



GEF-6 PROGRAM FRAMEWORK DOCUMENT (PFD)

TYPE OF TRUST FUND: GEF Trust Fund

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PART I: PROGRAM IDENTIFICATION

Program Title:	Leapfrogging markets to high efficiency products (appliances, including lighting, and electrical equipment)			
Country(ies):	Global, Costa Rica, Kazakhstan, Sudan, Myanmar, Indonesia, South Africa, Tunisia, Chile	GEF Program ID: ¹	9436	
Lead GEF Agency:	UNEP	GEF Agency Program ID:	01357	
Other GEF Agenc(ies):	UNDP DBSA	Resubmission Date:	March 25, 2016	
Other Executing Partner(s):	Costa Rica	Ministry of Environment (MINAE)	Program Duration(Months)	66
	Kazakhstan	Ministry of Investment and Development of the Republic of Kazakhstan		
	Sudan	Ministry of Water Resources, Irrigation and Electricity – The Electricity Regulatory Authority		
	Myanmar	Ministry of Industry		
	Indonesia	Ministry of Energy and Mineral Resource (MEMR)		
	Tunisia	Agence Nationale de la Maitrise de l’Energie (ANME)		
	South Africa	Department of Energy		
	Chile	Ministry of Energy		
GEF Focal Area (s):	Climate Change		Program Agency Fee (\$):	
			UNEP	1,121,344
			UNDP	1,161,303
		DBSA	450,000	
Integrated Approach Pilot	IAP-Cities <input type="checkbox"/> IAP-Commodities <input type="checkbox"/> IAP-Food Security <input type="checkbox"/>			
Program Commitment Deadline: April 2019				

A. FOCAL AREA STRATEGY FRAMEWORK AND OTHER PROGRAM STRATEGIES²:

Objectives/Programs (Focal Areas, Integrated Approach Pilot, Corporate Programs)	Expected Outcomes	Trust Fund	Amount (in \$)	
			GEF Program Financing	Cofinancing
CCM-1 Program 1	Policy, planning and regulatory frameworks foster accelerated low GHG development and emissions mitigation	GEFTF	30,362,753	149,941,000
Total Program Costs			30,362,753	149,941,000

B. INDICATIVE PROGRAM RESULTS FRAMEWORK

¹ Program ID number will be assigned by GEFSEC.

² When completing Table A, refer to the excerpts on [GEF 6 Results Frameworks for GETF, LDCF and SCCE](#).

Program Objective: To mitigate climate change by transforming national and regional markets to energy efficient products.					
Program Component	Financing Type ³	Program Outcomes	Trust Fund	(in \$)	
				GEF Project Financing	Co-financing
1. National child projects on energy efficient lighting, appliances, and equipment	TA / INV	1.1 Markets are transformed to energy efficient lighting, appliances, and equipment providing climate change mitigation benefits (Costa Rica, Kazakhstan, Sudan, Myanmar, Indonesia, Tunisia, South Africa, and Chile STAR allocations)	GEFI	25,877,225	122,230,238
2. Global services for partner countries	TA	2.1 Countries and regions have the guidance to successfully implement market transformation projects (Global Child project) 2.2. Increased capacity of 15 countries' officials to develop and implement projects and policies to advance energy efficiency of lighting, appliances, and equipment. (Global Child project)	GEFI	2,500,000	17,400,000
3. Increasing the ambition of the Global Partnership on Efficient Appliances and Equipment	TA	3.1 Increased number of countries commit to advancing energy efficiency of lighting, appliances, and equipment. (Global Child project)	GEFI	500,000	4,000,000
Subtotal				28,877,225	143,630,238
Project Management Cost (PMC) ⁴			GEFI	1,485,528	6,310,762
Total Project Cost				30,362,753	149,941,000

If Multi-Trust Fund project: PMC in this table should be the total and enter trust fund PMC breakdown here ()

C. CO-FINANCING FOR THE PROGRAM BY SOURCE, BY NAME AND BY TYPE

Country	Sources of Co-financing	Name of Co-financier	Type of Cofinancing	Amount (\$)
Global	GEF Agency	UNEP	In-kind	300,000
Global	GEF Agency	UNDP	In-kind	300,000
Global	GEF Agency	Inter-American Development Bank (IADB)	Grants	1,000,000
Global	GEF Agency	Inter-American Development Bank (IADB)	Loans	3,000,000
Global	Others	International Partnership for Energy Efficiency Cooperation (IPEEC)	In-kind	500,000
Global	Others	CLASP	In-kind	700,000
Global	Others	Natural Resources Defense Council (NRDC, USA)	In-kind	50,000
Global	Others	bigEE (Wuppertal Institute, Germany)	In-kind	550,000

³ Financing type can be either investment or technical assistance.

⁴ For GEF Project Financing up to \$2 million, PMC could be up to 10% of the subtotal; above \$2 million, PMC could be up to 5% of the subtotal. PMC should be charged proportionately to focal areas based on focal area project financing amount in Table D below.

Global	Others	Topten	In-kind	300,000
Global	Others	IEA-4E	In-kind	100,000
Global	Others	Copenhagen Centre on Energy Efficiency (C2E2)	In-kind	800,000
Global	Private Sector	Philips Lighting BV	In-kind	1,200,000
Global	Private Sector	OSRAM Licht AG	In-kind	1,200,000
Global	Private Sector	International Copper Association (ICA)	In-kind	1,200,000
Global	Private Sector	ABB	In-kind	1,200,000
Global	Private Sector	Mabe	In-kind	1,200,000
Global	Private Sector	Arcelik A.S.	In-kind	1,200,000
Global	Private Sector	BSH	In-kind	1,200,000
Global	Private Sector	Haier	In-kind	1,200,000
Global	Private Sector	Gree Electric	In-kind	1,200,000
Global	Private Sector	Electrolux	In-kind	1,200,000
Global	Private Sector	Southern African Power Pool	In-kind	700,000
Global	Private Sector	Southern African Development Community	In-kind	700,000
Global	Private Sector	Global Lighting Association	In-kind	400,000
Global	Private Sector	National Lighting Test Center (NLTC, China)	In-kind	300,000
Sudan	International entity	Philips	In-kind	1,000,000
Sudan	International entity	Osram	In-kind	1,000,000
Sudan	Private Sector	Air conditioner manufacturers	In-kind	1,000,000
Sudan	International entity	National Lighting Test Center, China	In-kind	200,000
Sudan	International entity	International Copper Association (ICA)	In-kind	500,000
Sudan	GEF Agency	UNEP	In-kind	50,000
Sudan	International entity	CLASP	In-kind	50,000
Sudan	International entity	Copenhagen Centre on Energy Efficiency (C2E2)	In-kind	50,000
Sudan	National Government	Electricity Regulatory Authority (ERA)	Cash	1,000,000
Sudan	National Government	Ministry of Water Resources, Electricity and Irrigation (MWRE)	Cash	200,000
Sudan	National Government	Sudanese Standards and Metrology Organization (SSMO)	In-kind	2,756,000
Sudan	National Government	Sudanese Electricity Distribution Company (SEDC)	Cash	200,000
Sudan	National Government	Sudanese Thermal Power Generation Company	Cash	100,000
Sudan	National Government	Merowe Dam Electricity Company	Cash	100,000
Kazakhstan	Recipient Government	Ministry of Investment and Development	In-kind	1,200,000

Kazakhstan	Recipient Government	National Energy Saving Program	In-kind	11,000,000
Kazakhstan	GEF Agency	UNDP	In-kind	300,000
Kazakhstan	Private Sector	Supply Chain Stakeholders	In-kind	5,000,000
South Africa	Private Sector	Eskom	In-kind	19,000,000
South Africa	Private Sector	ABB	In-kind	1,500,000
South Africa	Private Sector	Osram	In-kind	1,500,000
South Africa	Private Sector	Philips	In-kind	1,500,000
South Africa	Private Sector	International Copper Association (ICA)	In-kind	3,000,000
South Africa	Recipient Government	Department of Energy, South Africa	In-kind	600,000
South Africa	Recipient Government	Department of Environmental Affairs	In-kind	500,000
South Africa	Recipient Government	SANEDI	In-kind	700,000
South Africa	International entity	National Lighting Test Center, China	In-kind	250,000
South Africa	International entity	IEA Solid State Lighting Annex	In-kind	100,000
South Africa	International entity	Copenhagen Centre on Energy Efficiency (C2E2)	In-kind	100,000
South Africa	International entity	CLASP	In-kind	150,000
South Africa	International entity	Super-Efficient Equipment and Appliance Deployment (SEAD)	In-kind	200,000
South Africa	GEF Agency	UNEP	In-kind	20,000
South Africa	GEF Agency	UNDP	In-kind	400,000
South Africa	GEF Agency	UNDP	Grants	200,000
South Africa	GEF Agency	DBSA	In-kind	5,000,000
South Africa	GEF Agency	DBSA - Green Fund	Loans	5,000,000
Costa Rica	Recipient Government	Government of Costa Rica	In-kind	2,000,000
Costa Rica	GEF Agency	UNEP	In-kind	25,000
Costa Rica	GEF Agency	Inter-American Development Bank (IADB)	Loans	500,000
Costa Rica	Others	International Partnership for Energy Efficiency Cooperation (IPEEC)	In-kind	50,000
Costa Rica	Others	CLASP	In-kind	100,000
Costa Rica	Others	bigEE (Wuppertal Institute, Germany)	In-kind	100,000

Costa Rica	Others	Topten	In-kind	100,000
Costa Rica	Others	Copenhagen Centre on Energy Efficiency (C2E2)	In-kind	200,000
Costa Rica	Private Sector	Philips Lighting BV	In-kind	800,000
Costa Rica	Private Sector	OSRAM Licht AG	In-kind	800,000
Costa Rica	Private Sector	International Copper Association (ICA)	In-kind	800,000
Costa Rica	Private Sector	Mabe	In-kind	800,000
Costa Rica	Private Sector	BSH	In-kind	800,000
Costa Rica	Private Sector	Electrolux	In-kind	800,000
Costa Rica	Private Sector	National Lighting Test Center (NLTC, China)	In-kind	500,000
Chile	Government Contribution	Ministry of Energy	In kind	2,000,000
Chile	Government Contribution	Ministry of Environment	In kind	500,000
Chile	NGO	Fundación Chile	In kind	250,000
Chile	GEF Implementing Agency	UNEP	In kind	50,000
Chile	Private Sector	Electrolux	In kind	1,500,000
Chile	Private Sector	Samsung	In kind	1,500,000
Chile	Private Sector	LG	In kind	1,500,000
Chile	Private Sector	MABE	In kind	200,000
Indonesia	Recipient Government	Ministry of Energy and Mineral Resource		3,000,000
Indonesia	Recipient Government	Ministry of Energy and Mineral Resource	In-kind	8,950,000
Indonesia	Other	European Commission SWITCH Asia	Grants	70,000
Indonesia	Other	Super-efficient Equipment and Appliance Deployment Initiative (SEAD)	In-kind	70,000
Indonesia	GEF Agency	UNEP	In-kind	40,000
Indonesia	GEF Agency	UNDP	In-kind	80,000
Indonesia	Private Sector	Indonesian Lighting manufacturers	In-kind	13,550,000
Indonesia	Private Sector	Osram	In-kind	350,000
Indonesia	Private Sector	Philips	In-kind	350,000
Indonesia	Private Sector	National Lighting Test Center (NLTC), China	In-kind	200,000
Myanmar	Recipient Government	Ministry of Industry	In-kind	1,000,000
Myanmar	Private Sector	Local appliance industry	Investment	1,000,000

Myanmar	Private Sector	Osram	In-kind	250,000
Myanmar	Private Sector	Philips Lighting	In-kind	250,000
Myanmar	Private Sector	Electrolux	In-kind	250,000
Myanmar	Donor Agency	European Commission (Switch Asia)	Grant	250,000
Myanmar	Donor Agency	Asian Development Bank	Grant	250,000
Myanmar	GEF Agency	UNEP	In-kind	50,000
Tunisia	Recipient Government	Government of Tunisia	Cash and in-kind	15,000,000
Tunisia	Private Sector	Local Lighting Industry	Cash and in-kind	500,000
Tunisia	Private Sector	Osram	In-kind	500,000
Tunisia	Private Sector	Philips Lighting	In-kind	500,000
Tunisia	Private Sector	The Global Efficient Lighting Center	In-kind	300,000
Tunisia	GEF Agency	UNEP	In-kind	30,000
Tunisia	Donor Agency	Bilateral Aid (TBD)	Grants	150,000
				149,941,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, TRUST FUND, COUNTRY, FOCAL AREA AND THE PROGRAMMING OF FUNDS

* Please indicate fees related to this Program. Refer to the [Fee Policy for GEF Partner Agencies](#).

GEF Agency	Type of Trust Fund	Country Regional/Global	Focal Area	Programming of Funds	(in \$)		
					Program Amount (a)	Agency Fee	Total c=a+b
UNEP	GEF TF	Global	Climate Change		3,100,000	279,000	3,379,000
UNEP	GEF TF	Costa Rica	Climate Change		2,000,000	180,000	2,180,000
UNDP	GEF TF	Kazakhstan	Climate Change		3,500,000	315,000	3,815,000
UNDP	GEF TF	Sudan	Climate Change		1,770,000	159,300	1,929,300
UNEP	GEF TF	Myanmar	Climate Change		2,223,578	200,122	2,423,700
UNDP/UNEP	GEF TF	Indonesia	Climate Change		3,895,872	350,628	4,246,500
UNEP	GEF TF	Tunisia	Climate Change		2,399,541	215,959	2,615,500

UNDP/D BSA	GEF TF	South Africa	Climate Change		10,000,000	900,000	10,900,000
UNEP	GEF TF	Chile	Climate Change		1,473,762	132,638	1,606,400
Total Grant Resources					30,362,753	2,732,647	33,095,400

E. PROGRAM'S TARGET CONTRIBUTIONS TO GLOBAL ENVIRONMENTAL BENEFITS⁵

Provide the expected program targets as appropriate.

Corporate Results	Replenishment Targets	Indicative Program Targets
1. Maintain globally significant biodiversity and the ecosystem goods and services that it provides to society	Improved management of landscapes and seascapes covering 300 million hectares	<i>hectares</i>
2. Sustainable land management in production systems (agriculture, rangelands, and forest landscapes)	120 million hectares under sustainable land management	<i>hectares</i>
3. Promotion of collective management of transboundary water systems and implementation of the full range of policy, legal, and institutional reforms and investments contributing to sustainable use and maintenance of ecosystem services	Water-food-ecosystems security and conjunctive management of surface and groundwater in at least 10 freshwater basins;	<i>Number of freshwater basins</i>
	20% of globally over-exploited fisheries (by volume) moved to more sustainable levels	<i>Percent of fisheries, by volume</i>
4. Support to transformational shifts towards a low-emission and resilient development path	750 million tons of CO _{2e} mitigated (include both direct and indirect)	<i>69 to 150 million tonnes</i>
5. Increase in phase-out, disposal and reduction of releases of POPs, ODS, mercury and other chemicals of global concern	Disposal of 80,000 tons of POPs (PCB, obsolete pesticides)	<i>metric tons</i>
	Reduction of 1000 tons of Mercury	<i>metric tons</i>
	Phase-out of 303.44 tons of ODP (HCFC)	<i>ODP tons</i>
6. Enhance capacity of countries to implement MEAs (multilateral environmental agreements) and mainstream into national and sub-national policy, planning financial and legal frameworks	Development and sectoral planning frameworks integrate measurable targets drawn from the MEAs in at least 10 countries	<i>Number of Countries:</i>
	Functional environmental information systems are established to support decision-making in at least 10 countries	<i>Number of Countries:</i>

PART II: PROGRAMMATIC JUSTIFICATION

1. Program Description. Briefly describe: a) the global environmental and/or adaptation problems, root causes and barriers that need to be addressed; b) the baseline scenario or any associated baseline program/projects, c) the proposed alternative scenario, with a brief description of expected outcomes and components of the program, d) incremental/ additional cost reasoning and expected contributions from the baseline, the GEFTF, LDCF, SCCF, and co-financing; and e) innovation, sustainability and potential for scaling up.

The Program builds on the UNEP-GEF global project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment,” (UNEP Project #5831), hereinafter called the “SE4ALL Global Project”. The project is called this due to its contribution to the UN Secretary General’s Sustainable Energy for All (SE4ALL) initiative’s Lighting and Appliance & Equipment Accelerators. The SE4ALL Global Project has formed a global partnership, recently named United for Efficiency (U4E), which compiles international organizations, like-minded organizations, and private sector companies.

⁵ Provide those indicator values in this table to the extent applicable to your proposed program. Progress in programming against these targets for the program per the *Corporate Results Framework* in the [GEF-6 Programming Directions](#), will be aggregated and reported during mid-term and at the conclusion of the replenishment period.

Further, by the end of the project, it will have the commitment from at least thirty countries to transform their markets to energy efficient lighting, appliances, and equipment.

The proposed “Leapfrogging markets to high efficiency products (appliances, including lighting, and electrical equipment)” proposed GEF program, hereinafter called the “Global Leapfrogging Program” will utilize the resources already developed under SE4ALL Global Project, such as country assessments and best practice policy guides in order to increase the number of countries committing to advance energy efficient products. Further, it will follow the consensus recommendations on the policy framework when developing technical guides and training under the Global Leapfrogging Program. This relationship is reflected in the Figure 1 below and the text describing each component.

Figure 1: Relation between the SE4ALL Global Project (#5831) and the Global Leapfrogging Program (#9083)



The Global Leapfrogging Program proposes to countries an integrated policy approach under Component 1 to meet their individual policy needs and priorities. The Global Leapfrogging Program allows for the use of a coherent and consistent integrated approach, providing greater likelihood of success and increased harmonization between countries. Integrated policy approaches (minimum standards, MVE, communication campaigns and financial mechanisms, and environmentally sound management) have been demonstrated to permanently transition markets to energy efficient products while addressing environmental concerns.

As is described in Figure 1 and further in description of the components below (pages 9-12), the support to countries can be described as follows:

Implementation of “national-child projects” (National STAR allocation)

- **Countries included:** countries that allocate their National STAR Allocation to projects promoting energy efficiency of lighting, appliances, and equipment. It is expected that up to 10 countries will utilize their STAR allocation under this programmatic approach on lighting, appliances, and equipment.
- **Type of support provided:** Implementation of national projects to advance energy efficiency of lighting, appliances, and equipment through the integrated policy approach.

Virtual Center of Excellence available to all country partners (Global Funding)

- **Countries included:** all countries that join as member of global partnership to the en.lighten and/or U4E initiatives. It is expected that 100 developing countries and emerging economies will join. This will be broken down between 30 countries that committed to the partnership under the SE4ALL Project (GEF5) and the 70 countries that committed to the partnership on the Global Leapfrogging Program (GEF6).
- **Type of support provided:** countries will be supported through the virtual Centre of Excellence, including:
 - Technical how to guides on topics of interest for the advancement of energy efficient products;
 - Technical webinars on specific topics of the integrated policy approach;
 - Country assessments showing the financial, environmental and GHG benefits of a transition to energy efficient products;
 - Regional status reports describing the policies in place, potential benefits of a market transformation, and opportunities for harmonization;

Training provided to “non national-child project” countries (Global Funding)

- **Countries included:** The SE4ALL Global Project will prioritize the 15 countries that will receive this support.
- **Type of support provided:** The program will host in person training for trainers to bring together representatives from partner countries to increase capacities on implementing MEPS, supporting policies, MVE, and environmentally sound management.

Training provided to “national-child project” countries (Global Funding)

- **Countries included:** The program will provide support up to the 10 expected 10 “national-child project” countries that submit a project under this program.
- **Type of support provided:** The program will host in person training for trainers to bring together representatives from partner countries to increase capacities on implementing MEPS, supporting policies, MVE, and environmentally sound management.

Outreach to countries (Global Funding)

- **Countries included:** outreach will be provided to developing countries and emerging economies. Countries will be prioritized under the SE4ALL Global Project.
- **Type of support provided:** the program will provide outreach to countries through regional workshops to promote coordinated action and side events alongside major environmental/energy events. The outreach will increase the number of governments committing to advance energy efficiency of lighting, appliances, and equipment, while also promoting regional coordination. It is expected 100 developing countries and emerging economies will join the en.lighten/United for Efficiency Global Partnership. This is broken down by the 30 countries that committed to the partnership under the SE4ALL Project and the 70 countries that committed to the partnership on the Global Leapfrogging Program.

The Global Leapfrogging Program was originally submitted (GEF Council October 2015) with child projects of Costa Rica, Kazakhstan, and Sudan and a projected eight additional countries are expected to join. The project is now being re-submitted with child projects in Myanmar, Indonesia, Tunisia, South Africa, and Chile. This means that a final submission will occur with 3 new countries. Other countries interested in submitting a child project under Global Leapfrogging Program, include China and Lesotho.

For each child project, a concept note including national background, policy status, baseline scenario, description of individual national components, and potential savings.

The virtual Centre of Excellence that has been developed by UNEP, United Nations Development Programme (UNDP), the International Copper Association (ICA), CLASP and the Natural Resources Defense Council (NRDC), along with the UNEP-GEF SE4ALL Global Project (#5831) will support the child projects with consensus recommendations on best practice policies and strategies. Under Component 2 of this Program it will extend virtual Centre of Excellence work previously completed by providing in-depth “how to” guides (MEPS –

minimum energy performance standards MVE – monitoring, verification, and enforcement; supporting policies, and environmentally sound management), training for government officials, and also providing remote support for government officials. Further, under Component 3, a regional status reports will be developed and regional workshops will be hosted in order to increase the number of countries committing to transform their markets and increase regional harmonization.

By providing global funding for Component 2 and 3, the project will have immense impact in increasing the capacities of countries to implement projects on energy efficiency. These capacities will allow countries to successfully implement projects using their GEF STAR allocation and also allow some countries to implement market transformation projects independently with national budget or with outside funding. Component 2 will provide light support and guidance to 15 “non national-child project” countries and the 10 “national-child project” countries to ensure that best practices are implemented and using a common approach across different countries, while adapting to national circumstances. By doing so, GEF resources will be able to be extended further (in scope and/or depth), while also providing higher impact results, translating into greater GHG emission reductions.

Component 1: National child projects on lighting, appliances, and equipment

The Global Leapfrogging Program proposes five menu options to countries to be implemented as child projects to this program. Based on national circumstances, the country can implement a combination of one or more menu options for defined set of appliances and equipment, assuming the country meets the child project selection criteria as described in section 9. The project will ensure prerequisite criteria are in place, such as a national strategy for advancing markets to energy efficient products.

Further, the Global Leapfrogging Program allows countries to define the products of focus to be included in the child project based on their national circumstances. Potential products could be refrigerators, room air conditioners, electric motors (0.75kW to 375kW), distribution transformers, water heaters, lamps and controls, and other potential priority products such as pumps, TVs, computers and set-top boxes. Priority products can be selected based on the level of policies in place in the country and/or the products that offer the highest energy and greenhouse gas savings.

The menu options follow the integrated policy approach, which is proven method under the UNEP/GEF en.lighten initiative to permanently phase-out inefficient products from the market. The child projects should permanently and sustainably shift the markets to energy efficient products, which is achieved through minimum energy performance standards.

Menu Option 1: National strategy for advancing market to energy efficient products

The program will develop countries’ national strategies for energy efficient products. Each strategy will provide the overall framework and goals for the transition. The purpose of a national strategy is to focus priorities by developing a common vision and goals on transforming the market to energy efficient products. The strategy will define the scope of products based on an assessment of electricity demand and electricity usage, as well as anticipated consumer trends. The strategy will set national objectives and a detailed roadmap based on the integrated policy approach for each individual product, or, groups of products. Such efforts will ensure a coherent strategy, which will save time, effort and resources, and provide a systematic and holistic plan to ensure the success to transition to energy efficient appliances, equipment, and lighting.

Each national strategy can and should be set to align with national climate change mitigation goals and commitments. Within their national strategies, countries will calculate the projected emission reductions to be achieved by certain dates (for example, 2020 and 2030), allowing them to stay on track to achieve their broader climate and environment goals.

- Detailed estimated savings (GHG, financial, and energy) to inform decision making on developing policies, strategies, and projects.
- Defining the scope of products to be included in the national strategy based on the country circumstances.
- Identifying and quantifying national efficiency objectives and targets.
- Formation of working groups on MEPS, MVE, supporting policies and environmentally sound management.
- Work plan describing how to reach the country’s goals, including responsible organizations,

key persons, deliverables and a timeline.

- Training and capacity building with stakeholders to understand the economic, social, and environmental benefits of advancing a market to energy efficient products.

Menu Option 2: Implementation of regulatory mechanisms, including minimum energy performance standards (MEPS)

MEPS are mandatory measures that permanently remove the least efficient products from the market and thereby encourage innovation and rapid adoption of higher efficiency products. Menu Option 2 is designed to support countries in developing regulatory mechanisms, including MEPS. Activities will include:

- Determining the performance levels and other requirements of the products, taking into account national circumstances and the potential to harmonize with international or regional standards.
- Input from stakeholders including government standards and test agencies, customs, standardization institutes, certification and accreditation bodies, test laboratories, manufacturers, suppliers and distributors of lamps, consumer organizations, civil society, technology research institutes, electric utilities and private sector.
- Definition of authority to promulgate the MEPS (such as a standards body) and a specified timescale to make updates.

Menu Option 3: Creation of monitoring, verification and enforcement (MVE) capacities in countries and regions to ensure an effective transition to efficient appliances and equipment markets

The success of MEPS and a market transition depends on a well-functioning system of monitoring, surveillance, control, and testing facilities. This component of the program will promote enforcement and full compliance with MEPS. International experience indicates that unless effective market surveillance systems are established and enforced, substandard products continue to enter national markets, reducing energy and financial savings and thus spoiling the market for high efficiency, high performance products. MVE capacities must include methods and facilities for testing and evaluating higher efficient products. MVE activities potentially include: capacity building for professional personnel; continuously assessing the process and conducting market surveillance to verify product efficiency; establishing a public registry for products and for validating declarations of conformance; and, enforcing actions against manufacturers, suppliers or retailers of non-compliant products.

This component will strengthen the operational elements that guarantee compliance with MEPS. To enhance lighting MVE capacity in the country, the program will facilitate sharing of information and skills between neighboring countries and countries with similar profiles. Further, the program will encourage regional cooperation and harmonization of MVE schemes to discourage entry of poor-performance products.

- Developing a MVE scheme and programme entry conditions by defining the specific elements of monitoring, verification, and testing, and various options for addressing non-compliant products;
- Implementing in coordination with standards and labelling programmes;
- Developing and/or strengthening testing capacity and regional cooperation;; laboratories and expanding capacity;
- Regional collaboration and harmonization to reduce costs through shared laboratories and increased trade of products.

Menu Option 4: Supporting policies for the market transformation to energy efficient products

Supporting activities such as communication campaigns, distribution projects, and financial schemes can all assist in facilitating public acceptance and deployment of efficient products in the market. These policies and strategies assist in overcoming barriers of lack of knowledge of energy efficiency and the barrier of increased upfront costs (purchase price of the product).

- **Financial Mechanisms** will be designed to assist purchasers to meet the initial costs of products and to capture the savings over the products' lifetimes. The program will assist countries in developing innovative financial mechanisms. These could be addressed directly to purchasers and consumers (downstream support), or, via manufacturers (upstream support) or via retailers, distributors or utilities (midstream support). For example, the program will work with utilities and banks to consider on-bill financing for energy efficient products, thus reducing the initial investment and accommodating limited cash flow over the lifetime of the product.
- **Public awareness campaigns** will explain the meaning of energy labels and the rationale for minimum standards and encourage their use in purchase decisions. Campaigns may include

working with retailers to train staff to help and advise consumers. Depending on the product focus, the communication campaigns could focus on audiences including, business owners, building managers, retailers and policymakers, or, the general population.

- **Distribution campaigns** to a portion of society, such as underprivileged populations, can allow for increased familiarity of energy efficient products and their benefits, therefor increasing demand for the products.
- **Demonstration projects** in high profile public buildings or in businesses show other purchasers and the public that high efficiency products work well and deliver measurable savings. For example, a ministry of environment could be retrofitted with efficient lighting and air conditioning to showcasing national commitment to reducing energy consumption while saving public funds through reduced operating costs.

This component will also support developing countries that have national manufacturing or assembly to be able to produce products with high-energy efficiency and in environmentally sustainable manner. Three activities are proposed to enhance the capacities of local manufacturers and supporting the conversion of their facilities to produce energy efficient products.

- **Training to design and manufacture higher efficiency products:** The training will support the local industry on development of the skills required to design and manufacture or assemble higher efficiency products. On-site training and knowledge transfer will support and motivate local industry to achieve quality and performance standards. Outcomes of this activity include business plans for local industry participants to incorporate best practices and upgraded equipment and processes.
- **Access to financing for improved facilities:** The program will support local industry to propose and seek funding to upgrade their facilities to be able to manufacture high efficiency products in a sustainable manner.

Menu Option 5: Ensuring environmentally sound management and sustainable transition to efficient appliances and equipment

Environmentally sound management systems ensure that precautions are taken to safeguard the environment and human health throughout the full lifecycle of appliances and equipment. An environmentally sound management legal framework incorporates and expands upon existing laws and efforts. Support will be given to ensure compliance with global international agreements for the reduction and safe management of hazardous waste, such as the Minamata Convention on Mercury, Stockholm Convention on Persistent Organic Pollutants, and Basel Convention on the Control of Transboundary Movement of Hazardous Waste. This component will coordinate with UNEP's OzonAction Team in the development of Refrigerant Management Plans, standards and actions combining the objectives of eliminating ozone depletion with reducing GHG emissions.

- National frameworks and strategies are developed for environmentally sound management of appliances and equipment;
- Training is delivered to government authorities, retailers and collection services;
- Waste management systems are established for spent products;
- Communication campaigns on proper disposal of used products.

More specifically, the activities in this component will support countries in developing policies and strategies for each individual appliance and equipment product type, as suggested below.

- **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. Countries will be supported to implement regulations, policies and standards promoting refrigerants with low or zero global warming potential (GWP). The tools and support provided will also address any safety concerns this may have, both in the manufacturing process and during the products' use.
- **Distribution transformers:** Many developing countries still need to eliminate old transformers containing polychlorinated biphenyls (PCBs) and establish processes to ensure environmentally sound disposal of the PCBs.
- **Electric motors:** repair of motors, which includes the burning off of accumulated organic material, can produce fumes that are unsafe for the workers and harmful to environment.

- **Lighting:** Lighting technologies may contain hazardous substances, particularly older and low-efficiency mercury-added lamps, and, old magnetic ballasts for discharge lamps, which may contain PCBs. The en.lighten initiative’s integrated policy approach includes environmentally sound management principles and addresses specific manufacturing, handling, operation and end-of-life issues.

Component 2: Global services for partner countries

Component 2 of the Global Leapfrogging Program extends the activities of the virtual Global Centre of Excellence, founded under the Efficient Appliance and Equipment Global Partnership Programme and funded under GEF project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment.” The virtual Centre of Excellence is supported by a network of experts from partner public organizations and private sector companies, including UNDP, CLASP, bigEE (Wuppertal Institute) 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, BSH, Haier, Gree Electric, and Electrolux.

Component 2 will result in countries being prepared to successfully implement the activities of a market transformation project while also ensuring that resources are not duplicated with each project (for example guides being used across all GEF project). This approach provides increased coordination between countries as they develop the policies in the country based off best practice recommendations. Further, this component will support 15 partner countries to have increased capacities (through training) to carry out projects and policies to transform their market. The 15 partner countries will be identified under the current GEF project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment.” The 10 “national-child project” countries would also be provided with training that would be funded through global funding. The resources and support include:

- **‘How to’ guides (available to 100 country partners):** the in-depth steps to developing particular parts of the integrated policy approach, including MEPS, financial mechanisms, MVE, and environmentally sound management. The guides will be topical with chapters describing the particular differences for each appliance and equipment.
- **Remote support (available to 100 country partners):** Through the virtual centre of excellence, the project will support country projects with call in centre functionality to address issues ranging from manufacturing to end of life of products. Experts on each subject of the integrated policy approach will be made available to support countries in developing and implementing their policies. Further, general support will be provided through a learning portal (available to the child projects but also the general public) of the program’s website with training video, online training courses, webinars, and calculators.
- **Regional status reports (available to 100 country partners):** showing the level of policies, products in use, manufacturing, and potential savings (energy, financial, and climate savings) with a transition to energy efficient products. Potential regions: Russia (+Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan), Eastern Europe plus Caucasus, ASEAN (+Papua New Guinea), China, India, MENA, ECOWAS, Eastern Africa, SADC, Central America (+Mexico), Mercosur
- **Training for trainers (available to 15 “non national-child project” countries and up to 10 “national-child project” countries):** The project will host in person training sessions to bring together representatives from partner countries to increase capacities on implementing MEPS, supporting policies, MVE, and environmentally sound management. The representatives of each session will then be qualified to return to their country and replicate the training within their departments and/or ministries. Training guides, material and PowerPoint presentations will be shared with participants to ensure they can adequately replicate the training. This approach ensures increased collaboration across countries while also increasing the use of a common methodology to transforming markets to energy efficient products. The criteria to receive this support will be based on the country being a partner to initiative, commitment to advance energy efficiency is shown through national communications; funding for project implementation is available (for example from a child project, other GEF Child Project, and other sources of funding, including domestic funding, Germany’s International Climate Initiative, European Commission); regional diversity of countries supported. Through the funding that is currently provided in this program, the training will be provided to 15 “non national-child project” countries and the expected 10 “national-child project” countries.

The 'how to' guides, remote support, and regional status reports will be available to all countries that partner with the initiative. The project will prioritize the countries that will be included in the training based on their ambition to implement policies, obtained funding to carryout the polices, and also based on GHG emission reductions potential.

The virtual Centre of Excellence, will communicate the availability of the tools and ensure the child projects do not duplicate resources/tools within their own project.

Component 3: Outreach on Efficient Appliances and Equipment

Through Component 3 of the Global Leapfrogging Program, there will be increased number of governments committing to advance their markets to energy efficient appliances and equipment. The program will achieve commitment of 100 countries, increasing by 70 over the goal of the GEF SE4ALL Global Project (Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment - UNEP #5831). To complete this, the Global Leapfrogging Program will use the resources and tools developed under SE4ALL Global Project (#5831), such as the country-by-country assessments and best practice policy guides. Carrying-on the global campaign from the preparatory SE4ALL Global Project, this component will host regional workshops to gain the political commitment from governments to transform their markets, while also encouraging increased regional harmonization. The project will utilize tools and reports developed under GEF project #5831 to maximize GEF resources, such as using the country Assessments and policy brochures on best practice policies.

- **Regional workshops launching regional status reports and regional/national commitment:** Regional workshops will be hosted in each region to bring together each country’s ministry of energy, ministry of environment, and standard authority. The workshops will gain political commitment from governments to transition their markets to energy efficient products and also form agreement within the region to harmonize policies and standards. The workshops will provide the opportunity for increased coordination across projects with best practice policies and for countries to provide lessons learned on the existing policies and projects.
- **Side events alongside major environmental and energy events:** The project will host side events and workshops alongside major environmental and energy events to ensure that energy efficiency of lighting, appliances, and equipment stays at the top of the agenda in order to receive commitment for national decisions makers to advance their markets.

2. Stakeholders. Will program design include the participation of relevant stakeholders from civil society and indigenous people? (yes /no) If yes, identify key stakeholders and briefly describe how they will be engaged in program design/preparation:

Stakeholder	Role
Government and national standards-setting bodies	Policy makers, officials and technical staff within government ministries will play a crucial role in the implementation of the proposed program. The Ministry of Industry and Energy will be the national project partner in each country. The Ministry of Ecology and Natural Resources will play a key role because climate mitigation activities as well as mercury control competencies rely on this body. Other ministries such as trade, commerce, finance, standards and quality control will participate in project oversight and implementation of market control activities. The national standards-setting body will also play a key role in the proposed project implementation.
Energy utilities	Electrical utilities and energy service providers have an incentive to encourage efficiency to lower capital costs for infrastructure. Regulated or state-owned utilities may have additional incentives. Utilities will provide key inputs to the program regarding patterns of electrical demand, by sector.
Testing laboratories and technical institutions	Test procedures are an important technical foundation for MEPS. Testing laboratories will take part in the process of developing standards and quality control measures.

Environmental advocates and consumer groups	Non-governmental organizations that advocate responsible energy policies will contribute their perspectives during the development of the national strategy for energy efficient products. They will provide a balancing perspective to manufacturers with regard to the stringency of MEPS and MVE schemes. Input from civil society consumer groups can ensure that regulations do not require overly expensive or less functional lighting products.
Manufacturers, importers, distributors and retailers of lighting products, appliances and equipment	<p>Manufacturers, importers, distributors and retailers are directly affected by energy efficiency regulations. They have valuable information about production costs and market structures. MEPS necessarily impose some burdens on manufacturers and importers, but these can be acceptable as long as they affect all companies equally and also introduce new business opportunities. Domestic and international firms will provide their input. Equipment retailers will comment on the proposed program and its future implementation by characterizing the market and consumer response to product efficiency and pricing.</p> <p>In order to ensure industry readiness of local industry, the program offers support to local manufacturers and assembly to ensure they can produce high energy efficient products in a sustainable manner.</p>

3. Gender Consideration. Are gender considerations taken into account? (yes /no). If yes, briefly describe how gender considerations will be mainstreamed into program preparation, taking into account the differences, needs, roles and priorities of men and women.

In the project preparation phase, adequate consultation will be carried out with all stakeholders and special consideration will be given to gender, allowing for equal inputs from both men and women. The views, experiences, and interests of women and men will be sought and taken into account during the program and child projects. The child projects will undertake consultations with organizations working on climate change and gender equality to analyze expected roles and responsibilities of men and women in the development of the project outputs. Through these consultations, the countries will include a section on gender consideration in their Implementation Plans.

Efforts will also be made to have acceptable gender representation in project management structures (committees, institutional frameworks) and capacity building actions (trainings, workshops,) under this project. Institutions to be consulted on gender issues at national level will include, but not limited to: Ministries in charge of gender, the gender focal point for the Ministry of Energy, civil society organizations working in the fields of gender and climate change as well as research institutions and development partners working on gender issues.

4. Benefits. Describe the socioeconomic benefits to be delivered by the program at the national and local levels. Do any of these benefits support the achievement of global environmental benefits (for GEF Trust Fund), and/or adaptation to climate change?

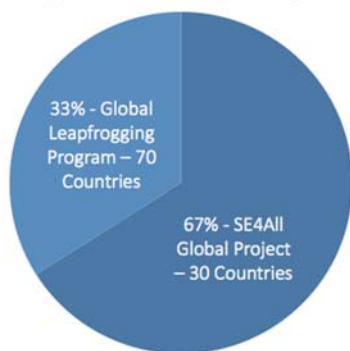
The project uses a similar approach as under the SE4ALL Global Project (Full name: UNEP-GEF global project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment”) to calculate greenhouse gas savings. However indirect emissions are not accounted for, as they have been under the SE4ALL Global project in order to offer a more conservative approach.

In addition to the above approach the methodology estimates emissions reductions (post project direct only) ranging from 69 million tCO₂ to 150 million tCO₂. This is based on a market transition to efficient appliances and equipment in three product groups (refrigerators, room air conditioners and distribution transformers are taken into account for the calculation) in non-OECD markets, over the ten years following the project completion.

A lower and upper savings potential has been provided for the global components with a range of savings the project can claim. The lower range assumes that the products in the market comply with energy efficiency standards by 2022 while the upper range assumes the market complies by 2018. The upper bound assumes 60% of the products in the market comply with standards, which is consistent with international experiences of market compliance and accounts for countries that sign up for the global partnership, but don't implement projects and policies to advance energy efficiency in their country. The more conservative lower bound assumes a slightly lower compliance ratio of 50%.

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 2.3 to 5.5 billion tCO₂ over the ten years following the project completion. The SE4ALL project aims to persuade 6-7 large markets (for example China, India, Brazil, etc) among 30 countries, to reach 2/3 of the non-OECD market. as is shown in the below pie chart.

Total potential CO₂ Savings in Non-OECD Countries for 3 Products⁶⁷

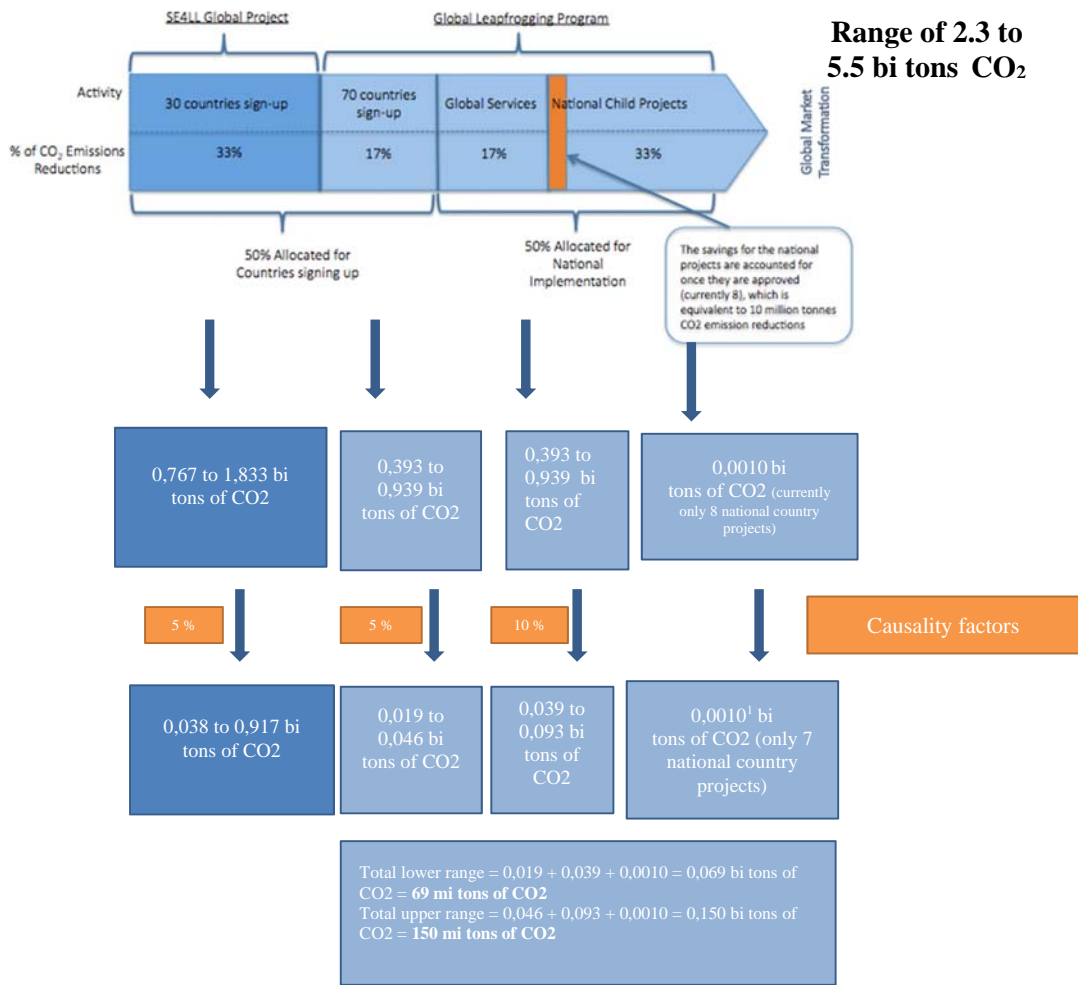


The figure shows the allocation of savings between the savings between the SE4ALL Global Project and the Global Leapfrogging, along with the share allocated to the national child projects that sign up.

⁶ Reach to nearly 100% possible by prioritizing countries (such as the BRICs – Brazil, Russia, India, and China) with high GHG emission reduction potential

⁷ A conservative approach was taken by assuming countries would implement policies for just three products

Share of savings between the SE4ALL Global Project (# 5831) and Global Leapfrogging Program (#9083)



Benefits under Component 1:

For each child project, the project does not account for the full 100% of the savings as the previous UNEP-GEF global project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment” has already built the political will for action in countries and laid the foundation to achieve a permanent and sustainable market transition. The potential savings of the project will be 33% of the total savings for that country, with the remaining portion being split between gaining of political commitment (50%) and under Component two of this project proposal (17%).

The following table shows the projected savings under the Program for the targeted number of fifteen child projects:

	Cumulative GHG reduction (tCO₂)
Post-project direct emission reduction	33% · 5,529,409,982 = 1,824,705,924
Post-project direct emission reduction	33% · 5,529,409,982 = 1,824,705,924

The full expected savings in the initial project countries include environmental benefits of nearly 4.6 million annual CO₂ reduction as per the table below. Additionally financial and energy savings will also be achieved by the project.

For example in Costa Rica, annual energy savings will be 1,000 GWh allowing for a more stable electricity grid and electricity capacity for economic development. The annual financial savings will be approximately 112 million USD (all figures are for the year 2030/ sources: UNEP; en.lighten Initiative). The below table presents the greenhouse gas savings for the initial project countries. As described above, this Program will claim 33% of the total savings in each country, which is also shown in the below table.

Annual Savings Potential of Child Projects in 2030

	% allocation	GHG (tonnes CO₂)	% allocation	GHG (tonnes CO₂)
Costa Rica	100%	72,000	33%	23,760
Kazakhstan	100%	4,200,000	33%	1,386,000
Sudan	100%	365,106	33%	120,485
Myanmar	100%	132,000	33%	43,560
Indonesia	100%	8,000,000	33%	2,640,000
Tunisia	100%	330,000	33%	108,900
South Africa	100%	17,000,000	33%	5,610,000
Chile	100%	683,000	33%	225,390
Full potential savings	100%	30,099,106	33%	10,158,095

Please see section IV of the child projects for a full description of the national savings in each country.

Benefits under Component 2:

The support provided to partner countries that committed to shift their markets to efficient appliances will enable partner countries to achieve this goal with their own efforts or other resources. Following the same logic as explained above, the project does not account for the full 100% of the savings, but for a share of 17% that relates to the services provided to partner countries.

Further, the calculation assumes a 10% causality factor meaning, of the full potential of emissions reductions coming from this category, only 10% will be captured through this project path. The 10% causality reflects that the country officials will have greater potential to implement projects or strategies for transitioning, however it does not result in the entire transition, which could be supported through other channels, such as a Child Project.

The following table shows the projected savings under the Program for Component 2 fifteen countries:

	Cumulative GHG reduction (tCO₂)
Post-project direct emission reduction excl. national	Lower range: 17% · 10% · 2,314,883,861 = 39,353,026

child projects	Upper range: $17\% \cdot 10\% \cdot 5,529,409,982 = 93,447,029$
Total direct and indirect	Range of 39,353,026 to 93,447,029

The expected post-project direct emission reduction under Component 2 in fifteen partner countries amounts to 39 to 93 Megatonnes CO₂ reduction.

Benefits under Component 3:

Under Component 3 of the program the project will extend the number of partner countries from 30 to 100, accounting for almost the entirety of the developing countries. Following the same approach as under the GEF project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment”, the project will account for 33% of the total savings for creating the political will of countries and stakeholders to transform their markets to efficient products. The project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment” accounted for 2/3 of the post-project direct and indirect emission reductions from 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 over the ten years following the project completion. Therefore Component 3 of this project will account for the remaining 1/3.

Further, the calculation assumes a 5% causality factor meaning, of the full potential of emissions reductions coming from this category, only 5% will be captured through this project path.

	Cumulative GHG reduction (tCO₂)
Post-project direct emission reduction	Lower range: $17\% \cdot 5\% \cdot 2,314,883,861 = 19,676,513$ Upper range: $17\% \cdot 5\% \cdot 5,529,409,982 = 46,723,514$
Total direct and indirect	Range of 19,676,513 to 46,723,514

Total emissions reductions calculations for the Global Leapfrogging Programme:

Global Savings	Calculations	tons CO₂ emissions reduction	Causality Factor	Allocated in the Project
Component 3: 70 non-OECD countries sign in	post-project direct	393,530,256 to 934,470,287	5%	19,676,513 to 46,723,514
Component 2: Global services (light touch)	post-project direct	393,530,256 to 934,470,287	10%	39,353,026 to 93,447,029
Component 1: National child projects (only 8 child country projects)	post-project direct	10,158,095	100%	10,158,095
Total				69,187,634 to 150,328,638

A more detailed assessment on the potential GHG savings will be conducted at CEO endorsement for both the global components and the individual national projects.

5. Risks. Indicate risks, including climate change risks, potential social and environmental future risks that might prevent the program objectives from being achieved, and if possible, propose measures that address these risks to be further developed during the program design:

Risk Description	Risk level	Mitigation measure
Lack of engagement of regional and/or national manufacturers of appliances, equipment, and lighting	Medium	<ul style="list-style-type: none"> (i) Engage with regional and national manufacturers under Component 1 (supporting policies) to ensure their readiness (ii) Ensure regional and national manufacturers are properly consulted during the national strategy for energy efficient products. (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, link the program 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; (iii) The UNDP and World Bank offices will gain the support and commitment of government officials and ministries; (iv) Involve the UNEP Regional Offices for advice and contacts for the implementation of program activities; (v) Provide technical assistance to overcome other institutional barriers (e.g. a lack of resources and skills to implement and enforce MVE); (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, NAMAs, or other means).
Weak government support, which leads to non-adoption or ineffective enforcement or policies and regulations.	Medium	<ul style="list-style-type: none"> (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; (ii) Improve the institutional arrangements for the enforcement of product standards and quality norms (iii) Effectively communicate to government policymakers about the benefits to be gained from appliance energy efficiency policy. (vii) Utilize UNDP country offices and World Bank to mobilize the support and commitment of government officials and ministries; (viii) Launch national and regional projects to

		obtain government support and transform effectively the markets.
Low-level participation from the private sector actors including manufacturers and distributors.	Low	<ul style="list-style-type: none"> (i) Involve the private sector key players from the project design stage; (ii) Disseminate latest information on the program's developments and events through appropriate channels; (iii) Identify needs and demands through continuous dialogue; (iv) Involve the UNEP Executive Director to obtain participation and progress from companies; (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; (vi) Effectively communicate to manufacturers and distributors about the benefits and economic opportunities to be gained from appliance energy efficiency policy.
Delayed implementation of activities that are baselines for specific incremental activities of the proposed program	Low	<ul style="list-style-type: none"> (i) During the proposed program inception meeting the precise role of each partner and their responsibilities will be established. (ii) During the global inception meeting, a realistic schedule and plan will be established among responsible agencies and program partners.

6. Coordination. Outline the institutional structure of the program including [monitoring and evaluation](#) coordination at the program level. Describe possible coordination with other relevant GEF-financed projects and other initiatives.

The program seeks the collaboration with multiple GEF agencies, including UNEP, the United Nations Development Programme, the World Bank, and regional development banks (Asian Development Bank (ADB), African Development Bank (AFDB), Development Bank of Southern Africa (DBSA), and European Bank for Reconstruction and Development (EBRD) and Inter-American Development Bank (IADB)). The program will start with UNEP, and UNDP implementing projects, however other GEF agencies are encouraged to submit relevant projects under the programmatic approach.

UNEP will serve as the lead Program Coordinating Agency and oversee the final design and development of expertise to assist countries in their transition to energy efficient products. UNEP will lead the coordination of global activities including support to 15 partner countries to develop a policy framework to transition their market to energy efficient products. Additionally, UNEP will lead the development of common methodologies and guidance through the centre of excellence, coordination of MVE, generation of country data and overall benefits of the transitions, and providing leadership to achieve a global political consensus. These global activities are necessary to provide 15 partner countries with specialized expertise on energy efficient products, which is required to support them in development and implementation of cost effective policies. UNEP, through the Centre of Excellence, will also lead in providing technical assistance to countries, which is incorporated in Component 1 of the program.

Program coordination and management: The program will be guided by a Program Steering Committee, which will meet annually to provide strategic advice and facilitate program level coordination and communication. The PSC will include representatives from each of the program's countries, the GEF agencies (UNEP and UNDP), and other partners to the project.

Global centre of excellence: UNEP will continue to lead the global Centre of Excellence that will provide expertise and provide overall coordination of national projects. The Centre will be composed of experts on international energy efficiency of appliance, equipment and lighting. The Centre will work with its partners at UNDP and other partner agencies by providing expertise to project implementation in countries, including coordinating workshops to develop a national strategy, expertise in developing standards, and training to national officials to ensure effective implementation.

Country consultations: The program is country led with the national with consultations regularly occurring with the countries listed in the program. The countries expressed their strong support for the project through their respective endorsements.

National project implementation: Each national project will include a national Steering Committee including representatives from relevant local and national governments, NGOs, private sector partners, and GEF agencies (UNEP and UNDP). The National Steering Committees will meet bi-annually to review progress, provide strategic advice and support adaptive project management.

UNEP will lead the implementation and rollout of integrated national and regional appliance efficiency strategies, policies and concrete on-the-ground implementation of activities. UNDP will also carryout national activities in countries they have a strong experience in implementation of energy efficiency projects, while also providing support with the strong relationships they have in local governments and institutions. By utilizing the expertise and policy recommendations created by UNEP, UNDP will ensure they are implementing strategy that results in a permanent transition to energy efficient products. Further, in some cases, UNEP may also lead national activities when UNEP has strong relationship in a country or region.

Further, the project seeks partnership from regional development banks to leverage their strengths regionally and also as an additional source of financing of national projects.

Coordination with on-going and past GEF projects:

The Program aims to include future GEF projects on energy efficient lighting, appliances, and equipment as child projects under this Global Leapfrogging Program in order to ensure best use of GEF, increased collaboration and increased harmonization of through best practice recommendations. However, the Global Leapfrogging Program will support on-going GEF projects in the field of energy efficiency of lighting, appliances and equipment. Country officials in the project countries will have access to the technical how to guides, the virtual Centre of Excellence, and the training. Some projects that could benefit from this collaboration include (non-exhaustive list):

- UNEP's Delivering the Transition to Energy Efficient Lighting in Residential, Commercial, Industrial, and Outdoor Sectors project in Pakistan
- UNDP's Low Carbon Development Path Promoting Energy Efficient Lighting and Solar Photovoltaic Technologies in Dominica
- UNDP's Enabling Solid State Lighting Market Transformation Promotion of Light Emitting Diode Lighting in China
- UNEP's Delivering the Transition to Energy Efficient Lighting in Bolivia
- UNEP's Lighting Market Transformation in Peru
- UNDP's Cape Verde Appliances & Building Energy-Efficiency Project (CABEEP)
- UNEP's Delivering the Transition to Energy Efficient Lighting Project in Yemen
- UNEP's Delivering the Transition to Energy Efficient Lighting Project in Chile
- UNDP's Local Development and Promotion of LED Technologies for Advanced General Lighting Project in Vietnam
- UNDP's Improving the Energy Efficiency of Lighting and Building Appliances in Egypt
- UNDP's Promoting Energy-Efficient Motors in Small and Medium Sized Enterprises (SMEs) in Turkey

In addition, the Program will also take lessons learned from past or soon to be completed projects in order to incorporate their experience and lessons learned, such as:

- UNDP's Promoting Energy Efficient Room Air Conditioners (PEERAC) Project in China (2010-2014)
- UNDP's Barrier Removal to the Cost-Effective Development and Implementation of Energy Standards and

- Labelling Project (BRESL) in Bangladesh, China, Indonesia, Pakistan, Thailand, and Vietnam (2009-2014)
- UNDP's Market Transformation of Energy Efficient Appliances in Turkey (2010-2014)
- 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 in fourteen African countries (2010-2014)
- The World Bank's Efficient Lighting and Appliances Project in Mexico (2010 – 2015)

Monitoring and verification:

The program and child projects will comply with the UNEP (or that of the relevant GEF agency for national child projects) in the 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 (or relevant GEF agency).

These indicators along with the key deliverables and benchmarks, which will be developed at CEO endorsement, will be the main tools for assessing project implementation progress and whether project results are being achieved.

At CEO Endorsement the SMART indicators for each expected outcome as well as mid-term and end-of-project targets will be developed. Additionally at CEO Endorsement the Program will develop M&E budget and detailed plan.

Project oversight to ensure that the project meets UNEP (or relevant GEF agency) 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 (or relevant GEF agency). 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 might be triggered by the Task Manager if the need arises. In this case, 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 during the stakeholder analysis. It is the responsibility of the UNEP (or relevant GEF agency) 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 (or relevant GEF agency) 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.

A. Knowledge Management. Outline the knowledge management approach for the program, including plans for the program to learn from other relevant initiatives, and to assess and document in a user-friendly form, and share these experiences and expertise with relevant stakeholders.

The Program seeks to fill much of the knowledge management gap that remains in energy efficiency of appliances and equipment, including the lack of consensus on the best practice and lack of collaboration between numerous organizations working on the same subject. The project will build of the consensus and partners that have already

been brought together under the UNEP-GEF global project “Establishing the Foundations of a Partnership to Accelerate the Global Market Transformation for Efficient Appliances and Equipment”. This program will utilize the resources created previously in building more in depth ‘how to’ guides, training programs, and regional status reports. The program’s website will include a knowledge management section, providing easy to access to publications, analysis and tools. In addition to hosting the resources created in Component 2 and 3, the website will allow for communication amongst government officials and stakeholders from different countries through a message board. This tool will allow for exchange of best practice amongst peers and lessoned learned and sharing of experiences.

A. National Priorities. Is the program consistent with the National strategies and plans or reports and assessments under relevant conventions? (yes /no). If yes, which ones and how: NAPAs, NAs, NBSAPs, ASGM NAPs, MIAs, NCs, TNAs, NCSA, NIPs, PRSPs, NPFE, BURs, etc.

This program and child projects are designed to complement and strengthen the existing national processes and other ongoing and planned projects and programmes on energy efficiency of appliance and equipment without duplication. Child project activities to be carried out by participating countries will be in line with national development priorities (Second National Communication to UNFCCC) and will help inform and guide other relevant initiatives including those put in place or planned to tackle climate change at different levels including regional, national, sectorial, and local levels.

Each of the countries have expressed their interest to reduce electricity consumption with appliances, equipment, and/or lighting. These are presented in Section I of each of the child projects documents.

Further, there has global call for action under 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”. As part of the SE4ALL Accelerator Platform, UNEP, UNDP, the International Copper Association (ICA), CLASP, the Natural Resources Defense Council (NRDC) and the GEF, launched the Global Partnership on Appliances & Equipment.

Additionally, under the GEF-6 Programming Directions, the GEF calls for a program to “promote quality, standards, policy development, and MRV for efficient appliances and equipment and green supply chains. Candidate technologies include lighting, air conditioning, refrigeration, motors, and building codes.”

9. Child Selection Criteria. Outline the criteria used or to be used for child project selection and the contribution of each child projects to program impact.

- National statements expressing governmental commitment to advance energy efficiency in appliances and equipment and/or joining the country partnership programme. The child project advances a permanent and sustainable transition to high efficiency products particularly through the inclusion of minimum energy performance standards and other aspects of the integrated policy approach as is described in the description of Component 1. When justified, the child project may vary from the integrated policy approach with adequate justification and ensuring the project results in a permanent and sustainable transition.
- The child projects should address the products of focus (refrigerators, room air conditioners, electric motors, distribution transformers, water heaters, lamps and controls, and other potential priority products such as pumps, TVs, computers and set-top boxes). However if national circumstances differ from the norm, the countries have the flexibility to include different electrical products when justified based on the benefits provided including large GHG reduction potential.
- Adequate co-finance is provided by national partners and stakeholders, showing the country’s commitment to the project.



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 with this template).

NAME	POSITION	MINISTRY	DATE (MM/dd/yyyy)
Mr. Ruben MUNOZ ROBLES	Director, International Cooperation	Ministry of Environment, Energy and Telecommunication Costa Rica	02/27/2015
Dr. Babiker Abdalla Ibrahim	Under Secretary	Ministry of Environment, Natural Resources and Physical Development - Sudan	06/28/2015
His Excellency Talgat Akhsambiyev	Vice - Minister	Ministry of Energy - Kazakhstan	07/15/2015
Mr. Hla Maung Thein	Deputy Director General	Ministry of Environmental Conservation and Forestry - Myanmar	08/17/2015
Ms. Tuti Hendrawati Mintarsih	GEF Operational Focal		08/11/2015
Mrs. Sabria Bnoui	Head of Section	Ministry of Foreign Affairs - Tunisia	11/11/2015
Mr. Zaheer Fakir	Acting Deputy Director-General	Department of Environmental Affairs, South Africa	07/28/2015
Mr. Miguel Stutzin S.	GEF Operational Focal Point	Ministerio del Medio Ambiente	17/02/2016

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF policies⁸ and procedures and meets the GEF criteria for program identification and preparation.

Agency Coordinator, Agency name	Signature	DATE (mm/dd/yyyy)	Project Contact Person	Telephone	Email Address
Brennan Vandyke, Director GEF Coordination Office, UNEP		March 25, 2016	Ruth Zugman do Coutto, UNEP Energy Branch	+33 1 44 37 16 34	Ruth.Coutto@unep.org
Adriana Dinu UNDP GEF Executive Coordinator		March 25, 2016	Manuel Soriano STA EITT	+66 2 304 9100	Manuel.soriano@undp.org
Nomsa T. Zondi GEF Coordinator, DBSA	<i>See attached scan</i>	March 25, 2016	Nomsa T. Zondi	+27 11 313 3491	Nomsaz@dbsa.org

⁸ GEF policies encompass all GEF managed trust funds, namely: GEFTF, LDCF, and SCCF

- C. Additional GEF Project Agency Certification** (*Applicable Only to newly accredited GEF Project Agencies*)
For newly accredited GEF Project Agencies, please download and fill up the required [GEF Project Agency Certification of Ceiling Information Template](#) to be attached as an annex to the PFD.

LIST OF CHILD PROJECTS UNDER THE PROGRAM FRAMEWORK

Child Projects under the Program ^{a/}							
Country	Project Title	GEF Agency	GEF Amount (\$)			Agency Fee (\$)	Total (\$)
			Focal Area 1	Focal Area 2	TOTAL		
			Project	Project	Project		
	FSPs						
UNEP	1. Global Project to leapfrog markets to energy efficient lighting, appliances and equipment	UNEP	3,100,000		3,100,000	279,000	3,379,000
Kazakhstan	2. Energy efficient standards, certification, and labeling for appliances and equipment in Kazakhstan	UNDP	3,500,000		3,500,000	315,000	3,815,000
Myanmar	3. Leapfrogging Myanmar's market to high efficiency lighting and appliances	UNEP	2,223,578		2,223,578	200,122	2,423,700
Indonesia	4. Advancing Indonesia's Lighting Market to High Efficient Technologies (ADLIGHT)	UNDP	2,633,372		2,633,372	237,003	2,870,375
		UNEP	1,262,500		1,262,500	113,625	1,376,125
Tunisia	5. Leapfrogging Tunisia's lighting market to high efficiency technologies	UNEP	2,399,541		2,399,541	215,959	2,615,500
South Africa	6. Leapfrogging South Africa's markets to high-	UNDP	5,000,000		5,000,000	450,000	5,450,000

	efficiency LED lighting and high efficiency distribution transformers	DBSA	5,000,000		5,000,000	450,000	5,450,000
	Subtotal		25,118,991		25,118,991	2,260,709	27,379,700
	MSPs						
Sudan	1. Leapfrogging Sudan's markets to more efficient lighting and air conditioners	UNDP	1,770,000		1,770,000	159,300	1,929,300
Costa Rica	2. Development Of A Market For Energy Efficient Lighting, Air Conditioners And Refrigerators In Costa Rica	UNEP	2,000,000		2,000,000	180,000	2,180,000
Chile	3. Leapfrogging Chilean's markets to more efficient refrigerator and freezers	UNEP	1,473,762		1,473,762	132,638	1,606,400
	Subtotal		5,243,762		5,243,762	471,938	5,715,700
	Total		30,362,753		30,362,753	2,732,647	33,095,400

a/ Total amount of child project concepts should equal the GEF program financing requested and consistent with Tables A, B and D.