

D2 HOT NEWS: A LOCAL DISTRICT HEATING COMPANY ESTABLISHED



SYNOPSIS

A new public private partnership (PPP) district heating company was established in Delft, producing, distributing and supplying an equivalent of nearly 20,000 homes with heat and hot water.

BACKGROUND

The new district heating system is one of the major projects within the Delft Climate Plan. The first idea was a municipal heat company that produced heat from a local industry and sewage plant, transported this heat into town and sold it to a distribution company. Later on, both the production and distribution systems were integrated, as well as technical and business management.

OBJECTIVES

Contribute to the realisation of the local climate goals by establishing a new local district heating network and organisation.

PROJECT DESCRIPTION

The energy utility, Eneco New Energy, is the mother company owning 97% of the shares.

The 3 * 1% priority shares are evenly owned by the municipalities, housing corporations and Eneco again. The priority shares only control the environmental performance, tariffs and service level (including serviced areas) and if applicable the return on investments:

- Delft and Midden-Delfland municipality own 1% priority share that concerns implementation in building projects, local building codes, supporting planning and building activities.
- Housing associations Woonbron, Vidomes, Duwo own together 1% priority share. They represent a large amount of consumers and connections to district heating.
- Eneco New Energy has also 1% of priority share.

Heat is produced in different locations:

- Low temperature residual heat from a sewage treatment plant is upgraded by means of a heat

pump and small CHP (combined heat and power) in 2 separated circuits. The heat is used in a new development (equivalent to about 1,600 homes) at 40/70°C.

- A large 24 MW CHP plant supplies heat to new and existing houses, utility buildings and small existing district heating systems in Delft, summing up to 20,000 home equivalents.
- Back-up and peak demand is supplied by gas boilers. The electricity produced is fed into the national grid.

RESULTS

The district heating company ensures a CO₂ reduction of at least 18,500 tonnes.

NEXT STEPS

Eneco Delft will build the production units, the main part of the total distribution grid and connect new buildings and collective boiler systems. Up until 2014 about 2/3 of the total connections will be achieved.

In parallel, Eneco Delft will try to integrate the future geothermal heat source that will be built at Delft University of Technology. Other renewable energy sources are considered to be connected in the future.

RECOMMENDATIONS

In a free energy market, PPPs represent good opportunities to achieve large scale energy production projects. All partners should have a specific role in the partnership, related to their own responsibilities and knowhow. The number, but especially the tempo of connecting (existing) buildings is essential for the performance.

FURTHER INFORMATION

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