



## ELENA Project Factsheet

### Improving renewable energy and energy efficiency in North Denmark District HEATING (INDDHEAT)

<b>Location</b>	North Denmark Region, Denmark
<b>Beneficiary</b>	Aalborg Municipality
<b>CoM signatory</b>	Yes
<b>Sector</b>	District Heating
<b>Total PDS cost</b>	EUR 3 096 000
<b>ELENA contribution</b>	EUR 2 786 400
<b>Project Development Services (PDS) financed by ELENA</b>	<p>The Project Development Services (PDS) financed by ELENA will provide support to implement the District Heating (DH) Investment Programme in the North-Denmark Region. This Investment Programme will support Energy Supply Companies that utilize fossil fuels, such as gas, coal and oil, production for their DH networks in the transition to renewable resources. These DH Energy Supply Companies are located within 5 municipalities from the Region, though the program can integrate other DH Energy Supply Companies. The aim of the INDDHEAT project is to provide dedicated Technical Assistance (TA) to DH Energy Supply Companies in their planning and decision-making process towards the change from fossil fuel towards renewable resources.</p> <p>The overall ELENA TA programme will be coordinated by the House of Energy – located within the Municipality of Aalborg. A Steering Group will oversee the ELENA TA programme implementation. The Steering Group will set the overall strategic course of the INDDHEAT project and will be responsible for approving budgets, progress reports, and implementation timeframes. The Secretariat will manage project administration, accounting, budgets, communication, and facilitation of networks and will also supervise the external consultants which will do the TA work for the District Heating companies.</p> <p>The planned PDS will support the screenings of the current situation for each DH companies, the planning and the studies for the design and permit approval, and the tendering process to implement the investments.</p>
<b>PDS Timeframe</b>	Q3 2018 – Q2021

<b>Investment programme description</b>	<p>The investment programme covers the North Denmark region, and at the moment concerns 5 municipalities on the 11 of the region. The municipalities are in alphabetic order: Broenderslev, Frederikshavn, Hjoerring, Morsoe, and Aalborg.</p> <p>In total, 10 investment projects are planned in the INDDHEAT project and the investment will occur in the following area:</p> <ul style="list-style-type: none"> <li>• Renewable Energy Sources such as Solar District Heating</li> <li>• Biomass boilers</li> <li>• Energy Efficiency (EE)</li> <li>• Heat pumps</li> <li>• Heat storage</li> <li>• Pipelines renovation</li> <li>• Extension of supply areas</li> </ul>
<b>Investment to be mobilized</b>	<p>EUR 70m</p>
<b>Description of the approach to implement the Investment Programme</b>	<p>Following the TA services, the investment programme will follow the below stages from the procurement of contractors:</p> <p><u>Preparation of the construction works stage</u>  The INDDHEAT project and the associated services are intended to supervise and support the development of an attractive business case. When the agreed materials are delivered, it will be up to the board members of the individual plant to take the decision on when to start the construction works phase for the investment project. An investment project is considered fully compliant and delivered, when a contract with a construction company performing the works phase is signed.</p> <p><u>Pipeline management</u>  Should one or more feasibility studies turn out with a negative financial return of investment, the grant sum originally intended for this partner will be offered to other partners, for their potential use. Thus, a joint waiting list for interested stakeholders will be created. Every third month the Secretariat will provide a short status update on investment progress.</p> <p><u>Quality control</u>  The INDDHEAT Secretariat is responsible for the collection of documentation from the consultant and the partners in relation to TA and report to the EIB about project progress. The chairman of the Steering Committee is the formal signatory and approves all materials before any reporting is submitted to the EIB.</p> <p><u>Project completion</u>  The project completion phase includes the deliverable of the final report to the EIB ELENA secretariat. Including the financial overview of all project related costs.</p>
<b>Expected results</b>	<p>The total estimated contributions are:</p> <ul style="list-style-type: none"> <li>• Energy Efficiency – Annual total energy saved 136 GWh.</li> <li>• CO<sub>2</sub> reductions – Annual total reductions of 40.751 t CO<sub>2</sub> eq.</li> </ul>
<b>Leverage factor (Minimum 20)</b>	<p>25</p>

<b>Market replication potential</b>	<p>The INDDHEAT program will develop both proven and more innovative technical solutions to the challenges facing Danish district heating companies. Working in cooperation with REFER-CDR, another ELENA supported investment program, it will provide a panel of proven solutions to increase RE content in DH heat supply in the country and abroad.</p> <p>Aalborg House of Energy has a good working relation with the Danish District Heating Association and will disseminate through the association news regarding the INDDHEAT project at national level. At EU level, House of energy partners with the North-Denmark EU Office and will be able to promote the solutions through this channel.</p>
<b>Status</b>	Contract signed on 28/06/2018
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