

Helen's Ambitious Renewable Energy Projects Lead Finland Towards Carbon Neutrality

For this edition of the Euroletter, we would like to highlight our Finnish member, **Helen**, and its **renewable projects**. Helen provides heating, cooling, electricity, regional and renewable energy solutions, and electric transport for **over 560,000 customers** in Finland. It **aims for carbon neutral energy production by 2030** and is making significant investments in a sustainable, modern energy system, targeting the replacement of over 2,000 MW of fossil energy production capacity by 2025.

Helen's commitment to sustainability is evident in two new **renewable energy projects** for **Helsinki**'s **district heating sector**, which recently received a €150 million loan from the European Investment Bank. These projects aim to replace fossil-fuel-based district heating with a more sustainable and efficient renewable energy mix, reducing greenhouse gas emissions and air pollution.

The two projects include a 90 MW heat pump plant using recovered energy from purified sewage water and the **conversion** of a 163 MW **coal plant to biomass pellets**. Both projects are expected to yield positive economic returns by generating clean, renewable heat at a lower cost compared to alternatives in Finland, thus providing broader social benefits.

Additionally, Helen is constructing two new air-to-water heat pump plants and several electric boilers within the Helsinki area. The most recent project in Patola is designed to advance Helsinki's heat production towards carbon neutrality, with an expected annual CO2 emissions reduction of 56,000 tons. The Patola air-to-water heat pump plant is the first of its size in the world. Construction will begin at the end of 2024, with production set to start during the 2026–2027 heating season.