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NEWSLETTER

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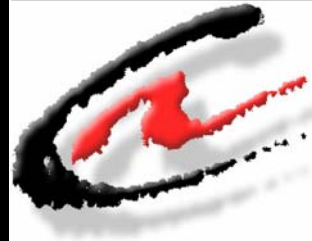
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THE ENERGY IN ALBANIA



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PROJECT "EUROPE AND EURASIA REGIONAL ENERGY SECURITY AND MARKET DEVELOPMENT"

1. Background

In Albania, energy efficiency issues are currently incorporated in a number of strategies and action plans such as the Strategic Energy Action Plan for Power Sector (Feb. 2001), Action Plan for Implementing the Power Sector Policy Statement (Apr. 2002), the National Strategy of Energy (Jun. 2003), Action Plan for Implementing the National Strategy of Energy (Sept. 2003), Energy Efficiency Law (Apr. 2005), etc. These documents outline the policy measures as well as practical actions to be undertaken in a time span lasting up to 2015.

On the demand-side management, the National Strategy of Energy includes a number of energy efficiency measures. Among them, thermal insulation of buildings stock is an important measure. The households and public buildings are between the biggest energy consuming sub-sectors in Albania. They consume large quantities of electricity, fuel wood and LPG, which has contributed to the country's current severe energy situation. Around 82 % of electricity & 30 % of all energy sources is consumed only by the residential sector, and most of it (26 %) is used to provide the space heating. During the last years, in Albania, more and more energy is consumed also for air-cooling. Buildings in Albania have been constructed with little concern for energy efficiency, since before 1990 the main driving factor has been the construction of buildings with the lowest costs.

Under the US-Greece Economic and Commercial Cooperation Commission, the US Agency for International Development (USAID) and Hellenic Aid, through their implementation teams from the International Resources Group (IRG), the Alliance to Save Energy (ASE), the Centre for Renewable Energy Sources (CRES) and regional partners, are jointly implementing the SYNENERGY work program to assist Energy Community. As part of USAID's assistance within the SYNENERGY framework, the IRG is implementing a 3-year project for USAID entitled "Regional Energy Security and Market Development". Under this project are included South East European countries and the observer countries of Ukraine, Moldova and Georgia.

As an organization uniquely qualified for the above work in energy efficiency issues in Albania, the Albania-EU Energy Efficiency Centre (EEC) in collaboration with IRG in Washington DC, is working to contribute to a range of activities under Task 4 in Albania and in the region.

2. Project Description

The project comprises 5 main tasks, with overlapping and complementary activities. Under Task 4: Regional Energy Efficiency Action, the Alliance to Save Energy oversees efforts to develop a standard methodology for defining energy efficiency potential and incorporating into national and regional energy planning. The IRG is working with counterparts to formulate approaches to commercial financing of energy efficiency projects that can reduce dependence on imported fuels. The main counterparts, for this regional project, will be the NGO Energy Efficiency Centres in the countries as well as National Energy Agencies. The Regional Centre of Excellence will work with these organizations in preparing National Energy Efficiency Action Plans (NEEAP), bankable projects and applying best practices in areas such as financing schemes and municipal energy management. The first regional event devoted to energy efficiency action plan training for the buildings sector is held on May 2009. The local NGO partners in each country are requested to provide the role of the local technical assistance focal point for the NEEAP, adaptation of regional models for secondary energy efficiency legislation and networking.

3. Activities under the Project

The EEC has started the work on the following activities:

1. National Energy Efficiency Action Plan for Buildings - The EEC will work as the focal point for the technical assistance provided to the Ministry of Economy, Trade and Energy (METE) by the IRG/ASE Team and the Regional Centre of Excellence (RCE)/Eneffect/Bulgaria, including collecting and providing the RCE with the input data and information, as well as review and analysis of the below deliverables from the RCE, and supporting the Ministry in local use and application of these documents:

- Data collection templates for evaluation of key efficiency parameters in construction.
- Methodologies for assessment of energy consumption, building's energy efficiency potential; further actions for the development of the long-term national program for energy saving in buildings and respective action plan and legislative documents for promoting energy efficiency in buildings.
- Recommendations for realistic energy efficiency targets based on the identified energy saving potential by building sub-

sectors.

- Guidelines for monitoring & evaluating progress on the implementation of the national energy efficiency action plan for buildings.
- Recommendations for the development of the long-term national program for energy saving in buildings and respective action plan.
- Compilation of sample top-down and bottom-up methodologies for assessing energy consumption in residential, public and commercial buildings.
- Compendium of energy efficiency strategies, plans, promotional programs and/or surrogates directed to promotion of energy efficiency in public and residential buildings in each country, for which the Consultant shall provide the respective input for Albania.
- Report on the status of and key efficiency parameters fixed by the building energy codes, building energy performance certificates, energy audit procedures, energy efficiency labels and standards for household appliances and lighting.
- Draft country energy efficiency plans for the building sector.
- An investment project package for a residential building.

Additionally, the EEC will be expected to assist the Ministry in the preparation of the respective chapters of the NEEAP for Buildings, supporting with the available expertise, serving as the liaison with the RCE.

2. Supporting Development Secondary Legislation on Energy Efficiency - Based on the regional templates developed by the IRG/ASE and the partner EE Centers, the EEC will be responsible for development of draft secondary legislation on several practices related to energy efficiency. Within its regional scope, IRG Team will develop templates for the energy auditing procedures and guidelines, model performance contracts; operational manual for energy efficiency fund; and energy labeling database and training program on enforcement of modern building energy codes. The EEC, as part of its scope under this project, will be requested to adapt the above regional templates for application in Albania. Additionally, the EEC will develop the energy auditing procedures and guidelines in assistance and coordination with the NANR/METE and for further dissemination to the rest of the participating countries.

3. Cooperation with the Ministry of Public Works, Transport and Telecommunication - IRG Team will be assisting the MoPWTT in the development of condominium legislation. The EEC will be requested to facilitate this communication, organize the exchange and translation of communication as needed.

4. Investment Project Development - The EEC will support the Regional Centre of Excellence in development of an investment project for a public building to be identified. The EEC will support the RCE in identification and selection of the project site, data collection, identification of relevant credit lines and facilitation of investment presentation to lenders.

4. Final Remarks

The project has started in April 2009 and it is expected to be implemented within December 2009. This project can be considered as an important step in introducing to the Albanian residential sector the issues such as efficient management of energy resources, national energy efficiency action plan for buildings, supporting development secondary legislation on energy

efficiency and consequently bring steady improvements in the long term. The EEC will promote and advocate the efficient management of energy resources and the energy conservation in buildings through all the country.



Dr. Eng. Edmond M. HIDO
Director
Energy Efficiency Centre

PROJECT “CO-FINANCING SCHEME FOR INSTALLING SOLAR WATER HEATING SYSTEMS IN ALBANIAN MUNICIPALITIES”

1. Background

The geographic position of Albania and its Mediterranean climate provide favourable conditions for the successful development of the solar energy. The high intensity of solar radiation and its duration, temperature and air humidity, etc., will contribute to this. According to the measurements on the solar radiation carried out by the Institute of Hydro-meteorology that are based on the data of nine meteorological stations, under the conditions of the geographic belt where the meteorological stations are located, the total annual solar radiation varies from a minimum of 1,185 kWh/m² in North Eastern part of Albania (Kukes) to a maximum of 1,690 kWh/m² in the South Western part of Albania (Fieri). So, the average annual solar radiation in Albania is 1,450 kWh/m². Most areas of the Albania benefits more than 2,200 hours of sunshine per year, while the average for the whole country is about 2,400 hours of sunshine per year. The number of sunny days varies from an average of 240-260 days per year to a maximum of 280-300 days per year, in the South Western part of Albania. Compared with the average daily solar radiation in Netherlands of 2.5 kWh/m² per day, in Denmark less than 3 kWh/m² per day, in France and North of Italy about 3.8-4.6 kWh/m² per day, in Spain, South of Italy, and Greece more than 4.6 kWh/m² per day, Albania has the average daily solar radiation of 4.3 kWh/m² per day. As we can see from these values, Albania must be considered as a country with a good solar energy regime and a great potential for solar energy utilisation.

Benefiting from the abundant sunshine and large number of sunny days, the solar energy market should be developed in Albania and so, the solar energy should be successfully used to provide hot water for sanitary needs in different sectors such as residential, hotels, hospitals, and for technological needs in the industry. These are the reasons that in Albania more interest should be dedicated to solar energy utilization for producing hot water for sanitary and technological needs as one of the most effective ways not only for saving the electricity consumed for this service up to now, but also for reducing the energy demand towards the overloaded system of electricity distribution.

Within the framework of the Hellenic Aid/USAID SYNENERGY project, the Centre for Renewable Energy Sources (CRES) aims at implementing pilot projects to 4-5 participating municipalities in Albania. On the basis of that, the ob-

jective is to create a co-financing scheme for promoting the use of solar thermal systems for heating water in the municipal buildings of Albania. This co-financing scheme will be targeted to ease the financial burden of the end-users in purchasing and installing such solar systems. Further, this will positively impact their energy bills and strengthen the proliferation of solar thermal systems to the wider public. Under such circumstances, feeling the responsibility of the role to play, the Albania-EU Energy Efficiency Centre in collaboration with CRES - Greece and financially supported by the Hellenic Aid, in the framework of the project “Co-Financing Scheme for Installing Solar Thermal Water Heating Systems in Albanian Municipalities”, intends to carry out a set of activities to support the solution of the above-mentioned issues.

2. Project Description

The participants in this Co-financing Scheme and their respective role are described below:

1. Hellenic Aid-Center for Renewable Energy Sources (CRES) - CRES is the implementing authority of the Hellenic Aid/USAID SYNENERGY project on behalf of the Hellenic Ministry of Foreign Affairs. CRES, through the Hellenic Aid, will have the role of the donor and contribute 50% of purchase and installation costs of solar water heating systems in a number of buildings of 4-5 Albanian municipalities. The role of CRES will be to:

- Set the quality standards for the selection of the equipment suppliers.
- Establish and implement the tender and evaluation procedures for the selection of the suppliers.
- Supervise the functional procedures of the co-financing scheme.
- Work closely with the banks and the municipalities to achieve their commitment to the co-financing scheme.

2. Albania-EU Energy Efficiency Center (EEC) - EEC will be responsible for supporting a municipality or several municipalities in which the co-financing scheme will be implemented. The role of EEC will be to:

- Evaluate in collaboration with CRES the applications and inform the successful applicants of the conditions and procedures for claiming the co-financing.
- Monitor and encourage the respond of the suppliers to install the systems.
- Check the performance of the solar water heating systems after their installation.
- Evaluate the energy saving from the solar water heating installations.
- Assist municipality in solving procedural and organizational problems.

3. The Municipalities - The participation of a municipality or a number of municipalities in the co-financing scheme is important due to their close relations and proximity to the end-users. The municipality will get a loan from a local bank and will use this loan to finance about 50 % of the initial investment costs of installing the solar water heating systems. The role of the municipality will be to:

- Co-ordinate administrative issues such as the users' applications for participating in the scheme.
- Deal with the relations with the end-users.
- Provide information on the progress and the results of the co-financing scheme.

The municipality will have to pay off the loan to the local bank.

Furthermore, the municipality in collaboration with EEC could implement an awareness campaign in order to inform the citizens for the co-financing scheme so as to scale up the participation of the end-users.

4. *The Local Bank(s)* - They provide the loans with, preferably, low interest rates to the municipalities. The local bank will also set the provisions for the contract for the loan.

3. Activities under the Project

The shares of this Co-financing Scheme would be 50% from the Hellenic Aid and 50% from the municipality(ies). The budget available from the Hellenic Aid for co-financing the solar water heating systems is 80,000 €, so the total amount of this Co-financing Scheme for Albanian municipalities will reach the amount of 160,000 €. The EEC will work to perform the following activities:

- Participation in the collection and processing of data related to the buildings concerning the typology of buildings (type and number of buildings, locations, any needs),
- Investigation of legislation, permits, issues related to VAT, taxes, fees, etc.,
- Review of tender documents and technical issues,
- Participation in monitoring the progress of the supply and installation works in the buildings,
- Edit and submit to CRES a progress report every three months.

4. Final Remarks

The project has started in September 2009 and it is expected to be implemented within December 2010. This project can be considered as an important step in introducing to the Albanian residential/municipal sectors the issues such as utilization of clean energy, efficient management of energy resources, environment protection and consequently bring steady improvements in the long term. The EEC will promote and advocate, through all the country, the utilization of solar thermal systems and the energy conservation in residential and municipal sectors. The successful implementation of this project is crucial to the further development of solar thermal market and improvement of energy supply situation in Albania.



Eng. Aleksander SHALSI
Vice Director
Energy Efficiency Centre

ELEVENTH WORLD RENEWABLE ENERGY CONGRESS AND EXHIBITION

1. Congress Mission Statement

With the accelerated approach of the global climate-change point-of-no-return the need to address the pivotal role of renewable energy in the formation of the coping strategies, rather than prevention, is more crucial than ever. Sustainability, green buildings, and the development of the large-scale renewable energy industry must be at the top of all developments, economic, financial and political agendas. The time for actions has arrived. Prevention and questioning how and why we face

this great challenge is a luxury we can no longer indulge. We welcome the establishment of the long overdue International Renewable Energy Agency which we hope will work side-by-side with similar intergovernmental agencies striving for the adoption of renewable energies.

The World Renewable Energy Congress (WREC) enables policy makers, researchers, manufacturers, economists, financiers, sociologists, environmentalists and others to present their views in Plenary and Technical Sessions and to participate in discussions, both formal and informal, thus facilitating the transfer of knowledge between nations, institutions and individuals. WREC acts as a reminder to everyone in our planet to do his best in conserving, reducing and rationalising the use of energy in order to stay in existence.

2. Congress Dates to Remember

All abstracts must be written in English and no more than one page A₄ in length. The maximum length of full papers is six pages including text, references, figures and tables. All papers and abstracts shall be submitted using the paper/abstract guideline on the website: www.wrenuk.co.uk. The key dates are:

- February 26, 2010 Last date for receiving abstracts,
- March 26, 2010 Acceptance notification of abstract,
- May 28, 2010 Last date for receiving full papers, and
- June 28, 2010 Acceptance notification of full papers.

All papers will be subjected to a full reviewing process before being accepted. Only those papers received by the deadline will be published in the conference proceedings CD-ROOM. 50 papers selected by the Technical Committee will be published in renewable energy.

3. Congress Organization

Chairman of Organising Committee: **H. E. Majid Al Mansouri**, Secretary General of Environment Agency - Abu Dhabi.

Chairman of the Technical Committee: **Prof. Ali Sayigh - UK**, Chairman of WREC & Director General of WREN.

Coordinator of Technical Sessions: **Prof. AbuBakr S Bahaj - UK**.

For more information about the Congress, contact: **Prof. Ali Sayigh**, WREC, PO Box 362, Brighton, BN2 1YH, UK; Tel: +44-1273-625-643; Fax: +44-1273-625-768; email: asayigh@wrenuk.co.uk

4. General Information

Congress Date: 25-30 September 2010

Congress Place: Abu-Dhabi, United Arab Emirates

Congress Registration: Pre-registration for this conference will be required. Early Bird registration by 30 July, 2010

Organised by: World Renewable Energy Congress, Brighton, UK

For other detailed information about the Congress and Exhibition, please consult the website: www.wrenuk.co.uk.

Dr. Eng. Edmond M. HIDO
Member
International Steering Committee