



ELENA Completed Project Factsheet

AVEDORE GREEN CITY (AGC)

Location of planned investments	Avedore, Denmark
Final Beneficiary	Avedore district heating company
Final Beneficiary's address	Blytaekkerporten 2, 2. sal, 2650 Hvidovre, Denmark
CoM signatory	No
Sector	Energy efficiency in buildings, District heating
Total PDS costs	EUR 1,001,288.66
ELENA contribution	EUR 901,159.79
Project development services financed by ELENA	<p>The ELENA funded activities included the following:</p> <ul style="list-style-type: none"> • Project management: Overall coordination, reporting and stakeholder engagement and Steering Committee meetings. • Communication between external and internal stakeholders. • Tenders concerning the external technical partners and other stakeholders. Responsible for the technical side of the district heating project. • Planning, organizing, and implementing communication with the tenants. • Financial monitoring and financial presentations. • Developing the energy management systems, i.e., metering and IT monitoring • Coordinating the work of energy efficiency renovations with the housing associations.
Description of ELENA operation	<p>The Final Beneficiary created a Project Implementation Unit (PIU) with internal staff and external expert to renovate a district heating network and renovate social housing units in Avedore.</p> <p>AVDH coordinated multiple stakeholders including social housing administrators and municipality representatives in the decision-making process. It also included an important communication element with tenants which led to high acceptance and smooth running of the programme and contributed to fostering social acceptance among residents.</p>
Timeframe	01/12/2020 – 30/11/2023
Investment programme description	<p>The ELENA supported investment programme consisted of the following components:</p> <ul style="list-style-type: none"> • Renovation of the district heating network in Avedore social housing neighborhood. Transition from a normal temperature DH (90 degrees) to a low temperature one (65 degrees). • Energy efficient Renovation of the social housing units in Avedore North and South. This comprised the adaptation of the building to the low temperature DH system (radiators replacement) and energy efficiency measures such as: improving the building envelopes, improving insulation of heating and hot water pipes, conversion of the heating system from a one string to a two string one, ventilation with heat recovery system and installation of smart meters in the flats. <p>After renovation, the dwellings consume 18 270 MWh compared to 27 980 MWh without the works. The average energy savings are in the range of 35%.</p>

Investment in implementation phase	EUR 28,332,880.00
Results expected to be achieved	9.7 GWh/year savings 283 tCO ₂ /year avoided
Leverage factor achieved	31.44
Lessons learnt	<p>The following summarise the main lessons learnt:</p> <p>Importance of including social housing administrators and municipality representatives in the decision-making process: the involvement of the municipality in the steering group committee enabled the political support to the project, more efficient interaction, and a good communication from the municipality on the project. The inclusion of social housing administrators improved the tenants acceptance of the project, as they acted as intermediaries between tenants and the project.</p> <p>Information sessions with the tenants are key to the acceptability of the project: These sessions helped the tenants enduring the inconveniences associated with the prolonged district heating renovation, despite the resultant increase in rental costs. The events organized contributed to fostering social acceptance among residents.</p> <p>Overall communication crucial: The Final Beneficiary developed a toolbox for handling different types of complaints. For example, communicating the benefits of the project thoroughly (e.g better indoor climate and energy savings); explaining costs such as rent increases was done in an understandable way and all obstacles, such as delays, were communicated in the local intranet.</p> <p>AVDH communicated to the tenants about the need for an energy transition, and all tenants had the possibility to participate in the decision processes. The project was approved by the tenants themselves which helped overall implementation.</p> <p>Strong organisation: Despite the COVID crisis, the project met most goals by the targeted time and no workstreams were cancelled. The strength of the steering group was greatly enhanced by its diversity, as members brought varied perspectives and expertise to the table. Collaboratively, they navigated challenges posed by COVID restrictions with mutual support and problem-solving abilities.</p>
Further information sources	n/a
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