







**Country Study** 

# Interim Evaluation of the Country Programme of Albania under the Global Solar Water Heating Market Transformation and Strengthening Initiative

# PIMS 3611/ Project ID: 00062847

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**Evaluation Office of UN Environment** 

#### Preamble

This evaluation report has been produced as part of the Terminal Evaluation of the GEF/UNEP/UNDP project entitled 'Global Solar Water Heating Market Transformation and Strengthening Initiative' (GEF ID 2939). UN Environment led global knowledge management component and UN Development Programme (UNDP) implemented country programmes in Albania, Chile, Lebanon and Mexico were evaluated under supervision of the Evaluation Office of UN Environment in 2016.

As per the Steering Committee decision (July 22, 2015, Tirana) the Country programme of Albania has been extended with government cost-sharing until the end of 2017. Thus, this report is considered as an interim evaluation (the mid-term evaluation was conducted already in October 2012). This report serves as an independent evaluation of the Country Programme of Albania, but should be considered as part of the overall evaluation together with other country programme evaluations feeding to the terminal evaluation of the global initiative. These evaluation reports and related Terms of Reference are available at UNEP Evaluation Office webpage (unep.org/evaluation/) and UNDP Evaluation Resource Centre (erc.undp.org).

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NAME OF THE PROJECT:	The Country Programme of Albania under the Global Solar Water Heating Market Transformation and Strengthening Initiative		
GEF ID:	2939	ATLAS ID (Award ID):	50767
UNDP PIMS ID:	3611	UNDP project ID:	62847
Project Type:	Full-size project	Focal Area(s):	Climate Change
GEF OP #:	6	GEF Strategic Priority/Objective:	Promoting the Adoption of Renewable Energy by Removing Barriers and Reducing Implementation Costs
Planned start data:	2009	Actual start date:	September 2009
Planned completion date at design:	2014	Planned completion date (revised) <sup>1</sup> :	December 31, 2017
Planned project budget at approval:	2,105,000	Total expenditures reported as of [December 30, 2015]:	1,330,710.64
GEF grant (USD):	1,000,000		

## **Project Identification Table**

<sup>&</sup>lt;sup>1</sup> As per minutes of the steering committee meeting (July 22, 2015, Tirana)

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# ACRONYMS

ADA	Austrian Development Agency
AIDA	Albanian Investment Development Agency
AKBN	National Agency on Natural Resources
ATA	Albania Tourism Association
CO	UNDP Country Office
CO <sub>2</sub>	Carbon dioxide
CP	Country Programme (referring to the subject of this evaluation report)
FF	Energy Efficiency
FRF	Electricity Regulatory Authority
FU	Furopean Union
FOFN	Swiss Federal Office for the Environment
FSP	Full size project
GFF	Global Environment Facility
GHG	Greenhouse Gas
GSWH	Global Solar Water Heating
KECH	the national Electric Litility
KM	Knowledge Management
MEI	Ministry of Energy and Industry
	Ministry of Energy and Industry Ministry of Environment, Ecrestry and Water Management
	Monitoring and Evaluation
	Mid-term Evaluation
	Maga watta
	Netionally Appropriate Mitigation Action
	National Energy Strategy
	National Drainet Director
	National Project Director
UME	Observatoire Mediterraneen de l'Energie
DALL	Diganization for Security and Co-operation in Europe
PRUDUC	Project document
PSC	Project Steering Committee
RE	Renewable energy
REPIC	international cooperation by the Swiss State Secretariat for Economic Affairs
RES	Renewable energy sources
RTOC	Reconstructed Theory of Change
SDC	Swiss Agency for Development and Cooperation
SESCO	Solar Energy Service Company
SFOE	Swiss Federal Office of Energy
SPF	Institut für Solartechnik
SRF	Strategic Results Framework
SWH	Solar Water Heating
TOC	Theory of Change
TOR	Terms of Reference
TRAC	UNDP's regular resources
UNDAF	United Nations Development Assistance Framework
UNDP	United Nations Development Program
UNEP	United Nations Environmental Program
VTC	Vocational Training Centre

## **1** INTRODUCTION

**1.** The subject of this evaluation is the Albanian component (hereafter referred to as "the Country Programme" [CP]) of the GEF/UNEP/UNDP project entitled 'Global Solar Water Heating Market Transformation and Strengthening Initiative' (hereafter referred to as "the GSWH initiative"). This interim evaluation report has been produced as part of the overall Terminal Evaluation<sup>2</sup> of the GSWH initiative.

**2.** This report presents the findings of the interim evaluation of the Albanian Country Programme that took place in March – July 2016. The CP received a grant of USD 1.0 million from the Global Environmental Facility (GEF) and was developed in 2008 as part of a UNEP and UNDP initially six-country project<sup>3</sup> (Algeria cancelled its participation), with the Knowledge Management and Networking component managed by the UNEP, and the individual implementation aspects in the individual countries were managed by the UNDP in the form of six nationally executed (NEX) projects. The project document was signed jointly by the UNDP and the Government of Albania in September 2009, for an initial project duration of 4.5 years. The CP was supposed to be operationally closed on 31<sup>st</sup> December 2015 but has benefited from a two-year extension to carry-out remaining activities funded by the Government cost-sharing<sup>4</sup>.

## **1.1 Evaluation approach and Methodology**

**3.** The interim evaluation was coordinated by the UNEP Evaluation Office and thus follows the UNEP Evaluation Policy and Programme Manual. The approach has been adapted and is aligned with UNDP and GEF requirements. This evaluation is guided by the TOR developed for the overall terminal evaluation of the GSWH initiative. Each country programme under GSWH Initiative (in Albania, Chile, Lebanon and Mexico) is assessed against the evaluation criteria specified in the evaluation TOR (section 4).

4. The evaluation assesses the country programme with respect to a minimum set of evaluation criteria grouped in five categories: (1) <u>Strategic Relevance</u>; (2) <u>Attainment of objectives and planned result</u>, which comprises the assessment of outputs achieved, effectiveness and likelihood of impact; (3) <u>Sustainability and replication</u>; (4) <u>Efficiency</u>; and (5) <u>Factors and processes affecting project performance</u>, including preparation and readiness, implementation and management, stakeholder participation and public awareness, country ownership and driven-ness, financial planning and management, supervision and backstopping, and project monitoring and evaluation.

**5.** The evaluation utilizes the Theory of Change (TOC) approach to depict the impact pathways from outputs through outcomes towards impacts. It will also assess the sustainability and the factors that influenced or could influence the replication and scaling up of the CP results and the state of the enabling environment for a sustainable SWH market in Albania after its completion. Efficiency through cost-effectiveness and timeliness of CP execution will also be assessed.

**6.** Outputs from this interim evaluation will provide guidance in view of charting future directions to ensure that the market transformation of solar water heaters in Albania is sustained and aims to feed into the synthesis and conclusions of the overall terminal evaluation of the GEF funded GSWH initiative.

**7.** Evaluation findings are based on the review, prior to the country mission, of all relevant project documentation and pertinent background information. Interviews with key project personnel and other

<sup>&</sup>lt;sup>2</sup> Terms of Reference concerning the overall terminal evaluation of the GSWH initiative will be available at UNEP evaluation office webpage together with main

<sup>&</sup>lt;sup>3</sup> Albania, Algeria, Chile, India, Lebanon, Mexico

<sup>&</sup>lt;sup>4</sup> Refer to the minutes of the Steering Committee meeting that was hold on July 22<sup>nd</sup>, 2015

relevant stakeholders from Government, Academia, Associations and Private sector also took place as well as the visits to three demonstration projects which have benefited from the CP, two of which are based in Tirana and one in Elbasan.

**8.** A full list of documents reviewed and people interviewed will be found in Annexes 1 and 2. The list of questions prepared for the interviews and the detailed agenda of the field mission are also provided in Annexes 3 and 4.

**9.** Preliminary findings after the in-country mission were shared with the UNDP and CP team prior to the departure of the evaluator. Additional consultations, later in the CP assessment process, were done by email for the checking of the factual errors and/or omissions.

**10.** Project outcomes are assessed as per GEF performance ratings as follows:

- Highly Satisfactory (HS): There is no shortcomings in the achievement of the objectives.
- Satisfactory (S): There are minor shortcomings in the achievement of the objectives.
- Moderately Satisfactory (MS): There are moderate shortcomings in the achievement of the objectives.
- Moderately Unsatisfactory (MU): There are significant shortcomings in the achievement of the objectives.
- Unsatisfactory (U): there are major shortcomings in the achievement of the objectives.
- Highly Unsatisfactory (HU): There are severe shortcomings in the achievement of the objectives.

## **1.2** Limitations of the evaluation

**11.** The short duration of the in-country mission (2 days) meant that a list of questions, which does not claim to be in any way exhaustive, was prepared with a focus on main issues. However, the range of interviewees was sufficiently wide to represent adequately the variety of the parties involved and to make it possible to collect perceptions and points of views from different sources. The triangulation of the responses was made possible by focusing on the same questions and useful conclusions could therefore be drawn regarding the CP.

## 2 DESCRIPTION OF THE COUNTRY PROGRAMME

#### 2.1 Country context

**12.** Albania is a small Mediterranean country (covering a total area of 28,748 km<sup>2</sup> and with a population of 2.89 Million in 2016<sup>5</sup>), benefiting form a generous amount of sunshine (average solar radiation: 1460 Kwh/m<sup>2</sup> per year<sup>6</sup>).

**13.** Until 1990, its domestic hydropower generation met over 90% of the country's electricity demand. However, with the likelihood of climate change having an adverse effect on hydropower in the future, it is expected that the average electricity output from Albania's hydropower plants will be reduced by as much as 15 percent.

14. The country is also experiencing a growing electricity demand-supply imbalance which is mainly due to the growth of the residential and commercial sectors which represent over 60% of the total energy demand and 62% of the electricity demand. The deficit from this imbalance, a trend that was accentuated by low electricity prices and poor discipline in paying electricity bills, was tentatively addressed by the Government through electricity imports and the planning of fossil fuel power plant construction. In 1999, the "non-technical losses", occurring as a result of electricity taken from the network by means of illegal connections to the network, more generally amounting to unpaid electricity, hit the 50% mark of the total amount of electricity produced. The 50% mark was reduced to 38% in 2002 and is presently being further reduced through strict measures taken by the Ministry of Energy and Industry (MEI) and by the Group of Donors in co-operation with KESH, the local utility provider. The government is currently engaged in the process of implementing programmes aiming at raising the price of electricity and at enforcing electricity bill payment discipline on the one hand, while at the same time aiming improving energy savings and renewable energy opportunities.

**15.** Electric boilers take care of over 70% of the domestic hot water needs of the country's household and service sector. According to studies conducted as a part of the National Energy Strategy preparation (2002) and which followed baseline development trends, demand for hot water in Albania is projected to reflect, in the residential sector alone, a growth in consumption from 600 GWh in 2000 to 875 GWh in 2015.

**16.** The market review conducted in early 2006 identified 6 Albanian companies that supply solar thermal equipment. Three out of these six companies were assembling the SWH systems themselves by relying on Greek (2) or Turkish (1) technology while the other three companies were relying on equipment that is imported, with, as matters stood in the early 2006, Greece, Italy, Germany and Austria as the main countries of origin. SWH systems have also been imported by on an individual purchase basis.

**17.** With regard to the technology used, the flat plate collectors were estimated to account for about 79% of the total installed area and a typically relatively inexpensive technology, the so-called thermosiphon, characterized the SWH systems serving the residential sector.

**18.** When the CP was launched (September 2009), there were at the time about 15 older, large solar water heating demonstration systems funded by a variety of donors<sup>7</sup>. The SWH market was affected by the following barriers:

<sup>&</sup>lt;sup>5</sup> Source: countrymeters.info

<sup>&</sup>lt;sup>6</sup> UNDP Project document of the Albania component of the GSWH project

- The low subsidized prices of electricity, illegal connections and un-paid electricity bills;
- The high upfront costs for SWH installation;
- The overall low level of awareness of the energy and environmental benefits of the SWH technology;
- The absence of an established market infrastructure;
- The lack of consumer confidence in the technical performance of the SWH technology;
- The absence of attractive and specifically tailored financial mechanisms to assist endusers with removing high up-front costs;
- The absence of motivated and skilled installation workforce; and
- The absence of international standards and certification as well as of labeling schemes and market surveillance.

#### 2.2 Country programme goal and objectives

**19.** The long term goal of the project is to accelerate a sustainable market development of solar water heating in Albania with good quality products and services. The specific objective of the CP during its lifetime was to accelerate the market development of solar water heating in Albania, with the aim of facilitating the installation of a 75,000 m<sup>2</sup> new solar water heating capacity during the project and to reach the target of an annual sale of 20,000 m<sup>2</sup> by the end of the project (in 2014) and, allowing for predictions for continuing growth to be fulfilled, to reach the stated longer-term goal of 520,000 m<sup>2</sup> of total installed capacity by 2020.

**20.** The CP targeted the residential (individual houses and buildings) and the commercial and services sectors mainly. SWH dealers and installers, SWH manufacturers and importers, engineers and architects, professional associations, and students were to benefit from the SWH Project's activities or be involved as stakeholders.

**21.** The benefits of this project have been estimated to correspond to avoiding over 300 MW of new fossil fuel power capacity by replacing electricity with solar power for water heating, and reducing an estimated cumulative GHG emissions potential of over 800,000 tons of  $CO_2$  by the end of 2020, from the project start<sup>8</sup>.

**22.** The project intervention outputs were clustered by outcomes: sustainable growth in demand by an i) enabling policy framework, ii) enhanced awareness and iii) available financing, iv) supply of reliable technology and services and v) replication, which together were designed to achieve the project objective.

<sup>&</sup>lt;sup>7</sup> 1)Solar water heating for the Administration and Education Center at Prespa National Park, funded by UNDP; 2) 48 m2 of solar panels and solar water heating system installed on Hospital 5 in Tirana (1993), by the Center for Energy Efficiency; 3) Solar water heating system for an elderly people's home in Tirana (1995), by the Center for Energy Efficiency; 4) Solar water heating systems in three SME's in Tirana, Fieri, and Durres, by the Center for Energy Efficiency (1999); 5) Solar water heating systems in 2 high schools in Tirana and Rrogozhina, by the Center for Energy Efficiency (1998); and 6) Solar panels installed under the ASIPE (Archaeological Site Protection implementing Renewable Energy Resources) project at Butrint Archaeological site in Southern Albania, and funded by the EU under the PECO programme.

<sup>&</sup>lt;sup>8</sup> In calculating the  $CO_2$  emission reduction impact, it has been assumed that the SWH systems will reduce the need for new fossil fuel based power generation capacity running on oil and the direct use of LPG, resulting an average annual emission reduction factor of 0,28 tons of  $CO_{2eq}$  per installed m<sup>2</sup>.

**23.** The outputs and activities under the **first outcome** which is a policy component were designed to raise the awareness of the key national policy makers on the benefits of SWH and facilitate the development and adoption of a legal and regulatory framework conducive for sustainable development of the SWH market in Albania.

**24.** The outputs and activities under the **second outcome** were to complement the marketing efforts of the private sector by raising the awareness of the targeted end-users on the benefits, economic feasibility and other characteristics influencing a positive purchasing decision. As a neutral actor, independent from commercial ties, the project may also be in a better position to provide impartial and better trusted information to the targeted end users about the characteristics, financial and environmental benefits of the technology, the available suppliers and installers and public support available. The general public awareness raising activities were designed to be complemented by educational activities at secondary schools and at the architecture, building, energy and environmental engineering branches of the university (linked also to the envisaged use of the testing facility under component 4 for educational purposes) as well as by specific articles or supplemental annexes in professional magazines dealing with energy and environment, thereby targeting those professional groups that are often influencing the decision making of the final end-users. In areas where solar thermal is not yet widely used, demonstration projects can also be a useful tool to support awareness and promotion campaigns.

**25.** The **third outcome** was designed to generate demand for the technology through applicable consumer financing and, as applicable, financial support schemes with an objective to leverage at least USD 15 million (about 50% of the total investments needs) for the set target of 75,000 m<sup>2</sup> of new SWH capacity through these financing mechanisms. Training sessions were to be organized to familiarize the bankers with the SWH panels' market, its trends and development and financing experiences from other countries. By building on the outcome of the initial market survey, the project also aimed to support the development and introduction of new financing instruments such as concessional loans, vendor financing or financing through SESCOs (Solar Energy Service Companies) to effectively stimulate the market. In this respect, the project aimed to raise the awareness and build the capacity of the local financing institutions and other key stakeholders, such as local vendors, power utilities etc. to structure and introduce new or apply existing financing products or other delivery models, which are expected to be attractive for the targeted end users and thus promote the demand.

26. After creating the demand for the technology, the **fourth outcome** was about ensuring that consumers have a satisfactory experience with it. Certification and quality assurance contribute to a trouble-free use of solar water heating and subsequently increase consumer confidence in the technology. Given the level of maturity of the Albanian market at the time of the project design, the quality control system was expected to start as a voluntary system driven by the supply side - i.e. the responsibility for the certification to be laid upon representatives of the supply side of the market, which would need to submit their products for independent testing before they can label their products. All test documents were to be made available for the selected institute for verification. At the product level, a set of requirements and criteria were to be developed that proves the conformity of the products with the standards. As the market matures, standards can become mandatory and regulated more formally by an independent certification institute. The introduction of a certification system needs to be complemented by adequate testing facilities to check compliance. Training was to be developed to the installers to show their know-how and their capacity to install units at an acceptable level. A recognition scheme for SWH installers was to be introduced to create an incremental value for the companies or individuals involved and who will be able to display a quality logo. The training provided sought to be embedded into the curricula of vocational schools in order to be continued after the project. The training facilities can be combined with the testing facilities with an objective to provide the theoretical and practical background for designing, building and installing solar thermal plants. The establishment of the quality control/improvement scheme discussed already was to be complemented by technical assistance to the local SWH supply chain to meet the requirements and to improve the quality of their products and services in general.

**27. The fifth outcome** is designed to ensure continuing SWH market monitoring and promotion in Albania after the project has ended, and to support next generation project designers and governments with experience and recommendations from the project by compiling and disseminating the project results and lessons learnt, thereby also serving the knowledge management component of the global SWH project.

## 2.3 Changes in country programme design

**28.** The project was initially designed as a stand-alone project and afterwards it became part-of the UNDP/UNEP/GEF Global Solar Water Heating Market Transformation and Strengthening Initiative.

**29.** In addition to the project extensions, the CP has not undergone formal changes in design during its implementation but had to adopt an adaptive management approach in respect of a number of constraints or new developments. An example of this was the unfulfilled commitment of the Italian Government with regard to providing funding to a total of USD 1,000,000 through UNEP towards the implementation phase of the financial mechanisms or such as cancelling plans to 1) establish/create a SESCO and a Solar Thermal Industry Association, which was still premature and did not meet with a positive reception from among the SWH stakeholders on the supply-side, 2) adopt a national system for product standards and quality control scheme and an Albanian certification label for SWH (it was decided to adopt the EU Solar Keymark certification), 3) establish an in-country testing center (the pilot Harry Fultz institute does not fully comply with all the requirements of the European standards and after checking the feasibility of investing in its upgrade, it was decided that it is more efficient to support the producers in testing their products abroad than upgrading the existing center, which is then used for pre-testing and training activities).

## 2.4 Implementation arrangements

**30.** The Ministry of Energy and Industry (MEI) is implementing the CP, under the UNDP national execution modality. A National Project Director (NPD), within the ministry, has been appointed and is in charge of supporting implementation of the CP. A Project Steering Committee (PSC) has been set up to supervise and guide the project implementation. It included representatives of institutions sharing a common interest in the issue, the UNDP Country Office (CO) and representatives of other institutions providing direct cost-sharing for the project activities.

**31.** As for the day-to-day management of the project, a Project Management Unit (PMU) has been established as a part of the Climate Change Umbrella Program of the UNDP Country Office located in Tirana that is led by a full time national project manager with professional and administrative staff in accordance with requirements. The PMU also benefits from the input of a part-time International Technical Advisor (ITA), i.e. an international SWH source of expertise to support the monitoring and provision of advice for the implementation of the project, thus ensuring that best practice and lessons learnt from similar activities in other countries are adequately taken into account in the implementation and management of the project.

**32.** The UNDP Country Office in Albania was in charge of monitoring the progress towards intended results, of providing administrative support upon request and of ensuring financial oversight in accordance with the guidelines for nationally-executed UNDP projects.

**33.** The Knowledge Management and Networking component of the UNEP GSWH project was responsible for providing a technical backstopping and contributing to global knowledge sharing and dissemination of best-practices and lessons learned.

## 2.5 Partners

**34.** The main partners for the CP are the following:

**35.** The **Ministry for Energy and Industry** (MEI) (which is the former Ministry of Economy, Trade and Energy) is the executing agency for the CP with an appointed National Project Director (NPD). It is responsible for the overall energy sector development.

**36.** The **National Agency on Natural Resources (AKBN),** under the tutelage of the MEI, was established in 2007 after the merger of the National Energy Agency (NEA) with other institutions. They have a strong collaboration with the CP, in particular for providing information and data on the Solar sector. The Agency is also expected to host the SWH market monitoring system after the CP completion.

**37.** The **Energy Regulatory Authority** (ERE) is a public legal entity, independent from the energy industry interest and from government institutions. It is responsible for issuing licenses, approving tariffs and developing and monitoring the implementation of the energy sector market rules. The agency is still relatively small, however, because the electricity sector is still not liberalized.

**38.** The **KESH** is the 100% state-owned electricity utility in Albania active in generation, and supply of electricity, while the OST (Operator of Transmission System) is responsible for power transmission and the OSHEE for power distribution.

**39.** The **Ministry of Environment**, created in 2001, is the highest governmental body responsible for environmental protection and the formulation of environmental policy and legislation in the Republic of Albania, thereby also playing a part in the development of the energy sector. The ministry is also the Focal Point for the Global Environment Facility (GEF) and the United Nations Framework Convention on Climate Change (UNFCCC).

**40.** Other partners who can also be considered to be direct beneficiaries of the Albania country programme include:

**41.** The **State Social Service**, which operates under the umbrella of the Ministry of Social Welfare and Youth, provides social services to 21 institutions, a number of which, such as health centers, care homes for the elderly and kindergartens, will act as pilot projects within the framework of the CP.

**42.** The **National Housing Agency**, which operates under the umbrella of the Ministry of Urban Development, is responsible for providing families in need with affordable housing that benefit from sustainable energy solutions. A MOU was established in collaboration with the UNDP to identify and implement pilot SWH projects. Some awareness raising activities have also been organized (such as design competitions at the university level) to sensitize young and future architects to SWH issues as well as issues relating other RE technologies.

**43.** The **Municipalities of Tirana, Elbasan, Lezha, Shkodra, Saranda,** which are to be involved in the project through the launch of demonstration projects tenders.

**44.** The **Albanian Tourism Association** (ATA), founded in April 2008, is a business association in the field of tourism. Its objective is to establish a reliable and active platform, ready to undertake responsibilities to contribute to the further development of tourism in Albania, to build a genuine and enduring partnership between the public and the private sectors and to act competently in its partnership with the government, including the CP.

**45.** The **Polytechnic University of Tirana**, founded in 1951, is the oldest and the second largest university in Albania. It includes six colleges and two research institutes, one of which is the Institute of Energy, Water and Environment. The Architecture Department works in association with the CP to introduce activities organized by the latter to raise awareness and its expertise will be sought in the context of supervising the design of SWH systems in a number of building enterprises in Albania.

**46.** The **Vocational Training centers** as well as the **Harry Fultz Institute** will benefit from the SWH related curricula developed by the CP and will contribute to building national capacities. In addition, the Harry Fultz Institute will work collaboratively on the project by testing solar panels in its center established through a collaborative endeavor involving the ADA and the Swiss government.

**47.** The **private sector** includes SWH systems producers, sellers and installers which will benefit from training activities to enhance their capacities and will be associated to the development of a quality control scheme. It also includes the local banks that will be involved in the introduction of attractive financial mechanisms.

## 2.6 Country programme specific financing<sup>9</sup>:

**48.** According to the project document, the total budget for the Albania Country Programme under the control of the UNDP amounted to USD 2,105,000 of which USD 1,000,000 was provided by the Global Environment Facility (GEF), USD 150,000 by UNDP's regular resources (TRAC) and USD 955,000 by the Albanian government. Also expected, was the amount of USD 1,000,000 from the Italian Government that was to be channeled through the UNEP.

**49.** Budget by outcomes and project co-financing and parallel financing<sup>10</sup> as per the project document are detailed in annex V.

## 2.7 The Reconstructed Theory of Change

**50.** The theory of change (TOC) is a representation of causal linkages, which allows understanding the underlying programme logic from outputs through direct outcomes to long-term outcomes, and furthering towards impact. The CP document did not originally include a TOC, which was reconstructed on the basis of the Strategic Result Framework (SRF) in the ProDoc. The Albanian country programme was developed as part of Global Solar Water Heating Market Transformation and Strengthening Initiative thus the underlying project logic in each participating country was based on similar assumption of market transformation mechanisms.

**51.** The CP activities and outputs were expected to contribute to achievement of 5 direct outcomes which themselves should eventually lead, via intermediate states towards the long-term outcome and eventually towards the intended impact. The CP's intended long-term impact was reduction of GHG emissions and reduced reliance on electricity.

**52.** Outputs and direct outcomes are direct CP effects while intermediate states are the transitional conditions between the CP's direct outcomes and long-term outcome. The long-term outcome of the reconstructed TOC are "SWH markets are successfully developed" that corresponds to the ProDoc objective and is measured by the a) estimated amount of installed SWH systems measured as m<sup>2</sup>, and b) growth of the annual sale of SWH systems. Direct outcomes and intermediate states are formulated based on the outcome statements in the ProDoc.

<sup>&</sup>lt;sup>9</sup> Extracted from the project document

<sup>&</sup>lt;sup>10</sup> Parallel financing includes funds that are provided by other donors (but not transferred to UNDP) for activities related to the CP

**53.** There are a certain number of drivers (yellow rectangles) which are external factors that are expected to contribute to the realization of the intended outcomes and impacts and can be influenced by the CP. Assumptions are also depicted (in the red rectangle) and are needed to achieve the intended impacts but they are largely beyond the control of the CP.

#### Figure 1: Reconstructed Theory of Change (TOC) diagram



## **3 EVALUATION FINDINGS**

#### 3.1 Strategic relevance

**54. National priorities.** The CP fits in with the National Energy Strategy (NES) of Albania (elaborated for the period 2006-2020 and which is regularly updated) and the objective, which aims to develop an effective energy sector that guarantees the security of the energy supply in general, and of electricity in particular, and promotes an efficient and economic use of energy, with a minimal environmental impact, to support the sustainable development of the entirety of the economic sectors. Penetration of solar thermal energy for hot water supply to the household and the service sectors are among the several measures developed in the action plan for the implementation of the NES.

**55. UNDP's policy and strategy.** The CP is part of the developed UNDP Strategy on Climate Change. The initial idea came from the NES and previous climate change studies such as Albania's First National Communication and Technology Needs Assessment and then continued with the PDF Block B (Project Development Facility) and the Full Size Project (FSP) formulation and approval. It also contributes to Outcome 2 entitled "a transparent and accountable government, developing and implementing effective national policies" within the UNDAF 2008-2013.

**56. Gender and HRBA issues.** These UN-wide programming principles have not been addressed during the implementation phase because they have not been identified as such in the ProDoc.

**57.** The CP is rated "<u>Satisfactory</u>" (S) in terms of its strategic relevance.

#### 3.2 Achievement of outputs

**58.** The CP includes 5 independent but inter-related outcomes. The review of the outputs produced during the CP implementation is presented hereafter:

59.	Outcome 1: An enabling institutional, legal, and regulatory framework to promote sustainable
SWH m	ırket.

SRF Outputs	Actual outputs delivered:
Output 1.1: Analysis, recommendations and the associated advocacy work for the adoption of adequate public financial and fiscal incentives to promote the SWH market finalized.	The CP has supported the drafting of the SWH related chapters of the new law on RES (n°138/2013) adopted by the Albanian Parliament in May 2, 2013. The law requires builders to adhere
Output 1.2: Analysis, recommendations and the associated advocacy work for the adoption of the required amendments in to the building law and code to encourage the installation of SWH into new buildings and in those going through a major renovation finalized.	to a minimum share of solar thermal heat for certain building types and exempts solar thermal systems and components from custom tariffs and Value Added Tax (VAT) altogether. In addition, the law specifies in particular the obligation for the public sector to integrate SWH into all new buildings and those subject to major renovation. Support was also provided to the drafting of the related secondary legislation (decrees). The CP has also supported the National Renewable Energy Action plan which sets a target for Albania of approximately 38% taking into account all sources of renewable energy, with a specific target for the heat produced by renewables of 12.1 %, out of which 1.23 % will be covered by solar water heaters: the plan involves technical and legislative measures for the country until 2020 with the

	baseline year 2009, in line with the respective EU directives, the obligations to the Energy Treaty and the National Energy Strategy's objectives.
	Collaborative work with the municipality of Tirana has been carried out in relation to the prospect of starting the implementation of solar obligation terms. Support was provided by the CP towards drafting a municipal level regulation and for the preparation of training materials. Collaboration with other municipalities (such as the municipality of Lezha, Elbasan and Durres) also started in 2013 for the same purpose.
Output 1.3: Analysis, recommendations and the associated advocacy work for setting up the required regulatory framework for a SWH quality control system finalized.	In the process of drafting the SWH related chapters of the Renewable Energy Law, it was decided that Albania will not develop its own quality control system for solar thermal hardware but will adopt the European Solar Keymark certification scheme.

**60.** Outcome 2: Enhanced awareness and capacity of the targeted end-users and building sector professionals to consider and integrate SWH systems into different types of buildings:

SRF Outputs	Actual outputs delivered:
Output 2.1: Materials for public awareness raising and marketing campaigns as well as for training of building designers developed and/or adopted into Albanian conditions and made available in printed and electronic format.	Various marketing and awareness-raising campaigns have been launched by means of seminars, leaflets, reports and articles in professional magazines. In addition, the CP is continuously delivering public outreach activities.
Output 2.2: Final design of the marketing campaign.	A documentary on the achievements and the
Output 2.3: Public awareness raising and marketing campaigns implemented in cooperation with relevant public entities and private SWH suppliers and manufacturers.	challenges of the CP and the experiences of the pilot solar thermal systems already installed was presented on Albanian state-owned television (TVSH) on May 10, 2014.
	A SWH-specific website (www.ccalb.org) has been created with high visibility but from 2013, following a corporate decision, the website became part of the UNDP website, albeit losing some visibility. Then, the CP increased efforts with the National Agency of Natural Resources, to support a specific link on solar energy (http://www.akbn.gov.al/energjia-diellore/). As part of the awareness raising strategy of the project, a number of pilot projects were launched, in several social buildings, in collaboration with the State Social Service of Ministry of Labor, Social Affairs and Equal Opportunities. Pilot projects in
	Thethi and at the Orphans House in Tirana were very well received by the media and increased the awareness of local and central governments as well as participants from businesses, NGOs, academia.
	Data from the pilot projects (44 buildings and 73 SWH systems) have been collected and used towards further awareness-raising and training activities as well as towards updating the default values of the SWH calculation software provided by the CP.

Output 2.4: Trained building designers and other key professionals to consider SWH as an option in the design of new buildings and renovation of the existing ones.	The CP has trained more than 712 professionals <sup>11</sup> (architects, engineers, instructors, etc.) over the last five years mainly in respect of the quality of products and their design and integration into new and existing buildings as well as in monitoring and maintenance. Training has also been organized on the community level for the installation, monitoring and maintenance of SWH systems upon the commissioning/ handing over of pilot projects.
Output 2.5: Improved curricula of SWH training courses in relevant academic and technical institutions and vocational schools	A good set of training materials has been developed and integrated in the curriculum/teaching programmes of selected professional schools, after being endorsed by the Ministry of Labor, Social Affairs and Equal Opportunities. Instructors have been trained, necessary equipment is delivered and courses "Repairmen and installers of SWH systems" of 10- 15 students are running three times per year in 6 out of 9 existing VTCs (Vocational Training Center) all over Albania. New courses on SWH have also started in the Harry Fultz Institute in Tirana.

**61.** Outcome 3: Increased demand for SWH systems by the availability of attractive end-user financing mechanisms or other delivery models:

SRF Outputs	Actual outputs delivered:
Output 3.1: Enhanced awareness <sup>12</sup> of the key financial sector stakeholder and local suppliers on the specific characteristics and financing	In cooperation with the Albanian Association of Banks (AAB), several activities have been undertaken such as:
opportunities in the SWH market.	<ul> <li>A round table with representatives of the main financial institutions in Albania and the association of consumers' protection on the financing mechanisms to promote SWH market transformation, held at the premises of the AAB on the 14<sup>th</sup> of July 2011;</li> </ul>
	<ul> <li>A round table on the SWH financing opportunities in the Tourism sector in cooperation with the Procredit Bank and the ATA on the 19<sup>th</sup> of April 2012;</li> </ul>
	<ul> <li>A joint awareness raising activity with Procredit Bank and GIZ (German cooperation) on Solar Energy in the touristic remote village of Thethi on July 2012.</li> </ul>
	In addition, studies <sup>13</sup> and situation analysis reports have been prepared and regular consultations with the commercial banks and representatives of the Tourism and Business associations were conducted to discuss the most feasible support mechanisms based on the findings study of different financial support schemes.

<sup>11</sup> Source: PIR reports

<sup>12</sup> Enhanced awareness is an outcome level results statement.

<sup>13</sup> "The Financial mechanisms feasibility study" carried out by the CP in 2010/2011 which highlighted the main issues and pointed to a large number of recommendations that had not yet been implemented as a result of the lack of co-financing (source: MTE Report 2012)

Output 3.2: Design, financial structuring and implementation arrangements for the specific purpose financing vehicles responding to the specific SWH market needs finalized and agreed with the key stakeholders and integrated into the overall SWH marketing package.	The little progress that has been made towards this output is due to the cancellation of Italy's financial contribution through UNEP and to the delayed co- financing contribution of the MEI (only received in full by the end of 2014) and to the continuous delays affecting the operationalization of the Government EE/RE fund. The CP has provided support to the establishment of the fund through making the sharing of the Slovenian and Croatian Eco-fund experiences possible and through organizing for a number of Albanian decision- makers a study tour in Slovenia and Croatia. The MEI has set aside some budget for the fund which is expected to become operational in Fall 2016. Since February 2016, the CP is assisting MEI in drafting its statute and the Operations manual. As an alternative, the CP established a grant cost- sharing scheme for the implementation of pilot projects within municipalities (which had to contribute in cash or in kind up to 10% of the total project cost). A scheme was also developed to co-finance innovative private projects in the tourism industry. NAMA entitled "Financing mechanism for EE in buildings" was developed to support the implementation of the NEEAP in the Residential, Public and Commercial sectors. It aims at
	promoting EE and RE technologies in buildings including SWH. <sup>14</sup>
Output 3.3: As required, trained SWH supply side stakeholders to effectively operate and/or market the new financing services.	<ul> <li>Training workshop on Testing, Certification and Labelling Schemes of SWH collectors and systems as necessary mechanisms to boost the market, in cooperation with the Solar und Wärmtechnik Stuttgard on the 23-24 October 2012;</li> </ul>
	<ul> <li>Training of the instructors of the vocational training centers to deliver the new curricula developed by the CP "Installer and Repairman of the solar panels", including the possible financial mechanisms to promote the market development for SWH systems and the increased demand for certified installers, repairmen and designers, in Tirana, on May 26, 2012;</li> </ul>
	<ul> <li>A roundtable with representatives of Tirana municipality, local banks and the home owners' association and other citizens to share and discuss on the feasibility study, business plan and elaboration of a supporting financing scheme (developed by the CP) for the rehabilitation of one multi-apartments residential building in Tirana on April 23, 2014;</li> </ul>
	<ul> <li>A roundtable and training of the high representatives of the Tirana Municipality on the Solar Thermal Obligation (STO) (developed by the CP for the specific needs of the Tirana Municipality together with the legal acts to allow for its</li> </ul>

<sup>&</sup>lt;sup>14</sup> EO: Another NAMA: 'Replacing fossil fuels with non-hazardous waste in the Albanian cement industry' was also developed as indicated by UNDP during the evaluation report review process and confirmed by a document 'Third National Communication of the Republic of Albania under the United Nations Framework Convention on Climate Change' (June 2016)

endorsement and implementation on September 25, 2014;
- Training workshops organized at local level in collaboration with OSCE for the presentation of the SWH technologies and their financing mechanisms alongside all south coastal municipalities and communes of Albania (Vlore, Orikum, Himara, Lukova, Saranda, Ksamil, etc.), during May-October 2014 and June 2015;
<ul> <li>Exchange Visit in Madrid and Barcelona, organized during 6-11 of November 2011 (in cooperation with the Spain Solar Association), with the involvement of key stakeholders from different public entities at central and local level, to profit from the experience/lessons learnt applied in Spain and by the Barcelona Municipality;</li> </ul>
<ul> <li>Exchange Visit in Slovenia, organized during 16-19 of June 2014, with the involvement of key stakeholders from different public entities at central and local level, to profit from experience/lessons learnt and financing mechanisms for the promotion of Solar Water Heating technologies of the Slovenian Eco Fund. This is followed by a very intensive work the Project is doing to put into operation the EE/RES Fund, established in Albania as per the new EE law (entered into force November, 2015), by putting together the statute and its operational manual, seen as the major financing mechanism to secure the sustainability of the Project's results;</li> </ul>
<ul> <li>Round tables with the mayors and the technical staffs of a number of Albanian municipalities to share the project's findings on SWH systems benefits and possible financing mechanism before entering into MoUs to jointly piloting the SWH systems in selected public buildings and training of their respective staffs in charge, including training on ToRs preparation and technical specification when the local governments would need to advertise for public procurement of solar systems;</li> </ul>
<ul> <li>Very active participation of the CP in many round tables and other events organized by the developing partners, public institutions (central and local), or civil society advocating for the financing mechanisms for the promotion of the SWH systems, based on the Project's results.</li> </ul>

**62.** Outcome 4: A certification and quality control scheme applicable for Albanian conditions adopted and enhanced capacity of the supply chain to offer products and services promoting sustainable SWH market:

SRF Outputs	Actual outputs delivered:
Output 4.1: Set of SWH standards and an associated	As per UNDP country office, the CP ensured the full
certification and labeling system developed (or	package EU standards in the area of solar thermal
adapted) for Albanian conditions	is adopted in cooperation with the General
	Directory of Standardization <sup>15</sup> . Upon request of the

<sup>&</sup>lt;sup>15</sup> Not met by the Evaluator due to the tight duration of the in-country mission

	domestic solar industry, three of them were provided in Albanian language for the ease of the solar thermal supply chain. The government's decision was made to apply the European Solar Keymark <sup>16</sup> certification scheme following specific studies/recommendations undertaken by the CP and three rounds of wide discussions with the General Directory of Standardization, the Accreditation Directory and the representatives of the SWH supply chain. The CP also required the Solar Keymark certification for the SWH systems acquired in the tenders' procedure (for the demonstration projects) as it was launched. As part of the cooperation with the local governments, this is also recommended to them, when publishing public tenders under their procurements rules as a package with improved specifications for the solar collectors and other necessary equipment to enable installation/monitoring and repair of SWH systems.
Output 4.2: A pilot testing facility to check compliance with adopted standards.	The pilot testing facility has been established at the Harry Fultz Institute through a cooperation programme with the Austria Development Agency (ADA), which, does not fully comply with the EU requirements for the durability test alone. In the circumstances where funds to upgrade it were considerably high (100,000 – 150,000 euros) and the market is still not sufficient in size to enforce the EU standards (still on voluntary basis), the CP decided to use the existing testing facility for pre- testing of solar collectors and other demonstration/ training purposes. However, it has only been used on few occasions and for educational purposes. One single local manufacturer has declared use of the facility from time to time for pre-testing his collectors.
Output 4.3: Technical support to local manufacturers and importers to obtain a certification and to improve their product quality in general.	CP managed to cooperate with Swiss Consortium of INFRAS/Swiss Solar who implemented a two- year program funded by Swiss REPIC as a parallel financing contributing to the Outcome 4 of the CP. Under this cooperation, a series of investigations were undertaken to check the quality of the SWH systems installations in the tourism sector and the tests of locally-produced collectors were carried out at the Solar technology institute (SPF) in Switzerland in the early stages of the CP implementation. The support for the Albanian manufacturers was continued by putting them into contact with the Business Advisory Services project of EBRD and the AIDA (Albanian Investment Development Agency) for possible co-financing opportunities of full testing/certification of solar

<sup>&</sup>lt;sup>16</sup> The Solar Keymark is a voluntary third-party certification mark for solar thermal products, demonstrating to end-users that a product conforms to the relevant European standards and fulfills additional requirements. It was developed by the European Solar Thermal Industry Federation (ESTIF) and CEN (European Committee for Standardisation) in close co-operation with leading European test labs and with the support of the European Commission. It is the main quality label for solar thermal products and is widely spread across the European market and beyond (source: <a href="http://www.estif.org/solarkeymarknew/pressroom/solar-keymark-certification">http://www.estif.org/solarkeymarknew/pressroom/solar-keymark-certification</a>)

	collectors as this technology is qualified as innovative under the above-mentioned institutions' policies.
Output 4.4: A training and recognition system in place for SWH system installers	To date, installers get their training certificates; however, the quality management system is not yet in place for domestic products and producers. Indeed, to qualify for the ISO or Solar Keymark requirements, the production process should be duly documented and archived. The CP has helped in the drafting of the decree (relating the RES law) obliging in the public tenders, the use of certified system designers, installers and imported products.

**63.** Outcome 5: The provided support institutionalized and the results, experiences and lessons learnt documented and disseminated (including monitoring, learning, evaluation and other feedback for adaptive management):

SRF Outputs	Actual outputs delivered:
Output 5.1: The reporting framework and arrangement for the SWH market monitoring established and continuing after the end of the project.	Annual SWH market monitoring was carried out by the CP with the estimation for the penetration rate of the SWH for households, the service and industrial sectors until 2025, with annual updates A governmental initiative was completed in 2013
	which consisted in a one-year monitoring program of electricity consumption for producing hot water in 20 families located in three climatic zones in Albania, as well as the installation of performance monitoring equipment for large solar thermal systems at three different sites in Tirana. This program continued with other sets of families in other areas and in the new pilots installed by the CP in cooperation with local municipalities and for which monitoring equipment is included.
	Pending the enforcement of the RES law which makes it mandatory for all producers and installers to "report the quantity and technical data of the SWH systems - imported, produced or installed - to the AKBN", the market monitoring was done by the CP. To date, it is not yet institutionalized within the Government. It is expected that the new Energy agency, established by the Energy Efficiency law in November 2015 (into operation within 2016 <sup>17</sup> ) will host the monitoring system and take over this task from the CP by the end of 2016.
Output 5.2: An agreed business and financing plan	A charter for the establishment of a local solar
Solar Thermal Industry Association or a similar entity	drafted in 2011 with CP support, shared and
to sustain the required market promotion activities.	discussed in minimum two dedicated round tables with potential members (manufacturers and importers).
Output 5.3: An established Albanian Solar Center, A Solar Thermal Industry Association or a corresponding entity	The idea of establishing such an association never really took off among the supply-side stakeholders due to (i) weak in-country tradition with effective industry associates, and (ii) different viewpoints

<sup>&</sup>lt;sup>17</sup> UNDP comment during the final report review process: The Agency created already by a Governmental Decree of December, 2016 following the new law on Energy Performance in Buildings, endorsed in November, 2016.

	among manufacturers and importers. Therefore, no further project activities have been planned in this direction, following the MTE recommendation.
Output 5.4: Project mid-term and final evaluation.	MTE conducted in June/July 2012. Report dated October 2012 is available.
	TE conducted during April/May 2016
Output 5.5: The project final results and lessons learnt documented and disseminated.	A complete publication « Best Practice from Albanian SWH Project and Solar thermal energy case studies" is under final draft, to be published and launched in September, 2016. A SWH calculation tool/software designed and available on line (http://www.ccalb.org/solar_live/index.php) and further developed as an application for smart phones (https://itunes.apple.com/us/app/solar- app/id792965104?ls=1&mt=8)

**64.** At the time of the interim evaluation, most outputs are or are about to be achieved, based on the indicators developed in the Strategic Result Framework. Some of them (such as output 3.2, output 4.2, output 5.3 for instance) have been reconsidered and adapted given the context that prevailed. Therefore, the CP is overall rated "<u>Satisfactory</u>" (HS) in terms of output achieved or in progress.

## 3.3 Effectiveness (attainment of direct outcomes and likelihood of impact)

#### 3.3.1 Progress towards direct outcomes and intermediate states<sup>18</sup>

**65. Outcome 1: An enabling institutional, legal, and regulatory framework to promote sustainable SWH market.** Although all activities related to the different outputs for this outcome have been addressed, the enforcement of this framework is not yet fully effective. Indeed, the adopted RES law n° 138/2013 is being reviewed by the new government<sup>19</sup> in place. However, according to the UNDP CO, the expected changes will not affect the Solar chapter. Regarding the setting of a specific target for the heat produced by renewable energy by 2020, the CP was asked by the MEI to provide such a target for the National Action Plan on RE sources. The rating of the level of progress towards this outcome is therefore "Satisfactory" (S).

66. Outcome 2: Enhanced awareness and capacity of the targeted end-users and building sector professionals to consider and integrate SWH systems into different types of buildings. Successful efforts were undertaken by the CP to raise awareness and enhance the capacity of decision-makers, professionals and other end-users through the organization of workshops, seminars and training schemes. Implementation of several pilot demonstration projects in particular have proved successful and worthwhile and has been acknowledged by all parties including beneficiaries interviewed throughout the in-country mission. Progress towards Outcome 2 has been the rated as "Highly Satisfactory" (HS).

<sup>&</sup>lt;sup>18</sup> Outcome statements are as per the project document. The analysis considers the direct outcomes and intermediate states as defined in the reconstructed TOC. The criterion has been modified from 'achievement' to 'progress' considering that this is an Interim evaluation.

<sup>&</sup>lt;sup>19</sup> Following the General Elections of June 2013, the new government decided to postpone the implementation of the law and review it in light of new developments (such as the impact of new hydro-producers on electricity end-users price).

**67. Outcome 3: Increased demand for SWH systems by the availability of attractive end-user financing mechanisms or other delivery models.** At the time of the interim evaluation, no much progress has been made with regards to end-user financing mechanism for the reasons already stated (refer to explanation in output 3.2 above), with the exception of the set-up of an investment cost-sharing small grants programme benefiting municipalities for pilot project financing. However, demand<sup>20</sup> in respect of SWH systems<sup>21</sup> in the residential and services sectors has increased for a number of other reasons other than the availability of a financing mechanism. This could indicate that, at least up until now, there has been no need for a financial mechanism to invest in SWH. Therefore, the rating of the level of success of this outcome is "Moderately Satisfactory" (MS) based on the originally planned outputs and activities and because the demand has indeed increased but thanks to the subsidies provided by the CP.

**68. Outcome 4: A certification and quality control scheme applicable for Albanian conditions adopted and enhanced capacity of the supply chain to offer products and services promoting sustainable SWH market.** The certification system for installers is still pending, waiting for the enforcement of the RES law and its secondary legislation. However, capacity of installers has been increased and enhanced thanks to the trainings provided. In addition, the enforcement of the European Solar Keymark for SWH systems which has been adopted as a national system is also contributing to the development of the SWH market in Albania. The level of progress towards outcome 4 is rated "<u>Satisfactory</u>" (S).

69. Outcome 5: The provided support institutionalized and the results, experiences and lessons learnt documented and disseminated (including monitoring, learning, evaluation and other feedback for adaptive management). At the time of the interim evaluation, the SWH market monitoring is still performed by the CP team. But there are positive signals that it will be institutionalized within AKBN as planned; the agency will take over the CP this task, and that the finalization and implementation of a concrete monitoring, verification and reporting (MVR) plan and system (requested already by the project's mid-term review, will be adequately addressed for all projects supported with project funding (whether GEF or Government co-financing). Otherwise, the project of establishing a local solar thermal association has been abandoned due to the lack of interest and to the diverging viewpoints among the main concerned stakeholders. However, with regards to documentation and dissemination of results, experiences and lessons learnt, the CP helped in the design of a SWH calculation tool/software and a complete publication "Best Practice from Albanian SWH Project and Solar thermal energy case studies" is under final draft, to be published and launched in September, 2016. Given the results achieved at this point of the CP implementation, the progress towards this outcome is rated "Moderately Satisfactory" (MS).

70. Overall progress towards achieving the direct outcomes is rated "<u>Satisfactory</u>" (S)

#### 3.3.2 Likelihood of impact of the CP

**71.** At the stage of this interim evaluation, the SWH market in Albania could be characterized as being an emerging market. Indeed, the "seeds have been planted" by the CP and all the ingredients are available to promote a sustainable development: the institutional, legal and regulatory framework has been designed and it is expected to be functional very soon; SWH systems have been tested in different types of buildings and should be replicated and up scaled: recently, the Ministry of Social Welfare and Youth installed SWH systems in three social institutions on its own budget, replicating what was done through the CP in a number of social institutions throughout the country; As per the private sector, the demand for SWH systems has been increased from the Hotel sector. End-users' demand has increased during the project implementation but there is still a large margin for

<sup>&</sup>lt;sup>20</sup> Measured by the continuous market monitoring carried out by the CP team

 $<sup>^{21}</sup>$  the SWH penetration rate (number of m<sup>2</sup> for 1,000 inhabitants) since the start of the CP, which has increased from 17.9 in 2009 to 62.5 in 2015 (source: CP team)

expanding it to other segments/sectors; the adoption of the European solar keymark system ensures the product quality but the certification of the installers is still pending. Curricula and training programmes on SWH related issues have been developed and implemented in most professional institutions but according to feedback received from one VTC visited during the in-country mission, a large number of these trained students either remained unemployed or emigrated abroad. Data collection and performance monitoring are currently done by the CP team and are not yet institutionalized although they are critical for the sustainability of the results.

**72.** Referring to the reconstructed TOC diagram, all outcomes are contributing to the long-term outcome expected that is "the SWH markets successfully developed", however, unevenly. Some of them have reached the intermediate state level. It is interesting to note that the intermediate state of direct outcome 3 has been achieved although no financial mechanism has been put in place to promote the demand during the implementation phase apart from the grant cost-sharing scheme with a large number of municipalities.

**73.** In the case of Albania, the SWH market has been successfully developed for the residential and the services sectors where the highest potential is. Demonstration projects and other awareness-raising activities as well as subsidies provided by the CP were crucial for this development. In addition, it is very likely that the ongoing EU integration process and the government measures aiming at raising the price of electricity and at enforcing electricity bill payment discipline were strong drivers too.

**74.** Regarding the impact level, at the end of 2015, the cumulative solar collector area was 176,010 m<sup>2</sup>. Considering the GEF grid emission factor for Albania (EF = 0.4631 [kg CO<sup>2</sup>/kWh]), the avoided CO<sup>2</sup> emissions for the lifetime of the collectors will be over 700,000 ton CO<sup>2</sup>. Taking into account the solar collector area to be installed by 2020, the expected target (800,000 tons of CO2eq) will be largely achieved by 2020<sup>22</sup>.

**75.** At the national level, the 176.010  $m^2$  of solar collector area corresponds to 123 MW new fossil fuel power capacity avoided or 1,518 GWh of electricity savings<sup>23</sup>.

**76.** In addition, it is very likely that the CP will contribute to other collateral effects such as the increase in the quality of life of the population. Indeed, testimonies received during the evaluation mission, showed that the success of the demonstration projects in the public social institutions (kindergartens, orphanages, etc.) that have benefitted directly from the CP, has created an additional demand in other institutions. For those institutions that had no access to hot water before, the comfort of the children has been increased and the working conditions of the employees enhanced. For others, a decrease in the energy or electricity bills have been noticed.

77. Likelihood of impact is rated "<u>Likely</u>" (L).

#### 3.3.3 Achievement of the formal CP objective

- **78.** According to the ProDoc, the key indicators of the success of the CP are as follow:
  - The target of 75,000 m<sup>2</sup> new installed SWH capacity reached by the end of the evaluation period;

<sup>&</sup>lt;sup>22</sup> Source: CP team

<sup>&</sup>lt;sup>23</sup> Source: CP team

- An annual sale of 20,000 m<sup>2</sup> reached by the end of the evaluation period with a growing trend at the average rate of 20% per year to reach the stated longer term goal of 520,000 m<sup>2</sup> of installed capacity by 2020;
- The adoption of a national system for adequate product standards, labelling and quality control scheme, to the extent possible harmonized with international schemes such as CEN/GENELEC "Solar Keymark" supported by the EU;
- An Enhanced capacity of the supply chain to offer their products and services and verified customer satisfaction
- **79.** At the stage of the interim evaluation, the CP has achieved most of the stated targets.

**80.** Data provided by the UNDP Country Office, which are an extract of the market monitoring notes are summarized in the table below.

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Annual newly installed m <sup>2</sup>	8,200	2,500	2,700	7,800	4,600	19,814	20,506	21,200	20,105	22,910	21,025
Accumulativ e installed area m <sup>2</sup>	32,800	35,300	38,000	45,800	50,400	70,214	90,720	111,92 0	132,02 5	154,93 5	176,01 0
Growth rate/ previous year in %					10%	39%	29%	23%	18%	17%	14%
Penetration rate in m <sup>2/</sup> 1,000 inhabitants	11.6			16.3	17.9	24.9	32.2	39.7	46.9	55	62.5

#### Table 1: Market monitoring data

Source: UNDP Albania

**81.** According to the above table, over the 2009-2014 CP implementation period, a cumulative area of 109,135 m<sup>2</sup> of newly installed collectors has been achieved, exceeding by far the expected 75,000 m<sup>2</sup> target. In addition, it is noticeable that the other target of 20,000 m<sup>2</sup> of annual SWH installations was already reached in 2011 that is within the second year of the CP implementation, while the set chronological objective was for 2014.

**82.** The average growth rate of the SWH market is around 23% over the period 2009-2015. However, a peak in growth is noticeable in 2010 followed since by a decreasing trend.

**83.** The decision was taken by the Government of Albania to apply the European Solar Keymark certification scheme for the SWH systems instead of developing their own national system. With regards to the installers certification system, its establishment is still pending.

**84.** Enhanced capacity through the setup of national SWH standards and a product certification scheme as well as access to testing facilities, training for current and future installers were provided by the CP.

**85.** With regards to customer satisfaction on the purchased SWH systems, no client survey has been undertaken to date.

## 86. Achievement of the formal CP objectives is rated "Satisfactory".

## 3.4 Sustainability and replication

**87.** The CP has planted the seeds of the market transformation of SWH in Albania and expected targets have been quite easily achieved. However, a number of issues are still not fully solved and challenges to its sustainability still remain.

**88.** The socio-political sustainability could seem to be not guaranteed at the time of the interim evaluation because the current government has put on hold the RES Law adopted in 2013. However, according to the UNDP CO, the chapter relating solar energy is not concerned by the questioning. In addition, the government of Albania is keeping on with its reforms (revising the electricity tariffs, fighting against the illegal connections to the grid and the unpaid electricity bills whose rate has passed in a few years, from 43% to 25% in 2016). This has contributed a lot to a change in the mentality and pushed people to seek an alternative and turn to SWH. (rating of socio-political aspects: Likely.)

**89.** Financial resources are an issue due in particular to the lack of a financial mechanism to support the development of SWH in other economic segments of the society (collective SWHs, industrial and services sectors in particular the tourism sector where there is an interesting niche). It is useful to recall that the demand for SWH systems in Albania has mainly increased due to the availability of subsidies through the CP. The EE/RE funds which is supposed to bring the solution is to date not in operation. The interest of other donors located in Albania that resulted in the mobilization of additional funds. According to the MEI, a budget has been set aside for this purpose and the fund is expected to become operational in fall 2016 (rating of financial aspects: Likely).

**90.** There is a risk of lack of institutionalization of the knowledge developed by the CP, for instance for the SWH data monitoring and the website as well as a high risk of loss of the skills and competencies acquired by the CP team if its human resources are not integrated in the relevant governmental institutions after the project's completion (rating of institutional set up: Moderately Likely)<sup>24</sup>.

**91.** The environmental sustainability will be achieved if the other categories of sustainability seen previously are also ensured. Therefore, it is very dependent on the others (rating of environmental aspects: Likely).

**92.** In terms of the project's catalytic role and replication, the success achieved by the demonstration projects has generated an additional demand by the public institutions. Therefore, the market is very likely to benefit from it, if a financial mechanism is rapidly established, given that the market growth of SWH experienced by Albania was mainly due to the subsidies provided by the CP and if the legal framework is maintained and enforced (rating of the catalytic role and replication aspects: Satisfactory).

**93.** In the light of the above, the sustainability is rated "<u>Moderately Likely</u>"(ML)<sup>25</sup>. It is expected that the continuation (for an extended period of two years, until the end of 2017) of the CP upon the

<sup>&</sup>lt;sup>24</sup> Evaluation rating of "Moderately Likely" is based on the situation during the evaluation period looking at the status of the project in the end of 2015 (as per the TOR), and information available during country which was conducted in April 2016. As per the information received from UNDP (March 2017): "A recent Agency on Energy Efficiency is created end of 2016 as per the provisions of the new Energy Performance in Buildings law (endorsed on November, 2016), so I don't see any risk of lack of institutionalization." Evaluation Office notes that the situation might have changed towards more favourable sustainability rating of the Albanian country component. Nevertheless considering the evaluation period the rating remains as MS.

<sup>&</sup>lt;sup>25</sup> TOR: Ratings on sustainability. All the dimensions of sustainability are deemed critical. Therefore, the overall rating for sustainability will be the lowest rating on the separate dimensions. EO: Evaluation rating of "Moderately Likely (MS)" is based on the MS rating of 'institutional sustainability' (see footnote 24 for details).

completion of the payment of the government cost-sharing procedure will allow the CP to concentrate on the remaining tasks and on consolidating the present achievements.

## 3.5 Efficiency

**94.** According to UNDP reporting, the GEF funding contribution was fully delivered at the end of 2015 as planned. However, the lack of the USD 1,000,000 contribution that was supposed to be provided by the Government of Italy via UNEP never materialized and impacted the transfer of the Government cost-sharing which was therefore also delayed. After having transferred a first tranche equivalent to 8% of its commitment, the Government of Albania only transferred the remaining amount (USD 518,000) in 2014. As a consequence, a 2-year project extension was required to carry out the remaining foreseen activities.

**95.** Despite this obstacle, the CP team attempted to bring the project as far as possible in achieving its results. It has demonstrated a great flexibility and adaptation in facilitating the establishment of a grant cost-sharing scheme for the implementation of pilot projects within municipalities (which had to contribute in cash or in kind up to 10% of the total project cost) but also to allow for the co-financing of innovative private projects in the tourism industry.

**96.** In terms of efficiency at the stage of the interim evaluation, and given the reasons cited above for which the CP team cannot be accountable, the CP is rated "<u>Satisfactory</u>" (S).

## **3.6 Factors affecting performance**

#### 3.6.1 Preparation and readiness

**97.** The CP was initially designed as a stand-alone UNDP/GEF project in 2005 and was later included in the Global SWH initiative. The first project document was revised to fit into the new proposed one. The delays in starting the CP have impacted the market dynamics at first but this was rapidly overcome when the CP actually started.

**98.** The design of the CP did not specify activities related to outreach of UNEP Knowledge Management and Networking component to the CP. They came too late and only few of them were implemented. The feedbacks received from the CP team suggested that there had not been enough support from the UNEP/GSWH programme. In addition, the design did not address either Gender or HRBA issues.

**99.** Overall, the CP preparation and readiness was "<u>Moderately Satisfactory</u>" (MS).

#### 3.6.2 **Project implementation and management**

**100.** At the country level the CP implementation and management was well supported and coordinated through the CP team whose role in adapting to constraints encountered in particular was well praised by the persons met during the interviews. In terms of the implementation arrangements between UNEP and UNDP it seems that there was certain lack of proactivity and responsiveness during the project is shared among both parties<sup>26</sup>. The CP was initially planned to be a stand-alone project and was then revised to be considered part of the global project which might have influenced these factors.

**101.** The CP's performance in implementation and management is rated "<u>Satisfactory</u>" (S).

<sup>&</sup>lt;sup>26</sup> EO: nevertheless during the evaluation report review process, the UNDP team highlighted strongly their willingness to cooperated with the knowledge management component

#### 3.6.3 Stakeholder participation, cooperation and partnerships

**102.** The main public and private stakeholders have been listed in the ProDoc and their general responsibilities defined. During the CP design stage, "extensive stakeholders' consultations" occurred and are mentioned several times in the project document as a means to ensure the CP's success and mitigate the identified risks. During the implementation phase, several line ministries such as the MEI, the Ministry in charge of the Environment, the Ministry of Labor, Social Affairs and Equal Opportunities, the Ministry of Public Works and Transport and the Ministry of Finance have been gathered in various roundtable discussions, not only in development of various outputs but also in coherent cross-sector decision making processes.

**103.** Cooperation with the private sector has been encouraged with the development of new networks. "Business to Business" meetings were organized in cooperation with the "Unioncamere Puglia Selia Tirana", involving Italian and Albanian businesses in November 2012 (60 participants attended) and on March 2013, in Tirana, under the project's global component, UNEP/DTIE organized the "Regional workshop and B2B meetings for the Transformation and Strengthening of the Solar Water Heating Market in the Mediterranean region and several Balkan countries". The regional workshop was organized by UNEP in cooperation with the Observatoire Méditerranéen de l'Energie (OME) and the UNDP Office in Albania under the auspices of the Ministry of Economy and Industry (MEI) with more than 40 participants from Albania and the Mediterranean region. The workshop was positively evaluated by the participants and created a platform for cooperation among the policy-makers, experts, and local businesses in the Mediterranean region. Following this event, two of the Albanian importers/manufacturers entered into agreements with a Solar Keymark Certified Macedonian Company. Nevertheless the mechanisms for information sharing and cooperation between UNEP and UNDP were limited to one meeting and available materials on web-page.

**104.** Given the very good cooperation with the government of Albania and the professional support provided, the UNDP CO and the CP were asked to further assist the MEI, the National Housing Agency to develop the National Action Plan on Renewable Energies to fulfill Albania's obligation as a party to the Energy Treaty, to revise and prepare accordingly for the amendment of the law on RES, get the EE/RE funds operational, assist with the design of the very first low energy- low cost social building in Albania and with the Strategic Environment assessment for the small hydro power plants.

As per the cooperation with other donors, a one-week certified training of the Architects and 105. the implementation of pilot projects/ installation of SWH systems in the Alpine area of Thethi were organized with the GIZ; the Italian Foundation "CELIM" has replicated the CP results and equipped with SWH systems as well as delivered training courses for the development of SWH training curricula in the vocational training centres in Shkodra, Vlora, Korca; A two-year joint programme focused on capacity building in the field of testing and quality management on the supply side of Solar Water Heating systems in Albania was implemented (started in 2011) by a consortium of Swisssolar (Schweizerischer Fachverband für Sonnenenergie), SPF (Institut für Solartechnik SPF Hochschule für Technik HSR) and INFRAS, supported by REPIC (founded as a new interdepartmental platform for the promotion of renewable. energy and energy efficiency in international cooperation by the Swiss State Secretariat for Economic Affairs (SECO), the Swiss Agency for Development and Cooperation (SDC), the Swiss Federal Office for the Environment (FOEN) and the Swiss Federal Office of Energy (SFOE). The programme was designed to provide direct assistance to the Albanian Solar Water Heating Programme through a Swiss project referred to as the "Market Transformation for Solar Water Heating in Albania".

**106.** Stakeholder participation, cooperation and partnership is "<u>Satisfactory</u>" (S).

#### 3.6.4 Communication and public awareness

**107.** There is a unanimous view among the stakeholders that the CP has played an essential role in raising awareness of the multiple stakeholders including the population who had little motivation to invest in renewable energy and energy efficiency technologies, due to the high subsidization of

electricity, the relatively high rate of illegal connections to the grid and the unpaid electricity bills as well as the limited standard of living of the majority of the population (minimum income is 150 Euros/month).

**108.** The effectiveness of the CP's outreach activities, in particular the demonstration projects that can be considered a powerful tool, significantly contributed to the SWH market development.

**109.** As a consequence, the CP's performance in ensuring communication and public awareness is rated "<u>Highly Satisfactory</u>" (HS).

#### 3.6.5 Country ownership and driven-ness

**110.** At the start of the CP, the reforms conducted by the government of Albania as well as the complete legal framework developed (the National Energy Strategy over 2016-2020, the RES law, Renewable Energy and Energy Efficiency action plans, etc.) showed a strong political willingness. In addition, the EU accession process and the need to comply with EU Environment directives have been strong drivers. According to the UNDP CO, the wish of the new elected government to review the adopted legal framework does not concern the solar chapter and cannot be considered as a political shift.

**111.** Country ownership and driven-ness is rated "<u>Satisfactory</u>" (S).

#### **3.6.6** Financial planning and management

**112.** The GEF funding has been disbursed on target and managed as per expectations and in accordance with UNDP procedures. However, the CP disbursement pace was late on the planned calendar due to the co-financing issues: after having transferred one tranche equivalent to 8% of its commitment, the Government of Albania transferred the remaining cost-sharing amount only in 2014. In addition, the Italian commitment of 1 million of USD which was supposed to transit via UNEP to finance soft loans aimed at purchasing SWH equipment made in Italy was never materialized.

**113.** Based on figures provided by the CDRs and the corresponding annual CP GEF budgets, the annual delivery rates were erratic. The average rate over the CP implementation period (until end of 2015) is about 60% (Planned project budget at approval was USD 2,105,000 and total expenditures reported as of [December 30, 2015] were USD 1,330,710.64).

	2009	2010	2011	2012	2013	2014	2015
Annual budgets USD	36,000	336,000	443,085	478,134	309,309	271,964	267,600
Annual Expenditures USD	14,154.14	242,576.47	294,231.10	230,430.53	233,775.17	239,903.08	75,439.95
Delivery rate	39	72	66	48	76	88	28

#### Table 2: Annual budget and expenditure

Sources: UNDP AWPs, UNDP CDRs

#### **114.** The financial management is rated "<u>Satisfactory</u>" (S)

#### 3.6.7 Supervision, guidance and technical backstopping

**115.** The UNDP Country office is the executing agency with responsibility for supervision of the quality and timeliness of project execution. The most obvious inputs of the UNDP CO were its leading role in the steering committee meetings and its advocacy role for Res, including solar in several and

different fora. The contribution of the UNDP CO's Communication unit to enlarge the visibility of the CP's results is to be highlighted too.

**116.** The UNEP DTIE was the co-executing agency with responsibility for global project management, monitoring and progress reporting, technical assistance including financial instruments as well as for the Knowledge Management component.

**117.** During the interviews conducted for the evaluation mission, no one seemed to be aware of the role of UNEP in the SWH initiative nor in the production of knowledge products.

**118.** Regarding the link with the KM and Networking component of the umbrella UNEP GSWH project which has been often referred to in the CP document, in practice, the CP has been operating as if it were a stand-alone project. It is nevertheless true that responsibilities and specific roles between UNEP and UNDP have never been clearly defined in the project document. According to the CP team, there has been several missed opportunities to collaborate with UNEP and actual collaboration had rather tended to be limited to problem-solving administrative issues.

**119.** However, the CP team is regularly consulting the website "<u>www.solarthermalworld.org</u>" to check the latest information on SWH market developments and legislation to promote the market increase. In one or two cases, the team was asked to post some articles on SWH market development in Albania. As other countries, they are using the SWH TechScope Readiness Assessment tool and Albania's report will be ready by September 2016.

**120.** UNDP and UNEP guidance and backstopping were respectively "Satisfactory"  $(S)^{27}$  and "Moderately Satisfactory" (MS).

## 3.6.8 Monitoring and Evaluation

**121.** An indicative Monitoring and Evaluation plan and corresponding budget has been developed during the design phase. Activities have been listed with responsible parties and timeframe.

**122.** In line with the project document, a mid-term review was completed in 2012 by an external and independent consultant recruited by the UNDP Albania Country Office. Other M&E requirements were also completed by the CP team such as the project inception report (February 2010), the annual activities progress reports and the GEF Project Implementation Reviews (PIRs) which were also reviewed by the UNDP GEF regional team prior to be sent to the global team (UNEP). Regular visits to the pilot projects were also organized. The CP went as well through monthly/quarterly and yearly reporting as per the needs of the MEI and the Ministry of Environment, on technical related activities and financial indicators against the endorsed annual plans.

**123.** However, there is no evidence that the indicators originally defined in the Strategic Results framework were used or have been re-defined. These indicators were not SMART and as such were not easy to use for an effective monitoring of the project performance: annual activities reports include a list of activities/outputs achieved and/or issues identified according to each of the 5 outcomes.

**124.** With regards to SWH data in line with the CP targets, a market monitoring was regularly done and is still carried out by the CP team.

<sup>&</sup>lt;sup>27</sup> Country program rating thus 'Satisfactory'

**125.** M&E planning and M&E plan implementation are both rated "<u>Satisfactory</u>" (S) except as regards indicators design and use.

## 4 CONCLUSIONS, RECOMMENDATIONS AND LESSONS

#### 4.1 Conclusions

**126.** Today, the SWH market in Albania could be safely described as being an emerging market. It steadily developed since 2009 at an average growth rate of 25% between 2009 and 2015, thanks to the CP which has boosted it by addressing various issues that were barriers to progress, such as the lack of awareness and information as well as the technical know-how.

**127.** According to the evaluation interviews, there is still a large room/margin for the SWH market expansion (to date, no more than 10% of the Residential and Services sectors has been targeted) if limiting factors are all well and rapidly addressed.

**128.** Strong signals have been the series of reforms undertaken by the government (measures to reduce unpaid electricity bills, increase in the electricity tariffs) and the EU integration process.

**129.** UNDP was a key player in the field of SWH in Albania (see paragraphs 104 and 105 above). The CP has become a reference in the donor community. EU and the German cooperation for instance are building upon the results achieved and are financing other initiatives.

**130.** To date the CP's most cited achievements are 1) raising of the awareness and of the interest of all the stakeholders including the decision makers, in particular thanks to the demonstration projects 2) the pivotal role of the CP team in inter-linking all national players and in ensuring effective communication channels between all parties, 3) The interest of other donors located in Albania that resulted in the mobilization of additional funds.

**131.** However, sustainability of the results to date is not ensured if the remaining issues that have been identified are not addressed, namely the enforcement of the RES law, the issue of quality/certification of the equipment and the installers, the delay in operating the financial mechanism and the lack of institutionalization of the support provided so far. The project extension until 2017 is an opportunity to address these issues.

**132.** Regarding the link with the Knowledge management and networking component of the umbrella UNEP GSWH project which has been often referred to in the project document, in practice, the CP has been operating as if it was a stand-alone project. Roles and responsibilities of UNEP and UNDP have never been clearly explained, which has resulted in several missed opportunities of collaboration.

Criterion	Overall Rating
A. Strategic relevance	S
B. Achievement of outputs	S
C. Effectiveness: Attainment of objectives and planned results	S
1. Progress towards direct outcomes as defined in the reconstructed TOC	S
2. Likelihood of impact	L

Table 4: Summary of Evaluation Ratings

Criterion	Overall Rating
3. Achievement of formal project objectives as presented in the Project Document.	S
D. Sustainability and replication	ML <sup>28</sup>
1. Socio-political sustainability	L
2. Financial resources	L
3. Institutional framework	ML <sup>29</sup>
4. Environmental sustainability	L
5. Catalytic role and replication	S
E. Efficiency	S
F. Factors affecting project performance	
1. Preparation and readiness	MS
2. Project implementation and management	S
3. Stakeholders participation, cooperation and partnerships	S
4. Communication and public awareness	HS
5. Country ownership and driven-ness	S
6. Financial planning and management	S
7. Supervision, guidance and technical backstopping <sup>30</sup>	S
8. Monitoring and evaluation	S
i. M&E design	S
ii. M&E plan implementation	S
Overall project rating	S

#### 4.2 **Recommendations**

**133.** Albania needs to take advantage of the two-year extension obtained to sustain its efforts to consolidate the results achieved by the CP to date:

To the CP team:

- The CP team should be persistent and advocate solving issues still outstanding with the concerned stakeholders in order to underpin the SWH market, in particular for the enforcement of the RES law, the operationalization of the EE/RE fund, the establishment of quality standards and certification schemes, the latter playing a critical role towards guaranteeing good quality products and competent installations for the consumers as well as for developing maintenance-oriented work.
- In order for the government to justify efforts to develop a SWH financial mechanism to allow access to SWH technology for those households and commercial establishments who are currently out of reach, it would be interesting to launch within the framework of the CP, a study to collect information and calculate the opportunity cost to the SWH

<sup>&</sup>lt;sup>28</sup> TOR: Ratings on sustainability. All the dimensions of sustainability are deemed critical. Therefore, the overall rating for sustainability will be the lowest rating on the separate dimensions. EO: Evaluation rating of "Moderately Likely (MS)" is based on the MS rating of 'institutional sustainability' (see footnote 29 for details).

<sup>&</sup>lt;sup>29</sup> Evaluation rating of "Moderately Likely" is based on the situation during the evaluation period looking at the status of the project in the end of 2015 (as per the TOR), and information available during country which was conducted in April 2016. As per the information received from UNDP (March 2017): "A recent Agency on Energy Efficiency is created end of 2016 as per the provisions of the new Energy Performance in Buildings law (endorsed on November, 2016), so I don't see any risk of lack of institutionalization." Evaluation Office notes that the situation might have changed towards more favourable sustainability rating of the Albanian country component. Nevertheless considering the evaluation period the rating remains as MS.

<sup>&</sup>lt;sup>30</sup> Only country level rating considered here

sector of not having a financial mechanism. This could be proposed by the CP team during the next project steering committee meeting.

• Annual surveys in collaboration with the VTCs and professional schools should also include the follow-up of what the trained students have become.

#### To the Albanian Government:

- The MEI should continue to push for reforms in the domain of electricity, in particular in respect of the removal of the heavy subsidies in the electricity sector
- The MEI and other relevant stakeholders should develop promising market segments such as the collective SWHs in new and retrofitted buildings, hotels, industry to contribute to the market sustainability

#### To UNEP/UNDP:

- With regard to joint UNDP/UNEP initiatives, roles and responsibilities must be clearly defined at the level of the project's design and further coordination is needed between the two UN agencies during implementation.
- For such types of UNEP- UNDP projects/programmes, the adoption of an approach that brings together geographically close countries (in the Balkan region) might bring benefits in terms of experience-sharing for trouble-shooting, collaboration and trade opportunities.
- UNEP must plan activities so that its visibility is ensured at the national level, in close collaboration with the co-implementing agencies (UNDP).

#### 4.3 Lessons learned

- In the context of Albania, demonstration projects were of critical importance for raising awareness of decision-makers and potential end-users. This helped boosting the SWH market. On the other hand, it has created a lot of expectations (among end-users) and if not addressed this will have an adverse effect on the market development. There is a need to establish mechanisms to respond to the additional demand generated (essentially financial).
- Once the market development has indicated effective results in volume of products produced and installed, the issue of the quality of the products, of the systems, and of the competence of the installation arises, which if not rapidly attended to, could put market development at risk.
- "Things don't work on programmes only but on people" (the SWH initiative is a good example to illustrate this; despite the many constraints it had to face, it managed to achieve its planned targets). Therefore, it is very important to identify the appropriate human resources both for the project team and the counterparts.

## ANNEX I. LIST OF THE PERSONS MET

#### <u>UNDP</u>:

Ms Elvita Kabashi, Environment Officer

#### Project team:

Ms Mirela Kamberi Mr Dritan Profka, Technical assistant on SWH, Climate Change Programme

#### **GOVERNMENT:**

#### **Ministry of Energy and Industry:**

Mr Alfred Bundo, Director of EU integration and projects Mr Agim Bregasi, Director of Electro energy policies

National Agency for Natural Resources (AKBN) Mr Artan Leskoviku

**Ministry of Social Welfare and youth** Ms Elida Leskaj, Deputy General Director of State Social services

National Housing Agency Ms Doris Andoni, General Director

#### **MUNICIPALITIES:**

**Municipality of Elbasan** Mr Klevis Xhoxhi, Deputy Mayor

#### ACADEMIA:

Tirana Politech University, Architecture Faculty Mr Gjergj Islami

Harry Fultz Institute Mr Arian Kapedani

**Durres Vocational training center** Mr Fatmir Munguli

#### PRIVATE SECTOR:

Mr Artan Dersha, SWH systems developer Mr Marko Hoxhallari, Solar systems Selling company Mr Mihal Sila, Solar systems producer Mr Martin Gjonaj, Director Hotel Theranda

CIVIL SOCIETY:

Ms Matilda Naco, Albanian Tourism Association

## ANNEX II. LIST OF THE DOCUMENTS CONSULTED

- MEI, "SUMMARY THE NATIONAL STRATEGY OF ENERGY AND PLAN OF ACTION", April 2005 (update)
- Albania-EU Energy Efficiency Center, Newsletter n° 35, June 2006
- UNDP "minutes of the LPAC meeting" September 2008
- UNDP, "The Country Programme of Albania under the Global Solar Water Heating Market Transformation and Strengthening Initiative (PIMS 3611), project document, September 2009
- UNDP "Albania Project Inception Report", February 2010
- UNDP, Adrian Dabulla, financial expert, "Report on the feasibility of recommended financial mechanisms, January 2011
- UNDP activities reports 2011-2012
- Albania-EU Energy Efficiency Center, Dr Edmond Hido, "Country Report: Albania" Quality Assurance in Solar Heating and Cooling Technology, March 2012
- Albania-EU Energy Efficiency Center, Newsletter n° 56, March 2012
- INFRAS/Swissolar "Market transformation for SWH in Albania", final report, August 2012
- UNDP, Louis-Philippe Lavoie, Mid-Term Evaluation report, October 2012
- UNEP/UNDP Regional workshop and B2B meetings, Mirela Kamberi, SWH project coordinator "General description and results achieved to date", March 2013
- UNDP "Solar Thermal Obligations for Public Buildings in the Municipality of Tirana", September 2013
- UNDP/GEF, "SWH project exit strategy", October 2014
- UNDP "Updated data on the installed SWH area" April 2016
- Annual Work plans 2009-2015
- Combined Delivery Reports 2009 2015
- Progress reports 2010 2015
- SC meeting minutes of July 22, 2015

## ANNEX III. QUESTIONNAIRE USED

Name and Organization:

#### General questions:

- How have you been involved in the SWH project?
- From your point of view, what are the main achievements of the project?
- What did the project bring to you professionally speaking?
- Generally speaking, can we say that there is now a real dynamic market for SWH in Albania? Why? What are the main drivers according to you?
- Has fossil fuels imports decreased?
- What are the main benefits resulting from the project? At national and global levels?
- Do you think that without the project, the situation would have been the same? In other words, what can be specifically attributed to the project? Are there other contributors according to you?
- What was the UNDP added value? UNEP added value? Are you aware of the KM component? Have heard about the regional workshops? The regional partners?
- What are the main factors of success? Which components of the project were the most useful according to you?
- What were the weaknesses of this project? At the design stage? During implementation?
- Do you think that results achieved will last? If yes, why? If no, why and what should be (have been) done?
- How do you continue to promote the SWH market?

#### Specific questions:

To UNDP CO and project team:

- Updated data on installed collector areas and annual sales as well as the number of private companies in this industrial segment
- Data on the budget disbursements
- Information on GHG emissions reduction calculation methodology
- Is the database for monitoring the project impacts in place?
- Examples of adaptive management adopted (if any) to face constraints
- When was the last market survey undertaken? Marketing campaigns?
- Has the delay in providing the co-financing impacted the project? How?
- Update on the financial services or mechanisms put in place by the project?
- What was the financial contribution of the private sector?
- What is the current status of the SWH quality control system? the certification mechanism? The recognition system to be put in place?
- What is the status of the testing facility?
- 3. <u>To all:</u>
  - Does the fact that the target for annual sales was already achieved at the end of 2011 mean that the trend was underestimated during the design phase?
  - Was the EU integration process a driver for SWH development in Albania?

- Why was the industrial sector somehow neglected? What about now, don't you think it is a promising sector that should be targeted?
- Is the new law on RE enforced? Have the needed secondary regulations been approved?
- Do you think that you have been enough involved/informed in/by the project?
- What is the current status/situation of the solar thermal industry association?
- How and what was the collaboration with the local authorities (in particular with the municipality of Tirana)? What is the situation now? What are the main achievements?
- Since the completion of the project, are there already some examples of upscaling, replication going on or planned?
- What is the situation in terms of financial support mechanisms? So far, it was not needed, what about the future? What about the industrial sector?
- What was the quality and the usefulness of the technical backstopping provided by the knowledge management component of the global SWH project and the regional partners?
- Do you have recommendations for such projects? For their sustainability?

## ANNEX IV. AGENDA FOR THE IN-COUNTRY MISSION

Day	Date	Time	Type of event	Participants	
Mon		14:20	Arrival to Tirana	Nadia Bechraoui	
		09:30	Meeting with the UNDP Environment Officer	Nadia Bechraoui, Elvita Kabashi	
		10:15	Meeting with SWH Project Coordinator and staff	Nadia Bechraoui, Mirela Kamberi, Dritan Profka, experts	
		12:00	Meeting with Project Director/Director of Projects and EU Integration at MEI	Nadia Bechraoui, Alfred Bundo	
		12:30	Meeting with the Director of Energy Policy at Ministry of Energy and Industry	Nadia Bechraoui, Agim Bregasi	
		14:00	Meeting with the Director of Social State Service	Nadia Bechraoui, Lida Leskaj	
Tue		14:45	Meeting with Project Board members, National Agency for Natural Resources	Nadia Bechraoui, Artan Leskoviku	
		15:30	Meeting with the Director of National Housing Agency	Nadia Bechraoui, Doris Andoni	
		16:15	Meeting with the Deputy Dean of Architecture Faculty, Tirana Politech University	Nadia Bechraoui, Gjergj Islami	
		17:00	SWH systems developers	Nadia Bechraoui, Artan Dersha, Dritan Profka	
		17:30	Meeting with producers' company selling solar systems_TermoTirana	Nadia Bechraoui, Mihal Sila	
		09:00	Meeting with the deputy mayor of Elbasani Municipality	Nadia Bechraoui, Klevis Xhoxhi	
		09:45	Field Visit, Kindergarten No.5 in Elbasan	Nadia Bechraoui, Dritan Profka	
		11:00	Meeting with Representative of vocational training center, Durres	Nadia Bechraoui, Fatmir Munguli	
	06 4 0016	12:15	Visit by the Albanian Solar Test Centre at the Harry Fultz Institute	Nadia Bechraoui, Arian Kapedani	
Wed		14:00	Field visit by Kindergarten No.50 in Tirana	Nadia Bechraoui, Dritan Profka	
wed	00 Apr 2010	15:00	Field visit by the Orphans House in Tirana	Nadia Bechraoui, Dritan Profka	
		15:45	Meeting with Representatives of private industry_ Hotel Theranda	Nadia Bechraoui, Martin Gjonaj	
		16:15	Meeting with the Albanian Tourism Association	Nadia Bechraoui, Matilda Naco	
		17:30	Meeting with Commercial company selling solar systems_ALNOBEL	Nadia Bechraoui, Marko Hoxhallari, Dritan Profka	
		18:30	Wrap-up meeting with the preliminary findings	Nadia Bechraoui, UNDP/Project team	

## ANNEX V. BUDGET BY OUTCOME / CO AND PARALLEL FINANCING

## Budget by outcome

Outcomes	Total	GEF	Government	Others
	USD	USD	USD	USD
<b>Outcome 1:</b> An enabling institutional, legal and regulatory framework to promote sustainable SWH market.	195,000	130,000	30,000 (Min of Env) 10,000 (in-kind)	25,000 (UNDP)
<b>Outcome 2:</b> Enhanced awareness and capacity of the targeted end users and building sector professional to consider and integrate SWH systems into different types of buildings.	475,000	190,000	40,000 (Min of Env)	25,000 (UNDP) 220,000 (ADA) <sup>31</sup>
<b>Outcome 3:</b> Increased demand for SWH systems by the availability of attractive end-user financing mechanisms or other delivery models, such as SESCOs or utility driven models.	1,040,000 (conf.) 1,000,000 (not conf.)	190,000 (TA)	735,000 (MEI) 115,000(Min of Env	Gov. of Italy 1,000,000 (not confirmed)
<b>Outcome 4:</b> 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.	596,000 (conf.)	200,000	35,000 (Min of Env) 10,000 (in-kind)	220,000 (ADA) <sup>15</sup> Swiss Gov. 131,000 (Confimed)
<b>Outcome 5</b> The provided support institutionalized and the results, experiences and lesson learnt documented and disseminated, including monitoring, learning, adaptive feedback and evaluation.	290,000	200,000	10,000 (in-kind)	50,000 (UNDP) HFI: 30,000 (in-kind)
Project management <sup>32</sup>	154,000	90,000	14.000 (in-kind)	50,000 (UNDP)
• Total	2,750,000	1,000,000	955,000 (cash) 44,000 (in-kind)	721,000 (cash) 30,000 (in-kind)

<sup>&</sup>lt;sup>31</sup> Based on the estimated share of the funding used for different activities and per the exchange rate of Nov 30, 2007

<sup>&</sup>lt;sup>32</sup> Covering the tasks related to the administrative management of the project. Technical contributions of the PMT covered under the Outcome budgets.

		1,000,000 (not confirmed)
		1

#### Co and parallel financing

Co-financing Source	Co-financing Sources						
Name of Co-	Classification	Туре	Amount (US\$)				
financier (source)				Status*			
The Government	Government	Cash	220,000	Confirmed			
of Albania		Cash	735,000	Confirmed			
		In-kind	44,000	Confirmed			
Harry Fultz Institute	Agency	In-kind	30,000	Confirmed			
UNDP	Agency	Cash	150,000	Confirmed			
Austrian Development Agency <sup>33</sup>	Bilateral	Cash	440,000	Confirmed			
The Government of Switzerland	Bilateral		131,000	Partially confirmed with some conditions attached			
The Government of Italy <sup>34</sup>	Bilateral	Cash	1,000,000	Not confirmed			
Sub-Total Co-financing			1,750,000	Confirmed			
			1,000,000	Not confirmed			
Private			> 20,000,000	To be leveraged			

<sup>&</sup>lt;sup>33</sup> A parallel project under implementation contributing to the goals of the UNDP/GEF project, but managed separately by the ADA.

<sup>&</sup>lt;sup>34</sup> As reflected in the project's financing table (table 1), the contribution of the Government of Italy, if so decided, can be utilized for activities related to component 3 "Increased demand for SWH systems by the availability of attractive end-user financing mechanisms or other delivery models, such as SESCOs or utility driven models" and component 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." In this context, the project would also seek to promote technology transfer and partnership building between the Albanian and foreign companies, including Italian companies.

## ANNEX VI. STRATEGIC RESULTS FRAMEWORK

Project Strategy	Indicator	Baseline	Target	Sources of Verification	Assumptions
<b>Objective:</b> To accelerate and sustain the solar water heating market in Albania as a part of the Global SWH Market Transformation and Strengthening Initiative.	The total installed SWH capacity and annual sale. Level of customer satisfaction on the	33,000 m <sup>2</sup> of installed collector area in 2005 with 7,000 m2 of new SWH capacity installed in 2005 with the expected 5% annual growth. Mixed	At least 75,000 m <sup>2</sup> of new installed collector area during the project, and an annual sale of 20,000 m <sup>2</sup> reached by the end of the project with expected continuing growth to reach the set target of 520,000 m <sup>2</sup> of installed SWH capacity by 2020. Positive experience by over 80% of the clients, who have purchased a SWH system on the basis of problem free good quality products and after sale	Official import statistics and local supply side surveys Ex-post project evaluations Market surveys	Economic and financial feasibility of the SWH investments to be promoted Continuing support of the key stakeholders to
	SWH systems installed.		services.		meet the project objectives.
<b><u>Outcome 1</u> An</b> enabling institutional, legal and regulatory framework to promote sustainable SWH market.	The adoption and effective enforcement of the recommended legal and regulatory changes to promote sustainable SWH market development	No specific building regulations, fiscal or public financial incentives in place to promote sustainable SWH market No specific regulations for SWH standards, certification or quality control mechanisms in place	<ul> <li>The recommended amendments of the legal and regulatory framework to promote sustainable SWH market adopted and effectively enforced, including:</li> <li>setting of specific targets for the heat produced by renewable energy by 2020;</li> <li>required amendments to the building code and building law to encourage the installation of SWH into new buildings and in those going through a major renovation;</li> <li>sustainable financial incentive mechanisms in place by using the resources of the Energy Efficiency Fund or other public resources;</li> <li>required fiscal incentives such as exempting the imported SWH equipment and materials from import duties and related taxes with associated safeguard mechanisms to prevent their illegal use;</li> <li>a decree to set up a SWH quality control system corresponding (to the extent feasible) to the relevant EU regulations and systems in place.</li> </ul>	Official government publications. Project monitoring and evaluation reports.	See above

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Project Strategy	Indicator	Baseline	Target	Sources of Verification	Assumptions
<b>Output 1.1</b> Analysis, recommendations and the associated advocacy work for the introduction of adequate public financial and fiscal incentives to promote the SWH market finalized.	The status of the proposal for the new public financial or fiscal incentives to stimulate the SWH market.	Required financial and fiscal incentives to stimulate the SWH market not effectively promoted.	With the key stakeholders discussed and agreed proposal for the required financial and fiscal incentives and their effective operationalisation submitted for final Government approval.	Project reports Official Gov't publications	Support of the key Government stakeholders.
<b>Output 1.2</b> Analysis, recommendations and the associated advocacy work for the adoption of the required amendments into the building law and building code to encourage the installation of SWH into new buildings and in those going through a major renovation finalized.	The status of the proposal for the required amendments into the building law and building code	Required amendments into the building law and building code not effectively promoted.	With the key stakeholders discussed and agreed proposal for the required legal and regulatory changes (incl. their effective enforcement) encouraging the installation of SWH systems into new buildings and in those going through a major renovation submitted for final Government approval.	See above	See above
<b>Output 1.3</b> Analysis, recommendations and the associated advocacy work for setting up the required regulatory framework for a SWH quality control system finalized.	The status of the proposal for setting up the required regulatory framework for a SWH quality control system.	No legal or regulatory framework for a SWH quality control system in place	With the key stakeholders discussed and agreed proposal for a quality control system for SWH equipment and installation submitted for final Government approval for those institutional, legal and regulatory aspects that require the approval of public authorities.	See above	See above
<b>Outcome 2</b> Enhanced awareness and capacity of the targeted end users and building sector professional to consider and integrate SWH systems into different types of buildings.	The demand for additional information, as measured by market surveys. The share of new and renovated buildings (across different types) integrating SWH into	According to initial market survey, more than 50% responded of not having made a positive decision yet, because of the lack of information and > 90% said they would like to have more information for final judgement	Over 80% of the end users and designers participating the market survey indicate that they have had enough information about SWH systems to make their decision. For all new and renovated buildings suitable for the integration of SWH systems, SWH has been considered as an option and over 20 % from each group of these buildings is integrating SWH into their final design.	Market surveys.	Interest of the key stakeholders to participate the marketing campaign.

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Project Sualegy	Indicator	Baseline	Target	Sources of Verification	Assumptions
Output 2.1 Materials for public awareness raising and marketing campaigns as well as for training of building designers developed and/or adapted into Albanian conditions and made available in printed and electronic format.	their design. The availability of suitable public awareness raising and marketing material.	Shortage of effective and good quality public awareness raising and marketing material.	Public awareness raising, marketing and training material developed and adapted for Albanian conditions and made available in printed and electronic format. A specific SWH web-site established and regularly updated	Project reports	
<b>Output 2.2 Final</b> design of the marketing campaign	Design of the marketing campaign agreed with the key stakeholders. Level of cost-sharing.	No systematic marketing campaign possible to organise by the supply chain on its own.	Agreed design of the marketing campaign with the key stakeholders, including the financing of the implementation of it with a cost-sharing ratio of at least 1:1 (in-cash or in-kind). <sup>35</sup>	Project reports	Interest of the key stakeholders to participate in the marketing campaign.
<b>Output 2.3 Public</b> awareness raising and marketing campaigns implemented in co-operation with relevant public entities and private SWH suppliers and manufacturers.	The level of public awareness raising and marketing campaign implemented.	No major public awareness raising and marketing campaign conducted yet.	Public awareness raising and marketing campaigns tailored to the specific needs and expected decision making "drivers" and information channels of the targeted end users implemented in co-operation with the relevant public entities and private SWH suppliers and manufacturers by using different media channels.	Project reports	See above
<b>Output 2.4 Trained</b> building designers and other key professionals to consider SWH as an option in the design of new buildings and renovation of the existing one.	The number of trained professionals The share of new or renovated buildings including SWH as an option.	Lack of information and expertise among the local architects, building engineers and other key professionals about SWH.	Architects, building engineers and other key professional, as well as the students in the associated fields are informed about the opportunities provided by SWH and different types of SWH equipment and are trained to integrate SWH into the design of new buildings and the renovation of the existing ones.	Project reports	

<sup>&</sup>lt;sup>35</sup> This may include Government and other donor cost-sharing, private supply side contribution, free program time or advertising in public media etc.

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Project Strategy	Indicator	Baseline	Target	Sources of Verification	Assumptions
of SWH training courses in relevant academic and technical institutions and vocational schools	adopted by the targeted educational entities	curricula	by the targeted educational entities, including co- operation with two vocational training systems (Swisscontact) and at least one vocational school (Beqir Cela) in Durres.		targeted educational entities
<b>Outcome 3:</b> Increased demand for SWH systems by the availability of attractive end-user financing mechanisms or other delivery models, such as SESCOs or utility driven models.	The amount of financing leveraged through new financing models specifically tailored for SWH market needs.	No specific longer term financing and new delivery mechanisms offered and marketed for the SWH purchase.	The agreed financial support mechanisms and new delivery models in operation with a cumulative target of USD 15 million leveraged by them for SWH financing by the end of the project	Project monitoring reports	<ul> <li>Initial demand for the financial services created and interest of the local financing sector to enter new market areas.</li> </ul>
Output 3.1 <u>Enhanced</u> awareness of the key financial sector stakeholder and local suppliers on the specific characteristics and financing opportunities in the SWH market.	The level of interest created.	Lack of information on the specific SWH market characteristics and financing models tested in other countries.	All the key financial sector stakeholders and local suppliers informed on the specific characteristics and opportunities provided by the Albanian SWH market (by building on the results of the market analysis), and on the experiences and lessons learnt from the financing models tested in other countries.	Project reports	See above
Output 3.2 Design, the financial structuring and the implementation arrangements for the specific purpose financing vehicles responding to specific SWH market needs finalized and agreed with the key stakeholders, and integrated into the overall SWH marketing package.	New financing instruments and, as applicable, delivery models made available.	No financing and delivery models specifically tailored for SWH market requirements available.	New financing instruments and business models (such as specific purpose bank loans, vendor financing, SESCOs etc.) specifically tailored and marketed for the SWH purchase offered to the end users as a part of the overall marketing package, including, as applicable, the integration of possible public incentives.	Project reports	See above
<b>Output 3.3 As</b> required, trained SWH supply side stakeholders to effectively operate and/or market the new financing services.	The capacity of the SWH supply side to operate and/or market the new financing services.	Lack of financing knowledge and expertise of the SWH supply side.	Trained SWH supply side stakeholders to effectively operate and/or market the new financing services.	Project reports	See above

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Project Strategy	Indicator	Baseline	Target	Sources of	Assumptions
				Verification	
Outcome 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	The share of supply side entities adopting the proposed quality control schemes. The level of customer	Lack of adequate incentives for and, in some cases, lack of capacity of the supply side to offer equipment and associated services at the required level to sustain the market growth	Adoption of a voluntary quality control, certification and labelling scheme for the SWH equipment and installation services by the majority of the SWH equipment and service providers with a market share of over 80% in the end of the project.	Project reports and supply side surveys.	
	satisfaction with the systems installed.	growth	equipment and services provided.	surveys	
<b>Output 4.1 Set</b> of SWH standards and an associated certification and labelling system developed (or adapted) for Albanian conditions.	Availability of a quality control system for SWH equipment suitable for Albanian situation.	No system available in Albania. Inter- national systems are available, but need to be adapted to Albanian conditions	A quality control system consisting of required standards and associated certification and labelling scheme suitable for Albanian situation developed and adopted first on a voluntary basis, and which may later graduate to a mandatory requirement.	Project reports	Support of the SWH supply chain recognizing the value added.
<b>Output 4.2 A</b> pilot testing facility to check compliance with adopted standards.	The number of locally tested systems according to adopted standards.	No testing facilities available.	A pilot SWH testing facility fitted to the current market situation in operation with a capacity to test at least 15 collectors per year in accordance with the applicable EU standards and with an ability to sustain its services also after the project. Over 80% of the SWH systems in the Albanian market tested for compliance by the end of the project.	Project reports	See above
<b>Output 4.3 Technical</b> support to local manufacturers and importers to obtain a certification and to improve their product quality in general.	The number of manufacturers receiving TA The number of missions and trade seminars organized	Lack of local capacity to meet the requirements and to improve their product quality in general.	Technical support received by the Albanian SWH manufacturers to improve their product quality. Up to 4 match making missions and an annual SWH trade seminar in Albania	Project reports	See above
<b>Output 4.4 A</b> training and recognition system in place for SWH system installers	The availability of the system. The number of SWH system installers	No training and recognition system in place for SWH system installers.	A training and recognition system in place for SWH system installers. Over 75% of the installers required to meet the SWH market development targets trained and recognized by the end of the project.	Project reports	See above

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Project Strategy	Indicator	Baseline	Target	Sources of	Assumptions
	trained			verification	
<b>Outcome 5</b> The provided support institutionalized and the results, experiences and lesson learnt documented and disseminated (including monitoring, learning, evaluation and other feedback for adaptive management)	Continuing support for SWH market development also after the end of the project.	No sustainability of the required market support No results and experiences documented and disseminated.	Local institution(s) continuing to promote the SWH market after the end of the project. The reports and other public material from the project can be easily found and accessed.	Final evaluation Project reports	
<b>Output 5.1</b> The reporting framework and arrangement for the SWH market monitoring established and continuing after the end of the project.	Agreed reporting format and institutional arrangements for SWH market monitoring established.	No systematic reporting format and institutional arrangements for SWH market monitoring.	Updated baseline assessment and agreed reporting format and institutional arrangements for SWH market monitoring established and continuing after the end of the project.	Project reports and final evaluation	Agreed co- operation between the vendors and other business entities involved in SWH market
Output 5.2 An agreed business and financing plan for the establishment of an Albanian Solar Center, a Solar Thermal Industry Association or a similar entity to sustain the required market promotion activities.	The status of the business and financing plan.	No active institution in place yet to represent and support the local SWH industry and to promote the sustainable market growth of SWH in Albania in general.	An agree business and financing plan to facilitate the operation of the Association on a self-sustaining basis.	Project reports	Recognition of the benefits of the proposed institution by the local supply chain.
Output 5.3 An established Albanian Solar Center, a Solar Thermal Industry Association or a corresponding entity	The Association established and in operation	See above.	An Albanian SWH Industry Association established and in operation on a self-sustaining basis, with gradual build up of its capacity to support the Albanian SWH industry to expand and enhance its competitiveness and the quality of the products and services provided, and to promote the Albanian SWH market in general.	Project reports	See above.
Output 5.4 Project midterm	Status of the	No evaluations	Project midterm and final evaluations conducted on	Project reports	
Output 5.5 The project final results and lessons learnt documented and disseminated.	Available report	No results and lessons learnt compiled, analyzed and disseminated	Report finalized and disseminated	Project reports and final evaluation	

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