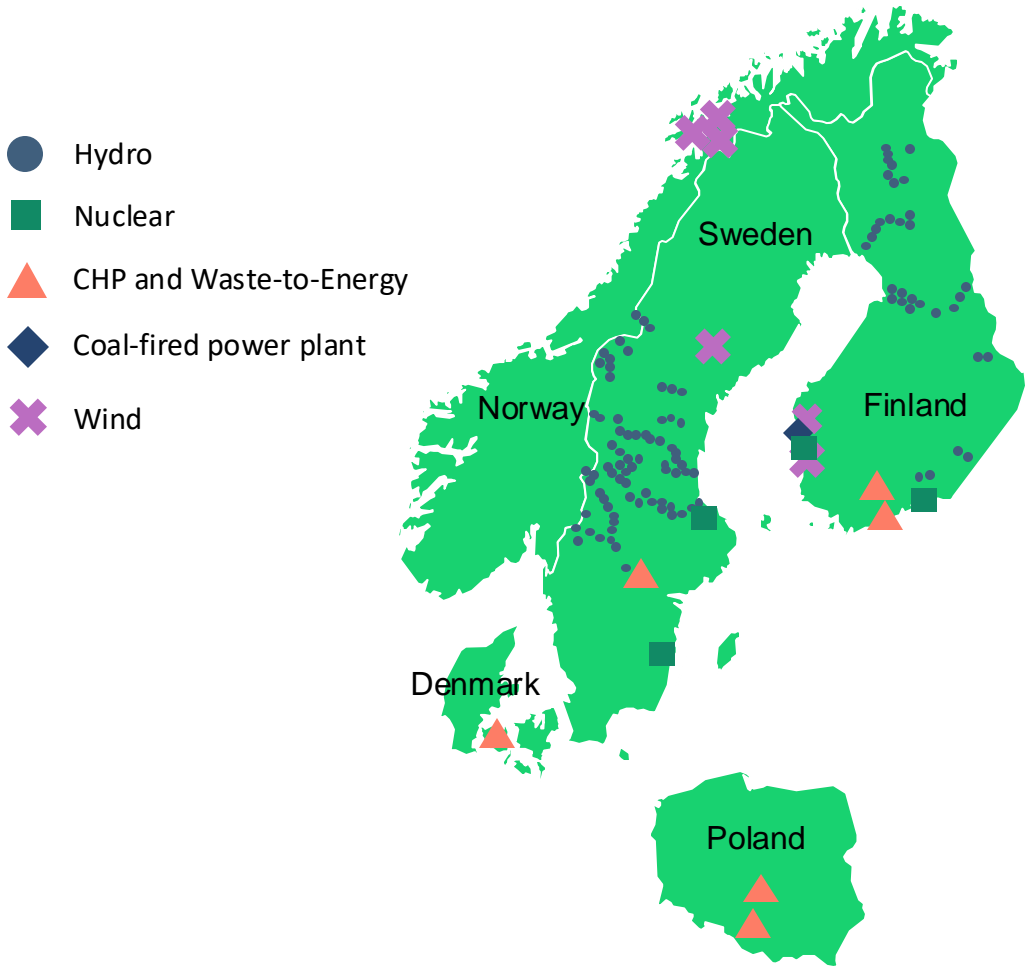


# Vätgas- konferensen

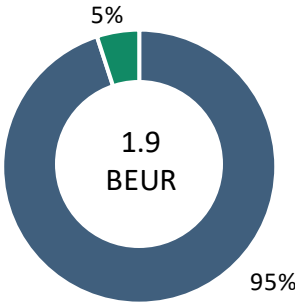
Putting Hydrogen on the Market – A story of close cooperation

Fortum & Euromekanik

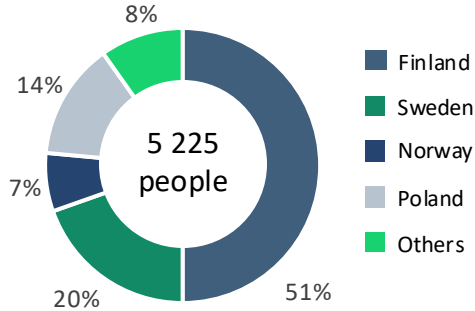
# Fortum today: We are one of the cleanest power generators in Europe – with a strong Nordic focus



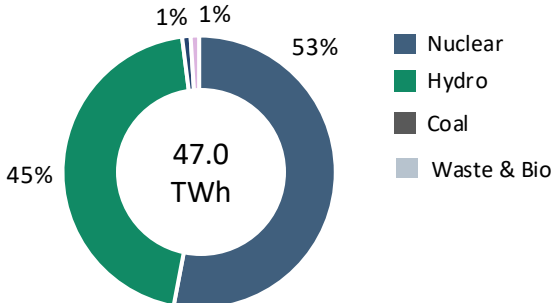
Comparable EBITDA



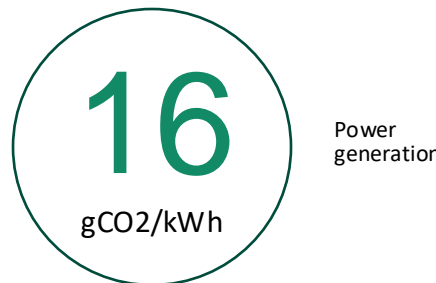
Personnel



Power generation



Specific emissions



Our purpose is

**TO POWER A WORLD WHERE PEOPLE,  
BUSINESSES AND NATURE THRIVE TOGETHER.**

STRATEGIC PRIORITIES

Deliver reliable  
clean energy

Drive  
decarbonisation  
in industries

Transform  
and develop

We help societies to reach carbon neutrality and our customers to grow and decarbonise their processes in a reliable and profitable way, in balance with nature.

# Our business portfolio

## FORTUM CORE

Strengthen and selectively grow areas of core competence, while capitalising volatile markets.



Hydro



Nuclear



Flexibility and optimisation



Customer business



Heating and Cooling

## DEMAND-DRIVEN RENEWABLES

Prepare ready-to-build pipeline to serve customer demand growth with long-term contracts.



Onshore wind



Solar

## EXPLORE

Future-shaping by studying, validating, and developing future opportunities.



Clean hydrogen



Innovation & Venturing

## NON-CORE

Businesses not in the core of the strategy. Strategic review.



Circular Solutions

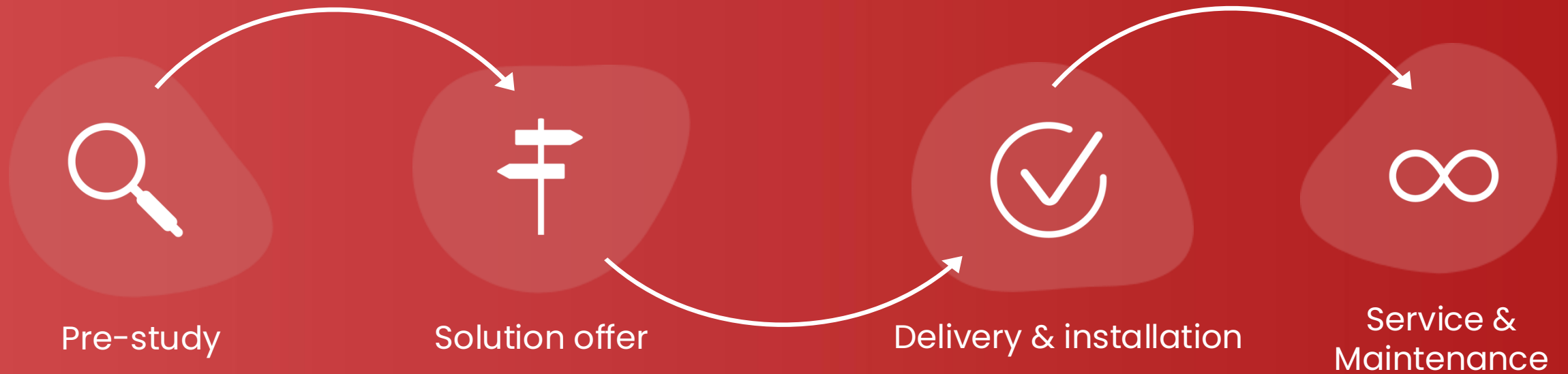
# Euromekanik

## Introduction

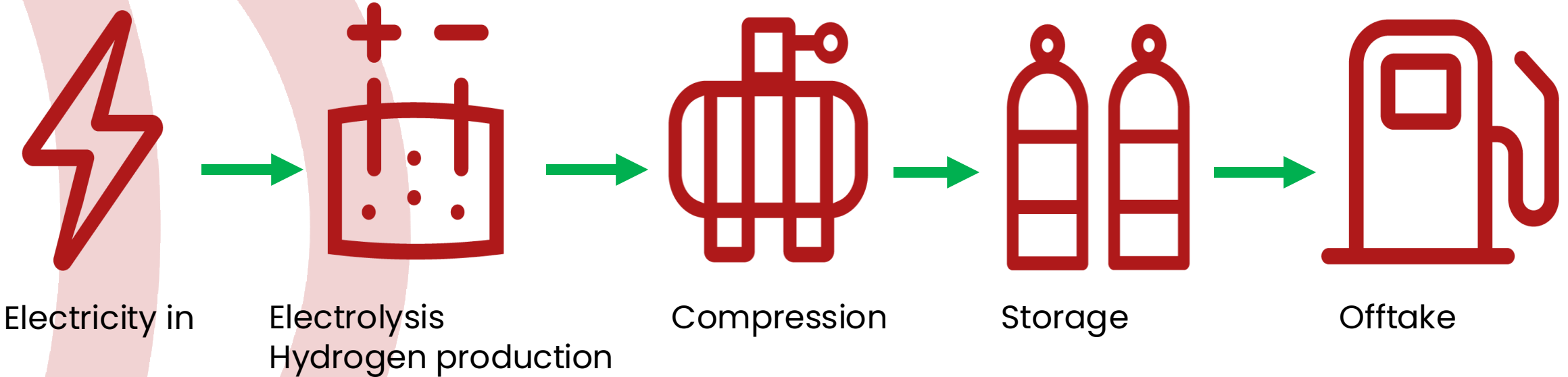
- Founded in 1974, 40 staff today
- Suppliers of technical solutions and products within energy gas, petrochemical fluids and steam
- System integrator working with world class component manufacturers
- Active in national standardization work within the energy gas sector (Energigas Sverige)
- Competence within personal and process safety secures sustainable technical solutions for the process industry



## Being a customer to Euromekanic



# Hydrogen



SYSTEM INTEGRATION

# Early adopters of new technology

## Pilot plant in 2021



- ZEHTC
- Hydrogen production at Siemens in Finsspång



# Project Description

- Testing two Electrolyzer technologies
  - 1 MW each
- Compressing
- Tube trailer filling
- Overall safety and control system



# Why are we doing the Kalla project?



# Hydrogen market maturity

From this....



...to this



# Are projects like this really needed?



# How is the project model set-up?

## **Fortum is responsible for**

- Site and Civil
- Purchasing Electrolyzers
- Purchasing Transformers
- DCS programming

## **Euromekanik is responsible for**

- System engineering and detailed design
- Managing and integrating electrolyzers, transformers etc
- Compressor and tube trailer filling
- Installation and commissioning

## **FEED and project execution is done in parallel**

- Saves time but adds complexity



# From Pilot plant to Role Model plant

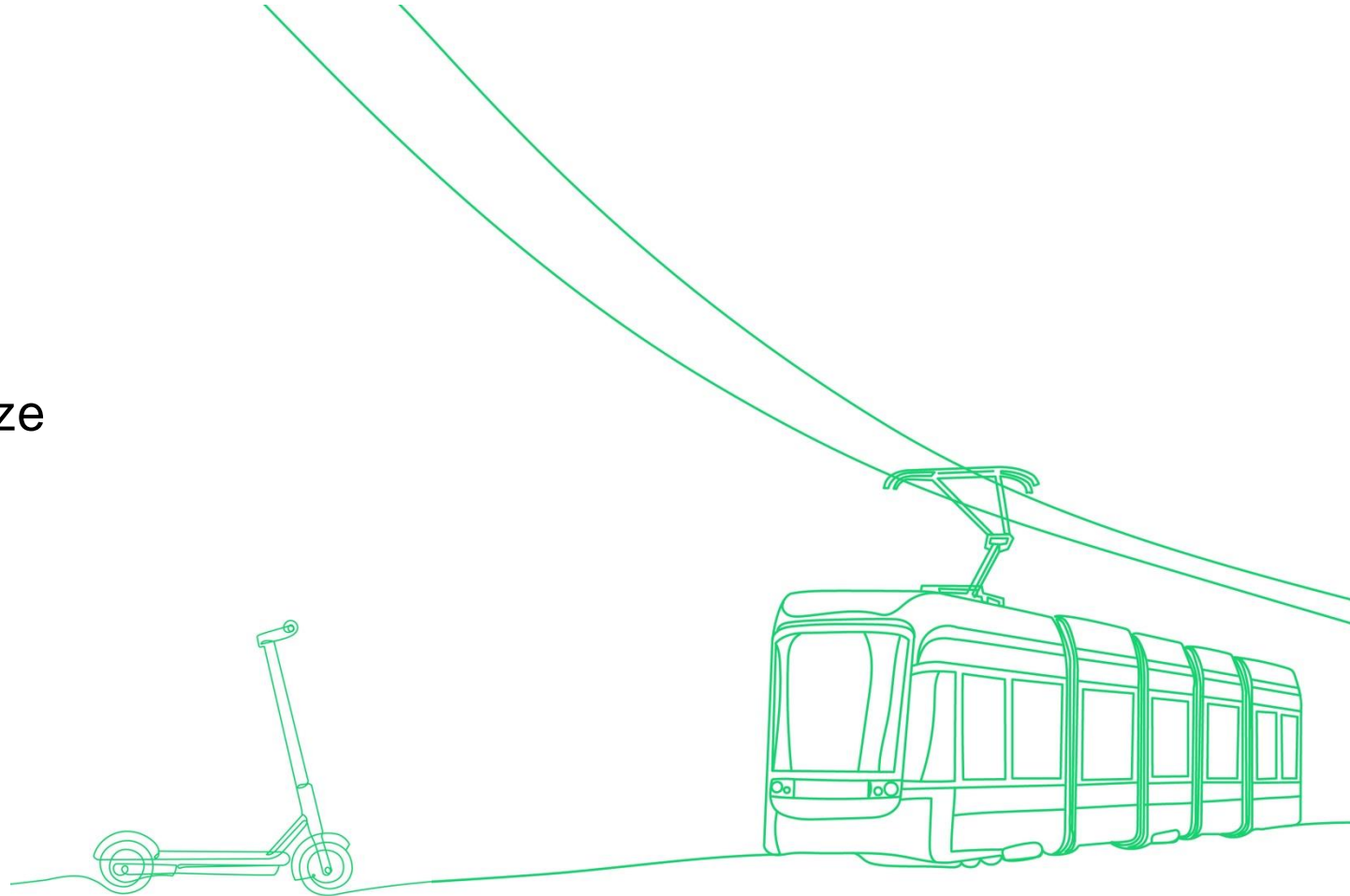


# Lessons learned (so far...) to bring for coming projects



# Large Finnish company and small Swedish company

- Cultural differences on country level
- Cultural differences due to company size
- Benefits but also challenges





# Thank you!

