BiG>East Kick-off meeting in Munich

The BiG>East consortium

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Support for the biogas market in Southern and Eastern Europe

Europe's current situation with exploding fossil energy prices and rising dependency on energy imports makes it highly necessary to produce and valorise biogas in terms of heat, electricity and fuel. In 2006, about 5.35 Mtoe of biogas were produced for energy use in the European Union. But the potential is estimated at much more than 20 Mtoe. Currently, the biogas sector in Western Europe is faced by rapid technical and non-technical developments and innovations, and biogas markets are growing at a considerable pace. In Germany, the biogas market is booming and there are already more than 3,700 biogas plants installed (September 2007). Also Austria and Denmark have considerable biogas markets including more than 500 biogas plants.

In contrast, the biogas market in Southern and Eastern Europe is very small, although the potential is promising especially if organic wastes are used as feedstock. In Bulgaria so far no biogas plants are installed. In Croatia, the first biogas plant has been installed and a few are currently planned and constructed. Due to the available biomass resources, the biogas potential of Latvia is very promising, but at the moment, there are only three biogas plants for waste materials in operation. In Slovenia there are only four biogas power plants in operation and four others are at an early planning stage. The biogas market in Greece is slightly more developed. Currently, there are 17 biogas plants in Greece. The produced biogas mainly comes from agro-industrial effluents, sewage sludge and MSW landfills.

BiG>East
Biogas for Eastern Europe

Logo of the BiG>East project

The situation in Romania is different since it has a track of biogas research and production since many years. Research in the biogas sector in Romania started more than 50 years ago. In the late 1970's, the first industrial biogas plant was implemented. In the late 1980's thousands of small and large scale biogas plants were in operation, but after 1990, interest and investment decreased dramatically. Today, the number of large pig and cattle biogas units is decreasing significantly and only very few projects have been developed and implemented after 1990.

Non-technical barriers

Biogas technologies are well established and developed in countries like Germany, Austria and Denmark. Research is still needed in order to improve cost efficiency, energy balances, and life cycle emissions, but biogas technologies are available and framework conditions are favourable. Non-technical barriers like the limited access to new technologies and unsuitable framework conditions are among the main barriers for the creation of a sound biogas market in Southern and Eastern Europe.

Although some countries recently introduced renewable energy policies, there is still lack of supporting policies and legislation. This barrier will be overcome in the long- and medium-term since all EU-27 member states have to implement and fulfil European directives in the field of agriculture, energy and waste. However, this will take time and needs to be accelerated. New legislation is needed to improve prerequisites for investments which will be also driven by increasing fossil energy prices.

Another main barrier for the implementation of biogas plants in Southern and Eastern Europe is the lack of interest, knowledge and awareness. In many countries available information about biogas in very limited. For instance, publications on the newest technical and scientific results about biogas technologies are missing and basic literature in national language is rare. Furthermore, there are insufficient pilot installations in order to convince policy makers, farmers or waste companies. Many stakeholders like politicians, financiers, or decision makers do neither know about the numerous technical and non-technical opportunities to implement biogas plants nor about social and environmental benefits.

Furthermore, there is a lack of communication between different stakeholders about new energy technologies.

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The BiG>East Project

In order to support the biogas market and to overcome the above mentioned barriers in Southern and Eastern Europe the BiG>East project "Promoting Biogas in Eastern Europe – Mobilization of Decision Makers and Training for Farmers" (Contract No. EIE/07/214) is supported by the European Commission under the Intelligent Energy for Europe Programme.

The general objective of BiG>East is to promote the production and use of biogas as a secure and sustainable energy source in six target countries of Eastern and Southern Europe: Bulgaria, Croatia, Latvia, Romania, Slovenia and Greece. This will be achieved by knowledge transfer from project partners with extensive, long-term expertise of Western Europe to farmers, biogas plant operators and decision makers in Southern and Eastern Europe. The BiG>East consortium includes twelve organisations which will elaborate the following tasks of the BiG>East project:

- Studies on the biogas potential and barriers in the target countries
- Development of training handbooks for farmers in English and national languages
- Implementation of 18 pilot training courses for farmers
- Identification of promising sites for the set-up of new biogas plants
- Organisation of twelve mobilization campaigns for decision makers and funding bodies
- Dissemination of project results via workshops, technical study tours and presentations

The BiG>East project was launched at the Kick-Off-Meeting in Munich in September 2007. The two-days meeting was accompanied by a study tour to two innovative biogas plants in Germany.

BiG>East Study tour to the first biogas plant in Pliening, Germany, which feeds biomethane into the national gas grid

Training and mobilization campaigns

Within the BiG>East project, 18 biogas training courses for farmers and future biogas plant operators will be implemented. This will increase the awareness among farmers and activate their willingness to work in the field of biogas. Training will increase the quality of operating and maintaining biogas plants and avoid safety and health hazards, as well as malfunctioning installations. Furthermore, BiG>East will identify most promising sites for biogas production in the six target countries. These sites will be identified by using appropriate guidelines and by conducting assessment studies. The technical feasibility of biogas plants on these sites will be presented to decision makers, such as municipalities, utilities, environmental NGO's, project developers, funding bodies, waste management authorities, and SME's in the course of twelve mobilization campaigns.

Local implementation strategies will recommend site-specific activities in order to facilitate the construction of new biogas plants.

BiG>East will help to establish a new biogas industry. Training activities and mobilization campaigns will create a framework in order to supply the market of Eastern Europe with renewable energy. Economies of scale will be reached and the renewable energy market in Europe will be strengthened.

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