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**IMPLEMENTED ACTIVITIES FOR THE PERIOD DECEMBER 2010 – DECEMBER 2011 AND
RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE PROJECT FOR 2012**

UNDER

**THE COUNTRY PROGRAMME OF ALBANIA UNDER THE GLOBAL SOLAR WATER HEATING MARKET
TRANSFORMATION AND STRENGTHENING INITIATIVE**

Albania
Solar Water Heating Market Transformation and Strengthening Initiative
PIMS 3611

**IMPLEMENTED ACTIVITIES FOR THE PERIOD DECEMBER 2010 – DECEMBER 2011
AND RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE PROJECT FOR 2012**

Since the Steering Committee meeting dated 3 December, 2010 and approval of the work plan for 2011, project activities have been focused mainly on legal and institutional framework for the promotion of solar panels for hot water at a national level but also locally; in preparation of the draft National Plan for Renewable Energy by the year 2018 with base year 2009; capacity of all representatives of the supply chain panels / solar systems for hot water, building capacity of Professional Training Centers to develop specific training courses for solar thermal systems; drafting of a scheme of quality control and certification of solar thermal systems and their installation in Albania, as well as evaluating opportunities for improving the local testing center based on the inputs and consultations with national and international experts contracted by the project. Meanwhile, the second Project Implementation Review (PIR) was finalized in August 2011.

Below are listed all the up to now findings and problematic issues of the Project according to the expected outcomes.

Outcome 1 (An enabling legal and regulatory framework to promote sustainable SWH market (policy)):

- Finalizing technical analysis support and drafting the relevant chapter about solar energy for water heating under the new law of renewable energy, which by the end of the year is planned to be submitted to the Parliament; draft laws acts are also prepared in support of requirements of the renewable energy law related to solar energy;
- Following the request of the Ministry of Economy, Trade and Energy (METE), it is compiled the first draft of the National Plan of Renewable Energies, which takes into account all sources of renewable energy including specific targets for solar energy for water heating: this draft involves technical and legislative measures for the country until 2018, in line with relevant EU directives, and the obligations to the Energy Treaty and the objectives of National Energy Strategy;
- Finalizing a study tour to Spain with the involvement of key stakeholders from different public entities, to profit from the positive experience on the promotion of Solar Water Heating.

Outcome 2 (Enhanced awareness and capacity of the targeted end-users and building professionals to consider and integrate SWH systems into different types of buildings (information)):

- Concepting and finalizing a summer campaign for public awareness raising with a mobile solar shower;
- Finalizing the software for dimensioning and calculating the economic and financial feasibility of solar thermal systems for the production of sanitary hot water, which is

posted to the internet to be used by all the interested people of residential and service sector.

- Procuring of equipment for monitoring hot water consumption in up to 20 households according to the three climatic zones in Albania: Results of monitoring will be used for research purposes to better definition of financial indicators of solar panels for hot water used in the country;
- Identifying possible sites for solar thermal system monitoring (the related recommendations, technical specifications and supervision of the installation of the monitoring equipment are expected from the international expert on certification);
- Establishing a technical working group under the lead of National Employment Service to finalize a draft proposal on the improvement of the SWH curricula for the training of SWH system installers for the Vocational Training Centers in Albania: The specific curricula is expected to be approved by the Ministry of Labour, Social Affairs and Equal Opportunities. Technical specifications are also developed on the basis of which are procured equipment to support three of the Vocational Training Centers, respectively in Tirana, Durrës and Fier: installation of equipment procured and training of instructors on the basis of improved curriculum is expected to be finished by the first quarter of 2012;
- Finalizing a draft program, recruiting the required international experts, and it is finished the first phase of the training of architects and other building sector professionals (the second phase is planned to be delivered in March 2012, pending on the results of a questionnaire done to test the Arch./Eng. needs in the Albanian building sector regarding the application of SWH technology);
- In collaboration with the Italian NGO – CeLIM, it is finalized the program, recruited the International Expert, and delivered the training of Energy Engineers and other local government representatives regarding the application of the SWH in Public and Private buildings.

Outcome 3 (Increased demand for SWH systems by the availability of attractive end-user financing mechanisms or other delivery models, such utility driven models (finance)):

- Finalising a report for evaluating the feasibility of different financial support schemes;
- Organizing a round table with the local banks, representatives from the Tourism and Business Associations and other stakeholders to discuss the most feasible support mechanisms;
- Conducting and dissipating a survey among the members of the Albanian Tourist Association (the final results still pending) for the identification of the needs regarding the financing of the SWH systems in the Albanian Hotel Service.

Rezultati 4 (A certification and quality control scheme applicable for Albanian conditions and enhanced capacity of the supply chain to offer products and services promoting sustainable SWH market (technology and business skills)):

- Through a cooperation with the Swiss Consortium led by INFRAS, it is organized the initial testings by the SPF testing centre in Rapperswil of the three Solar Collectors produced by Albanian manufacturers: the testing is associated with recommendations related improvements in the technology, with the aim to make the final test by the end of 2012; in addition, the Albanian manufacturers participated in the one week training in Switzerland and had also the chance to visit the most important Fair Trade on Solar Energy in Munich, Germany, in June 2011;
- Accomplishing the first set of trial tests (4 collectors) of the pilot testing facility installed by the Harry Fultz Institute: It is expected the evaluation of the results by the international expert contracted for certification;
- Continuing the work for the drafting and discussion of the certification scheme for the installers of SWH systems: a round table is organized with all the main stakeholders to present their comments for the certification scheme of the solar products and Training and Certification scheme of the installers of SWH systems; the project facilitated, in collaboration with General Directory of Standardization for the adoption of 100% of all the EU/International Standards related to SWH: three of these standards are bought and translated into Albanian for the needs of end-users; The Project has established close relationships with the General Directory of Accreditation regarding the possibility of the functioning of the above mentioned certification schemes.

Rezultati 5: (The provided support institutionalised and the results, experiences and lesson learnt documented and disseminated (including monitoring, learning, evaluation, and their feedback for adaptive management))

- It is finalized and sent to AKBN a proposal for the SWH market monitoring in Albania; The Project has collaborated with INSTAT to include in the template of the census an indicator regarding SWH: the results of census are expected;
- Finalizing the estimation for the penetration of the SWH also for the industrial sector as a follow-up of the update of the market analyses for the residential and service sectors.
- Finalizing a draft charter for the establishment of a local solar thermal association

Project Management:

- By a public tender a roster of local and international experts is established, which roster seems to be an effective tool in the hands of the project by streamlining the expedited procedures in a timely manner when and as needed to contract experts on the basis of the terms defined in cooperation with the national actors;
- Good contacts are maintained and/or established with the METE, MoE, AKBN, Ministry of Public Works, Tirana municipality, other institutions within the country, as well as different international partners, in order to elaborate further areas of common interest and possible co-operation for the promotion of solar water heating systems.

MAIN CONCLUSIONS AND RECOMMENDATIONS

Outcome 1

- According to METE, the Renewable Energy Law is expected to be submitted for final Parliament approval by the end of 2011 and with final approval eventually on early January, 2012. After this, the project can start to support the METE in the preparation of related secondary legislation;
- There is some indication that the Ministry of Public Works in Albania is increasingly interested in developing new, revised energy efficiency norms for buildings, in which solar energy can also play a role. The project will explore further opportunities for co-operation on this and/or support the early initiation of a new project focusing especially on energy efficient building norms with links also to solar energy. Funding for this could be sought, among others, from bilateral donors. GEF could be an option as well, having into consideration anyhow the needed time to get the project from the early conceptualization phase under actual implementation.

Main expected outputs for 2012 under Outcome 1

- Finalized and adopted secondary legislation for the renewable energy law as it concerns solar thermal specific provisions with a possible link to other building sector related laws and regulations;
- Awareness raising and training of the key stakeholders on the practical implementation of the new regulations.

Outcome 2

- For vocational training in 2012, the project is expected to finalize and get under implementation the curricula developed during 2011;
- The second training session of architects, architecture students, building engineers and, as applicable, representatives of construction companies is expected to take place in early March 2012;
- The visits of the last three-semester of 2011 in the Municipality of Tirana confirmed strong interest of the new administration to co-operate with the project. The possible areas of co-operation:
 - adoption and implementation of solar thermal obligations for selected new public buildings and for those going through a major renovation under the administration of the Tirana municipality;
 - technical and legal assistance by the project in the form of training of the municipal staff, and recruitment of an experienced solar thermal engineer/architect to support project design and monitoring of the systems installed (the # of targeted buildings in 2012, 2013 and 2014 to be specified in the MoU);
 - piloting solar thermal installations in municipality owned multi-apartment buildings (e.g. social housing - the # of targeted buildings in 2012, 2013 and 2014 to be specified in the MoU);
 - joint public awareness raising campaigns.
- The selection of sites for monitoring and the technical specs for the required equipment will be finalized during the visit of the international expert on certification;

- The procured equipment for monitoring hot water consumption is expected to be installed by April 2012.

Main expected outputs for 2012 under Outcome 2

- The new solar thermal courses in vocational (and as applicable, professional schools) finalized and started for the autumn 2012 term;
- The planned training courses/workshops for the local architects and other building sector specialists delivered during spring 2012 (at least one 2-3 day training event delivered by an international expert);
- Finalized MoU with Tirana municipality and the agreed joint activities for 2012 successfully finalized in accordance with the suggestions elaborated earlier in this document;
- The equipment for monitoring the performance of selected solar thermal installation installed by the end April 2012 and the data collected and analyzed for the remaining months;
- The equipment for monitoring the hot water consumption installed by the end of January 2012 and the data collected and analyzed for the remaining months;
- Finalising the design and publishing of a solar thermal specific website (hosted by AKBN or other applicable entity), which can continue to operate with expected regular updating and active further development also after the project.

Outcome 3

- Identified problems with committed co-financing: The 2011 co-financing of METE was transferred to the account of AKBN (Albanian Agency of Natural Resources), which was of the opinion to use the funds for the benefit of their own building. As a result, the project has not been able to proceed with further design and consultations on any project supported financing scheme without really having these resources in its use;
- When estimating the required financial resources for financial instruments such as interest rate subsidies, it came quickly clear that with current levels of committed METE & MoEFWA co-financing (in the absence of the Italian dedicated funds), no effective interest rate subsidy scheme e.g. for household systems can be operational. Thus, it is suggested that the planned METE co financing for 2012, namely USD 150,000 would be partially used as simple cost-sharing grants to support solar thermal installations in new and innovative pilot markets such as industry, multi-apartment buildings etc. and partially to support the efforts of the Tirana Municipality to install SWH systems in the public buildings/socials houses under its jurisdiction.

Main expected outputs for 2012 under Outcome 3

- Upon transfer of the committed local contribution for 2012 in full to UNDP's account, finalizing the terms for and announcing a call for proposals for innovative and new use of solar thermal in industry, multi-apartment buildings etc. with agreed cost-sharing by the project (the % and other conditions of the grant to be paid by the project still to be discussed and agreed after a study to be realized by a financing expert to this purpose);
- Elaboration of possible joint support schemes with the Tirana municipality;

- Joint awareness raising and marketing campaigns with the local banks and, as required, training of the staff of the banks on solar thermal.

Outcome 4

- The international expert on certification is expected to finalize his assessment and report on the further development of the testing facility and certification scheme: In general, the current project environment is concerned both for (i) the candidate entities to host/put into operation the testing facility, as well as (ii) the local supply side's interest to use the testing facility which does not look too encouraging as of today. The report of the international expert on certification is expected to shed more light on this;
- In terms of certification, the results of the product testing of locally manufacturer panels in Switzerland indicated that at least with some manufacturers the product quality is not so far from Solar Keymark requirements and with some further product development these requirements could be relatively easily met. Bigger challenges and more time are required for meeting the Solar Keymark requirements for a quality management system of the actual production facilities. Therefore, an option was brought up for further consideration to introduce an interim Albanian label that would just have a requirement for meeting the Solar Keymark equivalent technical standards for the panels based on a random sample collection. For the overall quality management requirements of the production facilities, a longer transition period could be allowed, e.g. with a target of reaching the Solar Keymark requirements within the next 5 years.

Main expected outputs for 2012 under Outcome 4

- Follow-up on the recommendations and conclusions of the report of the international expert on certification;
- As applicable, introducing the agreed quality control scheme for both domestically produced and importer solar thermal products and their installation;
- Promoting the domestic solar thermal product development with required testing support by upgrading the local testing facility and/or by providing cost-sharing for sending products for testing abroad.

Outcome 5

- The 2010 market monitoring report is expected to come up as well with the identification of further data gaps and institutional challenges to obtain the required data on a sustainable basis;
- No real progress with the Solar Thermal Association so far. There is apparent lack of real interest and drive within the local solar thermal industry to establish such an association.

Main expected outputs for 2012 under Outcome 5

- Finalized market monitoring reports for 2011;
- Establishment of a permanent system for market monitoring, which can continue to operate also after the project.