



DEVELOPMENT OF A NETWORK OF COOPERATION FOR THE PROMOTION OF RENEWABLE ENERGY SOURCES - BUS OZE

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The project is implemented as part of the 2007-2013 Malopolska Regional Operational Programme and co-financed by the European Regional Development Fund within the 8.2 measure, Developing the position of Malopolska in European networks of cooperation.

The project is leading by AGH University of Science and Technology, Krakow, Poland. The rest of the partners taking part in the Project include: Tadeusz Kosciuszko Cracow University of Technology (Poland); The municipality of Krzeszowice (Poland); Polish Geothermal Society (PSG - Poland); Ivano – Frankivsk National Technical University of Oil and Gas (Ukraine); Carinthia University of Applied Science (Austria); Miskolc University (Hungary); Samsø Energiakademi (Denmark).

The project consists in holding a series of meetings, training programmes and study visits which result in a conceptual development of the Malopolska Centre for Renewable Sources and Preservation of Energy located in Miekinia, Poland and gain the experience for partners. The project is essentially aimed to develop a new model of cooperation by creating a new channel for the transfer of information, knowledge and know-how stemming from theoretical and practical aspects of implementation and efficacy control of Renewable Energy Sources. An additional element of the project is centered around informative and promotional activities which are geared towards disseminating, updating and consolidating information about positive effects of using Renewable Energy Sources in the economy with a view to raising awareness and support of the local community in respective areas. Renewable Energy



Sources are promoted in example by series of exhibitions of the mobile RES laboratory, which visit all subregions of Malopolska and lectures. Several information about RES will be included in RES Guide, which is prepared and will be widespread.

HYBRID RES SYSTEMS ON EXAMPLE OF THE AGH-UST EDUCATIONAL AND RESEARCH LABORATORY OF RENEWABLE ENERGY SOURCES AND ENERGY SAVING IN MIEKINIA, POLAND

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The educational and scientific activity of the Faculty of Geology, Geophysics and Environment Protection, AGH University of Science and Technology (AGH-UST), Krakow, Poland, is closely related to the subject-matter of renewable energy sources (RES). The specialty “renewable energy sources” has existed and research work in this field has been conducted for several years. It created the need for establishment of educational and research infrastructure that would enable practical courses and laboratory studies, which would enrich the educational offer of the University and improve the quality of the research work. Laboratory, besides didactic and research function, also acts as information and advisory role in terms of RES and energy saving.

Laboratory disposes of different RES installations. Education in the field of geothermal energy in Laboratory Miekinia is based on heat pumps. The Laboratory is heated by four heat pumps with ground sources. Heat pumps works in three different heating systems for building heating and hot domestic water production. They use borehole heat exchangers (83, 87 and 100 m deep) and a horizontal ground source (area of 600 m²). The building is also chilled in the passive way, without the heat pump’s compressor use. The installation’s parameters are measured with temperature sensors, heat meters and electric meters and shown in BMS system. Apart from the