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## Annex 3: PIR Generic Offline Template

As of 4 May 2015

(any changes made to the on-line PIR after this date will not be reflected in the PIR Generic Offline Template)

### Generic Offline Template – 2015 PIR

**THIS TEMPLATE CANNOT BE USED TO SUBMIT THE FINAL 2015 PIR, THE FINAL PIR CAN ONLY BE SUBMITTED ONLINE.**

This MS Word file contains the sections to be updated in the 2015 PIR only. Unlike the 2015 PIR Word Report, this file contains no project-specific information and does not include the data that is pre-loaded into the 2015 online PIR.

Please note:

> This file can be used to prepare PIR input offline, if that approach is found to be helpful. The use of this file is entirely optional.

> Any information entered into this file must be manually transferred into the online PIR system.

> This generic offline template does not in any way replace the mandatory online 2015 PIR; a completed version of this offline template WILL NOT be accepted as any project's final PIR, will not be transferred to the GEF, and the project will be in non-compliance with the GEF mandatory reporting requirements.

**The final PIR can only be accepted through the online PIR system.**

## Basic Data / Basic Project & Finance Data

### Basic Project Information

PIMS ID	3908
Project Title	Promoting Renewable Energy in Mae Hong Son Province

### Project Contact Information

Role	Name	Email Address
Project Implementing Partner	UNDP Direct Implementation Modality (DIM), N.A.	N.A.
Project Manager/Coordinator	Ms. Sorat Phutthaphithak (PM since June 2014)	sorat.phutthaphithak@undp.org
UNDP Country Office Programme Officer	Dr. Sutharin Koonphol	sutharin.koonphol@undp.org
GEF Operational Focal Point (OFP)	Mr. Kasemsan Jinnawaso Permanent Secretary, Ministry of Natural	N.A.

	Resources and Environment, Thailand	
<b>Other Partners</b>	Office of the Governor, MHS Province Provincial Energy Office , MHS Province Department of Alternative Energy Development and Efficiency (DEDE), MHS Province	N.A.

### **Finance**

[Will be automatically uploaded to each PIR by end June. No input required. Data to be uploaded: GEF Grant Amount; PPG Amount; Total GEF Grant; Co-financing; Total GEF Grant Disbursement as of 30 June]

### **Project Milestones and Timeframe**

<b>Revised planned closing date</b>	Closing date not revised, still planned at 31 December 2016.
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### **Project Supervision**

<b>Dates of Project Steering Committee/Board meetings during reporting period (30 June 2013 to 1 July 2014)</b>	21 October 2014 21 April 2015
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### **Terminal PIR**

<b>Is this the terminal PIR that will serve as the final project report?</b>	No
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### **General Comments on Basic Data**

Please insert additional comments not explained above.
Project expenditures were relatively low in the reporting period, as the procurement process to contract a company to support the installation of several renewable energy systems was delayed. The delivery as of 30 June 2015 was at US\$ 64,118.. For more details on progress, see other sections below.

## Development Objective Progress / Progress Toward Development Objectives

Objective / Outcome: Description of Objective / Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Level at 30 June 2014	Level at 30 June 2015
<b>Project Objective:</b> <b>To overcome barriers to the provision of Renewable Energy (RE) services in integrated provincial renewable energy programmes in Thailand</b>	1) Increase of power generation capacity and usage from RE systems in MHS both on-grid and off-grid	RE power generation capacity in MHS amounts to 29,220 MW (on grid) and 255 kW (off-grid). (June 2014)	By the end of the project: RE power generation capacity in MHS amounts to 29,720 MW (on grid) and more than 315 kW (off-grid);  Additional RE power generation capacity of 500 kW (solar farm) and 60 kW (off grid hydro) and several solar applications realized.	RE power generation capacity in MHS amounts to 29,220 MW (on grid) and 255 kW (off-grid). (June 2014).	RE power generation capacity in MHS amounts to 29,220 MW (on grid) and 255 kW (off-grid). (June 2015)
	2) Models for RE generation & application which can be replicated in other areas demonstrated	No new models for RE generation & application.	At least 3 new models for RE generation & application developed and operational.  Models ready to be replicated in other areas (hydro, solar and biogas).	Implementation of the project activities for the second phase of the project started beginning of June 2014. The time period for achieving results till the end of the reporting period (end of June '14) was too short. In the period July '13 till June '14 very few activities on the ground were implemented. The focus was on implementing the recommendations of the MTR team and agreeing with the	Several models related to RE generation & application, service delivery, fund management and sustainable utilization of RE were sketched out but not finalized. For instance policy support for RE applications & energy access in forest reserved area; facilitation to local government in RE technologies, operation & maintenance (O&M); community management for productive uses of RE technologies; women empowerment in ICS realization and promotion; RE revolving fund (Clean Energy Fund) for income generation and livelihoods improvement for the marginalized groups.

Objective / Outcome: Description of Objective / Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Level at 30 June 2014	Level at 30 June 2015
				government on the new project strategy.  No RE models developed.	
<b>Outcome 1: Strengthened institutional, organizational and social capacity results in planning, management and implementation of integrated RE programmes in MHS</b>	3) No. of RE projects proposed by government agencies in line with provincial plan	None	At least 2 RE projects proposed by government agencies in line with provincial plan	See above.  No RE projects proposed.	3 RE (micro-hydro power) projects were proposed and developed by 3 local governments (Tambon Administrative Organizations or TAOs), in line with local and provincial plans. TAOs will be the owner of the plants. (Completed)
	4) No. of working RE management models established	None	At least 3 management models established (off-grid hydro, biodigesters, solar)	See above.  No management models established.	A management structure for off-grid micro-hydro power was established. The agreed structure includes responsibilities/ tasks of provincial & local concerned agencies and was agreed with participation of local communities.
<b>Outcome 2: Financially sustainable RE systems operational in MHS</b>	5) No. of on-grid solar farm projects approved, installed and operational in MHS by end of 2016	3 (total 2,880 kW- June 2014)	1 additional on-grid solar farm project approved, installed and operational in MHS by end of 2016 (capacity 500 kW).	See above.  No new RE systems approved or installed.	2 potential locations for on-grid solar farms were selected and under land legal review.
	6) No. of SHS rehabilitated in MHS by end of 2016	0	100 SHS rehabilitated in MHS by end of 2016 (100*120 Wp)		0
	7) No. of solar lanterns sold in MHS by end of 2016	0	200 solar lanterns sold in MHS by end of 2016 (200*2.5W)		2 solar lanterns demo models were selected and tried-out to find the most suitable one for MHS off-grid poverty stricken areas, in term of technology application and

Objective / Outcome: Description of Objective / Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Level at 30 June 2014	Level at 30 June 2015
					<i>affordability.</i>
	8) No. of biodigesters installed at schools, SMEs and farms in MHS by end of 2016 with	33 (at SMEs/hh – June 2014)	20 additional biodigesters at schools, SMEs and farms installed and operational in MHS by end of 2016 with support from project (average size 8 m3)		3 potential locations for biodigesters at schools and another 9 at farms were identified and assessed.
	9) No. of off-grid micro-hydropower projects approved, installed and operational in MHS by end of 2016	9 (255 kW – June 2014)	2 off-grid hydropower plants approved, installed and operational in MHS by end of 2016 (2 * 30 kW).		3 off-grid micro-hydro power projects were approved by MHS province. 2 out of 3 projects are under investigation of land use permit by MNRE.
	10) No. of solar rooftop installations approved, installed and operational in MHS by end of 2016	0	10 solar rooftop systems approved, installed and operational in MHS by end of 2016 (with support from the project) (10 * 200 W)		0
	11) No. of EE projects in gov. buildings approved, implemented and operational in MHS by end of 2016	0	1 EE project in gov. building approved, implemented and operational in MHS by end of 2016 (RE capacity 600 W savings)		0
	12) No. of villages in which ICS have been tried out and are being used in MHS by	0	10 villages in which ICS have been tried out and being used in MHS by end of 2016 (50 systems)		14 villages of 3 ethnic groups (Tai Yai, Karen, Lanna), located in peri-urban and rural areas, in which 55 ICS have been tried out and are being used. (Completed)

<b>Objective / Outcome: Description of Objective / Outcome</b>	<b>Description of Indicator</b>	<b>Baseline Level</b>	<b>Target Level at end of project</b>	<b>Level at 30 June 2014</b>	<b>Level at 30 June 2015</b>
	<i>end of 2016</i>				
<b>Outcome 3: Technical support is available locally for the development, management and maintenance of RE applications in MHS</b>	13) <i>No. of village technicians trained to operate and maintain off-grid hydropower plants</i>	<i>No knowledge (center) or experts easily available</i>	<i>4 village technicians trained to operate and maintain off-grid hydropower plant by end of 2016</i>	<i>See above. No technicians or users trained.</i>	<i>10 technicians (8 technicians from 3 TAOs and 2 from Provincial Energy Office) were trained to carry out technical field assessments to determine potential for off-grid micro-hydro power.</i>
	14) <i>No. of village technicians trained to maintain rehabilitated SHS</i>	<i>0</i>	<i>10 village technicians trained to maintain rehabilitated SHS by end of 2016</i>		<i>0</i>
	15) <i>No. of technicians trained on EE measures and solar rooftop installation</i>	<i>0</i>	<i>2 government technicians trained on EE measures and solar rooftop installation</i>		<i>0</i>
	16) <i>No. of users trained in the operation and maintenance of biodigesters</i>	<i>0</i>	<i>20 users of biodigesters trained to operate and maintain the systems</i>		<i>0</i>
	17) <i>An improved design of an ICS suitable for situation in MHS</i>	<i>None</i>	<i>Improved design for ICS suitable for MHS finalized</i>		<i>Improved design for ICS suitable for MHS finalized and being used among 55 project volunteers. (Completed)</i>

Objective / Outcome: Description of Objective / Outcome	Description of Indicator	Baseline Level	Target Level at end of project	Level at 30 June 2014	Level at 30 June 2015
<b>Outcome 4:</b> <i>Policies facilitate up-scaling and replication of RE systems in Thailand</i>	18) Documented and published experiences/lessons learned from all technologies implemented by end of 2016	None	By end of 2016 all lessons learned documented and published	See above.  No lessons learned documented or guidelines published.	0
	19) Centre of learning approved and operational in MHS by end of 2016	None	Centre of learning approved and operational by end of 2016		0
	20) Guidelines published	None	At least 2 guidelines for replication published e.g. a) on management models for off-grid applications b) incentive schemes/financial model for RE		One guideline for local technicians on technical field assessments to determine potential for off-grid micro-hydro power was published and 700 copies disseminated to provincial and local concerned agencies and TAOs in MHS.
	21) No. of lessons learned included in policy making at central level	0	At least 2 important lessons learned included in policy making at central level		Information on several topics and themes of important lessons learned i.e. on micro-hydro power policy, financial support mechanisms, appropriate service delivery models for accessible and affordable RE technologies in poverty stricken areas for off-grid marginalized groups have been gathered. This information will be used in coming year to determine key learnings for inclusion in policies at central level.





## Development Objectives Rating

<p><b>Project Manager / Coordinator</b> is the person managing the day to day operations of the project.</p>	<p>MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country or regional projects where appropriate.</p> <p>Please review the cumulative progress toward end-of-project targets as noted in the DO tab of this PIR and provide a rating on this progress. Please consider the following questions before selecting a DO rating:</p> <ol style="list-style-type: none"> <li>1. What is the likelihood that the project will achieve its stated objective?</li> <li>2. What is the likelihood that the project will achieve all stated outcomes by the planned project closure date?</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.</li> <li>3. Fully explain the critical risks that have affected progress.</li> <li>4. Outline action plan to address projects with DO rating of HU, U or MU.</li> </ol> <p><b>Moderately Satisfactory</b></p> <p>The overall objective of the project is to overcome barriers that currently prevent widespread and sustainable utilization of renewable energy technologies for the provision of energy services in rural areas of Thailand, in particular in Mae Hong Son Province. After the mid-term review last year and the significant changes made in the project management arrangements based on the recommendations provided by the MTR team, significant process has been made in setting-up a management structure, establishing coordination mechanisms horizontally and vertically, setting up communication channels with MHS project stakeholders, establishing relationships and gaining trust from all stakeholders.</p> <p>Overall, the cumulative project progress can be rated Moderately Satisfactory. The project has laid the groundwork for the sustainable utilization of renewable energies in MHS and is expected to achieve most of its major relevant objectives. Given the delay in procurement of a company to support the realization of a solar farm, SHS systems, biodigesters and solar rooftop system, there is the possibility that not all anticipated global environmental benefits will be achieved within the project timeframe. The remaining time till project closure and remaining budget is limited.</p> <p>Within its strategic framework and with concerted efforts of the stakeholders, the project is on the track and gears towards its objectives/outcomes. Its results would contribute to the reduction of GHG emissions in Thailand, and to the Goal of Thailand's GEF strategy supporting to the implementation of Sufficiency Economy principles, as enshrined in Thailand's 10<sup>th</sup> National Economic and Social Development Plan.</p> <p>Most progress has been achieved on outcome 1 in the strengthening of institutional, organizational and social capacities in MHS province regarding the planning of integrated RE programmes in MHS province. Overall progress on outcome 2 (RE systems operational</p>
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in MHS) and 3 (technical support for development of RE systems is available locally) is behind schedule due to the delayed procurement of a company to support the installation of RE systems in the province. However, significant progress was made on the trying out and dissemination of ICS models. Regarding progress on outcome 4 on policies to facilitate up-scaling and replication of RE systems, information/lessons learned are being gathered, which will be used as input to the policy making process at central level. Clear results of this process will become visible during 2016.

The cumulative project financial delivery as of 30 June 2015 is US\$ 64,118. The financial delivery is less than expected due to delays in the procurement of a company to support the installation of various RE systems.

The risks the project encountered and actions taken to mitigate the risks include:

- Lack of Policy Support. Lack of policy enabling factors to execute development activities in protected areas. This has caused long delays in the official procedure to investigate land before a land-use permit for the micro-hydro plants in forest preserved areas can be issued. This is causing delays in the plants construction. => The project has continuously been following up closely with provincial, regional and central decision bodies and tried its best to respond quickly to their additional requirements. Experiences gained in the request for land-use permit, its procedures, complexities and adaptation management will be documented carefully as the project's lessons learned, starting in Q4/2015. It is planned that these experiences will be presented to the Provincial Board next year and to concerned agencies at the national level at the end of the project.
- Changing of Leadership and Supports. Developments on the ground were dependent on strong support from provincial leaders, especially the provincial management team. However, the people in these positions were shifted frequently. Changing of leaders could create positive and negative impacts to the project. => The project team made frequent visits the MHS management team to consult/ update them about the project. This ensured they understood well the project strategy and objectives. Also their ideas/ advices were included to ensure their support and work towards the project objectives.
- Limited Capacity of Provincial Project Partners. Provincial government partners have limited capacity to fully support the project activities because (i) few have sufficient knowledge/skills in relation to the promotions and applications of RE technologies; (ii) almost all of them are overwhelmed with regular assignments, while security matters in the province were considered the top development priority; (iii) with a high rate of transfer/shuffle among government employees, the newcomers had to start getting familiarized with the project; and (iv) the MHS Provincial Energy Office (PEO) which is one of the key project's focal points does not have sufficient technical staff. There are only two staff who are responsible for all technical aspects of energy development in MHS province. In addition, the PEO had a small budget for RE related promotion and realization at ground level. => The project has tried to identify and build up technical and management capacities to provincial focal points, local governments and institutions. The project also collaborated with an NGO and created linkages to local/ regional RE networks to assist and build up capacities of the key stakeholders. In

	<p>addition some tasks in field areas were carried out, in close cooperation with the PEO.</p>
<p><b>UNDP Country Office Programme Officer</b> is the UNDP programme officer in the UNDP country office who provides oversight and supervision support to the project.</p>	<p>MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country. Not necessary for regional or global projects.</p> <p>Please review the cumulative progress toward end-of-project targets as noted in the DO tab of this PIR and provide a rating on this progress. Please consider the following questions before selecting a DO rating:</p> <ol style="list-style-type: none"> <li>1. What is the likelihood that the project will achieve its stated objective?</li> <li>2. What is the likelihood that the project will achieve all stated outcomes by the planned project closure date?</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating, for example, if your rating differs from the rating provided by the project manager please explain why.</li> <li>2. Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.</li> <li>3. Fully explain the critical risks that have affected progress.</li> <li>4. Outline action plan to address projects with DO rating of HU, U or MU.</li> </ol> <p><b>Moderately Satisfactory</b></p> <p>The DO rating is Moderately Satisfactory because in this reporting period the project has made substantive progress in building awareness and engaging provincial and local officials in developing renewable energy technology to pave way for mainstreaming renewable energy promotion into the provincial and local development plans (Outcome 1). The project has also made systematic progress in technical capacity building on renewable energy technology at the local and community level (Outcome 3). However, the delay in the procurement process to get technical team on board in late 2014 as planned, has resulted in the delay in getting started with introducing RE technologies on the ground (Outcome 3). In addition, the process in getting the land permits to build the two micro-hydro has taken longer than anticipated, affecting the project’s plan in producing tangible results on the ground at the early stage of Phase 2.</p> <p>The key positive trend in this reporting period include:</p> <ol style="list-style-type: none"> <li>(1) <b>Site selection with full participation of the provincial and local authorities:</b> the project has facilitated the site selection in order to focus the RE technologies demonstrated in 1-3 clusters in order to create consolidated models for replication in other areas in Mae Hong Son. After some delays in identifying the pilots sites in Q3/2014, three sites were finally selected as the pilots, including (1) Pha Bong Sub-district, Muang District; (2) Pa Tho Sub-district, Khun Yuam District, and Wieng Nua Sub-district, Pai District, with strong engagement of the provincial and local authorities in designing the criteria for site-selection, in developing the</li> </ol>

proposals, in decision-making in finalizing the site selection.

(2) **Capacity building for targeted communities and local authorities:** the project has started preparing the ground works for introducing the RE technologies in the targeted communities and Tambon Administrative Organisations (TAOs) in three target areas. These include creating awareness on the benefits of micro-hydropower and solar to the daily life of the off-grid communities, the basic technical knowledge on maintaining the systems.

(3) **Adaptive management to maintain momentum of interest among stakeholders:** the procurement process faced delays due to the mistakes in the call for proposal, resulting in the need to redo the process from the beginning. Hence, the plan to have a technical team to work on promoting the solar and bio-digesters technology by early 2015 was not realized. According to the new schedule, the technical team will now be on board by August 2015. This delay has greatly affected the project's effort to produce tangible results as early as possible in Phase 2 to regain confidence among the stakeholders. However, the project management unit has undertaken good adaptive management as follows:

- **Introducing Integrated Cook Stoves (ICS)** to targeted communities to pilot on which models would be most suitable to each of the community's daily usage, taking into account the different ways of life among the different ethnic groups in Mae Hong Son (e.g. Mong in Pha Bong Sub-district, Karen in Pa-Tho Sub-district, and Muser in Wieng Nua Sub-district). The project also uses the process of introducing ICS to build awareness on the benefits of renewable energy, as well as how ICS could help reducing use of wood and support forest conservation, which is key for communities in Mae Hong Son, wherein 90% of the areas are forest covers.
- **Supporting initial feasibility studies for solar farm and bio-digesters:** this is to start some of the groundwork necessary to the introducing the solar farm and bio-digesters in target areas, so that when the technical team is on board in Q3/2015 – the works on demonstrating these two technologies could start immediately. The feasibility studies are conducted by hiring an individual contract for a period of 4 months to complete the tasks. This has helped in maintaining the momentum of the project's progress and the interest among the stakeholders especially in the target communities.

The critical risks identified are further delays in getting the land permits from the Department of National Parks, Plant, and Wildlife Conservation (DNP) to install the micro-hydro systems. If the permits are not granted

	<p>by Q3/2015, the project risks the chance of not installing the systems in time to provide a comprehensive capacity building on operation and maintenance in time before the project ends. It will also affect the confidence of the project amongst stakeholders as well as the applicability of micro-hydro power in the context of Mae Hong Son – as it would prove to be too difficult and impractical to obtain permits from DNP to install micro-hydro systems in other areas of Mae Hong Son, even though the superintendents looking after the areas are in agreement and were the project’s champions. The project management unit and UNDP have made all the efforts to mitigate this risk by (1) UNDP senior management met with the Director General of DNP to flag these two requests to get his support. The DG recognised the cases and ensures that he would give permission once the cases reaching his desk. However, the process from the site-level to go through all the steps before reaching the DG’s consideration still takes very long time; (2) the project management unit keeps in close contact with the local authorities and works closely with them to provide additional information as required by the parks authorities in order to expedite the process as much as possible.</p>
<p><b>GEF Operational Focal point</b> is the government representative in the country designed as the GEF operation focal point.</p>	<p>HIGHLY RECOMMENDED but NOT mandatory for projects under implementation in one country. Not necessary for regional or global projects.</p> <p>Please review the cumulative progress toward end-of-project targets as noted in the DO tab of this PIR and provide a rating on this progress. Please consider the following questions before selecting a DO rating:</p> <ol style="list-style-type: none"> <li>1. What is the likelihood that the project will achieve its stated objective?</li> <li>2. What is the likelihood that the project will achieve all stated outcomes by the planned project closure date?</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.</li> <li>3. Provide recommendations for next steps.</li> </ol> <p>N.A.</p> <p>N.A.</p>
<p><b>Project Implementing Partner</b> is the representative of</p>	<p>RECOMMENDED but NOT MANDATORY for projects under implementation in one country and regional projects.</p> <p>Please review the cumulative progress toward end-of-project targets as noted in the DO tab of this PIR and provide a rating on this progress. Please consider the following questions before selecting a</p>

<p>the executing agency (in GEF terminology). This would be Government (for NEX/NIM execution) or NGO (for CSO Execution) or an official from the Executing Agency (for example UNOPS).</p>	<p>DO rating:</p> <ol style="list-style-type: none"> <li>1. What is the likelihood that the project will achieve its stated objective?</li> <li>2. What is the likelihood that the project will achieve all stated outcomes by the planned project closure date?</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.</li> <li>3. Provide recommendations for next steps.</li> </ol> <p>N.A.</p> <p>N.A.</p>
<p><b>Other Partners:</b> For jointly implemented projects, a representative of the other Agency working with UNDP on project implementation (for example UNEP or the World Bank).</p>	<p>RECOMMENDED but NOT MANDATORY for jointly implemented projects.</p> <p>Please review the cumulative progress toward end-of-project targets as noted in the DO tab of this PIR and provide a rating on this progress. Please consider the following questions before selecting a DO rating:</p> <ol style="list-style-type: none"> <li>1. What is the likelihood that the project will achieve its stated objective?</li> <li>2. What is the likelihood that the project will achieve all stated outcomes by the planned project closure date?</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.</li> <li>3. Provide recommendations for next steps.</li> </ol> <p>N.A.</p> <p>N.A.</p>
<p><b>UNDP Technical Adviser</b> is the UNDP-GEF Technical Adviser.</p>	<p>MANDATORY RATING MUST BE PROVIDED for all projects.</p> <p>Please review the cumulative progress toward end-of-project targets as noted in the DO tab of this PIR and provide a rating on this progress. Please consider the following questions before selecting a DO rating:</p> <ol style="list-style-type: none"> <li>1. What is the likelihood that the project will achieve its stated objective?</li> <li>2. What is the likelihood that the project will achieve all stated outcomes by the planned project closure date?</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating (do not repeat the project objective).</li> </ol>

2. Note trends, both positive and negative, in achievement of outcomes as per the updated indicators provided in the DO sheet.
3. Fully explain the critical risks that have affected progress.
4. Outline action plan to address projects with DO rating of HU, U or MU.

**Moderately Unsatisfactory**

The overall rating of the DO progress is Moderately Unsatisfactory because of the following reasons. A diverse set of activities has been implemented, including a large multi-media public awareness-raising campaign, continued stakeholder outreach and engagement, capacity development, and assistance to the Government regarding the development of a national energy plan. Particularly innovative activities worthy of specific mention include: assistance provided for the thermo-physical characterisation. Because the reasons as outlined above, which resulted in the low delivery rate (46%) of the project in 2014 as well as in the beginning of 2015. The outputs under the full control of the project management unit were delivered efficiently with systematic reporting and documentation. These include the introduction of the Integrated Cook Stoves (ICS) and capacity building of target communities. The financial and progress reports are comprehensively delivered. The proposed structure also upgrade the position of the field coordinator to be senior field coordinator to make it more attractive to local hire, as well as put in place the project's office secretary to assume more administrative and financial responsibilities. So far (from Mar – July 2015), the new structure has worked well. The project delivery rate in 2014 was at 46% (USD 131,308) against the 2014 ASL (USD 284,865). Moreover, the project continues to reveal the large scale of energy savings that can feasibly be achieved by introducing basic RE measures. The project's energy audit has revealed that over 500 tCO2 of emission reductions can be cost-effectively delivered through minor changes. Nonetheless, there are a number of significant deficiencies in the project's progress towards development impacts. Of the project's 9 demonstration projects, 6 are experiencing delays or technical problems. The members of the multi-stakeholder Labelling Committee have not yet been determined. And the Decree that is needed to activate the passive component of the Thermal Regulation has not yet been published in the Official Journal, a prerequisite to the Decree becoming law; the Decree associated with the active component has not yet even been drafted. Given that a Decree, once published in the Official Journal, becomes law after a period of one year, it is now certain that neither component will have become law by the time the project ends. Since a mandatory standard represents the cornerstone development objective of the project, this is clearly a disappointing state of affairs. In the final months of the project, the project team is urged to focus on continued advocacy for the Decrees so as to ensure the project's development legacy is protected. Overall, a year of mixed development success merits a Moderately Unsatisfactory rating.

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***General comments on Development Objective Rating***

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<b>DO Progress: Rating Definitions</b>	
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 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

For each project Outcome briefly describe up to four (4) major outputs delivered this reporting period only (i.e. annual progress not cumulative progress). **Do not repeat outputs reported in previous PIRs.** If you have any general comments about the information in this section of the PIR, please note them at the bottom of this page.

Outcome	Outputs reported as of 30 June 2015
<b>Outcome 1</b>	<b>Strengthened institutional, organizational and social capacity results in planning, management and implementation of integrated RE programmes in MHS</b>
<b>Output 1.1</b>	<i>Strengthened capacities, mobilization and co-ordination mechanisms for integrated RE planning in MHS</i>
	<i>Activities completed during this reporting period:</i>
	<ul style="list-style-type: none"> <li>• Completion of RE baseline survey in 3 target villages.</li> </ul>
	<ul style="list-style-type: none"> <li>• 3 RE (on micro-hydro power) projects were proposed and developed by 3 local governments (Tambon Administrative Organizations or TAOs), in line with local and provincial plans.</li> </ul>
	<i>Activities on progress towards achievements:</i>
	<ul style="list-style-type: none"> <li>• A management structure for off-grid micro-hydro power was established.</li> </ul>
	<ul style="list-style-type: none"> <li>• Review of TAO development &amp; operational plans for 3 TAOs and study on local development planning mechanism.</li> </ul>
	<ul style="list-style-type: none"> <li>• Identify capacity gaps and needs of 3 TAOs, Provincial Energy Office for RE integration planning.</li> </ul>
	<ul style="list-style-type: none"> <li>• Needs assessments to stakeholders for study tours on solar farm, SHS, solar lanterns</li> </ul>
<b>Outcome 2</b>	<b>Financially sustainable RE systems operational in MHS</b>
<b>Output 2.1</b>	<i>Awareness raised of all stakeholders involved in RE projects regarding social, economic and environmental costs and benefits of RE systems</i>
	<i>Activities completed during this reporting period :</i>
	<ul style="list-style-type: none"> <li>• Technical field assessments for micro-hydro power in 3 target sites.</li> </ul>
	<ul style="list-style-type: none"> <li>• ICS experiment and village try-out in 14 villages with 55 ICS systems installed and being used.</li> </ul>
	<ul style="list-style-type: none"> <li>• Approval of 3 off-grid micro-hydro power projects by MHS Project Board. 2 out of 3 projects are under investigation of land use permit by MNRE.</li> </ul>
	<i>Activities on progress towards achievements:</i>
	<ul style="list-style-type: none"> <li>• Awareness campaign on ICS implemented.</li> </ul>
<b>Output 2.2</b>	<i>Grid-linked RE systems established consistent with integrated provincial development plans</i>
	<i>Activities on progress towards achievements:</i>
	<ul style="list-style-type: none"> <li>• Assessment of potential locations for solar farm carried out, selection criteria established, selection of 1 site closed to complete</li> </ul>
<b>Output 2.3</b>	<i>Off-grid renewable energy electrical systems to local communities established</i>
	<i>Activities completed during this reporting period:</i>
	<ul style="list-style-type: none"> <li>• List of potential locations for micro-hydro made (based on available info), selection criteria established, selection of 2 demonstration sites completed (incl. verification of existing info) and plan for each site prepared</li> </ul>
	<ul style="list-style-type: none"> <li>• 3 community forums organized, baseline data &amp; needs assessment in 2 demo sites conducted</li> </ul>
	<ul style="list-style-type: none"> <li>• Technical design for 2 micro-hydro demonstration sites prepared</li> </ul>

	<ul style="list-style-type: none"> <li>Select 3 locations in 3 districts for SHS, solar lanterns adoption</li> </ul>
	<i>Activities on progress towards achievements:</i>
	<ul style="list-style-type: none"> <li>Request for permission to realize 2 micro-hydropower plants submitted to MNRE</li> </ul>
	<ul style="list-style-type: none"> <li>Identification of 2 potential sites, review of MHS comprehensive plan and legal issues for an installation of a solar farm.</li> </ul>
	<ul style="list-style-type: none"> <li>Identification of 1 potential government building for a solar rooftop installation and EE measures.</li> </ul>
	<ul style="list-style-type: none"> <li>Submission of requests for land-use permit to install 2 micro-hydro power plants in the protected areas.</li> </ul>
	<ul style="list-style-type: none"> <li>2 demo solar lantern models introduce/try-out at PEO, 2 TAOs, potential users in 2 districts</li> </ul>
	<ul style="list-style-type: none"> <li>Study of barriers, market, supports mechanisms for SHS, solar lanterns</li> </ul>
<b>Output 2.4</b>	<i>Non-electrical renewable energy promoted</i>
	<i>Activities completed during this reporting period :</i>
	<ul style="list-style-type: none"> <li>Trial out of ICS in 14 villages (55 households) implemented (village pilot stage)</li> </ul>
	<i>Activities on progress towards achievements:</i>
	<ul style="list-style-type: none"> <li>Assessment of 6 potential locations for biodigesters at farms/households</li> </ul>
	<ul style="list-style-type: none"> <li>Assessment and critical review of 3 potential locations of biodigester in school (in case of readiness, needs and capacity to operate &amp; maintain the systems)</li> </ul>
<b>Outcome 3</b>	<i>Technical support is available locally for the development, management and maintenance of RE applications in MHS</i>
<b>Output 3.1</b>	<i>Completed trainings in maintenance and repair of RE systems</i>
	<i>Activities completed during this reporting period :</i>
	<ul style="list-style-type: none"> <li>Awareness built and participation commitment of 3 TAOs and 3 villages in construction, O&amp;M of MHP plants</li> </ul>
	<ul style="list-style-type: none"> <li>Training of 10 technicians (8 technicians from 3 TAOs and 2 from Provincial Energy Office) were trained to carry out technical field assessments to determine potential for off-grid micro-hydro power</li> </ul>
	<ul style="list-style-type: none"> <li>Available ICS models in Thailand and other countries identified and procured</li> </ul>
	<ul style="list-style-type: none"> <li>Most suitable ICS models selected and designs improved</li> </ul>
	<ul style="list-style-type: none"> <li>Available ICS model experimented in Mae Hong Son under controlled settings and experiences documented in detail (experimental stage)</li> </ul>
<b>Outcome 4</b>	<i>Policies facilitate up-scaling and replication of RE systems in Thailand</i>
<b>Output 4.1</b>	<i>Lessons learned documented and disseminated to policy makers and included in national policies</i>
	<i>Activities completed during this reporting period:</i>
	<ul style="list-style-type: none"> <li>One guideline for local technicians on technical field assessments to determine potential for off-grid micro-hydro power was published and 700 copies disseminated to provincial and local concerned agencies and TAOs in MHS.</li> </ul>
	<i>Activities on progress towards achievements:</i>
	<ul style="list-style-type: none"> <li>Several models related to RE generation &amp; application, service delivery, fund management and sustainable utilization of RE were sketched out.</li> </ul>
	<ul style="list-style-type: none"> <li>Information on several topics and themes of important lessons learned i.e. on micro-hydro power policy, financial support mechanisms, appropriate service delivery models for accessible and affordable RE technologies in poverty stricken areas for off-</li> </ul>

grid marginalized groups have been gathered.

***General comments on Implementation Progress***



## Implementation Progress Rating

<p><b>Project Manager / Coordinator</b> is the person managing the day to day operations of the project.</p>	<p>MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country or regional projects where appropriate.</p> <ol style="list-style-type: none"> <li>1. Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this PIR)? [HS / S / MS / MU / U / HU / n.a]</li> <li>2. Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?) [HS / S / MS / MU / U / HU / n.a]</li> <li>3. Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively? [HS / S / MS / MU / U / HU / n.a]</li> <li>4. Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the PIR last year? [HS / S / MS / MU / U / HU / n.a]</li> <li>5. Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation. [HS / S / MS / MU / U / HU / n.a]</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 500 words minimum and 1200 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Summarize annual progress and address timelines of project output/activity completion in relation to annual workplans.</li> <li>3. Outline the general status of project expenditures in relation to annual budgets, the effectiveness of project management units in guiding project implementation, and the responsiveness of the project board in overseeing project implementation.</li> </ol>
	<p><b>Moderately Satisfactory</b></p> <ol style="list-style-type: none"> <li>1. <u>Progress in Delivery of Outputs:</u> [MS]</li> </ol> <p>The rating was moderately satisfactorily because the project could produce some tangible and intangible results: it completed several project activities and most project outputs are progressing well. Also the project set up smooth management/ coordination mechanisms as well as rebuilt trust/ relationships among the provincial stakeholders. The implementation is in most cases in compliance with the work plan.</p> <p>The progress of the project during the first half of the year (July to December 2014) seemed not to show distinctive tangible results, if compared to the timeline and expected outputs, since this period marked as the real beginning of the project implementation on the ground. Under the atmosphere of negative impressions to the unsuccessful project first phase, the project team started the second phase of the project with intangible results such as set-up management structure, coordination mechanisms horizontally and vertically, communication channels with MHS project stakeholders, especially with key provincial government focal points: MHS Provincial Office and Provincial Energy Office. This included getting all partners being familiar with the project strategy and the new UNDP's operational modality (DIM). During this period, trust and image were regained; relationships mended. The project refined the work plan which suited, as much as possible, to MHS development conditions/challenges/needs, in line with its provincial and local (Tambo Administrative Organization - TAO) development plans.</p>

Compared to the work plan there are delays in the procurement of a company to support the installation of various RE systems (e.g. solar farm, SHS). This is particularly affecting the implementation of the activities of component 2 (sustainable RE systems operational) and component 3 (technical support available locally). For this reason, a rating of moderately satisfactory is assigned and not satisfactory.

The main achievements of the project implementation during the reporting period (July 2014 to June 2015) were:

- Setting-up of PMU operations, activated coordination/ communication mechanisms with MHS provincial and local stakeholders;
- Facilitation of process with MHS government to identify and finalize 3 project locations;
- Completion of RE baseline survey in 3 target villages and capacity development of TAO personnel to collect data. The information gathered was essential for the implementation of all the project activity, especially for the RE integrated planning;
- Completion of technical field assessments for micro-hydro power in 3 target sites through facilitation/ capacity development to TAO technicians. Sites were selected in line with local and provincial plans, and with TAOs' ownership. All projects were reviewed and approved by MHS government (exceeding the targets and ahead of the schedule);
- Completion of ICS research and village try-out in 14 villages with 55 ICS systems installed and being used (exceeding the targets and ahead of the schedule);
- Completion of selection and improvement of design of ICS model suitable for MHS;
- Identification of 2 potential sites for a solar farm installation;
- Identification of 1 potential government building for a solar rooftop installation.

## 2. Efficiency in Delivery of Outputs [MS]

The budget spending of the project was behind the planned schedule due to longer duration of procurement procedures to get a service provider that would be responsible for providing support to the installation of several RE technologies. It is expected that this procurement procedure will be finalized and the awarded service provider on board within Q3/2015. By then, the project implementation should be fully operational; deliverables should be achieved and budget effectively spent. In the meantime, the project has hired a consultant to carry-out preliminary studies, develop selection criteria, assess and identify potential sites for a solar farm, a solar rooftop system at a large building and 2-3 biogas plants at farms.

The cumulative project financial delivery as of 30 June 2015 is US\$ 64,118.. The financial delivery is less than expected due to delays in the procurement of a company to support the installation of various RE systems.

## 3. Quality of Risk Management [S]

The risks which the project encountered and mitigated were:

- Procurement:

- Delays in procurement procedures to contract a service provider for the installation/ rehabilitation of the project's RE technologies. => The project hired a consultant to carry-out preliminary studies, develop selection criteria, assess and identify potential sites for 1 solar farm, solar rooftop at a building and 2-3 biodigesters at farms.

- Inadequate Local and Community Capacities.

- Local governments (TAOs) have limited capacity to fully support the project activities due to (i) few or no personnel who has knowledge/skills in relation to RE technologies; (ii) TAOs have limited budget for RE operation and maintenance for communities under their jurisdictions; (iii) there are always internal conflicts between elected bodies and TAO civil servants. => The project had tried to keep good relationships with both sides (elected persons/ civil servants) by using 'people-centered development approaches' as a focus to RE promotion in their communities. Requested the target TAOs to provide supports to the project by allocating staff time to work with the project team. Built up technical and management capacities of TAO staff, local institutions and networks.
- Project target communities belonged to Tai Yai, Karen and Lahu (Muser) ethnic groups with totally different cultures, dialects, beliefs and ways of life. From the project baseline survey, almost all of the community members especially Karen and Lahu women had low or no education. They live in highlands with an average income much lower than Thailand's poverty threshold (=THB 68/person/day or USD 2/person/ day). Under these circumstances, it was quite challenging for the project team to transfer RE technologies to the communities and let them carry-on with the operation and maintenance (O&M) of the systems. => The project built up capacities of TAOs and community leaders/ youths to be able to do the O&M. In addition, the project set-up, enhanced and nurtured community organizations which consisted of the senior and the younger generation to take care of the activities. The project carefully and gradually empowered the roles of women/girls in community management.
- Challenges to work in MHS. Regular constraints in relation to local physical and social conditions were: (i) low to limited accessibility to the project sites during the rainy season; (ii) high disaster risks of landslides, wildfire & smoke, road accidents, communicable diseases especially malaria and dengue, insects bites, food/water contamination; (iii) communication with ethnic highlanders; (iv) high project personnel turn-over, rare capable person who was willing to work/ live in MHS for a long period due to discouragements from physical and operational barriers. => Situations/security assessments have been regularly conducted; first aid medical kits prepared; recruitment of 1 MHS native staff completed; project work plan incorporates as much as possible the seasonal conditions/ challenges. Making team members to complement each other; enhancing team spirit to cope with challenges.

	<p>4. <u>Quality of Adaptive Management</u> [HS]</p> <p>Key recommendations from the MTR and PIR in 2014 regarding adaptive management were: adoption of a more technologies led approach to overcoming barriers to RE, focus on a few implementation areas, and changing it management modality to direct implementation (DIM). All the recommendations have been implemented, and the project is now on track as described above.</p> <p>5. <u>Quality of Monitoring and Evaluation</u> [HS]</p> <p>UNDP CO carried out 3 monitoring visits to the project in order to have close consultations with key provincial stakeholders and the project team. Advices and adjustments were provided for smooth operation on the ground.</p>
<p><b>UNDP Country Office Programme Officer</b> is the UNDP programme officer in the UNDP country office who provides oversight and supervision support to the project.</p>	<p>MANDATORY RATING MUST BE PROVIDED for projects under implementation in one country. Not necessary for regional or global projects.</p> <ol style="list-style-type: none"> <li>1. Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this PIR)? [HS / S / MS / MU / U / HU / n.a]</li> <li>2. Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?) [HS / S / MS / MU / U / HU / n.a]</li> <li>3. Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively? [HS / S / MS / MU / U / HU / n.a]</li> <li>4. Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the PIR last year? [HS / S / MS / MU / U / HU / n.a]</li> <li>5. Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation. [HS / S / MS / MU / U / HU / n.a]</li> </ol> <p>Please justify your rating and address the following points in your comments. The QORs and delivery data in the ERBM portfolio project monitoring report should inform your rating. Please keep word count between 500 words minimum and 1200 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating. If your rating differs from the rating provided by the project manager please explain why.</li> <li>2. Summarize annual progress and address timeliness of project output/activity completion in relation to annual workplans.</li> <li>3. Outline the general status of project expenditures in relation to annual budgets, the effectiveness of project management units in guiding project implementation, and the responsiveness of the project board in overseeing project implementation.</li> </ol> <p><b>Moderately Satisfactory</b></p> <p>The overall rating of the implementing progress is Moderately Satisfactory because the project has established strong management set-up in the first year of Phase 2. The project management unit in Mae Hong Son has been fully functioned, with systematic financial requesting and reporting process, effective communication and coordination lines with UNDP Bangkok Office, as well as close collaboration with the Mae Hong Son Provincial and Provincial Energy Offices. However, the project did not make much progress in delivering outputs as planned due to the delay in the procurement process to get the technical team</p>



	<p>on board; and the delay in obtaining the land permits to install the micro-hydro systems in the two target areas.</p> <p>The rating of each aspect of the implementing progress is as follows:</p> <ul style="list-style-type: none"> <li>• <b>Progress in delivery of outputs:</b> the rating is Moderately Unsatisfactory (MU) because the reasons as outlined above, which resulted in the low delivery rate (46%) of the project in 2014 as well as in the beginning of 2015.</li> <li>• <b>Efficiency in delivery of outputs:</b> the rating of the ‘efficiency’ in delivery of outputs is however Moderately Satisfactory (MS) because the outputs under the full control of the project management unit were delivered efficiently with systematic reporting and documentation. These include the introduction of the Integrated Cook Stoves (ICS) and capacity building of target communities. The financial and progress reports are comprehensively delivered.</li> <li>• <b>Quality of risk management:</b> the risk management during this reporting period is Moderately Satisfactory (MS) based on the fact that the timeliness in addressing the project risk in the case of the high turn-over rate of project staff. In March 2015, both the project coordinator and the project’s field coordinator submitted their resignation due to personal problems. The project manager proposed a restructuring of the project management unit to mitigate the risk of high-turnover rate in the future, by adjusting the post of project coordinator to project assistant, to be based in Bangkok instead of Mae Hong Son as it has proven to be difficult to find a full-time project coordinator who will be willing to be posted in Mae Hong Son for a long time. The proposed structure also upgrade the position of the field coordinator to be senior field coordinator to make it more attractive to local hire, as well as put in place the project’s office secretary to assume more administrative and financial responsibilities. So far (from Mar – July 2015), the new structure has worked well.</li> <li>• <b>Quality of adaptive management:</b> the rating for adaptive management is Satisfactory(S) for the reasons as explained in the DO rating (because the adaptive management has the direct implication to maintain the progress towards the outcomes).</li> <li>• <b>Quality of monitoring and evaluation:</b> the rating for monitoring and evaluation is Satisfactory (S) because the project board met as planned and as required to make critical decision. The project board met twice during this reporting period: first- in October 2014, to make decision on the site selection; second, in June 2015 to consider the progress and the work plan. UNDP undertook 3 project monitoring visits during the period, twice with senior management (Deputy Resident Representative) participating.</li> </ul> <p>The project delivery rate in 2014 was at 46% (USD 131,308) against the 2014 ASL (USD 284,865). The delivery from Q1-Q2 2015 was at USD 64,118. The project has undertaken budget revision to reduce the ASL down from USD 630,000 to USD 272,272 as it becomes evident that the land permits will not be granted until end of Q3/2015 – hence the construction of the two micro-hydro systems will need to be shifted to next year.</p>
<b>GEF Operational</b>	HIGHLY RECOMMENDED but NOT mandatory for projects under implementation in one country. Not necessary for regional or global projects.

<p><b>Focal point</b> is the government representative in the country designed as the GEF operation focal point.</p>	<ol style="list-style-type: none"> <li>1. Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this PIR)? [HS / S / MS / MU / U / HU / n.a]</li> <li>2. Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?) [HS / S / MS / MU / U / HU / n.a]</li> <li>3. Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively? [HS / S / MS / MU / U / HU / n.a]</li> <li>4. Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the PIR last year? [HS / S / MS / MU / U / HU / n.a]</li> <li>5. Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation. [HS / S / MS / MU / U / HU / n.a]</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative.</li> <li>3. Provide recommendations for next steps.</li> </ol>
	<p>N.A.</p>
	<p>N.A.</p>
<p><b>Project Implementing Partner</b> is the representative of the executing agency (in GEF terminology). This would be Government (for NEX/NIM execution) or NGO (for CSO Execution) or an official from the Executing Agency (for example UNOPS).</p>	<p>RECOMMENDED but NOT mandatory for projects under implementation in one country or regional projects.</p> <ol style="list-style-type: none"> <li>1. Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this PIR)? [HS / S / MS / MU / U / HU / n.a]</li> <li>2. Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?) [HS / S / MS / MU / U / HU / n.a]</li> <li>3. Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively? [HS / S / MS / MU / U / HU / n.a]</li> <li>4. Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the PIR last year? [HS / S / MS / MU / U / HU / n.a]</li> <li>5. Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation. [HS / S / MS / MU / U / HU / n.a]</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative.</li> <li>3. Provide recommendations for next steps.</li> </ol>
	<p>N.A.</p>
	<p>N.A.</p>

<p><b>Other Partners:</b> For jointly implemented projects, a representative of the other Agency working with UNDP on project implementation (for example UNEP or the World Bank).</p>	<p>RECOMMENDED but NOT mandatory for jointly implemented projects.</p> <ol style="list-style-type: none"> <li>1. Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this PIR)? [HS / S / MS / MU / U / HU / n.a]</li> <li>2. Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?) [HS / S / MS / MU / U / HU / n.a]</li> <li>3. Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively? [HS / S / MS / MU / U / HU / n.a]</li> <li>4. Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the PIR last year? [HS / S / MS / MU / U / HU / n.a]</li> <li>5. Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation. [HS / S / MS / MU / U / HU / n.a]</li> </ol> <p>Please justify your rating and address the following points in your comments. Please keep word count between 200 words minimum and 500 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating.</li> <li>2. Note trends, both positive and negative.</li> <li>3. Provide recommendations for next steps.</li> </ol>
	<p>N.A.</p>
	<p>N.A.</p>
<p><b>UNDP Technical Adviser</b> is the UNDP-GEF Technical Adviser.</p>	<p>MANDATORY RATING MUST BE PROVIDED for ALL projects.</p> <ol style="list-style-type: none"> <li>1. Please rate the progress in delivery of outputs. For example, do the annual outputs represent sufficient progress in order to achieve the project outcomes (see DO page of this PIR)? [HS / S / MS / MU / U / HU / n.a]</li> <li>2. Please rate the efficiency in delivery of outputs. For example, in this reporting period are budget resources being spent as planned? (i.e. is project delivery on target?) [HS / S / MS / MU / U / HU / n.a]</li> <li>3. Please rate the quality of risk management. For example, in this reporting period were project risks managed effectively? [HS / S / MS / MU / U / HU / n.a]</li> <li>4. Please rate the quality of adaptive management. For example, in this reporting period were actions taken to address implementation issue identified in the PIR last year? [HS / S / MS / MU / U / HU / n.a]</li> <li>5. Please rate the quality of monitoring and evaluation. For example, in this reporting period were sufficient financial resources allocated to project monitoring and evaluation. [HS / S / MS / MU / U / HU / n.a]</li> </ol> <p>Please justify your rating and address the following points in your comments. The QORs and delivery data in the ERBM portfolio project monitoring report should inform your rating. Please keep word count between 500 words minimum and 1200 words maximum.</p> <ol style="list-style-type: none"> <li>1. Explain why you gave a specific rating. If your rating differs from the rating provided by the UNDP Country Office Programme Officer and/or the Project Manager please explain why.</li> <li>2. Summarize annual progress and address timelines of project output/activity completion in relation to annual workplans.</li> <li>3. Outline the general status of project expenditures in relation to annual budgets, the effectiveness of project management units in guiding project implementation, and the responsiveness of the project board in overseeing project implementation.</li> </ol>
	<p><b>Moderately Unsatisfactory</b></p>

	<p>There were delays in the procurement of a company to support the installation of various RE systems affecting the implementation of the activities of component 2 and component 3. For this reason, a rating of moderately unsatisfactory is assigned. The main achievements of the project implementation during the reporting period were: Setting-up of PMU operations, activated coordination/ communication mechanisms with MHS provincial and local stakeholders; Facilitation of process with MHS government to identify and finalize 3 project locations; Completion of RE baseline survey in 3 target villages and capacity development of TAO personnel to collect data. The information gathered was essential for the implementation of all the project activity, especially for the RE integrated planning; Completion of technical field assessments for micro-hydro power in 3 target sites through facilitation/ capacity development to TAO technicians. Sites were selected in line with local and provincial plans, and with TAOs' ownership. All projects were reviewed and approved by MHS government (exceeding the targets and ahead of the schedule); Completion of ICS research and village try-out in 14 villages with 55 ICS systems installed and being used (exceeding the targets and ahead of the schedule); Completion of selection and improvement of design of ICS model suitable for MHS; Identification of 2 potential sites for a solar farm installation; Identification of 1 potential government building for a solar rooftop installation. The budget spending was lower than last year. Cumulative project financial delivery as of 30 June 2015 is US\$ 64,118 It is expected that this procurement procedures will be finalized and the awarded service provider on board within Q3/2015. In the meantime, the project has hired a consultant to carry-out preliminary studies, develop selection criteria, assess and identify potential sites for a solar farm, a solar rooftop system at a large building and 2-3 biodigesters at farms. Challenges to work in MHS. Regular constraints in relation to local physical and social conditions were: (i) low to limited accessibility to the project sites during the rainy season; (ii) high disaster risks of landslides, wildfire &amp; smoke, road accidents, communicable diseases especially malaria and dengue, insects bites, food/water contamination; (iii) communication with ethnic highlanders; (iv) high project personnel turn-over, rare capable person who was willing to work/ live in MHS for a long period due to discouragements from physical and operational barriers.</p>
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**General comments on Implementation Progress Rating**

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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.

## Adjustments

### Project Planning

If delays have occurred in reaching key projects milestones - the inception workshop, the Mid-term Review and/or the Terminal Evaluation - then note below the current status of that milestone, the original planned and actual/expected dates, and comments to explain the reasons for the delays and their implications.

<b>Key Project Milestone</b>	<b>Status</b> (pick one option below)	<b>Original Planned Date</b>	<b>Actual/Expected Date</b>	<b>Comments</b> including reasons for delays and their implications
<b>Inception Workshop</b>	<i>Completed</i>	<i>December 2010</i>	<i>January 2011</i>	<p><i>The project was endorsed by the GEF CEO in February 2010, whereas the project document was only signed with the government host agency in December 2010 (10 months delay).</i></p> <p><i>The GEF approval process took more than a year. This, combined with the delay in project document signature, meant that valuable momentum was lost between project formulation and project start. The project objectives had to be reintroduced and explained to key partners.</i></p> <p><i>The inception workshop was expected to be organized in December 2010, but instead the project launch was conducted on 29 January 2011. This delay did not have any significant consequences on project implementation.</i></p>
<b>Mid-term Review</b>	<i>Completed, with a slight delay of 2 months.</i>	<i>June 2013.</i>	<i>August 2013.</i>	<i>Completed. The Request for Proposals for the mid-term review was advertised at the end of May 2013, the consulting firm was selected</i>

				<p><i>in June 2013, and the field mission to Thailand was conducted from 23-30 July 2013. The final version of the MTR was released 30 August 2013. This delay did not have any significant consequences on project implementation.</i></p> <p><i>However, the implementation of the recommendations of the MTR took longer than anticipated, mainly due to the political situation in Thailand, see comments under "General Comments on Basic Data".</i></p>
<b>Terminal Evaluation</b>	<p><i>As per the new timeframe for the second phase of the project. Following the recommendations of the MTR, the TE will take place end of 2016.</i></p>	<i>End of 2015</i>	<i>End of 2016.</i>	<p><i>As per the new timeframe for the second phase of the project following the recommendations of the MTR, the TE will take place end of 2016. Originally it was planned at the end of 2015.</i></p>

### **Critical Risk Management**

Select from below the critical risks only that appear in the ATLAS project risk log and briefly describe actions undertaken this reporting period to address each critical risk. Please ensure that any 'social' risks identified during the environmental and social screening of the project are reflected in the ATLAS risk log under type/description 'other'. Note that the total number of critical risks is used to calculate the overall risk rating of the project. The methodology to determine the overall risk rating is explained further on this page.

<b>Current/Active Critical Risks</b> (pick one option below; add rows as necessary)	<b>Critical Risk Management Measures Undertaken in 2015</b>
<b>Regulatory</b>	Difficulties, resulting from environmental area protection laws, were still the main risk for the installation of 2 micro-hydro power plants. Because the areas, where there were potential and needs for micro-hydro power, mostly located within the jurisdiction of the

	<p>Department of National Parks, Wildlife and Plants, Ministry of Natural Resources and Environment (MNRE). The regulations for protected land-use permit required very long process of investigations -- from local area in MHS to the ministry in Bangkok. A request proposal together with a long list of supporting documents such as certified contour maps with GPS locations of key construction points, certified construction blueprint, pipeline model, electricity lining model, photos, EIA assessment report, etc. were required to submit from TAO to the concerned office of the national parks, to provincial MNRE, to a regional MNRE branch in MHS, to a regional MNRE office in Chiang Mai, to several desks in the department in Bangkok before reaching the final desk of the Director-General. Once an additional support document was required, the process had to start again from the first station and up onto the same ladder. This definitely delayed the project's construction plan for the 2 micro-hydro power plants. In fact, MNRE staffs at all levels were quite supportive to the project; however, they could not act against the laws. =&gt; The project helped facilitating with documents preparation and had frequently followed up from both ends of the MNRE: the project team with TAOs, concerned office of the national parks, provincial/ regional MNRE in MHS while UNDP CO at MNRE regional office in Chiang Mai and the department in Bangkok.</p>
Operational	<p>Inadequate capacities of TAOs and ethnic communities to carry on the operation and maintenance of the RE systems. =&gt; Capacity development in group organization &amp; management, bookkeeping and local fund management, as well as RE technical training to local technicians.</p>

**General comments on Adjustments**

No adjustments to the timeframe of the project were made in this reporting period. Expected closure date of the project is 31 December 2016.





## Communicating Impact

All projects must complete this section.

### ***Tell us the story of your project, focusing on how the project has helped to improve people's lives.***

Please use 500 words or less.

Avoid UN jargon, acronyms, and technical terms. Use plain language.

Include quotes from beneficiaries, if possible, and be sure to provide their names

The following questions can be used as guidance for your story:

What is this project about – the issue, interventions, and impacts?

Who are the beneficiaries of this project?

How have project interventions improved people's livelihoods?

What was the most notable achievement during this reporting period?

This text will be used for UNDP corporate communications, the UNDP-GEF website, and/or other internal and external knowledge and learning efforts.

Despite the commitment of the Thai government to Renewable Energy, there have been constraints to the wider and more sustained application of renewable energy technologies in Thailand. This project will overcome barriers that currently prevent widespread and sustainable utilization of renewable energy technologies for the provision of energy services in rural areas of Thailand. The project will work in Mae Hong Son province, which the Ministry of Energy has identified as its target to be the first energy self-sufficient province in Thailand, in conformity with the king's sufficiency economy concept.

The project will facilitate an integrated RE planning process at provincial and local level, in order to translate targets set at the national level to the local level and into real action. The four components of the project focus on (a) institutional capacity development for planning and implementing RE programmes; (b) access to financing; (c) technical training and education and (d) policies for up-scaling and replication. As the project was being reformulated during the reporting period, no major impacts and results were achieved during the reporting period.

### ***What is the most significant change that has resulted from the project this reporting period?***

The most significant change could be positive or negative and could relate to any aspect of the project such as direct beneficiaries, communities, partnerships, policy. The purpose of this section is to capture lessons learned and changes that many not be revealed through the project's logical framework or other parts of the PIR.

This text will be used for internal knowledge management in the respective technical team and region.

The project has tried out a 'Happy End-User Approach' for the promotion and adoption of the ICS. Within this framework, the project started with gathering opinions from 55 project's ICS volunteers, 70% of whom were women from middle to low income groups. All resided in peri-urban and rural areas of 14 villages in 5 sub-districts and belonged to 3 different ethnical groups (Tai Yai, Kare, Lanna). The project worked with the volunteers to identify positive/negative points of using normal household cooking stoves. Then, asked them to list down what were criteria for their 'dream' or good household cooking stove. From this participatory problems identification, the end-users could identify hampering and enabling factors that determined the adoption of new ICS. Factors included ease of use, economy (price) and efficiency of the stoves. Surprisingly, ease of use, not technical or efficient stove performance, was on the highest ranking. Therefore, this participatory process could identify 'blurring' development issue, especially on behavioral change for RE technologies adoption. It also helped the project accomplish its output in a short time.

**Describe how the project supported South-South Cooperation and Triangular Cooperation efforts in the reporting period.**

Describe the main focus of the efforts. What is the evidence that the initiative(s) contributed to results?
This text will be used for internal knowledge management in the respective technical team and region.
N.A.

**Project links & social media**

Please list below the website addresses (URLs) that exist for this project, including any links to social media sites. Please include: Project website, Project page on the UNDP website, Adaptation Learning Mechanism (UNDP-ALM) platform, Facebook, Twitter, Flickr, YouTube, Google +	<a href="http://www.th.undp.org/content/thailand/en/home/operations/projects/environment_and_energy/REinMHS.html">http://www.th.undp.org/content/thailand/en/home/operations/projects/environment_and_energy/REinMHS.html</a>
Please share hyperlinks to any media coverage of the project, for example, stories written by an outside, external source.	N.A.
Please upload any supporting files, including photos, videos, stories, and other documents.	N.A.

**General comments on Communicating Impact**

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## Partnerships

All projects must complete this section. Please enter "N/A" in cells that are not applicable to your project.

This information is used to get a better understanding of the work GEF-funded projects are doing with key partners, including the GEF Small Grants Programme, indigenous peoples, the private sector, and other partners. The data may be used for reporting to GEF Secretariat, the UNDP-GEF Annual Performance Report, UNDP Corporate Communications, posted on the UNDP-GEF website, and for other internal and external knowledge and learning efforts. The RTA should view and edit/elaborate on the information entered here.

Partners	Describe innovative aspects of the project in working with (limit = 2000 characters for each section)
<b>Civil Society Organisations/NGOs</b>	<p>The project worked with Plan International, an NGO based in BKK, which had planned development activities in MHS in relation to training and education on climate change and natural disaster reduction for school children and communities. Its working areas in MHS are overlapping with the project. Plan Int'l's development objective was to develop an integrated school curriculum on climate change-disaster risk reduction-RE, which was similar to the planned project's activity aiming in building up capacity of school children/ youths to be RE informants in their ethnic communities. Because they could provide basic RE information to their parents, family members especially women/girls. In addition, some of the youths might be capable to assist in the O&amp;M of the installed RE systems at a later stage.</p> <p>During the reporting period, Plan Int'l completed its school and community baseline survey and is now conducting detailed planning. The project plans to work with this NGO on the integration of RE knowledge into the curriculum. Following activities such as review of the curriculum, try-out/ testing, and translation of the curriculum into some hill tribe dialects would be conducted around Q4/2015. Through working channel with the NGO, the project expected to increase basic knowledge of the relationships between climate change, natural disasters and the use of RE technologies as a preventive measure and choice, using children and youths as information disseminators.</p>
<b>Indigenous Peoples</b>	Indigenous hill tribes were the main beneficiaries of this project. (See above at 'Civil Society Organization/ NGOs.')
<b>Private Sector</b>	The project engaged with a private firm on the establishment of a solar farm, under a Public-Private Partnership model. Under this modality, the project has proposed and has managed to attract one private company (Thai Oil) to invest in the installation of a community based solar farm. The company has agreed to build and operate the solar farm for 15 years in order to get the return of investment then hand over the solar farm to the responsible TAO or community.
<b>GEF Small Grants Programme</b>	The project did not cooperate yet with the Small Grants Programme.
<b>Other Partners</b>	The project has been working with several government agencies at central/ regional level of MNRE and engaged with many provincial and local agencies including military,

	community energy volunteers.
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***General comments on Partnerships***

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## Gender

All projects must complete this section.

This information is used in the UNDP-GEF Annual Performance Report, UNDP-GEF Annual Gender Report, reporting to the UNDP Gender Steering and Implementation Committee and for other internal and external communications and learning.

<p><b>Has a gender or social assessment been carried out this reporting period?</b></p>	<p>Yes. Disaggregated gender in target communities was recorded in RE baseline survey.</p>
<p><b>If a gender or social assessment has been carried out what were the findings?</b></p>	<ul style="list-style-type: none"> <li>• Women and girls have minor or no decision making role in the selection or buying of RE or other electricity devices for their families.</li> <li>• Women are the main users of inefficient cooking stoves which created a lot of harmful smoke. Therefore, they are on high risk of ill-health especially respiratory disease.</li> <li>• Widows are the most marginalized of the marginalized groups in the hill-tribes society.</li> </ul>
<p><b>Does this project specifically target woman or girls as key stakeholders?</b></p>	<p>Yes, women are an important stakeholder in the project especially in the ICS promotion and applications. Women are the main users of household cooking stoves. The project worked with women in identifying appropriate household cooking stove models which they love to use. The project considered this as one of the most important criteria for ICS model selection. The project also plans to work with female volunteers to help identifying further means to enhance ICS adoption.</p>
<p><b>Please specify results achieved this reporting period that focus on increasing gender equality and improving the empowerment of women.</b></p> <p>Some points to consider: impact of project on daily workload of women, # of jobs created for women, impact of project on time spent by women in household activities, impact of project on primary school enrolment for girls/boys, increase in women's income etc. Be as specific as possible and provide real numbers (e.g. 100 women farmers participating in sustainable livelihoods programme).</p>	<p>Women are the main target for ICS realization and adoption since they are the main users of this RE technology. During the experiment and try-out periods, women volunteers took the lead in the project's activities. From the observation, some are now more confident to join the project next steps of ICS awareness building in their communities. With the new stove, around 30 to 50% fuel savings are achieved.</p>
<p><b>Please upload the gender or social</b></p>	<p>[uploading only possible in PIR system; list here the files</p>

<b>needs assessment and any other documents related to the project's gender-related results.</b>	that you plan on uploading]
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***General comments on Gender***

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## Environmental or Social Grievance

This section must be completed by the UNDP Country Office if a grievance related to the environmental or social impacts of this project was addressed this reporting period.

It is very important that the questions are answered fully and in detail.

*If no environmental or social grievance was addressed this reporting period then please do not answer the following questions.*

*If more than one grievance was addressed, please answer the following questions for the most significant grievance only and explain the other grievance(s) in the comment box below.*

<b>What environmental or social issue was the grievance related to?</b>	N.A. No grievance received.
<b>What is the current status of the grievance?</b>	N.A.
<b>How would you rate the significance of the grievance?</b>	N.A.
<b>Please describe the on-going or resolved grievance noting who was involved, what action was taken to resolve the grievance, how much time it took, and what you learned from managing the grievance process (maximum 500 words). If more than one grievance was addressed this reporting period, please explain the other grievance (s) here.</b>	N.A.

Rating	Description
Minor	The grievance had/has a low impact on the day-to-day implementation of the project.
Significant	The grievance had/is having a significant impact on the day-to-day implementation of the project, but the project is still expected to achieve its objective.
Serious	The grievance had/is having a serious impact on the day-to-day implementation of the project, and there is a risk (50% or higher) that the project may not be able to achieve its objective.