

FORM BEST PRACTICES CONTEST 2023

Olecko Municipality, Poland

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Name project

STRONG PARTNERSHIP FOR GREEN OLECKO

Category Certification Criteria: mark the category of your project

- X Energy and environmental policies (politiche energetiche e ambientali);
- O Infrastructure policies (politiche infrastrutturali);
- O Quality of urban life policies (politiche per la qualita' urbana);
- O Agricultural, touristic and artisan policies (politiche agricole, turistiche, artigianali);
- O Policies for hospitality, awareness and training (politiche per l'ospitalita, la consapevolezza e la formazione);
- O Social cohesion (coesione sociale).

Summary project

The premise of the project was to combine the forces of the local government and the private sector, optimal use of the resources that all parties have and the construction of an ecological and economical heating system for the city with the "zero waste" principle in order to maintain the highest air quality and environment enjoyed by Olecko.

The commune presented a project involving the construction of a new and modernization of the existing networks in order to reduce heat losses and eliminate as many non-ecological heat sources as possible,

The Production and service plant "Prawda" Ltd, which, among other things, manufactures furniture for the IKEA chain, has been trying to care for the environment and act economically for many years. For their needs, they built a boiler room in which they burn wooden waste from production (zero waste). However, they do not use all the heat produced, so after discussions with the mayor, they agreed to sell the surplus for a price covering the costs of production to the city.

In this way, the potentials were combined. With the help of a municipal company, the commune built the networks and connected them to the entrepreneur's heat source.

Thanks to this cooperation, a strong partnership has been established for Green Olecko, which is already planning further activities in this area. The applied solutions not only met the objectives of all parties, but also contributed to the reduction of heat losses, the elimination of low emissions in the heating system in Olecko, and in the face of high heat prices and rising inflation, it allowed to obtain the lowest and stable prices for residents and entrepreneurs.



Reduction of heat loss

Liquidation of low emission in the district heating system

Decommissioning of three main coal-fired boiler houses in Olecko

Heat from an ecological heat source

Increased residents' awareness of the harmfulness of low emissions and ecological energy sources, as well as the impact on the environment

Including the private sector and residents in joint activities for the environment

Improving the quality of life of residents

Optimization of heat costs for companies and residents

Result project

Thanks to the implementation of the project:

- 5542 meters of a new economical heating network with connections were built,
- the existing network was modernized, adapting it to high standards along the length of 326 meters

47 heat substations were built and modernized at new and existing customers

The modernization of the heating network made it possible to connect new recipients of heat energy from the area of Olecko. The modernization of heating networks enabled the liquidation of three main coal-fired boiler houses in Olecko

Everything was possible thanks to the partnership with the private sector. A communal company and Production and service plant "Prawda" Ltd., which provide the city with heat from an ecological stove that meets the highest ecological standards, in which waste from furniture production for IKEA is burned in the form of wood pellets (zero waste)

Today, ecological heat is used by, among others, a kindergarten and public schools, the City Hall in Olecko, housing communities, 33 new individual customers and many residents.

Thanks to joining forces, the commune did not have to invest in the construction of a modern boiler house, but instead increased the length of the new networks and extended the ecological heat to a larger number of residents. A private entrepreneur sells the surplus of heat produced by him, which he would not use for his own needs. Thus, it applies the "zero waste" principle and consistently supports the idea of building a green Olecko.

An additional benefit for both companies and residents is the low price of heat - PLN 64.89/GJ (approx. EUR 14), which is one of the lowest prices in Poland when compared to domestic prices. From the beginning of 2019, the municipal company increased the scope and area of operation, and the heating capacity supplied to heat consumers increased from 4.36 MW to 13.22 MW, which means an increase in the number of recipients and the development of the company.

Finance (costs and benefits)

The final total cost of the project was 14,146,703.67 PLN (EUR 3,102,347.30), including:

- eligible expenses 11,597,158.47 PLN (EUR 2,543,236.51)
- grant amount 9,857,584.70 PLN (EUR 2,161,751.03)



- loan amount - 1,739,573.77 PLN (EUR 381,485.48)

The project is co-financed by the Cohesion Fund under the Operational Program Infrastructure and Environment for 2014-2020, Priority Axis I Decarbonisation of the economy, Measure 1.5 Effective distribution of heat and cold.

Thanks to the solution, such institutions as the municipal kindergarten or the Municipal Office in Olecko gained ecological heat and save on its costs.

Staff (staff involved and use of time)

The president of the board of the municipal company PEC Ltd in Olecko is responsible for the implementation of the project. The project and its development plan were based on his own and external consultants' calculations. The entire investment was implemented according to the assumptions and goals developed by the Mayor of Olecko in 2019. At that time, the original concept of building a municipal boiler house was abandoned due to the too high costs of the investment and the lack of financial capacity of the commune. Thanks to the agreement with a local entrepreneur who has a surplus of thermal energy produced for the plant's own needs in the latest, environmentally friendly technology, it was possible to implement the project, eliminate coal-fired heat sources in favor of renewable energy sources and extensive modernization of the heating network covering a large part of the city. Thus, the residents gained an environmental effect, and in the face of the energy crisis, a stable and safe source of thermal energy at a low price in the current conditions.

Currently, talks are underway on further investments in consultation with the private sector in order to expand the effect and connect other areas of Olecko to ecological heat sources. The next stage of development of the ecological network is also underway. The project is implemented thanks to funding from the National Fund for Environmental Protection and Water Management. The task includes the construction of subsequent sections of the heat network in a modern, environmentally friendly and economical technology.

Additional information (if necessarily)

In 2019, the municipal company responsible for heat in Olecko implemented the ISO 14001:2015 Environmental Management System.

System goals:

- 1. Conducting heat generation processes in a way that minimizes environmental pollution and prevents pollution in accordance with environmental regulations.
- 2. Implementation of projects aimed at using heat from Renewable Energy Sources (RES).
- 3. Improving the qualifications of employees and taking into account the role of employees and their representatives in environmental protection activities.

Publications on activities in the field of ecological heat in Olecko:

https://bit.ly/42INbUi https://bit.ly/3pcunIF https://bit.ly/3LVa1N9 https://bit.ly/414Cp3G https://bit.ly/3VwVHxr

http://pec.olecko.pl/biezace-informacje/

Poland air quality map - Olecko

Link website (if available)

PEC Olecko - Przedsiębiorstwo Energetyki Cieplnej



Once filled in this form please send it to: info@cittaslow.net - Participation Deadline, 15 May 2023 -