

# Role of energy sourcing in P2X projects

Åsa Hedman – Head of Operations

# Flexens

Flexens is a project developer implementing Power-to-X projects to enable societies to run on 100 % renewable energy sources.

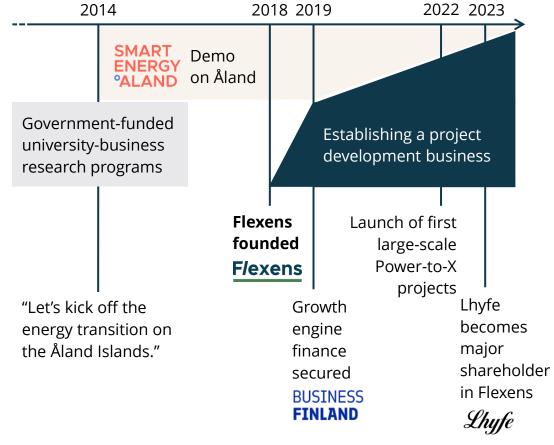
# Advanced project development rooted in research

Flexens: Your ideal Power-to-X partner

**BUILT ON A SOLID OWNERSHIP STRUCTURE** 



#### **TIMELINE AND HIGHLIGHTS**





### **Exceptional team driven by necessary change**

Flexens: Your ideal Power-to-X partner



**21** dedicated professionals with diverse backgrounds

**16** based in our Helsinki office**5** based on the Åland Islands

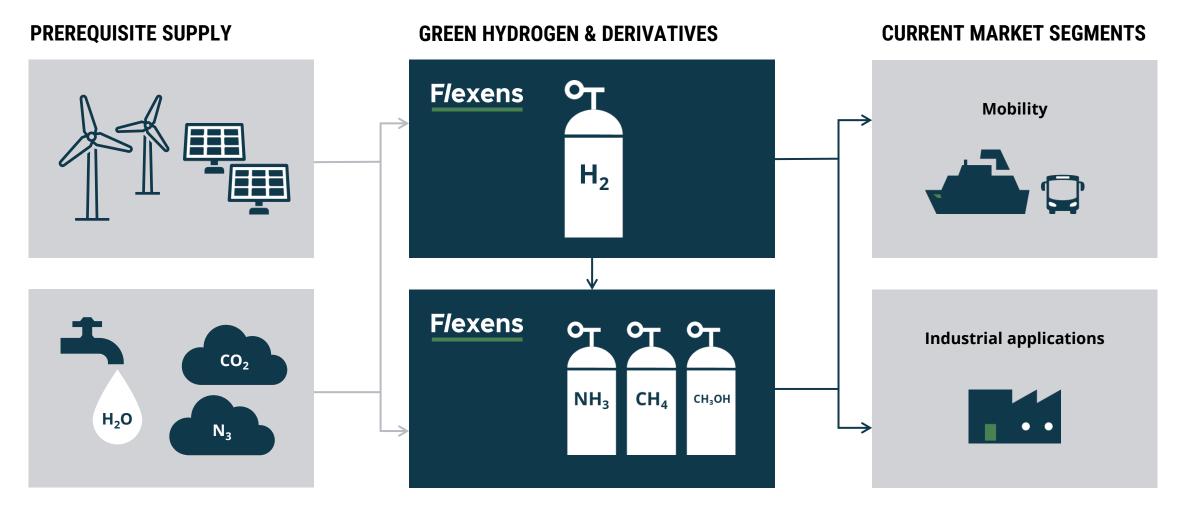
**Over 250 years** of shared experience in key industries

We are growing: In the past 2 years, our team size has **doubled** 



## Focus on green hydrogen and its derivatives

Flexens as a project developer





# **Examples from our project pipeline (Public)**

### Highlighting our current activities



We are developing a 300-350 MW green hydrogen and ammonia plant in Kokkola, Finland. Its planning started in 2022, and we're currently in the EIA phase.

# ÅLAND ENERGY ISLAND

Copenhagen Infrastructure Partners, Flexens, and Lhyfe have formed a partnership for the development and construction of an integrated energy island solution enabling large-scale offshore wind, green hydrogen production, and other value-creating activities on Åland. Cabo Verde and Flexens have signed an MoU to collaborate further in developing feasibility studies for the implementation of large-scale green ammonia production in Cabo Verde.

re-scale amm

CABO VERDE

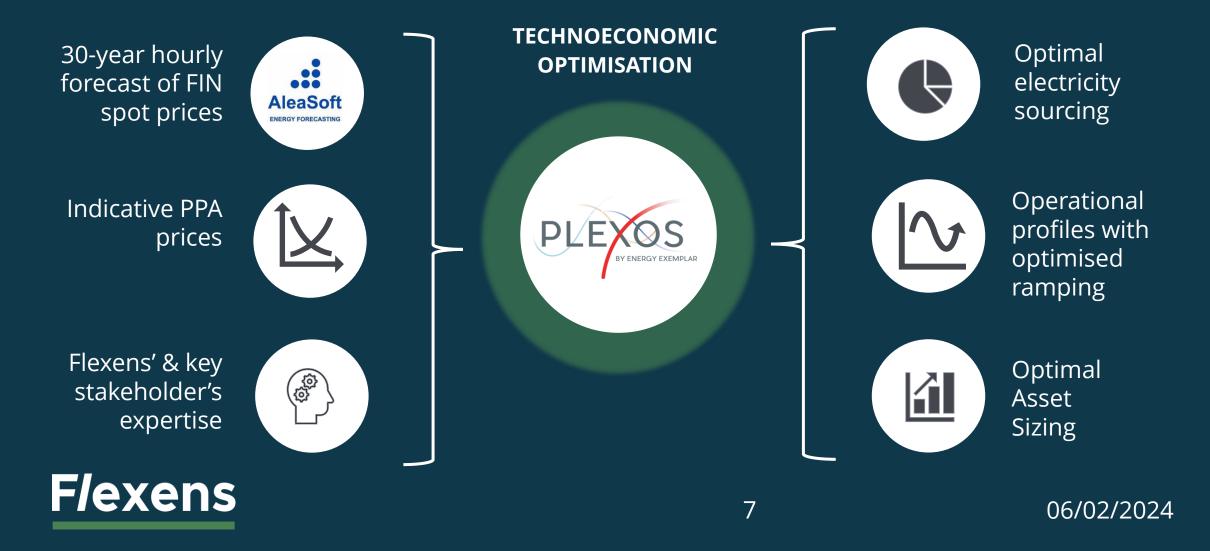
# NAANTALI (GNE)

#### Flexens is a minority shareholder (8 %) in Green North Energy.

Their planned 280 MW plant in Naantali is Finland's first green ammonia project.

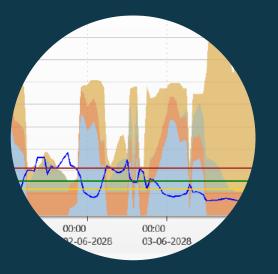


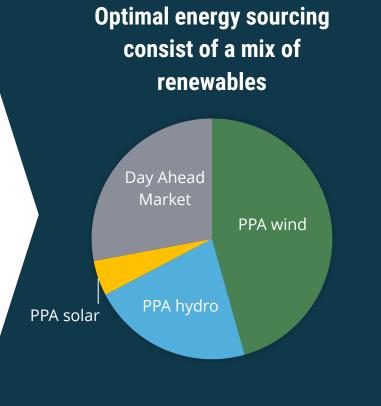
# **Business case validation with Plexos**®

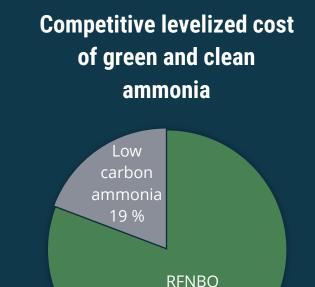


# Business case based on securing long-term PPA's to ensure predictable production cost for green ammonia

Flexible operation to use lowcost green electricity







ammonia 81 %

06/02/2024



# **Electricity sourcing is key**

- Main impact on businesscase is in electricity costs and price of end product.
- Regulations sets boundaries on electricity purchases.
  - RFNBO rules out grid electricity on day ahead market
  - Baseload electricity is needed for a good businesscase.
- Behind the meter electricity sourcing is highly interesting
  - In most cases requires changes in regulations
  - Savings in transmission costs
  - Sets a good base for collaboration between energy producers and P2X developers





### ÅSA HEDMAN

Head of Operations asa.hedman@flexens.com

+358 40 570 3798

