



**ELENA Completed Project Factsheet**  
**Global Roadmap for Energy Efficiency and New Energy Resources**  
**in Extremadura**  
**(GREENER-EX)**

<b>Location</b>	Extremadura Region, Spain
<b>Beneficiary</b>	Extremadura Energy Agency (AGENEX)
<b>CoM signatory</b>	No
<b>Sector</b>	EE and RES in Buildings Street lighting e-Mobility
<b>Total PDS costs</b>	EUR 1 263 692
<b>ELENA contribution</b>	EUR 1 137 323 (90%)
<b>Project development services financed by ELENA</b>	The project development services supported a large investment programme to improve the energy efficiency in street lighting and public buildings, as well as electrical transport in Extremadura Region. The technical assistance has also been provided to support the development of building integrated renewable projects, namely biomass boilers and photovoltaic systems. Some of the street lighting projects have been implemented through energy performance contracts (EPC's). A total of 62 investment projects have been implemented by 44 different entities located in Extremadura. These entities will benefit from lower energy costs and new or renovated installations.
<b>Description of ELENA operation</b>	AGENEX assisted regional and local authorities located in Extremadura Region in the implementation of energy efficiency, renewables and mobility related investments, by acting as an aggregator. The assistance provided included the development of energy audits and other preliminary technical studies which have been developed to support the decision making process of the Public Authorities to move on with those investments.  As the initial approach included several investments to be developed based on EPC's, significant efforts were made to explain that model to the Public Authorities (which for most of them were not familiar with this contractual regime). Assistance has also been provided during the development of the tender documents and during the tender phase.
<b>Timeframe</b>	December 2014 – December 2018
<b>Basis for investment identification</b>	The investment programme has been prepared on the basis of information provided by local and regional authorities.
<b>Investment programme description</b>	The investment programme targeted energy efficiency related investments in public buildings, street lighting and electric mobility. In addition, it also included investments related to the installation of biomass boilers and photovoltaic systems in public buildings.
<b>Investment in implementation phase</b>	EUR 38.6m

<b>Results expected to be achieved</b>	Energy Efficiency - 41.59 GWh/year Renewable energy production - 5.95 GWh/year GHG reduction - 14,505 t CO <sub>2</sub> eq/year Estimated job creation - 173 FTE
<b>Leverage factor achieved</b>	34
<b>Lessons learnt</b>	<ul style="list-style-type: none"> <li>• Long decision making process within the Public Administration caused some delays in project implementation;</li> <li>• There is a significant lack of personnel in the Regional Administration with knowledge on energy efficiency and renewables. This is one of the reasons why most of the projects only moved on in the last year of the ELENA Contract;</li> <li>• Significant support had to be provided in the development of the tender documents and in the evaluation of the different bids;</li> <li>• More efforts should have been made in the initial months of the project to promote it across the different Regional administration Ministries, in order to make the project well known and to improve its acceptance;</li> <li>• Implementation of EPC's was still challenging during a relevant part of the ELENA TA Contract, as the EPC costs were until that considered as debt for the public authorities. That was the reason why Regional Authorities postpone the investment decision. In addition, EPC's are still unfamiliar for public authorities and a relevant effort has been made to explain the technical and financial aspects of these contracts;</li> <li>• The new Eurostat Guide to the Statistical Treatment of Energy Performance Contracts helped to overcome some of the existing barriers in the development of EPC's. Several hospital are now more willing to move on with EPC's to renovate their buildings.</li> </ul>
<b>Further information sources</b>	<a href="http://elena.agenex.net/index.php/en/">http://elena.agenex.net/index.php/en/</a>
<b>Contact person at Beneficiary</b>	Daniel Encinas Martín ( <a href="mailto:dencinas@agenex.org">dencinas@agenex.org</a> )