



### ELENA Completed Project Factsheet

#### RIKSENERGY

<b>Location of planned investments</b>	Sweden
<b>Final Beneficiary</b>	Rikshem AB
<b>Final Beneficiary's address</b>	Klara Södra Kyrkogata 1 101 26 Stockholm Sweden
<b>CoM signatory</b>	N/A
<b>Sector</b>	Residential Building
<b>Total PDS costs</b>	EUR 2,190,333.43
<b>ELENA contribution</b>	EUR 1,971,300.09
<b>Project development services financed by ELENA</b>	<p>The Project Development Services (PDS) financed by ELENA supported the preparation of an Energy Efficiency (EE) and Renewable Energy (PV) Investment Programme in Sweden.</p> <p>The overall ELENA TA programme was coordinated by two dedicated employees and implemented with the support of thirteen internal and external experts working partially on the programme.</p> <p>The ELENA support enabled the company to develop concept to be applied across its property such as Lightning, Solar PV panels, Individual metering and charging (IMD) and Charging infrastructure. It also developed monitoring with IoT and screened the energy declaration of its properties to identify the worst-performing properties and developed a comprehensive EE refurbishment programme.</p> <p>The programme also supported the preliminary identification of properties with good PV potential followed by the preparation of an investment plan to develop PV.</p>
<b>Description of ELENA operation</b>	<p>The Project had one Coordinator who was involved in all steps, coordinating two parts of the programme (energy efficiency projects and PV panels).</p> <p>Rikshem renewed its mandatory new energy declarations for most of its facilities. Those certificates provided suggestions for creating more energy-efficient buildings. In parallel, the IoT project provided operational data to support the selection of 29 properties for refurbishments.</p> <p>The PV components followed a linear approach, starting with a pre-selection of approximately 30 buildings with favourable characteristics, for which a detailed study was produced, and eventually the selection of 7 projects, while others may be implemented after the end of the ELENA contract.</p> <p>The technical assistance activities narrowed the number of facilities down: the goal was to perform efficiency measures in the facilities where the measures would be the most cost- and energy- efficient. In most of the properties, sensor data will not materialise in investment, however the data collected will be used in the future and will help to monitor the EE work at apartment level.</p>
<b>Timeframe</b>	May 2020 – April 2024
<b>Investment programme description</b>	<p>The RIKSENERGY investment programme concerned the technical assistance associated with the planning, technical pre-design, and procurement of investments in residential buildings (including student houses and elderly care facilities) across Sweden.</p> <p>The project included three components:</p>

	<ul style="list-style-type: none"> <li>• The development of a comprehensive Building Management System/Internet of Things (IoT) solution for more than 20.000 appartements located in the country, with sensors outside and within appartments connected to common infrastructure and providing data for better energy management;</li> <li>• The EE refurbishment of 29 properties, with modernisation of technical facilities such as heating and ventilation, replacement of lighting;</li> <li>• The development of solar PV on 7 suitable properties;</li> <li>• Installation of Electrical Vehicles charging infrastructure in several properties.</li> </ul> <p>The Investment Programme achieved a 33% energy consumption reduction in the building's consumption and significant CO2 savings. It filled a gap within the organisation between large, non-EE focused refurbishment programme, and the small, targeted, ad-hoc projects from the local teams. Rikshem was the investor for all the components.</p>
<b>Investment in implementation phase</b>	EUR 26,289,349.29
<b>Results expected to be achieved</b>	<p>The total estimated contributions are:</p> <ul style="list-style-type: none"> <li>• Energy Efficiency – Annual total energy saved 21.97 GWh;</li> <li>• Renewable Energy – 0.575 GWh RE electricity generation;</li> <li>• CO<sub>2</sub> reductions – Annual total reductions of 1,243 CO<sub>2</sub> eq t;</li> <li>• Jobs retained or created - 69 equivalent FTE.</li> </ul>
<b>Leverage factor achieved</b>	13.34
<b>Lessons learnt</b>	<p>The grant from the ELENA initiative has allowed Rikshem to support internal functions with competent external consultants to help achieve additional energy savings and increase usage of renewable energy within the property portfolio.</p> <p>The grant has allowed Rikshem to perform additional investigations, congregate useful knowledge and information to support decision making regarding difficult questions. The support and reinforcement for Rikshem's organisation, both in manpower as well as in knowledge needed for progression, has speeded up the work as well as made it more unified and efficient for all the different regions where Rikshem operates.</p> <p>One important lesson learnt during the ELENA-project was the need for the different services within Rikshem to cooperate to achieve the targeted results. This cross-functional way of working will be useful in many aspects, especially in solving upcoming problems related to the performance of energy measures. Now Rikshem has a forum where different competencies can gather, discuss and solve difficult questions to progress in their work and achieve set goals.</p> <p>Another lesson learnt was how difficult it is to determine methods to quantify different measures and their climate impact, for example how the production of solar electricity contributes to a lower climate impact. There are a lot of different methods and ways to calculate as well as different key input parameters to be used. The work with determining this for different energy measures within Rikshem will continue after the ELENA-project is finished.</p> <p>Furthermore, the development of different concepts for different energy measures (lightning, PV panels, IMD and charging infrastructure) has been appreciated within Rikshems organisation. When the project started there was a lack of knowledge related to the implementation of different energy measures and the concept has worked as a good support for the different property management departments to simplify the implementation of diverse actions. Furthermore, the concept ensures a unified way of working as well as ensuring that all regions within Rikshem work towards the set goals.</p>

	<p>The method for conceptualisation of specific energy measures can be used for the development of new concepts if needed in the future as well, even after the ELENA-project is finished.</p> <p>Some other lessons learnt during the implementation of the project are:</p> <ul style="list-style-type: none"> <li>• Consider how the project should be executed and monitored before the project starts.</li> <li>• Ensure that structures are in place for follow-up, costs, results, and progress.</li> <li>• Create a structure that can withstand personnel changes in project management.</li> <li>• Given the project's long duration, it's essential to build a robust framework.</li> <li>• Build flexibility regarding timing, resources, and scope. Especially if you are unfamiliar with your properties, adaptability is crucial.</li> <li>• Maintain close communication with the ELENA team at EIB.</li> <li>• Be prepared to handle any changes in the implementation plan.</li> <li>• Ensure that the project has support and buy-in from leadership and the board.</li> <li>• Given its large investment volumes, strategic focus, and long-term nature, adaptability is key.</li> <li>• Remember that exchange rates can impact the volume of the project considerably.</li> </ul>
<b>Further information sources</b>	<a href="https://www.rikshem.se/om-oss/hallbarhet/klimatneutral-verksamhet/">https://www.rikshem.se/om-oss/hallbarhet/klimatneutral-verksamhet/</a>
<b>Contact person at ELENA Beneficiary</b>	Ebba Lindencrona - <a href="mailto:ebba.lindencrona@rikshem.se">ebba.lindencrona@rikshem.se</a>