

WORKSHOP Investors' interest in the Bulgarian Renewable Energy Sector 16-17 May 2008

"Erma" hotel, Golden Sands Resort, Varna, Bulgaria

Report on the organization and performance of the workshop

The workshop was organized, in close collaboration between the Association of Producers of Ecological Energy and Sofia Energy Centre.

The target group included:

- Investors;
- Local actors mayors and representatives of municipalities;
- Users of systems on RES & CHP;
- Representatives of Electrical distribution companies;
- Representatives of National electrical company;
- Representatives from State Commission on Energy and Water Regulation;
- Private companies.

The approximate number of participants is 80 people.

The workshop was organized in two days.

During the first day the problems with legislation, decrees and other legislative documents were presented and discussed including contractual, tariff rates, metering and other problems associataed with the grid connection of RES plants. During the second day mainly presentations of companies producers and investors in wind generators were presented.



The agenda for May 16

| 10:00 - 10:40 | Production of electricity with RES&CHP for Homeowners – PERCH, |
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| | Mrs. Violetta Groseva, Sofia Energy Centre |
| 10:40 - 11:00 | Proposal for Directive of the European Parliament and the Council for Encouragement of Use of Energy from Renewable Sources |
| | Mr. Velizar Kiriakov, Chairman of the Association of Producers of Ecological Energy |
| 11:00 - 11:40 | Presentation of the Bulgarian Society for Protection of Birds |
| 11:40 - 12:30 | Discussion |
| 12:30 - 14:00 | Lunch |
| 14:00 - 14:40 | Presentation of Global Wind Power |
| 14:40 - 15:20 | Connection of Producers of Electricity from RES to the Transmission Electrical Network |
| | Mr. Todor Todorov, Head of Department "Actives of the transmission network" |
| 15:20 - 15:40 | Coffee Break |
| 15:40 - 16:20 | The grid connection question of present interest |
| | Representative of E.On |
| 16:20 - 17:00 | Discussion |
| 17:00 - 18:00 | Roundtable with representatives of the State Commission on Energy and Water Regulation (Mr. Stefan Nachev) and Ministry of Economics and Energy |

Presentation and the audience







Discussion and Results

From the reports, the discussions and the roundtable the following main topics can be pointed out for the development of the production of electricity with RES & CHP for Homeowners.

- 1. The production of electricity from RES is relatively new for the electricity network in Bulgaria.
- 2. With the new laws, decrees and legislative documents that have been adopted a harmonization with the European legislation is achieved. The major documents are:
 - The Energy law
 - Law on Renewable Energy Sources and Biofuels
 - Law on Territory Planning
 - Decree No.6 for the connection of producers and users of electricity to the transmission and distribution electrical networks.
 - Decree on regulation of the prices of electrical energy.
 - Legislative documents, defining the technical requirements for electrical equipment.
- 3. The high purchase prices of electricity produced from wind generators and PV systems lead to the rapid development of large generators and wind farms and PV systems.
- 4. The application of small wind generators is hindered by one norm which states that "the wind generator can be installed at not less than 500 m from the home".
- 5. The application of small PV systems for household users is hindered by lack of clarity in the law for defining the measuring of the produced energy, i.e. "net" or not. This means that it is unclear whether the whole amount of the produced energy from PV systems can be sold on preferential prices or whether only the left over amount of what is not consumed from the household can be sold.
- 6. The rules for connection are defined with Decree 6 of 09.06.2004 (altered in 2005 and on 5 March 2008).
 - In the Decree many issues for connection of RES centrals are clarified
 - The Degree however is not further developed for small producers
 - No boundaries are defined for what are small producers:

In Bulgaria the following data are used:

- Small hydro power plants are less than 10 MW
- Centrals up to 5 MW are connected in the electricity distribution network (20 KV) and above 5 MW are connected in the transmission network.
- PV systems up to 5 kWp are small and the purchase price of the electricity is 400 Euro/MWh, while for systems above 5 kWp the purchase price is 367 Euro/MWh.
- 7. The connection is done according to scheme and conditions, defined by the electricity distribution company.



- There are no rules for correct calculation of the costs for connection and their fair distribution between the producer and the electricity distribution company.
- 8. In Bulgaria there are few small PV systems and wind generators (less than 10).
 - With the European funds for development of rural areas 2007-2013 up to 100 % of small RES systems are subsidized for municipalities and up to 70% for micro enterprises and farmers.

This will contribute to increase of the installed small systems on RES.

9. At the same time the laws and decrees should be clarified and further developed in the cases of small RES systems.

As is seen from the abovementioned the issues of Production of electricity with RES&CHP for homeowners and the interconnection to the electrical network provoked great interest. A journalist from the National radio "Horizont" took an additional interview and envisages in two consecutive radio programs to cover the issues on Production and connection of small RES&CHP.

Future investors in small centrals also showed great interest to the issues of the Project. Immediately after the Workshop on 20.05.2008 Mr. Plamen Penev (<u>universalpenev@abv.bg</u>) visited the office of Sofia Energy Centre and was interested on issues of constructing a small cogeneration plant on the basis of agricultural waste (mainly straw) and PV systems for a small enterprise.

Other homeowners also envisage to visit SEC for additional information.

Dissemination: CD with the preliminary presented papers were distributed to the participants.

Annexes:

• Presentation of Mrs. Violetta Groseva on "Production of Electricity with RES&CHP for Homeonwers"