**ELENA Completed Project Factsheet**

**Castilla y León Energy Efficiency Project**

**(SOMACYL)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Castilla y León region, Spain</th>
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<tbody>
<tr>
<td>Beneficiary</td>
<td>Sociedad Pública de Infraestructuras y Medio Ambiente de Castilla y León, S.A. (SOMACYL)</td>
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<tr>
<td>CoM signatory</td>
<td>No</td>
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</tbody>
</table>
| Sector            | District heating
                   Street lighting
                   EE in buildings |
| Total PDS costs   | EUR 1,172,026               |
| ELENA contribution| EUR 884,916 (90%)           |

**Project development services financed by ELENA**

SOMACYL developed an investment programme focused on supply of biomass in district heating and boilers, and energy efficiency in street lighting. The ELENA operation supported SOMACYL in the first stages of project development.

SOMACYL was an ESCO to public clients and was responsible for the development and implementation of the investments, as well as the supply of biomass and heat. The clients benefited from lower energy costs and new installations.

The ELENA support developed the pre-design and commercial proposals for the clients. This involved data collection from the specific buildings and systems and an analysis of the technical feasibility of implementing new biomass heating systems and boilers.

In addition to reinforcing internal resources, ELENA supported subcontracting of external companies for technical development and implementation of the schemes. There were 4 full time engineers and various short term external experts funded by ELENA during the contract.

**Description of ELENA operation**

SOMACYL managed the project with support from external companies and was responsible for monitoring all work. The project development services supported internal engineering staff and experts to carry out the energy audits and work required for energy efficiency investments in public installations in Castilla y León.

125 energy audits and over 40 feasibility and initial project design technical studies were carried out to prepare the investments in both lighting and heat generation installations.

**Timeframe**

January 2014 – June 2018

**Basis for investment identification**

The investment programme has been prepared on the basis of information provided by local and regional authorities.
| Investment programme description | The investment programme focused on the replacement of fossil fuel heat boilers by biomass boilers in public buildings, the development of centralised heating networks based on biomass and energy efficient streetlighting. 32 separate energy efficiency were carried out, for public lighting, district heating, and installation of biomass boilers. Final accepted investment by the end of the ELENA contract date was as follows:  
- Streetlighting 3,143,106 MEUR  
- Biomass boilers 2,396,526 MEUR  
- District heating 11,758,685 MEUR |
| Investment in implementation phase | EUR 17.3m |
| Results expected to be achieved | Energy Efficiency – 4.2 GWh/year  
Renewable energy production – 7.5 GWh/year  
GHG reduction – 3,100 t CO2eq/year  
Estimated job creation - 82 FTE |
| Leverage factor achieved | 20 |
| Lessons learnt | The planned scale of investment was not reached. One of the main identified problems was related to approval delays from public authorities which took much longer than anticipated. This led to lower than planned investments as the approval was required before the signature of the energy services contract and the continuation of works. In addition, there were some difficulties for Junta de Castilla y León to sign long-term commitments related to the operation of facilities. This was an issue with the budget accounting procedures.  
There was greater than anticipated possibilities for medium and large scale district heating networks, as opposed to those expected in smaller facilities. However, as these medium and large scale district heating projects are novel in Spain, the relevant regulations are still not fully developed. Therefore the time and work required for these projects was much longer than was expected.  
During the project operation there was a downward trend in gas and oil fuel prices which discouraged replacing old boilers with the biomass boilers.  
The above implies that the initial stages should have involved more efforts to promote the project across the necessary administrative bodies and to ensure that all regulatory and internal procedures were compliant with realising the projects.  
The communication and knowledge dissemination activities (e.g conferences, webinars, telephone exchanges etc) were noted as being important in getting support for the projects and the tender processes. |
| Further information sources | https://somacyl.es |
| Contact person at Beneficiary | Adrian Angulo - adrian.angulo@somacyl.es |