An aerial photograph of Helsinki, Finland, showing the city's layout on islands and peninsulas, with a prominent pink semi-transparent box overlaid on the left side. The box contains the title and speaker information. The background image shows the city's grid-like street pattern and its proximity to the water.

Fast moves in Helsinki – examples for Transformation of a City

Maiju Westergren, Vice President.
Twitter: @maijuwes





HELEN



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Helen today

Turnover
930 M€

25% of district
heat in Finland

7 TWh
district heat

Growth with new
energy services

HELEN



**We need to
decrease
emissions both in
production and
consumption**

HELEN

Towards carbon neutral energy system



1.

**Carbon dioxide emissions -40%,
Renewables to 25%, halve the use of coal by 2025**

2.

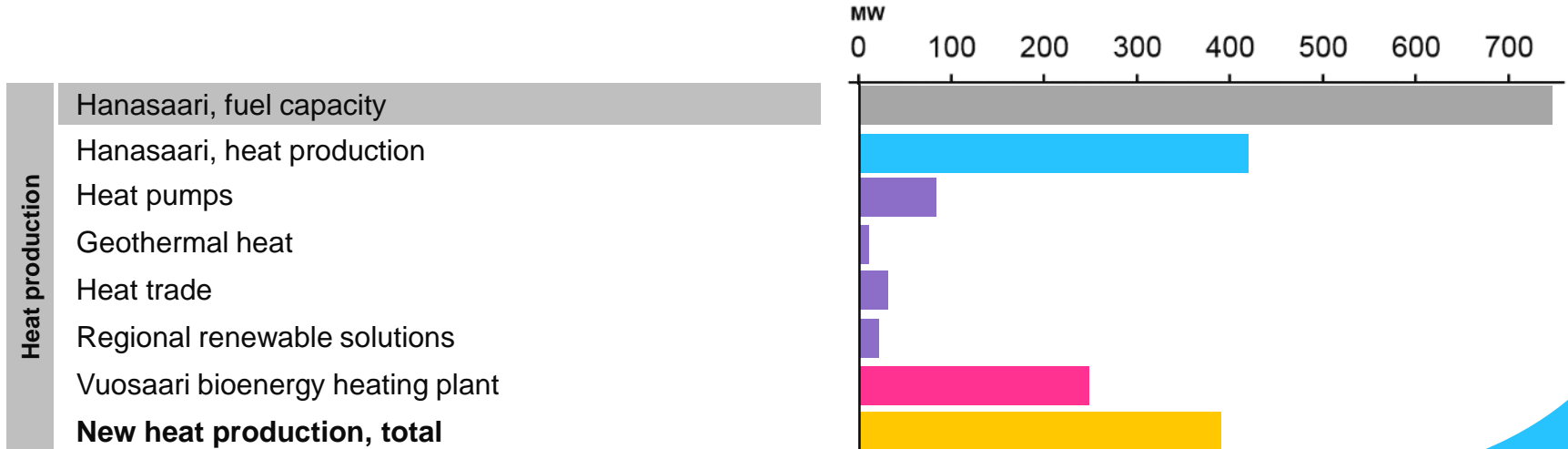
Phase out of coal in 2029

3.

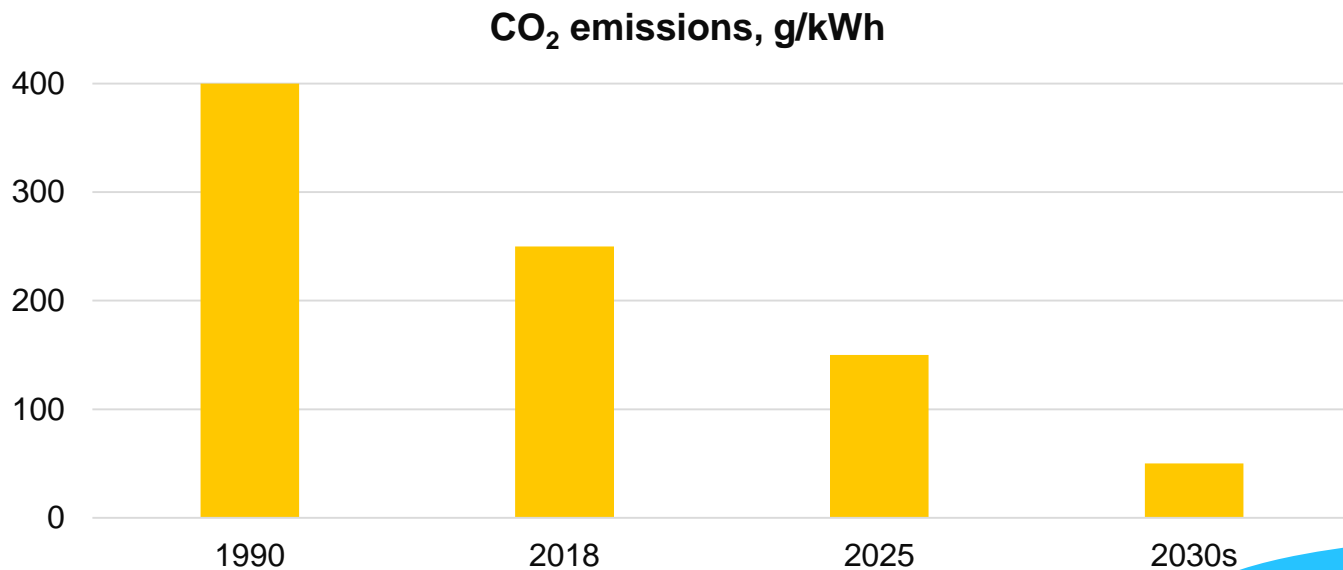
Carbon neutral energy production by 2035

1ST STEP:

Hanasaari power plant will be replaced by biomass, heat pumps and storages



Towards carbon neutral energy production



CASE: Heat Demand Response

Demand response enables cutting the most polluting and expensive hours.

WIN – WIN – WIN

Customer – System –
Energy Producer

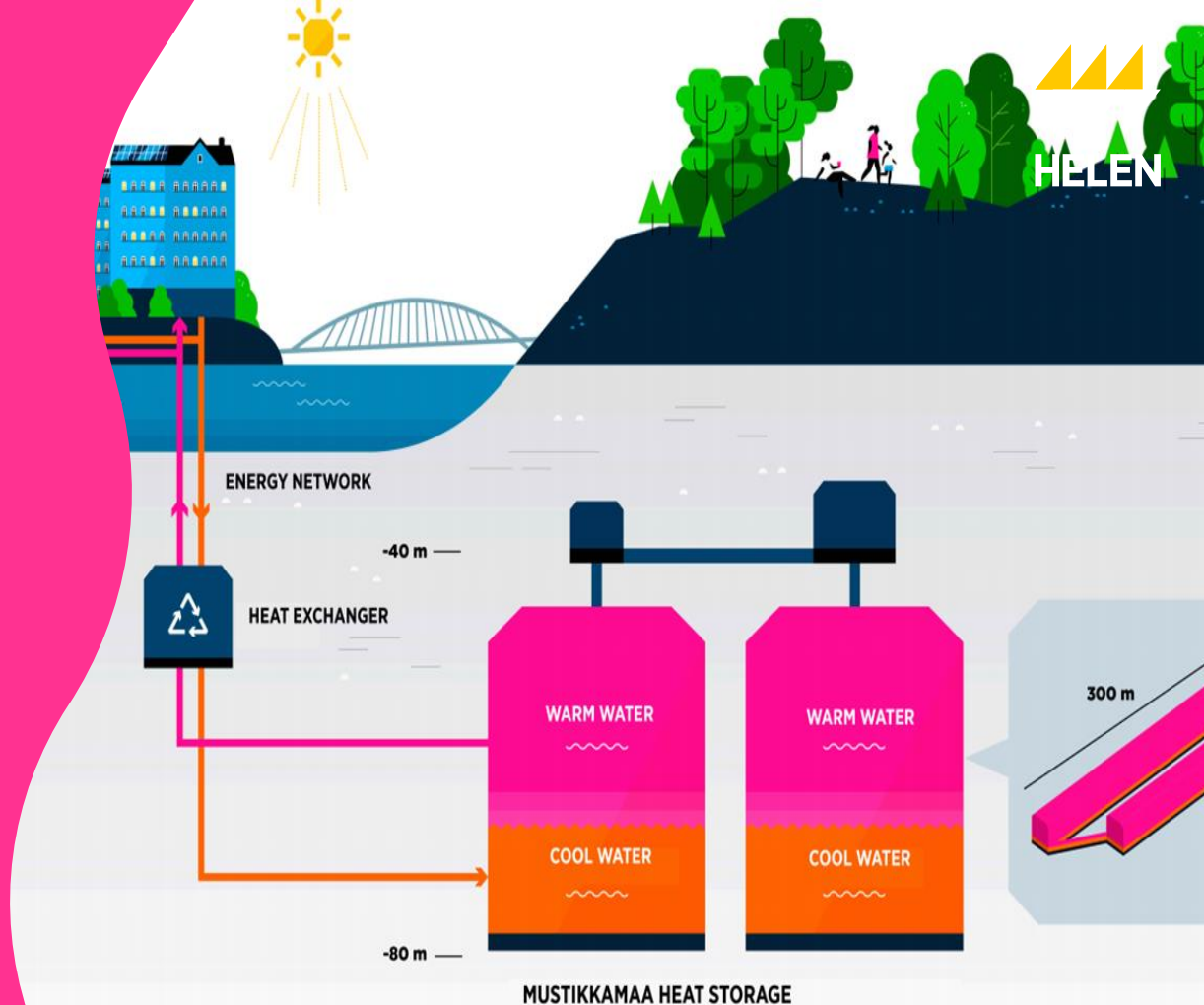


CASE: Giga-scale Heat Storage

The old oil caverns are reused

Hot water is used for energy storage

The charging capacity 120 MW



**Decarbonisation cannot be
achieved without involving
customers**

HELEN

A young girl with dark hair is smiling and looking directly at the camera. She has colorful paint on her face, including a vertical pink stripe on her forehead and yellow and pink patches on her cheeks. Her hands are held up, showing palms painted with various colors like pink, blue, yellow, and purple. She is wearing a white t-shirt with colorful handprints and a yellow sweater. The background is a soft, out-of-focus outdoor setting.

CASE: Paulig & Open District Heat

Excess heat from a
coffee roastery is sold
to Helen and
transferred to the
district heating
network



CASE: Data Optimized Heating

Innovative solution for
metering and
optimising conditions
in residential buildings

- Maximizing comfort
- Minimizing energy costs
- Optimising energy flows

5-10% savings in heat
consumption



Recommendations to EU energy and climate policy

Net zero emissions target for 2050

Vision for carbon neutral heating

Strong EU ETS - no overlapping regulation

Future of Heating:

Low-carbon

Customer-focused

Level playing field for all heating

Servicized

