Nordic Blue Crude
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CFO Tom Henrik Sundby
Green Aviation – 100 % CO2-neutral flights

- Liquid electricity, CO2-neutral synthetic fuel is the solution for hard to electrify sectors. Aviation is our prioritized market.
- No new CO2-emissions from usage. No polluting particles.
- 100 % replacement of fossil fuels. All existing engines can be 100 % loaded with liquid electricity, utilizing existing infrastructure.
Start us-insights: Nordic Blue Crude rated top 5 of 624 global Carbon Management Startups

This Heat Map illustrates the geographical distribution of 5 out of 624 carbon management startups disrupting smart cities.
Renewable Energy is used to split water vapor (H₂O) to hydrogen (H₂) and oxygen.

Hydrogen from electrolysis reacts with carbon dioxide (CO₂) and is reduced to carbon monoxide (CO).

Synthetic gas (H₂ and CO) is converted to Blue fuel products consisting of wax, and enhanced premium diesel and naphtha through a catalytic process.

- CO₂ can be captured from air
- Unavoidable CO₂ from concentrated industrial emissions is cheaper

Naphtha can be used in gasoline and as feedstock to plastic. Carbon capture and storage can be achieved with plastic.
Plant being designed by Aker Solutions
Operational 1H 2022

Electrolyte Pit
PW & Tanker Loading
Steam PAU
DAC

Electrolyser Building
1-Transformers
2-Rectifiers
3-Stacks
4-Separation Skids
5-EIT / Office Area
6-Electrolyser LER
7-Water Treatment

Storage Tanks

Existing Cable Trench

Process PAU-1
Carbon Dioxide / Hydrogen (8-CO2 Buffer Vessel)
Syngas Production

Process PAU-2
Syngas Comp. / Fischer Tropsch / Separation & Stabilisation (9-FT Reactor / Steam Drum)

Process PAU-3
E-Fuel 1 – Production plant connected to existing infrastructure at Herøya in Norway

Affordable access to:

- Unavoidable CO2-emissions
- Renewable Hydropower
- Existing infrastructure
- Industrial expertise
- Technological innovation hub

Future 20X scale to original plant
Commercialization Strategy

- Multiple off-take agreements in place @ prices which provides a sustainable business case

- Unique advantages through location which secures affordable access to feedstock

- Potential sites for expansion identified to fulfill the ambition to scale to 1+ billion liter in 2030

Key for success is access to renewable power
Scalable production model

Production Capacity per Plant

- 10 million liter (2022)
- 100 million liter (2024)
- 1 billion liter (2030)

Production capacity 2050

60 billion liter = \approx \frac{1}{8} \text{ of current jet-fuel consumption}