## Co2mmunity: Community Energy Projects

Community energy projects offer enhanced production of renewable energy from local sources (wind, solar, biomass, hydropower, geothermal) through active participation of local communities. Together, citizens co-finance, co-develop, and co-operate renewable energy plants, and foster sustainable energy distribution.

1. Title of the project *  Comprehensive thermomodernisation of multi-family buildings of the Housing Cooperative in Łańcut with the use of RES installations and intelligent Energy Management System
2. Country * Poland
3. Location (city, village, etc.), address * Łańcut
4. Short description of the project (3-5 sentences) *  The Housing Cooperative in Łańcut implemented a project entitled "Comprehensive thermomodernisation of multi-family buildings located at Wyszyńskiego Street in Łańcut, which are in the resources of SM Łańcut with the use of RES installations and intelligent Energy Management System". The aim of the Project is a comprehensive thermomodernisation of multi-family buildings at Wyszyńskiego Street in Łańcut. The Project includes: (1) External thermomodernization, (2) Installation of an intelligent energy management system, (3) Modernization of central heating, domestic hot water and cold water installations, (4) Installation of a PV installation of approximately 2 kW on each building (energy produced used only for the building and common parts). Project has been co-financed by EU funds under the Operational Program Infrastructure and Environment 2014-2020, sub-action 1.3.2. Supporting energy efficiency in the housing sector. The value of the project is about 1.3 million PLN, of which the EU funding is about 861 thousand PLN.
<ul><li>5. Type of community</li><li>Urban</li><li>Rural</li></ul>

6. Type of project *
✓ Renewable electricity
Renewable heat source
Energy efficiency or energy saving (renovation of buildings etc.)
New technology piloting
Other:
7. Technologies *
Bio CHP plant
Biogas reactor
Biomass boiler
Central heating system
Demand response automation system
District heating network
Electric battery
Electric vehicle charging station
Energy efficient windows, insulation etc.
Heat pump for heating and/or cooling
Internet application related to energy system or service
Micro-grid
Solar heat collectors
Solar PV system
Thermal storage
Wind turbines
Other:
8. System / service / outcome pictures (please write a link(s) to pictures)

9. Ownership model
Fully financed and owned by a community
Received financial support for investment and fully owned by a community
Participation through buying shares
Co-operative membership
Participation through aggregator or other energy service provider (individual contract)
Other:
10. Main stakeholders of the project
Housing Cooperative in Łańcut residents
11. How was the project funded? (several answers possible)
Community funds
Bank loan
Subsidies
Government grant
Municipal grant
European funding
Crowdfunding
Other:

12. Type of benefits and investment motives
Direct income from selling energy
Energy and cost savings
☐ Income from shares
Climate and environmental benefits
Adoption of new or smart technologies
Improvement of indoor air quality or other living conditions
Improvement of local economy
Increase of community resilience
Other:
13. How was the rest of the community involved in the project? (several answers possible)
Participated in discussions
Opposed the project
Supported the project
Participated in the decision-making
Received a revenue share
Was not involved in any discussions
14. Did you receive help from any organisation, public institution or other similar project? If yes, from whom and how did they help you?
15. Lessons learnt (NIMBY, institutional barriers, financial barriers, regulative barriers, etc.). How the project became successful after all? Any advices for other community energy project managers?
16. Website link
http://www.smlancut.pl/

17. Contact information *
Spółdzielnia Mieszkaniowa w Łańcucie ul. 29 listopada 1, 37-100 Łańcut tel. 17 225 27 34 e-mail: sekretariat@smlancut.pl
Technical and economic details
Technical and economic details of community renewable energy project.
TECHNICAL DETAILS: 1. System size or purchase volume (kW, MW, amount of units): *
3 x 2kW PV installations
2. System installation or product adoption time: month/year *
3. Expected system or service lifetime
4. Energy production or savings/year
Electricity saved - 8.892 MWh/year, amount of heat energy saved - 584.66 GJ/year
5. Who is taking care of the Operation and Management?
ECONOMIC DETAILS: 1. Investment or purchase cost:
About 1.3 million PLN
2. Operation and Management cost/year

3. Total amount of subsidies received
4. Economic feasibility: Internal Rate Of Return (IRR), Net Present Value (NPV), Payback Period