



## ELENA Project Factsheet after project completion

### “NEWLIGHT”

<b>Location</b>	North West Croatia: county of Zagreb and Krapina-Zagorje
<b>Beneficiary</b>	North-West Croatia Regional Energy Agency (REGEA)
<b>CoM signatory</b>	No
<b>Sector</b>	Street lighting
<b>Total PDS costs</b>	EUR 704 469
<b>ELENA contribution</b>	EUR 634 022 (90%)
<b>Project development services financed by ELENA</b>	The project development services supported the preparation and implementation of EE measures in public lighting. The Regional Energy Agency of North-West Croatia prepared all tender documentation and launched public procurement for streetlight energy audits in 57 local authorities. The investments foreseen were implemented mainly through Energy Performance Contracting (EPC) with some local authorities opting for the Design and Build (D&B) – traditional contract model.
<b>Description of ELENA operation</b>	<p>REGEA supported the refurbishment of luminaires in the two counties to increase the energy performance of public lighting. The implemented EE measures include mainly replacing the luminaires with more efficient technologies such as LED. In the ELENA timeframe, public lighting energy audits (inventory) details of existing systems from around 72 200 lighting points have been collected and analysed. This resulted in a unique database, which has been used for technical and financial investment assessment.</p> <p>Major milestone achieved due to the implemented PDS activities:</p> <ol style="list-style-type: none"> <li>57 energy audits (public light inventories) completed;</li> <li>GIS based database with more than 2 million attributes from 57 local authorities prepared (preview of data available via free web GIS platform);</li> </ol> <p>Based on the outputs and analysis of the energy audits, action plans of reconstruction of the streetlight systems for each city and municipality (signatory of Contract agreement) have been prepared.</p> <p>Major milestones achieved due to the implemented activities:</p> <ol style="list-style-type: none"> <li>57 Action plans (strategic documents for local authorities summarising the analysis of numbers and figures from public lighting system energy audits, giving a short overview of funding opportunities and suggesting the optimal scope and financial model for modernisation);</li> <li>Detailed analysis of market conditions (cost of luminaires, ESCO market readiness, available financial sources and the potential cost of capital, etc.).</li> </ol> <p>Out of 72 200 existing luminaires, more than 54 000 (approx. 75%) were reconstructed in 26 municipalities using four financial models. Major milestones achieved due to the implemented activities:</p> <ol style="list-style-type: none"> <li>26 public authorities engaged in tendering process until October 2018 (45.5%): <ul style="list-style-type: none"> <li>- 13 EPC procurement processes (22.5%);</li> <li>- 8 traditional procurement processes (14.0%);</li> <li>- 1 D&amp;B procurement process (2.0%);</li> <li>- 4 Leasing procurement processes (7.0%);</li> </ul> </li> <li>31 public authorities - did not engage in procurement processes until 26 October 2018 (54.5%).</li> </ol>

<b>Timeframe</b>	October 2015 – October 2018
<b>Basis for investment identification</b>	The investment programme has been prepared based on the information provided by the local and regional authorities.
<b>Investment programme description</b>	Energy efficiency street lighting system in the two counties.
<b>Investment in implementation phase</b>	14.36 MEUR
<b>Results expected to be achieved</b>	Energy Efficiency – 21.38 GWh (saved/year) CO <sub>2</sub> reductions – 7050 CO <sub>2</sub> eq t.
<b>Leverage factor achieved</b>	23
<b>Lessons learnt</b>	<ul style="list-style-type: none"><li>• Financial instruments still have a key role in boosting the ESCO market in Croatia;</li><li>• Due to low energy prices most of the projects still require financing grants;</li><li>• Decreasing cost of LED luminaires represents the highest risk of achieving the leverage factor for such a project.</li></ul>
<b>Further information sources</b>	N.A.
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