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PROMOTING ENERGY EFFICIENCY AND RENEWABLE ENERGY IN POLAND

SOLAR ENERGY INSTEAD OF COAL FOR POLAND

The roof of the swimming pool in Jasło, north-east Poland, has been covered with solar panels. © Local authority association of Wisłoka river basin

Around 90 percent of Poland's energy demands are covered by coal. As such, Poland is home to one of Europe's most environmentally harmful forms of energy production. Switzerland is promoting the use of renewable energy in Poland by cofinancing solar panels, geothermal heating pumps and biomass plants. Modernising the heating system in Warsaw is also improving energy efficiency.

In line with the EU directive on renewable energy, Poland has set itself the goal of increasing renewable energy use to 15% of overall energy consumption by 2020. To help Poland reach its national target, funds are also being provided through the Swiss enlargement contribution.

HEATING WITH COAL – A WIDESPREAD PHENOMENON

Air pollution and emission levels in Poland are significantly higher than in western European countries. Although industrial companies are largely responsible for the high emissions, coal ovens in private households and public buildings in particular play a significant role. Switzerland is contributing CHF 115 million to support energy efficiency and the use of renewable energies in a total of ten projects:

- **Solar panels for private households and public buildings:** In south-east Poland, a priority region for Switzerland's contribution to EU enlargement, around 50 municipalities received assistance to buy and install solar panels to power the hot water supply in 25,000 households and 210 public buildings. In addition, 120 public buildings were equipped with rooftop solar panels and around 40 geothermal heating pumps were installed. In north-east Poland, more than 90 public buildings in 24 different towns and villages were modernised and equipped with solar panels. There are also information campaigns and courses to make sure that people know how to use and maintain the solar panels properly.

- **Modernising the heating system in Warsaw:** In the 1960s and 70s, large blocks of flats with communal heating stations were built in Warsaw. The heating in each flat was the same and could not be regulated individually. To optimise the energy efficiency of the city's heating system, 811 individual heating stations have now replaced 111 communal ones, helping around 100,000 of Warsaw's inhabitants. Old heating pipes have also been replaced.

- **Building a biomass plant in Lębork:** Switzerland's enlargement contribution was also used to support the construction of a biomass plant in Lębork, where the 35,000 inhabitants can now benefit from an innovative system that covers 37% of the town's heating and electricity needs.

In Mazovia Province solar panels were installed in 12 hospitals, where events about environmental protection and renewable energy were also organised for the younger patients. © Marshal's Office of the Masovian Voivodeship

- **Raising public awareness and exchanging know-how with Switzerland**: A number of Polish schools held seminars on environmental protection and renewable energy. As a result, some pupils visited people in their neighbourhoods to talk about these issues and Switzerland's projects. Other pupils took part in a drawing competition about solar energy. In Warsaw, three conferences took place for specialists from Poland and Switzerland to exchange know-how in this field. In addition, Switzerland hosted five delegations of Polish representatives interested in Swiss energy policy and expertise.

IMPROVED AIR QUALITY AND REDUCED EXPENDITURES

High levels of air pollution and, in particular, a high proportion of fine particulate matter in the air increase the risk of lung and cardiovascular diseases. As the villages are located in or around UNESCO biosphere reserves, national parks, or Natura 2000 areas, the many species of flora and fauna found in these precious zones are also under threat.

Through the implementation of these ten projects, both the air quality and the emission levels in the affected region will improve. Annual CO2 emissions will drop by some 88,000 tonnes. Moreover, owners of private homes and public buildings will enjoy a higher disposable income thanks to lower expenditures on traditional energy sources.

In south-east Poland 120 public buildings have been equipped with solar panels.
© Town of Niepołomice

Switzerland's enlargement contribution has helped make Warsaw's heating system more energy efficient. Measures include the replacement of old heating pipes.
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THE PROJECT IN BRIEF

SUBJECT
Renewable energy and energy efficiency

COUNTRY
Poland

STARTING POINT / BACKGROUND INFORMATION
The EU plans to cover 15% of its energy requirements with renewable energy by 2020.

PURPOSE
Better environmental protection and promoting renewable energy.

ACTIVITIES
Installing solar panels for heating water and generating electricity, installing heat pumps, modernising the heating system in Warsaw and building a biomass plant in Lębork

TARGET GROUPS
Private households and public buildings, general public

COSTS
Swiss contribution: CHF 115 million

RESPONSIBILITY FOR PROJECT IMPLEMENTATION
Polish municipalities and towns

DURATION
2012 - 2017