

From coal to small-scale nuclear - Transforming the energy supply of Helsinki

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HELEN

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Helen in numbers

Net sales of the
Helen Group in 2023

1,826 mill.
€

Operating
profit

93 mill.
€

Electricity production

4,686 GWh

Heat production

6,673 GWh

Tax footprint

388 mill.
€

Employees

786

Carbon neutral
energy

55%

Reduction of direct CO₂
emissions

38%



Towards sustainable energy system

Our emissions reduction schedule

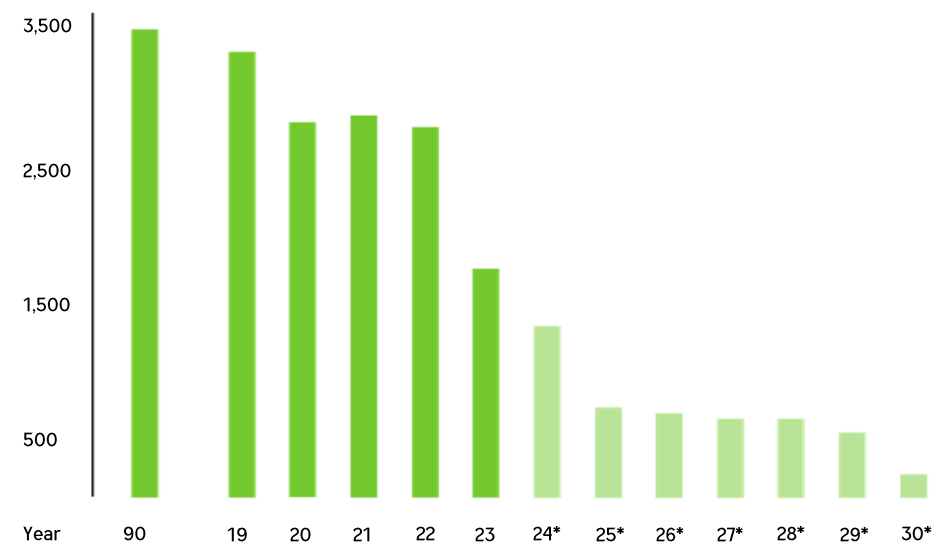
We have set a target of making our energy production carbon neutral by 2030. In addition, we aim to phase out combustion-based energy production by 2040.

2024 at least 60% on the 1990 level

2025 at least 80% on the 1990 level

2030 at least 95% on the 1990 level

Direct GHG emissions (Scope 1), ktCO₂e

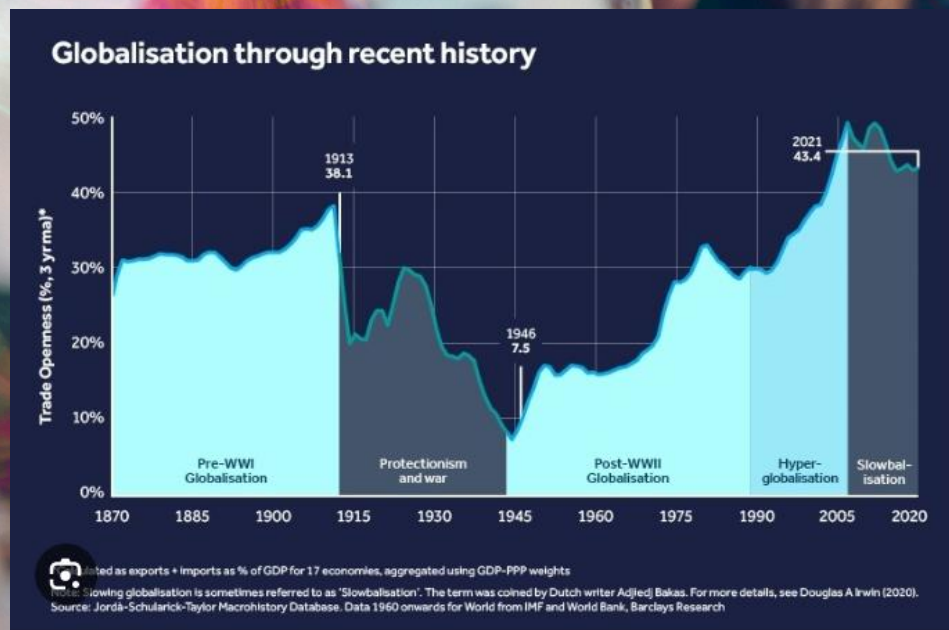
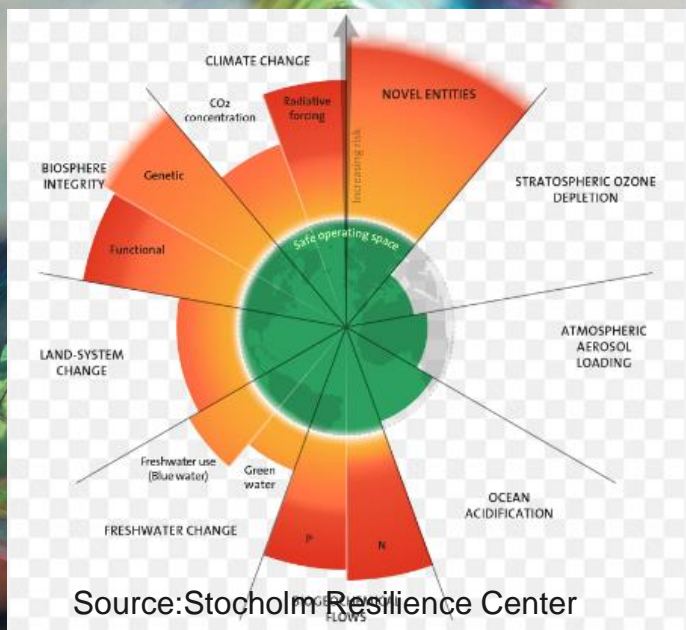


*Forecast

Systemic change – are we ready?



Climate Change Mitigation and Deglobalization challenges our current environment

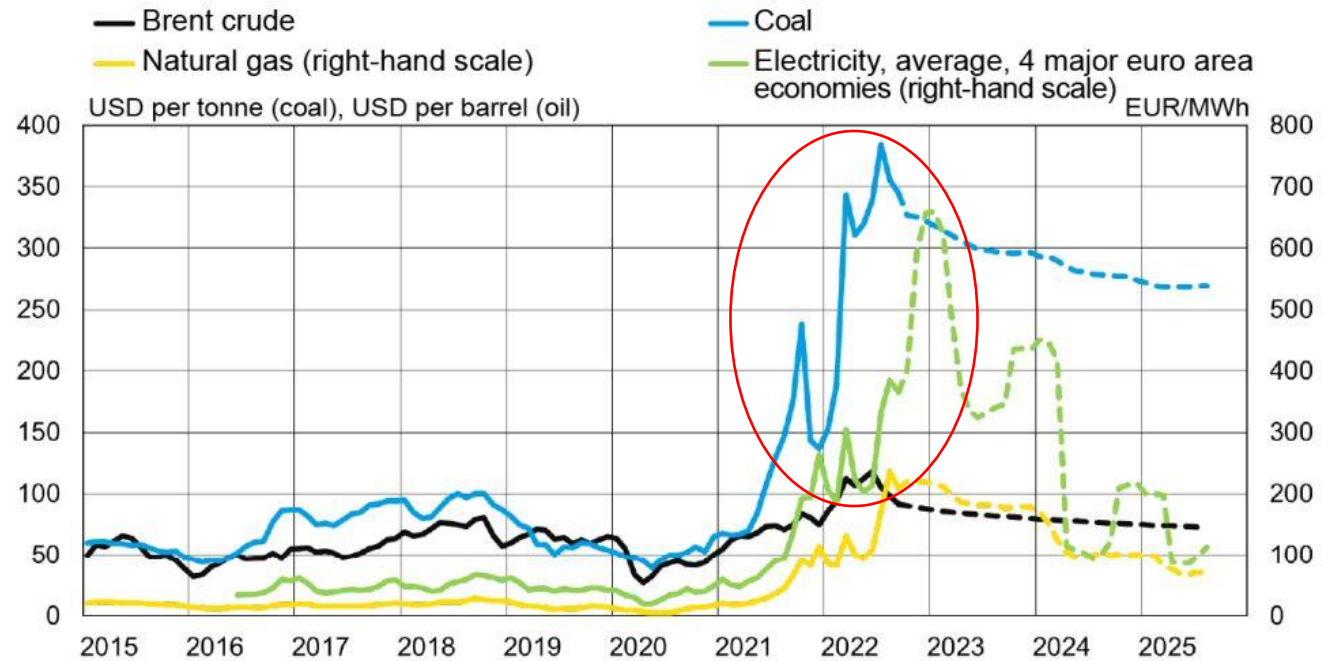


- End of fossil economy
- Acceptance of energy by burning?

- Deglobalization increases the need of better regional security of supply and resilience

Fossil economy secured stabled market prices

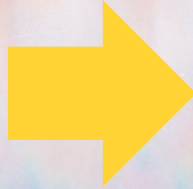
The rise in energy prices has been steep, and the markets expect prices to remain high



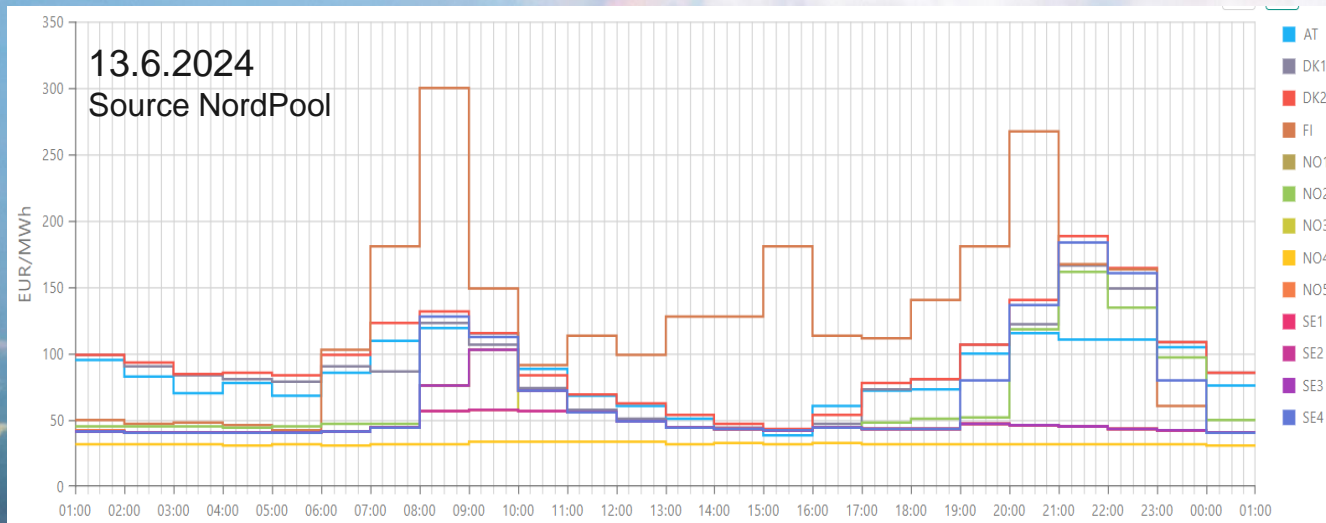
Prices are monthly averages. Futures curves marked as dashed lines.

Sources: ICE, Nordpool and Macrobond.

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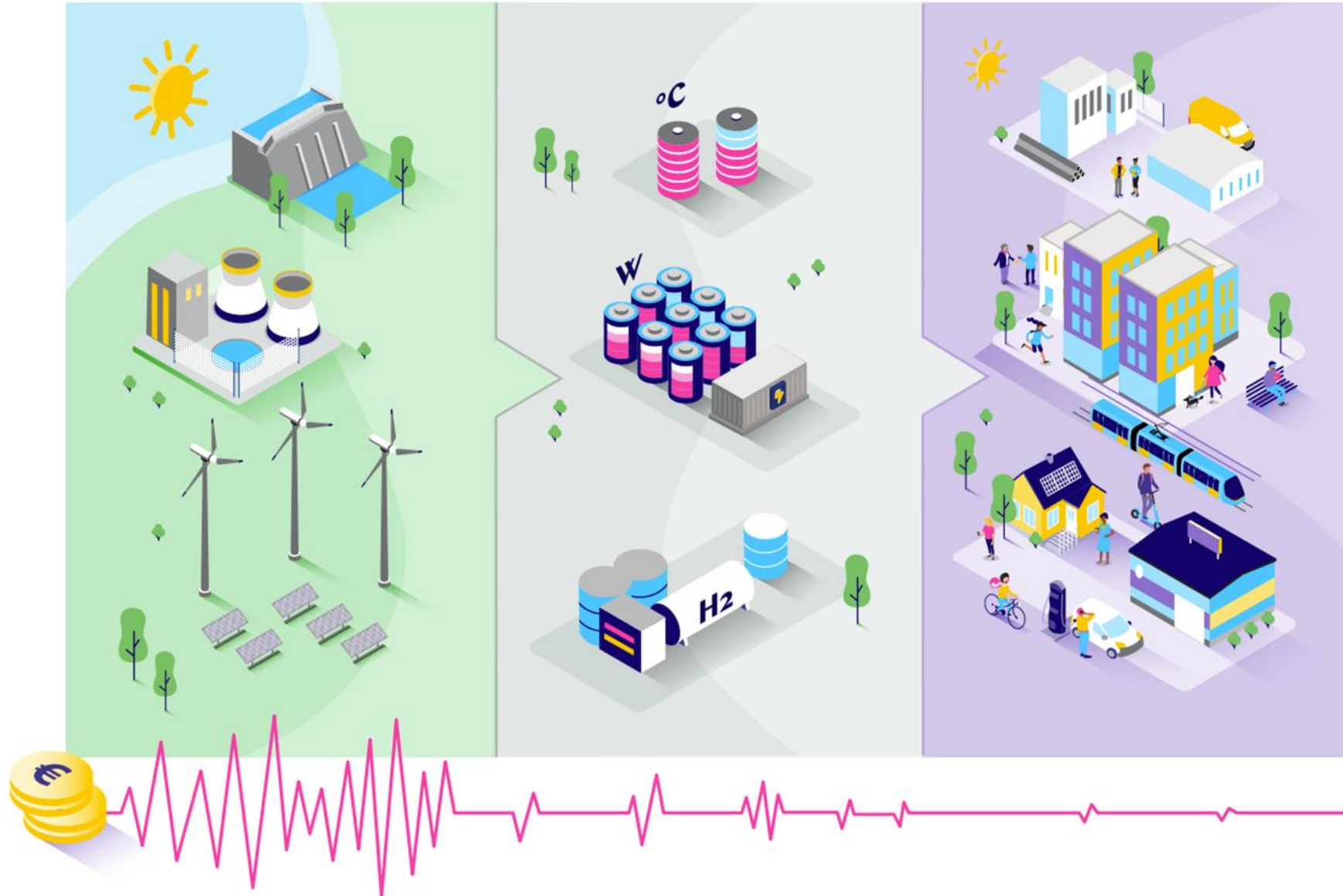
Rise of Renewables equals Volatility



Our solutions



Is Volatility a problem? No! More flexibility is needed



The guiding principles of our strategy



Creating the industry's best **digital customer experience** and **ability to optimise the energy system**



Electrifying heating to reduce emissions and **pursuing SMR** to phase out combustion



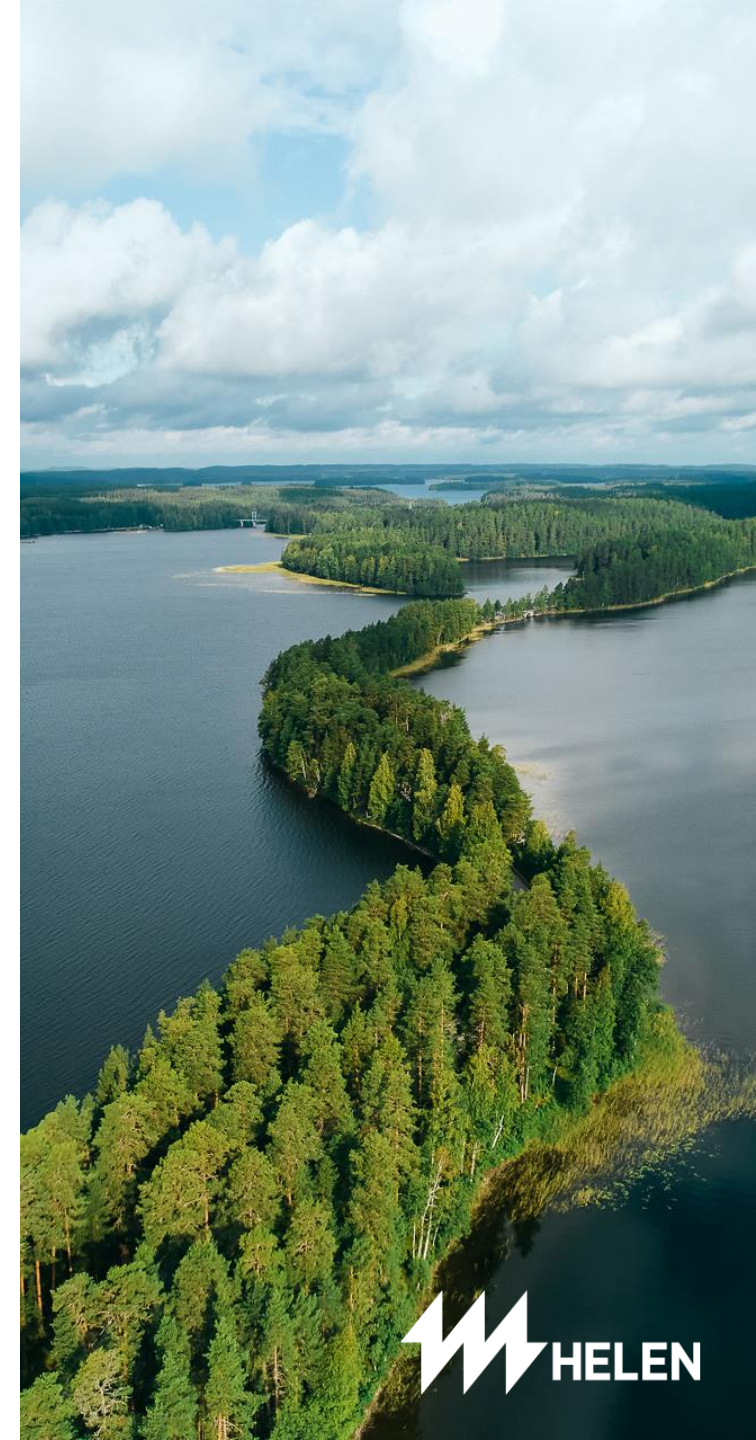
Balancing electricity production and consumption to mitigate Group risks



Increasing flexibility to allow the demand and supply of electricity to adapt to growing fluctuations in prices



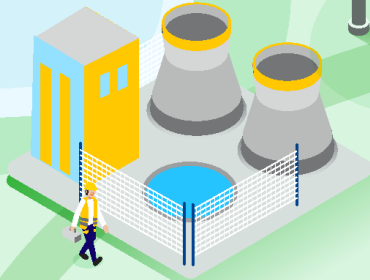
We will ensure our continued competitiveness in the future through systematic foresight and by innovating new business



Green flexibility



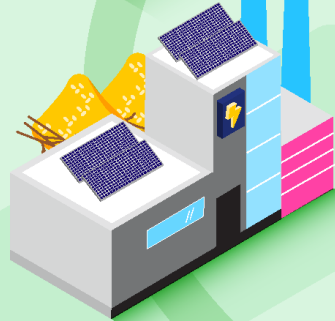
Hydro and nuclear power



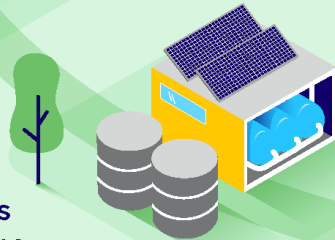
Small modular reactors



Bioenergy and natural gas



Electric boilers and heat pumps



Wind and solar farms

Batteries



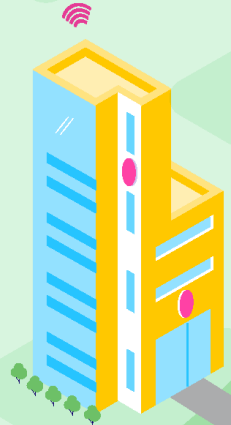
Hydrogen



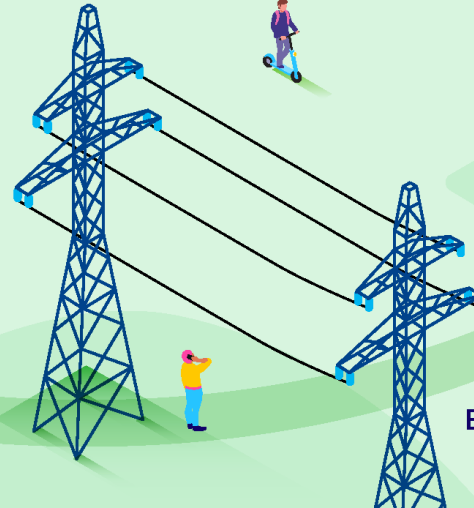
Corporate customers

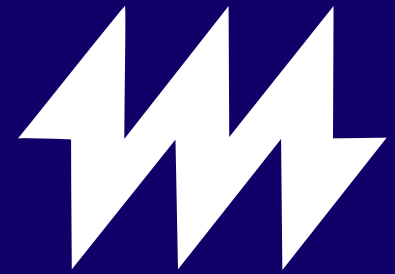


Consumers



Electricity network





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