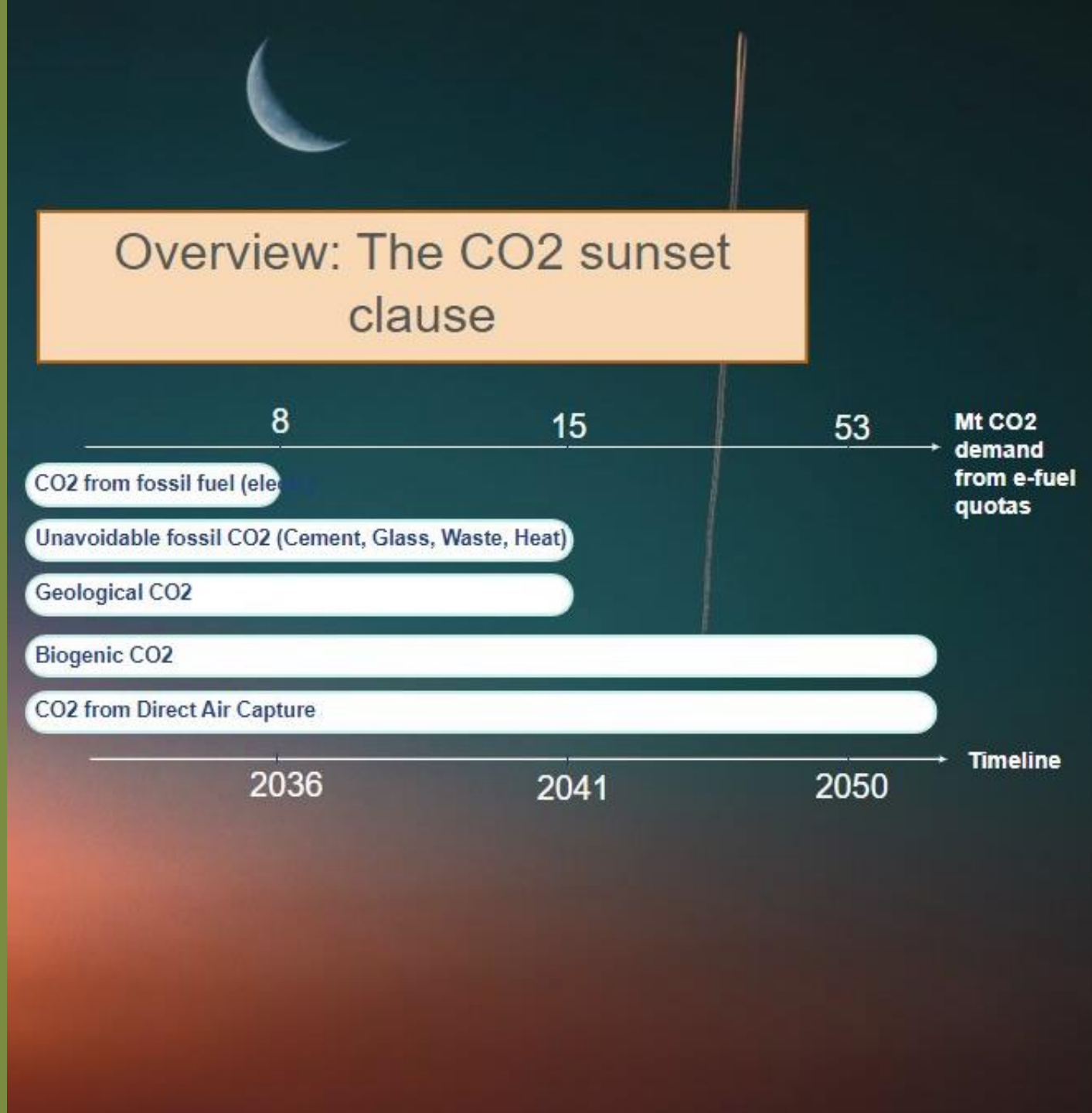
Timing

Linked investment decisions

Unclear and short-term regulations

Limited focus on CCU-eligible sources

Different narratives create uncertainty



The boosters needed

- **The Nordics have biogenic carbon and renewable energy**
- **Collaboration across actors and value chains**

- **Multiple reports outline what's needed for a functioning CCUS and e-fuel industry**
  - Create a harmonised CCUS framework on logistics, infrastructure and markets
  - Enable long-term, clear and predictable conditions
  - Allow allocation for mixed CO_2 streams
- **Political action and long-term commitment**

The goal: Project Alby PtX, Ånge, Sweden

Production 🤝 Consumption 🤝 Local Value Creation

- Grid connection: 360 MW (500 MW available)
- CO_2 : ~270,000 t/y
- ~80,000 t/y (e-Kerosene and e-Naphta)
- FID: 2027, COD: 2030

CO_2 feedstock strategy

Grid capacity drives the location

Liquid CO_2 transported to site

CCU project collaboration models:

1. In Emitter's Scope
2. Shared Scope
3. In Alby PtX Scope

Alby Power-to-X

norsk e-fuel

PRIME CAPITAL

res power for good

We have the potential to build a new competitive renewable and resilient industry – but we need to enable it.

Thank you!

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