



# PROJECT IDENTIFICATION FORM (PIF)

PROJECT TYPE: MEDIUM-SIZED PROJECT

THE GEF TRUST FUND

Submission Date: 16 December 2009

Re-submission Date:

## PART I: PROJECT IDENTIFICATION

GEF PROJECT ID<sup>1</sup>: PROJECT DURATION: 24 months

GEF AGENCY PROJECT ID:

COUNTRY(IES): Morocco

PROJECT TITLE: Market Transformation for Energy Efficient Lighting in Morocco

GEF AGENCY(IES): United Nations Environment Programme (UNEP)

OTHER EXECUTING PARTNER(S): The Ministry of Energy, Mines, Water, and Environment (MEMWE) with UNEP/DTIE

GEF FOCAL AREA (S)<sup>2</sup>: Climate Change

GEF-4 STRATEGIC PROGRAM(S): CC-Sp1-Building EE

NAME OF PARENT PROGRAM/UMBRELLA PROJECT (if applicable):

INDICATIVE CALENDAR*	
Milestones	Expected Dates mm/dd/yyyy
Work Program (for FSP)	N/A
CEO Endorsement/Approval	04/01/2010
Agency Approval Date	06/15/2010
Implementation Start	07/01/2010
Mid-term Evaluation (if planned)	07/01/2011
Project Closing Date	07/01/2012

## A. PROJECT FRAMEWORK

**Project Objective:** The main objective of the proposed GEF project is greenhouse gases emissions reductions through energy efficiency (EE) lighting market transformation and progressive phasing out of incandescent bulbs in the residential, municipal, institutional and tertiary sectors by:

- Restricting the supply of less energy efficient lighting products through legislative initiatives; and
- Promoting the demand for energy efficient lighting products at all levels

Project Components	Indicate whether Investment, TA, or STA <sup>b</sup>	Expected Outcomes	Expected Outputs	Indicative GEF Financing <sup>a</sup>		Indicative Co-Financing <sup>a</sup>		Total (\$) c = a + b
				(\$ a)	%	(\$ b)	%	
1. Energy Efficiency Policy Enhancement	TA	1.1 An enabling institutional, legal and regulatory framework to promote a sustainable CFL (compact fluorescent lamps) market.  1.2 State Government	1.1.1 Analysis, recommendations, and associated advocacy work for the introduction of adequate public financial and fiscal incentives to promote the CFL market.  1.1.2 Analysis, recommendations and the associated advocacy work for setting up the required regulatory framework for CFLs norms and	20,000	44	25,000 (in-kind)	56	45,000

<sup>1</sup> Project ID number will be assigned by GEFSEC.

<sup>2</sup> Select only those focal areas from which GEF financing is requested.

		legislation adopted for the phase-out of incandescent lamps.	quality control. 1.2.1 Identification of possible new regulations to promote the phase-out of incandescent lamps.					
2. Technology and Standards - CFLs Quality Improvement	TA	2.1 An effective and affordable certification and quality control scheme that is applicable for all CFLs imported in Morocco, and enhanced capacity of the supply chain to offer products and services promoting a sustainable CFL market.	2.1.1 Set of CFL standards and associated certification system developed (or adapted) for Moroccan conditions.  2.1.2 Availability of effective and affordable testing procedures to check compliance of imported CFLs with standards.  2.1.3 A training and recognition system in place for CFL installers.	40,000	36	40,000 (in-kind) 30,000 (cash)	64	110,000
3. Generation of demand for CFL through applicable consumer financing and, as applicable, financial support schemes	TA, Inv.	3.1 Increased demand for energy efficient lighting products based on availability of attractive end-user financing mechanisms  3.2 Public utilities and private distributors and installers fully involved in the dissemination of energy efficient lighting products	3.1.1 Design the financial structure and implementation arrangements for specific purpose financing vehicles that will address consumer needs in the CFL market.  3.1.2 As a pilot initiative, financial incentives provided to end-users to encourage the uptake of efficient lighting products  3.2.1 Enhanced awareness of key electricity distributors and local suppliers on the specific	269,000	9	3,110,000 (cash)	91	3,379,000

			<p>characteristics and financing opportunities in CFL market.</p> <p>3.2.2 Ten million CFLs distributed (out of the Government's overall plan to distribute 22 million CFLs) to households, commercial establishments, and public service organizations in accordance with contracts signed between the Ministry of Energy, Mines, Water, and Environment (MEMWE) and the electricity distributors.</p>					
4. Information, Consumers' Education, and Awareness Raising	TA	4.1 Enhanced consumers awareness and capacity of the targeted end-users, housing developers and other key stakeholders to facilitate the integration of LBC into new housing developments and into other promising new market segments	<p>4.1.1 Public awareness raising and marketing campaigns implemented in co-operation with relevant public utilities entities and private electricity distributors</p> <p>4.1.2 Materials for public awareness raising and marketing campaigns developed or adapted into Moroccan conditions.</p>	490,091	61	250,909 (cash) 60,000 (in-kind)	39	801,000
5. Project management								
a) Moroccan Ministry of Energy, Mines, Water & Environment (MEMWE)				50,000	11	140,000 (cash) 260,000 (in-kind)	85	470,000
b)UNEP/DTIE				20,000	4			
<b>Total project costs</b>				889,091		3,915,909		4,805,000

<sup>a</sup> List the \$ by project components. The percentage is the share of GEF and Co-financing respectively of the total amount for the component.

<sup>b</sup> TA = Technical Assistance; STA = Scientific & Technical Analysis.

**B. INDICATIVE CO-FINANCING FOR THE PROJECT BY SOURCE and by NAME (in parenthesis) if available, (\$)**

Sources of Co-financing	Type of Co-financing	Project
Project Government Contribution (Ministry of Energy, Mines, Water, and Environment, [MEMWE])	Cash (to be confirmed)	350,000
	In-kind	185,000
Electricity Utility Contribution (Office National de l'Electricité [ONE])	Cash (to be confirmed)	2,150,909
	In-kind	100,000
UNEP – DTIE (Italian Trust Funds)	Cash (confirmed)	1,030,000
	In-kind	100,000
<b>Total co-financing</b>		<b>3,915,909</b>

**C. INDICATIVE FINANCING PLAN SUMMARY FOR THE PROJECT (\$)**

	Previous Project Preparation Amount (a) <sup>3</sup>	Project (b)	Total c = a + b	Agency Fee
GEF financing	0	889,091	889,091	88,909
Co-financing	0	3,915,909	3,915,909	
<b>Total</b>	<b>0</b>	<b>4,805,000</b>	<b>4,805,000</b>	<b>88,909</b>

**D. GEF RESOURCES REQUESTED BY AGENCY (IES), FOCAL AREA(S) AND COUNTRY(IES)<sup>1</sup>**

GEF Agency	Focal Area	Country Name/ Global	(in \$)		
			Project (a)	Agency Fee (b) <sup>2</sup>	Total c=a+b
(select)	(select)				
(select)	(select)				
<b>Total GEF Resources</b>			<b>0</b>	<b>0</b>	<b>0</b>

<sup>1</sup> No need to provide information for this table if it is a single focal area, single country and single GEF Agency project.

<sup>2</sup> Relates to the project and any previous project preparation funding that have been provided and for which no Agency fee has been requested from Trustee.

<sup>3</sup> Include project preparation funds that were previously approved but exclude PPGs that are awaiting for approval.

## **PART II: PROJECT JUSTIFICATION**

### **A. STATE THE ISSUE, HOW THE PROJECT SEEKS TO ADDRESS IT, AND THE EXPECTED GLOBAL ENVIRONMENTAL BENEFITS TO BE DELIVERED:**

Morocco has fairly rational electricity tariffs, and limited subsidies to petroleum products, except liquid petroleum gas (LPG) and diesel oil. As the economy depends at 97% on imported energy, the Government of Morocco (Government) and energy sector enterprises took initiatives to promote renewable energy (RE), more than EE:

- Wind farms were constructed under concession agreements with ONE, or by ONE itself, or under self-generation specific legal and contractual arrangements; total capacity now reaches 124 megawatt (MW); 140 MW additional capacities are foreseen by 2009.
- Measures were introduced to promote solar water heaters, first in the residential sector with PROMASOL, which encompasses support actions to develop the market and improve quality of equipment and services.
- A decentralised electrification programme with photo-voltaic (PV) kits contributes to increasing the rate of electrification, which should soon reach 90%.
- A programme to develop energy standards in buildings is underway. A scheme for landfill standards and management is planned; several biogas projects are foreseen, but no project has been implemented so far.

Morocco is facing an annual average increase of 8% of electricity consumption and this trend is strongly driven by the residential and commercial sector. Electrification is developing fast allowing an ever greater population to access modern energy services. Programs to encourage energy efficient domestic appliances, in particular for efficient lighting, have been extremely limited. To improve peoples' living conditions, Morocco needs to considerably reinforce their electricity supply infrastructures as well as implement demand-side management programs to speed up EE market development in the region. Retrofitting the existing installations and constructing new generation and transmission facilities will not be sufficient to overcome the barriers to the energy sector development. The challenges of attracting the required funds to meet future regional electricity demand require the exploration of various approaches. One of the promising areas is the promotion of EE programs through technology transfer and this has been defined by the Government as a national priority. Recent international efforts to promote EE have been gathering around the globe. Many of these programs feature the compact fluorescent lamp (CFL) as a mainstay in delivering energy conservation in the residential and institutional sectors. The concept of "promoting CFL in North Africa" is proposed to the Algeria, Egypt, Morocco, and Tunisia, within the context of the "Global Market Transformation for Efficient Lighting" project, a four-year GEF-supported project to be implemented by UNEP. UNEP will ensure that appropriate external and internal arrangements will be made with regard to the execution of the project and that the activities under the project will be properly coordinated with the "Global Market Transformation for Efficient Lighting" project. The interaction between the Center of Excellence to be established under the global lighting project and the (national) project will constitute an innovative approach to promote the adoption of energy efficient lighting in Morocco.

The reform of the energy sector aims at reducing the strong energy dependency of Morocco. The Government is currently engaged in a deep reform of the energy sector and the development of a voluntary policy to support the development of RE and EE. The Government doesn't provide any financial support for EE promotion and existing institutions, including MEMWE and the Center of Renewable Energy (CDER) have limited resources. All professionals are waiting for the Government and the parliament to issue laws and decrees on EE and RE. A new draft EE/RE framework law was approved by the Government Council in May 2007, but it still has to pass the Parliament, and secondary regulation will then have to be prepared. Finally, the Government will have to devise a more ambitious EE/RE strategy including information campaigns, training, demonstration, support to mandatory audits, development of standards, and appropriate financial and fiscal incentives, and will have to conduct a reflection about the creation of ad hoc funds.

One of the key elements of this program will be the implementation of a new law and its decrees of application for EE and RE. This law-project aims in particular to:

- Increase the share of RE in the national energetic mix to 10% and in the electricity supply to 20% by 2012;

- Drive the energy demand curve towards a rational use of all the energy resources and services with an objective of energy savings of 5.3 millions of Tep by 2020.
- Implement mechanisms and incentives for EE and RE.

In Morocco, a financing mechanism, using resources coming from both national and external resources, should as far as possible include the following components:

- Technical assistance to support "market" development: awareness raising, communication campaign, training, seminars and events, project identification and preliminary feasibility studies;
- Incentives for end-users, as a signal in the early stages of market development, or for pilot and demonstration projects.

However, the development of EE and its financing would face several constraints: lack of regulatory, fiscal and financial incentives, as well as of government policies encouraging EE; insufficient awareness and interest from end-users for energy efficient lighting as a means to control the electricity consumption costs. The project objectives will be achieved with the implementation of specific barrier removal programs that will involve: (1) updating of EE policies; (2) standards and quality control on lighting applications; (3) development and implementation of appropriate financing mechanisms; and (4) consumer education and information dissemination.

The Project has 5 components:

### **Component 1: Energy Efficiency Policy Enhancement**

This component includes the creation of an EE institutional and policy framework, under the form of a wide-based stakeholder forum consisting of members from government institutions, energy agencies, public utilities, professional associations, traders and other suppliers of appliances and consumers associations. This body will concentrate decision makers' view and create consensus for EE promotion nationwide, including energy efficient lighting.

An EE policy paper stating all the decrees of application will be developed for the adoption by the Government and the parliament, to guiding concrete actions including the phase out of inefficient lighting technologies, including incandescent bulbs and promote efficient ones. This policy paper will also pave the way for quality requirements, support to national EE initiatives, develop financing incentives and apply innovative financial mechanisms.

This component envisages the following activities:

- Create a Multi-Stakeholder Commission to carry out policy dialogue among stakeholders.
- Establish an internal policy team within MEMWE to review policy options and propose suitable policies.
- Carry out workshops to discuss policy options with government agencies, the standardization institute, and concerned private sector parties.
- Conduct policy analysis and make recommendations aimed at the preparation and adoption of legislation for phasing out incandescent lamps.
- Organize technical support for the implementation of a new EE policy at the national and local levels.

### **Component 2: Lighting Products Quality Improvement**

For an effective public policy and private sector involvement in EE promotion at national level, it is essential to provide the necessary assistance to the government institutions to establish an appropriate EE standard in Morocco for CFLs in view to improve lighting products quality nationwide. While much EE standardization work has already been done, a great challenge still remains for Morocco to insure the implementation of such standards.

This component will bring together leading policymakers, national standardization professionals, electricity distributors and key private sector actors to discuss how to accelerate progress in energy efficient lighting standardization taking into consideration, the specific context of the country which is dominated by cheap and energy inefficient lighting products.

This component envisages the following activities:

- Identification of lighting products that have minimum EE standards.
- Establishment of a standard and labeling committee within the Ministry of Industry and the national normalisation institute.
- Conducting a survey of available lighting products in the local market.
- Establishment of minimum standards, through the adoption and adaptation (if necessary) of international standards taking into consideration other initiatives being taken in the region with regard to the setting of minimum standards for CFLs and international best practices.
- Assessment of enforcement requirements and develop an appropriate enforcement mechanism.
- Implementation of new standards and labeling for CFLs.
- Setting up testing procedures for CFLs to verify compliance with minimum standards.

### **Component 3: Generation of demand for CFLs through applicable financial support schemes**

This component envisages the dissemination of CFLs to replace incandescent bulbs that represent, according to recent market survey, more than 60% of lighting products used in the household sector. The CFLs will be procured by electricity distributors through bulk procurement using international standards and specifications. Households, which are supplied by the electric utility (ONE) or any electricity distributor will be entitled to buy up to 10 CFLs at an incentive price on a first come first serve basis. It is proposed that households will pay for the costs of the CFLs through 24 monthly payments under their electricity bill without any interest charges. Based on UNEP/DTIE experience in developing and structuring financing mechanisms under the Mediterranean Renewable Energy Programme, UNEP/DTIE will insure synergies with the activities undertaken under the Global Market Transformation Efficiency Lighting project. Detailed financing arrangements will be worked out during the PPG phase. It is estimated that eventually up to 22 million CFLs could be sold under such a program during the project timeframe.<sup>4</sup> MEMWE together with ONE and the private sector companies will establish a recycling scheme for CFLs.

The following activities are envisaged:

- Technical and managerial capacity building of public agencies and private market players.
- Development of energy efficient lighting pilot projects.
- Distribution of 10 million of CFLs in public lighting sectors (residential, public services) through bulk procurement by ONE and electricity distributors.
- Monitoring of energy efficient lighting pilot projects including assessment of energy savings and peak load reduction.
- Provision of financial incentives to encourage proactive private sector providers of energy efficient lighting products.
- Implementation of CFL recycling scheme.

### **Component 4: Consumers Education and Awareness**

This component is related to public awareness programs for residential consumers and public services lighting.

ONE and MEMWE will be advised to promote EE in their intervention areas as part of their customer service programs. Among the services to be provided to their customers are awareness campaigns for households and energy management capacity development for public services and municipalities. This component will therefore encourage collaboration of both the public and private sectors in the promotion of energy efficient lighting products.

Activities to be undertaken include:

- Undertake national campaign to promote the use of energy efficient lamps. As part of the national policy to encourage the use of energy efficient electrical appliances, this campaign will inform the customers on a number of regulatory measures instrumental in reducing both national energy bill and CO<sub>2</sub> emissions.

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<sup>4</sup> However, present available funds would allow for the distribution of 10 million CFLs only.

- Awareness raising of customers about the benefits of using energy efficient lighting, through media communications
- Information on energy efficient lighting provided through utility channels. This will involve the holding of yearly meetings of interested organizations and individuals in the domestic lighting market to exchange information on energy efficient lighting technologies, business opportunities, success stories, and in addressing environmental impacts of lamp wastes.
- Information dissemination will be made using television, radio and print media. For prints, simplified and illustrative information materials written in French and arabic will be distributed to households explaining the use and benefits of energy efficient lighting products.

### **Global Environmental Benefits**

Morocco represents a population of 32 million of inhabitants. Morocco is among the largest energy consumers in the region. Lighting accounts for 30 to 40% of the power demand in the consumer sector. Experts estimate that by switching only 40% of Moroccan households to more efficient lighting products, such as CFLs, power consumption can decrease by around 20% resulting in a total GHG emissions reduction of 2.3 million tons (MT) of CO<sub>2</sub> over ten years.<sup>5</sup> The immediate benefits include immediate reduction of peak load, improved profitability by diverting saved energy for industrial use, substantial cost savings in comparison with the construction of new power plants, reduced expenditures for fossil fuels, better consumer image due to less power outages, substantial environmental benefits due to reduced CO<sub>2</sub> emissions, increased awareness about need to save electricity, and reduced electricity cost for all consumers. The Government is yet to decide whether it will pursue the certification and sale of carbon credits as a result of the project.

### **B. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH NATIONAL/REGIONAL PRIORITIES/PLANS:**

In its initial communication to UNFCCC, Morocco recognizes the importance of regulations, EE, and customer awareness in achieving the goal of reducing greenhouse gas emissions. On April 21, 2008, the Government adopted the National Plan of Priority Actions (NPPA) for the electric sector to optimize national electric balance and to ensure the sustainability of the electric service. The NPPA intends to implement actions having for objective the adequacy between supply and electric demand of power, mainly through the rationalization of consumption. Therefore, the dissemination of CFLs with low consumption and the installation of solar water heaters in the public buildings, and the implementation of incentive tariffs may lead to a decrease in electricity consumption.

The contracts programs signed on July 8, 2008 between MEMWE and the electricity distributors defined joint engagements on each part to make it possible for the distributors to achieve the goals set by NPPA, to reduce the residential consumption by 15% by 2012.

### **C. DESCRIBE THE CONSISTENCY OF THE PROJECT WITH [GEF STRATEGIES](#) AND STRATEGIC PROGRAMS:**

The Project aims at increasing market penetration of energy-efficient lighting technologies by applying a proven market transformation instrument for EE promotion. The Project therefore responds to the strategic objectives of GEF Climate Change Focal Area and to the objectives of the Strategic Program CC-SP1: Promoting Energy Efficiency in Residential and Commercial Buildings. The expected direct impacts of the Project include improved efficiency of energy use in the consumer sector, resulting in lower specific energy consumption and CO<sub>2</sub> emissions per capita. In addition to its direct effects, the Project will develop capacities of lighting industry at national level, sustain regional policies for EE promotion and consumers awareness that are expected to result in indirect effects due to strengthening of national energy policies, manufacturers' product policies and consumer behavior change.

### **D. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF RESOURCES:**

As the financial mechanism of the United Nations Framework Convention on Climate Change (UNFCCC), the Global Environment Facility (GEF) will assist Morocco building EE options and reduce the consumption of fossil fuel through

<sup>5</sup> Based on a GTZ-financed study on EE opportunities done in 2007 entitled: 'Etude sur le cadre organisationnel, institutionnel et législatif pour la promotion des Énergies Renouvelables'.



the provision of a grant that will be used to fund incremental costs related to the dissemination of 22 million CFLs as well as support a national communication campaign. The GEF \$1 million financing will allow the leveraging of about \$3.9 million as co-financing, i.e., 1 US dollar from the GEF allocation will be matched by about 3.9 US dollars from national and bilateral sources. Approximately 50% of GEF contribution is dedicated to communication, which is critical for the proposed project success. Building the trust and raising awareness among targeting end-users, electricians, local governments and decision makers in the business sector about the technical feasibility and the environmental costs and benefits of CFL technology is, therefore, essential for positive market development. The major resources needed for investment under the project will be supported by electric state utility, private electricity distributors, consumers, and the private sector. Detailed financing modalities will be prepared during PPG phase.

#### **E. OUTLINE THE COORDINATION WITH OTHER RELATED INITIATIVES:**

At present, mainly due to lack of funds ONE has installed about 3 million CFLs only and the project is to accelerate this effort with the installation of 10 million CFLs and forms part of the Government's overall plan to install 22 million. The project will exchange information and coordinate activities when required with the GEF-supported Global Market Transformation for Efficient Lighting project, which is implemented by UNEP.

At the regional level the project will share information and lessons learnt with the governments in the North African and Middle East regions in coordinating activities related to CFLs standards and labels. Through this collaboration, the Government will benefit from the experiences of other neighboring countries (such as Tunisia, where energy labels have recently been introduced through a GEF project) and from the possibility to reduce some costs, for example importing Tunisian made CFLs.

At the regional level, the project will rely on the on-going regional energy policy reforms coordinated by the World Bank, EIB, European Commission, GTZ, ADEME, CDER, etc. For this purpose it will coordinate with and rely on the expertise and guidance to be developed under the Global Market Transformation for Efficient Lighting Initiative project.

At the national level the project will liaise and work closely with the following stakeholders and other relevant ones that are identified during the PPG phase:

##### Governmental authorities (Morocco):

- *Ministry of Energy, Mines, Water, and Environment of Morocco (MEMWE)* is the key governmental body involved in formulation and implementation of national environmental and climate change policies. The project will work closely with the relevant electricity distributors to promote the national lighting initiative and to support the wide dissemination of high-performance lighting products to help utilities meet the increasing energy demand.
- *Ministry of Industry* is the key governmental body involved in the formulation of standards and labels for all types of equipment to be used to encourage the competitiveness of the Moroccan enterprises.
- *Public Electricity Utility (ONE – Office National de l'Electricité)* expressed interest to implement pilot projects to disseminate high-performance lighting products. ONE is committed to provide on the ground information on households for this project area (name of users/address/average electricity consumption/etc.), information on grid voltage, conduct detailed pre-study, distribution of CFLs in the project area (door-to-door), collection & destruction of GLS bulbs, information campaign to promote project etc. ONE targets 2.6 million households.

##### Other possible stakeholders:

- *Private electricity distributors* are operating in certain cities and they distribute electricity to approximately 1.6 million households.
- *International lighting companies* are being approached by the Government to make arrangements for the supply of the remaining 12 million CFLs under the program.

**F. DISCUSS THE VALUE-ADDED OF GEF INVOLVEMENT IN THE PROJECT DEMONSTRATED THROUGH INCREMENTAL REASONING :**

Between 2002 and 2008, the electricity demand has increased by an average of 8% per year due to the rural electrification and economic growth. Therefore, the use of CFLs could be an effective way to limit the electricity demand growth. Even though the CFLs can be considered as economic, commercially viable and available technology, in most cases some form of public support is still essential for facilitating sustainable market transformation. Without GEF support, the barriers mentioned below will remain and will result in a high growth of electricity produced and the resulting GHG emissions. In the business-as-usual scenario inefficient incandescent lamps will continue dominate the local and regional lighting market and penetration of efficient lighting products will remain low due to a number of market barriers both on the demand and supply side, which the proposed GEF project seeks to address:

- *Low consumer awareness about new products and their characteristics:* Limited consumer awareness threatens to restrain the development of high-performance lighting products market in the region. In North African countries, consumer knowledge of energy saving lamps is extremely low and is restricted to a few specific products. Even in countries such as Morocco and Tunisia where CFLs products is better known, penetration into the target market has been lower than anticipated due to relatively low awareness levels.
- *Low quality of imported CFLs undermines consumers' confidence in new products.* CFLs have undergone many changes since they were first introduced over 15 years ago. There is no regulation to ensure minimum quality standards on the market. The project will help establish standards and labels to deal with lighting equipment quality assurance and quality control in liaison with GEF's *Global Market Transformation for Efficient Lighting project*.
- *Lack of Policy, Legal and Regulatory Framework:* The Framework Law on Energy Efficiency and Renewable Energy was approved by the Council of the Government on 17 May 2007. However, it has not been endorsed by the parliament yet and it may take between 2 to 3 years to have the decrees of application adopted. It should be noted that without the publication of certain decrees of application, the law cannot become effective. Also, to incorporate this policy into the legal and regulatory framework will require considerable efforts. Currently, there is a lack of information and know-how about how to proceed efficiently with these important steps. Without support, it is likely that the full implementation of the policy will take considerable more time unless the Government can benefit from the experience gathered in other countries. The present project addresses this barrier with a comprehensive component on the policy, legal, and regulatory system development. GEF involvement will provide the necessary resources for capacity building and this will be the main catalyst to increase the efficiency of the in-kind efforts that will be provided by the Government and stakeholders.
- *Lack of attractive and specifically tailored financing mechanisms:* a specifically tailored financing mechanism for customers considering high up-front costs as a barrier can be developed by the state utility and the electricity distributors to allow a quick uptake of CFLs.

The barriers presented above slow down the penetration of more energy efficient lamps in Morocco and in the targeted countries in northern Africa. The project has been designed to overcome some of these most significant barriers and allow a faster transformation process for the market. The GEF support to the project will also catalyze the intervention of many local and international co-financing partners from the public sector and NGOs. These partners would not provide their support to the initiative without GEF intervention.

The project will be managed and monitored following all standard UNEP/GEF procedures for monitoring and reporting. This includes a mid-term evaluation and an end of project evaluation. The UNEP/DTIE Project Management Unit will closely monitor the indicators for outputs and outcomes against the Project Logical Framework to establish global and local benefits, financial and environmental, accrued from the project. Main indicators regarding the project will include CO<sub>2</sub> emissions reduced/avoided, peak load, MW reduced, energy saved, megawatt-hours (MWh) and market penetration rate for EE lighting products.

The monitoring and evaluation (M&E) plan will be reviewed by the Project Steering Committee (PSC) at the outset of project operations and presented in the Inception Workshop. This plan will confirm the monitoring and verification activities and responsibilities to be undertaken during the project. It will serve as a baseline from which to measure project impacts and will establish efficiencies in the execution of the project.

UNEP will be responsible for the financial oversight, administrative control and evaluation following UNEP standard rules and procedures. The project will be implemented by MEMWE and in collaboration with the electricity distributors.

**G. INDICATE RISKS, INCLUDING CLIMATE CHANGE RISKS, THAT MIGHT PREVENT THE PROJECT OBJECTIVE(S) FROM BEING ACHIEVED, AND IF POSSIBLE INCLUDING RISK MITIGATION MEASURES THAT WILL BE TAKEN:**

<b>Risk</b>	<b>Rating</b>	<b>Mitigation</b>
The Government does not provide human and financial resources for setting up a national policy framework for promoting EE lighting	L	The Government has presented its National Plan of Priority Actions National and the replacement of incandescent lamps is a national priority. In addition, the state utility has to optimize its demand side management to respond to the growing demand.
Introduction of CFLs has adverse impact on the environment	L	Establishment of standards and quality improvement secure a low level of mercury in CFLs, reducing their disposal related hazard rather insignificant.
Non-enforcement of standards	L	CFLs will be procured through international competitive bidding and the use of tender documents with detailed required minimum standards as prescribed by ONE and the electricity distributors.
Lighting industry cannot deliver high quality and efficient products to meet market demands	M	The assessment made during project concept note preparation shows that most of the sector operators are importing lighting products. They are well informed about EE lighting products standards and are already developing joint ventures with international key players of the market to import good quality products.
Private electricity distributors are reluctant to engage in EE lighting demonstration programme	M	Promoting efficient lighting can save up to 40% of residential sector energy consumption budget. The same benefits can be obtained for efficient-lighting projects in the public buildings. Coupled with capacity saving and signed contracts with MEMWE to install CFLs, this should provide sufficient motivation to engage private distributors in EE lighting demonstration.

**H. DESCRIBE, IF POSSIBLE, THE EXPECTED COST-EFFECTIVENESS OF THE PROJECT:**

The proposed project to the GEF will help achieve at least 15% energy saving related to lighting in municipal, residential and public buildings sectors by promoting demand for and supply of high-quality, environmentally-friendly and efficient indoor lighting technologies and solutions by 2012. The project will include four components targeting both supply and demand side of the market. Component 1 is designed to remove regulatory barriers for EE Lighting market transformation. Ministries of Energy and Environment, Commerce and Industry will be collaborating with other public agencies to develop a national policy and legal framework to facilitate the emerging market of efficient lighting products in the country. On the supply side the project will support domestic lighting traders to help them ensure quality and sufficient supply in efficient lighting products and minimize their negative environmental impact.

The project will also help establish and build capacity for implementation of rigorous Quality Assurance and Control framework for lighting products (Component 2) and will work with GEF Global Lighting Initiative to help gradually phase out fabrication and diffusion of inefficient bulbs. Component 3 will support design and implementation of nationwide EE lighting dissemination project that will demonstrate economic, social and environmental impact of EE lighting in the host country. Component 4 focuses specifically on awareness barriers to higher demand for efficient lighting products among key groups of consumers, population and public buildings managers. Direct GHG emissions reduction from implementation of this project will be 2 MT of CO<sub>2</sub> over a ten-year product life-cycle for the low voltage consumers,

including residential sector and public building services, which is highly cost-effective (less than \$0.86/ton of CO<sub>2</sub> emissions avoided) in comparison to other alternatives for GHG emission reductions in the region.

**I. JUSTIFY THE COMPARATIVE ADVANTAGE OF GEF AGENCY:**

For the period 2010-2013 UNEP will focus its efforts on its mandate by exercising environmental leadership on six cross-cutting thematic priorities among which climate change. In the area of climate change mitigation, UNEP will support countries to make a transition towards societies based on more efficient use of energy, energy conservation, and utilization of cleaner energy sources. Under UNEP's Medium Term Strategy the project supports the following outcomes:

- Normative approaches (standards, labels, certification) to EE for various kinds of appliances and equipment are used;
- Macro-economic and sector-wise analyses of policy options for, fostering low greenhouse gas emissions, including technology transfer, are undertaken and used;
- Barriers are removed and access is improved to financing for RE and EE technologies at the national level through targeted analysis of costs, risks and opportunities of clean energy and low carbon technologies in partnership with the finance sector; and
- National institutional capacity for assessing and allocating public funding and leveraging private investment for clean energy is strengthened.

UNEP is also implementing the Global Market Transformation for Efficient Lighting project, which will help define various key components regarding a phase out of incandescent bulbs and their replacement by modern energy efficient products. UNEP implementation of the project will also offer the opportunity to benefit from the findings and research under the Global Market Transformation for Efficient Lighting project with regard to, for instance, establishment of methodologies for the development of labeling procedures, quality certification, appropriate policy options, established standards and detailed environmental safeguards, etc.

At the same time, the Global Market Transformation for Efficient Lighting Project will take advantage of the identification of issues and corresponding solutions that may result from the proposed project and as such will offer an innovative approach to adoption of energy efficient lighting world-wide. This kind of project fits in the normative and scientific positioning of UNEP, which is part of its comparative advantage. As part of its strategy in the climate change focal area, UNEP intends to develop various other similar projects in the field of technology transfer, aiming at promoting the most recent EE technologies in replacement of obsolete technologies. Finally, UNEP will be coordinating this project with other national energy efficient lighting projects in the world such as in China, Russia, Ukraine, etc.

**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 [country endorsement letter\(s\)](#) or [regional endorsement letter\(s\)](#) with this template).

NAME	POSITION	MINISTRY	DATE (Month, day, year)
Mr. Mohamed Benyahia	GEF OFP	Ministry of the Environment	04/15/2009

**B. GEF AGENCY(IES) CERTIFICATION**

This request has been prepared in accordance with GEF policies and procedures and meets the GEF criteria for project identification and preparation.

Agency Coordinator, Agency name	Signature	Date (Month, day, year)	Project Contact Person	Telephone	Email Address
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