Programme Operators

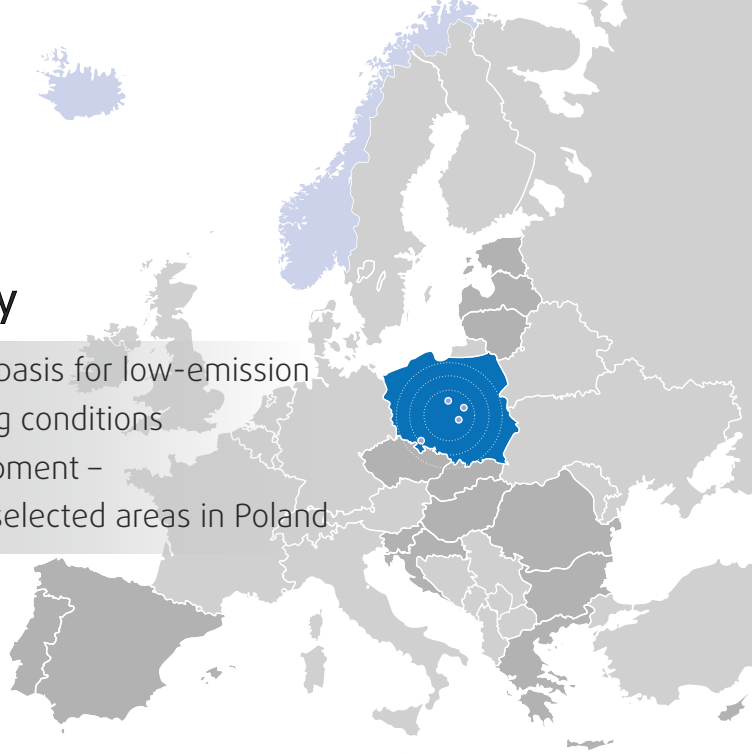
MINISTERSTWO ŚRODOWISKA

National Fund
for Environmental Protection
and Water Management

Iceland Liechtenstein Norway grants

Geothermal Energy

Geothermal energy – a basis for low-emission heating, improving living conditions and sustainable development – preliminary studies for selected areas in Poland



www.eeagrants.agh.edu.pl

Geothermal Project Supported by the EEA Financial Mechanism 2009-2014

The bilateral co-operation fund, Plo4 Programme
"Saving energy and promoting renewable energy source"

Project Partners

Konstantynów Łódzki

Lądek Zdrój

Sochaczew

Poddębice

Geotermia Poddębice

Uzdrowisko Lądek-Długopole SA

General information

The funds of the Norwegian Financial Mechanism and the European Economic Area for 2009–2014 support the projects conducted in 16 beneficiary countries of Central and Southern Europe and the Baltic States.
Under the funds, 32 support areas were identified, from environmental protection (with renewable energy sources) and climate change to civic society and general research. The scopes of bilateral co-operation and the sets of the relevant programmes are agreed on an individual basis with the recipient countries to take into account their diverse needs and priorities.

The total financial contribution of the Donor Countries (Norway, Iceland, and Lichtenstein) amounts to 2.8 billion € in the second edition of funding designed for 2009–2014. The priorities assumed for 2014–2021 reflect those of the European Union and are intended to react to common challenges facing Europe.

More information is available at: eeagrants.org

MEERI PAS

AGH University of Science and Technology

Wrocław University of Science and Technology

cmr Christian Michelsen Research AS

ORKUSTOFNUN National Energy Authority

EGEC Geothermal

Renewable Energy Sources
Geothermal Energy

Energy saving and the promotion of renewable energy sources

- Limitation of greenhouse gas emissions and air pollution
- Increase of the share of energy generated from renewable energy sources in the total energy consumption

Formal Basis of the Project

Regulation of the implementation of the EOG Financial Mechanism and the Norwegian Financial Mechanism for 2009–2014.

Background

Poland possesses proper geothermal energy potential to supply low-emission thermal energy. Presently, only 6 geothermal power plants are operational and several more are at various stages of design. A wider development of the sector of geothermal energy use requires specific and wide-ranging actions. The present Project well corresponds with those actions since it concerns the transfer of Norwegian and Icelandic knowledge and experiences to the Polish Partners. The two countries are the global leaders in the use of geothermal energy and thermal energy generation.

Geothermal energy can be widely applied, allowing for a low emission of greenhouse gases. It is also a reliable basis for the development of industry and businesses. The present Project focuses on selected Polish towns situated in the prospective areas, regarding the low-emission thermal energy generation, aiming at the improvement of living conditions and sustainable development.

Goal

The goal of this Project is to transfer knowledge, technologies and good practice from Norway and Iceland to Poland and apply geothermal energy in district heating, as one of the RES.

The Donor Countries are the global leaders in geothermal energy management: Norway, owing to the use of heat pumps, and Iceland, owing to the use of geothermal steam and waters.

The Polish geothermal district heating business is still at the initial stage of development. This Project will contribute to capacity building, rising acceptance and awareness among a number of stakeholder groups for wider geothermal energy application. Preliminary feasibility studies will be drafted, together with proposals for Pilot Projects to be carried out in Poland, based on the Norwegian and Icelandic experiences. The Partners from the latter countries will gain experience on the thermal energy generation business in the Polish conditions and those of other European countries, which will expand their knowledge and competence. An essential element of the Project also includes proposals of developing formal and economic tools, which, next to the transfer of knowledge and examples of good practice, are indispensable for durable geothermal energy generation in Poland.

Main Project Activities

Study Visit to Poland

The evaluation of the potential and the conditions of geothermal district heating on the prospective areas of Poland, using the examples of such towns as Konstantynów Łódzki, Poddębice, Sochaczew, and Lądek-Zdrój; obtaining information for preliminary feasibility studies on the application of geothermal energy generation and efficient energy management in those towns, as well as proposing relevant Pilot Projects and starting contacts.

Study Visit to Norway

Learning the experiences of heat pump operation in the Norwegian district heating installations, visiting selected plants and starting contacts.

Study Visit to Iceland

Learning the experiences and technologies of geothermal district heating plants, as well as other geothermal installation applications in Iceland, visiting selected plants and starting contacts.

Reports from Study Visits

The Technical Reports on the results of study visits will concentrate on the essential issues to be included in the final Study Visit Report. The individual Reports from Study Visits will contain e.g. the following:

- Preliminary feasibility studies of the use of geothermal energy in district heating and efficient energy management in selected areas of Poland, on the example of four Polish towns,
- Proposals for pilot district heating installations, using geothermal energy,
- Proposals of indispensable legal and economic tools for optimum development of geothermal district heating in Poland.

Dissemination of the Project Results

This activity will include e.g. opening and concluding conferences, with the participation of the representatives of the Partners, towns, investors, Programme Operators, other Polish ministries, government agencies, business organisations, media, and Donor Countries.

Project Management and Promotion

Current Project activity management; Partners' meetings; promotional activities (publications, website, Press Releases, brochures etc.).

The "Wojciech" Health Resort, Lądek Zdrój – erected in 1680, rebuilt in neo-baroque style in 1878-1880, the most magnificent and the oldest balneological edifice in the Lądek Zdrój SPA, where from the 13th century geothermal waters has been known and used

Author: Jacek Halicki (source: wikipedia)

Project Partners and Performers

Consortium:

- Mineral and Energy Economy Research Institute of the Polish Academy of Sciences (Project Leader)
- AGH University of Science and Technology in Kraków
- Wrocław University of Science and Technology

Partners from the Donor Countries:

- Christian Michelsen Research AS, Norway
- National Energy Authority, Iceland

Co-operating Participants:

- Lądek-Zdrój Town and Uzdrowisko Lądek-Długopole S.A.
- Konstantynów Łódzki Town
- Poddębice Town and Geotermia Poddębice Sp. z o.o.
- Sochaczew Town
- European Geothermal Energy Council
- Experts

Project duration

July - October 2017

Project Budget

PLN 3,003,509.42 PLN / € 716,708.29

Contact

MEERI PAS
Beata Kępińska, prof. MEERI PAS - Project Manager
Wybickiego 7A St., 31-261 Kraków
email: bkepinska@interia.pl
Phone: +48 18 2073218

Christian Michelsen Research AS, Norway
Dr Kirsti MidttØmme
Fantoftvegen 38, Bergen
email: kirsti@cmr.no
Phone: +47 416 07 478

National Energy Authority of Iceland, Iceland
Baldur Pétursson
Grensasvegur 9, 108 Reykjavik
email: baldur.petursson@os.is
Phone: +354 569 6000

www.eeagrants.agh.edu.pl

Geothermal energy – a basis for low-emission heating, improving living conditions and sustainable development – preliminary studies for selected areas in Poland