

2015  
Project Implementation Review (PIR)  
of  
**PIMS 5279**  
**Solar Water Heating Market Transformation and Strengthening Initiative**

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## A. Basic Project and Finance Data

Project Implementing Partner:	United Nations Development Programme
GEF Focal Area:	Climate Change - Mitigation
Country(ies)	(ALB) Albania(ALB) Albania(NHE) New Hebrides(NYC) New York
Project Start Date:	-
Planned Project Closing Date:	31-Jul-2013
Revised Planned Closing Date:	30-Jun-2015
Dates of Project Steering Committee/Board meetings during reporting period:	July 2015
Total GEF Grant (U\$S)	\$ 0
GEF Grant Disbursed as of 30 June (U\$S):	\$ 981,397.91
Total Co-financing (as planned in CEO endorsement request):	\$ 0.00
Overall Risk Rating	Low
Overall DO Rating	Highly Satisfactory
Overall IP Rating	Highly Satisfactory

## B. Project Contacts and Links

Partner	Contact Name	Email Address
Project Coordinator / Manager	Mirela Kamberi	mirela.kamberi@undp.org
UNDP Country Office Programme Officer	Elvita Kabashi	elvita.kabashi@undp.org
Project Implementing Partner	Alfred Bundo	alfred.Bundo@energjia.gov.al
GEF Operational Focal Point	Pellumb Abeshi	pellumb.abeshi@moe.gov.al
Other Partners		
UNDP Technical Adviser	Marina Olshanskaya	marina.olshanskaya@undp.org
UNDP Programme Associate	Tugba Varol	tugba.varol@undp.org

Project website, etc.	<p>Twitter: <a href="https://twitter.com/UNDPAlbania">https://twitter.com/UNDPAlbania</a> Facebook: <a href="https://www.facebook.com/UnitedNationsAlbania">https://www.facebook.com/UnitedNationsAlbania</a>  <a href="https://www.facebook.com/pages/UNDP-Albania/302120716513378">https://www.facebook.com/pages/UNDP-Albania/302120716513378</a> SWH in UNDP webpage:  <a href="http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/the-country-program-of-albania-under-the-global-solar-water-heat/">http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/the-country-program-of-albania-under-the-global-solar-water-heat/</a> SWH tool:  <a href="http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/the-country-program-of-albania-under-the-global-solar-water-heat/calculate/">http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/the-country-program-of-albania-under-the-global-solar-water-heat/calculate/</a> SWH tool for iphones:</p>
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	<p><a href="https://itunes.apple.com/us/app/solar-app/id792965104?ls=1&amp;mt=8">https://itunes.apple.com/us/app/solar-app/id792965104?ls=1&amp;mt=8</a>; SWH tool for Android: <a href="https://play.google.com/store/apps/details?id=app.am.solar">https://play.google.com/store/apps/details?id=app.am.solar</a> AKBN: <a href="http://www.akbn.gov.al">www.akbn.gov.al</a> ose <a href="http://akbn.gov.al/energija-diellore/">http://akbn.gov.al/energija-diellore/</a> SWH documentary, English: <a href="https://www.youtube.com/watch?v=8RypFnbON8M">https://www.youtube.com/watch?v=8RypFnbON8M</a> SWH documentary, Albanian: <a href="https://www.youtube.com/watch?v=7cwCWR1uY2k&amp;feature=youtu.be">https://www.youtube.com/watch?v=7cwCWR1uY2k&amp;feature=youtu.be</a></p>
Links to media coverage	<p>A number of public awareness and advocacy activities have been implemented throughout the year to raise awareness about the programme and advocate for use of clean energy with a focus on use of solar panels for hot water. A myriad of public information and advocacy tools have been used in this regard. Production of public information materials: Newsletters to highlight programme events produced and shared widely. Production and airing of a TV documentary called "Towards a Clean Energy Transformation in Albania" and also shared via email to all international partners working in the area of environment. Production of infographics to show the benefits of using solar panels: <a href="http://visual.ly/how-benefit-solar-energy">http://visual.ly/how-benefit-solar-energy</a> Media related work Frequent briefing of reporters about the programme results. Airing of the Documentary on prime time on the Albanian Public TV Taking reporters to the programme areas. The Programme highlighted in a UNN-Albania documentary: <a href="https://www.youtube.com/watch?v=S0PTAm5QgSc">https://www.youtube.com/watch?v=S0PTAm5QgSc</a> Use of social media Posting information related to the calculation tool in place on UNDP Facebook account: <a href="https://www.facebook.com/pages/UNDP-Albania/302120716513378?ref=hl">https://www.facebook.com/pages/UNDP-Albania/302120716513378?ref=hl</a> The calculation tool was accessed by 5000 people. Stories about the programme shared via UNDP HQ social media counts and UNDP Albania ones. <a href="http://www.al.undp.org/content/albania/en/home/ourwork/democraticgovernance/successtories/helping-authorities-explain-the-real-cost-of-h2o/">http://www.al.undp.org/content/albania/en/home/ourwork/democraticgovernance/successtories/helping-authorities-explain-the-real-cost-of-h2o/</a> The post reached 18000 people. The documentary "Towards a Clean Energy Transformation in Albania" posted on You Tube and shared on UNDP social media platforms: <a href="https://www.youtube.com/watch?v=7cwCWR1uY2k">https://www.youtube.com/watch?v=7cwCWR1uY2k</a> UNDP website The project has a subpage under UNDP Albania website which is updated frequently with programme events/results /publications: <a href="http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/the-country-program-of-albania-under-the-global-solar-water-heat.html">http://www.al.undp.org/content/albania/en/home/operations/projects/environment_and_energy/the-country-program-of-albania-under-the-global-solar-water-heat.html</a></p>

## C. Project Summary

## D. Progress toward Development Objective

Objective/Outcome	Description	Description of Indicator	Baseline Level	Target Level at end of project	Level at 30 June 2013	Level at 30 June 2014	Level at 30 June 2015
Global Objective	Acceleration of the global commercialization and market development of SWH in residential, private service sector, and public buildings and, when applicable, industrial applications.	The amount of installed SWH systems in participating countries (m2). The annual market growth rate in the participating countries in terms of newly installed m2 (%). Level of customer satisfaction with the SWH systems installed.	As per the initial country-specific market assessments and baseline analyses.	An additional 1 million m2 of installed SWH capacity compared to the expected baseline development. Sustainable market growth of at least 20% in average in the participating countries by the end of the project.			
		Albania	33,000 m2 of installed collector area in 2005 with 7,000 m2 of new SWH capacity installed in 2005 with the	At least 75,000 m2 of new installed collector area during the project, and an annual sale of 20,000 m2 reached with	At mid-term, the installation of nearly 40,000 m2 of new SWH capacity has been installed, which accounts for more than 50% of the expected final impact (direct post-project	At the end of June, 2014 the cumulative SWH systems area is 144,565 m2, with 22,400 m2 new installed area within the reporting period; To support the implementation of the Solar Chapter under the Law on Renewable Energy Sources, endorsed on 02 May, 2013, the following sub-legal acts are	At the end of June, 2015 the cumulative SWH systems area is 164,870 m2, with 20,305 m2 new installed area within the reporting period; The draft National Action Plan on Renewable Energy is revised and finalized, to reflect for the latest changes in the energy legal frame like the new law on Power Sector, new

			<p>expected 5% annual growth. Mixed customer satisfaction.</p>	<p>expected continuing growth to reach the set target of 520,000 m2 of installed SWH capacity by 2020. Positive experience for over 80% of the clients who have purchased a SWH system on the basis of problem-free good quality products and after-sale services.</p>	<p>and indirect) within the project timeframe; At the end of June, 2013 the cumulative SWH systems area is 122,165 m2, with 20,845 m2 new installed area within the reporting period;The law on Renewable Energy Sources is approved by the Albanian parliament on 02 May, 2013 with a whole chapter promoting solar thermal systems, while secondary regulations are already drafted in this regard;More than 350 participants are trained over the last 3 years and the GEF project provided TA to commercial energy end-users and finally the project carried out the annual survey to follow up on the market transformation and</p>	<p>prepared/discused: (i) Governmental Decree on approval of rules for mandatory installation of solar water heating systems in buildings, and ii) Governmental Decree on exemption from value added tax and custom duties of solar water heating systems; The grounds are prepared for the establishment of the RES/EE Fund to further secure the sustainability of the actions undertaken to transform the SWH market in the country; The Tirana Municipality and a number of other local governments are supported with technical assistance and demonstration projects to justify the solar obligation's ordinances to request SWH systems in each and every new public building and the ones going through a major renovation; A whole monitoring system is installed and collected are under processing from the pilot projects, big SWH systems installed and families spread as per the climatic zones in urban/rural areas; More than 560 participants (Arch., Eng., Instructors, etc.) are trained over the last four years, with 210 only during the reporting period, out of which 72 female participants, focused mainly on the quality of products and their design and integration into new and existing buildings including monitoring and maintenance. Over 90% of the</p>	<p>law on Concessions, etc., but also the successful government reform, preventing electricity non-payment (from 45% for the year 2013 to 32% for half 2015), removing one of the key obstacles for introduction of RES in Albanian Energy System. Upon request of MEI, Law on RES is provided with amended articles, affecting the most the RES-E and the feed-in tariffs, while the solar chapter has remained unchanged; The following sub-legal acts are prepared/discused: (i) Governmental Decree on the approval of the RES target in the final energy consumption and the NREAP associated with the statement of legislative purpose for its approval; ii) Governmental Decree for the approval of rules for mandatory installation of solar water heating systems in buildings and iii) Governmental Decree on exemption from value added tax and custom duties of solar water heating systems; The grounds are prepared for establishment of RES/EE Fund: revised laws on EE and RES and draft law on Energy Performance in Buildings provide for the Fund by the end of 2015; The NAMA mechanism is explored in line with findings of two prepared NAMAs in the areas of EE in buildings (including SWH) and fuel switch in cement sector; Another</p>
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					<p>the performance of installed equipment.</p> <p>trained professionals responded very satisfactorily to the usefulness of training materials in terms of fulfilling their interests and requirements for new information. A survey made in a residential building resulted that 100% of inhabitants had enough information about SWH systems and did not see this as a barrier for investing. All conducted hotels, having not yet a SWH system in their premises, resulted to have good knowledge about the SWH systems and their installation requirements, while pointing out the initial investment as the main barrier for not having yet done a decision pro SWH systems. On the other hand, a voluntary certification and labelling scheme is adopted for the SWH equipment and installation services by the majority of the SWH equipment providers having the Solar Keymark certification with a market share of over 60%. This is expected to be reinforced upon endorsement of the secondary legislation of the RES law, according to which draft "In order to meet the requirements of the solar obligation in buildings, all imported SWH collectors should have the EU certification Solar Keymark, while starting from 1 June, 2017, a full Solar Keymark Certification is required for domestically produced and assembled</p>	<p>partnership is under implementation with the National Housing Agency to deploy EE measures (solar included) in the social buildings; The municipalities of Tirana, Elbasan, Shkoder, Sarande, Orikum, Gramsh and Fier are supported with technical assistance and demonstration projects to justify the solar obligations ordinances; A whole monitoring system is installed and processed data will get published in cooperation with Global Knowledge Management/UNEP; 712 participants (Arch., Eng., Instructors, etc.) are trained over the last five years, with 152 only during the reporting period (66 female participants), on installation/monitoring/maintenance of SWH systems by public institutions, quality of products and their design and integration into new and existing buildings. A great deal is done to improve the specifications for the public tenders procuring the SWH systems and their service. On the other hand, a voluntary certification and labelling scheme is adopted for the SWH equipment and installation services by the majority of the SWH equipment providers having the Solar Keymark certification with a market share of over 60%. A number of feasibility studies are under preparation for hotels and food</p>
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						SWH collectors	industry interested on the technology of SWH; A case study is under preparation on the results, best practices and lessons learned in the deployment of solar water heaters (SWH) in Albania; The whole local contribution is availed to the project; Over 90% of the trained professionals responded very satisfactorily to the usefulness of training materials in terms of fulfilling their interests and requirements for new information.
		Chile	Current baseline expansion of installed capacity shows an annual growth, relative to approximately 6,000 m2 of installed capacity in 2006. At this growth, total installed capacity will reach 11,000 m2 by 2011.	Accelerate and ensure sustainable growth rate of 45%-50% for the SWH market in Chile to reach a target of 35,700 m2. The growth rate in the residential sector will be proportionately faster. Residential systems will account for 80% of the total expansion in capacity.			

		India	Estimated 2 m2 in India per 1000 inhabitants by the end of the project following the current baseline development. Growth of annual sales rate at 6 % in India, being lower than previous years as a result of market mistrust. Mixed customer satisfaction.	2 million m2 market acceleration contributing to (10 million m2 per 1 billion inhabitants). A steady, average growth rate of >30 % in India reached by the end of the project and continuing growth toward the expected saturation point of 140 m2 per 1,000 inhabitants towards 2025. Over 90% customer satisfaction on new installations on the basis of problem free good quality products and installation services.			
		Lebanon	Estimated 26 m2 in Lebanon	At least 190,000 m2 of			



			<p>per 1000 inhabitants in year 2005 i,e 106,817 m2 total installed collectors with 16,000 m2 of new SWH capacity installed by year 2005. Average Annual Growth: 10-15 % in Lebanon as evidenced over the past 5 years with significant risks of not being able to sustain the continuing, steady growth . Mixed customer satisfaction.</p>	<p>new installed collector area during the project, and an annual sale of 50,000 m2 reached with expected continuing growth to reach the set target of 1,050,000 m2 of installed SWH capacity by 2020. 55-75 m2 per 1,000 inhabitants with a steady, average growth rate of 15-20% reached by the end of the project and continuation until the expected saturation point of 55-75 m2 per 1,000 inhabitants and 200-225 m2 per 1000 inhabitants by</p>			
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				<p>year 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 services.</p>			
		Mexico	<p>Current baseline expansion of installed capacity shows 14% annual growth, relative to approximately 743,000 m2 of installed capacity in 2005. At this rate, total installed capacity will reach 1,500,000 m2 by 2011.</p>	<p>Accelerate and ensure sustainable growth rate of 25-30% (in total installed capacity) for the SWH market in Mexico to reach a target of 2,500,000 m2. The growth rate in the residential sector will be proportionately faster. Residential systems made</p>			

				to account for 14% of the total installed capacity.			
		Number of new countries proposing similar activities for GEF funding as a stand-alone SWH project which is a part of the broader global networking of the overall initiative.	UNEP	Interest in and start-up of replication of similar activities in other countries.			
Global Outcome 1	Effective initiation and coordination of the country-specific support needs and improved access of national experts to state-of-the-art information, technical backstopping, training, and international experiences and lessons learnt.	The number of countries with SWH market transformation and strengthening activities initiated.	0 (under this initiative or linked to it).	At least 16 (UNEP).			
		Availability of timely and cost-effective	UNEP	UNEP			

		technical backstopping responding to the needs (to be evaluated on the basis of surveys conducted with the participating countries).					
		Albania					
		Chile					
		India					
		Lebanon					
		Mexico					
Global Outcome 2:	The specific SWH market transformation targets of the first 6 participating countries reached by the end of the project, conducive to the overall global market transformation goals of the project.	The success in meeting the country-specific targets in the initial 6 countries (as per the sub-components listed below, corresponding to the specific country project outcomes).	The basic conditions for accelerated and sustainable SWH market development in most GEF program countries still missing. As per the initial country specific market assessments	A supportive legal and regulatory framework in 6 participating countries adopted (including an applicable quality assurance, certification, and labeling scheme). The			

			and baseline analysis.	level of awareness of the targeted end users. The capacity of the key local stakeholders built as per the targets of individual country components. Access to suitable financing to cover the higher up-front costs of SWH systems. The SWH penetration rate and the annual growth rate as per the stated country-specific targets.			
Outcome 2.1.	An enabling institutional, legal and regulatory framework to promote a sustainable SWH market.	The adoption and effective enforcement of SWH-related laws and regulations (incl. possible financial and	N/A	N/A			

		<p>fiscal incentives) to promote sustainable SWH market development. The level of implementation (e.g. an amount of systems, whose installation has been facilitated by the new regulation, share of targeted buildings respecting a new building code, etc.) - to be based on periodical surveys still to be introduced by each national project and as such not likely to be available for the first PIR).</p>					
			No specific	The	Law No. 138/2013 on	The implementation of the Law	The draft National Action Plan on

			<p>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.</p>	<p>recommended amendments to promote sustainable SWH market:ÃĈÃĈ setting of specific targets for heat produced by RES by 2020 ÃĈÃĈ required amendments to the building code/law to encourage the installation of SWH into new/under renovation buildings ÃĈÃĈ sustainable financial incentive mechanisms by using the resources of the EE Fund/other public ÃĈÃĈ required fiscal incentives, such as exempting the imported SWH</p>	<p>Renewable Energy Sources is adopted on 2 May 2013, promoting Solar Energy by establishing: (i) Minimum objectives on using solar energy; (ii) Mandatory installation of SWH systems; (iii) Certification and labeling of SWH systems; and (iv) Tax exemption from the custom duties and VAT for SWH systems. The law, looking that public buildings indicate a primary role, starting the installation of solar panels from 2013, charges the Council of Ministers within 6-12 months to issue the following Governmental Decrees to: 1) adopt specific criteria for calculation of solar energy used for hot water either separately or as part</p>	<p>No.138/2013 on Renewable Energy Sources is postponed (by the new Government after the General Elections of June, 2013) with another 6 ÃĈ 12 months, mainly due to the impact of new hydro producers on electricity end-users price, which ought to be done in coordination with the market design to be included in the Electricity Law, currently under revision. However, two governmental decrees are prepared/discussed to implement the Solar Chapter: i) Draft Decree on approval of rules for mandatory installation of solar water heating systems in buildings, and ii) Draft Decree on exemption from value added tax and custom duties of solar water heating systems; Technical and Legal assistance is given to several municipalities for drafting and implementation of the standards related to renewable energy sources and energy efficiency in public buildings, including also the solar thermal obligation in all new buildings and those going under major renovation; The Slovenian Eco-Fund is presented both, in Tirana and a study tour with Albanian decision makers is organized in Slovenia to profit from their positive experience and lessons learnt, in an attempt to establish the Renewable Energy/Energy Efficiency Fund in Albania as the sustainable</p>	<p>Renewable Energy is revised/discussed/finalized, which implementation is safer in the new conditions of the energy system in Albania: the measures introduced by the new Government preventing electricity non-payment (which has been reduced from 45% for the year 2013 to approximate 32% for the first five months of 2015), are removing one of the key obstacles for introduction of RES and energy efficiency on the demand and supply sides of Albanian Energy System. Law No.138/2013 on RES is under amendment to reflect for the provisions of the new Law on Power Sector and the one on Concessions (both finalized during 2015). However, the part related to Solar Heating will remain the same, to be implemented through two governmental decrees: i) On approval of rules for mandatory installation of SWH systems in buildings, and ii) On exemption from value added tax and custom duties of SWH systems; Technical/Legal assistance is given to several municipalities for drafting/implementation of standards related to RES and EE in public buildings, including solar thermal obligation in new/under renovation buildings; Upon getting considerable advise on the establishment of a</p>
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				<p>equipment and materials from import duties and related taxes – setting up a SWH quality control system corresponding (to the extent feasible) to the relevant EU regulations.</p>	<p>of energy building code; 2) determine the economy sectors and categories of buildings, the minimum surface area or the capacity of SWH systems to be installed, the technical requirements and the specific procedures and criteria to be followed for better enforcement of these obligations and their monitoring by the responsible institutions; 3) approve certifying schemes or equivalent qualifying schemes for installers of solar panel systems, developed by the National Agency of Natural Resources. Such certificates shall also be required from installers of SWH systems installed to satisfy the indicators in</p>	<p>financial incentive mechanism for SWH systems; The preparation of the National Action Plan on Renewable Energy is supported, discussed and submitted to the Energy Community Treaty of the EU, commented very positively and actually at the final stage of endorsement by the new Government: under the committed RES target of 38% by 2020, the target for thermal energy from solar is 1.23 %.</p>	<p>EE/RES fund, its establishment is closer (expected by the end of 2015) through the revised laws on Energy Efficiency and RES and the one on Energy Performance in Buildings, which do require for its establishment. The technical support given in the frame of the project will enable for ready projects on SWH systems to apply for in the first run.</p>
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				<p>force and from those that benefit from the public incentive schemes; and 4) approve the rules and procedures on the reimbursement of custom duties paid for imported raw materials for the production or installation of SWH systems. The Ministry of Economy, Trade and Energy got assisted for finalization of National Renewable Energy Action Plan, while the new feed-in tariffs implied by the RES Law is a key mechanism in helping Albania with its commitment to meeting a 38% percent RES target (excluding large hydro) by 2020 which is consistent with Albania's commitments as a member of the Energy Community Treaty of the EU.</p>		
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Outcome 2.2.	Enhanced awareness and capacity of the targeted end users and building sector professionals to consider and integrate SWH systems into different types of buildings (or into other promising new market segments/applications)	List and/or a brief description of the results of awareness raising, marketing, and training activities implemented (qualitative) and demand for additional information, as measured by market surveys (quantitative). The share of new and renovated buildings in different market segments adopting SWH into their design (quantitative, if available).	N/A	N/A			
			According to an initial market survey, more than 50% responded not	Over 80% of the end users and designers participating in the market	One-year monitoring is accomplished with relevant data on consumption of hot water/electricity	Two-years monitoring are accomplished with relevant data on consumption of hot water/electricity used in 20 families according to three climatic zones to better determine the	Three-years monitoring are accomplished with relevant data on consumption of hot water/electricity used in 20 families according to three climatic zones to better determine the

			<p>having made a positive decision yet, because of the lack of information and &gt; 90% said they would like to have more information for final judgement.</p>	<p>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.</p>	<p>used in 20 families according to three climatic zones to better determine the financial parameters of SWH collectors used in the country. 3 complete sets of monitoring equipment are installed (by Hotel Theranda, Daycare centre No. 17 and Orphans House in Tirana). Following the cooperation with Italian association CeLIM, 3 other didactic sets are provided in Vocational Training Centers which develop specific courses for solar energy (in Shkodra, Vlora and Korca) and for high school "Karl Gega" in Tirana. Harry Fultz Institute has started a specific course for solar installers in September, 2012. Following the</p>	<p>financial parameters of SWH systems used in the country, while one year monitoring is accomplished by three big SWH systems in social centers/hotels and 7 pilot projects in kindergartens, schools and dormitories. In the framework of the collaboration with the Ministry of Social Welfare and Youth/State Social Service and several Local Governments, design projects are prepared with technical specifications for the installation of Solar Thermal Systems by the Development Centre in Berat, Elderly House in Fier, Domestic Development Centre and the House of Colors in Tirana, Elderly House and Development House in Shkodra; Sport Centers in Orikum and Himara, Day-Care Centre/Kindergarten and the Dormitory of the Economic High School in Saranda; the Dormitory of the High School and two Day-Care Centers in Elbasan, as well as for the Day-Care Centre and Kindergarten in Gramsh; Following the collaboration with the Municipality of Lezha, the solar thermal systems are installed, co-financed also from the Municipality of Lezha, by the dormitory of the professional school "Kolin Gjoka" and by the Day-Care Centre "Beselidhja" to cover the demand for hot water of</p>	<p>financial parameters of SWH systems used in the country, while two years monitoring is accomplished by big SWH systems in social centers/hotels and pilot projects in kindergartens, schools and dormitories: each and every pilot project realized in cooperation with local governments is supported with monitoring equipment. Interesting monitoring results are waiting for their compilation/publication in two case studies in cooperation with Global Knowledge Management/UNEP (in November, 2015). In the framework of the collaboration with the Ministry of Social Welfare and Youth/State Social Service and several Local Governments, design projects are prepared with technical specifications for and installations are realised by the Elderly House in Fieri, Orphans House and Development Centre in Shkodra, Sport Centre in Orikum, two Day-Care Centres/kindergartens in Elbasan, as well as a Day-Care center and a Kindergarten in Gramsh. Following there are under consideration three other kindergartens in Elbasani, the dormitory of the high school in Gramshi, several health clinics in Bulqiza, Fieri and Burreli, etc. The SWH Tool for the Residential and Service sectors:</p>
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				<p>installation of three SWH systems by tourist area of Thethi and training seminar for media representatives, a promotional event is organized in Thethi for public awareness on solar energy used in relatively isolated areas and touristic places (20-21 July 2012) with 30 participants from line ministries, UN bodies, NGOs and a great number of written and visual medias. A SWH system is installed by "Orphans House" in Tirana in cooperation with the State Social Service, the launching event of which (12 March 2013) was well attended by 35 representatives from line ministries, State Social Service, solar related businesses, media, etc. In frame</p>	<p>the above institutions; It is installed and put into function also the SWH system by the "Domestic Development Centre" in Tirana; Besides the web paged based, it is enabled the development of the applications for "Smart Phones" of the SWH Tool for the Residential and Service sectors</p> <p><a href="https://itunes.apple.com/us/app/solar-app/id792965104?ls=1&amp;mt=8">https://itunes.apple.com/us/app/solar-app/id792965104?ls=1&amp;mt=8</a>; A great number of trainings and promotion materials are realized like trainings manuals and presentations, leaflets, drawings, information tables, calendars, film materials, etc. More than 560 participants (Arch., Eng., Instructors, etc.) are trained over the last four years, with 210 only during the reporting period, out of which 72 female participants, focused mainly on the quality of products and their design and integration into new and existing buildings including monitoring and maintenance. Over 90% of the trained professionals responded very satisfactorily to the usefulness of training materials in terms of fulfilling their interests and requirements for new information. A survey made in a residential building resulted that 100% of inhabitants had enough information about SWH systems and did not see this as a barrier for investing. All conducted hotels, having</p>	<p><a href="https://itunes.apple.com/us/app/solar-app/id792965104?ls=1&amp;mt=8">https://itunes.apple.com/us/app/solar-app/id792965104?ls=1&amp;mt=8</a> is uploaded in the UNDP webpage: <a href="http://www.al.undp.org">www.al.undp.org</a>; A great number of trainings and promotion materials are realized like trainings manuals and presentations, leaflets, drawings, information tables, calendars, film materials, etc. More than 712 participants (Arch., Eng., Instructors, etc.) are trained over the last four years, with 152 only during the reporting period, out of which 66 female participants, focused mainly on the quality of products and their design and integration into new and existing buildings including monitoring and maintenance. Over 90% of the trained professionals responded very satisfactorily to the usefulness of training materials in terms of fulfilling their interests and requirements for new information. Through the cooperation with ATA (Albanian Tourism Association) and the AKBN (the National Agency on Natural Resources), several feasibility studies are under preparation for a number of private hotels and enterprises of the food industry (beer and fish), which have expressed interest for the SWH technology and are also suitable for this kind of technology.</p>
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				<p>of collaboration with Ministry of Labour, Social Issues and Equal Opportunities different social institutions/public buildings are evaluated for their feasibility/technical specifications of SWH systems</p> <p>installations: the Project is looking forward to enter into a MoU with the Ministry of Labour for joint implementations of pilot projects.</p> <p>Business to Business meetings on innovative technologies are organized jointly with Unioncamere Puglia in Tirana (12-14 November 2012) with participation of 16 Italian companies and 30 domestic ones, involving ones operating with solar energy.</p>	<p>not yet a SWH system in their premises, resulted to have good knowledge about the SWH systems and their installation requirements, while pointing out the initial investment as the main barrier for not having yet done a decision pro SWH systems.</p>	
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Outcome 2.3:	Increased demand for SWH systems based on availability of attractive end user financing mechanisms and/or other delivery models.	Description of the available financing mechanisms to support SWH investments (qualitative) and amount of financing leveraged by the mechanisms for SWH investments (quantitative) and amount of financing leveraged by the mechanisms for SWH investments (quantitative).	N/A	N/A			
		Albania	No specific longer-term financing and new delivery mechanisms offered and marketed for the SWH purchase.	The agreed financial support mechanisms (such as specific purpose bank loans, vendor financing, SESCOs, etc.) and new	A one-year MoU with Tirana Municipality is signed (10 March 2013) to cooperate in the following areas: i) Technical and legal assistance for drafting and implementation of Standards of the MoT for Renewable	In the absence of the funds dedicated for the financing mechanism through a MoU between Italian Ministry for the Environment, Land and Sea and UNEP to be implemented in line with the Outcome 2.3 of the Project, and in line with the MTE recommendations, a Financial Support Delivery mechanism is designed/implemented (an Investment Cost-sharing Small Grants scheme supported by national	In the absence of the funds dedicated for the financing mechanism through a MoU between Italian Ministry for the Environment, Land and Sea and UNEP to be implemented in line with the Outcome 2.3 of the Project, and in line with the MTE recommendations, a Financial Support Delivery mechanism is designed/implemented (an Investment Cost-sharing Small Grants scheme supported by national

				<p>delivery models in operation with a cumulative target of USD 15 million leveraged by them for SWH financing by the end of the project.</p>	<p>Energy Sources and Energy Efficiency on public buildings including the Mandatory installation of SWH systems by all new buildings and those going through a major renovation ii) Piloting solar thermal installations by Day-care centers No. 30, No. 50, and High schools ĀĀEgerem ĀĀ abejĀĀ , ĀĀAhmet GashiĀĀ in Tirana iii) Training of the municipal staff to support project design and monitoring of the SWH systems installed iv) Support with SWH demonstration systems of the Center ĀĀPromotion, Demonstration, and Education on RESĀĀ v) Feasibility study and a suitable financial mechanism for installation of SWH</p>	<p>co-financing) to provide the needed financing support for SWH systems targeting government/public facilities. As a result, and following the implementation of the extended Memorandum of Understanding with the MoT-Municipality of Tirana (10 March, 2013 ĀĀ 10 September, 2014) the following are realized: (i) The SWH systems jointly co-financed and installed together with monitoring equipment in Day-Care centers No. 17, 30, 50, and High Schools ĀĀEgerem CabejĀĀ , and ĀĀAhmet GashiĀĀ in Tirana: surveillance of and processing of data are following; (ii) Technical and Legal assistance for drafting and implementation of the standards related to renewable energy sources and energy efficiency in public buildings for the Municipality of Tirana, including also the solar thermal obligation in all new buildings and those going under major reconstruction (under the jurisdiction of MoT); (iii) Training of the municipal staff to support project design and monitoring of the SWH systems installed; and (iv) Preparation/Presentation/Discussion of the Feasibility study and proposal of a suitable financial mechanism for the installation of the SWH systems and implementation of Energy Efficiency measures (thermo</p>	<p>co-financing) to provide the needed financing support for SWH systems targeting government/public facilities. As a result, the extended Memorandum of Understanding with the MoT-Municipality of Tirana (10 March, 2013 10 September, 2014) is implemented and other agreement with the municipalities of Saranda, Orikum, Elbasan and Gramshi have enabled the installation of SWH systems by several public buildings, associated with the technical assistance given to their respective staffs in charge with the design, preparation of the tender documents, monitoring and maintenance; Following the experience learned in the frame of the implementation of the MoU with the Municipality of Tirana, and in collaboration with the UNDP/UNEP/PEI program and later with the SE4ALL (Sustainable Energy for ALL), another partnership is set with the National Housing Agency (NHA), to support with technical assistance in the preparation of new energy design/construction standards in social housing including EE measures and solar systems: following the MoU, the project assisted NHA for the preparation of ToRs and the evaluation of proposals for a Low-cost, Energy-Efficient social house in Korca, to be built with funds from the</p>
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				<p>systems and energy efficiency measures in a concrete existing multi-apartment in Tirana, in partnership with inhabitants, MoT and/or interested Banks; and vi) Joint public awareness raising campaigns. Following the MoU, international/national experts started design and determination of the technical specifications for the pilot projects, and technical/legal assistance to be given to MoT. Following the recommendations of the MTE report for pilot projects and the collaboration with the National Agency for Natural Resources (NANR), a solar thermal system is installed and put into function for the main building of NANR, which has</p>	<p>insulation and double glass windows), in partnership with inhabitants, MoT and/or interested Banks for a concrete existing multi-apartment in Tirana, selected by the MoT; Again in line with the MTE recommendations and as per the Management Response in place since 2012 Technical assistance to be given to the MEI to draft the regulation related to the EE/RE Investment Fund required to advance the enforcement of the RE Regulation and boost investments in RE/EE, the grounds are prepared for the establishment of the RES/EE Fund to further secure the sustainability of the actions undertaken to transform the SWH market in the country.</p>	<p>NHA, which is a totally new initiative in the social housing area. The competition for the engineering design is expected to be finished within July, and following further support for increasing capacities of the architects and engineers regarding energy efficiency will be given based on the Korca case, but also through the monitoring of two other social housings, built in Fier by the NHA reciprocally with/without EE measures. In terms of other financing mechanism, and besides the expected RES Fund, NAMA mechanism is explored in line with the findings of two prepared NAMAs in the areas of energy Efficiency in buildings (including SWH technology) and fuel.</p>
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					<p>demonstrative purpose as well, since NANR is the state institution in charge with RES policy; Following the cooperation with the State Social Service, the SWH system for the Elderly House in Tirana and for the Clinics in Petrela and Preza are procured/installed. The cooperation with Lezha Municipality is finalized, followed by the technical specifications for the joint implementation of pilot projects by the dormitory of the professional school "Kolin Gjoka" and by the Day-Care Centre "Beselidhja" to cover their demand for hot water.</p>		
		Chile	The cost of SWH is currently prohibitively high for the	Generation of demand for SWH through applicable consumer			

			majority of the residential sector and the financial sector (banks, mortgage institutions) lacks adequate support mechanisms.	financing and, as applicable, financial support schemes with the objective of adding an increment of approximately 29,000 m2 of additional SWH capacity, and meeting set target of 35,700m2 of total installed SWH capacity. This equates to a target of leveraging USD 15-20 million (including both bank lending and cash contributions) to attain the set target.			
		India	No specific longer term financing and new delivery mechanisms offered and marketed for	The agreed financial support mechanisms and new delivery models in			

			the SWH purchase.	operation to meet the announced MNRE target to reach 10 m2 of installed SWH capacity by 2020.			
		Lebanon	No specific longer-term financing and new delivery mechanisms offered and marketed for SWH purchases.	The agreed financial support mechanisms and new delivery models in operation with a cumulative target of USD 20 million (about 40-50% of the total investment needs) leveraged by them for SWH financing.			
		Mexico	Generally, the cost of SWH systems is too high for majority of residential sector and the financial sector	Generation of demand for SWH through applicable consumer financing and, as applicable, financial			

			(banks, mortgage institutions) lacks adequate support mechanisms.	support schemes with the objective of adding an increment of approximately 900,000 m2 of additional SWH capacity by 2011, and meeting set target of 2.5 million m2 of total installed SWH capacity by that year. This equates to an objective of leveraging at least USD 100 million (10% of total investment needs) to attain the set target.			
Outcome 2.4:	A certification and quality control scheme applicable for the respective national conditions adopted and enhanced capacity of the supply chain to offer good quality	Description of the quality assurance system in use (qualitative) and estimated market share of sold	N/A	N/A			

	products and services promoting a sustainable SWH market.	products adhering to the proposed quality control schemes (quantitative). Level of customer satisfaction on the SWH systems installed (to be based on periodical surveys still to be introduced by each CP and as such not likely to be available for the first PIR).					
		Albania	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	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	Following the outcomes of the Int./national experts on testing and certifications, a tailored training on testing centre placed by Harry Fultz Institute in Tirana is organized (20 October 2012), with participation of 23 instructors,	The testing of solar collectors by the Solar Testing Centre is continued (installed by Harry Fultz Institute in Tirana); Following the recommendations of the international expertise, the ToRs related to the procurement of the SWH systems are upgraded for fulfilling the requests of the European Certification Solar Keymark ; On the other hand, a voluntary certification and labelling scheme is adopted for the SWH equipment and installation services by	The testing of solar collectors by the Solar Testing Centre is continued (installed by Harry Fultz Institute in Tirana); Following the recommendations of the international expertise, the upgraded ToRs related to the procurement of the SWH systems are implemented in each and every case for fulfilling the requests of the European Certification Solar Keymark; On the other hand, a voluntary certification and labelling scheme is adopted for the SWH

			market growth.	<p>service providers with a market share of over 80% at the end of the project. Over 90% of customer satisfaction on the certified equipment and services provided.</p>	<p>manufacturers, importers, other interested engineers and students. Upon provision of the certification and labeling scheme for SWH collectors, a round table is organized with 13 representatives from Ministry of Economy, Trade and Energy (METE), Ministry of Public Works and Transport, General Directorate of Accreditation, General Directorate of Standardization, and manufacturers: certification scheme proposed by the Project is widely discussed and approved by participants on 24 October 2012. Following METE's suggestion to collaborate with other projects to support Albanian SWH manufacturers regarding testing and</p>	<p>the majority of the SWH equipment providers having the Solar Keymark certification with a market share of over 60%. This is expected to be reinforced upon endorsement of the secondary legislation of the RES law, according to which draft In order to meet the requirements of the solar obligation in buildings, all imported SWH collectors should have the EU certification Solar Keymark, while starting from 1 June, 2017, a full Solar Keymark Certification is required for domestically produced and assembled SWH collectors ; Discussions are still going with the new government to consider the temporary Albanian scheme of testing and certification of SWH products and the quality management, allowing for the domestic industry to upgrade to the requirements of the European certification Solar Keymark till 2017; the project has been closely assisting at least one of the domestic producers who seems very close to the final testing of one model of SWH collectors to possibly get the Solar Keymark certification in one of the EU testing/certification center; On the job trainings are delivered to departments from local governments in charge with monitoring and maintenance of SWH systems upon the hand-over to them of several pilot</p>	<p>equipment and installation services by the majority of the SWH equipment providers having the Solar Keymark certification with a market share of over 60%. This is expected to be reinforced upon endorsement of the secondary legislation of the RES law, according to which draft In order to meet the requirements of the solar obligation in buildings, all imported SWH collectors should have the EU certification Solar Keymark, while starting from 1 June, 2017, a full Solar Keymark Certification is required for domestically produced and assembled SWH collectors; The project has been closely assisting at least one of the domestic producers who seems closer to the final testing of one model of SWH collectors to possibly get the Solar Keymark certification in one of the EU testing/certification center; On the job trainings are delivered to departments from local governments in charge with monitoring and maintenance of SWH systems upon the hand-over to them of several pilot projects. A study is prepared/shared On the countrys macro-economic potential for energy saving from the residential sector, considering also the possibilities for solar thermal systems.</p>
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				<p>certification of their products and quality management according to European certification – Solar Keymark , meetings are organized with BAS (Business Advisory Services) Project of EBRD and AIDA (Albanian Investment Development Agency). Following, a round table is organized (30 April 2013) jointly with AIDA with participation of 8 Albanian SWH manufacturers on the possibilities of co-financing their efforts for testing/certification of solar panels, qualified as innovative technology.</p> <p>\\\\\\\\\\\\\\\\"Regional workshop and B2B meetings for the Transformation and Strengthening of the</p>	<p>projects.</p>	
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					<p>SWH Market in the Mediterranean region" is successfully organized in Tirana (20-21 March 2013) in the frame of the GEF/UNDP/UNEP/IC A Global Initiative for the SWH Market Transformation with participation of 50 representatives from Albania and the Mediterranean region, from Albanian line ministries, UNDP Albania, Bratislava and New York, UNEP Paris, etc. The workshop was positively evaluated and created a network of collaboration among the policy-makers, experts and local businesses with their homologues in the Mediterranean region, operating in the area of SWH.</p>		
		Chile	Lack of	Implementatio			



			adequate incentives for and lack of capacity of the supply side to offer equipment and services at the required level to sustain market growth.	n of capacity building initiatives to raise product quality and services provided by local SWH manufacturers. Adoption of a voluntary quality control and certification scheme for SWH equipment and installation services adhered to by the majority (over 80%) of SWH equipment and service providers in Chile.			
		India	Generally, the supply side capacity is not up to the required level of professionalism	Enhanced capacity of the supply chain to respond to the growing demand with good quality			

			.	services sustaining the market growth.			
		Lebanon	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 schemes for the SWH equipment and installation services by the majority of the SWH equipment and service providers with a market share of over 80%. Over 90% of customer satisfaction on the certified equipment and services provided.			
		Mexico	Lack of adequate incentives for and some lack of capacity of the supply side to offer	Adoption of a voluntary quality control and certification scheme for SWH			

			equipment and services at required level to sustain market growth.	equipment and installation services adhered to by the majority (over 80%) of SWH equipment and service providers in Mexico.			
Outcome 2.5:	The provided support institutionalized and the results, experiences, and lesson learnt documented and disseminated (including monitoring, learning, evaluation, and other feedback for adaptive management).	Description of the available sustainable institutional support for SWH development (e.g. specific government entities, information points, SWH industry associations, etc.) that will provide continuing support for SWH market development beyond the end of the project and	N/A	N/A			

		access to project-related information by national and international experts.					
		Albania	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.	The forecasts for the penetration of solar panels for hot water are realized also for the industry sector following the updating of the relevant analysis for the residential and service sectors. The Albanian Public Television (TVSH) is preparing a short movie on the Project's achievements and the best experience of pilot solar thermal systems performed in the public/private sectors (to be launched via the programmes of TVSH on September, 2013). The mid-term evaluation is accomplished according to the	The market monitoring for the reporting period is realized and the forecasts for the penetration of solar panels for hot water are updated for the residential, service and industry sectors; In collaboration with MEI and other in line institutions it has been worked for the support of a new initiative, focusing on the Energy Efficiency norms in the buildings related to solar energy and in line with the best European practices/ European Directives; The Albanian Public Television (TVSH) is contracted for the preparation/presentation on a special emission, (date 10 May, 2014) a complete movie on the achievements of the Project and the best experience of pilot solar thermal systems performed in the public/private sectors; Representatives of the project have actively participated in activities related specially to solar energy, Energy Efficiency and Climate Change in general; A considerable number of technical reports are prepared and published in the webpage of the	The market monitoring for the reporting period is realized and the forecasts for the penetration of solar panels for hot water are updated for the residential, service and industry sectors; In collaboration with MEI and other in line institutions it has been worked for the support of a new initiative, focusing on the Energy Efficiency norms in the buildings related to solar energy and in line with the best European practices/ European Directives; The Project Exit strategy is prepared and the GEF funds are already fully delivered in June 2015, allowing the Project to run on the Governmental contribution, 82% of which was transferred to Projects account only in October, 2014; The roster of national experts is updated as per Projects need; A fund of \$ 200 K is mobilized and transferred to the Project account (from ONE UN Fund for Albania) to continue assisting the government of Albania in the area of renewable energies/Small Hydro Power Plants to contribute to the achievement of RES

				<p>procedures of GEF: The overall rating is "satisfactory" , with many "highly satisfactory" ones for different Project's components, coming up with three main recommendations for its further implementation until the end of the Project, opening in the same time the possibility for its extension for another year, in support of drafting the secondary legislation for the implementation of the RES Law; piloting projects in the public buildings based on the local contribution of the Albanian Government, and feasibility studies/a financing scheme for private hotelier industry in the country; Following, the Response Management</p>	<p>UNDP Climate Change Programme (<a href="http://www.ccalb.org">www.ccalb.org</a>) under the SWH Project and on the UNDP webpage (<a href="http://www.undp.al.org">www.undp.al.org</a>); Different reports/analysis are prepared as per requests of UNDP, MEI, ME and other institutions in the country.</p>	<p>national target, based on the lessons learnt and experiences of the SWH Project; Representatives of the project have actively participated in activities related specially to solar energy, Energy Efficiency and Climate Change in general; A considerable number of technical reports are prepared and published in the webpage of the webpage (<a href="http://www.al.undp.org">www.al.undp.org</a>); Different reports/analysis are prepared as per requests of UNDP, MEI, ME and other institutions in the country.</p>
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					<p>Strategy is prepared/under implementation. The financial audit is carried out for 2012, with excellent results.</p> <p>Representatives of the project have actively participated in activities related specially to solar energy, RES, Energy Efficiency and Climate Change in general. Different reports are prepared as per requests of UNDP, METE, MMPAU and other institutions in the country: The activities and the reports are published in the webpage of the UNDP Climate Change Programme (<a href="http://www.ccalb.org">www.ccalb.org</a>) under the SWH Project.</p>		
		Chile	No sustainability of the required market	Local institutions continuing to promote the			

			support. No results and experiences documented and disseminated.	SWH market beyond the duration of the project.			
		India	No results and experiences documented and disseminated.	The reports and other public material from the project can be easily found and accessed.			
		Lebanon	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.			
		Mexico	No sustainability of the required market support. No results and	Local institutions continuing to promote the SWH market beyond the			

			experiences documented and disseminated.	duration of the project.			
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## E. Progress in Implementation

Project Outcomes	Description	Outputs Reported as of 30 June 2015
Global Outcome 1	Effective initiation and coordination of the country-specific support needs and improved access of national experts to state-of-the-art information, technical backstopping, training, and international experiences and lessons learnt.	
Global Outcome 2:	The specific SWH market transformation targets of the first 6 participating countries reached by the end of the project, conducive to the overall global market transformation goals of the project.	
Outcome 2.1.	An enabling institutional, legal and regulatory framework to promote a sustainable SWH market.	<p>1. Following the request of MEI for technical assistance, recommendations for the review of RES Law No. 138/2013 and the draft National Renewable Energy Action Plan are given; 2. The National Renewable Energy Action Plan is reviewed and presented, its Albanian version is provided, the draft governmental decree to endorse it is drafted and submitted together with the its statement of legislative purpose.</p>
Outcome 2.2.	Enhanced awareness and capacity of the targeted end users and building sector professionals to consider and integrate SWH systems into different types of buildings (or into other promising new market segments/applications).	
Outcome 2.2.	Enhanced awareness and capacity of the targeted end users and building sector professionals to consider and integrate SWH systems into different types of buildings (or into other promising new market segments/applications).	<p>1. Three-year monitoring program is performed on consumption of hot water/electricity used in 20 families according to 3 climatic zones in Albania; monitoring program continues for large solar thermal systems, respectively by Hotel Theranda, Day-Care Centers No. 17, 30 and 50, Orphans House and Domestic Violence Centre in Tirana, Sport Centre in Orikum, Day-care center/kindergarten in Saranda; 2. In the frame of the collaboration with the Ministry of Social Welfare and Youth/Social State Service and the local governments, after the preparation of the projects design, SWH systems are installed by Elderly House in Fieri, Development Centre in Shkodra, Sport Centre in Orikum, two Day-Care Centre/kindergarten in Elbasan, and one Day-Care center and a Kindergarten in Gramsh. Following there are under consideration three other kindergartens in Elbasan, the dormitory of the high school in Gramsh, several health clinics in Bulqiza, Fieri and Burreli, etc. 3. Through cooperation with OSCE in Tirana, a series of</p>

		<p>workshops at local level for the presentation of the SWH technologies in different municipalities and communes in the south costal area of Albania are successfully organized (Orikum, Himara, Lukova, Saranda, Ksamil, etc.); 4. It is enabled/uploaded the development of the applications for "Smart Phones" of the SWH Tool for the Residential and Service sectors; 5. In collaboration with the Polytechnic University, reciprocally the Faculty Architecture and Urbanistic and the Faculty of Mechanical Engineering, training workshops and open sessions are successfully developed for Architects, Energy Engineers, and other professionals, including also students of master of Science and the ones from the Energy Audit course, for the technologies of SWH systems for domestic hot water and heating; 6. Different promotion materials in the frame of the Project's activities are realized like leaflet, drawings, information tables, calendars, film materials, etc.</p>
Outcome 2.3:	Increased demand for SWH systems based on availability of attractive end user financing mechanisms and/or other delivery models.	<p>1. Following the implementation of MoU with Tirana (10 March, 2013 - 10 September, 2014) the following are realized: " " Technical and Legal assistance for drafting/implementation of standards related to RES and EE in public buildings, including SWH obligation in all new buildings and those going under major reconstruction; " " Installation of the SWH systems by Day-Care centers No. 30, 50 and High Schools " " Eqerem " Abej " , " Ahmet Gashi " including monitoring equipment; " " Training of municipal staff to support project design and monitoring of the SWH systems installed; " " Preparation/Presentation/Discussion of the Feasibility study and proposal of a suitable financial mechanism for installation of SWH systems and employment of EE measures in partnership with inhabitants, MoT and/or interested Banks for a concrete existing multi-apartment in Tirana, selected by the MoT; 2. Following the experience learned in the frame of the implementation of the MoU with the Municipality of Tirana, and in collaboration with the UNDP/UNEP/PEI program and later with the SE4ALL (Sustainable Energy for ALL), another MoU is in place with the National Housing Agency, to support with technical assistance in the preparation of new design/construction standards in social housing considering RES &amp; EE measures (including solar systems); 3. Following the MoU, the NHA is assisted for the preparation of ToRs and evaluation of the proposals for a Low-cost, Energy-Efficient social house in Korca, to be built with funds from the NHA, which is a totally new initiative in the social housing area. The competition for the engineering design will get finalized by end of July, following with further support for increasing capacities of the architects and engineers regarding energy efficiency through concrete case study and monitoring results of three social housing, reciprocally with/with soft/without EE measures, built in Fieri and Korca (the last one to be build).</p>

Outcome 2.4:	A certification and quality control scheme applicable for the respective national conditions adopted and enhanced capacity of the supply chain to offer good quality products and services promoting a sustainable SWH market.	<p>1. The testing of new types of solar collectors by the Solar Testing Centre has continued (installed by Harry Fultz Institute in Tirana); 2. Following the recommendations of the international expertise, the ToRs related to the procurement of the SWH systems are upgraded for fulfilling the requests of the European Certification Solar Keymark ; 3. Several on-the-job trainings are organized with municipal/commune staff, combined with the pilot projects which are realized in collaboration with the Municipalities/Communes or other institutions; 4. A Study On the macro-economic potential for energy saving from the residential sector in Albania, considering the potential for solar thermal systems is prepared and shared.</p>
Outcome 2.5:	The provided support institutionalized and the results, experiences, and lesson learnt documented and disseminated (including monitoring, learning, evaluation, and other feedback for adaptive management).	<p>1. The forecasts for the penetration of solar panels for hot water are realized for the residential, service and industry sectors following the market monitoring update for the period July 2014 June 2015; 2. The PIR (Project Implementation Review) report is prepared for the period July 2014 June 2015, upon the request of GEF donor; 3. The Project Exit strategy is prepared upon the full delivery of GEF Funds; 4. Two NAMAs are developed (drafted/discussed/finalized) and pending to be registered in the International Registry of NAMAs on i) Supporting the implementation of Energy Efficiency Action Plan in Residential and Service Sector and ii) Use of non-hazardous waste for replacing the fossil fuels in cement industry; 5. The roster of national experts is updated as per Project's need; 6. Representatives of the project have actively participated in activities related specially to solar energy, Energy Efficiency and Climate Change in general; 7. Different reports are prepared as per requests of UNDP, MoEI, MoE and other institutions in the country: The activities and the reports are reflected/published in the UNDP webpage (<a href="http://www.undp.al.org">www.undp.al.org</a>);</p>

## F. Ratings and Comments on Project Progress

### Project Progress toward Development Objective

Role	2015 Rating	2015 Comments
Project Manager/Coordinator	Highly Satisfactory	<p>Following AWP for 2014-2015 project managed to achieve most of its outcomes at a highly satisfactory level. Upon request of the new Government and in the new conditions of the successful governmental reforms in the energy sector, preventing electricity non-payment (which has been reduced from 45% for the year 2013 to approximate 32% for the first five months of 2015), removing one of the key obstacles for introduction of RES and energy efficiency on the demand and supply sides of Albanian Energy System, the RES Action Plan is revised and the recommendations for the amendment of the RES Law are given, keeping unchanged the solar chapter and its provisions for solar obligations. The GEF contribution is fully delivered, while the governmental contribution of USD 518K is finally transferred to the project in October, 2014, enabling the project to continue with foreseen activities for establishment of RES/EE Fund, pilot projects in public buildings and TA for the administrators of the local governments, provide TA for the private sector, enable for full-fledged marketing campaign and continue with TA for the supply chain of SWH systems. More than 712 participants (Arch., Eng., Instructors, etc.) are trained over the last five years, with 152 only during the reporting period, out of which 66 female participants, mainly as on-the-job trainings for the administrators of the local governments on the installation/monitoring/maintenance of solar thermal systems by public institutions, quality of products and their design and integration into new and existing buildings. Project/UNDP is in very good relations with Ministry of Energy/other gov. bodies, and the Project is seen as a technical source/reference for issues in the energy area, even wider than solar/RES. Updated report shows as of 2014, installation of nearly 105,000 m<sup>2</sup> of new SWH capacity has been installed, which accounts for more than 100% of the expected final impact (direct post-project and indirect) within project timeframe, while 27 public buildings have benefited from installed SWH systems and TA. Overall installed cumulative area is 164,870 m<sup>2</sup>, with 20,305 m<sup>2</sup> new installed area within the reporting period, keeping steadily the reached objective for annual sale of 20000 m<sup>2</sup>. As per the project design, there are five key indicators of the success at the end of the project timeframe:</p> <ul style="list-style-type: none"> <li>• The target is 75,000 m<sup>2</sup> of new installed SWH capacity reached by the end of project: At end of 2014, installation of nearly 105,000 m<sup>2</sup> of new SWH capacity has been installed, which accounts for more than 100% of the expected final impact (direct post-project and indirect) within project timeframe;</li> <li>• 27 public buildings have benefited from installed SWH systems;</li> <li>• Other efforts during reporting period have been focused on supporting Ministry of Energy and Industry to progress with finalization of the RES Action Plan (with a specific target for solar energy), revision of RES Law/its secondary legislation to implement the Solar Chapter; supporting municipalities of Tirana, Elbasan, Shkoder, Sarande, Orikum, Gramsh and Fier with technical assistance and demonstration projects to justify the solar obligation's ordinances to request SWH systems in each and every new public building and the ones going through a major renovation;</li> <li>• on the job trainings for monitoring and maintenance of installed solar thermal systems;</li> <li>• monitoring programs for hot water consumption and efficiency of big SWH systems;</li> <li>• efforts to detail the EE/RES fund or other financing models, like NAMAs;</li> <li>• opening of the assistance in the area of standards for EE and solar energy in social buildings, etc.</li> </ul> <p>An annual sale of 20,000 m<sup>2</sup> reached by the end of the project: the project already achieved this target at the end of 2011.</p> <ul style="list-style-type: none"> <li>• The stated longer term goal of 520,000 m<sup>2</sup> of installed capacity by</li> </ul>

		<p>2020: if market trend continues in same way over upcoming years, the target will be easily reached. â Ć Adoption of a national system for adequate product standards, labeling and quality control schemes, to the possible extent, harmonized with international schemes: In the process of drafting the SWH related chapters of the RE law and the supporting by-laws as it concerns any quality related aspects to be installed under the solar obligation and/or supported by public funds, it was concluded that it does not really make sense to develop an own quality control system for solar thermal hardware in Albania, but the already developed European Solar Keymark certification system will be applicable also in Albania. In fact, Solar Keymark is increasingly already attached to many SWH collectors and systems sold in Albania. Domestic producers continued to perform pre-testing of their products by testing facility of the Harry Fultz Institute in Tirana; capacity building continued of engineers, instructors, interested students, installers and manufacturers on the solar collectorsâ testing centers and their operation. â Ć Enhanced capacity of the supply chain to offer their products and services and verify customer satisfaction: More than 712 participants (Arch., Eng., Instructors, etc.) are trained over the last five years, with 152 only during the reporting period, out of which 66 female participants, mainly as on-the-job trainings for the administrates of the local governments on the installation/monitoring/maintenance of solar thermal systems by public institutions, quality of products and their design and integration into new and existing buildings.; Project continued to provide TA to commercial energy end-users to improve installations of SWH systems upon previous inspection; A series of capacity building activities and awareness raising held on technology of SWH with several municipalities/communes alongside the south coast of Albania; During the reported period different promotion materials such as leaflets, fast facts, posters, 2015 wall calendar are prepared and distributed; Efforts have continued to find synergies with other donors contributing to the promotion of solar water heating in Albania; The whole local contribution is finally transferred to the projectâ s account (more than 80% no earlier than October 2014) which will contribute to the incoming EE/RES fund and the continuation of the projectâ s activities based on those as previously foreseen. Project webpage was transferred to UNDPâ s one (<a href="http://www.al.undp.org">www.al.undp.org</a>) updated on regularly bases, while projectâ s activities were shared to some other social medias like Facebook, twitter, etc. Regular articles written and published to several newspapers and magazines.</p>
<p>UNDP Country Office Programme Officer</p>	<p>Highly Satisfactory</p>	<p>Fixing the power sector by clamping down on abuses of the system and instilling a culture of accountability was one of the biggest challenges of the new government. As result the entry into force of Renewable Energy Sources (RES) law was postponed in 2015 and UNDP-GEF support ensured that the role of RES in the overall power supply strategy was clearly defined prior embarking on nuances of RES support schemes in general and feed-in-tariffs in particular through: â Ć Updating the RES law including the best option to implement the feed-in tariffs; â Ć Completing the secondary legislation and necessary reviews of RES action plan in line with country obligations to energy community secretariat. UNDP support and engagement through this project has opened the way to extend the cooperation as partner of choice in other areas such as Energy Efficiency and Small Hydros. The project work and pilot interventions/applications at municipal level are being used as good example for further potential upscale in the new 61 reshuffled municipalities (after the elections of June 2015 and in the framework of one of the major administrative and territorial reforms in the country). Renewable Energy is promoted in different fronts with UNDP support, Ministries of Energy, Urban Planning and Environment UNDP are brought together for establishment of an Eco Fund, either as a public fund with no fiscal revenues of its own or as extra budgetary independent one. The above mentioned are</p>

		a package of interventions with intended application at municipal level that UNDP will be pursuing in the country.
Project Implementing Partner		
GEF Operational Focal point		
Other Partners		
UNDP Technical Advisor	Highly Satisfactory	The project received Highly Satisfactory rating. It exceeded its targets and fully achieve the global development objective, i.e. to ensure transformation of market for solar water heating (SWH) systems in Albania. The target for SWH-covered area has been exceeded more than two-fold, i.e. by reaching 164,870 m2 against 75,000 m2 originally planned by the end of the project. Annual sales of SWH system have also reached the targeted level of 20,000 m2 already for a three consecutive year. GEF-funded activities of the project has been completed and operationally closed as of June 2015. However, project received additional contribution from the Government of Albania and is continuing, indicating a high-level of national buy-in and sustainability of the results.

### Project Progress in Project Implementation

Role	2014 Rating	2015 Rating	2015 Comments
Project Manager/Coordinator	Highly Satisfactory	Highly Satisfactory	The project effectively implemented as per the layout of the expected activities of the annual work plans: a full list of reports produced by the technical experts on time and in line with the respective ToRs. A series of consultations are organized in each and every area the project is working with: legal issues continued with the recommendations for amendment of the RES-E articles, while keeping unchanged the Solar thermal chapter, and revising the RES Action plan, seeing it as one of the core elements of the Energy Strategy for Albania, which is still under development. TA is given to all the municipalities, with which a cooperation was established to contribute with SWH systems in several of their public buildings with hot water demand, i.e. in Tirana, Gramsh, Elbasan, Orikum, Saranda, Fier, Shkoder, etc. On the job trainings are delivered to local communities on the installation, monitoring and maintenance of SWH systems upon commissioning/hand over of pilot projects. Awareness on the technology of SWH is raised through a number of workshops with local communities, NGOs, private business and other interested participants. Technical specifications are improved as part of the tender procedures for the procurement of SWH systems. Interesting data are gathered from the monitoring programs from families, hotels and other types of buildings, which results will get published into a full study (in cooperation with UNEP) to be used in project's further awareness raising and training activities as well as for updating the default values in the web-based software tool developed by the project to assists the design (dimensioning) and

			financial evaluation of the SWH systems considered. The project is well represented in a series of activities related to Climate Change and Energy Efficiency. The project has been in close contact with UNDP CO in terms of activities and the budget delivery. The disbursement rate of the GEF and UNDP funding is at the level of 100% and 78% respectively by the end of June, 2015. The management arrangements seem very appropriate and efficient. The project managed to get 100% of the local contribution (Euro 650K), eventhough 80% of it late enough (October, 2014). This would allow the project to continue with planned activities based on local contribution, as agreed also in the last SC meeting of 22 July, 2015.
UNDP Country Office Programme Officer	Highly Satisfactory	Highly Satisfactory	The yearly activities of the project are fully implemented according to the endorsed work plan and required timelines. Project has delivered more than 85% of the budget and no critical risk is encountered. The government co-financing from the Ministry of Energy was delivered in full, more than half a million USD was disbursed late 2014. The project has maintained very good partnerships at central level with Ministry of Energy and other line ministries and also at local level with nine municipalities from north to south of the country. Local actors as well as other development partners are participating in the co-financing scheme at local level piloted by the project. Huge potentials are assessed now with the new municipalities that came out of the territorial administrative reform for upscale the current interventions of SWH with government cost shaing, although this would require necessary time to adjust to the new reality, project success stories are a touchable and concrete example of energy savings with GHG reduction impact. The responsibilities of bigger local government units (61 compared to 375 previously) give them large influence on energy use in their communities through land use and planning, building standards, property taxes, provision of utility services etc. In this context there is a huge need identified for them to comply technically, thus the project will continue to address the need at a larger scale. Partnerships with academia and UNOPS-UNDP small grants initiatives are extending project coverage and knowledge sharing. As approved in the project latest steering committee the government cost sharing received from ministry of Energy would contribute to the abovementioned activities.
Project Implementing Partner			
GEF Operational Focal point			
Other Partners			
UNDP Technical Advisor	Satisfactory	Satisfactory	Project implementation progress is rated satisfactory. This is the last PIR for the GEF-funded component of the project and the delivery is at 98%. All inputs were delivered on time and on budget. The project itself remaining operational due to received monetary contribution from the Government, which is a clear indication of its high relevance and sustainability of the project results. In this respect, excellent

			collaboration with and buy-in of the Ministry of Energy and Industry should be noted. This strong partnership along with additional resources received by the project will enable it to scale-up its impact and continue work on essential elements of the policy reform for renewable energy in Albania.
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## G. Project Planning

Key project milestone	Status	Original Planned Date (Month/Year)	Actual or Expected Date (Month/Year)	Comments
Inception Workshop		-	-	
Mid-term Review		-	-	
Terminal Evaluation		-	-	

## H. Critical Risk Management

Critical Risks Type(s)	Critical Risk Management Measures Undertaken in 2015
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## I. Environmental and Social Grievances

Related environmental or social issue	
Status	
Significance	
Detailed description	

## J. Communicating Impact

Tell us the story of the project focusing on how the project has helped to improve people's lives.
Efforts during reporting period have been focused on supporting Ministry of Energy and Industry to progress with finalization of the RES Action Plan (with a specific target for solar energy), revision of RES Law/its secondary legislation to implement the Solar Chapter; supporting municipalities of Tirana, Elbasan, Shkoder, Sarande, Orikum, Gramsh and Fier with technical assistance and demonstration projects to justify the solar obligation's ordinances to request SWH systems in each and every new public building and the ones going through a major renovation; on the job trainings for monitoring and maintenance of installed solar thermal systems; monitoring programs for hot water consumption and efficiency of big SWH systems; efforts to detail the EE/RES fund or other financing models, like NAMAs; opening of the assistance in the area of standards for EE and solar energy in social buildings, etc. A series of capacity building activities and awareness raising held on technology of SWH with several municipalities/communes alongside the south coast of Albania; During the reported period different promotion materials such as leaflets, fast facts, posters, 2015 wall calendar are prepared and distributed; Project webpage was transferred to UNDP's one ( <a href="http://www.al.undp.org">www.al.undp.org</a> ) updated on regularly



<p>bases, while projectâ s activities were shared to some other social medias like Facebook, twitter, etc. Regular articles written and published to several newspapers and magazines.</p>
<p>What is the most significant change that has resulted from the project this reporting period?</p>
<p>The entering into Memorandum of Understanding with public entities/municipalities of Tirana, Lezha, Saranda, etc. ensured cooperation not only with regards to the technical-legal assistance on local standards to involve solar obligations and capacity building of their staff in charge with policy making/projects design, but also ensured from the beginning the cost-sharing of selected pilot projects, qualified as direct impact of the Project in terms of the overall area installed and GHG emissions reduced. Enlarging the scope of the assistance in the area of energy efficiency measures in buildings with SWH systems one of them, made the Project more interesting in the eyes of the Projectâ s local partners, while helps in terms of the market transformation for SWH. Examples from assistance given to the Ministry of Energy and Industry to review the RES Law and its national Action plan; MoU with the National Housing Agency for technical assistance with design/construction standards employing EE measures and SWH in social buildings, or contribution for preparation of two other NAMAs in the area of energy. Installing of/collecting data from relevant monitoring equipment together with SWH systems helped a lot in preparing strong justification background for the municipalities to further on consider the solar obligations for the public buildings under their jurisdiction. Cooperation with other donors/other UN agencies working in the area of energy/RES/EE multiply the efforts of the standalone project. Examples from cooperation with GEF Small Grants, UNEP?UNDP PEI, UNDP SE4All, One UN Funds, etc.</p>
<p>Describe how the project supported South-South Cooperation and Triangular Cooperation efforts in the reporting year.</p>
<p></p>

## K. Partnerships

Partners	Innovation and Work with Partners
Civil Society Organisations/NGOs	<p>The Project has continued maintaining the good relations established with the associations of Tourism, Architects, Constructors, Banks, etc., by attracting their opinion on, inviting them in each and every event organized to promote Solar Water Heating in the country, and/or support every proposal by them with regards to further training, participation in others related events, etc. The relations with media have been also very good, having them correctly addressing Solar Water Heating events in the visual and written channels. The Universities, as part of the academia have especially been so close to us with dedicated trainings and open sessions on solar energy. The Project has also successfully promoted the SWH technology in the activities organized by NGOs like the Solar Week (23 â 24 October, 2014); Vlora Aarhus Center on RES with focus on solar energy (September, 2014), Environment day (5 June, 2015), etc. Through the cooperation with NGOs, a number of health clinics with demand for hot water, located in isolated rural areas are identified/contacted and supported.</p>
Indigenous Peoples	
Private Sector	<p>The training of a considerable number of architects, building engineers, other professionals in the building sector, hotel owners, SWH installers, etc. was conducted. Through the cooperation with ATA-Albanian Tourist Association, the Project is assisting 5 hotels with the feasibility studies and technical designs, on the understanding the participants will continue and procure themselves the designed SWH systems. As well through cooperation with AKBN (National Agency for Natural Resources) several food industries (beer</p>

	and diary) are also on the way to get support with feasibility studies/technical design projects for SWH systems. The increased rate of the annual sales of SWH systems (4,600 m2 in 2009 while more than 20,000 m2 in 2014) is a good indication for the consideration of SWH systems in new buildings and/or ones under renovation.
GEF Small Grants Programme	The initiated cooperation with GEF Small Grants Programme has continued with regards to technical assistance/co-financing given to local municipalities to install SWH systems in their public buildings having a high demand for hot water, like kindergartens, dormitories and schools. In this frame, the feasibility studies and technical designs are prepared and the SWH systems with monitoring equipment are installed by the two Day-Care Centers in Elbasan, as well as for the Day-Care Centre and Kindergarten in Gramsh.
Other Partners	Besides the partnership built with Tirana Municipality (which MoU got extended till September, 2014), the Project entered into partnerships with Saranda, Orikum, Elbasan and Gramshi municipalities, through which cooperation several public buildings were supported with SWH systems and technical assistance for their monitoring and maintenance. The cooperation with the Harry Fultz Institute in Tirana has continued with pre-testing of SWH systems of the Albanian producers by the Testing Centre placed by this Institute and also with the organization of different events/workshops for university students and professionals of the SWH supply chain. The Project was into close cooperation with UNDP/UNEP Poverty and Environment Initiative and later (beginning of 2015) with UN SE4All initiative, through which, a MoU is established with the national Housing Agency to assist them with new energy standards for designing/constructing of social houses. On the other hand, through one UN funds for Albania, another technical assistance is under conceptualization to assist the Ministry of Energy and Industry in the area of RES/SHPPs in similar terms with the cooperation on solar energy. A macroeconomic analysis on energy savings potential of Albanian households is already produced, having a lot of focus on solar energy use. On the other hand, a cooperation was established with the UNDP Regional Project "Supporting RBEC transition to low emission development" under which cooperation, two NAMAs related in the area of energy were fully developed.

## L. Progress toward Gender Equality

Has a gender or social assessment been carried out this reporting period?	No
If a gender or social assessment has been carried out what where the findings?	
Does this project specifically target woman or girls as	No

direct beneficiaries?	
Please specify results achieved this reporting period that focus on increasing gender equality and improving the empowerment of women.	By targeting the social public institutions like kindergartens, medical clinics, elderly and orphans houses to co-finance the installations of solar thermal systems and demonstrate the benefits of this technology with energy savings and climate change mitigation, due to the fact that the majority of those public institutionsâ staff are women (both, management and common ones), a lot is done during the reporting period to increase their awareness and consider their particular needs and suggestions: women appeared very interested in and had clear voices in support to solar energy. Good examples continue to come from social institutions approached with their female directors who strongly impacted the decision making in favor of investments of SWH systems in their institutions. In terms of the participants in our related trainings, the female participants trained during the reporting period on the design, planning and monitoring of solar thermal systems (both professionals and students) was 66 out of 152.

## M. Annex 1 - Ratings Definitions

### Development Objective Progress Ratings Definitions

*Highly Satisfactory (HS):* Project is expected to achieve or exceed all its major global environmental objectives, and yield substantial global environmental benefits, without major shortcomings. The project can be presented as 'good practice'.

*Satisfactory (S):* Project is expected to achieve most of its major global environmental objectives, and yield satisfactory global environmental benefits, with only minor shortcomings.

*Moderately Satisfactory (MS):* Project is expected to achieve most of its major relevant objectives but with either significant shortcomings or modest overall relevance. Project is expected not to achieve some of its major global environmental objectives or yield some of the expected global environment benefits.

*Moderately Unsatisfactory (MU):* Project is expected to achieve of its major global environmental objectives with major shortcomings or is expected to achieve only some of its major global environmental objectives.

*Unsatisfactory (U):* Project is expected not to achieve most of its major global environment objectives or to yield any satisfactory global environmental benefits.

*Highly Unsatisfactory (HU):* The project has failed to achieve, and is not expected to achieve, any of its major global environment objectives with no worthwhile benefits.

### Implementation Progress Ratings Definitions

*Highly Satisfactory (HS):* Implementation of all components is in substantial compliance with the original/formally revised implementation plan for the project. The project can be presented as 'good practice'.

*Satisfactory (S):* Implementation of most components is in substantial compliance with the original/formally revised plan except for only few that are subject to remedial action.

*Moderately Satisfactory (MS):* Implementation of some components is in substantial compliance with the original/formally revised plan with some components requiring remedial action.

*Moderately Unsatisfactory (MU):* Implementation of some components is not in substantial compliance with the original/formally revised plan with most components requiring remedial action.

*Unsatisfactory (U):* Implementation of most components is not in substantial compliance with the original/formally revised plan.

*Highly Unsatisfactory (HU):* Implementation of none of the components is in substantial compliance with the original/formally revised plan.