



ELENA Project Factsheet

Municipal Energy Performance Contracting Initiative (MEPCI)

Location	The state of Baden-Württemberg, Germany
Beneficiary	Klimaschutz und Energieagentur Baden-Württemberg (KEA)
CoM signatory	No
Sector	Energy Efficiency and small-scale renewable energy.
Total PDS cost	EUR 1,437,250
Elena contribution	EUR 1,293,525
Project development services (PDS) financed by ELENA	<p>The project development services will provide support to municipalities in the region of Baden-Württemberg to develop energy performance contracting projects.</p> <p>The agency will create a stakeholder platform and will launch a marketing campaign to reach the sign-up of municipalities to the programme.</p> <p>Additional staff will be employed at the agency and technical consultancy services will be subcontracted for the elaboration of baselines and other technical specifications of the EPC tenders.</p> <p>Municipalities signing up to the programme will receive a first assessment to identify suitable buildings that can be pooled into EPC tenders. The tender documentation will be prepared by the agency and the entire procurement process managed on behalf of the municipalities until the winning ESCOs have been contracted. The agency will also support the municipalities during the first steps of the implementation of the ESCO contracts to ensure appropriate implementation quality.</p> <p>It is also planned that the project development services will bring about a new quality to the EPC concept after starting with traditional EPC models more comprehensive refurbishment will be introduced via EPC in some of the selected building pools.</p>
Description of ELENA operation	<p>The project development services will provide support to municipalities in the region of Baden-Württemberg to develop energy performance contracting projects.</p> <p>The agency will create a stakeholder platform and will launch a marketing campaign to reach the sign-up of municipalities to the programme.</p> <p>Additional staff will be employed at the agency and technical consultancy services will be subcontracted for the elaboration of baselines and other technical specifications of the EPC tenders.</p> <p>Municipalities signing up to the programme will receive a first assessment to identify suitable buildings that can be pooled into EPC tenders. The tender documentation will be prepared by the agency and the entire procurement process managed on behalf of the municipalities until the winning ESCOs have been contracted. The agency will also support the municipalities during the first steps of the implementation of the ESCO contracts to ensure appropriate implementation quality.</p> <p>It is also planned that the project development services will bring about a new quality to the EPC concept after starting with traditional EPC models more comprehensive refurbishment will be introduced via EPC in some of the selected building pools.</p>
Timeframe	January 2015 – December 2017
Basis for investment identification	Market assessment in the municipalities

Investment programme description	<p>The Investment Programme covers three different sectors:</p> <ul style="list-style-type: none"> • Energy efficiency in existing public (non-residential) buildings, • Implementation of renewable energy sources • Implementation of combined heat and power production (CHP). <p>Mostly non-residential public buildings will be retrofitted within the framework of the project. The focus is on schools with or without gymnasiums as well as administrative buildings. But other buildings from the public building stock such as kindergartens, multi-purpose buildings, etc. will also be accepted within the ELENA Investment Programme.</p> <p>It is planned to implement 15-20 EPC-projects with an average floor space of 50.000 m² and 10 buildings per project. Accordingly, 150- 200 buildings or 750.000-1.000.000 m² will be retrofitted within the ELENA Investment Programme.</p> <p><u>Comprehensive refurbishment projects:</u> It is expected that at least in the second year of the ELENA Investment Programme first solutions from recent research work on the integration of comprehensive refurbishments into business models (i.e. IEA- Annex 61) will be ready for implementation. This will potentially lead to an extension of the scope of energy efficiency to the refurbishment of parts or of the complete thermal envelope. This would involve higher energy conservation rates of up to 70 % instead of 40 % in currently accomplished EPC-projects.</p> <p><u>Renewable Energies:</u> The project as part of the “Energiewende” aims at an increased use of renewable energy sources to foster the transfer to a sustainable heat supply and, to some extent, a sustainable electricity generation. The target is 5.000 to 7.500 kW of additional renewable heating capacity (with an average of 400 to 500 kW renewables per EPC project).</p> <p><u>CHP:</u> The objective of CHP is to put into account the fossil fuel used in the facilities most efficiently and thus reduce the consumption of primary energy in the building. Installations of medium sized CHP plants will be leveraged by this ELENA programme up to a capacity of 1 to 2 MW.</p>
Investment to be mobilised	The total cost of the investment programme is estimated at 30 MEUR.
Expected results	<ul style="list-style-type: none"> • Final energy savings of 34 GWh/year. • Renewable energy production of 22 GWh/year • Total CO₂ emissions reductions of 16,000 tonnes/year.
Leverage factor (Minimum 20)	23.2
Market replication potential	The project has a high replication potential. One of the main objectives to be achieved under this ELENA project is to build appropriate capacity for dealing with EPC projects.
Project status	Contract signed 18.12.2014
Contact person at Beneficiary	Mr Rüdiger Lohse, Ruediger ruediger.lohse@kea-bw.de