



REQUEST FOR CEO APPROVAL
PROJECT TYPE: Medium-sized Project
TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROJECT INFORMATION

Project Title: Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment			
Country(ies):	Global	GEF Project ID: ¹	5831
GEF Agency(ies):	UNEP	GEF Agency Project ID:	01289
Other Executing Partner(s):		Submission Date:	12/01/2015
GEF Focal Area (s):	Climate Change	Project Duration(Months)	18 months
Name of Parent Program (if applicable):		Project Agency Fee (\$):	130,150
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <ul style="list-style-type: none"> ➤ For SFM/REDD+ <input type="checkbox"/> ➤ For SGP <input type="checkbox"/> ➤ For PPP <input type="checkbox"/> </div> <div style="width: 40%;"></div> </div>			

A. FOCAL AREA STRATEGY FRAMEWORK²

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Trust Fund	Grant Amount (\$)	Cofinancing (\$)
CCM-1	Outcome 1.2: Enabling policy environment and mechanisms created for technology transfer	Output 1.1: Innovative low-carbon technologies demonstrated and deployed on the ground Output 1.2: National strategies for the deployment and commercialization of innovative low-carbon technologies adopted	GEF TF	685,000	3,860,000
CCM-2	Outcome 2.1: Appropriate policy, legal and regulatory frameworks adopted and enforced Outcome 2.2: Sustainable financing and delivery mechanisms established and operational	Output 2.1: Energy efficiency policy and regulation in place Output 2.2: Investment mobilized Output 2.3: Energy savings achieved	GEF TF	685,000	3,865,000
Total project costs				1,370,000	7,725,000

B. PROJECT FRAMEWORK

¹ Project ID number will be assigned by GEFSEC.

² Refer to the [Focal Area Results Framework and LDCF/SCCF Framework](#) when completing Table A.

Project Objective: To mitigate climate change by reducing the growth of global electricity consumption through the creation of a global partnership accelerating markets for highly efficient electrical appliances and equipment.

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Cofinancing (\$)
1. Policy and strategy framework to accelerate the transition to efficient appliance and equipment	TA	1.1 Consensus is reached on the policy and strategy framework options by expert taskforces (NGOs, IGOs, industry) for 3 products.	1.1.1 Policies and strategy framework are drafted and discussed for 3 products 1.1.2 Case study reports on best practice policies and strategies for energy efficient appliance and equipment developed.	GEF TF	250,000	1,250,000
2. Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition	TA	2.1 Developing and emerging country decision-makers have increased awareness of the benefits (economic, financial and climate) of adopting enabling policies to foster the transition to more energy efficient products.	2.1.1 Country-by-country analysis of the readiness of policies, standards and enforcement for each target technology and assessment of existing activities developed (to facilitate the market transition to efficient products (for 3 identified priority products) 2.1.2 Country-by-country estimated benefits (environmental, energy, climate, financial, business) of the transition to efficient products developed (such as refrigerators, room air conditioners, electric motors, and distribution transformers)(3 products).	GEF TF	390,000	2,075,000
3. Bringing appliance and equipment efficiency on top of the global agenda	TA	3.1 Commitment is gained from key private sector partners and political leaders on energy efficiency of appliances, equipment, and lighting (to support implementation of this project and other projects on improving appliances and equipment efficiency)	3.1.1 Partnership engagement strategy and branding strategy are developed. 3.1.2 Workshops and side-events alongside major global and regional energy and climate events. 3.1.3 Targeted communication campaign showcasing the benefits, including making the business case for private sector engagement.	GEF TF	190,000	1,050,000
4. Expanding the scope	TA	4.1 Consensus is	4.1.1 Expert meetings	GEF TF	420,000	2,700,000

of the en.lighten initiative		reached by en.lighten technical experts on best practice policy, awareness raising, and financial mechanism tool kits to facilitate the transition to efficient and advanced lighting (light emitting diodes) in the commercial, industrial and outdoor lighting applications	convened on best practice policy tools to support the transition to efficient and advanced lighting (LEDs) in commercial and industrial sectors and to outdoor applications developed. 4.1.2 Expert meetings convened on best practice policy tools for awareness raising on efficient and advanced lighting (to emphasize a systems approach and hours-of-use controls) for optimal savings benefits developed 4.1.3 Support tools on finance mechanisms are developed and tested in two partner countries (including tools for measuring, reporting, and verifying results).			
Subtotal					1,250,000	7,075,000
Project management Cost (PMC) ³				(select)	120,000	650,000
Total project costs					1,370,000	7,725,000

C. SOURCES OF CONFIRMED COFINANCING 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 Cofinancing	Cofinancing Amount (\$)
GEF Agency	UNEP	In-kind	200,000
GEF Agency	UNDP	In-kind	200,000
CSO	CLASP (USA)	In-kind	200,000
CSO	Natural Resources Defense Council (NRDC, USA)	In-kind	25,000
CSO	bigEE (Wuppertal Institute, Germany)	In-kind	600,000
CSO	Topten	In-kind	100,000
Bilateral Aid Agency (ies)	Department of Industry, Australia	Cash	2,000,000
Other Multilateral Agency (ies)	IEA-4E	In-kind	500,000

³ PMC should be charged proportionately to focal areas based on focal area project grant amount in Table D below.

Others	Copenhagen Centre on Energy Efficiency	In-kind	500,000
Private Sector	Philips Lighting BV	In-kind	800,000
Private Sector	OSRAM Licht AG	In-kind	800,000
Private Sector	International Copper Association (ICA)	In-kind	800,000
Private Sector	ABB	In-kind	200,000
Private Sector	Mabe	In-kind	500,000
Private Sector	Arcelik A.S.	In-kind	300,000
Total Co-financing			7,725,000

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY¹

GEF Agency	Type of Trust Fund	Focal Area	Country Name/ Global	(in \$)		
				Grant Amount (a)	Agency Fee (b) ²	Total c=a+b
UNEP	GEF TF	Climate Change	Global	1,370,000	130,150	1,500,150
Total Grant Resources				1,370,000	130,150	1,500,150

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.

F. CONSULTANTS WORKING FOR TECHNICAL ASSISTANCE COMPONENTS:

Component	Grant Amount (\$)	Cofinancing (\$)	Project Total (\$)
International Consultants	260,000	1,226,250	1,486,250
National/Local Consultants		572,250	572,250

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).

PART II: PROJECT JUSTIFICATION

The UN Secretary-General’s Sustainable Energy for All (SE4All) initiative identified lighting, appliances and equipment as top priority themes to achieve the goal of doubling the global rate of improvement in energy efficiency, through the “SE4ALL Accelerators”. A global transition to efficient and advanced lighting, appliances, and equipment offers an extraordinary opportunity to achieve global mitigation goals and engage countries in taking action. Currently, a global transition to efficient lighting is underway through a number of country and regional actions. At the global level the UNEP-GEF en.lighten initiative – a public-private partnership (PPP) has spear-headed global action to accelerate global phase-out of inefficient incandescent lamps – mostly found in the residential sector – though a consensual integrated policy approach. This successful PPP has engaged 66 countries worldwide as of October 2014 in committing to phase-out and taking real action on the ground, shifting markets to efficient products. This project will expand the scope of en.lighten to capture additional benefits offered by advanced lighting technologies (particularly light emitting diodes and lighting controls) in the commercial and industrial sectors and in outdoor lighting applications.

The project will also establish the foundations to extend the en.lighten initiative’s successful PPP model, policy and delivery approach to additional high-impact appliances and equipment, such as room air conditioners; residential refrigerators; electric motors; distribution transformers; information and communication technology (ICT) – all of which offer extraordinary potentials for energy savings and climate. Based on recommendations from the Expert Taskforce, an initial three products will be selected for further review by the Taskforces and development of best

practice policy recommendations. The products covered combined with lighting will account for 55% of global electricity consumption by 2030⁴. From a socio-economic standpoint, the market uptake for these products is set to grow extremely rapidly as the number of middle class increases from 2 billion today to 5 billion in 2030 (source: Brookings Institute), with a vast majority of these new middle class in non-OECD countries – where efficiency standards are woefully absent. If these markets are left to grow without the adequate policy frameworks, energy and climate impacts risk being massive jeopardizing global efforts to control climate.

The policy and technical consensus that will be achieved in Expert Taskforces, Component 1, will provide the overarching guidance and support for future GEF national and regional projects that achieve the leapfrog to high efficiency products. Guidance will be provided in the form of best practices that successfully transition economies to high efficiency technologies. The guidance will be in the form policies and strategies that are in general universally adaptable to the national situation of each country; however the expert the Expert Taskforces will make note of any regional or national circumstances that would alter the approach from the general guidance provided.

Component 2 of the project will develop country-by-country policy status and projected energy, GHG and financial savings of a transition to high efficiency products. Under this project, these studies will be completed three products in order to gain momentum with countries and partner to make fast action on energy efficiency appliances and equipment. These studies will result in developing and emerging country decision makers having increased awareness of the benefits of adopting enabling policies for a faster transition to more energy efficient products.

The strategy in Component 1 and the resources of Component 2 will be the base of a virtual Centre of Excellence that will support countries and regions in their transition to energy efficiency products. The Centre of Excellence is virtual in nature as it brings together experts in the field of energy efficiency from the project partners, including UNEP, UNDP, CLASP, NRDC, ICA, manufacturers, and governments. In the future the Centre of Excellence could support countries in the developing policy through training, workshops, and further resources such as policy toolkits on each individual product. The Centre of Excellence will be virtual by bringing together world class experts in each field, that will support the development of the resources and eventually providing support to countries.

Through the global action campaign in Component 3, the project will create global awareness on the potential and simplicity of mitigating climate through product policy. It will also persuade and generate political will from governments, private sector manufacturers, international organizations and civil society to take accelerated and coordinated action. These countries and private sector companies will be sought to commit to the Global Partnership to advance energy efficiency of appliance equipment in their relevant markets. Annex Q presents the Theory of Change in a figure as has been described in this text.

By developing establishing a consensus on best practice policies; informing policymakers of the benefits of a transition; and mobilizing action from key partners in the private sector and political partners it will allow for successful and quick national action on energy efficiency of products and equipment. The Global Partnership and Virtual Centre of Excellence will lay the groundwork for developing best practice policies that can then be tailored made to support national projects, through a follow up stage that could possibly include a programmatic approach that is being discussed with UNDP and could benefit from GEF financing, ensuring that the materials produced here are further adapted and used at the national level.

A. DESCRIBE ANY CHANGES IN ALIGNMENT WITH THE PROJECT DESIGN OF THE ORIGINAL PIF⁵

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

While this project is to establish the foundations of a global partnership, potential recipient countries will be non-annex I parties to the United Nations Framework Convention on Climate Change (UNFCCC). These non-Annex countries (as shown in Annex R) will be prioritized based on their country officials signing the Global

⁴ Data sources: IEA Key Energy Statistics 2013, IEA World Energy Outlook 2013, Lawrence Berkeley National Laboratory BUENAS Model, US EIA, UNEP.

⁵ 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.

Partnership form to accelerate energy efficient products in their country. Further, as 66 countries have already committed to en.lighten initiative to advance energy efficiency of lighting, these will be sought to expand their policies from lighting to appliances and equipment.

The project is in line with national priorities of numerous countries as described in their communications to the UNFCCC, which clearly identify energy efficiency as a critical path to reduce CO₂ emissions. The resources created by this project will support countries in achieving their goals by providing an international consensus of the best practice policies and strategies for each product class or application. The analyses on national policy status and potential benefits of transition to efficient technologies will motivate governments, the sector, and international organizations to take action in the field of energy efficiency of appliances and equipment. The project would also build political will within governments that could be supported with future capacity building and advice of the Global Partnership.

Based on their national communications, most recent national plans, energy efficiency agencies, Technology Need Assessments (TNAs) and press releases, an overview of the priorities in energy efficiency has been developed for the 144 non-annex I parties to the UNFCCC eligible to receive GEF allocations. Out of the 144 countries, 52 have expressed interest in the implementation of measures for energy efficiency for end-use consumption, appliances, equipment and/or lighting or have started developing measures that are still at an early stage.

Below are summary examples of countries that have prioritized energy efficiency in end use products:

- **Bangladesh:** in the 2012, the country identified priority activities in energy efficiency improvement to be: replacement of inefficient incandescent and fluorescent lamps with higher efficiency lamps; the use of high efficiency motors in industries; and, the replacement of old refrigerators with new, high energy-efficient models.
- **Grenada:** in its national communication to the UNFCCC it identified the development and implementation of a national energy plan, emphasizing energy efficiency. Achieving a gradual substitution of high-energy consuming equipment by more energy efficiency equipment is a key mitigation strategy for the country. The government plans to establish legal obligations for producers, consumers of energy, manufacturers and importers of equipment with regards to energy efficiency levels and the environmental impact of products imported and consumed.
- **India:** According to India's national communications, they are developing testing and certification procedures and promoting testing facilities for certification and testing for energy consumption of equipment and appliances is planned, as part of the Energy Conservation Act. The Bureau of Energy Efficiency is enhancing its ongoing energy labelling programme to include 10 other appliances, namely, air conditioners, ceiling fans, agricultural pump-sets, electric motors (general purpose), compact fluorescent lamps, fluorescent tube light (FTL)–61 cm, television sets, microwave ovens, set-top boxes, DVD players, and desktop monitors.
- **Africa:** Many countries – or sub-regions within the continent – have plans, expressed their interest, to develop energy efficiency strategies and policies for appliances, equipment, and lighting.
 - **Gambia:** the government intends to create energy efficiency legislation. Scenarios have been developed on the impact of replacing incandescent lamps with compact fluorescent lamps in hotels and households; and, transitioning to light emitting diodes for outdoor lighting applications. Energy efficient technologies are among the priority national mitigation technologies. Significant potential was identified in all sectors.
 - **Kenya:** the policy framework on energy was reviewed in 2012; energy management regulations are being developed. Energy efficiency projects are being implemented, such as: specifications for low-loss transformers and equipment; transformer relocation to load centres on the supply side; transition to efficient lighting in the residential sector and for street lighting; and, replacing electromagnetic ballasts and inefficient fluorescent lamps with higher efficiency lighting systems in government buildings.
 - **Zimbabwe:** the target technologies for climate change mitigation measures include compact

fluorescent lamps and other advanced lighting systems; high efficiency electric motors; and, passive space cooling. A government policy on energy efficiency is needed, as well as appropriate instruments to encourage use of and access to energy efficient products.

- **Economic Community of West African States (ECOWAS):** The ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE), seeks to develop and implement coherent regional sustainable energy policy framework and facilitate its implementation on national levels. Amongst other accomplishment, recently government officials from ECOWAS countries and international organizations have adopted a Regional Efficient Lighting Strategy, which will facilitate an integrated transition to energy efficient lighting in the region by 2020.

The work completed under this project will identify specific areas of reductions in order for countries to meet their Intended Nationally Determined Contributions (INDCs). Under Component 2, country-by-country estimates will be made on the potential savings for energy efficient appliances and equipment. Countries will have clear and accurate estimates on the potential savings they can commit to their INDC.

To join the Efficient Appliance and Equipment Global Partnership, countries will endorse a Country Partnership form, stating that they will promote the transition to energy efficient appliances and equipment (See Annex S) in their country. Partner countries will receive technical support and information in obtaining funding for actions to promote the transition to efficient appliances and equipment. Further, the Global Partnership will recognize partner countries at high-level events and workshop. Countries that have already committed to en.lighten initiative, will be amongst the priority countries to expand their policies to energy efficient appliances and equipment. Priority countries will be further defined within the expert taskforces and after the country assessments, which will show the potential GHG savings for each country.

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

No major changes have been made in the project design since the original PIF and the intentions of the project remain the same. In the PIF stage, UNDP was listed as co-implementer, however this was put in error and the intent of UNEP and UNDP is to have UNEP as the sole Implementing Agency. UNDP will participate in the project as a co-financing partner.

Further, the CEO Endorsement includes changes to the expected outcomes and outputs were made to have a coherent programming logic, which will allow for efficient monitoring and evaluation of the project. As is shown in the below table, these minor changes have been introduced in the wording of outcomes and outputs of the project and do not change the intent of the project nor activities. These changes were introduced in order to have clear outputs and outcomes that lead to the overall objective of the project. Similarly, there has been minor shifting of the budget between the components with the total funding remaining the same. All changes are less than 10% of the original component amount and justified below:

- Component 2 – Decrease in the funding amount by US\$ 35,000 – After further completing the detailed budget, it showed that the activities required for Component 2 can be completed with a reduced budget of US\$ 390,000.
- Component 3 – Increase in the funding amount by US\$ 15,000 – The increase is due to an increase in the website design, which will be central communication tool for the project should be funded accordingly with US\$ 15,000.
- Component 4 – Increase in the funding amount by US\$ 20,000 – The increase is to revise up the amounts allocated for travel, website updates, and expert taskforce meetings.

Table 1 Changes in the Project Framework since the original PIF

Original PIF			Current CEO Endorsement		
Expected Outcomes	Expected Outputs	GEF Grant Amount	Expected Outcomes	Expected Outputs	GEF Grant Amount

		(\$)			(\$)
Policy and strategy framework developed for the implementation of energy efficiency policies for each technology (4) in developing and emerging countries.	<ul style="list-style-type: none"> - Taskforces form a consensus on best practice policies to transform global markets to efficient appliances and equipment. - Case study reports on best practice policies and strategies for energy efficient appliance and equipment. 	250,000	1.1 Consensus is reached on the policy and strategy framework options by expert taskforces (NGOs, IGOs, industry) for 3 products.	1.1.1 Expert taskforces are established with an agreed work plan for 3 products 1.1.2 Policies and strategy framework are drafted and discussed for 3 products 1.1.3 Case study reports on best practice policies and strategies for energy efficient appliance and equipment developed.	250,000
Increased awareness in governments on the specific economic, financial and climate benefits of efficient appliances and equipment efficiency. Identification of priority countries and regions for targeted policy action on efficient appliances and equipment.	<ul style="list-style-type: none"> - Country by country estimated benefits (environmental, energy, climate, financial, business) of the transition to efficient products, such as refrigerators, room air conditioners, electric motors, and distribution transformers (2-3 products). - Country by country analysis on readiness of each target technology policies, standards and relevant actions. 	425,000	2.1 Developing and emerging country decision-makers have increased awareness of the benefits (economic, financial and climate) of adopting enabling policies to foster the transition to more energy efficient products.	2.1.1 Country-by-country analysis of the readiness of policies, standards and enforcement for each target technology and assessment of existing activities developed (to facilitate the market transition to efficient products (for 3 identified priority products) 2.1.2 Country-by-country estimated benefits (environmental, energy, climate, financial, business) of the transition to efficient products developed. ,(such as refrigerators, room air conditioners, electric motors, and distribution transformers) (3 products).	390,000
At least eight global manufacturers of appliances and/or equipment join the new global	<ul style="list-style-type: none"> - Partnership strategy and messages are developed. - In-person meetings 	175,000	3.1 Commitment is gained from key private sector partners and political leaders on energy efficiency	3.1.1 Partnership engagement strategy and branding strategy are developed.	190,000

<p>partnership.</p> <p>Energy efficiency of appliances, equipment, and lighting are placed on top of the agenda at global and regional energy and climate fora.</p>	<p>with major private sector to raise awareness of the project and seek their participation.</p> <ul style="list-style-type: none"> - Workshops and side-events alongside major global and regional energy and climate events - Targeted communication campaign showcasing the benefits, including making the business case for private sector engagement, in an accelerated transition to efficient lighting, appliances, and equipment. 		<p>of appliances, equipment, and lighting (to support implementation of this project and other projects on improving appliances and equipment efficiency)</p>	<p>3.1.2 Workshops and side-events alongside major global and regional energy and climate events.</p> <p>3.1.3 Targeted communication campaign showcasing the benefits, including making the business case for private sector engagement.</p>	
<p>Resources and tools available to countries to facilitate the transition to efficient lighting in the commercial/ industrial and outdoor sectors (including LEDs and controls).</p>	<ul style="list-style-type: none"> - Policy tools to support the transition to efficient lighting in commercial/industrial and outdoor sectors. - Awareness raising of lighting plus controls (system approach for optimal savings) benefits. - Support on developing innovative finance mechanisms and on measuring, reporting, and verifying plans for Nationally Appropriate Mitigation Actions (NAMAs) - Develop efficient lighting NAMAs in at least 2 countries. 	400,000	<p>4.1 Consensus is reached by enlighten technical experts on best practice policy, awareness raising, and financial mechanism tool kits to facilitate the transition to efficient and advanced lighting (light emitting diodes) in the commercial, industrial and outdoor lighting applications</p>	<p>4.1.1 Expert meetings convened on best practice policy tools to support the transition to efficient and advanced lighting (LEDs) in commercial and industrial sectors and to outdoor applications developed.</p> <p>4.1.2 Expert meetings convened on best practice policy tools for awareness raising on efficient and advanced lighting (to emphasize a systems approach and hours-of-use controls) for optimal savings benefits developed</p> <p>4.1.3 Support tools on finance mechanisms are developed and tested in two partner countries (including tools for measuring, reporting, and</p>	420,000

				verifying results).	
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A.3 The GEF Agency's comparative advantage:

UNEP has a proven track record and globally recognized legitimacy for the development and successful implementation of environment, climate and energy-related projects at the global and regional levels. In light of its global environmental mandate UNEP is the UN leading agency to promote environmental protection and an international leader in promoting energy efficiency in developing and emerging countries. UNEP's Executive Director co-chairs the Energy Efficiency Committee under the SE4ALL initiative, as well as the SE4ALL Energy Efficiency Accelerators on Lighting and Appliances and Equipment. In addition UNEP has succeeded in engaging over 60 countries worldwide to commit politically and take action to phase-out inefficient incandescent lamps, through the en.lighten initiative, one of the most successful GEF projects in the field of energy efficiency. This places UNEP as the preferred agency to persuade and engage countries in putting in place frameworks to leapfrog to highly efficient products through this project.

UNEP joined forces with international partners who bring expertise, top notch technical knowledge, networks and representation all over the world, offer top notch technical expertise, legitimacy and the capabilities that are needed to create a global partnership and a virtual Centre of Excellence on energy efficiency. CLASP has internationally recognized experience in the delivery of technical assistance to governments to support their appliance and equipment standards and labelling. The International Copper Association (ICA) is committed to providing technical evidence and knowledge to support countries in transitioning markets to energy efficient products. With UNDP the project gains a country presence in developing and emerging countries and their successful experience in national project implementation, in coordination with governments, the project will establish collaboration and partnerships at the country level with UNDP to promote energy efficiency of production and end-use applications. NRDC brings more than 30 years of experience in energy efficiency policy and governance and is the voice of civil society in the project. This combined experience and legitimacy brought by the initial partners creates the conditions for a global partnership capable of engaging additional partners to achieve a global leapfrog to high efficiency products.

Table 2 summarizes the lead agency's experience in this sector, highlighting synergies and the infrastructure for the successful implementation of the project.

Table 2: Examples of UNEP's Energy Efficiency Initiatives (past and on-going)

Branch/Project/Initiative	Description and related activities
en.lighten initiative	Since 2010 UNEP has led a global initiative with GEF and private sector support (Osram, Philips) and more recently from the National Lighting Test Center of China, to accelerate the transition to efficient lighting through the phase-out of inefficient incandescent lamps in the residential sector (www.enlighten-initiative.org). Through the en.lighten initiative, UNEP has supported the development of efficient lighting integrated policies in over 30 countries and obtained high-level political commitment from 66 countries to phase-out inefficient incandescent lamps within a determined timeframe (2016).
UNEP en.lighten initiative: Securing Climate Change Benefits of Efficient Lighting in Southeast Asia and the Pacific	The project, supported by the Australian Government, provides strategic and technical capacity-building support to developing countries in South Asia, Southeast Asia and the Pacific to strengthen their regional and national efficient lighting monitoring, verification and enforcement infrastructures for efficient lighting products.
Sustainable Building and Climate Initiative (UNEP-SBCI)	SBCI provides a common platform for dialogue and collective action among building-sector stakeholders to address sustainability issues of global significance, especially climate change. SBCI develops tools and strategies for achieving greater acceptance and adoption of sustainable building practices throughout the world and establishes baselines, which are globally recognized and are based on a life-cycle

	approach.
Copenhagen Centre on Energy Efficiency (formerly the EE Hub)	Recently established in Copenhagen as a collaborative effort from the Government of Denmark, UNEP and the Danish Technical University (DTU) to support the coordination and facilitation of the “SE4All high-impact opportunities” in the area of Energy Efficiency, and the Energy+ initiative, which will help in putting NAMAs into effect.
GEF-Funded National Energy Efficient Lighting Projects	UNEP has led or is leading national GEF-funded efficient lighting projects in Vietnam (2011), Cote d'Ivoire (2013), Peru (2013), Chile (2014), Bolivia (2014), Yemen (2014), and Pakistan (2014) totalling nearly 20 million USD in GEF funding.

Beyond energy efficiency, UNEP offers strong on-going initiatives to ensure that all aspects of the project are carried out in an environmentally sustainable manner and that the project benefits from the existing expertise of UNEP. [Table 3](#) summarizes how the project will benefit from collaboration between UNEP Energy Branch, Climate and Clean Air Coalition to Reduce Short-Lived Pollutants (CCAC), Sustainable Consumption and Production Branch, OzonAction, as well as the mercury related work led by UNEP-Chemicals.

Table 3: UNEP-Wide Initiatives Directly Contributing to the Project

Branch/Project/Initiative	Description and related activities
Climate and Clean Air Coalition to Reduce Short-Lived Pollutants (CCAC) initiative that promotes HFC alternative technologies:	CCAC brings together an international network of policymakers, industry, intergovernmental organizations, and civil society to enable the uptake of low-global warming potential (GWP), energy-efficient alternatives to HFCs and the removal of barriers to their adoption. The proposed GEF project will utilize the resources produced by CCAC, such as policy recommendations and information on climate-friendly alternatives to high-GWP HFCs to assist governments and private sector entities. With the support from both CCAC and this project, countries will be able to reduce both direct (such as from HFCs) and indirect emissions (through reduced electricity consumption) that come from refrigerators and room air conditioners.
Facilitating Implementation and Readiness for Mitigation (FIRM)	FIRM assists developing countries to strengthen their national low carbon development strategies and get a "quick start" on NAMAs. The focus is on reducing emissions of greenhouse gases in ways that also contribute to national development goals, such as creating jobs, enhancing energy security, and reducing the local environmental impacts of conventional energy technologies.
Technology Needs Assessments (TNAs) project	TNAs are country-driven activities that identify and determine the mitigation and adaptation technology priorities of countries. The intention is that assisted countries go beyond identifying technology needs narrowly and develop national technology action plans for prioritized technologies that reduce greenhouse gas emissions, support adaptation to climate change, and are consistent with national development.
OzonAction Branch	<p>The UNEP DTIE OzonAction Branch assists developing countries and countries with economies in transition (CEITs) to enable them to achieve and sustain compliance with the Montreal Protocol. Through the programme's assistance, countries are able to make informed decisions about alternative technologies and ozone-friendly policies. The Branch has implemented more than 1,000 projects and services that benefit of more than 100 developing countries and 7 CEITs, plus other services that assist another 40 developing countries.</p> <p>The Project closely collaborates with UNEP's OzonAction Division regarding refrigerators and room air conditioner, ensuring that policies and strategies</p>

	combine the objectives of eliminating ozone depletion with reducing GHG emissions. The project has focal points within the OzonAction Division and will invite staff of the OzonAction to participate in the expert taskforce groups.
Sustainable Consumption and Production (SCP) 10 Year Framework Programmes (10YFP)	<p>The 10 Year Framework of Programmes on Sustainable Consumption and Production (10YFP) is a global framework that enhances international cooperation to accelerate the shift towards SCP in both developed and developing countries. It provides capacity building and technical and financial assistance to developing countries, and encourages innovation and cooperation among all countries and stakeholders. Programmes within the 10YFP that have strong synergies with the proposed GEF project include:</p> <ul style="list-style-type: none"> - The 10YFP Consumer Information Programme (CIP) serves as a global platform to support the provision of quality information on goods and services, and the identification and implementation of the most effective strategies to engage consumers in sustainable consumption. CIP closely aligns policies that will be promoted under the proposed project, such as energy efficiency labelling and monitoring, verification, and enforcement activities. - The 10YFP Sustainable Public Procurement (SPP) with 65 partners in 30 countries, SPP aims to improve the knowledge on sustainable public procurement through increased collaboration and access to capacity building and support from SPP experts. The proposed GEF project will be able to closely collaborate with SPP in developing the projects strategy and also while developing tools and resources for public sector lighting (Component 4).
Promotion and Deployment of Energy Efficient Air Conditioners in ASEAN	The project is in course of implementation (2013 – 2016) and aims at increasing the market share of higher efficient air conditioners in ASEAN through harmonisation of test methods and energy efficiency standards, adoption of common minimum energy performance standards. The European Copper Institute is the lead applicant of the project and UNEP DTIE leads in the regional and national roadmap activities.

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

Energy efficiency is the most cost-effective high-impact-opportunity to reduce greenhouse gas emissions globally. Efficient lighting, appliances and equipment represent one of the easiest and most cost-effective areas to accelerate efficiency. Yet, the level of deployment efficient appliances and equipment in most developing countries remains considerably below that of developed countries (such as the European Union and United States), which have had policies and strategies in place for a number of years now. For example, in some Sub-Saharan African countries the average unit electricity consumption is nearly 800 kWh per annum, while OECD countries have an average of approximately 420 kWh per annum. This is partly due to obsolete and highly inefficient appliances and equipment remaining in the market for longer periods and lack of minimum performance standards for new products on the market. A large majority of developed countries had energy efficiency labels and MEPS in place by the end of the 1990s for refrigerators, RACs, electric motors, and distribution transformers. As is shown in [Table 2](#), mandatory MEPS and labels are also in place in some non-OECD countries, however there still remains a large amount of countries lacking MEPS. For each of the technologies (refrigerators, room air conditioners, motors and distribution transformers) between 60 per cent and 75 per cent of the non-OECD population can purchase products that are not subject to MEPS, meaning low efficiency products can still enter their markets. See Annex O for world maps of existing MEPS.

Table 4: Non-OECD Countries with Mandatory MEPS and/or Labelling Programmes for Selected Products

	Number of Countries	Population	Per cent of non-OECD Population

Refrigerators	MEPS	22	2.38 billion	41%
	Labels	29	3.65 billion	64%
RACs	MEPS	15	2.00 billion	35%
	Labels	27	3.60 billion	63%
Motors (includes 3 Phase)	MEPS	14	1.83 billion	32%
	Labels	7	1.60 billion	28%
Transformers	MEPS	2	1.43 billion	25%
	Labels	2	1.44 billion	25%

Sources: Australian government report 'Energy Labelling and Standards Programs Throughout the World', October 2013 and CLASP S&L database, December 2013

Further, a large number of the non-OECD country norms and standards have become obsolete, since efficiency levels have not been updated following technology advancements. For instance, refrigerator labels in Argentina and the Philippines have not been updated since 1997 and 2000 respectively.

The effect of such standards being 10 or 15 years out of date could be estimated by studying the rate of improvement in the United States market shown in two successive periods of 10/11 years (1980 to 1990 and 1990 to 2001), where annual consumption reduced by 30% and then by 30% again. Thus standards that were set 10 or 15 years ago may be failing to achieve savings of between 30% and 45% in annual consumption compared with appliances under newly revised standards.

The problem of high-energy-consuming appliances and equipment in developing countries will be amplified in the future as those economies increase their population and purchasing power. For example, developing countries are expected to see the current stock of 500 million domestic air conditioner units nearly double by 2030 and more than triple by 2050 as populations increase their household income and increasingly live in urban environments. Similarly, as developing countries and emerging economies increase their electricity consumption and grid connection in the coming years, it is expected that their number of distribution transformers will triple by 2030. Without policies and strategies put in place in the near future, high-energy-consuming products will remain in the market for 10 to 15 years for refrigerators, RACs, and motors, while distribution transformers will remain in use for over 30 years. To avoid locking-in the high-electricity-consuming products, countries must begin transitioning their markets today.

According to the most recent estimates from the en.lighten initiative (July 2014), significant opportunity remains to transition to efficient lighting. The initiative's efforts from 2009 to present will accelerate the adoption of efficient lighting mainly in the residential sector, beginning in 2015 to 2016. This project will stimulate policy changes that will deliver savings in all sectors. Globally, electric lighting for all sectors consumed approximately 15% of end-use electricity in 2010. Replacing the 2010 global stock of inefficient lighting in all sectors would result in 1,044 TWh (terawatt hours) of electricity savings annually—approximately 5.6% of global electricity consumption, or the equivalent yearly consumption of Germany and France combined. This is equivalent to 89.8 Mtoe (million tons of oil equivalent) in electricity savings. It is also equivalent to the annual electrical output of 280 large (500 MW) base-load power plants; representing an avoided construction cost of over \$233 billion. The net global financial savings from on-grid opportunities, (electricity savings plus the cost of replacement lamps and labor) is approximately \$120 billion. Replacing the 2010 global stock of inefficient lighting would achieve an annual CO₂ savings of 534 million tonnes.

Accelerating the transition through Integrated Policy Approaches

The project will define high-impact targets, and propose focussed an integrated policy guidelines to promote leapfrogging to efficient products. The integrated policy approach of the en.lighten initiative, which includes MEPS, supporting policies, MVE, and environmentally sound management has been internationally recognized as an effective way to remove inefficient products from the market.

Each aspect of the integrated policy approach is detailed below. [Table 5](#) provides examples for policy frameworks and strategies.

- **Minimum energy performance standards (MEPS)** remove the least efficient products from the market and thereby encourage innovation and rapid adoption of higher efficiency products.

- **Supporting policies and mechanisms**, such as: labels, financial and behavioural incentives, non-grant funding tools, innovative climate finance (e.g. NAMAs) and electric utility market transformation programmes are complementary to MEPS, in that they facilitate public acceptance and deployment of efficient products in the market. Examples of supporting policies that will be considered for each product category may include:
 - **Endorsement labels:** they are essentially seals of approval awarded to product models according to specified energy efficiency criteria.
 - **Comparative labels:** allow consumers to compare energy performance among models of similar products. Comparative labels may use a continuous scale or discrete categories of performance with minimum criteria for each level.
 - **Public awareness campaigns:** explain the meaning of energy labels and the rationale for minimum standards and encourage their use in purchase decisions would be essential. Campaigns may include working with retailers to train staff to help and advise consumers.
 - **Financial mechanisms:** assist in overcoming the purchase price of energy efficient appliances and equipment. This can be addressed directly to consumers (downstream support), or via manufacturers (upstream support) or via retailers, distributors or utilities (midstream support). NAMAs represent innovative market finance mechanisms that could be used to accelerate the transition to lighting, appliances and equipment.
- **Monitoring, verification and enforcement (MVE)** can deter market spoilage by non-compliant products and ensure the delivery of energy, financial and climate benefits.
 - **Monitoring** is a measurement process through which any party can use to check product efficiency. It involves measuring performance claims against a nominated standard in a consistent manner, using accurate instrumentation applied by qualified staff in controlled conditions.
 - **Verification** involves declarations of conformance by product suppliers confirmed often by independent third parties. This action can also be conducted by competitors or regulators, to challenge declarations.
 - **Enforcement** is the action taken by government or other parties against suppliers of non-compliant products, as a result of finding fault through either monitoring or verification. Enforcement requires rigorous and transparent monitoring and verification processes.
- **Environmentally sound management** will ensure that throughout the lifecycle of products that the environment and human are appropriate protected.
 - Actions include setting proper safeguards in handling dangerous materials during manufacturer and installation; maximum hazardous content limits to safeguard health and the environment; guidelines on the use of products; as well as, plans for the collection, environmentally sound disposal and/or recycling of products.
 - As is described in Section B.2, the project will assist countries with the environmental impacts associated with each product. This includes assisting in the transition of refrigerator and RAC manufacturing to alternative and natural low GWP and zero ODP refrigerants and blowing agents; developing recycling capacities for disposed appliances and equipment; and ensuring human health precautions.

Table 5. Selected Examples of Policy Frameworks Promoting Efficient Products

Country	Product	Policy Description
Brazil	Domestic Refrigerators	<p>During 2008 to 2010, 45 utility companies participated in the programme, replacing more than 380,000 refrigerators to save almost 190,000 MWh/year and reduce peak demand by more than 23,000 kW.</p> <ul style="list-style-type: none"> • Since 1998, utilities are required to invest part of their revenues in demand side energy efficiency programmes. • The programme aimed to help low-income households to replace inefficient refrigerators at no cost to them. The collection and recycling of the disposed refrigerator was part

		<p>of the programme.</p> <ul style="list-style-type: none"> Although the replacement of refrigerators required significant funding from utilities, the programme was economically viable, due to reduced investments in new power generation and savings due to higher grid stability and less irregular connections. <p>In 2011, the obligation for utilities to invest in demand side energy efficiency programmes became national law.</p>
Thailand	Room Air Conditioners	<p>Thailand started pro-active energy efficiency policies in 1992 with the promulgation of the Energy Conservation Act. The current policy framework of room air conditioners includes:</p> <ul style="list-style-type: none"> Mandatory MEPS combined with voluntary higher efficiency performance standards (HEPS) and a voluntary labelling scheme. Active consumer awareness campaigns to convince users about the advantages of higher efficient products (5-star products), conveying messages of high efficiency, economic return, and good quality: advertising in media, public relations between consumers and strategic partners (producers, government agencies, etc.), green learning programs in schools. Fiscal policy actions: an innovative tax incentive was introduced, including a tax waiver on the import higher efficient products. <p>The framework has resulted in 95% of the RAC market being constituted with an energy efficiency ratio (EER) of 3.2 and above, while mandatory MEPS are at EER 2.8.</p>
United States	Motors	<p>The United States first legislated for MEPS at the International Electrotechnical Commission's (IEC) IE2 standard for integral horsepower low voltage motors in 1992 through the Energy Policy Act. The policy framework and supporting initiative in the United States includes:</p> <ul style="list-style-type: none"> Mandatory MEPS levels were further raised through the Energy Independence and Security Act in 2007 to the current standard of IEC IE3. The early adoption of mandatory MEPS has allowed for a full transition to IE3 while other countries with voluntary MEPS and/or delayed implementation remains at lower levels. The Motor Decisions Matter initiative, which is rolled out through motor retailers and repairers to inform their customers, using Government endorsed "neutral" materials, of the benefits of buying high efficiency motors and quality repair. The initiative provides an excellent example of how government can work with industry and retailers, whom understand the motivation of each end-user.
Australia	Distribution Transformers	<p>Australia was one of the first countries to have MEPS for distribution transformers in 2004. MEPS were adopted for both liquid-filled and dry-type distribution transformers. The policy framework includes:</p> <ul style="list-style-type: none"> The liquid-filled regulations apply to single- and three-phase 10–2500 kVA units. The dry-type regulations apply to single- and three-phase 15–2500 kVA units. In both

		<p>instances, the requirements are prescribed at 50% of rated capacity.</p> <ul style="list-style-type: none"> • Australia also has a high-efficiency performance standard (HEPS) for distribution transformers. The HEPS apply to the same scope of coverage as the mandatory requirements, and represent an aspirational, voluntary level that is indicative of a possible future MEPS level. If manufacturers achieve these levels, they are allowed to promote their products if they meet or exceed these levels. <p>In addition, New Zealand has harmonised its policy with that of Australia, creating opportunities for enhanced regional markets.</p>
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A.5. Incremental /Additional cost reasoning: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated global environmental benefits (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

This project aims to remove barriers preventing the review, revision and implementation of MEPs for different appliances. There are two main things preventing this review and revision at the moment, one is a good understanding by governments by improved MEPs, and the second one is the lack of best practice policy options for doing this. This project will bring together a coalition of private and public sector players to create these best practice policy options and convince governments to participate in policy review.

Many governments already have MEPs for appliances but in many cases, these are now out of date, as technology has advanced. The aim of this project is to bring together the most recent data on technology performance and develop policy framework strategies that can include the latest performance possibilities and to be able to review energy performance standards on a regular basis. As an important part of persuading countries to adopt an on-going review and revision of energy performance standards, the project will present a cost-effectives analysis to government to demonstrate the potential savings they can make from improved energy performance standards, and the costs that a revise policy will imply for consumers.

Once governments are persuaded of the benefits of policy revision project will provide them with tools and resources to revise their policies.

The incremental cost reasoning is described below for each project component:

1) Policy and strategy framework to accelerate the transition to efficient appliance and equipment

This component aims to develop a policy and strategy framework based on international best practices in the area of appliance and equipment efficiency on the basis of which countries and regions can, later on, develop and implement effective strategies and policies. The taskforces will be provide recommendations that are generally relevant across all countries, however the taskforces will also make note of regions or countries vary different from the global best practice recommendations. Key stakeholders from around the globe that are already active and experienced in the area of appliance and equipment efficiency will gather in taskforces to be set-up with the objective to reach consensus on international best practice policies and strategies for market transformation. Participation in the taskforces will range from representatives of governments, national energy efficiency agencies and national standard-setting bodies (all to share information on strategies and policies and regulations) to manufacturers of efficient appliances and equipment (to share data about market structures, available technologies, incentives for manufacturers, impacts of efficiency standards on manufacturers, communication to consumers, etc.), utilities (to share information about end-user financing schemes or tools to encourage energy-saving behaviours, etc.), testing laboratories (available testing standards and methodologies, etc.), international and regional financial institutions (financial/incentive schemes for end-users, manufacturers, etc.) and other existing initiatives of the appliance and equipment efficiency sector. The objective of this multi-stakeholder participation is to bring together a diversity of expertise and experiences to ensure a holistic approach to the discussions, and subsequently make sure that the best international practices for strategy and policy frameworks

are identified to serve as reference for future action by countries and regions. The virtual Centre of Excellence will be responsible for coordinating the activities with the PMT providing overall guidance on the formulation of the taskforces and the taskforces providing expertise on their respective product.

2) Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition

The purpose of this component is to produce country assessments showing the environmental, economic and financial benefits of the transition to efficient appliances and equipment as well as an analysis of the current national/regional situation with regard to the priority products. They will be produced by expert institutions (either partners offering this as in-kind contribution or by subcontractors). Given that several implementing partners will execute the production of these assessments it is key to ensure the development and use of a harmonised methodology (further described below). The assessments will be reviewed by the product taskforces to ensure quality and coherence. Later on, the assessments will help to identify priority countries and regions for action and increase the awareness of governments on the benefits of a transition to efficient appliances and equipment, preparing the ground for a global action campaign. The PMT will provide general guidance on the product priority and the overall methodology to complete the policy and saving potential studies. The virtual Centre of Excellence will be responsible for carrying out the activities.

A harmonised methodology for calculating country-by-country baseline has been developed by expert groups on each technology. As is described below product groups have split into a bottom-up and top-down approach to estimating the savings potential according to the data availability and use of the product:

- **Room air conditioners, lighting, refrigerators and distribution transformers:** a bottom-up approach has been applied. The bottom-up approach builds on the projection of the product stock for each appliance / equipment, the projection of product sales and an assumption for the average product lifetime. The unit energy consumption is determined for each product group for a base scenario (current policies) and for a cost-effective new policy scenario.
 - Required factors, such as the average CO₂ emissions per kWh for OECD and for non-OECD countries have been taken from IEA publications. This bottom-up approach is in line with the method proposed by the Scientific and Technical Advisory Panel of the Global Environment Facility for Energy Efficiency Projects.
- **Electric motors and information and communication technology:** a top-down approach has been chosen, due to the very diverse product portfolio within this group. The top-down approach builds on the projected electricity consumption allocated to each product group and on the average potential for improvement in unit energy consumption.

The results of the CO₂ emission savings projection will be compared with different sources, such as the output of the BUENAS model of the Lawrence Berkeley National Laboratory, in order to ensure consistency with state-of-the-art projections of energy and CO₂ emission savings estimations.

Within the expert taskforces (Component 1), there will be further discussion on the precise methodologies and assumptions used, ensuring harmonised and accurate results.

3) Bringing appliance and equipment efficiency on top of the global agenda

This component will initiate the development of the multi-stakeholder platform that will in the long run result in the creation of the Global Partnership, as well as the global action campaign to be organised further down the line. It will aim to bring together diverse stakeholders engaged in appliance and equipment efficiency under one global umbrella. The overall long-term objective is to create synergies among experienced stakeholders and existing national and regional initiatives, leverage their expertise, experience and achievements, and therefore accelerate action and impact. The multi-stakeholder platform will find its first expression in the taskforces to be set up under project component 1. The long-term vision is to establish the Partnership Programme as the global reference for appliance and equipment efficiency.

This will be done in a two-pronged approach: (i) mobilising potential partners bilaterally such as governments (future partner countries for which national/regional projects will be designed and implemented), private sector, expert institutions, consumer groups, civil society more broadly and other international organisations. This will be coordinated

by the virtual Centre of Excellence with support from the PSC and the PMT members. The country assessments to be produced under component 2 will be an effective tool to convince governments to take action on the transition to efficient appliances and equipment, bring them on-board the Partnership and assist them in designing and implementing national/regional projects further down the line.

The second pillar of this component will be a targeted communication campaign that will widely disseminate information about the multiple benefits of the transition to efficient appliances and equipment. Such a campaign will consist, among other things, of a series of side events and workshops to be organised at key global and regional energy and climate events as well as active outreach and communication through social and other media. The virtual Centre of Excellence will coordinate the campaign with partners contributing to its design and implementation, be it through in-kind contributions or as subcontractors.

4) Expanding the scope of the en.lighten initiative

The existing governance and management structure of the en.lighten initiative will be maintained. With the support of the PSC, UNEP will make a concerted effort to expand its donor base for efficient lighting. The en.lighten initiative has spear-headed global action to accelerate global phase-out of inefficient incandescent lamps – mostly found in the residential sector. This successful PPP has engaged 66 countries worldwide as of October 2014 in committing to phase-out and taking real action on the ground, shifting markets to efficient products. This project will expand the scope of en.lighten to capture additional benefits offered by advanced lighting technologies (particularly light emitting diodes and lighting controls) in the commercial and industrial sectors and in outdoor lighting applications.

Tools will be developed with significant input and in-kind contributions from a newly formed task force of experts with an expanded field of practice. In particular, expertise will be sought from the private sector and from developed country governments and energy efficiency organizations that have long-term, highly successful experience and accomplishments in lighting demand-side management and market transformation efforts. Increased emphasis will be placed on virtual meetings, expansion of the en.lightened learning website, and multimedia venues for promoting the rapid transition to efficient lighting.

Annex J further describes the estimated GHG emissions reductions of this project and the following projects to be created out of this one.

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:

Risk Description	Risk level	Mitigation measure
Lack of engagement of regional and/or national manufacturers of appliances and equipment	Medium	<ul style="list-style-type: none"> (i) Engage with regional and national manufacturers under Component 4 to encourage their participation in the Global Partnership; (ii) Ensure regional and national manufacturers are properly represented on the Taskforces under Component 1 of the project. (iii) Persuade actively leading manufacturers of the benefits of joining the Global Partnership, by explaining the experiences gained by Philips and Osram in joining en.lighten where concrete action has been taken by countries, increasing markets of efficient products.
Policies might be recommended but not implemented	Medium	<ul style="list-style-type: none"> (i) Engage leading policy development bodies at global, regional and national levels; (ii) Engage the Sustainable Energy for All initiative and its CEO,

		<p>link the project to the UN Climate Summit process, the World Economic Forum and involve the UNEP Executive Director to generate the necessary political buy-in at national, regional and global levels;</p> <p>(iii) Rely on UNDP offices through a coordination mechanism that will be developed during project implementation, the World Bank and regional development banks to gain the support and commitment of government officials and ministries;</p> <p>(iv) Involve the UNEP Regional Offices for advice and contacts for the implementation of project activities;</p> <p>(v) Provide technical assistance to overcome other institutional barriers (e.g. a lack of resources and skills to implement and enforce MVE);</p> <p>(vi) Ensure that the strategy identifies sources of on-going funding, including government budgets, public-private partnerships, and international donor and investor support (through grant, non-grant mechanisms, NAMA, or other means).</p>
Weak government support, which leads to non-adoption or ineffective enforcement of policies and regulations.	Medium	<p>(i) Incorporate necessary interventions (e.g. events to gain high level political commitment) for the formulation of the policies on energy-efficient products, including the accompanying implementing rules and regulations;</p> <p>(ii) Improve the institutional arrangements for the enforcement of product standards and quality norms</p> <p>(iii) Effectively communicate to government policymakers about the benefits to be gained from appliance energy efficiency policy.</p> <p>(iv) Join forces with UNDP country offices, the World Bank, and regional development banks to mobilize the support and commitment of government officials and ministries;</p> <p>(v) Launch national and regional projects to obtain government support and transform effectively the markets.</p>
Low-level participation from the private sector actors including manufacturers and distributors.	Low	<p>(i) Involve the private sector key players from the project design stage;</p> <p>(ii) Disseminate latest information on the project developments and events through appropriate channels;</p> <p>(iii) Identify needs and demands through continuous dialogue;</p> <p>(iv) Involve the UNEP Executive Director to obtain participation and progress from companies;</p> <p>(v) The Sustainable Energy for All and the UN Climate Change Summit processes will facilitate the political consensus needed to promote the transition to efficient products;</p> <p>(vi) Effectively communicate to manufacturers and distributors about the benefits and economic opportunities to be gained from appliance energy efficiency policy.</p>
Delayed implementation of activities that are baselines for specific incremental activities of the proposed project	Low	<p>(i) During the proposed project inception meeting the precise role of each partner and their responsibilities will be established.</p> <p>(ii) During the global inception meeting, a realistic schedule and plan will be established among responsible agencies and project</p>

A.7. Coordination with other relevant GEF-financed initiatives

The project will integrate all information, relevant data and lessons learned generated from national GEF financed projects dealing with product efficiency (UNDP, World Bank). The project will approach all teams and staff of on-going GEF-funded projects to hear their needs and integrate them in the design of the global tools. These practices will certainly assist in developing the consensus of the Taskforces (Component 1) and the resources (Component 2). The consensus strategies and recommendations will serve as framework for future GEF-funded national and regional projects to follow. While adapting to local situation, the strategies and recommendations will ensure that GEF projects follow a coherent and proven method. The virtual Centre of Excellence together with its diverse partners, will stand ready to support countries in the development and implementation of projects that advance energy efficiency of products.

Below are some of the projects that will be used for lessons learned and/or coordination with future activities:

- **UNDP's Promoting Energy Efficient Room Air Conditioners (PEERAC) Project (2010-2014):** The project aims to transform the Chinese room air conditioner (RAC) market to higher energy-efficient RACs. The project includes technical advice to enable local AC compressor manufacturers to adopt these technologies.
- **UNDP's Barrier Removal to the Cost-Effective Development and Implementation of Energy Standards and Labelling Project (BRESL) (2009-2014):** Removal of barriers to the cost-effective development and implementation of ESL programs in Asia (Bangladesh, China, Indonesia, Pakistan, Thailand, and Vietnam). The project includes new minimum standards for ACs, refrigerators, fluorescent lamp ballasts, electric motors, compact fluorescent lamps and rice cookers. Further, it includes capacity-building support for local manufacturers and the development of technical guides.
- **UNDP's Market Transformation of Energy Efficient Appliances in Turkey (2010-2014):** The project aims to reduce the household electricity consumption and the associated greenhouse gas emissions of Turkey by accelerating the market transformation of less energy-consuming building appliances. The partnership includes two governmental institutions (General Directorate of Renewable Energy (GDRE) within the Ministry of Energy and Natural Resources and also Ministry of Science, Industry and Technology), each having different practices and corporate cultures, a sectorial NGO (TURKBESD), and a manufacturer (Arçelik). The project shows an excellent example of identifying the needs and expectations of each of the partners and designing the responsibilities accordingly. Given a potential customs union with the EU, as well as the existence of globally reputable manufacturers in Turkey, Turkey was able to adopt MEPS more rapidly, and ensured transformation of products on the market within about 1.5-2 years. Considering the average service life of appliances, Turkey is expected to achieve full market transformation in 10 years.
- **UNEP/ Basel Convention Regional Centre's Demonstration of a Regional Approach to Environmentally Sound Management of PCB Liquid Wastes and Transformers and Capacitors Containing PCBs (2010-2014):** The project in 14 African countries (Benin, Burkina Faso, Chad, DR Congo, Cote d'Ivoire, Djibouti, Guinea, Guinea Bissau, Mali, Mauritania, Morocco, Niger, Senegal, Togo) aims to reduce environmental and human health risks from PCBs releases through the demonstration of a regional approach to the introduction of cost-effective and socially acceptable environmentally sound management (ESM) of PCB oils, equipment and wastes held by electrical utilities in participating countries. The experience and lessons learned of the project will be of particular use under the environmentally sound management of PCBs, which are present in some old distribution transformers.
- **The World Bank's Efficient Lighting and Appliances Project in Mexico (2010 – 2015):** The project finances the acquisition and distribution of 45 million CFLs for low-income urban and rural households in the residential sector (component 1) and removes the affordability barriers for the purchasing of 1.9 million efficient appliances (refrigerators and RACs) by providing subsidies and soft-loans to low-income households to purchase the new equipment (component 2). The programme also ensures the environmentally sound management of the old equipment. The consumer benefits from reduced energy bills, free technical assistance and a warranty for the new equipment. The manufacturers will benefit from expanding their sales and reaching

a much larger share of customers. In component 1, two sub-components will support (i) the acquisition and distribution of CFLs, and (ii) implementation support for the implementing agencies. The project shows an excellent example for a market transformation to efficient lighting through the broad demonstration of the benefits from CFLs and an excellent scheme to overcome the first cost barrier for efficient appliances. The methodology could be further improved by combining it with the economic benefits for utilities from the reduction of peak electricity demand.

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

B.1 Describe how the stakeholders will be engaged in project implementation.

Stakeholder	Role in Project Implementation
Government ministries, efficiency agencies and national standards-setting bodies	<p>Policymakers, officials and technical staff within governments will play a role in the implementation as they have will be ultimately responsible for developing and implementing policies and strategies in their respective country.</p> <p>Component 1: Selected officials from both developed and developing countries will engage in the Expert Task Forces as they have valuable expertise on the implementation of concrete actions that push markets to efficient appliances and equipment. Their views will be incorporated when developing the policy recommendations. Additionally, existing multi-lateral appliance energy efficiency initiatives such as SEAD, IEA-4E, and APEC EGEE&C will be leveraged extensively for their technical expertise and well-established relationships with government policymakers.</p> <p>Component 2: The project will seek information and data from governments on their respective policies promoting energy efficiency and data on the number of products in their markets and the efficiency levels. This information will be used to develop the country-by-country policy analysis and also the country-by-country analysis on potential benefits of energy-efficient products. The outputs of both analyses will be shared with governments and they will have the opportunity provide comments before final publication. The analyses will also allow for prioritization of high-impact countries and the engagement of country officials with the Global Partnership and its resources.</p> <p>Component 3: Governments will be engaged to promote the implementation of policies, strategies, and actions that promote energy efficient appliances, equipment, and lighting products. Interested governments will be supported in the development of national and regional projects to transform markets to efficient products.</p> <p>Component 4: Governments will be supported in the development of policies promoting efficient lighting in the commercial, industrial and outdoor sectors. Support will also be given to governments on developing innovative financial mechanisms, such as Nationally Appropriate Mitigation Actions (NAMAs).</p>
Manufacturers, industry groups, utilities, and testing laboratories	<p>Private sector companies have a deep knowledge on the efficiency use, costs, distribution channels, marketing mechanisms, and client needs of products in different market. Further, some utilities cannot meet electricity delivery at a reasonable cost without energy efficiency actions.</p> <p>The project will engage with national/regional manufacturers in</p>

	<p>developing countries and emerging economies, which can hold a large market share in their respective markets. Given their longstanding presence in their local markets, they can provide important local stakeholder commitment and valuable information of the their market. They will be engaged to participate in all four components of the project.</p> <p>Component 1: Global, national, and regional manufacturers will be encouraged to participate in the Expert Taskforces as they have valuable information about production costs, supply chains, market structures and consumer preferences. Firms will play a crucial role by providing their views on the ideal project guidance, best practices and recommendations for countries (policies, regulations, standards, incentives, financial mechanisms, communication tools for consumers, etc.).</p> <p>Component 2: Manufacturers and industry groups will provide valuable information, data, and expertise, which will improve the country-by-country policy analysis and also the country-by-country analysis on potential benefits of energy efficient products. Manufacturers that have committed to the partnership will be given the opportunity to review and comment on the outputs of the two analyses before final publication.</p> <p>Component 3: Manufacturers, distributors, retailers, and industry groups will be engaged to gain their commitment to joining the Efficient Appliance and Equipment Global Partnership.</p> <p>Component 4: Private sector partners to the en.lighten initiative will be requested to provide support and expertise in order to develop policy tools for the commercial, industrial, and outdoor sectors. Further, private sector partners will be expected to contribute to awareness raising campaigns of lighting plus controls (system approach for optimal savings). Leaders in the electric utility industry will be encouraged to join the partnership, to contribute their experience in demand-side management, market transformation and communication campaigns promoting energy-efficiency.</p>
<p>Environmental advocates, consumer groups, and gender groups</p>	<p>Civil society groups represent the voice of consumers and organized citizen groups. The have experience delivering and participating in energy-related projects and are a good complement to the perspectives of private sector.</p> <p>Component 1: Non-governmental organizations will participate in the Expert Taskforces to ensure that the perspectives of the environment, consumer, and gender groups are adequately represented.</p> <p>Component 2: Non-governmental organizations will be invited to review and comment on the country-by-country policy analysis and also the country-by-country analysis on potential benefits of energy efficient products.</p> <p>Component 3: Non-governmental organizations (NGOs) will be invited to comment on the prospective partners to the Global Partnership Programme to ensure their dedication to energy efficiency, environmental issues, well-being of workers, and non-discrimination based on gender.</p> <p>Component 4: Environmental advocates, consumer groups and other non-governmental organizations will continue to serve in an advisory role to the en.lighten initiative and will be invited to review documents,</p>

	make presentations and participate in enlighten activities.
International organizations, UN agencies, global efficiency initiatives, international financial institutions	<p>International organizations and development banks have a long track record of promoting energy efficiency projects. Therefore the project will actively engage them, gather lessons learned and include them in the Global Partnership. The strategies and recommendations of the project will serve as a framework for future GEF funded projects on energy-efficiency to be implemented by UN agencies and multi-lateral development banks.</p> <p>Component 1: International organizations, including UNDP, and institutions will be critical to share already existing tools, guides and resources that will be used within the proposed project. They will be invited to participate in the Expert Taskforces in order to provide their experiences and expertise in implementing energy-efficiency projects.</p> <p>Component 2: International organizations and institutions will be request to provide status of policies and data in order to complete the country-by-country policy analysis and also the country-by-country analysis on potential benefits of energy efficient products. They will also be given the opportunity to review the output and provide comments before the final publication. UNDP will support the activities by providing expertise on the level of policies and use of products in the markets that they are active.</p> <p>Component 3: The project will partner with other international organizations (including already partnering with UNDP) and institutions to put energy efficiency of appliances and equipment at the top of the agenda of the private sector and governments. In order to complete this, international organizations will participate in events and meetings promoting the Global Partnership Programme.</p> <p>Component 4: The project will closely cooperate with UNDP, the World Bank, the Inter-American Development Bank and all other major regional development banks and financial institutions which become interested, to catalyse access to finance to support the implementation of country or regional projects. For example, loans, grants or other financial tools are needed for efficient-product deployment programs in government facilities, municipalities and other organizations that have purchasing power and can secure financing with long-term savings.</p>

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):

The project will create the supporting infrastructure, environment, and political will to allow countries and regions to successfully transition to energy-efficient products. The strategies and recommendations that will be developed within the project include consideration of socioeconomic benefits. These policies will provide economic opportunities through electricity savings, while also providing co-benefits for the environment, human health, and

gender.

Economic benefits: The policies and strategies that will be catalysed by the project will ultimately deliver remarkable economic benefits for citizens, end users, the private sector, utilities and governments. High-efficiency appliances will provide end-users savings on the total lifecycle costs of the product through reduced electricity use, allowing for purchasing power for improved standard of living. For instance currently, in Mexico an efficient reversible split-room air conditioner could save consumers 110 US\$ in reduced electricity bills per annum, which equates to over 1,320 US\$ over the lifetime of the product⁶ Further, the end-users are empowered through increased visibility in the quality and efficiency of the product through energy-efficiency labelling.

Local manufacturers stand to benefit by increasingly stringent energy efficiency standards and strategies by producing higher-efficient products that meet the need of local markets and also the possibility to enter new markets that have existing energy efficiency standards, such as in OECD countries. Further, the benefits will be provided across the economy, as businesses will be able to produce goods more efficiently due to improved technologies, such as electric motors. Lastly, governments stand to benefit increased energy efficient economy will allow for reduced imports of fuel sources or in the case of fossil-fuel-rich economies, the ability to export a greater share of resources.

Economic benefits for a given economy include reducing or postponing the need to develop new generating capacities, reducing blackouts, and by increasing energy security. The high frequency of blackouts in developing countries increases costs for business through either frequent downtimes or the need to have an electricity backup supply. Through the policies and strategies that are advocated within this project, it will allow for reduced electricity-consuming devices such as room air conditioners, motors, and lighting products, all of which are used at peak-load demand. By reducing the peak load, it will not only reduce the occurrence of blackouts but it will also reduce the use peak-load generation, which is often the most expensive.

Environmental benefits: Beyond the greenhouse gas emission reductions that will be delivered through increased energy efficiency, the project offers further global and local environmental benefits. For each technology, the project will implement best practices in environmentally sound management, including best practices for manufacturing, materials, and spent products.

- **Refrigerators and room air conditioners:** In addition to the indirect GHG reduction, a reduction in direct emissions will be achieved as markets move away from conventional refrigerants such as R22 and R410A to low global warming potential refrigerants and natural refrigerants. The Project will work closely with UNEP's OzoneAction Team in the development of Refrigerant Management Plans, standards and actions combining the objectives of eliminating ozone depletion with reducing GHG emissions. The project will also reduce direct GHG emissions of old RACs by increasing capacities and policies of safe disposal of HFC refrigerants at end-of-life and bans on imports of RAC's with HFCs.
- **Distribution transformers:** Eliminating old transformers containing polychlorinated biphenyls (PCBs) and ensuring environmentally sound disposal of the PCBs is still needed in many developing countries. The project will ensure PCBs and any other toxic materials are appropriately handled and disposed of in accordance with the Stockholm Convention on Persistent Organic Pollutants.
- **Electric motors:** repair of motors, which includes the burning of organic material, can produce fumes that are unsafe for the workers and harmful to environment. The project will support best practice motor repair that not only allows for improved worker and environmental safeguards, but also improved efficiency and quality.
- **Lighting:** Old technology that is phased out and some efficient and advanced lighting technologies may contain hazardous substances. Thus the en.lighten initiative's integrated policy approach includes environmentally sound management principles and addresses specific manufacturing, handling, operation

⁶ Electricity bill savings for Mexico were calculated at a rate of 0.088822 USD/kWh (IEA 2010) and lifetime of 12 years. Source of room air conditioner savings: "Estimate of Cost-Effective Potential for Minimum Efficiency Performance Standards in 13 Major World Economies – Energy Savings, Environmental, and Financial Impacts", LBNL/CLASP, July 2012.

and end-of-life issues. Guidance will be developed in line with global international agreements for the reduction and safe management of hazardous waste, such as the Basel Convention on the Control of Trans-boundary Movement of Hazardous Waste and the Minamata Convention on Mercury. The project will continue to assist countries to plan collection and recycling programmes to ensure that mercury from spent lamps is not released into the environment and that lighting products classified as electronic waste are properly collected and recycled.

Social and gender benefits: Women are key stakeholders for the development of industry, energy, environmental resources and climate change mitigation. Gender aspects are taken as a key issue in stakeholder consultations and the Expert Taskforce meetings. Gender mainstreaming will be integrated in all stages of the project cycle, including design of interventions, executions, monitoring and evaluation. References to gender will be consistent throughout the project approach, the activities, indicators, and budget. Women with expertise in relevant topic areas will be recruited to join Taskforces, contribute to private sector engagement, make presentations at high-level events and participate in all other project activities.

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

The project is designed to generate the high level political will in countries to move their economies to efficient appliances and equipment. It will also generate the supporting knowledge base (including strategy and key policy recommendations), and provide the infrastructure and technical support that countries need to develop national and/or regional appliances and equipment projects. The framework for national and/or regional projects will be based on proven strategies and policies that sustainably transition economies to energy efficient products, which will ensure GEF resources will have lasting impact beyond project completion. Further, the infrastructure will be able to act as Global Centre of Excellence to ensure that countries, regions, private sector, and international organizations work together in a harmonised manner while utilizing the best practice guidance of the project. The Global Centre of Excellence will be able to provide countries resources such as toolkits and country-by-country savings potential, while also providing in country or regional workshops to train policymakers on specific aspects of the intergraded approach.

Further the project design takes into account cost effectiveness by including market leaders from the private sector committed to promote high efficiency products and environmental sustainability. The participation of the private sector as well as other co-financiers to the project such as CLASP, SEAD, bigEE (Wuppertal Institute, Germany), ICA, UNDP, and Topten will create a Global Partnership with the legitimacy and valuable expertise and guidance to contribute to the project goals. By bringing together these leaders in the field of energy efficiency it will allow the project to strategically use GEF funding in the areas required.

The market transition to efficient appliances and equipment in three product groups (refrigerators, room air conditioners and distribution transformers taken into account for the calculation) in non-OECD markets is projected to achieve post-project direct emission reductions of 5.5 billion tCO₂ over the ten years following the project completion. As is described in the methodology in Annex J, the project claims the potential of fifteen countries' transition as post-project direct emissions, which is seen as conservative as the project has a target of thirty countries joining the partnership. The projects aims to persuade 6-7 large markets among the 30 countries, in order to reach 2/3 of the non-OECD market. Further, the market transformation for three appliances in the addressed countries is expected to achieve 1.89 billion tCO₂ in indirect emission reductions (top down), which reflect reductions in countries and from products that were not a focus of the project.

This project, however, does build the political will for action in countries and lays the fundament to achieve a permanent and sustainable market transition. This project does not implement national or regional market transformation programmes. Therefore this proposal does neither account for the entire projected post-project direct emissions reductions nor for the projected indirect emission reductions. Instead, the proposal takes 33% of the calculated savings into account, in order to allow a proportionaten equal allocation of savings to the political decision process and the knowledge building, which is covered by this project, and the implementation of country activities which happen as a consequence of the decisions made by partner countries to advance their markets to efficient products.

The resulting is a very competitive cost effectiveness when comparing to the GEF funding of US\$ 1,370,000.

The following table compares the cost effectiveness of reducing GHG emissions in the proposed project, based on the estimates presented in Annex J.

Table 6: Cost Effectiveness of the Cumulative GHG Reduction of the Project

	Cumulative GHG reduction (tCO₂)	GEF Cost-effectiveness (USD/tCO₂)⁷
Post-project direct emission reduction	33% · 5,529,409,982 =1,824,705,294	0.000751
<i>Total direct and post project direct</i>	33% · 5,529,409,982 =1,824,705,294	0.000751
Indirect emission reduction (top-down)	33% · 1,890,000,000 =623,700,000	0.002197

C. DESCRIBE THE BUDGETED M&E PLAN:

The project will comply with the UNEP standard monitoring, reporting and evaluation procedures. Reporting requirements and templates are an integral part of the UNEP legal instrument to be signed by the executing agency and UNEP.

The project M&E plan is consistent with the GEF Monitoring and Evaluation policy. The Project Results Framework presented in Annex A includes SMART indicators for each expected outcome as well as mid-term and end-of-project targets. These indicators along with the key deliverables and benchmarks included in Annex I will be the main tools for assessing project implementation progress and whether project results are being achieved. The means of verification and the costs associated with obtaining the information to track the indicators are summarized in Annex A. Other M&E related costs are also presented in the Costed M&E Plan and are fully integrated in the overall project budget.

The M&E plan will be reviewed and revised as necessary during the project inception workshop to ensure project stakeholders understand their roles and responsibilities vis-à-vis project monitoring and evaluation. Indicators and their means of verification may also be fine-tuned at the inception workshop. General project monitoring is the responsibility of the project management team but other project partners will have responsibilities to collect specific information to track the indicators. It is the responsibility of the Project Manager to inform UNEP of any delays or difficulties faced during implementation so that the appropriate support or corrective measures can be adopted in a timely fashion.

The project Steering Committee will receive periodic reports on progress and will make recommendations to UNEP concerning the need to revise any aspects of the Results Framework or the M&E plan. Project oversight to ensure that the project meets UNEP and GEF policies and procedures is the responsibility of the Task Manager in UNEP-GEF. The Task Manager will also review the quality of draft project outputs, provide feedback to the project partners, and establish peer review procedures to ensure adequate quality of scientific and technical outputs and publications.

Project supervision will take an adaptive management approach. The Task Manager will develop a project supervision plan at the inception of the project, which will be communicated to the project partners during the inception workshop. The emphasis of the Task Manager supervision will be on outcome monitoring but without neglecting project financial management and implementation monitoring. Progress vis-à-vis delivering the agreed project global environmental benefits will be assessed with the Steering Committee at agreed intervals. Project risks and assumptions will be regularly monitored both by project partners and UNEP. Risk assessment and rating is an integral part of the Project Implementation Review (PIR). The quality of project monitoring and evaluation will also be reviewed and rated as part of the PIR. Key financial parameters will be monitored quarterly to ensure cost-effective use of financial resources.

A mid-term management review or evaluation will take place after 9 months as indicated in the project milestones. The review will include all parameters recommended by the GEF Evaluation Office for terminal evaluations and will verify information gathered through the GEF tracking tools, as relevant. The review will be carried out using a participatory approach whereby parties that may benefit or be affected by the project will be consulted. Such parties were identified

⁷ Defined as GEF contribution to the project (USD 1,370,000) divided by the direct (and post-project) lifetime emission reduction
GEF5 CEO Endorsement Template-February 2013.doc

during the stakeholder analysis (see section B.1 of the project document). The project Steering Committee will participate in the mid-term review and develop a management response to the evaluation recommendations along with an implementation plan. It is the responsibility of the UNEP Task Manager to monitor whether the agreed recommendations are being implemented.

An independent terminal evaluation will take place at the end of project implementation. The Evaluation and Oversight Unit (EOU) of UNEP will manage the terminal evaluation process. A review of the quality of the evaluation report will be done by EOU and submitted along with the report to the GEF Evaluation Office not later than 6 months after the completion of the evaluation. The standard terms of reference for the terminal evaluation Annex G will be included in the project document of UNEP once project is fully approved by the GEF. These will be adjusted to the special needs of the project.

The GEF tracking tools are attached as Annex J. These will be updated at mid-term and at the end of the project and will be made available to the GEF Secretariat along with the project PIR report. As mentioned above the mid-term and terminal evaluation will verify the information of the tracking tool.


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)

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
Brennan Vandyke, Director GEF Coordination Office, UNEP		January 12, 2015	Ruth Zugman Do Coutto, Programme Coordinator and UNEP/GEF Climate Change Mitigation Task Manager, Energy Branch	+33 1 44 37 16 34	Ruth.Coutto@unep.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).

Project Objective	Indicator	Baseline	Target	Means of Verification
To mitigate climate change by reducing the growth of global electricity consumption through the creation of a global partnership accelerating markets for highly efficient electrical appliances and equipment.	- Number of countries/regions committing to accelerate the transition to energy efficient appliances and equipment under the Global Partnership.	- Prior to project implementation 0 countries/regions have committed to the Global Partnership. - 66 countries have committed to the en.lighten Global Efficient Lighting Partnership Programme.	- 30 countries commit to the Global Partnership for appliances and equipment (does not include lighting). - 20 countries will expand their scope to include policies to promote energy efficiency in commercial, industrial and outdoor lighting.	- Endorsed country partnership forms for the Global Partnership for appliances and equipment and the en.lighten initiative. - Correlated country assessments for appliances, equipment, and lighting showing the projected electricity and GHG savings for a transition to energy efficient products.

COMPONENT 1: CREATING THE EFFICIENT APPLIANCE AND EQUIPMENT KNOWLEDGE BASE

1. Project Outcome	Indicator	Baseline	Target	Means of Verification
- Consensus is reached on the policy and strategy framework options by expert taskforces (NGOs, IGOs, industry) for 3 products.	- Number of policies and strategy frameworks endorsed by expert taskforces and posted on the website for access by countries	- none	- 3 (does not include lighting)	- Project website

Project milestones that show progress towards achieving the project outcome				Expected Milestone Delivery Date
M1 Project taskforces kick off the development of the policy and strategy framework for each technology (3)				January 2015
M2 Project taskforces form consensus on the policy and strategy framework for each technology (3)				July 2015
M3 Project taskforces release the policy and strategy framework for 3 technologies				December 2015

2. Project Outputs:	Indicator	Baseline	Target	Means of Verification
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1. Policies and strategy framework are drafted and discussed	- Number of appliances and equipment with a recommended integrated policy approach	- No recommended integrated policy approach for the select products.	- Recommended policy approach for 3 products	- Minutes from technical task forces created [ToRs, list of members, outputs from task forces].
Project output Milestones:				Expected Milestone Delivery Date
M1 Expert taskforce members are identified for each target technology (3) and taskforces are established.				January 2015
M2 Expert taskforces form consensus on the recommended policies and strategy framework.				July 2015
M3 Policy and strategy frameworks are developed for the implementation of energy efficiency policies for each technology (3) in developing and emerging countries.				October 2015
2. Case study reports on best practice policies and strategies for energy efficient appliance and equipment developed.	Number of products that have a case study report showing examples of best practice policies and strategies.	- No case study reports are available on the selected products.	- Case study report for 3 products	- Policy framework and case study report posted on the project website.
Project output Milestones:				Expected Milestone Delivery Date
M1 Work plan developed to complete case study reports.				January 2015
M2 Examples of best practice policies and strategies have been identified for 3 products.				April 2015
M3 Case study reports on best practice policies and strategies have been completed for 3 products.				October 2015
COMPONENT 2: SETTING A GLOBAL BASELINE AND PROJECTED SAVINGS FOR THE TRANSITION TO EFFICIENT APPLIANCES AND EQUIPMENT AND PERFORM A GLOBAL ASSESSMENT OF COUNTRIES' READINESS FOR THE TRANSITION				
2. Project Outcomes	Indicators	Baseline	Target	Means of Verification
Developing and emerging country decision-makers have increased awareness of the benefits (economic, financial and climate) of adopting enabling policies to foster the transition to more energy efficient products.	- Number of countries for which national saving potential and policy assessments for 3 appliance and equipment has been made available.	- Assessment for 33 countries (Latin America and Caribbean) for refrigerators/air conditioners and fans.	- 150 country appliance and policy assessments are complete (not including lighting)	- The initiative's website will contain all country appliance assessments and country policy assessments.
Project milestones that show progress towards achieving the project outcome				Expected Milestone Delivery Date
M1 Information has been gathered from public and private sector to perform country assessments				April 2015
M2 Country assessments have been presented and are universally acknowledged				October 2015

M3 Priority countries have been identified based on the quantification of the environmental impact				December 2015
M4 Contacts have been made with priority countries on regional and national level, focal points have been identified and the prioritization of countries and actions is acknowledged				February 2016
2. Project Outputs:	Indicators	Baseline	Target	Means of Verification
1. Country-by-country analysis of the readiness of policies, standards and enforcement is developed for 3 identified priority products	- Number of countries that have country-by-country policy assessments available for 3 products	None.	- 150	- The country-by-country reports will be posted on interactive map on the project's website.
Project output Milestones:				Expected Milestone Delivery Date
M1 Country questionnaires on the policy status of each appliance and equipment are provided to all developing and emerging governments.				January 2015
M2 Database on product policy is developed on the basis of global, regional and national expert and practitioners' interviews.				April 2015
M3 Responses to the country questionnaire are compiled and verification research is performed to compile the existing policy status of countries and regions of the world.				July 2015
M4 Country-by-country analysis on the policies, standards, and relevant actions is completed for 3 products and published in an interactive world map.				October 2015
2. Country-by-country estimated benefits (environmental, energy, climate, financial, business) of the transition to efficient products developed for 3 products.	Indicator - Number of country-by-country quantitative analysis on the projected benefits (environmental, energy, climate, financial, business).	Baseline - None for the selected products	Target 150	Means of Verification - Country-by-country assessments will be available on the project website.
Project output Milestones:				Expected Milestone Delivery Date
M1 Country questionnaire on data availability (i.e. total units, average unit energy consumption, and average time used daily) is sent to governments in all developing and emerging economies.				January 2015
M2 Country questionnaire on data availability (for example total units, average unit energy consumption, and average time used daily) completed by country officials, local stakeholders, and partner organizations and returned to the centres of excellence.				April 2015
M3 Peer reviewed model to calculate the energy savings of higher efficient products is completed for 3 products based on consistent methodologies.				June 2015
M4 Country-by-country results are calculated and shared with countries for opportunity to				August 2015

provide feedback.				
M5 Global country-by-country baseline and projected savings for the transition to efficient appliances and equipment is completed for 3 technologies and published in an interactive world map for 3 products.				October 2015
COMPONENT 3: ENGAGING PRIVATE SECTOR PARTNERS AND BRINGING APPLIANCE/ EQUIPMENT EFFICIENCY ON TOP OF THE GLOBAL AGENDA				
3. Project Outcomes	Indicators	Baseline	Target	Means of Verification
Commitment is gained from key private sector partners and political leaders on energy efficiency of appliances, equipment, and lighting (to support implementation of this project and other projects on improving appliances and equipment efficiency)	<ul style="list-style-type: none"> - Number of agreements by government - Number of agreements by global manufacturers join the new global partnership. - Number of press releases and articles on appliance and equipment in relation to Global Partnership. 	0	<ul style="list-style-type: none"> - 30 countries (not including lighting) - A minimum of eight global manufacturers of appliances and/or equipment (not including lighting manufacturers) - 10 	<ul style="list-style-type: none"> - Official co-finance letters from global and/or regional manufacturers to join the global partnership - Country partnership forms from country focal points to join the Global Partnership. - Speeches / Press releases/SE4All
Project milestones that show progress towards achieving the project outcome				Expected Milestone Delivery Date
M1 Four global manufacturers of appliances and/or equipment join the new global partnership.				January 2015
M2 Outreach to a minimum of 20 governments and a minimum of one region (regional integration body) to raise awareness for energy efficiency in appliances				August 2015
M3 Additional 4 global manufacturers of appliances and/or equipment join the new global partnership.				July 2015
M4 Outreach to additional 20 governments in minimum three regions to raise awareness for energy efficiency in appliances				March 2016
M5 Identification of two global priority areas are established for action on energy efficient appliances and equipment.				February 2016
3. Project Outputs:	Indicators	Baseline	Target	Means of Verification

1. Partnership engagement strategy and branding strategy are developed.	- Partnership strategy and branding are available for the project.	None.	- 1 partnership strategy and branding	- Minutes of partner meetings. - Partnership strategy and messages document.
Project output Milestones:				Expected Milestone Delivery Date
M1 Partnership meeting to discuss partnership strategy and key messages.				January 2015
M2 Agreement to the strategy and key messages by projects partners.				March 2015
2. Workshops and side-events alongside major global and regional energy and climate events.	<i>Indicators</i>	<i>Baseline</i>	<i>Target</i>	<i>Means of Verification</i>
	Number of workshops and side events alongside major global and regional energy and climate events.	None or limited.	4 workshops or side events alongside major global and regional energy and climate events.	- Press releases, recordings, and/or agendas of workshops or side events regarding the Efficient Appliance and Equipment Global Partnership at major global and regional energy and climate events
Project output Milestones:				Expected Milestone Delivery Date
M1 First side-event alongside major global and regional energy and climate events.				February 2015
M2 Second side-event alongside major global and regional energy and climate events, potentially at the Vienna Energy Forum.				June 2015
M3 Third side-event alongside major global and regional energy and climate events, potentially at the SE4ALL Forum.				June 2015
M4 Fourth side-event alongside major global and regional energy and climate events, potentially at COP 21 – Paris.				December 2015
3. Targeted communication material showcasing the benefits, including making the business case for private sector engagement.	<i>Indicator</i>	<i>Baseline</i>	<i>Target</i>	- Communication materials that are developed on the project.
	- Number of new communication materials that are developed on the project.	- No product brochures, website nor interactive communication tools.	- 4 brochures (1 per product) - 1 website - 2 interactive communication tools showcasing the potential benefits to private sector from joining the	

			global partnership	
Project output Milestones:				Expected Milestone Delivery Date
M1 Targeted brochures convincingly showing the benefits of the project and the potential savings of efficient appliances and equipment.				January 2015
M2 Short video and interactive webpage that displays the project strategy and the overarching benefits of the project.				January 2015
M3 Website, regular newsletters and social media tools are developed and used to reach out to private sector partners, including the country-by-country assessments of the environmental and economic benefits				October 2015
COMPONENT 4: EXPANDING THE SCOPE OF THE EN.LIGHTEN INITIATIVE				
4. Project Outcomes	Indicators	Baseline	Target	Means of Verification
Consensus is reached by en.lighten technical experts on best practice policy, awareness raising, and financial mechanism tool kits to facilitate the transition to efficient and advanced lighting (light emitting diodes) in the commercial, industrial and outdoor lighting applications	<ul style="list-style-type: none"> - Number of countries that have committed to expand their scope to include policies that promote energy efficiency in commercial, industrial and outdoors lighting. - Number of new countries committing to advance efficient lighting in the residential commercial, industrial and outdoor lighting applications 	- Currently 66 countries have committed to phase-out inefficient incandescent lamps within a determined timeframe (2016)	<ul style="list-style-type: none"> - 20 countries expand their scope to commercial, industrial and outdoors lighting. - 15 new countries join the partnership. 	- Endorsed en.lighten partnership form and official communications of governments.
Project milestones that show progress towards achieving the project outcome				Expected Milestone Delivery Date
M1 UNEP provides stakeholders with strategy and policy tools regarding efficient, advanced lighting for all sectors and for outdoor applications.				January 2015
M2 Two countries complete comprehensive proposals for implementing and financing their efficient, advanced lighting strategies				January 2015
M3 Efficient, advanced lighting strategies of at least five countries incorporate evidence provided by UNEP.				June 2016
4. Project Outputs:	Indicators	Baseline	Target	Means of Verification

1. Expert meetings convened on best practice policy tools to support the transition to efficient and advanced lighting (LEDs) in commercial and industrial sectors and to outdoor applications	- Number of tools published on the enlightened learning website to cover each specified topic;	UNEP Country Lighting Assessments version 1.1; Toolkit, reports and en.lightened learning website (limited to phase-out of inefficient incandescent lamps)	- UNEP Country Lighting Assessments version 2.0. - 2 Videos - 2 guides	The en.lighten learning website.
Project output Milestones:				Expected Milestone Delivery Date
M1 Expert taskforce is convened and discussed best practice policies and strategies to support the transition to efficient and advanced lighting in commercial and industrial sectors and to outdoor applications.				April 2015
M2 Report summarizing the best practice policies in commercial and industrial sectors and to outdoor applications.				June 2015
M3 Release of Country Lighting Assessments version 2.0.				December 2015
2. Expert meetings convened on best practice policy tools for awareness raising on efficient and advanced lighting (to emphasize a systems approach and hours-of-use controls) for optimal savings benefits developed	<i>Indicator</i>	<i>Baseline</i>	<i>Target</i>	<i>Means of Verification</i>
	- Number of new awareness raising tools available for partner to advance lighting in the commercial industrial and outdoor lighting applications.	Currently the en.lighten initiative does not awareness raising tools for the commercial industrial and outdoor lighting applications.	- 3 awareness raising tools	The awareness raising tools will be posted on the en.lighten learning website.
Project output Milestones:				Expected Milestone Delivery Date
M1 Release of awareness raising tool for the commercial and industrial sectors.				June 2015
M2 Release of awareness raising tool for outdoor lighting applications.				December 2015
M3 Webinars series to communicate to stakeholder on use and benefits of the tools.				February 2016
3. Support tools on finance mechanisms are developed and tested in two partner countries (including tools for measuring, reporting, and verifying results).	<i>Indicator</i>	<i>Baseline</i>	<i>Target</i>	<i>Means of Verification</i>
	- Number of new tools to support countries develop innovative finance mechanisms. - Number of countries that	- en.lighten has already developed the "Guidebook for the Development of a Nationally Appropriate Mitigation Action on	- 1 policy tool to support countries in developing innovative financial mechanisms. - 2 countries	- en.lighten website - Draft proposals prepared by the project and country partners.

	develop new financial mechanisms to promote energy efficient lighting.	Efficient Lighting” - None.	prepare a new financial mechanisms to support the transition to energy efficient lighting.	
Project output Milestones:				Expected Milestone Delivery Date
M1 Draft policy tool to support countries in preparing innovative financial mechanisms.				April 2015
M2 2 countries are selected to receive support in developing a financial mechanism to advance the transition to energy efficient lighting.				August 2015
M3 Policy tool is published and available for countries on the en.lighten website.				December 2015
M3 2 countries have developed a financial mechanism to advance the transition to energy efficient lighting.				June 2016

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).

GEF Secretariat Review (May 1, 2014)

Comment: Component 2 on setting a global baseline could be quite valuable to help educate national governments on savings potential. As this project will cover multiple appliances, it will be helpful to ensure that the methodologies used to prepare estimates are as systematic and consistent as possible. At the time of CEO endorsement, please present brief summaries of the methodologies.

Response: In the course of the preparatory work for the PIF on the “Global Partnership to Accelerate the Market Transformation for Efficient Appliances and Equipment”, the global electricity demand has been clustered according to product groups and the six appliances/ equipment with the highest energy demand have been identified: electric motors, room air conditioners, lighting, information and communication technology, refrigerators and distribution transformers. For these product groups, the potential savings have been identified by an expert group, separately for OECD and non-OECD countries. The methodologies that have been used for these estimates and will be used to estimate the global baseline are included in Section A.5 under Component 2.

It should be noted, the savings potential elaborated in the course of the preparatory work for the “Efficient Appliances & Equipment Global Partnership Programme” represents the total potential, assuming a global market transformation to efficient products in the six selected product groups. In contrast to this full potential, the estimation presented in the Request for CEO Endorsement is limited to this project’s objective to generate market transformation policies and strategies in 15 countries for three appliances / equipment (refrigerators, air-conditioners and distribution transformers) as a first step. This estimation has been performed using the tool provided by the Scientific and Technical Advisory Panel of the Global Environment Facility for Energy Efficiency Projects.

Comment: At the time of CEO endorsement, please identify private sector partners who may be already willing to partner or high-candidates. Please evaluate the potential for non-global, but still large sized national manufacturers as potential partners and include at CEO endorsement stage.

Response:

The en.lighten initiative will receive continued support from the two leading lighting manufacturers:

OSRAM: one of the two leading light manufacturers in the world. The company’s portfolio covers the entire value chain from components to electronic control gears as well as complete luminaries, light management systems and

lighting solutions.

Philips: Royal Philips of the Netherlands is a diversified Health and Well-being company, focused on improving people's lives through timely innovations. As a world leader in lighting, Philips integrates technologies and design into people-centric solutions, based on fundamental customer insights.

The project has already gained commitment from two manufacturers to join the Efficient Appliance and Equipment Global Partnership Programme and will support the initial project with in-kind support.

ABB: Based in Zurich, Switzerland, ABB is a global leader in power and automation technologies, including distribution transformers where ABB has approximately 15% of the global market.

Mabe: Based in the Mexico, Mabe designs, produces, and distributes appliances (including refrigerator and air conditioners) to over 70 countries, with particular market share in Latin

The project is currently in active dialogue and have a high chance of partnering with future appliance and equipment manufacturers:

BSH Bosch und Siemens Hausgeräte: Based in Germany, BSH is the leading manufacturer of home appliances in Europe and a leading manufacturer globally, including refrigerators.

LG: Based in South Korea, LG is a global market leader for both refrigerators and air conditioners.

Samsung Electronics: Based in South Korea, Samsung is a global market leader for both refrigerators and room air conditioners.

National manufacturers:

The project is continuing active dialogue to include all potential partners, including national manufactures that may have large market share in their country. National manufactures, such as refrigerator and room air conditioner manufacturer, Concepcion Industries of the Philippines, offers a national and regional presence by having the largest refrigerator market share in the Philippines with 20% of the market. The success of domestic players can be attributed to their long-standing presence, affordable pricing, and strong understanding of the local market. The knowledge and experience of national manufacturers would be for beneficial to the project to ensure that the strategy meets the needs of developing countries and local circumstances. The project will continue engagement and seek partnership with national manufactures during project implementation. National manufactures will also be engaged to participate in expert Taskforces to ensure their views are adequately represented.

Comment: The project will focus on several key appliances, such as refrigerators, room air-conditioners, electric motors, distribution transformers, and lighting. For each of these appliances, some preliminary estimates for global consumption and potential GHG benefits have been presented. At the time of CEO endorsement, please refine the estimates, and identify what portion of the global potential for which this project can fairly take credit for.

Response:

The project has revised the estimated GHG benefits that will be taken credit for under this project using the GEF-STAP methodology for calculating GHG benefits for energy efficiency projects.

The estimated GHG estimates include "Direct Post-project GHG emission savings," which a based on the projection the project will result in 15 countries developing policies and strategies to advance their economies to energy efficient products. Further, the project can fairly take credit for "Indirect Top-down Emission Savings" accounting for spill over to countries/regions and products that were not the focus of the project. This is a conservative approach that only takes account for actions in a limited amount of countries that the project will have influence on.

These results and full methodology are presented in full in Annex J (Calculation of Greenhouse Gas Benefits).

ANNEX C: STATUS OF IMPLEMENTATION OF PROJECT PREPARATION ACTIVITIES AND THE USE OF FUNDS⁸

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

Not applicable.

PPG Grant Approved at PIF:			
<i>Project Preparation Activities Implemented</i>	<i>GEF/LDCF/SCCF/NPIF Amount (\$)</i>		
	<i>Budgeted Amount</i>	<i>Amount Spent To date</i>	<i>Amount Committed</i>
Total	0	0	0

⁸ 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.

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

Provide a calendar of expected reflows to the GEF/LDCF/SCCF/NPIF Trust Fund or to your Agency (and/or revolving fund that will be set up)

Not applicable.

ANNEX E: CONSULTANTS TO BE HIRED FOR THE PROJECT USING GEF/LDCF/SCCF RESOURCES

<i>Position Titles</i>	<i>\$/ Person Week*</i>	<i>Estimated Person Weeks**</i>	<i>Total (in USD)</i>	<i>Tasks To Be Performed</i>
International Consultants - Project Management				
Policy and project management	1,923	52	100,000	Will lead in identifying Expert Taskforce member; coordinating Expert Taskforce meetings; drafting the policy and strategy framework; coordination of the country policy questionnaires and completion of the country-by-country policy analysis (3 products); preparation of presentation material for events; and supporting outreach to the private sector and governments.
Justification for travel, if any: 10,000 – travel expenses to attend two international climate change, environment, or energy events to raise awareness with government and private sector on the Global Partnership (UNEP budget line 1601).				
International Consultants – Technical Assistance				
Technical consultant for appliances and equipment	2,222	36	80,000	Performing a country-by-country modeling analysis to develop potential energy savings, financial, and environmental benefits for 3 of the products (as selected by project management); coordinating data collection from countries, appliance/equipment manufacturers, and project partners; technical advice on developing the Projects strategy and recommendations; development of case study reports on best practice policies and strategies.
Financial specialist	2,500	8	20,000	Will provide advice on innovative financial mechanism for end-users; development of two (2) national financial mechanisms to promote energy efficient lighting.
Technical lighting consultant(s)	1,667	36	60,000	Will provide technical expertise on expanding the en.lighten scope to efficient, advanced lighting for the commercial and industrial sectors and to outdoor applications; analysis and information tools; virtual and in-person presentations and training for target audiences; and, contributions to awareness raising material on the benefits of advanced, efficient lighting.
Justification for travel, if any: 15,000 – Travel expenses for expert to attend the appliances and equipment Taskforce workshop (UNEP budget line 1602). 5,000 – Travel expenses for technical consultant on appliances and equipment to attend the Taskforce workshop and an event to raise awareness on the Global Partnership (UNEP budget line 1602). 10,000 – Travel expenses for expert lighting consultant to attend national events and/or workshops to raise awareness on efficient, advanced lighting and the related savings opportunities (UNEP budget line 1601).				

Annex F: Detailed GEF and Co-financing Budget

Annex 1: Project Document

ANNEX F-1 - RECONCILIATION BETWEEN GEF ACTIVITY BASED BUDGET AND UNEP BUDGET LINE (GEF FUNDS ONLY US\$)											
Project title: Establishing the Foundations of a Global Partnership to Accelerate the Market Transformation for Efficient Appliances and Equipment											
Project number: 5831											
Project executing partner:											
Project implementation period:											
From:	Jan-15										
To:	Jun-16										
			Expenditure by project component					Expenditure by calendar year			
			1. Policy and strategy framework to accelerate the transition to efficient appliance and equipment	2.Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition	3. Bringing appliance and equipment efficiency on top of the global agenda	4. Expanding the scope of the en.lighten initiative	5. Project management	Total			
									2015 (12 months)	2016 (6 months)	Total
UNEP Budget Line											
10	PERSONNEL COMPONENT										
	1100	Project personnel									
	1101	Project manager	30,000	20,000		120,000	30,000	200,000	133,333	66,667	200,000
	1102	Policy officer	40,000	60,000	10,000	50,000	25,000	185,000	123,333	61,667	185,000
	1103	Communication officer		25,000	30,000	90,000		145,000	75,000	70,000	145,000
	1199	Sub-total	70,000	105,000	40,000	260,000	55,000	530,000	331,666	198,334	530,000
	1200	Consultants									
	1201	Policy and project management	40,000	50,000		10,000		100,000	66,667	33,333	100,000
	1202	Technical consultant for appliances and equipment	40,000	40,000				80,000	53,333	26,667	80,000
	1203	Financial specialist				20,000		20,000	13,333	6,667	20,000
	1204	Technical lighting consultant				60,000		60,000	40,000	20,000	60,000
	1299	Sub-total	80,000	90,000	-	90,000	-	260,000	173,333	86,667	260,000
	1300	Administrative Support									
	1301	Project assistant	10,000	10,000	10,000	20,000		50,000	33,333	16,667	50,000
	1399	Sub-total	10,000	10,000	10,000	20,000	-	50,000	33,333	16,667	50,000
	1600	Travel on official business									
	1601	Travel to engage with governments and private setor			40,000	20,000		60,000	40,000	20,000	60,000
	1602	Travel to expert workshops	30,000			10,000		40,000	26,667	13,333	40,000
	1699	Sub-total	30,000	-	40,000	30,000	-	100,000	66,667	33,333	100,000
1999	Component total		190,000	205,000	90,000	400,000	55,000	940,000	604,999	335,001	940,000
20 SUB-CONTRACT COMPONENT											
	2100	Sub-contracts (MOUs/LOAs for cooperating agencies)									
	2101							-	-	-	

		1. Policy and strategy framework to accelerate the transition to efficient appliance and equipment	2. Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition	3. Bringing appliance and equipment efficiency on top of the global agenda	4. Expanding the scope of the enlighten initiative	5. Project management	Total	2015 (12 months)	2016 (6 months)	Total
UNEP Budget Line										
	2199	Sub-total	-	-	-	-	-	-	-	-
	2200	Sub-contracts (MOUs/LOAs for supporting organizations)								
	2201	Development on consensus on best practice policies	40,000				40,000	26,667	13,333	40,000
	2202	Modelling of country-by-country saving potentials		125,000			125,000	83,333	41,667	125,000
	2203	Country-by-country policy status		50,000			50,000	33,333	16,667	50,000
	2299	Sub-total	40,000	175,000	-	-	215,000	143,333	71,667	215,000
	2300	Sub-contracts (for commercial purposes)					-			
	2301	Graphic design		10,000	20,000	5,000	35,000	23,333	11,667	35,000
	2302	Website design & update			15,000	10,000	25,000	16,667	8,333	25,000
	2303	Short video			10,000		10,000	6,667	3,333	10,000
	2399	Sub-total	-	10,000	45,000	15,000	70,000	46,667	23,333	70,000
2999	Component total		40,000	185,000	45,000	15,000	285,000	190,000	95,000	285,000
30	TRAINING COMPONENT						-			
	3200	Group training					-			
	3201						-			-
	3299	Sub-total	-	-	-	-	-	-	-	-
	3300	Meetings/Conferences								
	3301	Expert Taskforce Meeting	20,000				20,000	13,333	6,667	20,000
	3302	Meetings/side event for awareness raising			55,000	5,000	60,000	40,000	20,000	60,000
	3399	Sub-total	20,000	-	55,000	5,000	80,000	53,333	26,667	80,000
3999	Component total		20,000	-	55,000	5,000	80,000	53,333	26,667	80,000
40	EQUIPMENT AND PREMISES COMPONENT									
	4100	Expendable equipment								
	4101						-			-
	4199	Sub-total	-	-	-	-	-	-	-	-
	4200	Non-expendable equipment								
	4201						-			-
	4299	Sub-total	-	-	-	-	-	-	-	-
4999	Component total		-	-	-	-	-	-	-	-
50	MISCELLANEOUS COMPONENT									
	5100	Operation and maintenance of equipment								
	5101						-			-

			1. Policy and strategy framework to accelerate the transition to efficient appliance and equipment	2. Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition	3. Bringing appliance and equipment efficiency on top of the global agenda	4. Expanding the scope of the en.lighten initiative	5. Project management	Total	2015 (12 months)	2016 (6 months)	Total
UNEP Budget Line											
	5199	Sub-total	-	-	-	-	-	-	-	-	-
	5200	Reporting costs									
	5201							-			-
	5299	Sub-total	-	-	-	-	-	-	-	-	-
	5300	Sundry									
	5301							-			-
	5399	Sub-total	-	-	-	-	-	-	-	-	-
	5400	Hospitality and entertainment									
	5401							-			-
	5499	Sub-total	-	-	-	-	-	-	-	-	-
	5500	Evaluation									
	5501	Mid Term Review/Evaluation					25,000	25,000	25,000.00		25,000
	5502	Terminal Evaluation					40,000	40,000		40,000.00	40,000
	5599	Sub-total	-	-	-	-	65,000	65,000	25,000	40,000	65,000
5999	Component total		-	-	-	-	65,000	65,000	25,000	40,000	65,000
99	GRAND TOTAL		250,000	390,000	190,000	420,000	120,000	1,370,000	873,332	496,668	1,370,000

Annex G: Monitoring and Evaluation Budget and Workplan

Costed M&E Workplan

Type of M&E activity	Description	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Inception Meeting	<ul style="list-style-type: none"> • Discussion and agreement on the roles and specific contributions of each project partner. • Agreement on the work plan for the project. 	Execution: UNEP Support: CLASP, ICA, NRDC, UNDP		10,000	Within 2 months of project start-up
Inception Report	<ul style="list-style-type: none"> • Inception report immediately following the inception workshop, includes: <ul style="list-style-type: none"> ◦ Includes a detailed Work Plan and budget for 18 months of the project, divided per output. • More detailed narrative of roles of UNEP, CLASP, ICA, UNDP 	Execution: UNEP Support: CLASP, ICA, NRDC, UNDP		2,000	1 month after project inception meeting
Measurement of project indicators (outcome, progress and performance indicators, GEF tracking tools) at national and global level	<ul style="list-style-type: none"> • Measurement of project indicators (outcome, progress and performance indicators, GEF tracking tools, including measurement and further analysis of the logical framework indicators after the project's inception and before the project's end. 	Execution: UNEP Support: CLASP, ICA, NRDC, UNDP		5,000	Outcome indicators: start, mid and end of project Progress/performance. Indicators: annually
Semi-annual progress report; Annual financial reports	<ul style="list-style-type: none"> • Part of UNEP procedures for project monitoring; • Annual financial: detailed financial reports with justification of any change; • Bi-annual progress: <ul style="list-style-type: none"> ◦ Analyses project performance over the reporting period of UNEP; ◦ Describes Work Plan for the next period in an Annex and detailed budget divided per output and inputs. 	Execution: UNEP Support: CLASP, ICA, NRDC, UNDP		2,000	Within 1 month of the end of reporting period i.e. on or before 31 January and 31 July
Project Steering	<ul style="list-style-type: none"> • Meeting of partners directly involved in project 	Execution: UNEP		10,000	Once a year minimum

Type of M&E activity	Description	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Committee meetings and National Steering Committee meetings	implementation	Support: CLASP, ICA, NRDC, UNDP			
Reports of PSC meetings	<ul style="list-style-type: none"> Reporting recapping the PSC meeting and actions made. 	Execution: UNEP Support: CLASP, ICA, NRDC, UNDP		2,000	Annually
Project Implementation Review (PIR)	<ul style="list-style-type: none"> Analyses on project performance over the UNEP reporting period. Describes constraints experienced in the progress towards results and the reasons Draws lessons learned and makes clear recommendations for future orientation in addressing the key problems in the lack of progress. The PIR is discussed at the PSC meeting 	Execution: UNEP Support: CLASP, ICA, NRDC, UNDP		2,000	Annually, part of reporting routine
Mid Term Review/Evaluation	<ul style="list-style-type: none"> Determines progress being made towards the achievement of outcomes and identifies corrections if needed. Determines effectiveness, efficiency, and timeliness of project implementation; highlights issues requiring actions; and potential lessons learned about project design, implementation, and management. 	Execution: independent evaluator Support: UNEP, UNEP Evaluation Office	25,000	26,500	At mid-point of project implementation
Terminal Evaluation	<ul style="list-style-type: none"> Further reviews the topics covered in the mid-term evaluation. Determines the sustainability of the results, including the contribution to capacity development and achievement of global environmental goals. 	Execution: independent evaluator Support: UNEP, UNEP Evaluation Office	40,000	26,500	Within 6 months of end of project implementation
Project Final	<ul style="list-style-type: none"> The project team will draft 	Execution: UNEP		10,000	Within 2

Type of M&E activity	Description	Responsible Parties	Budget from GEF	Budget co-finance	Time Frame
Report	<p>and submit a Project Final Report, which should sent to UNEP at least two weeks before the PSC meeting for their review and comments. The meeting decides whether any action is needed to achieve the sustainability of project results; and draws lessons to be captured into other projects;</p> <ul style="list-style-type: none"> • Comprehensive report summarizing all activities, achievements, and lessons learned, objectives met or not achieved. Lays out recommendations for any further steps that may need to be taken to ensure sustainability and replication of project activities. 	Support: CLASP, ICA, NRDC, UNDP			months of the Project completion date
Co-financing report	<ul style="list-style-type: none"> • Report on co-financing (cash and/or in-kind) fulfilled contributions from project partners. 	<p>Execution: UNEP</p> <p>Support: CLASP, ICA, NRDC, UNDP and other partners</p>		2,000	Within one month of the PIR reporting period, i.e. on or before 31 July
Publication of Lessons Learnt and other project documents	<ul style="list-style-type: none"> • Lessons learned and other project documents are published for the benefit of on-going and future projects. 	<p>Execution: UNEP</p> <p>Support: CLASP, ICA, NRDC, UNDP and other partners</p>		2,000	Annually, part of semi-annual reports and Project Final Report
Total M&E Plan Budget			65,000	100,000	

ANNEX H: PROJECT IMPLEMENTATION ARRANGEMENTS

I. SUMMARY

The project outlined in the present document aims to establish the foundations of the Efficient Appliances and Equipment Global Partnership Programme, a new flagship initiative of UNEP in cooperation with its core co-financiers to the project: UNDP, ICA, CLASP and NRDC.

UNEP will lead the coordination of global activities including expert taskforces, development of common methodologies and guidance through the centre of excellence, coordination of global certification activities, generation of data and overall benefits of the transitions, and providing leadership to achieve a global political consensus. UNDP will contribute to all components of the project and will support the implementation and rollout of integrated national and regional appliance efficiency strategies, policies and concrete on-the-ground implementation of activities using UNDP's strong country presence and know-how on national projects promoting energy efficiency in the focus products.

During 18 months the project will focus on three components: (i) Policy and strategy framework to accelerate the transition to efficient appliance and equipment; (ii) Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition, and (iii) Bringing appliance and equipment efficiency on top of the global agenda. These are to be implemented along the lines described below and expected to initiate the creation of a multi-stakeholder platform that will, in the long run, form the Global Partnership. Through the Global Partnership assistance will be provided to national governments for the design and implementation of national/regional projects to accelerate the market transformation to efficient appliances and equipment.

A project governance structure will be put in place to ensure that decision-making, management and implementation arrangements are appropriate and operate effectively. The governance structure will consist of a Project Steering Committee, a Project Management Team and a virtual Centre of Excellence. Their respective functions are outlined below.

The Efficient Appliances and Equipment Global Partnership Programme follows the example in the successful en.lighten initiative and its public-private partnership model, which has been working with 66 countries to put in place policies to phase-out inefficient incandescent lamps by the end of 2016. The High Impact Opportunity for advanced lighting and appliance efficiency of the Sustainable Energy for All (SE4ALL) initiative provides a conducive international framework for creating synergies among the two initiatives, including best practices and lessons learned. Building on the achievements of en.lighten, the project will expand the efforts of the initiative to the commercial/industrial and outdoor sectors by assisting countries to transition to energy-efficient lighting in these areas.

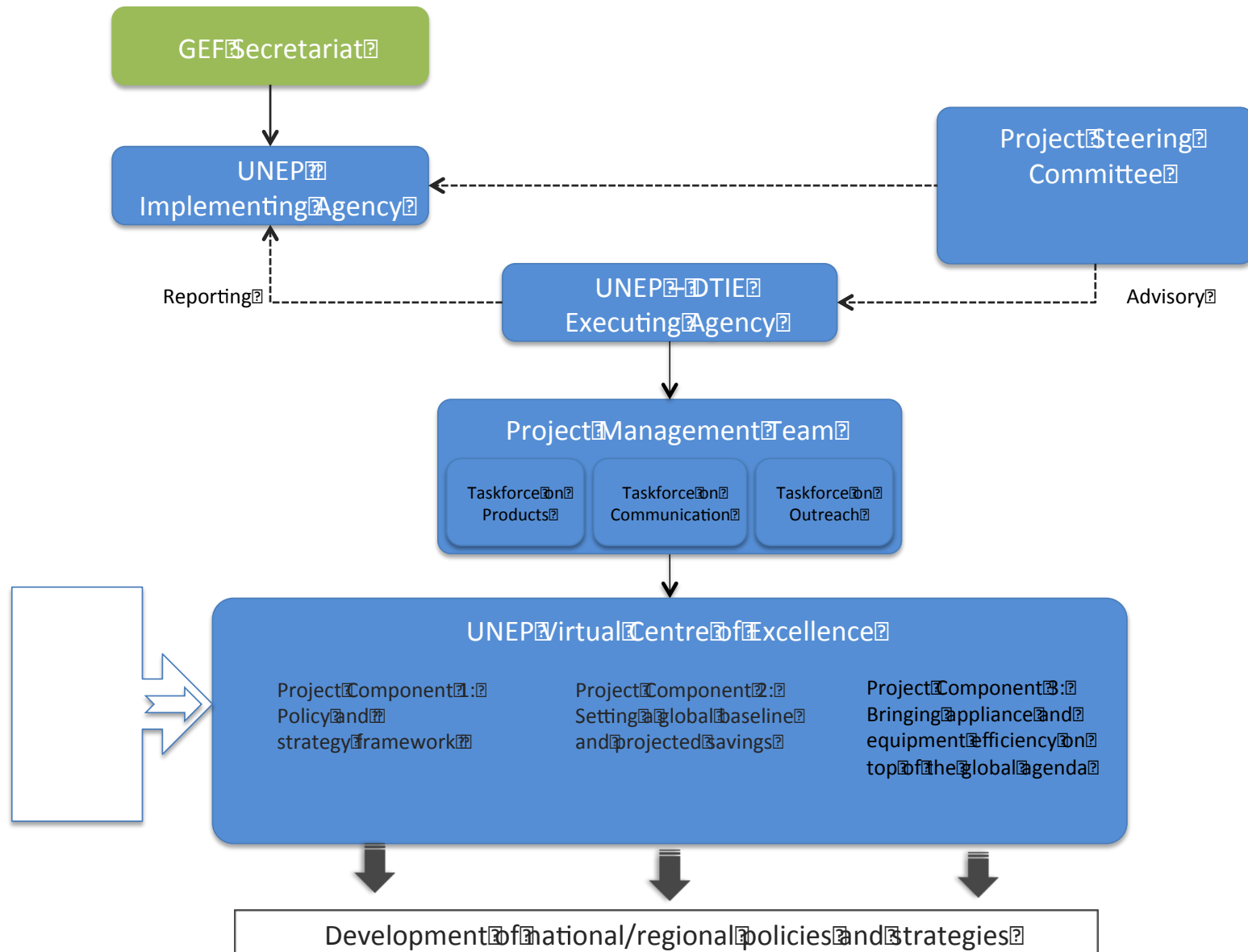
II. PROJECT GOVERNANCE STRUCTURE

Body	Composition	Role	Frequency of meetings
Project Steering Committee (PSC)	One representative of: UNEP, UNDP, ICA, CLASP, NRDC, GEF, SE4ALL Global Facilitation Team, WB, up to four appliance and equipment manufacturers (one per product area)	Provides overall guidance on the strategic orientation of the Global Partnership Programme Provides strategic advice on the annual/bi-annual programme of work Examines progress of implementation of the programme of work Members facilitate resource mobilisation by suggesting/providing high-level	3 times in 18 months

	Other partners can be considered to become PSC members on the basis of their strategic importance to the Global Partnership Programme	contacts to possible funding sources	
Project Management Team (PMT)	<p>The PMT will be operationalized with the founding partners of the project and provides oversight on the implementation of the project components.</p> <p>Composition: UNEP, ICA, CLASP, NRDC</p> <p>Other partners can be considered to become PMT members on the basis of their importance/role in each of the priority product groups</p>	<p>Prepares annual/bi-annual programme of work (on the basis of strategic guidance provided by PSC)</p> <p>Members facilitate resource mobilisation by suggesting/providing contacts to possible funding sources</p> <p>The PMT provides guidance on the formulation of the taskforces.</p> <p>The PMT provides strategy recommendations for completion of component 2 (country-by-country analysis on policy and savings potential).</p> <p>Members participate in outreach events (as panellists) and key international and regional energy and climate events to promote the Partnership Programme and position appliance and equipment efficiency on top of the international agenda as a key solution in the climate, energy and sustainable development discussions</p>	3 times/year and as need arises
Virtual Centre of Excellence	Formally hosted by UNEP but with in-kind support of partners (staff, resources etc.; this staff can also be out posted in offices of partners)	<p>Ensures implementation of activities and day-to-day management/coordination of the Programme</p> <p>Prepares meetings and documents for decision-making of the PSC and PMT and executes their decisions</p> <p>Prepares terms of reference for each of the priority product group taskforces and supports preparation of taskforce meetings (in liaison with the leader of each taskforce)</p> <p>Ensures development of a common methodology for country analysis on readiness of policies and standards, and</p>	Daily

		<p>country assessments on benefits of the transition to efficient products</p> <p>Reviews/ensures quality of knowledge products (case study reports on best practice policies) and country assessments and analysis</p> <p>Undertakes global resource mobilisation with governmental donors and other potential funders, including following up on contacts provided by the PSC and the PMT</p> <p>Leads the mobilisation of additional partners for the Partnership Programme</p> <p>Implements communication and outreach activities and coordinates relevant contributions of partners and services of sub-contractors</p>	
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III. ORGANIGRAM EXECUTING ARRANGEMENT



ANNEX I - KEY DELIVERABLES AND BENCHMARKS

Expected Component/Outcome/Output/Activity		Deliverables																		
1. Policy and strategy framework to accelerate the transition to efficient appliance and equipment			M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
1.1 Consensus is reached on the policy and strategy framework options by expert taskforces (NGOs, IGOs, industry) for 3 products.			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1.1.1 Expert taskforces are established with an agreed work plan	Activity a.0 Identifying experts and forming expert taskforces	- List of experts compiling the expert taskforces																		
	Activity a.1 Developing and agreeing to work plan	- ToR and work plan describing the tasks to be achieved with the expert taskforces																		
1.1.2 Policies and strategy framework are drafted and discussed	Activity a.1 Drafting of the strategy for each product group (3) and achieving consensus amongst experts	- Minutes from expert taskforce meetings with consensus on the best practice policies for 3 product groups																		
1.1.3 Case study reports on best practice policies and strategies for energy efficient appliance and equipment developed.	Activity a.2 Based on recommendations from expert taskforces, drafting of reports showing best practice policies for each product group (3)	- Case study reports describing best practice policies for 3 products																		
2. Setting a global baseline and projected savings for the transition to efficient appliances and equipment and perform a global assessment of countries' readiness for the transition			M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
2.1 Developing and emerging country decision-makers have increased awareness of the benefits (economic, financial and climate) of adopting enabling policies to foster the transition to more energy efficient products.			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
2.1.1 Country-by-country analysis of the readiness of policies, standards and enforcement for each target technology and assessment of existing activities developed (to facilitate the market transition to efficient products (for 3 identified priority products)	Activity b.0 Research and inquiring with country representatives (including ministries of energy), project partners and international organization on the presence of policies and strategies.	- Completed country questionnaires on the level of policies from country officials, manufacturers, international organizations, and other partners																		
	Activity b.1 Analysing and compiling the policy status into an interactive world map.	- An interactive world map, allowing the user to see the level of policies in countries and regions for 3 products.																		
2.1.2 Country-by-country estimated benefits (environmental, energy, climate, financial, business) of the transition to efficient products developed (such as refrigerators, room air conditioners, electric motors, and distribution transformers)(3 products).	Activity b.2 Identifying models to be used and aligning across all product groups.	- 3 models to calculate energy, GHG, and financial savings for the transition to energy products																		
	Activity b.3 Data collection from country representatives (ministries of energy), project partners, and international organizations.	- Country/regional level data is collected to input into the model, including stock of product, annual sales, unit energy consumption, and cost.																		
	Activity b.4 Running of model, peer / country review, and updates as needed.	- Country-by-country results (the electricity, financial, and environmental benefits).																		
	Activity b.5 Final layout of results and publication	- Country-by-country results shown on individual country sheets																		
3. Bringing appliance and equipment efficiency on top of the global agenda			M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
3.1 Action is mobilized from key partners on energy efficiency of appliances, equipment, and lighting (to support implementation of this project and other projects on improving appliances and equipment efficiency)			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
3.1.1 Partnership engagement strategy and branding strategy are developed	Activity c.0 Meeting amongst project partners to develop engagement strategy and branding strategy	- Engagement and branding strategy document are developed.																		

3.1.2 "Workshops and side events alongside major global and regional energy and climate events."	Activity "c.1" Preparing for and hosting 4 workshops or side events alongside major global and regional energy and climate events."	B4 "completed workshops or side events" alongside major global and regional energy and climate events."																		
3.1.3 "Targeted communication material showcasing the benefits," including "making the business case for private sector engagement."	Activity "c.2" Development of a project website	B1 "project website" presenting the Global Partnership																		
	Activity "c.3" Development of 3 brochures (1 per product)	B3 B4 "brochures describing the best" practice approach and "potential savings" for each product group																		
	Activity "c.4" Development of 2 "interactive communication tools" showcasing the "potential benefits to private sector from joining the" global partnership"	B2 "Interactive communication tools																		
4. "Expanding the scope of the en.lighten Initiative																				
4.1 "Consensus is reached by en.lighten technical experts on best practice policy, awareness raising, and financial mechanism tool kits to facilitate the transition to efficient and advanced lighting (light emitting diodes) in the commercial, industrial and outdoor lighting applications"			M1	M2	M3	M4	M5	M6	M7	M8	M9	M10	M11	M12	M13	M14	M15	M16	M17	M18
4.1.1 "Expert meetings convened on best practice policy tools to" support the transition to efficient and advanced lighting (LEDs) in" commercial and industrial sectors and to outdoor applications" developed.	Activity "d.0" Holding a taskforce" meeting to achieve consensus on" best practice policies for energy" efficient lighting in commercial and" industrial sectors and to outdoor" applications developed.	B "Consensus is achieved by the taskforce" on the best practice policies."																		
	Activity "d.1" Drafting of the strategy" for commercial and industrial" sectors and to outdoor applications" developed.	B Strategy document describing the best" practice policies for the commercial and" industrial sectors.																		
4.1.2 "Expert meetings convened on best practice policy tools for" awareness raising on efficient and advanced lighting (to emphasize a" systems approach and hours of use controls) for optimal savings" benefits developed	Activity "d.2" Holding an expert" meeting to achieve consensus on" best practice policies awareness" raising on efficient and advanced" lighting (to emphasize a systems" approach and hours of use controls)	B Taskforce achieves consensus on best" practice policies for advanced lighting and" controls.																		
	Activity "d.3" Development of policy" tools to promote the awareness of" efficient and advanced lighting" (including controls)	B One (1) policy tool is developed to" promote awareness of advanced lighting" and controls.																		
4.1.3 "Support tools on finance mechanisms are developed and tested" in two partner countries (including tools for measuring, reporting, and verifying results)."	Activity "d.4" Development of policy" tool to support countries in" developing financial mechanisms.	B A policy tool/guide to support countries" in the development of financial" mechanisms promoting energy efficient" lighting.																		
	Activity "d.5" Two (2) Country" workshops to assist two (2)" countries in the development of" financial mechanisms promoting" energy efficient lighting.	B Two financial proposals are prepared to" support countries in the transition to" energy efficient lighting.																		

ANNEX J: CALCULATION OF GREENHOUSE GAS BENEFITS

The project's goal is to develop a policy and strategy framework and build the political will to transform appliance and equipment markets to energy efficient products. The GHG estimates have been prepared using the GEF "Revised Methodology for Calculating Greenhouse Gas Benefits of GEF Energy Efficiency Projects (Version 1.0)". This project does build the political will for action in countries and lays the fundament to achieve a permanent and sustainable market transition. This project does not implement national or regional market transformation programmes. Therefore this proposal does neither account for the entire projected post-project direct emissions reductions nor for the projected indirect emission reductions. Instead, the proposal takes 33% of the calculated savings into account, in order to allow a proportionate & equal allocation of savings to the political decision process and the knowledge building, which is covered by this project, and the implementation of country activities which happen as a consequence of the decisions made by partner countries to advance their markets to efficient products.

Following this approach, the project estimates that total accounts for "Direct Post-project GHG emission savings" of are 1,824,705,294 tCO₂ for the 10 years following project completion. Further, the project estimates "Indirect Top-down Emission Savings" of 623,700,000 tCO₂; accounting for spill over to countries and product groups that were not a focus of the project. Below is the general methodology used and the result tables from the GEF Guide for Standards and Labelling.

Direct Post Project GHG Emission Savings

The project will gain the political commitment from governments to implement policies and strategies to advance energy efficient products. The savings accounted for under the direct post project GHG emission savings are the countries that of the projects priority and of the focus product groups. General assumptions are:

- The calculations estimate fifteen countries will develop a policy and strategy framework to transform their markets for three selected appliances and equipment. Accounting for 15 countries is a reasonable and conservative estimate as it means that half of the countries that commit to Global Partnership (target of 30 countries) will then go onto transform the markets due to this project.
- The fifteen countries will be prioritized based on their market size and potential for GHG emission reduction. By prioritizing countries it means the project can reach roughly two-thirds of the non-OECD countries.
- The calculations account for just three (3) products in order to be conservative with the estimates and also to reflect that not all products will be relevant in all countries (for example air conditioners in cooler climates). The products used in the calculations are refrigerators, air conditioners, and distribution transformers.

Indirect Top-down GHG Emission Savings

The "Indirect Top-down Emission Savings (tCO₂)" take spill-over effects into account, such as the adoption of the policy and strategy framework by neighbouring countries (beyond the 15 prioritized countries) and the market transformation to efficient products in more than 3 product groups in the 15 partner countries.

- Due to implementation of policies and strategies in 15 countries (included in Direct Post Project GHG Emission Savings), experience shows that neighbouring and/or regional countries will also begin to have higher efficient products. This is due to common trade flows and the use of one product line.
- Due to success of in the focus product groups, it is also likely the 15 prioritized countries will expand to other product groups outside the focus of the project.
- Total potential savings for nonOECD countries is estimated 3,150,000,000 tCO₂ for the 10 years after project closure. A causality factor of 60% is used to reflect that not all products sold in the market may comply with the standard and also reflecting baseline advancement that would occur regardless of the project.
- The overlap between direct savings and indirect savings has been cleared and is not double-counted.

Step 1: Enter Basic Project Information

Project Information

Project Information

Project Title	Establishing a Global Partnership to Accelerate the Market Transformation to Efficient Appliances and Equipment		
GEF ID Number	5831		
Country	Other	Global (Non-OECD countries)	
Region			
GEF Agency	United Nations Environment Programme		
Date of Submission of GHG Accounting	1-Aug-14		
Contact Name	Gustau Manez Gomis		
First Year of Project	2015		
Year of Project Close	2016		
GEF Grant Amount (\$)	\$1,370,000		
Co-financing Amount (\$)	\$8,000,000		

General Parameters

	Default	User-Specified
Length of Analysis Period (Years After Project Close)	20	20
First Post-project Year		2017
Last Post-project Year		2036
Maximum Technology / Measure Lifetime (Years)	20	20

Notes

Fuels and Emission Factors

	Default	User-Specified
Grid Electricity T&D Loss Rate (%)	10%	10%
Grid Electricity Emissions (tCO2/MWh)	N/A	0.7170
Fuel: Click here to select from list	0.0000	0.0000
Fuel: Click here to select from list	0.0000	0.0000
Fuel: Click here to select from list	0.0000	0.0000

Notes

Average for Non-OECD countries (2011) World Energy Outlook 2013 Annex A

Step 2: List Activity Components and Select Quantification Module

Activity Component	Sector/Subsector	Logframe Output	Module/Intervention Type
Refrigerators	Residential	Outputs 1.1-3.4	Standards and Labeling
Air Conditioning	Residential	Outputs 1.1-3.4	Standards and Labeling
Distribution Transformers	Residential	Outputs 1.1-3.4	Standards and Labeling

Step 3: Model Activity Components

Standards and Labeling Module

Project Information

Project Title	Establishing a Global Partnership to Accelerate the Market Transformation to Efficient Appliances and Equipment
Country	Global (Non-OECD countries)
Contact Name	Gustau Manez Gomis
First Year of Project	2015
Last Year of Project	2016

Results: Standards and Labeling Activity Components

	Total	Cumulative		Annual				
		2015-2016	2017-2036	2015	2016	2025	2035	
Direct Electricity Savings (MWh)	1	0	1	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
N/A	0	0	0	0	0	0	0	0
Direct Total Energy Savings (GJ)	3	0	3	0	0	0	0	0
Direct GHG Emission Savings (tCO2)	1	0	1	0	0	0	0	0
Direct Post-project GHG Emission Savings (tCO2)	5,529,409,982		5,529,409,982			321,413,342	346,666,841	
Indirect Bottom-up Emission Savings (tCO2)								

Component 1: Refrigerators -- General Inputs

Technology Specifications

	Default	User-Specified
Target Technology	Home Refrigerator	Home Refrigerator
Fuel Used	Electricity	Electricity
Displaced Technology	Existing Home Refrigerator	Existing Home Refrigerator
Useful Technology Lifetime (years)	5	10
Power Consumption: Home Refrigerator (W)	255	255
Power Consumption: Existing Home Refrigerator (W)	300	300

Notes

Assumption: lifetime of refrigerators in Non-OECD countries is 10 years

Annual Energy Consumption

User may enter either daily or annual energy information

	Default	User-Specified
Daily Usage (hr/day)	10.0	24.0
Days Used Each Year (days/yr)	365	365
Annual Energy Consumption: Home Refrigerator (kWh/yr)	931	217
Annual Energy Consumption: Existing Home Refrigerator (kWh/yr)	1,095	423
Percentage Energy Savings		49%

Notes

Assumption: home refrigerators are in use 24 hours per day.
BUENAS: BAT 2030 UEC (Non-OECD average)
BUENAS: 2010 UEC (Non-OECD average)

Market Assumptions

	Default	User-Specified
Annual Sales in Year 2015		85,400,000
Annual Sales Growth Rate		1.6%

Notes

Non-OECD (LBNL BUENAS update of 31 January 2014)
Non-OECD (LBNL BUENAS update of 31 January 2014)

Baseline Assumptions

	Default	User-Specified
Market Share of Home Refrigerator in Year 2015		10.00%
Baseline Annual Increase in Home Refrigerator Market Share	5%	2.00%
Annual reduction in energy consumption: Home Refrigerator	0%	2%
Annual reduction in energy consumption: Existing Home Refrigerator	1%	1%

Notes

Market share of efficient refrigerators in non-OECD countries is expected to be at 10% in the best case (conservative assumption)
Market share of efficient appliances is not expected to grow by more than 2% p.a. in average in non-OECD countries without intervention (more e.g. in China, less e.g. in India).
Assumption: unit energy consumption improves by 20% over a decade, also driven by improving standards (in contrast to static standards)

Standard/Labeling Program Effectiveness

	Default	User-Specified
Year Standard in Force		2018
Percent New Sales Compliant with Standard		60%

Notes

Assumption: 10% of products are domestic stock or imports that have not been covered by MV&E and 15 country projects will be generated in non-OECD countries after prioritizing the markets. This approach can cover 2/3 of the entire non-OECD market. (2/3 * 90% = 60%)

Component 2: Air Conditioning -- General Inputs

Technology Specifications

	Default	User-Specified
Target Technology	Home Air Conditioner	Home Air Conditioner
Fuel Used	Electricity	Electricity
Displaced Technology	Existing Home Air Conditioner	Existing Home Air Conditioner
Useful Technology Lifetime (years)	5	10
Power Consumption: Home Air Conditioner (W)	1,395	1,395
Power Consumption: Existing Home Air Conditioner (W)	1,641	1,641

Notes

Assumption: lifetime of refrigerators in Non-OECD countries is 10 years

Annual Energy Consumption

User may enter either daily or annual energy information

	Default	User-Specified
Daily Usage (hr/day)	8.0	8.0
Days Used Each Year (days/yr)	180	180
Annual Energy Consumption: Home Air Conditioner (kWh/yr)	2,008	1240
Annual Energy Consumption: Existing Home Air Conditioner (kWh/yr)	2,363	2,363
Percentage Energy Savings		48%

Notes

Source: "Estimate of Cost-Effective Potential for Minimum Efficiency Performance Standards in 13 Major World Economies - Energy Savings, Environmental, and Financial Impacts", LBNL/CLASP, 2012.

Market Assumptions

	Default	User-Specified
Annual Sales in Year 2015		70,000,000
Annual Sales Growth Rate		2.4%

Notes

Baseline Assumptions

	Default	User-Specified
Market Share of Home Air Conditioner in Year 2015		10%
Baseline Annual Increase in Home Air Conditioner Market Share	5%	2.00%
Annual reduction in energy consumption: Home Air Conditioner	0%	2%
Annual reduction in energy consumption: Existing Home Air Conditioner	1%	1%

Notes

Market share of efficient room air conditioners in non-OECD countries is expected to be at 10% in the best case (conservative assumption)
Market share of efficient appliances is not expected to grow by more than 2% p.a. in average in non-OECD countries without intervention (more e.g. in China, less e.g. in India).
Assumption: unit energy consumption improves by 20% over a decade, also driven by improving standards (in contrast to static standards)

Standard/Labeling Program Effectiveness

	Default	User-Specified
Year Standard in Force		2018
Percent New Sales Compliant with Standard		60%

Notes

Assumption: 10% of products are domestic stock or imports that have not been covered by MV&E and 15 country projects will be generated in non-OECD countries after prioritizing the markets. This approach can cover 2/3 of the entire non-OECD market. (2/3 * 90% = 60%)

Component 3: Distribution Transformers -- General Inputs

Technology Specifications

	Default	User-Specified
Target Technology	--	Distribution Transformers
Fuel Used	--	Electricity
Displaced Technology	--	Existing Distribution Transformers
Useful Technology Lifetime (years)	5	20
Power Consumption: Distribution Transformers (W)	--	--
Power Consumption: Existing Distribution Transformers (W)	--	--

Notes

Assumption: lifetime of distribution transformers in Non-OECD countries is 20 years

Annual Energy Consumption

User may enter either daily or annual energy information

	Default	User-Specified
Daily Usage (hr/day)	--	--
Days Used Each Year (days/yr)	--	--
Annual Energy Consumption: Distribution Transformers (kWh/yr)	0	26,560,000
Annual Energy Consumption: Existing Distribution Transformers (kWh/yr)	0	53,360,000
Percentage Energy Savings		50%

Notes

Sources: US DOE Final Rule 2007, SEAD Transformer Report 2014, UNEP calculations: SEAD Tier 4; [kWh/GVA capacity]
Sources: US DOE Final Rule 2007, SEAD Transformer Report 2014, UNEP calculations: Baseline; [kWh/GVA capacity]

Market Assumptions

	Default	User-Specified
Annual Sales in Year 2015		672
Annual Sales Growth Rate		3.8%

Notes

Baseline Assumptions

	Default	User-Specified
Market Share of Distribution Transformers in Year 2015		10%
Baseline Annual Increase in Distribution Transformers Market Share	5%	1.00%
Annual reduction in energy consumption: Distribution Transformers	0%	2%
Annual reduction in energy consumption: Existing Distribution Transformers	1%	1%

Notes

Market share of BAT distribution transformers in non-OECD countries is expected to be at 10% in the best case (conservative assumption)
Market share of efficient distribution transformers is not expected to grow by more than 1% p.a. in average in non-OECD countries without intervention (more e.g. in China, less e.g. in India).
Assumption: unit energy consumption improves by 20% over a decade, also driven by improving standards (in contrast to static standards)

Standard/Labeling Program Effectiveness

	Default	User-Specified
Year Standard in Force		2018
Percent New Sales Compliant with Standard		60%

Notes

Assumption: 10% of products are domestic stock or imports that have not been covered by MV&E and 15 country projects will be generated in non-OECD countries after prioritizing the markets. This approach can cover 2/3 of the entire non-OECD market. (2/3 * 90% = 60%)

Step 4: Calculate Indirect, Top-Down Impacts

	User-Specified
Total Market Potential (tCO2)	3,150,000,000
Causality factor	60%
Indirect Top-Down Emission Reductions (tCO2)	1,890,000,000

Notes

Based on 100% new sales compliant with standards (full potential for all non-OECD countries); 10 years project influence period after project closure; and a spill-over of action to the other identified three high-impact appliances / equipment: lighting, electric motors (0.75kW to 375kW) and ICT; an indirect effect on refrigerators, air conditioners and distribution transformers beyond the 15 countries is considered with the remaining 1/3 that was not taken into account for the direct post-project emission savings calculation. No overlap between direct impact and indirect impact). Spill-over to other appliances and equipment beyond the 3 product groups is considered.
The GEF contribution is substantial, but modest indirect emission reductions can be attributed to the baseline. The baseline are energy efficiency programmes that will be rolled out in individual non-OECD countries.

ANNEX K: OFP ENDORSEMENT LETTER

Not applicable.

ANNEX L: CO-FINANCING COMMITMENT LETTERS FROM PROJECT PARTNERS

- UNEP
- UNDP
- CLASP (USA)
- bigEE (Wuppertal Institute, Germany)
- Topten
- Department of Industry, Australia
- IEA-4E
- Copenhagen Centre on Energy Efficiency
- Philips Lighting BV
- OSRAM Licht AG
- International Copper Association (ICA)
- ABB
- Mabe
- Arcelik A.S.

IN A SEPARATE FILE

ANNEX M: ENVIRONMENTAL AND SOCIAL SAFEGUARDS CHECKLIST

As part of the GEFs evolving Fiduciary Standards that Implementing Agencies have to address 'Environmental and Social Safeguards'. To fill this checklist:

- STEP 1: Initially assess E&S Safeguards as part of PIF development. The checklist is to be submitted for the CRC.
- STEP 2 : Check list is reviewed during PPG project preparation phase and updated as required
- STEP 3 : Final check list submitted for PRC showing what activities are being undertaken to address issues identified

UNEP/GEF Environmental and Social Safeguards Checklist

Project Title:	Establishing the Foundations of a Global Partnership to Accelerate the Market Transformation for Efficient Appliances and Equipment		
GEF project ID and UNEP ID/IMIS Number	5831	Version of checklist	1
Project status (preparation, implementation, MTE/MTR, TE)	implementation	Date of this version:	25.06.14
Checklist prepared by (Name, Title, and Institution)	Geordie Colville, SPO, DTIE, UNEP		

In completing the checklist both short- and long-term impact shall be considered.

Section A: Project location

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/ N.A.</i>	<i>Comment/explanation</i>
- Is the project area in or close to -		
- densely populated area	N.A.	<i>This a global umbrella/preparatory project. No country activities will take place</i>
- cultural heritage site	N.A.	
- protected area	N.A.	
- wetland	N.A.	
- mangrove	N.A.	
- estuarine	N.A.	
- buffer zone of protected area	N.A.	
- special area for protection of biodiversity	N.A.	
- Will project require temporary or permanent	N.A.	

support facilities?		
<i>If the project is anticipated to impact any of the above areas an Environmental Survey will be needed to determine if the project is in conflict with the protection of the area or if it will cause significant disturbance to the area.</i>		

Section B: Environmental impacts

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A</i>	<i>Comment/explanation</i>
- Does the project respect internationally proclaimed human rights including dignity, cultural property and uniqueness and rights of indigenous people?	Yes	
- Are property rights on resources such as land tenure recognized by the existing laws in affected countries?	N.A.	
- Will the project cause social problems and conflicts related to land tenure and access to resources?	No	
- Does the project incorporate measures to allow affected stakeholders' information and consultation?	Yes	
- Will the project affect the state of the targeted country's (-ies') institutional context?	No	
- Will the project cause change to beneficial uses of land or resources? (incl. loss of downstream beneficial uses (water supply or fisheries)?	Yes	The project will reduce GHG emissions and will allow safe handling and environmentally sound management of hazardous substances, including mercury, PCBs, and ozone-depleting refrigerants.
- Will the project cause technology or land use modification that may change present social and economic activities?	Yes	Energy-efficient refrigerators, room air conditioners, electric motors, distribution transformers, and lighting technologies have a higher initial cost but save money over the life of the products. Supporting policies, such as financial mechanisms will be implemented to reduce the impact of the higher upfront costs on individual consumers and businesses.
- Will the project cause dislocation or involuntary resettlement of people?	No	
- Will the project cause uncontrolled in-migration (short- and long-term) with opening of roads to areas and possible overloading of social infrastructure?	No.	
- Will the project cause increased local or regional unemployment?	No.	In fact, the project will promote the deployment of energy-efficient technologies. It is expected that this will encourage the creation of manufacturing capacities for efficient technology manufacturing in

		the country and also greater capacities to export products as well.
- Does the project include measures to avoid forced or child labour?	N.A.	
- Does the project include measures to ensure a safe and healthy working environment for workers employed as part of the project?	Yes	<p>The project includes strategies for the environmentally sound management of products, which includes the proper handling of all products during manufacturing, installation, and disposal.</p> <ul style="list-style-type: none"> - In addition to reducing the level of mercury in lighting products it promotes mercury-dosing techniques which will avoid contamination of workers in the manufacturing of lighting products. - The project includes measures for environmentally sound management of existing distribution transformers, of which some contain PCBs. - The project includes measures for environmentally sound management, including safe handling of refrigerants in the manufacture of refrigerators and room air conditioners.
- Will the project cause impairment of recreational opportunities?	No.	
- Will the project cause impairment of indigenous people's livelihoods or belief systems?	No.	
- Will the project cause disproportionate impact to women or other disadvantaged or vulnerable groups?	No.	
- Will the project involve and or be complicit in the alteration, damage or removal of any critical cultural heritage?	No.	
- Does the project include measures to avoid corruption?	No.	
<i>Only if it can be carefully justified that any negative impact from the project can be avoided or mitigated satisfactorily both in the short and long-term, can the project go ahead.</i>		

Section D: Other considerations

If negative impact is identified or anticipated the Comment/Explanation field needs to include: Project stage for addressing the issue; Responsibility for addressing the issue; Budget implications, and other comments.

	<i>Yes/No/N.A.</i>	<i>Comment/explanation</i>
- Does national regulation in affected country (-ies) require EIA and/or ESIA for this type of activity?	No	
- Is there national capacity to ensure a sound implementation of EIA and/or	No	

SIA requirements present in affected country (-ies)?		
- Is the project addressing issues, which are already addressed by other alternative approaches and projects?	No	
- Will the project components generate or contribute to cumulative or long-term environmental or social impacts?	Yes	Environmental conditions should be improved by this project while the project will also allow for a higher-efficient economy allowing for increased investment opportunities.
- Is it possible to isolate the impact from this project to monitor E&S impact?	Yes	The project can measure the impact by estimating the increased implementation of policies and strategies promoting energy efficient appliances, equipment, and lighting.

ANNEX N: ACRONYMS AND ABBREVIATIONS (PAGE 1)

10 YFP	The 10 Year Framework of Programmes on Sustainable Consumption and Production
ASEAN	Association of Southeast Asian Nations
CCAC	Climate and Clean Air Coalition to Reduce Short-Lived Pollutants
CCM	Climate Change Mitigation
CEIT	Countries with Economies in Transition
CEO	Chief Executive Officer
CFL	Compact Fluorescent Lamp
CIP	Consumer Information Programme
CSO	Civil Society Organizations
DTU	Danish Technical University
ECOWAS	Economic Community of West African States
EER	Energy Efficiency Ratio
EOU	Evaluation and Oversight Unit in UNEP
ESM	Environmentally Sound Management
FIRM	Facilitating Implementation and Readiness for Mitigation
GEF	Global Environment Facility
GHG	Greenhouse gas
GLA	Global Lighting Association
GWP	Global Warming Potential
HEPS	Higher Efficiency Performance Standards
HFC	Hydrofluorocarbons (coolant)
IADB	Inter-American Development Bank (IADB)
ICA	International Copper Association
IEC	International Electrotechnical Commission
IMIS	Integrated Management Information System
IPEEC	International Partnership for Energy Efficiency Cooperation
M&E	Monitoring and Evaluation
MEPS	Minimum Energy Performance Standards
MVE	Monitoring, Verification and Enforcement
NAMA	Nationally Appropriate Mitigation Action
NGO	Non-Governmental Organization

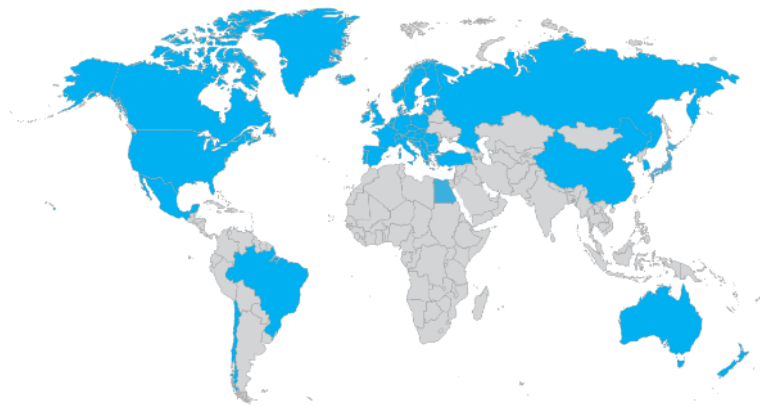
ANNEX N: ACRONYMS AND ABBREVIATIONS (PAGE 2)

NLTC	National Lighting Test Centre, China
NRDC	National Resources Defense Council
ODP	Ozone Depletion Potential
OECD	Organisation for Economic Co-operation and Development
OLADE	Latin America Energy Organization (OLADE)
PCB	Polychlorinated biphenyl
PIR	Project Implementation Review
PMC	Project Management Cost
PMT	Project Management Team
PPP	Public-Private Partnership
RAC	Room Air Conditioner (also referred to as AC)
REDD	Reducing Emissions from Deforestation and Forest Degradation
SBCI	Sustainable Building and Climate Initiative
SE4ALL	Sustainable Energy for All
SEAD	Super-Efficient Equipment and Appliance Deployment
SFM	Sustainable Forest Management
SGP	Small Grants Programme
SMART	Criteria to guide the setting of objectives (Specific, Measurable, Assignable, Realistic, Time-related)
SPP	Sustainable Public Procurement
STAP	Scientific and Technical Advisory Panel
TA	Grant Type
TF	Trust Fund
TNA	Technology Need Assessment
ToR	Terms of Reference
UN	United Nations
UNDP	United Nations development Programme
UNEP	United Nations Environment Programme
UNEP DTIE	UNEP Division of Technology, Industry and Economics
UNFCCC	United Nations Framework Convention on Climate Change

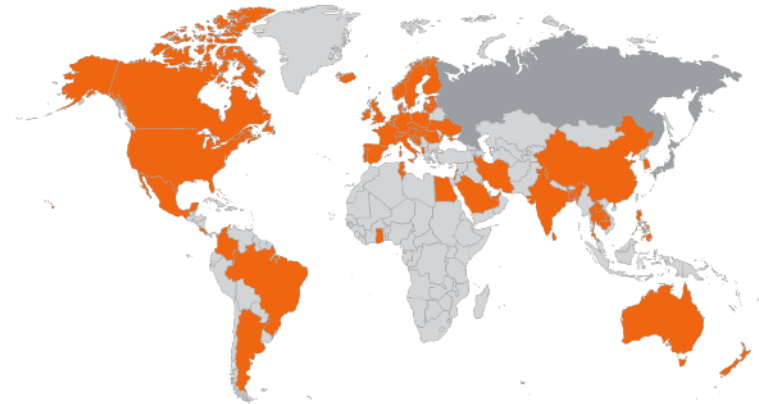
ANNEX O: STATUS QUO OF MANDATORY MEPS (2013)



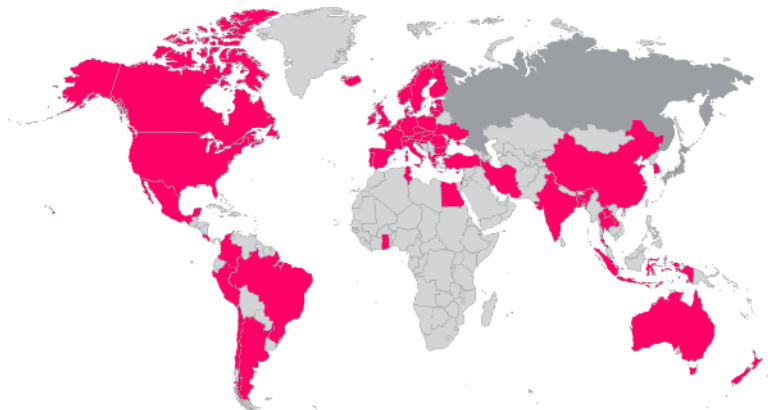
Motors



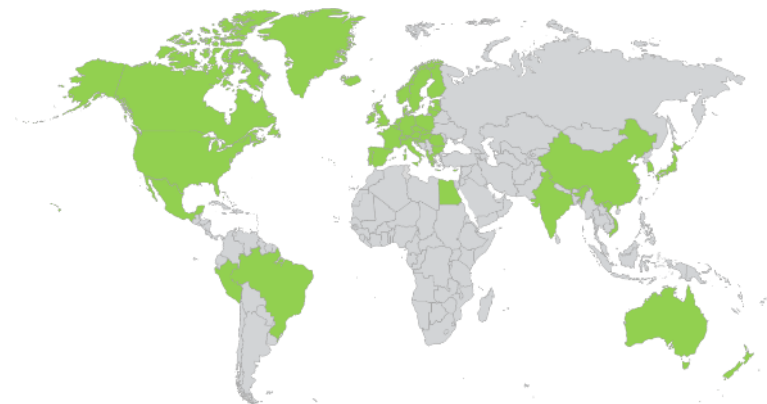
Air conditioners



Refrigerators



Transformers



ANNEX P: COUNTRIES COMMITTING TO THE UNEP EN.LIGHTEN INITIATIVE GLOBAL PARTNERSHIP PROGRAMME

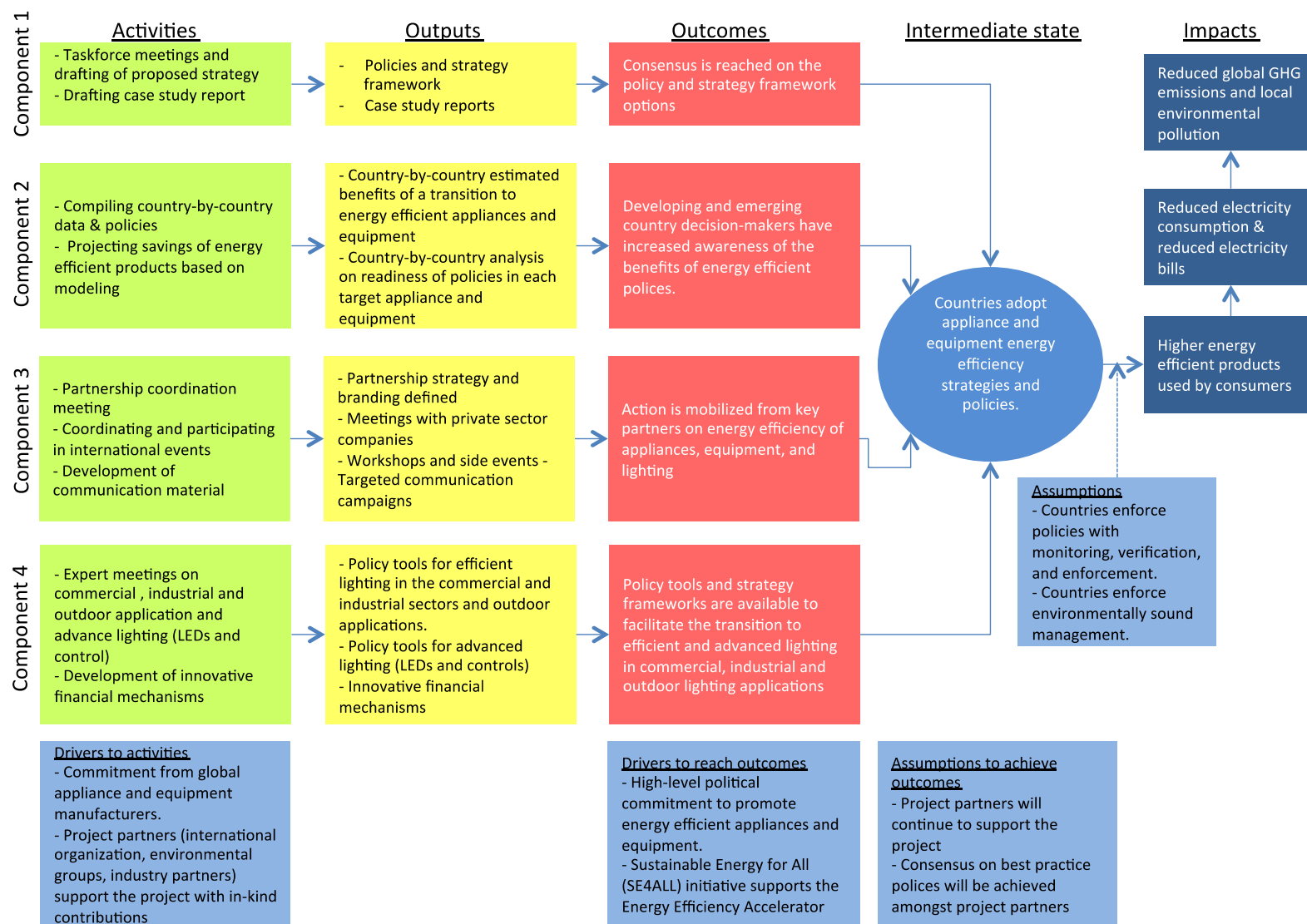


66 Partner countries (alphabetical order): Algeria, Belize, Benin, Bolivia, Burkina Faso, Cabo Verde, Cameroon, Chile, Cook Islands, Costa Rica, Cote d'Ivoire, Dominican Republic, Ecuador, Egypt, El Salvador, Ethiopia, Gambia, Georgia, Ghana, Guatemala, Guinea, Guinea Bisau, Haiti, Honduras, Indonesia, Iraq, Jordan, Kiribati, Kuwait, Lebanon, Liberia, Maldives, Mali, Marshall Islands, Micronesia, Morocco, Myanmar, Nepal, Nicaragua, Niger, Nigeria, Pakistan, Palau, Palestine, Panama, Paraguay, Peru, Philippines, Qatar, Russian Federation, Saint Lucia, Samoa, Senegal, Sierra Leone, Solomon Islands, South Africa, Sudan, Thailand, Togolese Republic, Tonga, Tunisia, Tuvalu, United Arab Emirates, Uruguay, Vanuatu, Yemen

About the partnership: The Global Efficient Lighting Partnership Programme is an unparalleled voluntary opportunity to work with en.lighten and other countries within a specific region to achieve a coordinated transition to efficient lighting. Participation in a strategic program that sets shared objectives and provides technical support will assist in identifying mutual barriers and may result in more aggressive goals for a country, while still remaining a cost-efficient exercise.

Interested countries make a dedicated pledge signaling the intent to work with en.lighten to design and implement a set of policies and approaches that will enable the transition to energy-efficient lighting quickly and cost-effectively. Emphasis is placed on an integrated approach for designing policy measures so that the transition can be sustained by the domestic market without continued external support or resources.

Annex Q - Theory of Change



ANNEX R: COUNTRIES ELIGIBLE FOR SUPPORT FROM THE PROJECT (NON-ANNEX I PARTIES TO THE UNFCCC)

Afghanistan
Albania **
Algeria
Andorra
Angola
Antigua and Barbuda
Argentina
Armenia **
Azerbaijan
Bahamas
Bahrain
Bangladesh
Barbados
Belize
Benin
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Burkina Faso
Burundi
Cambodia
Cabo Verde
Cameroon
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo
Cook Islands
Costa Rica
Cuba
Côte d'Ivoire
Democratic People's Republic of Korea
Democratic Republic of the Congo
Djibouti
Dominica

Dominican Republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Ethiopia
Fiji
Gabon
Gambia
Georgia
Ghana
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
India
Indonesia
Iran (Islamic Republic of)
Iraq
Israel
Jamaica
Jordan
Kazakhstan **
Kenya
Kiribati
Kuwait
Kyrgyzstan
Lao People's Democratic Republic
Lebanon
Lesotho
Liberia
Libya
Madagascar
Malawi
Malaysia
Maldives
Mali

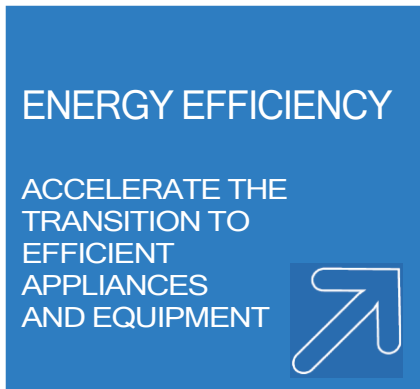
Marshall Islands
Mauritania
Mauritius
Mexico
Micronesia (Federated States of)
Mongolia
Montenegro
Morocco
Mozambique
Myanmar
Namibia
Nauru
Nepal
Nicaragua
Niger
Nigeria
Niue
Oman
Pakistan
Palau
Palestine*
Panama
Papua New Guinea
Paraguay
Peru
Philippines
Qatar
Republic of Korea
Republic of Moldova **
Rwanda
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Samoa
San Marino
Sao Tome and Principe
Saudi Arabia

Senegal
Serbia
Seychelles
Sierra Leone
Singapore
Solomon Islands
Somalia
South Africa
South Sudan
Sri Lanka
Sudan
Suriname
Swaziland
Syrian Arab Republic
Tajikistan
Thailand
The former Yugoslav Republic of Macedonia
Timor-Leste
Togo
Tonga
Trinidad and Tobago
Tunisia
Turkmenistan **
Tuvalu
Uganda
United Arab Emirates
United Republic of Tanzania
Uruguay
Uzbekistan **
Vanuatu
Venezuela (Bolivarian Republic of)
Viet Nam
Yemen
Zambia
Zimbabwe

* Observer State

** Party for which there is a specific COP and/or CMP decision

ANNEX S: COUNTRY PARTNERSHIP FORM FOR EFFICIENT APPLIANCES AND EQUIPMENT



United Nations Environment Programme
Division of Technology, Industry and Economics
75441 Paris Cedex 09 · France

In my capacity as representative of the Government of _____ [name of country] I request the accession of _____ [name of country] as a partner of the Global Partnership for Efficient Appliances and Equipment under the accelerator of the Sustainable Energy for All Initiative of the United Nations, to promote the transition to efficient products and equipment.

As a member of this partnership my country receives technical support and information in obtaining funding for actions to promote the transition to efficient appliances and equipment.

The following officer is designated as the focal point of the Partnership for Efficient Appliances and Equipment in my country.



Name: _____

Title: _____

Address: _____

E-mail: _____

Name & Signature [Minister or Vice Minister] and Ministry

Official Seal

Date