

REQUEST FORCEO ENDORSEMENT PROJECT TYPE: Medium-sized Project TYPE OF TRUST FUND: GEF Trust Fund

PART I: PROJECT INFORMATION

Project Title: Cape Verde Appliances & Building Energy-Efficiency Project (CABEEP)				
Country(ies):	Cape Verde	GEF Project ID:1	5344	
GEF Agency(ies):	UNDP	GEF Agency Project ID:	4996	
Other Executing Partner(s):	Directorate General for Environment (DGA), Directorate General of Energy (Ministry of Tourism, Industry and Energy),	Submission Date:	October 20 th 2014 December 9 th 2014	
GEF Focal Area (s):	Climate Change	Project Duration (Months)	48 Months	
Name of Parent Program (if applicable): ➤ For SFM/REDD+ ➤ For SGP ➤ For PPP		Project Agency Fee (\$):	\$182,248.00	

A. Focal Area Strategy framework²

Focal Area	Expected FA	Expected FA	Trust	Grant	Co-financing
Objectives	Outcomes	Outputs	Fund	Amount (\$)	(\$)
CCM-2Promote Market Transformation for Energy-Efficiency in Industry and the	Outcome 2.1: Appropriate policy, legal and regulatory frameworks adopted and enforced	Output 2.1: Energy efficiency policy and regulation in place Output 2.3: Energy	GEF TF	\$1,918,400	\$10,036,998
Building Sector	Indicator 2.1: Extent to which EE policies and regulations are adopted and enforced (3)	savings achieved			
Total project costs				\$1,918,400	\$10,036,998

B. PROJECT FRAMEWORK

Project Objective: The objective of the project is to reduce energy consumption and related GHG emissions in buildings and household appliances in Cabo Verde through introducing a range of legislative and regulatory measures and resulting in an estimated CO₂ savings of approx.. 703.99 ktCO₂ equivalent over the 10-year project lifetime

Project Component	Grant Type	Expected Outcomes	Expected Outputs	Trust Fund	Grant Amount (\$)	Confirmed Co- financing (\$)
1.Enabling Policy, Institutional, and Legislative Framework for Energy-Efficiency in Buildings	TA	EE policies, legislation and secondary regulations are adopted and put in place and strengthened	1.1 New building code focused on energy savings in Cabo Verde which includes minimum energy performance standards and energy	GEF TF	\$ 500,000	\$3,050,920

¹Project ID number will be assigned by GEFSEC.

² Refer to the <u>Focal Area Results Framework and LDCF/SCCF Framework</u> when completing Table A.

		regulatory framework results Cabo Verde on track by the end of the project to meet its target of 30% increase in energy-efficiency by 2020	passports and which promotes climate resiliency and adaptation' and includes water usage considerations 1.2 Inventory &database management system for national energy balance, detailed consumption statistics & related GHG's emissions in the building by major enduse (air conditioning, lighting, water heating, appliances.). 1.3 MRV Protocol to measure energy savings, water usage, and emission reductions in public buildings 1.4 Amendments to construction permit regulations to include mandatory requirements for minimum energy performance standards and including robust			
2. Energy- Efficiency improvements through Standards &Labelling for appliances	TA and INV	Certification, labelling and enforcement mechanism to promote energy efficient end-uses and national testing, certification, labelling and enforcement mechanisms adopted. Energy efficiency becomes priority consideration in consumer's decision in the purchase of any	enforcement mechanism 2.1 Labelling programme for appliances imported into Cabo Verdean line with ECOWAS labelling programme 2.2 Regulations including import regulations for energy-efficiency standards for a first selection of appliances (lighting, air conditioner, refrigerators, water heaters, bulbs etc) 2.3 Testing mechanism for selected appliances to be developed and	GEF TF	TA: \$200,000 Investment : \$200,000 Total: \$400,000	\$ 2,030,865

		new equipment	established			
		Energy efficient refrigerators, air conditioners, and water heaters meet the new quality, environmental and energy performance standards and are diffused widely on the national market	2.4 National certification procedures to promote energy efficiency 2.5 Public awareness programme & diffusion strategy, which includes training seminars on the new regulations for importers, appliances distributor's retail chains, and the general public.			
			2.6 Demand Side Management program, run by the national utility, built around a "turn-in or exchange" mechanism/modality 2.7 The most relevant financial incentive is identified &introduced in a pilot programme for the scale up of energy efficient refrigerators, air conditioners & water heater.			
3 Energy efficiency solutions in a selection of public buildings through selected pilot demonstration projects	TA and Inv	Best Practice energy efficiency measures implemented in selected public buildings related to energy- efficiency Additional investment mobilized through co-financing Additional GHG emissions avoided	3.1, Selection of at least 4 public buildings & 2 social housing programmes for pilot demonstration projects in energy efficiency investment 3.2 Building Stakeholders (architects, engineers, designers, developers, financial institutions) trained to monitor energy performance / water usage at the selected buildings in accordance with database management system 3.3 Monitoring and Reporting System of energy performance / water usage for the demonstration projects	GEF TF	TA: \$100,000 Investment:\$500,000 Total: \$600,000	\$1,967,399

4. Replication & Dissemination	TA	Additional investment in energy-efficiency mobilized through co-financing	4.1 Elaboration of case study guides and disseminated among relevant audience. 4.2 Public awareness raising campaign on standards and labels 4.3 Training of Key Building Stakeholders (senior policy makers, introduction of energy efficiency technique & practices in Vocational Training Schools across the country) on energy efficient buildings 4.4 A thorough monitoring of the impacts of the new energy efficiency requirement is performed. 4.5 Regular update of the legislation in order to tighten energy efficiency is introduced to transform further the appliance market & building practices 4.6 Lessons Learned study prepared and disseminated	GEF	\$340,000	\$2,417,130
Subtotal		10.2			*	.
Project management	Cost (PN	ЛС) ³		GEF TF	\$78,400 (includes direct project costs of \$24,276)	\$465,684 (includes \$195,000 from UNDP)
M & E Budget						\$ 105,000
						(from UNDP
Total project costs					\$1,918,400	\$10,036,998

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

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

Please include letters confirming co financing for the project with this form

Sources of Co- financing	Name of Co-financier (source) Type of Co-financing		Co-financing Amount (\$)	
		In-Kind	Cash	
National Government	Ministry of Tourism, Industry, and Energy	\$4,719,599.10	\$191,737,20	\$4,911,336.30
Private Sector	APP (Aquas de Ponta Preta)	\$550,000	\$62,316	\$ 612,316
International Organization(regional organization)	ECOWAS Regional Centre for Renewable Energy and Energy- Efficiency (ECREEE)	\$2,500,000	\$1,400,000	\$ 3,900,000
National Institution	UNICV		\$313,346	\$ 313,346
GEF Agency	UNDP		\$300,000	\$300,000
Total Co-financing		\$7,769,599.10	\$2,267.399.2	\$10,036,998.3

D. TRUST FUND RESOURCES REQUESTED BY AGENCY, FOCAL AREA ANDCOUNTRY 1: NA

055.4	Type of	Country Name/		(in \$)		
GEF Agency	Trust Fund	Focal Area	Global	Grant	Agency Fee	Total
	Tract rana		Giobai	Amount (a)	$(b)^2$	c=a+b
UNDP	GEF	Climate Change	Cabo Verde	\$ 1,918,400	\$ 182,284	\$ 2,100,648
Total Grant Resources			NA	NA	NA	

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.

Indicate fees related to this project.

Consultants working for technical assistance components:

Component	Grant (\$)	Amount	Co-financing (\$)	Project (\$)	Total
International Consultants	480,000			0	
National/Local Consultants	324,400			0	

F. 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

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

A.1. <u>National strategies and plans</u> or reports and assessments under relevant conventions, if applicable, i.e. NAPAS,NBSAPs, national communications, TNAs, NCSA, NIPs, PRSPs, NPFE, Biennial Update Reports, etc. No changes from the PIF.

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

GEF Climate Change Strategy Objective 2 is focused on promoting market transformation for energy efficiency in the building and transport sectors.

This project is full consistent with Climate Change Strategy Objective 2, which involves a synergistic combination on technical assistance, policy, regulation, and institutional capacity building to support the adoption of energy-efficiency technologies and measures.

A.3 GEF Agency's comparative advantage:

The project fully complies with the comparative advantages approved by the GEF council, where UNDP is assigned a leading role for technical assistance and capacity building on climate change.

No further changes from the PIF.

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

The following text has been extracted from the UNDP PRODOC; Sub –Section 1.5 Baseline Analysis SECTION I: Situation Analysis

In the baseline situation, a government focus on projects and activities to remove barriers to energy-efficiency in Cabo Verdewould be unlikely to take place despite their high potential for energy savings and GHG emissions reductions. The Government has specific goals and targets as part of the Barbados declaration, which includes a 35% reduction in greenhouse gas emissions from 1990 levels by the year 2020 and plans for 10% of all public lighting to be powered by renewable energy by 2030.

The baseline situation envisages no new law on energy savings being introduced into Cabo Verdein the next 5 years with minimum energy performance standards for both buildings and appliances. High-energy consumption of buildings, based on the imported model for design and construction in Cabo Verde has lead to decades of regular building practices contributing more to GHG emissions. Under a baseline scenario, the new buildings that will be built in Cabo Verde will have more or less similar energy consumption to the current building energy performance. Due to absence of strict policy measures in the country, there will also be fewer buildings that can be considered energy efficient, and the percentage of such type of buildings in the country's building stock in the next 10-15 years will remain constant.

In addition, under the baseline project, it is more likely that no national test laboratory will be set up to test appliances imported into Cabo Verdein the next 5 years and there will be no scheme in place to regulate, monitor, and enforce compliance with energy performance standards for domestic appliances. Most of the appliances currently being used in the country are inefficient. These appliances have significant energy efficiency potential that can be harnessed without compromising the quality and performance of the service they provide.

GEF CEO Endorsement: Cabo Verde

⁴For 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.

Through the UNDP-GEF project intervention, the government will be able to support the market transformation by introducing mandatory energy efficiency standards. There are several legal, institutional, technical, policy, financial barriers, to mainstreaming energy efficient appliances in the country. Presently, there are no minimum energy-efficiency standards (MEPS) for domestic appliances, this project will result in development MEPS as well as a labelling program. In the business –as – usual scenario it is clear that GHG emission and energy consumption of appliances will continue to rise from the appliances sector.

It makes sense therefore to focus on energy-efficiency, an area with significant potential for energy savings which up until now has been largely neglected with the exception of energy-efficient lighting. Cabo Verde has been participating in the ECOWAS Initiative on energy-efficient lighting and the UNEP enlighten Global Efficient Lighting Partnership Programme.

A. 5. <u>Incremental</u> /<u>Additional cost reasoning</u>: describe the incremental (GEF Trust Fund/NPIF) or additional (LDCF/SCCF) activities requested for GEF/LDCF/SCCF/NPIF financing and the associated <u>global</u> <u>environmental benefits</u> (GEF Trust Fund) or associated adaptation benefits (LDCF/SCCF) to be delivered by the project:

The following text has been extracted from the UNDP PRODOC; Sub –section 2.5 Incremental Reasoning: Expected Global, National and Local Benefits SECTION II: Project Implementation Strategy

The proposed GEF project aims to target barriers, which are currently impeding the realization of significant energy savings in the buildings and domestic appliances sector in Cabo Verde. Through this project, the GEF will contribute to lifting institutional, policy, regulatory, and other strategic barriers to energy efficiency in building and appliances. The GEF financing will lead to following global, national and local benefits as a result of project implementation

Global Benefits

The global environment benefits associated with this project are expected to be significant. The project will facilitate and influence actions that will result in the reduction of GHG emissions from the country's buildings sector by end-of-project as compared to GHG emissions in a business-as-usual scenario. Initial estimates suggest possible savings of up to 1,158,180 MWh resulting from improved energy efficiency in Cabo Verde over a 10-year period averaging out to approximately 115,818MWh per year. With a grid factor of 0.492tCO₂/MWh this suggests potential CO₂ savings of some 703.99 ktCO₂over a 10-year lifetime or approximately 70.4ktCO₂ per year.

National and Local Benefits:

Among the key national benefits that the project will bring are:

- Legislative and regulatory frameworks will be improved to promote energy efficiency in buildings
- Significant savings in electricity in buildings sector, and corresponding CO₂ emissions reduction in the long term.
- Access to comprehensive information on national energy balance, detailed consumption statistics and related GHG's emissions in building by major end-use (through inventory and well established DBMS)
- Monitoring of energy efficiency in buildings sector will enable better evaluation and development of new policies and strategies by the government
- Significant capacity will be built and will increase pool of professionals to design energy efficient buildings on a large scale
- The improved access to financing for energy efficiency in buildings
- Significant awareness will be generated amongst professionals, decision makers, and the general public,
- A number of design tools will be developed, including guidebooks, user manual and software tools
- A large number of demonstration buildings will be constructed demonstrating energy efficiency best practices
- Households increase their purchasing capacity through reduced burden of electricity bills
- Control demand growth and therefore limited government investment, fiscal deficit, and public debt (considering most of the investment in power plants has been completed through credit and public endowment).
- New jobs and business opportunities on energy audits, trainers, design professionals, testing officials etc.

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:

The following text has been extracted from the UNDP PRODOC; Sub –Section 2.4 Project indicators, risk and assumptions from SECTION II: Project intervention strategy

To ensure the effective design and implementation of the project activities, there are some risks that have to address to ensure project success. Efforts should be made to mitigate existing risks that might prevent the project objectives from being achieved.

To address these risks, the project has to establish effective means to monitor and to the extent possible mitigate these risks. Mitigation measures include active and continuous involvement in project activities and decisions of the groups of people that might pose a risk to the project implementation and sustainability. The project can be considered to face two categories of risks: external (policy-related) and internal (risks inherent to project implementation itself):

The external risks include:

- The greatest risk to the success of the project is a lack of continued political will towards energy efficiency and a stable economic growth of the country. Possible effects of this could be slow implementation of the project resulting in delayed outcomes.
- Co-financing does not materialize from key partners and also for demonstration projects.
- Slow or limited market transformation for new buildings related to real estate market stagnation and economicfinancial crisis as a risk in limited new construction or challenges for public institutions to secure funding for their investment projects
- Legislation does not pass a law on building codes and for appliances or resistance of Ministry of Finance to adopt some fiscal incentives, or Custom Department to implement some regulations due to the increased costs
- Economic and market risks stems from increased cost of energy efficiency measures for new design and construction practices. There is a risk that building owners and builders will reject this additional cost.

The internal project implementation risks are:

- Failure to trigger positive response from consumers and stakeholders (architects, design professionals, building material suppliers, builders, contractors, developers, and building managers) –possible effects of this could be ineffective capacity building efforts and a resultant slower rate of market transformation.
- Failure of demonstration projects showing good performance of new energy efficiency technologies, no achievement of projected energy savings and increased investment or maintenance costs for EE.
- Failure to have appropriate coordination within project activities of each component.
- Failure to trigger improved financing for energy efficient buildings. This will result in very slow uptake of energy
 efficient buildings in the market. This also includes suggestions for mitigation measures to deal with outlined
 risks to warrant successful implementation of this GEF project.

Table 1: Project Risks

Risk	Level of Risk	Mitigating Actions
Lack of political support for energy efficiency	Medium	Involve and commitment of Government of Cabo Verde and key decision makers in the project implementation from the beginning
Lack of confirmed co financing from key partners	Medium	Involve key stakeholders in the project implementation from the project inception stage and find alternative partners
No confirmed co- financing for demonstration project	Medium	Involve key partners for demonstration selection and implementation. Select alternative demonstration projects if 6 months after the completion of the feasibility studies, co-financing is not forthcoming.
Legislation does not pass into a law on energy efficiency buildings and	Medium	Government ministries should be involved from the project inception stage and should be regularly updated

appliances		about the project progress
Lack of positive response from	Low	Targeted capacity building efforts to initiate a positive
building industry		response from the industry
		Involve all the stakeholders in all stages of the project
Poor energy performance of	Low	Targeted training programs for key professionals
demonstrated technologies, non		involved in the demonstration projects (other activities
achievement of projects energy		leading to removal of barrier to effective implementation
savings selected demonstration		of demonstration projects)
projects		
Lack of coordination within project	Medium	Project director should be well informed about the project
components and activities		development and ensure coordination mechanisms'
		effectiveness. Project Manager should manage the
		activities and coordination between components.
Increased cost of energy efficiency	Medium	Financial and fiscal incentives should be introduced as
measures		early as possible to motive investment in energy
		efficiency measures
		Awareness raising and training should be done from the
		beginning of the project, to make informed cost benefit
		decisions
Improved energy efficiency financing		
1	High	Banking sector should be involved as one of the

A.7. Coordination with other relevant GEF financed initiatives: NA

B. ADDITIONAL INFORMATION NOT ADDRESSED AT PIF STAGE:

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

The following text has been extracted from the UNDP PRODOC; Sub –Section 1.4 Stakeholder Analysis SECTION I: Project intervention strategy

The analysis of stakeholder roles and attitudes towards increasing energy efficiency in buildings and appliances are stated below. There are a number of key stakeholders including government agencies, regional institutions, and private sector entities that will be critical in ensuring the success of the project.

Table 2: Stakeholder Analysis

Box 5: Stakeholder Analysis

Stakeholder	Role
Government	
Directorate General for Energy (DGE)-(National Implementing Partner)	The DGE is the government agency responsible to elaborate and implement government policies in the field of industry, energy, mines, and geology. The DGE will act as the executing agency for this project and takes key responsibilities for monitoring, reporting, and verification of energy efficiency in buildings and for appliances. The Project Management Unit (PMU) will be located in the DGE. DGE will align this project strategy with broader Energy Demand Side Management policies proposed in the country. Role of DGE is to ensure timely implementation and delivery of project outputs. DGE is key body to undertake the baseline data analysis and advance the adoption, implementation and enforcement of the national regulatory framework for energy efficiency in main productive sectors

Ministry of Tourism, Industry, and Energy (MTIE)	The MTIE is responsible for the development of government policies related to tourism, industry, and energy. The MTIE will play a key role in undertaking the baseline data analysis for the public buildings and for coordinating the work with ELECTRA, the national utility.MTIE will ensure that the project implementation logic contributes is aligned with the policy orientations of the Energy Sector Demand Side Management that is been drafted.
The General Directorate for Industry and Commerce (DGIC)	Under the DGIC liberalization of trade ECOWAS treaty region was developed. It provides coordination and harmonization of policies targeted to environmental protection. DGIC promotes the establishment of joint production enterprises within the ECOWAS member states. The ministry fosters local industry and is responsible to promote sector policies and regulations. DGIC will be a partner to promote new import regulations for appliances.
The General Directorate of Tourism (DGT)	The DGT is responsible for recognizing the tourism sector and develop strategies for the economic development of Cabo Verde. The DGT has developed a public private partnership (PPP) model strategy for sustainable tourism in Cabo Verde (2010-2015). The DGT is responsible for the growth of new hotels and resorts in the country. DGT's role is to support audits for tourism buildings and develop baseline for existing buildings. The DGT will help in pilot project identification and will support dissemination of lessons learned and best practices demonstrated within this project among tourist sector operators and investors.
Directorate General of Environment (DGA)	DGA is responsible for coordination with other agencies with respect to all matters pertaining to environment and for managing EIA. DGA is responsible for the national environmental education program and the environmental information system (SIA). It will collaborate in project implementation, especially on the design of outreach campaigns with environmental education programs. It will be a partner as well on integrating energy efficiency considerations on the construction project EIA (environmental impact assessment) and will be responsible for integrating the project in a broader low emission and climate resilient national strategy.
DGI (Directorate General of Infrastructures) & General Inspection Services	Within the Ministry of Infrastructures and Maritime Economy (MIEM), the DGI is the central agency responsible for the execution of civil construction and public works policy, including industrials infrastructure, economic and social, hydraulic works and public buildings.
	The public sector building practices should provide a reference for the market, show-casing good examples and demonstrating efficiency benefits. Therefore, DGI could become a relevant partner in integrating energy efficiency standards on public works' tender process and contract award criteria for public building
Institute of Metaerology and	The INMC is a National Institute under the Ministry of the Environment

The INMG is a National Institute under the Ministry of the Environment

Housing and Land Use Planning (MAHOT), responsible for promoting coordination and implementation of government policy measures and actions in the fields of Meteorology and Geophysics. As the designated authority and focal point of Cabo Verde for the UNFCCC, INMG will

Institute of Meteorology and

Geophysics (INMG)

	collaborate on the implementation of all MRV measures to quantify GHG emissions offsets and to implement energy information system related initiatives.
DG Customs- Ministry of Finance and Planning	Customs control the import and inspection of all goods coming into the country and will have a key role to play in enforcing the energy efficiency standards and labelling program for appliances. They will collaborate on the design and implementation of appliances import regulations and standards. In general, they will facilitate implementation of component 2 of the project.

Municipality

National Municipality Association (ANMCV)

The National Municipality Association (ANMCV) includes all major cities and municipalities in the country and mandates to represent their interests. According to the legal statutes creating the association, the ANMCV has the mission to promote, advocate, represent local authorities and support them in assuming their jurisdiction and reinforcing their financial autonomy. ANMCV could support capacity development activities targeting municipal authorities. Additionally, ANMCV support will be valuable in designing awareness raising and reinforcement activities for municipal decision-makers, planners and technical staff involved on the permitting process.

Municipalities

Cabo Verde counts with 22 municipalities across the 9inhabited islands. Within the municipalities, the technical cabinets are responsible for landuse planning, zoning enforcement and building permitting approval in their jurisdiction. The Municipal Charter and the Decentralization Act (Law nº 69/VII/2010, of 16th August) determines the main responsibilities to municipalities. Responsibilities over land-use & urban planning, social action and interventions, civil protection and municipal police, culture promotion, transportation water, public health, sports and social equipment/facilities, environment and sanitation, housing, education, internal commerce, employment and economic development and entrepreneurship promotion sectors have been partially assumed by municipalities. In regards to energy, according to the existing regulatory framework, municipalities have competences over rural electrification and public lighting. However, rural electrification programs have been implemented mainly by state institutions

IGQPI-Management Quality and Intellectual Property Institute

IGQPI is responsible to coordinate the national quality management system. It promotes and coordinates activities targeted to demonstrate the credibility of economic agents, as well as develop functions as the national metrology lab. IGQ is responsible for coordination of all normalization and standardization processes, metrology and conformity assessment. IGQ is responsible for recognizing and qualify as Sector Normalization Organism the public or private entities on which IGQ will delegate technical normalization on specific activity sectors. ICQ will be relevant partner on capacity development activities and other initiatives to implement S&L for appliances and establish testing procedures.

National Institute on Land Management(under installation after Decree creation in April 2014), The INGT INGT is responsible to develop and implement policies in land-use planning and management, urban development, cadastre, housing, cartography, geodesy, toponimia, and Spatial Data Infrastructure. It will integrate and cover the responsibilities of the old DGOTDU and Housing policies cabinet.

Cabinet on support of housing policies & Directorate General of Land-use planning and urbanization (DGOTDU) –

DGOTDU is the government unit responsible for land-use planning policies. The Directorate assumes the responsibilities over study, promotion, coordination and execution on land management policies and urbanism. Promotion of land-use guidelines, support, review and clearance of island-wide and municipal level land-use plans are under its responsibility.

Ministry of Environment, Housing and Land-use planning

In collaboration with municipalities, and IFH, the cabinet on housing policies support and is responsible for the promotion of requalification, rehabilitation of housing units and promotion of urban renewal initiatives.

DGOTDU and Housing policies cabinet will support detail identification and selection of demonstration projects on social housing programs. They are also expected to support initiatives of sustainable urban planning and promotion of energy efficiency considerations on zoning and neighbourhood detail planning

Electricity Sector Bodies

ELECTRA

Electra is a limited company that produces and distributes electricity across the territory of Cabo Verde, with a current rate of 75% coverage, as well as the production and distribution of drinking water in S. Vicente, Sal and in Praia on Santiago with a coverage rate of 50%, and the collection, treatment and reuse of wastewater in Praia. ELECTRA, as the major utility collaborates on the design of inefficient appliances replacement and its financial mechanisms. Additionally, it will support awareness raising activities.

AEB - Aguas e Energia de Boavista

AEB, under a subcontractor agreement with ELECTRA is responsible as a utility running water and electricity production and distribution services in Boavista island. It will collaborate on the design of inefficient appliances replacement and its financial mechanisms. In addition, it will also support awareness raising activities.

APP/APN

Aguas de Ponta Preta/ Aguas de Porto-Novo are the partner companies responsible for water production in Sal and Santo Antão Island.

Additionally, they produce and sell electricity to some resorts in Sal islands and they have partnered with the Porto-Novo Municipality (in Santo Antão island) for a RE-based small grid in a remote rural community (Tarrafal de Monte Trigo)

Economic Regulatory Agency (ARE)

An Economic Regulatory Agency (ARE) was created under the Decree-Law no 26/2003, is an independent administrative authority that regulates the water, energy, transport sectors. Multi-sectoral agency sets regulations for energy and water sector, transportation. ARE gives technical support and advisory to the government and its collaboration will be essential to device incentives schemas and awareness raising campaigns.

Other Organizations				
Regional Centre for Renewable Energy and EE (ECREEE)	Provide relevant guidance on ECOWAS rules and regulation to ensure that regulatory framework and policies are in line with regional and international guidelines.			
	Synergies with ECREEE will be promoted for demonstration projects selection and implementation, awareness raising. Collaboration with ECREEE is essential to ensure S&L and testing procedures proposed are in line with ECOWAS-region orientation and regulations.			
	Additionally, synergies will be developed with the regional initiative for Energy efficiency in buildings, as well as in regards to the solar-thermal regional project which implementation is planned to start in 2015			
OAC- Architects Order	A professional association, the Chamber of Architects represents the sector practitioner's interest and is responsible for licensing the professional to work in the country. They will be a key partner on all technical discussion to propose a new energy efficient building code and building permitting process review, which are appropriate to the country climate and reality. They are expected to partner as well on all capacity development initiatives, dissemination of best practices and sector practitioners awareness raising.			
OEC (Engineers Order)	A professional association, the Chamber of Engineers represents the sector practitioner's interest. Thermal, industrial and civil engineers are member of this order. They should participate on the process to prepare new building codes and the definition of compliance mechanism. They will be associated with all the activities related to curriculum development and capacity building.			
Universities and vocational training schools/IEFP	The different public (UniCv) and private universities across the country have established (1) Architecture and several Engineering schools to locally train professional on this areas. National Employment and vocational training Institute (IEFP) is responsible for management of a national system of vocational training schools. Some professional families, linked to electricity and construction sector have been developed through professional training programs. Universities and training centres are expected to participate on curriculum revision initiatives and to collaborate for delivering new training and raising awareness among practitioners.			
Luxembourg Development Agency - (LUXDEV)	LUXDEV oversees the bilateral development programs in the country and ensures the overall operational coordination. Currently, the agency is supporting the implementation of the project -"Support to the national employment and vocational training programme"; moreover, the project supported capacity building to enhance the needed skills for the day-to-day management of the institutions and the drafting of new curricula for new courses.			
The European Union (EU) -	The European Union has created SE4All Technical Assistance Facility to support Cabo Verde and other developing countries, which are committed to reach the SE4All objectives through appropriate sector reforms and scaling up of investment in the energy sector. Examples of areas of support			

include national energy sector policies and reforms, capacity building particularly in the policy and regulatory areas, technical support in preparation of investment projects, mobilization of funds and facilitation of partnerships, industrial and technology cooperation, and project demonstrations.

IFH (Housing Development Institute)

IFH is a public real estate and housing corporation established in 1999. A social and public housing real estate developer, IFH address the Cabo Verde housing deficit as well as upgrading existing housing stock. IFH is responsible for affordable housing development and social housing management, public land urbanization and servicing projects. It estimates that housing deficit in the country is at around 42,000 dwellings in 2010. In 2009, the government launched a new housing policy: a national social housing system which was established as the new legal framework to attract investments in public housing by minimizing housing and infrastructure cost and promote housing developments and public housing programs management efficiency.

IFH is responsible for the implementation of the public housing program "Kasa Para todos. This program contemplated the delivery of the construction of three classes of accommodation: economic, social and controlled costs, in addition to the rehabilitation of social housing in several municipalities in the country to citizens as housing units to buy, to rent or resoluble rent and sale contracts. With about 1,460 buildings constructed (economic, cost controlled and social housing), 1,450 rehabilitated housing and management of state assets of about 390 properties, the IFH has assumed responsibility with its function of promoting and structuring of urban space in the country

Chamber of Commerce Industries and Services Sotavento (CCISS) and the Chamber Commerce, Industry and Services Barlovento (CCISB) The Chambers of Commerce Industries and Services (CCISS) are organizations of private law public utility. CCISS was established in 1995, to influence the public policies of promotion and corporate citizenship through corporate social responsibility. Chambers of commerce have been delegated the authority to manage commerce, import and export licensing system. The Chamber of commerce will support awareness raising among importers and retailers to achieve market transformation.

Civil Engineering Laboratory Cabo Verde (LEC) - Ministry of Infrastructure and Maritime Economy The LEC aims to undertake, promote and coordinate scientific research, technological development, and activities necessary for the progress and good practice of civil engineering. The relevant duties of the LEC include conducting studies in the field of standards and technical regulations, testing thermal properties of construction materials and providing quality certification of materials, components and other construction products

Private Sector Partner/(s)

Various Private sector partners will play a key role in the co-financing of project activities and replicating best practices This includes commercial and industrial associations, industrial/commercial enterprises/business groups, construction companies, oil companies/gas companies/production and distribution companies of conventional and renewable energy. Private sector partners may include participation and contribution in increasing energy efficiency in the building sector. They will contribute to technology transfer related to low emission climate resilient development strategy;

	participate in the evaluation of GHG emissions in industry and GHG mitigation.
Civil society, consumer associations (ADECO), association for social service and community intervention (ASSIC); and community organizations	Some local associations, such as the above mentioned ASSIC has been involved in community awareness campaigns on energy use safety and energy efficiency. Other environmental NGOs, such as ADAD have advocated for other environmental causes, such as plastic bags banning. Consumer association ADECO, and all relevant associations and NGOs would be partners to develop and implement awareness raising campaigns. ADECO will be an important partner in developing a national S&L system for appliances.
Media (Community radios, National TV and private radios and press)	Media sector is large and diverse in Cabo Verde. Public TVs, community and state radios, private newspapers and radios have most of them developed some type of scientific and educational programs or special editions, journalist to participate in trainings and awareness raising campaign. Their insights on public opinion in the country will be relevant to target well the messages on the communications and educational materials and to ensure dissemination of best practices and results achieved through this project

B.2Describe 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):

Electricity production in Cabo Verde has increased by 94% in last decade fuelled by an exponential growth in the energy demand by 114%. The country's stable economy and growth in tourism sector is expected to increase the demand for electricity even further, with 62.6% of population living in urban areas and annual rate of urbanization of 2.12%. Cabo Verde GDP is estimated to be \$3,900 per year by the World Bank at, which at \$330 per month suggests that on an average, approximately 15-20% of an individual's income is being spent on energy costs, which is very high⁵. The cost of electricity is nearly 70% higher than that in the European Union⁶. The project implementation will result in lifting the legal, regulatory, institutional, awareness and capacity building barriers for energy efficiency in buildings and appliances. This will result in reducing the growth in demand for fossil fuel based electricity production from the built environment. Thus at national and local level, the project implementation will increase the energy affordability of the people both at urban and rural areas and improving their sustainable livelihood. At national level the reduction in demand for electricity will further support in keeping the energy cost of electricity stable, energy efficiency will reduce costs for low-income consumers and will contribute to alleviating poverty.

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

The following text has been extracted from the UNDP PRODOC; Sub –Section 2.6 Cost Effectiveness SECTION II: Project intervention strategy

The project would contribute to both global environmental benefits and to national benefits, as synthesized below. The direct project reduction of CO₂ emissions targeted by the efficient energy use in buildings and appliances is about 289.30 ktCO₂e. Considering the US\$ 1,991,000 from the GEF (\$ 72,600 PPG + \$1,918,400 Grant) as support for this project and the direct CO₂ emission reductions from the actual energy efficiency building demonstrations that will be implemented, the unit abatement cost is about US\$ 6.6 per ton of CO₂ reduced. On the other hand, the cost-effectiveness would be around US\$ 2.7/ton CO₂ if the conservatively estimated indirect CO₂ emission reductions were also considered. After all, most of the CO₂ emission reductions will actually be realized indirectly with the compliance to the energy efficiency building code and energy efficiency appliance S&L program that the project will help develop, approve, and enforce as well as the influence that the project would generate

⁵Energy Policy of Cabo Verde

⁶UNDP-Cabo Verde: Project Identification form(PIF) - "Removing barriers to energy efficiency in Cabo Verdean built environment and for appliances"

among the building sector stakeholders in incorporating energy efficiency features and energy efficiency practices in the buildings that they design, construct, operate and manage/administer.

Table 3: Changes from The PIF

PIF Stage		CEO Endorsement Stage
Component 1	Enabling Policy, Institutional, and Legislative Framework for Energy-Efficiency in Buildings	Same
Component 2	Energy-Efficiency improvements through Standards &Labelling for appliances	Enabling energy efficiency improvements through S&L for appliances
Component 3	Energy efficiency solutions in a selection of public buildings through selected pilot demonstration projects	Same
Component 4	Replication and Dissemination	Same

C. DESCRIBE THE BUDGETED M &E PLAN:

The following text has been extracted from the UNDP PRODOC; SECTION VI: Monitoring Framework and Evaluation

The project will be monitored through the following M& E activities. The M& E budget is provided in the table below.

Table 4: M & E Budget

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
Inception Workshop and Report	Project Manager Project Assistant UNDP CO, UNDP GEF	Indicative cost: \$10,000	Within first two months of hiring of national project manager
Measurement of Means and Verification of project results.	UNDP GEF RTA/Project Manager will oversee the hiring of specific studies and institutions, and delegate responsibilities to relevant team members.	Indicative cost: \$ 20,000 (To be finalized in Inception Phase and Workshop)	Start, mid and end of project (during evaluation cycle) and annually when required.
Measurement of Means of Verification for Project Progress on output and implementation	Oversight by Project Manager Project team	Indicative cost: \$6,000 (To be determined as part of the Annual Work Plan's preparation)	Annually prior to ARR/PIR and to the definition of annual work plans
ARR/PIR	Project manager and team UNDPCO UNDPRTA UNDP EEG	Already included in the PMU cost	Annually
Periodic status/ progress reports	Project manager and team	Already included in the PMU cost	Quarterly
Mid-term Review	Project manager and team UNDP CO	Indicative cost: \$30,000	At the mid-point of project

Type of M&E activity	Responsible Parties	Budget US\$ Excluding project team staff time	Time frame
	UNDPRCU		implementation.
	External Consultants (i.e. evaluation team)		
Final Evaluation	Project manager and team,	Indicative cost: \$36,000	At least three
	UNDP CO		months before the
	UNDPRCU		end of project
	External Consultants (i.e. evaluation		implementation
	team)		
Project Terminal	Project manager and team		At least three
Report	UNDP CO	None	months before the
	Local consultant		end of the project
Audit	UNDP CO	Indicative cost per year: \$	Yearly
	Project manager and team	3,000	
Visits to field sites	UNDP CO	For GEF supported	Yearly
	UNDPRCU (as appropriate)	projects, paid from IA fees	
	Government representatives	and operational budget	
TOTAL indicative C	OST		
Excluding project te	am staff time and UNDP staff and travel	US\$ 105,000	
expenses		(+/- 5% of total budget)	

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

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

NAME	Position	MINISTRY	DATE(MM/dd/yyyy)
Mr.Moises BORGES	GEF Operational Focal Point &General Director of Environment	MINISTRY OF	

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	Project Contact Person	Telephone	Email Address
Adriana Dinu	A inn	9 December	John O'Brien Regional	+90 212 512 5853	John.obrien@undp.org
Executive Coordinator, UNDP GEF		2014	Technical Advisor EITT		

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).

This section has been extracted from UNDP Project Document: SECTION III :STRATEGIC RESULTS FRAMEWORK AND GEF INCREMENT

This project will contribute to achieving the following Country Programme Outcome as defined in CPAP or CPD: Institutions reinforce environmental governance and integrate principles of environmental sustainability, climate change and disaster relief reduction; public and private institutions adopt a holistic approach to conservation and protection of critical habitats and biodiversity.

Country Programme Outcome Indicators: % of public resources allocated to environment; Number of key sector strategies integrating environmental dimension.

Primary applicable Key Environment and Sustainable Development Key Result Area (same as that on the cover page, circle one): 1. Mainstreaming environment and energy OR 2. Catalyzing environmental finance OR 3. Promote climate change adaptation OR 4. Expanding access to environmental and energy services for the poor.

Applicable GEF Strategic Objective and Program: Climate Change Mitigation Objective 2: Promote market transformation for energy efficiency in industry and the building sector

Applicable GEF Expected Outcomes:

- · Appropriate policy, legal and regulatory frameworks adopted and enforced
- Sustainable financing and delivery mechanisms established and operational
- GHG emissions avoided

Applicable GEF Outcome Indicators:

- Extent to which EE policies and regulations are adopted and enforced (score of 0 to 4)
- Volume of investment mobilized
- Tonnes of CO₂ equivalent

Objective/Outcome or Output	Indicator	Basel ine	Target s End of Project	Source of verification	Risks and Assumptions
Project Objective The objective of the project is to reduce energy consumption and related GHG emissions in buildings and household appliances in Cabo Verde through introducing a range of	Cumulative GHG emissions reduced from building sector and through domestic appliances by end-of project (EOP), ktCO ₂ e	0	297.8	M&E reports of the pilot/model projects. Reports and documents available on code compliance. GHG national inventory (energy sector) and national Energy balance.	Risk: Energy performance reports may not be made available unless mandated and they may not be accurate Assumptions: Government of Cabo Verde commitment
legislative and regulatory measures and resulting in an	Annual Reduction of energy consumption in the buildings and	0	115,818	Project implementation reports Building sector energy database	to energy efficiency remains firm

estimated CO ₂ savings of some 703.99 ktCO ₂ over the 10-year project lifetime	appliances, MWh			GHG national inventory (energy sector) and national Energy balance and utilities report to DGE.	All energy performance reports are made available
Outcome 1 ^{7:} Policy, Institutional and Legislative Framework for energy efficient buildings are enabled	Direct energy savings in the buildings sector projects by EOP, MWh/yr. (energy and water efficiency)	0 (No Policy exists)	4634	Project Implementation reports	
Outcome 2: Energy-Efficiency improvements through Standards &Labeling for	Direct energy savings in the appliances stock by EOP MWh/yr	0 (No S&L programs)	111,184	Project implementation reports	
appliances	% Increase in sales of energy efficient appliances as a result of energy efficiency finance	0	20%	Sales data reports	
Outcome 3: Energy efficiency solutions in a selection of public buildings through selected pilot demonstration projects	No. of demo projects implemented each year	0	2	Documentation of demonstration projects	Risk: Delay in the actual implementation and experience from the demonstration building are not properly and accurately recorded Assumption: The demo projects selected are implemented as planned and all the process documentation carried out and documented lessons learnt
Outcome 4: Additional investment mobilized in energy-efficiency as a result of the	% Increase in sales of energy efficient appliances during the project implementation	No data available	30%	Sales data reports	Risk: Failure to trigger positive response from key stakeholders and certified
dissemination and replication activities.	% Increase in number of energy efficiency buildings during and after project implementation	0	30%	Documentation reports	Assumption: Experts to deliver trainings are

 $^{^{7}}$ All outcomes monitored annually in the APR/PIR. It is highly recommended not to have more than 4 outcomes. GEF CEO Endorsement: Cabo Verde

		available and willingness of the targeted stakeholders to benefit from the training. Accredited authorities willing to cooperate on energy
		efficiency in buildings

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).

S. No.	Comment	Response
1	Please refine the GHG estimate using the STAP methodology for energy efficiency investments	This work has been completed.
	and include other potential global environmental benefits, such as water and adaptation benefits.	GHG estimates have been calculated using the STAP methodology. The GEF CO ₂ emissions calculation methodology to estimate the direct and indirect emission reductions resulting from the project implementation was applied (refer annexure C of the Project Document).
		The calculations have also been verified using additional projection methods based on the project along with reasonable assumptions. (Detailed calculation spreadsheet is also available upon request)

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:

The PPG objectives have been largely achieved

PPG Grant Approved at PIF: \$72,600					
Project Preparation Activities	Implementation	GEF/LDCF/SCCF/NPIF Amount (\$)			
Implemented	Status	Budgeted	Amount Spent To		
		Amount	date	Committed	
Collection of baseline data	Completed	16,000	14,927	0	
Stakeholder consultation	Completed	12,100	3578.04	7,625	
Pre- Identification of pilot/demonstration	Completed	12,000	835.49	9,344.47	
projects					
Project strategy and implementation	Completed	32,500	25,403	18,887	
detailing.					
Total		72,600	44,743.53	27,856	

⁸If 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)

n/a