

Global Solar Water Heating Market Transformation and Strengthening
Initiative: Albania Country Programme

Draft Final Report

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1. Introduction

This Final Report is prepared under the project “**Global Solar Water Heating Market Transformation and Strengthening Initiative: Albania country programme**” sponsored by GEF/UNDP, and it represents the last delivery prepared according to ToR of the National Legal Expert on Energy Legislation under this project.

The Final Report contains a summary of the main activities, including a brief description of previous deliveries provided by the National Legal Expert on Energy Legislation, and copies of draft legal acts developed and proposed to METE for promotion and establishment of SHW market in Albania.

This Final Report contains also some conclusions and recommendations focused on the importance of implementation of the legislation pieces drafted and proposed under this project with the goal of establishing an effective and successful SWH market in Albania.

2. Report summarizing the Albanian current legal framework and of EU legislation regarding SWH

The first delivery of the National Legal Expert on Energy legislation was a detailed report analysing the current energy-related laws and regulations and those under development with an impact on the development of the SWH market in Albania. The first report was preceded by a number of meetings with almost all interested counterparts, including representatives of Ministry of Economy, Trade and Energy, Ministry of Public Works and Transport, Tirana Municipality, Association of Albanian Constructors, Association of Albanian Architects etc. In these meetings, opinions and suggestions on the current obstacles of legal or policy nature for creation and strengthening of a domestic SWH market were discussed.

Report, underlines that although not directly related to SWH systems, last decade a number of primary and secondary legislations have been adopted in Albania that may have an impact on the development of SWH market, including legislation on establishing national targets for use of RES, legislation on installation of central heating systems, energy conservation and energy

performance of buildings, and the legislation on fiscal and tax facilities applied for various RES technologies.

- a) For the national targets for use of RES, the Report highlights two important pieces of legislation, law no.9072, dated 22.05.2003 “On Power Sector” as amended, and law no. 9876, dated 14.02.2008 “On production, transportation and trade of biofuels and other renewable transport fuels” that set specific targets for production of electricity from RES and supply of biofuel for transportation purposes. Both legislations show that an experience of introducing mandatory targets for renewable used for electricity production and transport already exists in the country, and a similar policy can also be followed for heating and cooling sector establishing general mandatory targets for all renewables to be used this sector including specific targets for solar thermal energy.
- b) For mandatory installation of central heating systems and energy conservation in buildings the Report highlights four pieces of legislations including, the Government Decree no.584, dated 2.11.2000 “On energy saving and conservation in buildings”, the law no.8937, date 12.09.2002 “On heat conservation in buildings”, the Energy Building Code approved by the Government’s decree no.38 dated 16.01.2003, and the law no.10112, date 9.04.2009 “On administration of common spaces in apartment buildings”. All these legal acts establish a number of mandatory conditions for new buildings as to the installation of central heating systems and energy efficiency and saving serving as a good experience for introducing any mandatory installation of SWH in different categories of buildings and classifying SWH systems in multi-store buildings as part of the common property.
- c) For fiscal facilities the Report underlines that the actual Albanian legislation contains a number of fiscal facilities for the use of renewable energy sources and equipment employed for the use of renewable energy sources such as the law no.8987, dated 24.12.2002 “On establishment of facilitation conditions for power producers” and the law no.9876, dated 14.02.2008 “On production, transportation and trade of biofuels and other renewable transport fuels”, but no such facilities still exist for SWH installations. Report recommends that at least at the initial stage of the development of SWH market, the exemption of SWH from custom duties and VAT may affect positively the reduction of costs for consumers.

Report devoted an important space to the review of the draft Renewable Energy Law prepared by the Albanian Ministry of Economy, Trade and Energy with the support of the Italian Ministry for Environment, Land and Sea. The draft RES law reflects some of the requirements of the EU Directive 2009/28/EC especially as to the establishment of the mandatory national targets of RES in consumption, development and adoption of a National RES Action Plan, criteria and methods of calculation of the share of energy from renewable sources, measures for supporting and promoting the use of RES especially to RES used for electricity production, however it has contained no other provisions regarding SWH besides an article regarding the exemption from custom duties of SWH with a storage capacity up to 500 liters. Report underlines that exemption from VAT may be included in the draft RES law. Besides, the Report also recommends that other provisions that would support the establishment of a possible SWH market in Albania may be developed and added to the current draft. Such provisions would establish a certification system for SWH that would benefit from the fiscal facilities or be subject of any supporting measures from the Government. They would also appoint or establish a responsible Government institution for the promotion of RES in general and SWH in particular.

Report contains a description of the EU policies and acquits for promotion of RES in general and solar thermal installations in particular, including the recent new EU Directive 2009/28/EC for promotion of the use of energy from Renewable Energy Sources (RES), which entered into force in June 2009.

As a matter of fact, the promotion of renewable energy sources in general and solar energy in particular has been one of the energy policy goals of the EU institutions. In this view, in March 2007, the Heads of State and Government of the EU 27 countries adopted a binding target of 20% final energy consumption from renewable energy by 2020.

The new Directive on the promotion of the use of energy from Renewable Energy Sources (RES) contains a series of elements to create the necessary legislative framework for making 20% renewable energy target become a reality.

Differently from the previous EU Directive 2001/77/EC of 27 September 2001 on the promotion of electricity produced from renewable energy sources in the internal electricity market, the new Directive is a document dealing with all RES used for production of electricity, transport and heating & cooling sectors.

For the first time, heating and cooling - responsible for nearly half of Europe's energy demand - will be covered by a Europe Directive promoting renewable energies. Thus the new Directive 2009/28/EC of 23 April 2009 on the promotion of the use of energy from renewable sources creates a positive climate for the long-term development of solar thermal technologies in Europe. Report brings also a number of positive and successful experiences from different EU members as to promotion of RES used for heating and cooling purposes in general and SWH in particular, including Germany, Spain, Italy, France, Belgium, Austria, Denmark, Greece, Portugal, Bulgaria, Cyprus, Malta etc.

Report underlines that the EU member states have undertaken various policy measures and actions to comply with their mandatory national targets according to the new RES Directive and to promote the use of solar thermal systems for water or space heating purposes. These measures include:

- setting of mandatory targets for consumption of RES for hot water purposes;
- approval of building technical codes containing mandatory requirement of installation of solar water heaters in buildings;
- establishment and development of financial incentive programmes by the Governments or local authorities;
- provision of capital grants to cover part of the investment cost associated with installation of SWH;
- application of tax incentives or deductions for subjects installing a SWH system;
- establishment and facilitation of credit lines for financing the subjects to install SWH in their buildings;
- enforcement of certification procedures for installed SWH and renewable certification system;
- establishment of specialized institutions dealing with RES in general and SWH in particular;
- organization of awareness raising campaigns supported by public authorities and focused to relevant target groups.

While not all actions and measures have given the same effect in promotion of use of solar energy in heating and cooling sector, their combination by

individual countries has facilitated a lot the use of solar energy and strengthening of SWH market.

Besides very successful experiences from the EU member states with the promotion of renewable energy sources in general and solar water heating systems in particular, the Report provided a number of positive experiences from other developed and less developed countries that have adopted similar policy measures and actions for promotion of SWH, where the experiences of Australia, Tunisia and Hawaii were underlined particularly.

For promotion of the use of solar energy for water heating purposes, Australia is one of few countries that have introduced a specific renewable energy certificate (REC) system for SWH. According to pertinent Australian legislation a SWH installation may be eligible for getting a REC in case an accredited body has given the device product certification to the Australian Standards. Once RECs have been created, they will be audited by a Regulator officer to ensure they have been created correctly. When RECs have passed the Regulator’s validation, they will become 'Registered', and will be able to be sold and transferred in the REC Registry in order to meet any liability under the Renewable Energy Electricity Act.

Based on the screening of the actual Albanian legislation and the positive experiences from different EU members and not only, the Report draws a number of conclusions providing specific recommendations for relevant Albanian institutions to take necessary policy and legal actions for promotion of use of solar energy and establishment of a domestic SWH market.

3. Analysis of the foreseen financial impact of the fiscal facilities proposed for SWH

In view of the proposal made under the first deliverable (Report) to include in the draft RES law some fiscal facilities for SWH systems in including the exemptions of SWH from custom duties and VAT, in co-operation with the Market Assessment Expert, an analysis the foreseen financial impact (both for the end user price of the SWH systems and the state budget) that these measures would have was made. The fiscal facilities are considered among the

most effective short-term measures for promotion of similar technologies, which have yielded good result worldwide where they have been applied.

The Report prepared for this purpose contains a detailed analysis of the possible impact would have these fiscal measures on different categories of consumers, including hotels, restaurants, schools and public buildings, and households.

According to the calculations, in case of exemption of SWH systems from custom duties and VAT for a period of 5 years (2011-2015) consumers would benefit and at the same time the state budget will lose about Euro 1.281 Million. Report also underlines that from the other side, due to the strengthening of SWH market especially in sectors such as hotels and services, the state budget is expected to increase the revenues coming from the profit tax estimated at a value of Euro 1.313 Million for the same period.

However, it should be underlined that the benefits from these actions shall not be only of financial aspects, but they are expected to increase the security of energy supply for the Albania and promote furthermore the development of important sectors of Albanian economy such as tourism and services. Ultimately, these measures will also have a positive impact on the growth of SWH market in Albania increasing the energy consumption from renewable, which are friendly for the environment.

4. A list of recommended changes or additions to existing laws and regulations or those under development

Based on the analysis and screening of the existing legal framework affecting establishment of a possible domestic SWH market, the National Legal Expert on Energy Legislation proposed a list of recommended new acts or changes or additions to the existing laws and regulations or those under development. It should be mentioned that the list was a product resulting not only from the analysis of the existing legal framework made by the Legal Expert, but also from the feedbacks received from all involved local counterparts mentioned above. The list included:

- Draft provisions for exemption of SWH systems from custom duties and VAT to be included either in the draft RES law or in the law on VAT;
- Draft specific provisions on mandatory installation of SWH in different categories of buildings to be included in the draft RES law;
- Amending the existing law no.10112, date 9.04.2009 “On administration of common property in apartment buildings” in order to include SWH installations as part of common spaces in apartment buildings;
- Drafting of a new Government Decree requiring all new or refurbished public buildings install SWH systems;
- Drafting of a new Decision for Tirana Municipality Council requiring that all new or refurbished buildings under jurisdiction of Tirana Municipality install SWH systems.

5. Finalized proposals (in both languages, Albanian and English) to the government for new legal and regulatory provisions to support the SWH market in Albania

After the list of recommended new acts or changes and amendments to the existing legislation or under preparation was finalized, the National Legal Expert on Energy Legislation and the National Legal Expert on Construction Legislation worked on preparing the pertinent drafts accompanied with the respective statements of legislative purpose (“Relacions”), which are provided in Anex I to this Report.

• Draft provisions for promotion of SWH under draft RES law

As mentioned above, it has been proposed that the draft RES law under development by METE may contain a separate section regarding promotion of SWH. The provisions proposed for this purpose address two important issues: a) one dealing with actions to be taken by the Government for mandatory installation of SWH in different categories of buildings either they are new or refurbished ones, b) another provisions stipulating the exemption of persons producing or importing solar thermal systems with a storage capacity up to 500 liters from the custom duties and VAT till 31 December 2015. This second provisions provides for that only imported solar water heaters that comply with

the European standards shall benefit from the facilities, while SWH produced domestically they will benefit only if their productions are certified by an accredited body that meet the European standards.

Both provisions require from the Council of Ministers to develop and adopt the respective secondary legislation for implementation of these provisions.

- **Draft Decree on installing of SWH in public buildings**

Mandatory installation of SWH in buildings has been implemented by various developed countries with the goal to increase the share of final energy consumption from RES in general and solar energy in particular. While various countries have imposed such obligation for different categories, there are also countries that have started with the public buildings in order to use the public sector as a good example. The draft decree prepared under this project goes in line with this policy. Draft decree provides for that starting from July 1, 2011, all public buildings falling under a certain category listed in the Annex I of the decree, which shall be built newly or shall be fully reconstructed, shall install solar thermal systems to meet the energy demand for heating of sanitary hot water. The solar thermal system may be part of a combined system using other energy sources and technologies that are used for heating of sanitary water in these buildings.

Up to date, the majority of public institutions provide the hot water using electricity. Thus, in 2009, only to provide the hot water for public buildings is estimated that an amount of about 150 million kWh is consumed representing about 4% of total energy consumption in the country (without energy losses).

The draft decree provides for that the calculation of total energy demand for sanitary hot water in public buildings shall be done in accordance with the average number of persons frequenting the building, the percentage (%) of persons consuming hot water in the building out of total number of persons frequenting the building, and the average consumption of hot water for a person determined according to Annexes II and III of the decree.

The draft decree requires that solar thermal systems to be installed should comply with the European standards for such systems and have a minimum efficiency of 55%.

The draft decree also stipulates that any environment and construction permits for construction or major reconstruction of public buildings shall not be issued in case the heating of sanitary water is not designed to be made with solar thermal systems or with combined systems including such solar thermal systems.

The draft decree requires from all institutions that within December 31 of each year report to the National Agency of Natural Resources regarding the surface of installed solar thermal systems and type of the system. This would enable not only a better monitoring of the implementation of this draft decree, but also the collection of the necessary data to take similar policies and actions for other types of the buildings.

However, it should be pointed out that this draft decree represents only a first important step for promotion of this type of technology, which is very attractive for meeting the energy demand in the country and the establishment of a consolidated market of solar thermal systems. Other similar actions and measures should be imposed on other categories of buildings such as hotels, restaurants or other service buildings consuming hot water, including household buildings.

- **Draft decision of Tirana Municipality Council on installation of SWH in buildings**

The draft decision of Tirana Municipality Council goes in same line with the draft Government Decree described above. However, this draft decision expands the number of building categories under jurisdiction of Tirana Municipality that are going to be subject of a mandatory installation of SWH. Subject of this decision shall be the following building categories:

- i. Single-family houses of different types;
- ii. Apartment blocks;
- iii. Private offices;
- iv. Private educational buildings;
- v. Private polyclinics and clinics or health centres;
- vi. Hotels and restaurants;
- vii. Private sports facilities;
- viii. Wholesale and retail trade services buildings;

- ix. Industrial buildings, in general if hot water is needed for the process and, also, when the installation of showers for the staff is mandatory;
- x. All other private buildings which involve the existence of dining-rooms, kitchens or collective laundries.

The draft decision stipulates that only newly built or refurbished buildings shall be subject of this decision.

On the other hand, the decision shall not be applicable in these cases: a) buildings officially protected as part of cultural heritage because of their architectural or historical value; b) buildings used as places of worship and for religious activities; c) temporary buildings with a time of use of two years or less; d) residential buildings which are used or intended to be used for either less than four months of the year or, alternatively, for a limited annual time of use and with an expected energy consumption of less than 25 % of what would be the result of all-year use; f) and in all cases where can be argued with relevant technical studies that the requirements of this decision are impractical due to, shadings of the building, inadequate orientation of the building, building restrictions, etc.

Draft decision provides for that the Municipality of Tirana shall approve a construction permit only after the installation projects of solar thermal systems for the production of sanitary hot water in the buildings homologated by duly authorized organism or entity are included in the building design.

- **Draft law on amending law no.10112, dated 9.04.2009 “On administration of common property in apartment buildings”**

The experience of other countries, the installation of SHW systems in the multi-owner apartment buildings might bring several problems in the management and maintenance of these systems. For this reason it was judged as necessary to amend the existing law no.10112, date 9.04.2009 “On administration of common property in apartment buildings” with the goal to include in the definition of the common spaces also SWH systems together with the required pipe installations for such systems. This measure not only will make SWH installation part of common property managed by the Assembly established by the habitants of an apartment building according to the law, but would also facilitate possible installation of collective SWH systems in such apartment buildings.

The draft law provides for the modification of a number of articles of the existing law, but all with more or less the same goal, making SWH installations as part of common property.

6. Conclusions and recommendations

- Creation of necessary legal framework for promotion of SWH represent an important first step for Albania to establish and strengthen a possible SWH market and consequently grow the share of final energy consumption from renewable in general and solar energy in particular.
- Elaboration of a separate section in the draft RES law under preparation and introduction of the proposed provisions described in this report would create a strong legal basis where to base future Government policies for promotion of solar energy. Draft RES law should also be as a good opportunity for Albania to harmonise its legislation with the new EU Directive 2009/28/EC for promotion of the use of energy from Renewable Energy Sources (RES) treating all renewables used for electricity production, transport and heating & cooling in one comprehensive RES law. On the other hand the responsible institutions (METE and AKBN) should work to develop the secondary legislation required by RES law that will facilitate the implementation of the law provisions regarding SWH systems.
- The introduction of specific mandatory targets for different types of RES technology, including solar energy used for hot water, either in the primary or secondary legislation, may be an effective measure for developing the use of SWH in household and service sectors.
- The fiscal and tax facilities for production, import and installation of SWH has been demonstrated to be a necessary measure at least for a transitory period until a SWH market be established and matured in the country. Exemption of SWH either imported or produced in the country from the custom duties and VAT will reduce the cost of installation such systems by energy consumers providing an additional incentive for them. On the

other hand, the estimations of the possible effects these measures would have on the state budget are not very considerable and in most of the cases will be compensated from the revenues collected from profit taxes imposed to commercial customers.

- A certification system for certifying that SWH systems benefiting the established incentives comply with the EU technical standards or national standards adopted by the responsible institutions will make sure that the installed SWH will be of a high quality and efficiency.
- Mandatory installation of SWH in buildings is shown to be an effective measure and policy worldwide, therefore a similar policy should be implemented in Albania as well. Installation of SWH in public buildings such as hospitals, schools, kindergartens, sportive centres etc. can result very effective given their considerable demand for hot water. The implementation in effective manner of this action in the public sector may also serve as a good example to be followed by private sector encouraging them to decide unitarily to install such systems.
- Other categories of buildings, especially in the sectors of hotels and restaurants, may soon be subject of mandatory installation of SWH systems, because of steady demand for hot water all around the year.
- Tirana Municipality may take the leading role in imposing mandatory installation of SWH in other categories of buildings besides the public buildings, therefore the adoption of the draft decision by the Municipality Council could bring good results. This experience can be shared by other municipalities later.
- Amending of law on common property in apartment buildings would facilitate the installation of collective SHW systems and their management and maintenance.
- The Government should appoint or establish a public agency or institution with the tasks of promoting the use of RES in general and SWH in particular, including the management of any possible financial fund or credit lines established for this purpose. Training or other

capacity building activities for the Government agencies or local authorities engaged with the promotion of a SWH market in Albania may be identified and be supported under GEF/UNDP project.

- The awareness of consumers regarding the benefits of using solar energy for hot water has been one of key aspects for a successful and effective Government policy and actions. The UNEP/UNDP programme, but also other sources, may be used for organization of awareness raising campaigns supported by public authorities and focused to relevant target groups.

ANNEX I
DRAFT LEGAL PROPOSALS