# 1. Project Data

	Su	mmary project data		
GEF project ID		4152		
GEF Agency project ID		IDA P110978		
GEF Replenishment Phase		GEF-4		
Lead GEF Agency (inc	lude all for joint projects)	World Bank		
Project name		Rural Electrification Phase II		
Country/Countries		Lao PDR		
Region		Asia		
Focal area		Climate Change		
Operational Program or Strategic Priorities/Objectives		S-3 (Power Sector Policy Frameworks Supportive of Renewable Energy and Energy Efficiency); and S-4 (Promote Productive Uses of Renewable Energy)		
Executing agencies in	Electricité du Laos (EdL); Ministry of Energy and Mines (MEM)		ry of Energy and Mines	
NGOs/CBOs involvement		Not mentioned		
Private sector involve	ement	Not mentioned	Not mentioned	
CEO Endorsement (FSP) /Approval date (MSP)		Feb 22, 2011	Feb 22, 2011	
Effectiveness date / project start		Aug 17, 2011	Aug 17, 2011	
Expected date of project completion (at start)		Jun 30, 2014		
Actual date of projec	t completion	Jun 30, 2015	Jun 30, 2015	
		Project Financing	<u>.</u>	
	_	At Endorsement (US \$M)	At Completion (US \$M)	
Project Preparation	GEF funding	At Endorsement (US \$M)	At Completion (US \$M)	
Grant	GEF funding Co-financing	At Endorsement (US \$M)	At Completion (US \$M)	
	_	At Endorsement (US \$M)  1.18	At Completion (US \$M)  1.09	
Grant	_			
Grant	Co-financing	1.18	1.09	
Grant	Co-financing  IA own	1.18 20.00	1.09 16.99	
Grant GEF Project Grant	IA own Government Other multi-/bi-laterals Private sector	1.18 20.00 4.06	1.09 16.99 16.10	
Grant GEF Project Grant	IA own Government Other multi-/bi-laterals	1.18 20.00 4.06	1.09 16.99 16.10	
Grant GEF Project Grant	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOsOther	1.18 20.00 4.06 7.88	1.09 16.99 16.10 17.24	
Grant  GEF Project Grant  Co-financing  Total GEF funding  Total Co-financing	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOsOther	1.18 20.00 4.06 7.88	1.09 16.99 16.10 17.24	
Grant GEF Project Grant Co-financing Total GEF funding	IA own Government Other multi-/bi-laterals Private sector NGOs/CSOsOther counterparts	1.18 20.00 4.06 7.88 4.13	1.09 16.99 16.10 17.24 1.33	
Grant  GEF Project Grant  Co-financing  Total GEF funding  Total Co-financing  Total project funding	IA own Government Other multi- /bi-laterals Private sector NGOs/CSOsOther counterparts	1.18 20.00 4.06 7.88 4.13 1.18 36.07	1.09 16.99 16.10 17.24 1.33 1.09 51.65 52.75	
Grant  GEF Project Grant  Co-financing  Total GEF funding  Total Co-financing  Total project funding	IA own Government Other multi- /bi-laterals Private sector NGOs/CSOsOther counterparts	1.18 20.00 4.06 7.88 4.13 1.18 36.07 37.25	1.09 16.99 16.10 17.24 1.33 1.09 51.65 52.75	
Grant  GEF Project Grant  Co-financing  Total GEF funding  Total Co-financing  Total project funding  (GEF grant(s) + co-fin	IA own Government Other multi- /bi-laterals Private sector NGOs/CSOsOther counterparts	1.18 20.00 4.06 7.88 4.13 1.18 36.07 37.25	1.09 16.99 16.10 17.24 1.33 1.09 51.65 52.75	
Grant  GEF Project Grant  Co-financing  Total GEF funding  Total Co-financing  Total project funding (GEF grant(s) + co-fin	IA own Government Other multi- /bi-laterals Private sector NGOs/CSOsOther counterparts	1.18 20.00 4.06 7.88  4.13 1.18 36.07 37.25  /aluation/review information Dec 17, 2015	1.09 16.99 16.10 17.24 1.33 1.09 51.65 52.75	
Grant  GEF Project Grant  Co-financing  Total GEF funding  Total Co-financing  Total project funding (GEF grant(s) + co-fin  TE completion date  Author of TE	IA own Government Other multi- /bi-laterals Private sector NGOs/CSOsOther counterparts	1.18 20.00 4.06 7.88  4.13 1.18 36.07 37.25  /aluation/review information Dec 17, 2015 Alan David Lee	1.09 16.99 16.10 17.24 1.33 1.09 51.65 52.75	

## 2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	BLIND REVIEW	BLIND REVIEW	BLIND REVIEW	MS
Sustainability of Outcomes		BLIND REVIEW	BLIND REVIEW	ML
M&E Design		BLIND REVIEW	BLIND REVIEW	MS
M&E Implementation		BLIND REVIEW	BLIND REVIEW	S
Quality of Implementation		BLIND REVIEW	BLIND REVIEW	MS
Quality of Execution		BLIND REVIEW	BLIND REVIEW	MS
Quality of the Terminal Evaluation Report		BLIND REVIEW	BLIND REVIEW	MS

#### 3. Project Objectives

3.1 Global Environmental Objectives of the project:

The global environmental objectives (GEOs) of the GEF component of the project were (a) increased efficiency of energy supply by *Electricité du Laos* (EdL) and consumption by customers; and (b) substantial adoption of renewable energy in the government's rural electrification program. (PD, p.iv)

3.2 Development Objectives of the project:

The project development objectives (DOs), according to both the PD and IDA Financing Agreement, were to (a) increase access to electricity of rural households in villages of the project provinces and (b) further improve the financial performance of *Electricité du Laos* (EdL).

The GEF project components for the Rural Electrification Phase II were:

- 1. EdL System Loss Reduction
- 2. Demand-side Management and Energy Efficiency
- 3. Renewable Energy Development

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

The GEOs and DOs remained unchanged throughout the project, however the project was restructured in 2013 to revise one financial performance indicator and drop two others to retain relevance as external circumstances changed and to rationalize the number of financial indicators to one key indicator.

# 4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 Relevance	Rating: Satisfactory

This project is the second phase of the Lao Rural Electrification Adjustable Program Loan (APL) Program, whose first phase was approved in August 2005 with \$15 million IDA credit and \$3.75 GEF grant. The proposed project for REP II is a logical follow-up to the activities of REP I that would contribute to achievement of the REP II DOs and lay the foundations in the country for a more sustainable approach to renewable energy development and DSM/EE in the long term for GHG emission reduction. The GEF-financed activities would contribute to two GEF climate change operational program objectives: (i) removing the barriers to achieve higher efficiency levels in end-use electricity consumption; and (ii) expanding wider use of renewable energy technologies in rural power supply, especially off-grid. The strategies and outcomes were also in line with two Strategic Priorities for the Climate Change Focal Area: (i) creation of power sector policy frameworks supportive of renewable energy, and (ii) promoting awareness of EE practice and value. (CEO Endorsement, pg.4)

The development objectives of the project also closely aligned with government plans and the World Bank Group strategy at both appraisal and completion. The National Socio- Economic Development Plan for 2006–2010 and 2011–2015, respectively, included goals to provide electricity to 70 percent and 80 percent of households. The National Socio-Economic Development Plan for 2011–2015 included a commitment to reform state enterprises (including the EdL), particularly on finance. (TE, pg.11)

# 4.2 Effectiveness Rating: Moderately Satisfactory

In the TE, the effectiveness of the project was assessed through the evaluation of outcomes achieved at the component level for both the Global Environmental Objectives and Project Development Objectives. The TER rates this outcome as Moderately Satisfactory due to several shortcomings as explained below.

Below the project's achievements against the Project Development Objectives are presented:

(a) Increased access to electricity of rural households in villages of the project provinces: The project targeted electrifying 47,000 households by completion, as approved after IFC co-financing. (37,000 grid; including 8000 through P2P "Power to the Poor Program" and 10,000 off-grid). This component has been successful by electrifying 37,614 households at completion, which was above the target value and double the expected 8,000 households to benefit from the P2P. The TE attributes this achievement to the preparation and planning undertaken from 2010 to 2012 during the preimplementation period. Although longer than planned, this time was used to prepare connection

- contracts with households and identify households eligible to participate in the P2P ultimately leading to more households participating in the P2P during the REP II-time frame. (TE, pg.7)
- (b) Further improved financial performance of *Electricité du Laos* (EdL): The assessment of this outcome was based on the key associated indicators: and months of accounts receivable from government agencies. The EdL Group's debt-service coverage ratio in 2014 was 1.9, thus exceeded the minimum 1.1 target by 72 percent. The target to limit accounts receivable from government agencies to less than 3 months was not met due to insufficient budget allocations for relevant agencies to pay power bills. (TE, pg.9)

The project's achievements against the Global Environmental Objectives are presented below:

- (a) Increased efficiency of energy supply by EdL and consumption by customers: "Measurable increase in awareness and adoption of EE technologies and practices by consumers" outcome was achieved by the project's demand side management and energy efficiency activities, which saved an estimated total 9.2 GWh per year through the distribution of 360,000 CFLs (Compact Fluorescent Lightbulb) and retrofitting and behavior change campaigns in 50 public buildings. (TE, pg.61)

  'Reduction of the EdL's distribution system loss' outcome was not achieved at the time of project completion. The value at completion (measured per year) was 13.1 percent which was higher than the original 13 percent maximum target value and the 11 percent target value subsequently approved with the GEF additional grant. The TE attributes the value at completion to factors outside project activities (TE, pg.16)
- (b) Substantial adoption of renewable energy in the government's rural electrification program: This outcome was achieved as the newly installed generation capacity value at completion was 310 kW, which exceeded the target value of 300 kW by 3 percent. The value at completion includes the single 260 kW biogas turbine on a pig farm in Vientiane Province and two 25 kW hydro stations for villages in Houaphanh Province. (TE, pg.60)

4.3 Efficiency	Rating: Satisfactory
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The TE evaluates the efficiency of the project through economic and financial analyses conducted at appraisal for two subcomponents: Grid Extension and Off-Grid Investment Program as these subcomponents represent the bulk of project investment (76 percent as estimated at appraisal or 87 percent of actual investment at completion). The TER rates the efficiency as Satisfactory based on the re-estimated indicator values at completion which confirms that most of the economic and financial results were acceptable and similar to the estimates at appraisal.

Grid Extension: Based on the approach and assumptions at appraisal, the NPV estimated for the economic analysis was US\$85 million, the economic internal rate of return (EIRR) 81 percent, and

benefit-to-cost ratio 2.8. The project's NPV in 2010 was re-estimated at completion to have been US\$137 million, the EIRR 39 percent, and the benefit-to-cost ratio 3.2. (TE, pg.33) The TE notes that "the results at completion were different but still quite favorable, primarily due to the inclusion of total capital cost and a higher consumer surplus". The financial analysis at appraisal for this component assessed the revenues for the distribution company at the average electricity tariff of U.S. cents 6.38 per kWh. The results at completion were less than expected due to the use of the latest available low-voltage household tariff, which was substantially less than as assumed at appraisal.

Off-Grid Investment: The economic analysis for this component was performed for SHSs (Solar Photovoltaic Home System) on a per system basis. Based on the approach and assumptions at appraisal, the NPV was estimated to range from US\$209 to US\$313 per SHS, the EIRR from 22–41 percent per SHS, and benefit-to-cost ratio from 1.6 to 1.8 per SHS. The NPV in 2010 is re-estimated at completion to have been US\$5.5 million, the EIRR 60 percent, and the benefit-to-cost ratio 5.1 (TE, pg.35). According to the TE, the results at completion were acceptable but different as the analysis was done at the component level and not at the system level. The financial analysis at appraisal for this component assessed the revenues earned from SHS installation fees, similar to completion except for the usage of the holistic approach instead of on a per system basis. The results complied with the values estimated at appraisal.

#### 4.4 Sustainability

Rating: Moderately Likely

The TE does not provide a detailed discussion examining the four dimensions of financial resources, sociopolitical, institutional framework and governance, and environmental sustainability, however assesses the risks to the maintenance of outcomes. the TER rates project sustainability as Moderately Likely, mainly due to potential financial risks facing the Electricité du Laos (EDL), an executing agency of the project.

**Financial Resources Sustainability: Moderately Likely** There is an expected risk of grid electricity tariffs increasing over time, to cover investments to maintain and expand the power system and ensure quality of supply, however the TE evaluates the risk of tariffs becoming unaffordable for households connected under the project as low given the strong association of grid connections with income-generating activities, including for P2P participants.

The key financial risk facing the EdL was determined as the increasing level of debt to finance due to rising capital spending/investment resulting from new debt financing for unplanned projects. On the other hand, the Ministry of Finance, the Ministry of Energy and Mines as well as the EdL have established a joint working group to propose and undertake actions to ensure financial sustainability of the power sector. (TE, pg.18)

**Sociopolitical Sustainability: Likely**. As indicated in the evaluation in 2013, compared to a baseline study in 2004, household incomes were three times higher on average, and households owned more assets and spent less share of their income on energy. The TE notes that "There was a positive association between grid connections and business activities. P2P participants (16,010 households by completion) particularly benefited from these changes as they tended to be newly formed families with less means.

About 93 percent of P2P recipients agree that work undertaken by women is easier with electricity" (TE, pg.17). With community ownership and government commitment, sociopolitical sustainability of the project seems likely in the near future.

Institutional Framework and Governance Sustainability: Likely The TE notes that "the project made a lasting institutional impact by having (a) an improved policy environment and regulatory framework, including cost-recovery tariff, reduced cross subsidies, power sector financing strategy, and the 2013–2017 Power Sector Financial Sustainability Action Plan; (b) an RE master plan in place; and (c) strengthened human capacities in the EdL and the MEM in project management, environmental and social impact management, renewable technologies, and English language" (TE, pg.17)

**Environmental: Unable to assess** The TE does not state any environmental risks to sustainability of project benefits, and no other information on environmental sustainability is available.

#### 5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The co-financing was higher than the amount estimated at the project approval. Given limited IDA allocations for Laos, the project drew partners during preparation and implementation. The resultant co-financing and parallel financing was almost three times the IDA grant amount, enabling the project to exceed its original targets.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The \$15 million IFC co-financing has been delayed for nine months because of not being able to meet disbursement conditions which have negatively impacted the grid extension component at the beginning. However, the full amount was disbursed on September 25, 2012 after which the letter of credit was established and the goods were delivered. (PIR, 2013)

Procurement activities under each EdL subcomponent were carried out by staff of different EdL departments, which led to some delays in procurement due to lack of experience. (TE, pg.10)

The Task Team Leader (TTL) of the bank changed four times during project supervision which also contributed to the delay in formally restructuring the project. (TE, pg.19)

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

Government had a very strong commitment to meet the national electricity access target which is supported by the project and provided the EdL with a strong mandate and enabling environment (including an 18 percent tariff increase in 2013) to achieve the outcome of electrifying 248,000 households in rural villages of Lao PDR. The TE notes that "there were shortcomings in compliance with covenants directly under the government's control: (a) government agencies' budget allocations were inadequate to cover power bills and (b) the government did not maintain the EdL's debt-to-equity ratio to less than 1.5. The MoF's decision to centralize government agency billing from 2015 is a step to address the latter concern." (TE, pg.20)

#### 6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

The TER rates M&E Design as Moderately Satisfactory. The results framework includes indicators, objectives and targets for each year, however it's focused on energy efficiency and renewable energy components and seems to lack directly project-related outcomes on the improvement of the financial performance of Electricité du Laos (EdL). TE also notes that the loss reduction indicator lacked details of its methodology "as it was not clear whether it was measured by month or year and how to account for factors beyond project activities". (TE, pg.9)

Key indicators in the results framework included: (i) Reduction of EdL's distribution system loss; (ii) Measured increase in awareness of EE and adoption of EE technologies and practices by consumers; (iii) Installed renewable energy generation capacity with mini-grid for RE and (iv) CO2 emissions reduction.

The monitoring activities in the CEO Endorsement (pg.3) include submission of regular Progress Reports, Financial Monitoring Reports, external Auditing Reports and a Project Completion Report along with the regular supervision of the implementing agency to monitor the project implementation against the agreed result framework.

6.2 M&E Implementation	Rating: Satisfactory
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The TER rates M&E Implementation as Satisfactory. Majority of the indicators would be measured semiannually and during progress reporting as per the Results Framework in the project design. The TE states that data for most indicators were updated once or twice per year, including through seven ISRs completed for the project.

During the restructuring of the project in 2013 the financial performance indicators were revised to accommodate for any changes occurring due to the creation of Edl-Gen which is a separate business created by the government and owned 75 percent by the EdL and 25 percent listed on Lao PDR's stock exchange. (TE, pg.3)

TE notes that "the loss reduction indicator and its target values would have benefited from review to account for two developments in 2013: (a) a study improved measurement of 'non-technical' (that is, commercial) losses and (b) several large customers served by low-voltage distribution lines switched to medium voltage lines, which caused an extraordinary shift in distribution loss data". (TE, pg.10) On the other hand, monitoring data for the electrification aspect of the project was useful for adaptive management throughout project implementation.

### 7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 Quality of Project Implementation	Rating: Moderately Satisfactory
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The project's implementing agency was the World Bank. The project preparation and appraisal performance of the bank was satisfactory in terms of relevance, development outcomes, safeguards compliance and institutional arrangements etc. However the TE notes that "Risks associated with coordination of grid and off-grid electrification, design and management of the SHS program, and the technical and economic challenges of village off-grid electrification were, in hindsight, underestimated" (TE, pg.19) The bank team visited the project 2–3 times per year to monitor and verify social and environmental impacts, meet with contractors, clients and other relevant authorities, as well as beneficiaries to listen and discuss possible adverse impacts. The TE states that "the World Bank Group's joint implementation support contributed to enhanced discussion/dialogue on financial aspects as evidenced by a joint support to the Lao PDR authorities in developing 2013–2017 Action Plan for Financial Sustainability of the Power Sector in Lao PDR" (TE, pg.19)

The project executing agencies were Electricité du Laos (EdL) and Ministry of Energy and Mines (MEM).

The TE states that strong institutional and staff commitment to the project at the EdL have been instrumental to the overall success of the electrification components and the resolution of problems during implementation despite the shortcomings in compliance with covenants and agreements toward improving the EdL's financial performance which were not in direct control of the EdL. TE also notes shortcomings on the reporting of the project's loss reduction activities, impact in the context of developments to methodology, the shift in large customer connections, and difference between planned and actual expenditure.

During project implementation, MEM had reportedly relied extensively on external consultants and Bank teams indicating a large capacity gap between different levels of MEM staff, which TE concludes hindered project administration and implementation. (TE, pg.20)

#### 8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The reduction target of about 30,000 kt CO2e was not fully achieved, based on the available evidence, though significant emissions reductions can be attributed to project activities.

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The project results in 2013 indicated that compared to a baseline study in 2004, household incomes were three times higher on average, and households owned more assets and spent less share of their income on energy.

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. "Capacities" include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. "Governance" refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

#### a) Capacities

As TE notes, there were deliverables associated with the demand-side management and energy efficiency component including a website; consumer awareness and behavior campaign in urban areas; a roadmap for EE standards and labelling; an assessment of pilot program options for commercial and industrial demand management; an upgraded energy use database; and building the capacity of EdL staff including to conduct energy audits and monitor and verify EE activities such as the maintenance of the energy use database (TE, pg.28)

#### b) Governance

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

The 2013 evaluation found that with better lighting from grid connections, children in P2P households do not appear to significantly increase their study time in the evening but like elsewhere, prefer to spend more time watching televisions. (TE, pg.17)

TE also notes that "contrary to expectations, 4 out of 27 public sector buildings, for which data were available at completion, increased energy consumption after installation of EE technologies. The increase of up to 3 percent (compared to a reduction of 10 to 25 percent for most buildings) is presumed to be independent of the project intervention." (TE, pg.17)

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

'Measurable increase in awareness and adoption of EE technologies and practices by consumers' component was achieved with a broader scope for adoption of EE technology and practices. (Adoption:

24 government, 3 hospitals, and 23 other public buildings in Vientiane. Thousands of residents and shops nationally). (TE, pg.vi)

#### 9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The high-level lessons applicable to this project as part of the national electrification program and included the following:

- -Clear electricity access targets, institutional framework, financing, monitoring mechanisms, sound planning, and efficient operations can ensure the achievement of targets in a timely and effective manner.
- A workable balance must be struck among financing, subsidy, and tariff policies by providing necessary state subsidies to RE and at the same time maintaining the commercial viability of the power sector with cost-recovery tariffs.
- A 'P2P, with low-cost financing that targets unelectrified households in villages previously electrified, is a simple and effective means to provide grid connections with strong benefits for women, children, income generation, health, and social inclusion.
- Additional lessons include the importance of regularly updated data from multiple sources including on private sector investments to coordinate grid extension with off-grid electrification and avoid 'stranded' off-grid assets by earlier than expected arrival of the grid. SHSs (Solar Photovoltaic Home System) must have a sustainable business model that does not depend on heavy government oversight. Careful consideration is warranted before including financial indicators as PDO outcome indicators or covenants given the sociopolitical risks associated with reform necessary to meet them, especially adjustments to tariffs, and the time required to bring about financial improvement, which often may exceed the life of one project.
- 9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE does not specifically list recommendations but provides some of them along with the lessons derived from the project listed in the above section.

## 10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	GEF IEO comments	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The report explains in detail the outcome achievements for the GEOs and PDOs	S
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The report is consistent in content for the evaluation of the project outcomes and achievements	S
To what extent does the report properly assess project sustainability and/or project exit strategy?	Project sustainability was assessed at the level of key risks to the main outcomes, however does not elaborate the four dimensions of sustainability	MS
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learned section is not very comprehensive and evidence-based, provides high-level explanations but do not link them with relevant recommendations	ми
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report provided the actual project costs and actual co- financing used. Additionally, the report indicated what activities each co-financer contributed to.	S
Assess the quality of the report's evaluation of project M&E systems:	The report's evaluation of project M&E is brief and could have been more detailed especially regarding the implementation phase	MS
Overall TE Rating		MS

# 11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).