

REQUEST FOR CEO ENDORSEMENT

PROJECT TYPE: MEDIUM-SIZED PROJECT TYPE OF TRUST FUND: GEF TRUST FUND

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A. PART I: PROJECT INFORMATION

Project Title: Viet Nam: Local Development and Promotion of LED Technologies for Advanced						
General Lighting in Viet Nam						
Country(ies):	Viet Nam	GEF Project ID:1	5555			
GEF Agency(ies):	UNDP	GEF Agency Project ID:	5193			
Other Executing Partner(s):	Viet Nam Academy of Science	Submission Date:	3 December			
	and Technology (VAST)		2014			
	Center for High Technology		16 January			
	Development (CHTD) under		2015			
	VAST					
GEF Focal Area (s):	Climate Change	Project	48			
	_	Duration(Months)				
Name of Parent Program (if	n/a	Agency Fee (\$):	144,153			
applicable):						
➤ For SFM/REDD+						
➤ For SGP						

B. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
CCM-1	1.1 Technologies successfully demonstrated, deployed and transferred	1.1 Technology demonstrations	GEFTF	701,900	490,000
CCM-1	1.2 Enabling policy and mechanisms created for technology transfer systems	1.2 Enabling policy for technology transfer	GEFTF	815,500	6,139,394
	-	Total Project Costs		1,517,400	6,629,394

 $^{^{\}rm 1}$ Project ID number will be assigned by GEFSEC. $^{\rm 2}$ Refer to the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when completing Table A. GEF5 CEO Endorsement Template-February 2013.doc

C. PROJECT FRAMEWORK

Project Objective: To mitigate GHG emissions through transformation of the lighting market towards greater usage of locally produced LED lighting products in Viet Nam

greater usage of to	carry pro	l land	ng products in Viet Nam	Tr	C	Cam@1
Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trus t Fund	Grant Amount (\$)	Confirmed Co- financing (\$)
1. Transfer of skills, knowledge and technology in support of local LED lamp manufacturing	TA	1. Development of a local LED industry that provides locally produced quality LED lamps that are increasingly in demand by local consumers	1.1 Completed biennial reviews of national roadmap for LED lighting development. 1.2 Improved LED lighting standards that meet international norms 1.3 Training workshops for strengthened LED lamps testing and enforcement regime 1.4 Labeled and certified LED lighting products 1.5 Updated building codes that include the use of LED lighting products 1.6 Completed capacity building program for strengthened LED R&D facilities 1.7 Engineering and construction designs for improved LED lighting production in Viet Nam	GEFTI	929,450	150,000 (MoIT) 100,000 (QUATEST) 2,100,000 (Ralaco) 3,010,000 (Dien Quang) 290,400 (VN Schreder)
	Inv		1.7 Engineering and construction designs for improved LED lighting production in Viet Nam	GEFTI	90,000	100,000 (Ralaco) 100,000 (Dien Quang)
2. Demonstration of cost-effective local commercial production of LED lighting devices	TA	2. Increased use and deployment of locally- produced high- quality LED lighting technologies	2.1 Completed feasibility studies of indoor and outdoor LED demonstrations 2.3: Approved system for monitoring and evaluation of LED lighting systems 2.4: Completed LED lighting product applications awareness raising program 2.5: Completed workshops for disseminating lessons learned from LED demonstrations 2.2 Competed LED lighting	GEFTE	385,900	25,000 (VAST) 36,300 (Ralaco) 287,694 (Dien Quang) 165,000 (VN Schreder)
	Inv		application demonstrations	GETIF		(CHTD)
			Subtotal		1,445,350	6,404,394

Project management	Cost (PMC) ³ GEFT	72,050	125,000
			(VAST)
			100,000
			(UNDP)
Total p	roject costs	1,517,400	6,629,394

D. SOURCES OF CONFIRMED CO-FINANCING FOR THE PROJECT BY SOURCE AND BY NAME (\$)

Please include letters confirming cofinancing for the project with this form

Sources of Co-financing	Name of Co-financier (source)	Type of Co- financing	Co-financing Amount (\$)
National Government	MoIT	In-kind	150,000
National Government	QUATEST 1	In-kind	100,000
National Government	VAST	In-kind	150,000
National Government	CHTD	Investment	40,000
Private Sector	Ralaco	Investment	2,236,300
Private Sector	Dien Quang	Investment	3,397,694
Private Sector	VN Schreder	Investment	455,400
GEF Agency	UNDP	Cash	100,000
Total Co-financing			6,629,394

E. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹: N.A.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Co-financing (\$)	Project Total (\$)
International Consultants	464,000	450,000	914,000
National/Local Consultants	524,300	100,000	624,300

G. DOES THE PROJECT INCLUDE A "NON-GRANT" INSTRUMENT? NO

(If non-grant instruments are used, provide in Annex D an indicative calendar of expected reflows to your Agency and to the GEF/LDCF/SCCF/NPIF Trust Fund).

¹ In case of a single focal area, single country, single GEF Agency project, and single trust fund project, no need to provide information for this table. PMC amount from Table B should be included proportionately to the focal area amount in this table. ² Indicate fees related to this project.

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below. GEF5 CEO Endorsement Template-February 2013.doc

PART II: PROJECT JUSTIFICATION

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF $^{4}\,$

A.1: National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e NAPs, NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Repor

Additional important government policies and strategies to which the Project is consistent with were identified during the project formulation stage in addition to those indicated in the PIF. These are:

- 1. The Law on Environmental Protection, promulgated in 1993; updated by the National Assembly on 23 June 2014 at the Decision No.55/2014/QH13, and effective from 1 January 2015
- 2. National Action Plan on the Green Growth (2014-2020) approved by the Prime Minister on March 20, 2014 at Decision No. 403/2014/QD-TTG
- 3. The National Targeted Program on Response to Climate Change was approved by Prime Minister at Decision No158/2008/QD-TTG dated 2 December 2008

Futher details on these policies are presented in the Project Document, pp. 18 and 19.

A.2: GEF focal area and/or fund(s) strategies, eligibility criteria and priorities.

4. NA

A.3: The GEF Agency's comparative advantage:

5. N/A.

A.4. The baseline project and the problem that it seeks to address:

- 6. The National Energy Efficiency Program (VNEEP) under the coordination of MoIT forms the key baseline project estimated at USD 44 million until 2020. Phase I of VNEEP was implemented between 2006 and 2010 to secure savings of 3 to 5%. Phase II (VNEEP II) is now under implementation until 2015 with the aim of securing 5 to 8% savings. VNEEP II's key specific activities that have a strong link with LED lighting products includes:
 - Component 1: Improvement of EE targets, goals and strategy. MoIT is the midst of developing and preparing roadmaps for various components of VNEEP that articulates how sector-based EE goals are integrated and contribute to national socio-economic goals;
 - Component 2: Capacity building. MoIT is developing specific capacity building programmes to support and expand the pool of local expertise for various areas where VNEEP are focused:
 - Component 3: Enforcement of Minimum Energy Performance Standards (MEPS) and Labeling. MoIT is supporting implementation of MEPS development for specific energy consuming products according to the Law on Energy Efficiency and Conservation. In addition, the MoIT will also coordinate with MoST on the periodic review of equipment and appliances to be included in national EE promotion programmes, and with MoC on the

⁴ For questions A.1 –A.7 in Part II, if there are no changes since PIF and if not specifically requested in the review sheet at PIF stage, then no need to respond, please enter "NA" after the respective question.

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- enforcement of the Building Energy Code and effective engagement of the building and construction industry on EE programmes;
- Component 4: Specific improvements in selected sectors. MoIT is providing technical support to enable local manufacturers of various EE equipment and appliances to possibly reduce the costs to the Vietnamese consumer;
- Component 5: Improvement on implementation of EE&EC programs. This would include awareness raising programs supported by MoIT on the financial viability of EE&EC programmes; and
- Component 6: Improvement of energy data collection and MRV protocols. MoIT is responsible for evaluating the capacities of various organizations to EE, and delegating lead roles to those organizations qualified for M&E roles for EE initiatives. In addition, MoIT is implementing detailed plans for the collection of data on end-use energy usage from the residential sector.
- 7. UNDP Viet Nam has an ongoing project on "Strengthening capacity on climate change initiatives in the industry and trade sectors" (CCIT) that aims to strengthen the capacity of policy makers and stakeholders in the industry sector to reduce GHG emissions, and remove barriers that are restricting industrial enterprises from adopting technologies to improve resource efficiency and productivity. The implementation schedule of the project is January 2013 December 2016 and a budget of US\$ 2.9 million. Key activities that are considered as baseline to the Project include:
 - Quantification of GHG emission reduction potentials and energy savings from identified climate change mitigation actions (such as the use of energy efficient lamps particularly LED lighting devices) in the industry and trade sectors;
 - Development of data collection framework and methodologies for estimating GHG emission reductions for specific climate change mitigation options (e.g., utilization of EE lighting) that will be initially piloted in specific industry sectors, but are also applicable to other industry sub-sectors such as the lighting products manufacturing industry;
 - Development of policies and institutional mechanisms for the promotion of market reform to enable involvement of the private sector and service providers in low carbon development of the industry sector;
 - Capacity development of staff within MOIT at both national and provincial levels, energy
 efficiency conservation centers, auditors and enterprise managers through development and
 delivery of training packages on development, implementation and monitoring of climate
 change policies, development and implementation of mitigation action plans, GHG emission
 reduction potential assessment, energy audits and MRV.
- 8. The PIF mentions other baseline projects such as the National Program on Technology Innovation up to 2020, the National Program on High Technology Development up to 2020, and the National Fund for Technology Innovation. This proposed GEF Project, however, will focus on VNEEP II as its baseline project.
- 9. The problem that baseline project seek to address is the lowering or removal of barriers to more widespread adoption of LED lamps in Viet Nam. These barriers include:
 - An absence of an LED regulatory framework over the quality of LED lamps produced in Viet Nam;
 - Weak institutional arrangements for standard testing of LED lamps, R&D for the advancement of LED lighting products, and for the promotion, appraisal and standards enforcement of LED lighting products;

- Insufficient knowledge and capacity of local manufacturers and suppliers on best practices for LED lamp manufacturing and best strategies on improving their production lines to successfully supply LED lamps to the Viet Nam lighting market;
- Low level of investment into LED lamp production lines due to the aforementioned lack of knowledge;
- Low public awareness on the benefits of LED lamps which are mainly related to electricity savings.
- A. 5. <u>Incremental /Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global environmental benefits</u> (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:
 - 10. By building on the updated baseline assessment carried out during PPG work, some complementary activities to and some rewording of the previous outcomes and outputs presented in the PIF have been added into the Project design. These changes are reflected in the Project Results Framework presented on pgs 39-41 of the UNDP-GEF project document. The changes from the PIF are as follows:
 - 11. The three outcomes of Component 1 in the PIF were consolidated into one outcome to encompass the spirit of the three original outcomes;
 - 12. The PIF Output 1.1 (Approved and enforced policies, legislation and standards on LED lighting applications) was expanded into 5 outputs on this Project:
 - Output 1.1 is providing assistance in biennial reviews of the national LED lighting roadmap and other areas of strategic planning for accelerated market penetration of LED lamps into Viet Nam's lighting market;
 - Output 1.2 is assistance for upgrading of testing method standards for LED lamps and their components to mandatory standards;
 - Output 1.3 is training workshops to strengthen the LED lamp testing and enforcement regime;
 - Output 1.4 is assistance towards labelled and certified LED lighting products; and
 - Output 1.5 is the updating of building codes to include the use of LED lighting products;
 - 13. The PIF Output 1.2 (Transferred and implemented skills, knowledge and technology on design and assembly of specific LED lamp sizes) was changed to Output 1.7 in the Project to engineering and construction designs for improved lighting production in Viet Nam. The assistance in the output will enable local Vietnamese LED manufacturers to source international expertise on advanced knowledge on LED lamp manufacturing;
 - 14. An investment has been added to Output 1.7 consisting of the procurement of LED lighting design software. The rationale for the investment was to increase access of this software to Viet Nam's largest lighting manufacturers, and improve their capacities to design quality LED lighting products for the Viet Nam lighting market;
 - 15. The PIF Output 1.3 (Completed and documented technical support for selected local manufacturers and their R&D testing facilities towards quality LED lamp production) was changed to Output 1.6 in the Project to complete a capacity building program to strengthen R&D centers of local LED manufacturers:

- 16. Output 2.2 is a consolidation of PIF Output 2.2 (1,000 LED lamps of 8-40W installed for indoor lighting in residential and commercial buildings) and Output 2.3 (200 LED lamps of 110-160W installed for outdoor street lighting and at construction sites).
- 17. A separate Output 2.3 for the monitoring and evaluation of LED lighting systems has been added to build local capacity for collecting real data on LED lamp benefits. Systems for MRV of energy savings and GHG emission reductions will be setup to ensure an MRV system consistent with other similar efforts for MRV of low carbon projects;
- 18. Output 2.4 has been added to raise awareness of LED lighting products with the public; and
- 19. Output 2.5 has been added to improve dissemination of information on lessons learned from LED product application demonstrations.
- A.6. Risks, including climate change, potential social and environmental risks that might prevent the project objectives from being achieved, and measures that address these risks:
 - 20. Social risk as a new risk category and some complementary risks were identified during the project preparation, which are reflected in Table 3, pg 36, and Annex I of the ProDoc of the UNDP-GEF project document.
- A.7. Coordination with other relevant GEF financed initiatives:
 - 21. There are no changes in the proposed coordination from when the PIF was approved.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

- B.1 Describe how the stakeholders will be engaged in project implementation.
 - 22. The Project Steering Committee (PSC) will have oversight of the Project Management Unit (PMU). The PSC will consist of a Chairperson (VAST President); with PSC members from MoC, MoIT, MoST, UNDP Viet Nam, VAST, and a LED manufacturer representative. The primary functions of the PSC will be to provide the necessary direction that allows the Project to function and achieve its policy and technical objectives, and to approve the annual Project plans and M&E reports. Other stakeholders to be engaged in project implementation are discussed in Para 21 of the UNDP-GEF Project Document.
- B.2 Describe the socioeconomic benefits to be delivered by the Project at the national and local levels, including consideration of gender dimensions, and how these will support the achievement of global environment benefits (GEF Trust Fund/NPIF) or adaptation benefits (LDCF/SCCF):
 - 23. The social impacts of achieving market transformation of the Vietnamese LED lighting market include:
 - Reduced electricity costs to households, commercial and industrial establishments, and public agencies;
 - Increased availability of disposable income from electricity savings from increased LED usage;
 - Improved quality of lighting in urban areas that has impacts on safety for local residents in public areas;

- Possible increased difficulties to access to LED lighting experienced by marginal income sector of the population. However, for this population segment, LED lights do offer the possibility of having light sources powered from solar PV with minimal requirements for battery storage, thus providing a means of energy independence.
- From a gender perspective, this Project will benefit the citizenry, particularly women and children given that LED lights have a longer and more reliable service life and higher lighting output compared to lighting products that are based on current lighting technologies in use, thereby creating safer conditions in public areas. These benefits can also be extended to indoor lighting where the women who spend most their time indoors will have access to reliable lighting sources and lower energy costs to the household.

B.3. Explain how cost-effectiveness is reflected in the project design:

- 24. The cost-effectiveness of the Project is incorporated into the Project design addresses the barriers on both the supply and demand sides of the LED lighting market in Viet Nam. On the supply side, the Project will lay the groundwork for a supportive policy environment that will catalyze investment and development of a solid manufacturing base to sustain sales of locally produced LEDs, and stimulates subsequent investments in this sector. On the demand side, the Project will support activities to enhance public awareness on the quality and benefits of LED lamps to boost their confidence on increased usage of LED lamps. This will increase the likelihood of LED usage amongst more owners of commercial, existing residential buildings, new buildings and manufacturing facilities who will be aware of the proven benefits from the longer life and energy savings of LED lamps.
- 25. The direct GHG reductions expected from this Project are 70,005 tonnes CO_{2eq} cumulative to 2028, 10 years after Project completion. The cost of emission reductions resulting from this Project are USD 21.68 per tonne of CO_2 reduced.
- 26. This Project also seeks to produce knowledge of global value on transforming lighting markets that can be applied in other countries in the region, not participating in the Project and even for countries in other regions of the world. The value of these early lessons will make the GEF resources applied, more cost-effective in the medium term.

C. DESCRIBE THE BUDGETED M &E PLAN:

27. Project monitoring and evaluation will be conducted in accordance with the established standard UNDP and GEF procedures. The project team and the UNDP Office in Hanoi supported by the UNDP-GEF Regional Coordination Unit in Bangkok will be responsible for project monitoring and evaluation conducted in accordance with established UNDP and GEF procedures. The Project Results Framework provides performance and impact indicators for project implementation along with their corresponding means of verification. The GEF CC Tracking Tool will also be used to monitor progress in reducing GHG emissions. The M&E plan includes: inception workshop and report, project implementation reviews, quarterly and annual review reports, independent mid-term evaluation, and independent final evaluation. The following sections outline the principle components of the Monitoring and Evaluation Plan and indicative cost estimates related to M&E activities. The M&E budget is provided on Table 1. For further details, please see Para 75-84 of the UNDP-GEF project document.

Table 1: M&E Work Plan and Budget

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time Frame
Inception Workshop and Report	Project ManagerUNDP CO, UNDP GEF	Indicative cost: 10,000	Within first four months of project start up
Measurement of Means of Verification of project results.	UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	To be finalized in Inception Phase and Workshop.	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on <i>output and</i> <i>implementation</i>	 Oversight by technical specialist with support from the Project Manager Project team 	To be determined as part of the Annual Work Plan's preparation.	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	 Project manager and team UNDP CO UNDP RTA UNDP EEG 	Indicative cost: 5,000 for the first year for the completion and update of the GEF CCM Tracking Tool	Annually by July
Project Steering Committee meetings	Project Manager	3,000 x 4 years	Following IW and annually thereafter.
Periodic status/ progress reports	Project manager and team	None	Quarterly
Mid-term Review	 Project manager and team UNDP CO UNDP RCU External Consultants (i.e. evaluation/ Review team) 	Indicative cost: 25,000	At the mid-point of project implementation.
Final Evaluation	 Project manager and team, UNDP CO UNDP RCU External Consultants (i.e. evaluation team) 	Indicative cost: 30,000	At least three months before the end of project implementation
Project Terminal Report	Project manager and teamUNDP CO	0	At least three months before the end of the project
Audit	UNDP COProject manager and team	Indicative cost per year: 3,000 x 4 years	Yearly
Scheduled audits and spot check	UNDP COProject manager and team	Indicative cost per year: 3,000 x 4 years	To be decided based on risk assessment from the micro- assessments
Visits to field sites (UNDP staff travel costs to be charged to IA fees)	 UNDP CO UNDP RCU (as appropriate) Government representatives (MoNRE, MPI) 	4,000 x 4 years	Yearly
TOTAL indicative COST Excluding project team staff tim	e and UNDP staff and travel expenses	122,000 (+/- 5% of total budget)	

PART III: APPROVAL/ENDORSEMENT BY GEF OPERATIONAL FOCAL POINT(S) AND GEF AGENCY(IES)

A. RECORD OF ENDORSEMENT OF GEF OPERATIONAL FOCAL POINT(S) ON BEHALF OF THE GOVERNMENT(S):): (Please attach the Operational Focal Point endorsement letter(s) with this form. For SGP, use this OFP endorsement letter).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Dr. Van Tai Nguyen	Director General	MINISTRY OF NATURAL	02/04/2013
		RESOURCES AND	
		ENVIRONMENT	

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF/NPIF policies and procedures and meets the GEF/LDCF/SCCF/NPIF criteria for CEO endorsement/approval of project.

Agency Coordinator, Agency Name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
Adriana Dinu UNDP – GEF Executive Coordinator		January 16, 2015	Rakshya Thapa, Regional Technical Advisor EITT	+66 (0)2304 9100 ext. 5038	rakshya.thapa@undp.org

ANNEX A: PROJECT RESULTS FRAMEWORK (either copy and paste here the framework from the Agency document, or provide reference to the page in the project document where the framework could be found).

Complete project results framework can be found on Pgs 39-41 of the UNDP-GEF project document

ANNEX B: RESPONSES TO PROJECT REVIEWS (from GEF Secretariat and GEF Agencies, and Responses to Comments from Council at work program inclusion and the Convention Secretariat and STAP at PIF).

Viet Nam: Local Development and Promotion of LED Technologies for Advanced General Lighting in Viet Nam

No comments received from STAP

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS 5

A. PROVIDE DETAILED FUNDING AMOUNT OF THE PPG ACTIVITIES FINANCING STATUS IN THE TABLE BELOW:

PPG Grant Approved at PIF: \$89,906					
	GEF/LDCF/SCCF/NPIF Amount (\$)				
Project Preparation Activities Implemented	Budgeted Amount	Amount Spent To date	Amount Committed (3 Dec 2014)		
Revalidate Barriers and Baseline Projects/Activities	18,000	10,000	8,000		
2. Identification, evaluation and selection of demonstrations	31,000	28,000	3,000		
3. Conduct of Logical Framework Analysis (LFA) with the project stakeholders	16,906	16,500	406		
4. Detailed Design of Project Components & Activities	16,000	9,800	6,200		
5. Establishment of institutional framework for project partners/co-financiers in the project implementation and to ensure close coordination with co-financed baseline activities	8,000	3,962	4,038		
Total	<u>89,906</u>	<u>68,262</u>	<u>21,644</u>		

The PPG phase of the project achieved its main outcome of developing a Full-Size Project Proposal for submission to GEF.

ANNEX D: CALENDAR OF EXPECTED REFLOWS (if non-grant instrument is used): NA

If at CEO Endorsement, the PPG activities have not been completed and there is a balance of unspent fund, Agencies can continue undertake the activities up to one year of project start. No later than one year from start of project implementation, Agencies should report this table to the GEF Secretariat on the completion of PPG activities and the amount spent for the activities.