



## ELENA Completed Project Factsheet

### Lower Energy Use Via an Extraordinary Network (LEUVEN)

<b>Location of planned investments</b>	City of Leuven, Belgium
<b>Final Beneficiary</b>	Leuven Klimaatneutraal 2030
<b>Final Beneficiary's address</b>	Professor Van Overstraetenplein, 1 3000 Leuven Belgium
<b>CoM signatory</b>	Leuven Klimaatneutraal 2030 – No City of Leuven - Yes
<b>Sector</b>	Energy Efficiency and Renewable Energies in residential and non-residential buildings and street lighting sector
<b>Total PDS costs</b>	EUR 1,745,291.34
<b>ELENA contribution</b>	EUR 1,560,721.00
<b>Project development services financed by ELENA</b>	<p>The Project Delivery Unit (PDU) financed by ELENA included a coordinator, project manager, communication and technical staff involved in the daily coordination, management and implementation of the project development services financed by the ELENA facility. In total, about 4.7 FTE have been involved in the implementation of this project, with a total eligible cost of about EUR 370k.</p> <p>In addition, external consultants were involved in the development of technical studies to support the investments, under the management and supervision of the PDU. These studies included the analysis of residential and non-residential buildings in order to improve their efficiency and to promote the use of renewable energy sources. Street lighting systems have also been tackled by these studies. At the project end, eligible subcontracting costs represented about EUR 1,375 million.</p>
<b>Description of ELENA operation</b>	The investments were made by the private and public parties. The private parties followed their own internal competitive procedures to procure the investments while the public entities have tendered the investments in accordance with the applicable public procurement rules.
<b>Timeframe</b>	01 December 2017 – 31 May 2021
<b>Investment programme description</b>	<p>The investment programme consisted of the following components:</p> <ul style="list-style-type: none"> <li>• 14 projects in non-residential buildings, entailing energy efficiency and building integrated renewables, corresponding to a renovated area above 49,000 m<sup>2</sup>;</li> <li>• 4 projects in non-residential buildings, entailing energy efficiency and building integrated renewables, corresponding to a renovated area above 48,000 m<sup>2</sup>;</li> <li>• 5 projects exclusively related to the installation of building integrated renewables, corresponding to an installed capacity of about 450 kWp.</li> <li>• One street lighting project, related to the replacement of 104 lighting points.</li> </ul>
<b>Investment in implementation phase</b>	<p>The investments mobilized reached about EUR 42,358,536.00, namely:</p> <ul style="list-style-type: none"> <li>• EUR 20.9 million in residential buildings;</li> <li>• EUR 19.5 million in non-residential buildings;</li> <li>• EUR 1.5 million in building integrated renewable energy sources;</li> <li>• EUR 0.5 million in street lighting.</li> </ul>

<b>Results expected to be achieved</b>	<ul style="list-style-type: none"> <li>• Final energy savings of 6.8 GWh/year</li> <li>• Final energy production by RES of 5.4 GWh/year</li> <li>• CO2 annual reduction of nearly 2,300 t/year.</li> </ul>
<b>Leverage factor achieved</b>	27
<b>Lessons learnt</b>	<ul style="list-style-type: none"> <li>• There is still lack of proper energy monitoring in many older buildings, which results in additional support to be provided during technical assistance projects;</li> <li>• The various non-residential sectors usually depend on government funds to find resources for their investments. These all have their own rhythms and conditions that do not always help the speed of renovation;</li> <li>• It is not always possible to empty residential buildings to renovate them. To overcome the additional challenges imposed by this type of project, it is very important for the contractor to have a good contact person on site to take care of any inconvenience to the residents quickly;</li> <li>• Due to lack of experience and fear of liability, contractors are reluctant to warranty work with reused materials. It is not easy to find a good description for used materials: one customer may not be able to see that it is second-hand, another may have no problem with visible damage from use. For these reasons, the prices for recuperated materials are often a lot higher than for new materials, because the contractor wants to cover himself;</li> <li>• Installation of PVs in buildings rooftop usually has to compete with several issues, as the building structural stability, the existing outlets and chimneys, safety lines and the shading from the building or other buildings. These factors reduce the real RES potential of existing buildings;</li> <li>• Especially the projects where facade renovations were foreseen, the project had to deal with unforeseen additional costs during the works. This is mostly due to the quality of the inner masonry in bigger buildings from the 1960s and 1970s.</li> </ul>
<b>Further information sources</b>	<a href="https://bouwenaan2030.org/">https://bouwenaan2030.org/</a>
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