



## PROMOTING RENEWABLE ENERGY IN SOUTHEAST POLAND SOLAR ENERGY INSTEAD OF COAL FOR POLAND



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. To help Poland reach its national target, funds are also being provided through the Swiss enlargement contribution. Switzerland is contributing CHF 63.45 million to support the use of renewable energies in a total of five projects in Southeast Poland.

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### HEATING WITH COAL – A WIDESPREAD PHENOMENON

Air pollution and emission levels in Southeast 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 in this region.

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. This is all set to change: Switzerland is promoting the use of renewable energy in Southeast Poland. Solar panels are being purchased and installed in around 50 villages for heating water and generating electricity in over 16,000 private households and some 170 public buildings.

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### SOLAR PANELS FOR 16,000 PRIVATE HOUSEHOLDS AND 170 PUBLIC BUILDINGS IN AROUND 50 VILLAGES

As part of five projects to improve air quality and reduce emission levels in this region, solar panels are being purchased and installed in 50 villages to provide 16,000 private homes and 170 public buildings with hot water. The private homes will be selected according to environmental criteria such as the potential for emission reductions, as well as socio-economic criteria such as income, family size and residents with disabilities. Information campaigns and training sessions will ensure that solar panels are used and maintained correctly by recipients.



Public buildings and parks in six municipalities will be supplied with power through the installation of seven photovoltaic systems. Furthermore, these photovoltaic systems also serve as a demonstration for the surrounding villages, increasing the likelihood that other municipalities will decide to generate electricity through solar energy in future.

One of the five projects not only involves purchasing solar panels, but also four geothermal heat pumps for heating water and for heating public buildings.

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### **PROTECTING HUMAN HEALTH AND THE VARIETY OF FLORA AND FAUNA**

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.

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### **IMPROVED AIR QUALITY AND LOWER EXPENDITURES**

Through the implementation of these five projects, both the air quality and the emission levels in the affected region will improve. Annual CO<sub>2</sub> emissions are expected to drop by some 20,000 tonnes. A total of 600,000 residents and numerous tourists to the region stand to benefit. Moreover, owners of private homes and public buildings will enjoy a higher disposable income thanks to lower expenditures on traditional energy sources.

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### **OTHER PROJECTS TO PROMOTE RENEWABLE ENERGY IN POLAND**

Switzerland is investing CHF 51.93 million in five other projects in Poland to promote renewable energy and energy efficiency. One project will enable towns and cities which form part of the Parseta Basin intermunicipal association to heat schools, sports centres and social facilities using solar energy in future. Two projects in Krakow and Tarnow, as well as in the Masovian Voivodeship, will equip a total of 13 hospitals with solar panels. A further two projects in Warsaw and Lebork will involve the modernisation of the district heating system.



#### **THE PROJECT IN BRIEF**

##### **SUBJECT**

Renewable energy and energy efficiency

##### **COUNTRY**

Poland

##### **STARTING POINT / BACKGROUND INFORMATION**

The EU plans to cover 20% 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

##### **TARGET GROUPS**

Around 50 villages, 16,000 private households and 170 public buildings, general public

##### **COSTS**

Total project budget:

CHF 92.16 million

Swiss contribution:

CHF 63.45 million

##### **RESPONSIBILITY FOR PROJECT IMPLEMENTATION**

Municipalities of Busko-Zdroj, Mszana Dolna, Niepolomice, the district of Sucha Beskidzka, association of municipalities in the Wisloka Basin

##### **DURATION**

2012 - 2015

