



Involving NGOs in Renewable Energy Research (INRE) Event Report Form

Country:	Serbia
Title of event:	Workshop
Date of event:	14 December 2007
Location:	Chamber of Commerce, Resavska 13 – 15, 11000 Beograd, Serbia
Organiser:	Prof. dr. Marija Todorovic with Serbian Chamber of Commerce Group for Energy and Mining
Short description (goals, expected results, agenda):	<p>The analysis of the questionnaires and Workshop discussion identified common interest and a number of research areas attractive for collaboration between NGO's and RI's in the field of energy efficiency – EE, and renewable energy sources – RES, encompassing six general objectives as follows:</p> <ol style="list-style-type: none"> 1) Establishment of communication and active cooperation Network using ICT-s 2) Joint exploration and definition of areas, topics and themes prospective for joint research 3) Definition and obtaining specific mechanism to transfer knowledge and build capacity for valuable joint NGO's/RI's investigation and research on EE/RES 4) Definition, organization and foundation of platforms for joint NGO's/RI's dissemination of research results and promotion of RES/EE 5) Exploration and searching for effective lobbying mechanism for RES/EE 6) Definition and development of specific education and training program on RES/EE jointly NGO's and RI's, and in collaboration with international organizations and programs as UNESCO, UNEP, UNDP and other international or other countries programs. <p>Cooperation with international organizations in all different aspects of RES/EE sources and technologies is very important and is presumed to be integral part of approaching all six objectives. As a good example of well known and recognized leadership, and benefits of cooperation, is the implementation of UNESCO E-Learning program on RES 2006-2007 (for 40 countries in Southeast Europe, Near East, India, and Far East including China, New Zealand and Australia, in which Serbia was one the most successful participants with 130 attendees of broad users groups.</p> <p>NGO's and RI's common research priorities and specific topics/themes relevant for all listed RES's (with addition of geothermal energy and waste materials), which are to be established and/or strengthened can be itemized as follows:</p> <ol style="list-style-type: none"> a. Mapping and modelling for the evaluation of “technical” potentials and technologies of RES usage, both by themselves and in relation to the technologies of using fossil fuels, in light of the competent indicators and criteria of the free energy market, as well as the market for the reduced emission, according to the Kyoto Program. b. Research relevant and related to the advancement and development of technologies, equipment and systems for RES utilization. c. Method and model development for the economic, environmental and technical evaluation of different RES systems utilization, as well as comparative validation related to fossil fuels, Kyoto mechanisms and free market conditions. d. Research, development and demonstration projects on the integrated biological and technical/technological synergetic approach to the foundation of “wood for energy” and “planting for energy”. e. Mapping particularly seasonal quantity, composition and energy conversion related features of wastes in households, urban wastes in municipalities and combined agricultural and household wastes in rural areas.

- f. Investigation and mapping of the yearly dynamics of obtained efficiencies and useful energy outputs of different technologies and types of RES systems.
- g. Establishment of the system of accredited laboratories in the field of RES.
- h. Quality and performance control of both home manufacturers and distributors and the foreign ones as well, whose equipment is imported, in order to be able to guarantee efficient, energetically effective and economically justified investments into system equipment and building.
- i. Structuring, organization, and establishment of Network for EE and RES information, knowledge and technologies transfer, as well as efficient cooperation and collaboration of NGO's, RI's, manufacturing/production and other business organizations, aimed to advance effectiveness and efficiency of all active and responsible subjects in the field of RES in Serbia and to improve their regional and European connectivity as well as cooperation with similar networks all around the world.
- j. Establishment of the "Free Market System of Research, Development and Demonstration of the Alternative & RES use" endorsed by the Serbian Chamber of Commerce, Ministry of Science, Ministry of Energy and Mining, Ministry of Agriculture, Forestry and Water Supply.

As an important aspect of all listed priorities and specific topics/themes is to be consistent presence of clear idea to stimulate joint preparation and implementation of EU proposals for FP7 and foundation of joint ventures of NGO's and RI's.

Examples of activities which could serve as key actions to realize short and medium term results in above listed research priorities/topics could be:

- o Organization of local and regional level meetings/environmental fairs, and campaigns (including press, TV events, etc.) to:
 - increase awareness on local and global energy and environment issues and importance of EE and RES;
 - activate people/public participation in further more precise specifications (regulations, laws, etc.) definitions and development of Serbian EE/RES Strategy which should be in accordance with Serbian society and economy needs and with the most advanced European and other in the world prestigious approaches
 - influence local and state governmental authorities to introduce necessary mechanisms for subsidies and tax cuts for RES/EE projects (equipment production, investors, users/RES utilization) in mutual agreement with the appropriately defined Strategy;
 - intensify information exchange on RES practical implementations; to link financial institutions and NGO's and RI's and help to find support for RES/EE
- o Might be of key importance, interwoven with all others above given items, is the item *i*. (*Structuring, organization, and establishment of Network for EE and RES information, knowledge and technologies transfer,...*). It can be stressed that through the INRE project in Serbia, the NGO Telecottage or Teledom (Telehouse) of Serbia has been recognized not only as one of NGO's engaged in environmental, energy and RES related activities, but also as very important missionary of IT technologies transfer and spreading access to, and use of IT powerful means for information, knowledge and technology transfer, that is crucial for social and economical development, particularly in rural areas, but also in many suburban and urban communities. There are 70 locations in Serbia of NGO Telecottage and they have active communication with Hungarian (560 Teledoms and more 3500 E-points), Bulgarian, Russian and other. The first was established in Sweden in 1985, there are 10.000 in USA, etc.
- o Hence, one of possible ways to "*Structure, organize and establish a Network for EE and RES information, knowledge and technologies transfer,*" could be via enhancement, strengthening, and remodeling of NGO's and Teledom Network in

	<p>Serbia proceeded with integration with also innovative/new RI's Network of Knowledge Extension Centres. Thus organized Network could have for different themes specifically organized Focal Points.</p> <p><u>Expected Short-term Results</u></p> <ul style="list-style-type: none"> - Development and strengthening of national capability for: the acquisition, processing and dissemination of RES information (includes resources data, knowledge and engineering data, results of testing and product quality, data on system operation, commercialization, data on energy services and rural development,..). - Development of information system and the network as a mechanism through which any participant may have access to RES and relevant environmental information. - Formulation of relevant criteria and methodology for the Serbian RES and Sustainable Development Strategy definition, implementation, permanent re-evaluation and development. - Contribute technical information for discussion of public policy regarding RES R&D, sustainable development via HFA* route, broadening and regionalizing EE/RES programs. - Contribute investigation and development of optimal RES systems for local sustainable development demonstration sites - typical for specific purposes and locations. <p><u>Expected Medium-term Results</u></p> <ul style="list-style-type: none"> - Provision of referral and substantive information from developed data bases; National and international exchange of information; Effective cooperation on RES at the international, regional and national levels based on information. - Provision of data on international developments in the field of RES use for residential, health care, educational, commercial and industrial applications, energy conservation and storage, field and building envelopes integrated PV-s and hybrid systems; decentralized and autonomous RES systems for cogeneration, solar energy use in communities water (including desalination) and electrical distribution systems as well as biomass use in residential, SME and district heating and cooling systems and biomass conversion and use as the transportation fuels. - Development and transfer of technologies for RES utilization (which includes all sources of renewable energy such as solar thermal, photovoltaic, biomass, geothermal, mini/micro hydraulic, wind and wastes). - Contribute strengthening of RES industries (arranging for a pilot and demonstration plants, organizing different partnerships, enterprise meetings etc.). - Contribute efficient building of optimal RES systems for local sustainable development demonstration sites - typical for different remote regions. <p><u>Expected Long-term Results</u></p> <ul style="list-style-type: none"> - Contribute further knowledge improvement and technologies developments in the field of RES use for residential, medical-health control, educational, commercial and industrial applications. - Contribute entering international RES - R&D engineering and trade projects and contribute national economy growth harmonized with the sustainable development value system. - Contribute wide range implementation of technologies for RES utilization and establishment of the sustainable system of energy production and utilization avoiding environmental pollution and degradation and providing conditions for sustainable healthy society development. 	
Target group(s):	NGOs and Research Institutions	
Participants (number)	NGO representatives	12
	Researchers	12
	Others	2
English summary of Minutes and Results:	All participated NGO's in INRE Serbia project did express their interest for cooperation with RI's and active participation and research projects: gaining and improving knowledge, collection and investigation of all relevant data on RES/EE sources, technologies and RES utilization, including social, economical and political aspects.	

* Health for All World Health Organization Program

	<p>NGO's and RI's agree that there is a lack of clear priorities at the level of government, especially at the Ministry for Energy and Mining. On the other side the Ministry of Science is already six years conducting and financing pretty clearly defined National Energy Efficiency Program, including Program on Alternative and Renewable Energy Sources - NPEE. NPEE calls topics are defined by the NPEE's Board of Directors in accordance with NPEE strategy. Farther, nine NGO's activities related to EE/RES had been for the first time also financially supported directly by the SEEA – Serbian Energy Efficiency Agency in 2007.</p> <p>However, taking in account the NGO's interest for cooperation and taking part in research, and running NPEE on EE/RES, recognized has been the important possibility to better synchronize and intensify research potential and its performance in Serbia by the joint planning and cooperation of NGO's and RI's.</p> <p>For RES program growth and covering broader area of important RES technologies, engineering, manufacturing, construction/investment development, and finally RES implementation on the benefit of all segments of Serbian economy and society, NGO's entering cooperation with RI's could be extremely beneficial.</p> <p>NGO's role could be also essential in overcoming barriers for widening RES program in Serbia, by pursuing special RES related political campaign, targeting and requesting from government clear strategy on country level and a program for its implementation (strategy guidelines, goals, incentives for investors in RES, incentives to manufacturing organizations to enter transfer to new technologies and production of new products, as well as to research organizations to switch to RES area).</p> <p>There are examples of very successful projects in all RES technologies in Serbia, however, projects and projects results are regularly presented mainly and only at the scientific conferences and are not easily accessible to public and NGO's, and that is the weakest point in NPEE program, which should be changed in the future R&D&D program this info/barrier to be reduced.</p>
Attached files	<ol style="list-style-type: none"> 1. Agenda 2. Presentations in electronic format 3. List of participants



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by the Sixth
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Project
Involving Serbian NGOs in Renewable Energy Research
WORKSHOP

14th December 2007, 11 am, Chamber of Commerce of Serbia, Resavska 13 – 15

Hall 2 at the ground level

Agenda

1. Participants Registration 10:30
2. Opening and Welcome address: Dr. Miroslav Ignjatović Secretary of Association for Energy and Mining of the Chamber of Commerce of Serbia
3. Dr. Lulin Radulov, Director of the Black Sea Regional Energy Center (BSREC), Presentation of the project “Involving NGOs in Renewable Energy Research”. and EU FP7
4. Dr. Marija Todorović, Director of Alternative and Renewable Energy Sources Program within the NPEE (National Program of Energy Efficiency) at the Ministry of Science of Serbia, Presentation of Renewable Energy Sources Program of NPEE and preliminary results of INRE - Serbia
5. Selena Pješivac, adviser for public relation at the SEEA (Serbian Agency for Energy Efficiency)
6. Presentation of present NGO-s and RInst-s, and Discussion on INRE-Serbia results and possibilities of project proposal preparation for FP7:
 - a. plans for future research and potential collaboration between the participants;
 - b. opportunities to exchange information between the participating organizations
7. Conclusions and adjournment: Miroslav Ignjatovic and Lulin Radulov
8. Evaluation of the workshop by participants

Coffee and water will be served during Workshop, and predicted Workshop closing is at 15 pm.