



The Green Net

Location	Municipalities of Sittard-Geleen, Beek and Stein, The Netherlands
Beneficiary	Municipality of Sittard-Geleen
CoM signatory	Decision taken to sign the Covenant
Sector	Renewable energies, district heating
Total PDS cost	EUR 923 000
Elena contribution	EUR 668 000
Project development services (PDS) financed by ELENA	<ul style="list-style-type: none"> Initial choice to set up a public private partnership for the implementation of the district heating network Preparation and process of the tender procedure following the competitive dialogue rules Continued acquisition of potential district heating customers Legal and financial structuring of the project Preparation of investment decision for the involved municipalities
Description of ELENA operation	<ul style="list-style-type: none"> Set up of a dedicated project implementation unit with additional and internal staff in charge of preparing and implementing the complete investment programme External advice for project management and implementation Legal and financial design of contracts for heat producers and costumers Technical study validating technical concept proposed by private bidders Legal, financial expertise for preparation of tender documents and for the set up of the public private partnership vehicle
Timeframe	2012-2014
Basis for investment identification	<ul style="list-style-type: none"> City development strategy to increase energy efficiency through residual heat use, increase RE and avoid CO₂ emissions Preliminary studies concerning district heating potential, heat master plan set up, preliminary business plan elaboration, Project development in close cooperation with all the key partners (e.g. heat supplier, large potential heat customers, local authorities etc.) to increase acceptability of investment project and involvement of clients
Investment programme description	<ul style="list-style-type: none"> Construction of a complete district heating network (DHN) on the territory of the three municipalities Heat to the DHN supplied by an existing biomass cogeneration plant and residual heat from an industrial park utility producing steam for industrial customers During ELENA project duration DHN will be able to deliver an estimated 95.5 GWh to different kind of customers including decentralised production of cold water for cooling purposes District heating parameters planned 95-65°C At final development stage the primary network expected length 30 km and building connections 17 km for a heat capacity demand of 85 MW_{th}
Investment to be mobilized	Expected investment amount: EUR 55.4m
Expected results	<ul style="list-style-type: none"> Estimated heat supply for DHN implemented during ELENA duration: 95.5 GWh, at final stage estimated supply of 232 GWh CO₂ reduction: 19 300 tons
Leverage factor (Minimum 25)	83
Market replication potential	<p>Special replicable features of this project:</p> <ul style="list-style-type: none"> Cooperation of several municipalities to create a district heating network in a competitive heat market Synergies through use of existing heat supply facilities: biomass cogeneration and industrial zone utility; combination of heating and cooling supply Concerted action involving key stakeholders and use of public private partnership tool
Project status	ELENA contract signed on 29 th December 2011
Contact person at Beneficiary	Rogier Dieteren roger.dieteren@sittard-geleen.nl