PROGRAM FRAMEWORK DOCUMENT (PFD)

TYPE OF TRUST FUND: GEF Trust Fund
TYPE OF PROGRAM: Program Accessible to All GEF Agencies

PART I: PROGRAM IDENTIFICATION

Program Title:	EBRD South Eastern Mediterranean EE/ ESCO Markets Platform		
Country(ies):	Morocco, Tunisia, Egypt and Jordan	GEF Program ID:[1]	
Lead GEF Agency:	EBRD	GEF Agency Program ID:	
Other GEF Agenc(ies):	(select) (select) (select)	Submission Date:	2012-11-08
Other Executing Partner(s):		Program Duration(Months)	48
GEF Focal Area (s):	Climate Change	Agency Fee ($):	1,200,000

A. FOCAL AREA STRATEGY FRAMEWORK[2]:

Focal Area Objectives	Expected FA Outcomes	Expected FA Outputs	Type of Trust Fund	Indicative Financing ($)	Indicative Cofinancing ($)
CCM-2 (select)	Sustainable financing and delivery mechanisms established and operational	Investment mobilized Energy savings achieved	GEF	15,000,000	141,250,000
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)			(Select)		
(select) (select)	Others		(Select)		
			Subtotal:	15,000,000	141,250,000
			Program Management Cost[3]		
			Total Program Costs	15,000,000	141,250,000

B. PROGRAM RESULT FRAMEWORK

Program Goal: The overall program goal is to catalyze the creation of a sustainable energy efficiency and sustainable ESCO market in Morocco, Tunisia, Egypt and Jordan

Program Component	Grant Type	Expected Outcomes	Expected Outputs	Type of Trust Fund	Indicative Financing ($)	Indicative Cofinancing ($)
EE/ ESCO fund	Inv	Stimulation of public and private sector energy efficiency and ESCO markets Bankability of energy efficiency projects improved	Energy efficiency projects in the Public sector and Industrial sector Increased number of energy efficiency projects financed through ESCO and other innovative financing mechanisms	GEF	15,000,000	141,250,000
	(select)			(Select)		
	(select)			(Select)		
	(select)			(Select)		

[1] Program ID number will be assigned by GEFSEC.
[2] Refer to GEF-5 Template Reference Guide posted on the GEF website for description of the FA Results Framework when filling in Table A.
[3] This is the cost associated with the unit executing the project on the ground and could be financed out of trust fund or co-financing sources.

	(select)			(Select)		
	(select)			(Select)		
	(select)			(Select)		
	(select)			(Select)		
	(select)			(Select)		
	(select)			(Select)		
Subtotal:					15,000,000	141,250,000
Program Management Cost[4]						
Total Program Costs					15,000,000	141,250,000

C. INDICATIVE CO-FINANCING FOR THE PROGRAM BY SOURCE AND BY NAME IF AVAILABLE, ($)

Sources of Co-financing	**Name of Co-financier** (if known)	**Type of Cofinancing**	**Amount ($)**
GEF Agency	EBRD	Hard Loan	45,000,000
Other Multilateral Agency (ies)	Other IFIs to be determined	Hard Loan	45,000,000
Bilateral Aid Agency (ies)	Unknown at this stage	Unknown at this stage	15,000,000
Bilateral Aid Agency (ies)	Unknown at this stage	Grant	6,250,000
Others	Other lenders and private sector	Unknown at this stage	30,000,000
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
(select)		(select)	
Total Cofinancing			141,250,000

D. GEF/LDCF/SCCF RESOURCES REQUESTED BY AGENCY, FOCAL AREA AND COUNTRY[1]

GEF Agency	**Type of Trust Fund**	**Focal Area**	**Country Name/Global**	**Program Amount (a)**	**Agency Fee (b)[2]**	**Total c=a+b**
EBRD	GEF TF	Climate Change	Morocco, Tunisia, Egypt and Jordan	15,000,000	1,200,000	16,200,000
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
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(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0

[4] Same as footnote #3.

(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
(select)	(select)	(select)				0
Total Grant Resources				15,000,000	1,200,000	16,200,000

[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

[2] Please indicate fees related to this project.

PART II: PROGRAMATIC JUSTIFICATION

A. GOAL OF THE PROGRAM:

The overall program goal is to catalyze the creation of a sustainable energy efficiency and sustainable ESCO market in Morocco, Tunisia, Egypt and Jordan

B. DESCRIPTION OF THE CONSISTENCY OF THE PROGRAM WITH:

B.1.1 The GEF/LDCF/SCCF focal area strategies:

The program responds to the discussion following the November 2011 council meeting at which Document GEF/C.41/09, *GEF 5 Revised Strategy for Enhancing Engagement With the Private Sector*, was reviewed. The council adopted as amended the revised strategy for programming GEF 5 private sector funds and asked the Global Environment Facility's Secretariat to present to the council at its June 2012 meeting, in consultation with the multilateral development banks (MDBs), a detailed paper outlining clear operational modalities for private-sector engagement. As a result, GEF/C.42/Inf/08 *Operational Modalities for Public Private Partnership Programs* was presented at the June 2012 council meeting. This program responds to the GEF Secretariat's request to MDBs to prepare public-private partnership (PPP) platform proposals. The EBRD platform's overall objective will be to support innovative private sector engagement in the GEF's activities, in particular in the climate change focal area.

The program's overarching objective is to kick-start the creation of an energy efficiency (and ESCO) market in Morocco, Tunisia, Egypt and Jordan in order to enhance opportunities for sustainable investment opportunities into energy efficiency in the Southern Mediterranean and Middle East Region. Through the EE / ESCO fund the program will catalyze the emergence of an ESCO market for energy efficiency, which will contribute to reducing greenhouse gas (GHG) emissions from the public sector and contribute to the growth of a local supply chain in the industrial sector thus reducing their negative effects on global warming and climate change. The EBRD's PPP platform will contribute to mitigating this threat by enabling the emergence of a market for energy efficiency that would not materialize otherwise.

The EE / ESCO fund that will benefit from GEF funding will directly address the GEF Strategic Priorities in the areas of Climate Change and specifically with respect to energy efficiency projects and is fully consistent with Strategic Objective 2: "Promote market transformation for energy efficiency in industry and the public sector". The fund would also finance small scale renewable energy investments in the public sector such as Solar water heaters and roof top Solar PV. The program thus contributes directly to GEF objective 2 outcomes of "Sustainable financing and delivery mechanisms established and operational" and "GHG emissions avoided". It also directly addresses the GEF's ongoing strategies for engaging the private sector, as detailed in the Private Sector Strategy, and for the use of non-grant instruments.

B.1.2. For programs funded from LDCF/SCCF: the LDCF/SCCF eligibility criteria and priorities:
NA

B.2. National strategies and plans or reports and assessments under relevant conventions, if applicable, i.e. NAPAS, NAPs, NBSAPs, national communications, TNAs, NIPs, PRSPs, NPFE, etc.:

As with other countries in the Middle East and North Africa, in Egypt, Jordan, Morocco and Tunisia, there is great potential for energy efficiency to contribute to emission reductions, national energy policy aims, and economic growth. Unlike other countries in the region (e.g. Algeria), the four countries have common energy supply issues based on a scarcity of hydrocarbon fuels and underdeveloped renewable energy resources; as well as relatively energy intensive homes and industries. While not legally bound to reducing their emissions as non-Annex I Parties to the Convention, all four countries have articulated general sustainable energy strategies to improve energy security and enhance their economic competitiveness. The need to create enabling environments for energy efficiency investments across all sectors, and in particular in the public sector, is acknowledged across National Communications, TNAs and

NAMAs (where these are available and up to date, latter in form of commitments to the Copenhagen Accord). The fund would also finance small scale renewable energy investments such as Solar water heaters and roof top Solar PV and contribute to the growth of a local supply chain for renewable energy and energy efficient equipment in the industrial sector.

The proposed program is consistent with the countries' individual priorities in the following way:

- **Egypt**

The promotion of a sustainable energy efficiency market is consistent with recent developments in Egypt's energy policy since 2006, such as the creation of the Supreme Council of Energy (2006), the development of an Electricity and Energy Act, the preparation of Egypt's first National Energy Conservation Plan (the latter two in process) and an energy efficiency program for SMEs by the Credit Guarantee Company (CGC, under implementation). The focus in the domain of energy efficiency has been in particular on the development and process improvement in local manufacturing, efficient lighting and appliances, and promoting new styles of energy saving buildings. The program is further in line with Egypt's national priorities as expressed in the 'Second National communication under the UNFCCC' (2010), which states that the fortifying of energy efficiency policies in the residential and commercial sectors is a priority.

- **Jordan**

The program is consistent with the Renewable Energy and Energy Efficiency Law of Jordan (2010), which states the ambition of establishing a Renewable Energy and Energy Efficiency Fund to generate finance for both renewable energy and energy efficiency. Given its potential outcome of lowering GHG emissions, the program is further in line with the Act of Confining Sources of Greenhouse Gases Emanation Issued in Accordance with Articles (11, 18) of the Environment Protection Law. No. (1) 2003 for Jordan. It is also consistent with Jordan's Common Country Assessment (CCA), which recommends maximizing energy efficiency in consumption, and Jordan's National Energy Strategy Update (2007), which calls for the promotion of energy efficiency (amongst a range of energy-related policies), and the second national communication that identifies energy efficiency as one of the four "major areas that should receive the most attention".
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- **Morocco**

In its national communications to the UNFCCC (2001; 2010) Morocco recognizes the importance of energy efficiency for reducing GHG. Since 2006 Morocco has been engaged in developing its energy efficiency policy and support structures. One aspect of this has been the adoption of the National Plan of Priority Actions (NPPA, 2008), which includes the target to reduce residential energy consumption by 15% by 2012, using measures such as compact fluorescent lighting, solar water heating and incentive tariffs. In addition, Morocco's Note Verbale to the Copenhagen Accord notes the aspiration to implement, amongst others, measures related to the thermal performance of buildings, carbon neutral public buildings, eco neighborhoods, and energy efficient public lighting. A second aspect of Morocco's ambition for greater energy efficiency has been the Law N°16-09 which establishes the Agency for the Development of Renewable Energy and Energy Efficiency (ADEREE) whose responsibilities includes the delivery of energy efficiency programs. The program is thus consistent with general policy directions and aligns with a range of specific national and international policy commitments made by the government of Morocco.

- **Tunisia**

Energy efficiency is firmly embedded into Tunisia's national policy. Tunisia was the first to establish an energy agency (ANME) as early as 1985 and has tried to develop ESCOs since 1993. The proposed project is in line with the latest Tunisian Country Assistance Strategy (CAS), which cites energy efficiency as deserving support because it enhances quality of life and protects the environment (CAS, Annex B9a). In addition, on 3 May 2001 the president made a statement about Tunisia's commitment to improving energy efficiency throughout the economy. Among the 20

decisions adopted on this occasion, Directive No. 8 specifically mentions the development of an ESCO market in industrial and commercial sectors. This is also consistent with Tunisia's National Communication that identified energy as "the major contributor to the mitigation potential". In the past, two of Tunisia's eight GEF-funded climate change projects have been on promoting energy efficiency; one in the built environment through the use of building codes (completed in 2007) and the second in the industrial sector (completed 2010).

In summary, this project is fully consistent with the general national policy directions and specific national and international strategic statements and commitments which understand energy efficiency as a priority policy area. The support of a sustainable market for energy efficiency in Egypt, Jordan, Morocco and Tunisia meets some critical regional needs and has the potential to provide much-needed best practice cases for the Middle East and North Africa as a whole.

C. RATIONALE OF THE PROGRAM AND DESCRIPTION OF STRATEGIC APPROACH (INCLUDING DESCRIPTION OF CURRENT BARRIERS TO ACHIEVE THE STATED OBJECTIVES):

Improving energy efficiency in industry and in the public sector is a major imperative worldwide and not the least in Southern Mediterranean and Middle Eastern countries such as Morocco, Tunisia, Egypt and Jordan. At present, sustainable business models for energy efficiency are difficult to assemble and creating robust financing mechanisms for energy efficiency projects (and viable ESCO models) has proven challenging. This is in part because Morocco, Tunisia, Egypt and Jordan lack the legal and financial infrastructure to adapt to and support such business models. In addition, new ESCOs also often lack the proper skills (e.g. financial management, credit assessment, risk mitigation etc.) and thus have limited credibility with potential customers and financiers. There are also constrained capital markets and a limited number of investors willing to create new companies and test new business models. In addition, there are few commercial sources available for medium to long-term lending for energy efficiency projects in the public sector and for SMEs in the industrial sector (primarily those in the renewable energy and energy efficiency supply chain) in the region and various, material barriers to financing (e.g. lack of technical expertise for appraisal, lack of information about the technical risks and financial benefits of energy conservation and standards improvement, additional costs in loan appraisal etc.) all of which barriers the fund will address.

The EBRD intends to establish a USD 150 million EE / ESCO fund for energy efficiency projects in the industrial sector (targeting SMEs in the renewable energy and energy efficiency supply chain) and in the public sector. The fund's aim is to increase the availability of targeted finance for energy efficiency across the SEMED region and act as a catalyst for the establishment of a sustainable EE and ESCO market beyond the completion of the projects which will be financed by the fund. The fund will invest in four countries in North Africa and the Middle East which are EBRD countries of operation, i.e. Morocco, Tunisia, Egypt and Jordan (classified internally as the South Eastern Mediterranean Region (SEMED)). This application is for USD 15 million of GEF funding which would be invested in the fund (along with other donors) in a USD 30 million first loss tranche.

The fund will provide financial instruments adapted to the respective needs of individual projects:

- Short, medium and long-term senior debt
- Subordinated loans, including mezzanine loans
- Guarantees
- Forfeiting transactions
- Equity participation

The fund will lend directly to projects and lend through financial intermediaries which would be active in EE financing, namely:

- Commercial banks;
- Leasing and factoring companies;
- Other financial intermediaries.

Different options will be adopted where the fund lends through partner financial institutions, such as:

- The fund simply offers credit lines to commercial banks (or other partner financial institutions). These credit lines would be at market price and with no risk sharing features.
- Funded risk- sharing: The fund provides finance to projects which is channelled through financial intermediaries, with the partner financial institutions providing an at-risk contribution of minimum 20% typically on a project by project basis.
- Unfunded risk – sharing: When the PFI has adequate liquidity and does not require any long-term funds, unfunded risk participation will be provided through the fund's risk sharing arrangement with the PFI. The fund's risk participation in each project will typically be limited to 50% of the total project cost.

Pricing: The pricing for the fund's risk participation will be determined in line with local market prices to ensure an adequate return against the risks involved. Therefore, the interest margins charged by the fund under the funded scheme, or risk participation fees under the unfunded scheme, will be set on a project by project basis.

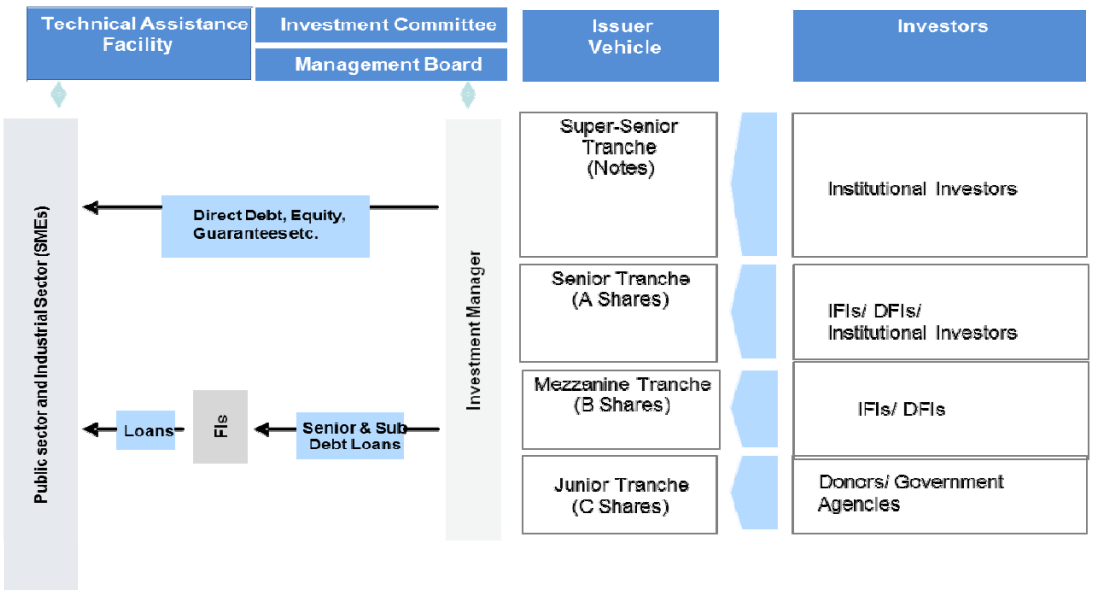
A USD 6.25 million donor-funded Technical Assistance Facility (TAF) – not funded by the GEF – will provide hands-on support to partner institutions and project sponsors.

The TAF will be active in the following areas:

- Technical due diligence
- Market and feasibility studies
- Strategy design and business model development for partner financial institutions
- Lending methodology and asset liability management for partner financial institutions

The TAF will work with project sponsors in preparing bankable projects and mobilising funds for their investment projects. It will also work with the partner financial institutions to build their capacity to evaluate and take EE specific risks.

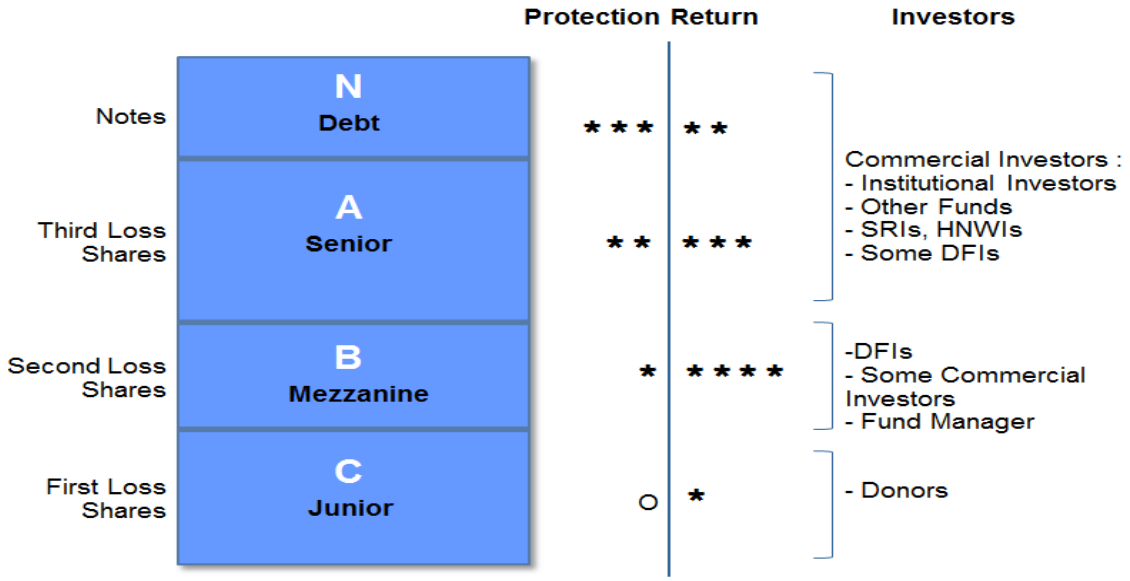
The EBRD has extensive experience in the use of risk-sharing instruments and will ensure that the fund will have: (a) the capacity to monitor compliance with non-grant repayment terms; (b) the capacity to track reflows within its normal lending operations; and (c) commit to the submission of a semi-annual actual status of reflow payments to the GEF.



This model reflects the structure used in other energy efficiency funds in the EBRD region, where the EBRD is an existing shareholder (e.g. the Green for growth fund http://www.ggf.lu/). It is a proven way of leverage private sector capital and can be a sustainable long term funding platform. Funds with identical structures e.g. the European Fund for South East Europe (with donor funded first loss shares) had less than 5% private capital in 2005 when first established. Private investors now represent more than 60% of the capital. http://www.efse.lu/

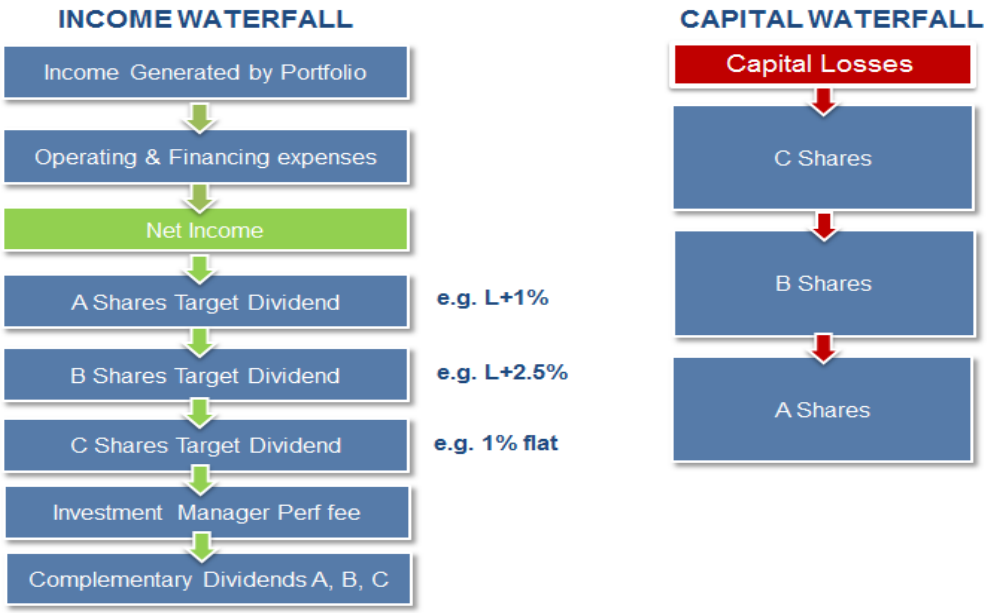
- **Senior Notes** will be offered to institutional investors. Interest is paid semi-annually or annually at interest rate of 6-month Euribor plus a spread in line with market based risk-return characteristics. These notes have no upside and the interest is paid regardless of whether the fund is generating dividend income.
- **Class A (Senior) shares** will have a tenor of up to 15 years and will be offered to DFIs, IFIs, and to institutional investors. The A shares would only suffer a loss to the extent that the B and the C shares will have been depleted due to losses in excess of their Net Asset Values (NAVs) and these shares will be subordinated to the Senior Notes. The A shares will receive a target dividend (floating rate of 6-months Euribor plus a commercial spread) if the revenues generated by the Fund allow it, as well as a complementary dividend according to the income waterfall.
- **Class B (Mezzanine) shares** will have a tenor of up to 20 years and are offered to DFIs and IFIs. The B shares will only suffer a loss to the extent that the C shares have been depleted due to losses in excess of their NAV. B shares will be subordinated to the A shares and the senior notes. The B shares will receive a target dividend (floating rate of 6-months Euribor plus a commercial spread) if the revenues generated by the Fund allow it, as well as a complementary dividend according to the income waterfall.
- **Class C (first loss) shares** will be issued for 20 years and will bear all unrealised/ realised capital losses of the Fund until the NAV of the C shares has been fully depleted. The C shares will capitalise any returns in order to increase the leverage effect and to build reserves in case of future losses of the Fund. The C shares are open to the GEF and other donors. The C shares will receive a target dividend of 1.0% if the revenues generated by the Fund allow it. <u>On redemption of the C shares, all remaining NAV will be reflowed to the GEF and other donor agencies.</u>

  The presence of C shares is critical for the sustainability of the fund vehicle as they:
  - Take the initial credit risk / local currency risk
  - Take the first loss position
  - Attract commercial funding in a public private partnership
  - Make high / medium risk investments possible



Income waterfall
For each Valuation Date, after paying the Direct Operating Expenses, the Investment Management Fees and the interest on the Notes, the year-to-date net investment income of the Fund will be allocated in the following order of priority:

1. Allocation of the year-to-date target dividends to the A shares, pro-rata for each Tranche of A shares;
2. Allocation of the year-to-date target dividends to the B shares, pro-rata for each Tranche of B shares;
3. Allocation of the fixed target return, capitalised, to the C shares as follows:
    a. The difference between the fixed target return of the C shares and the amount of any amortization of the discount in the relevant period resulting from the initial contribution of assets to the Fund; or
    b. Zero, if the amount of any amortization as described above is greater than the fixed target return of the C shares;
4. The Performance Fee of the Investment Manager subject to pre-defined parameters;
5. Complementary dividends for the A shares and B shares, pro-rata to each respective Tranche issued multiplied by a weighting factor (A shares factor = 1; B shares factor = 2)



Governance of the Fund
The Fund will be governed by three decision-making bodies (i.e. Investment Committee, Management Board and Supervisory Board). The governance structure of the Fund will be as follows:

- Investment Manager: The Investment Manager will be responsible for the management of the Fund's assets in accordance with the Investment Management Agreement, the Articles, the Investment Objective and Policy, the Issue Document and the Investment Guidelines. In addition to the management of the assets of the Fund, the Investment Manager will agree with the Management Board from time to time on the policies and procedures for the Technical Assistance Facility and will be in charge of the management of the Facility.
- Investment Committee: The Management board appoints the Investment Committee which consists of three to five members. The Investment Committee supervises the management of the Investment Manager and, in particular, monitors (i) the pipeline of PI Investments, (ii) portfolio transactions and divestments; and (iii) the financial structure and performance of the portfolio and Investments. The

Investment committee has an advisory role only and is not liable for investment/ divestment or other management decisions taken by the Management Board.

- Management Board: The Management board has prime responsibility for all aspects of the administration and management of the fund including investment and divestment decisions. It consists of three to five members who are not representatives of the Investment Manager.

The following criteria will be applied to selecting the projects to be considered for funding under the program:

Criteria	Comment
Sector	Energy efficiency in Industry and Public Sector
Leverage	Projects financed by the fund will achieve a minimum leverage for GEF funds of 1:10 (GEF: other funding).
Financing terms	The fund will provide financial instruments adapted to the respective needs of individual projects: • Short, medium and long-term senior debt • Subordinated loans, including mezzanine loans • Guarantees • Forfeiting transactions • Equity participation Average tenor of individual loans is expected to be 5-8 years. Specific conditions will depend on project economics and will be determined on a case-by-case basis and in line with target parameters for the facility. The investment period for the fund is expected to be 3-4 years. The pricing of investment instruments provided by the fund shall reflect market conditions. Each investment will include a comprehensive set of covenants including performance, technical, social and environmental guidelines.
Private sector development and demonstration effect	The fund will increase the availability and access to sustainable energy finance in the region and allow EE investments that will contribute to climate change mitigation, reduced energy bills and increased energy security. The involvement of private sector stakeholders in the preparation of projects (and the absence of direct grant funding) will send a positive signal to the market on the sustainability and replicability of the energy efficiency financing model.
Global environment benefits	Projects to be funded by the program will: 1) adhere to technical, environmental and economic eligibility criteria, especially with respect to energy savings and CO_2 emission reductions as well as environmental and social impact assessments; 2) have the potential to form part of individual government's commitment to mitigate climate change, where appropriate, including concrete objectives, for example relating to increasing energy efficiency in the industrial and public sectors.
Co-financing opportunities	The fund will endeavour to invest in projects which can provide synergies with other financial resources, such as the Moroccan Fond de Développement de l'Energie (FDE) and promote the use of innovative financing instruments. The Société d'Investissements Energétiques (SIE), set up to invest in energy efficiency and renewable energy projects, is also a potential investor in this fund.

The fund would also finance small scale renewable energy investments in industry or public buildings such as Solar water heaters and roof top Solar PV. Examples of eligible projects are included below.

Indicative list of sub-projects: Public sector

- On site co-generation of heat and electricity (all heat and electricity shall be used on-site).
- On site tri-generation of heat, electricity and cooling (all heat, electricity and cooling shall be used on-site).
- Replacement of existing boilers with more efficient ones (e.g. condensing boilers) or due to fuel switching.
- Rehabilitation of boilers (enhanced controls, economizers, improved insulation, regenerative burners, automatic blow-down, etc.)
- Rehabilitation of heat distribution systems including implementation of heat control and measurement measures.
- Replacement of oversized electrical motors, installation of Variable Speed Drives on electric motors (pumps, fans, drives);
- Rehabilitation of power distribution systems (e.g., replacement of old or oversized transformers, installation of capacitors to reduce reactive power consumption, etc.)
- Implementation of Energy Management Systems
- Rehabilitation of street lighting (only measures relevant to improvement of energy efficiency)
- Balancing of heating systems, implementation of individual heat control devices
- Implementation of Building Management Systems;
- Replacement of existing windows with new, double-glazed windows, low-emission glazing;
- Thermal insulation of the building envelope (external walls, roofs, basements)
- Rehabilitation of existing heating (thermal insulation of pipes, tanks and machinery equipment);
- Rehabilitation of air-conditioning/ventilation systems including installation of heat recovery from air ventilation system and/or processes, implementation of free cooling, replacement/rehabilitation of compressors, implementation of variable air-volume air-conditioning systems;
- Replacement of old and low efficient lighting with an energy efficient option (fluorescent bulbs, LED light bulbs, etc.)
- Implementation of renewable energy systems in buildings (e.g. solar water heaters, roof top solar PV, biomass boilers, geothermal energy utilisation for heating and/or cooling with or without heat pump, surface water energy utilisation for heating and/or cooling with heat pump, solar heating and/or cooling).

Indicative list of sub- projects: Industry (targeting SMEs in the energy efficiency and renewable energy supply chain)

- New renewable energy and energy efficiency production capacity and the expansion of existing capacity
- Working capital requirements
- Rehabilitation of power distribution systems (e.g., replacement of old or oversized transformers, installation of capacitors to reduce reactive power consumption, etc.)
- Rehabilitation of air-conditioning/ventilation systems including installation of heat recovery from air ventilation system and/or processes, implementation of free cooling, replacement/rehabilitation of compressors, implementation of variable air-volume air-conditioning systems;
- Rehabilitation of heat distribution systems including implementation of heat control and measurement measures.
- Replacement of oversized electrical motors, installation of Variable Speed Drives on electric motors (pumps, fans, drives);
- Implementation of Energy Management Systems

D. Discuss the added value of the program vis-à-vis a project approach (including cost effectiveness):

The programmatic approach will facilitate the implementation of several projects that are interrelated as they will all be supporting the same objective of scaling up private-sector investment in energy efficiency. The program will contribute to the development of a number of related projects that will be selected by applying fund criteria such as

the indicative criteria listed above. The program will seek to promote energy efficiency through innovative financing mechanisms such as the use of the ESCO model to address problems related to energy security and economic development in the countries of its operation. This justifies a programmatic approach which will reduce the transaction costs for both the EBRD and the GEF.

E. DESCRIBE THE BASELINE PROGRAM AND THE PROBLEM THAT IT SEEKS TO ADDRESS:

Problem to be addressed:
In the current economic climate in Egypt, Jordan, Morocco and Tunisia there are limited commercial sources available for medium to long-term lending for energy efficiency projects. Overall, the investment risks are high and remain a persistent challenge for private investment. This is particularly the case for SMEs in the industrial sector and public sectors, where energy efficiency savings would have the biggest impact. Important barriers to financing exist, such as a lack of technical expertise for appraisal, lack of information about the technical risks and financial benefits of energy conservation and standards improvement, and costs of loan appraisals. These barriers explain why the public and industrial sector energy efficiency market is not developing, and highlights the significant positive impacts the proposed program will have on the opportunities for energy efficiency in the countries and region.

Baseline:
A number of initiatives related to financing energy efficiency have been undertaken or are underway in Egypt, Jordan, Morocco and Tunisia on a country basis. There is only one regional initiative in the South Eastern Mediterranean countries with relevance to the proposed project:

- The Euro-Mediterranean Energy Market Integration Project (MED-EMIP)
  As part of a broader project, the consortium consisting of GIZ and other public and private sector parties has run a project on energy efficiency in the construction sector (budget of USD 5 million for 2006-2008; with extension thereafter). This included as beneficiary countries Egypt, Jordan Morocco and Tunisia (amongst others) and produced information and cooperation networks, review of policy and regulatory frameworks, ESCO service providers and technology cooperation, pilots and public awareness campaigns.

While facing similar issues in terms of energy security, scarcity of natural resources and institutional frameworks that are traditionally ill-adapted to fostering effective energy efficiency markets, there are nonetheless considerable differences in terms of past and ongoing initiatives and the level of donor-supported involvement in the four countries targeted by the proposed program. The most important baseline is set by a range of governmental and donor-supported activities that have taken place in each country:

- Egypt
  Egypt has had experience with donor-supported initiatives in the energy efficiency domain since the early 1980s; including a UNIDO industrial energy efficiency initiated in 1983, a USAID Energy Conservation and Environment Programme (ECEP 1988-98; in cooperation with many other parties), which focused on conducting energy audits, awareness building, and subsidized demonstration projects. Energy audits were also carried out under the EU-funded Industrial Modernization Program (in cooperation with the Ministry of Trade and Industry). Since 2005, the Egyptian National Cleaner Production Center (ENCPC) has been growing in size and expertise, under the Ministry of Trade and Industry and with support from UNIDO.

  Several major ongoing initiatives that are relevant to the current proposal have or are taking place in Egypt:

  - UNIDO's Industrial Energy Efficiency project (5 years from 2009, GEF ID# 3742) targets energy efficiency improvements in energy intensive industries and SMEs. It does so by providing technical assistance for the development of national energy management standards and capacity building for implementation and enforcement. A financial incentives program is also attached to the project, consisting primarily of support during the design stage of the financial incentives program. The

program is run with other executing partners, such as the Ministries of Trade and Industry, of Electricity and Energy, and of Investment; and the Egyptian Environmental Affairs Agency.

- UNDP with the Ministry of Electricity and Energy launched in 2010 the Improving the Energy Efficiency of Lighting and Other Building Appliances project (GEF ID# 3832). The aim, to facilitate the development of an Egyptian market for energy efficient and cost effective building appliances, is to be achieved through regulatory tools, such as Minimum Energy Performance Standards and Information Labels, enhanced public awareness, capacity building and innovative and attractive financing mechanisms. This project will explore and test efficient market-based economic incentives complemented by extensive public outreach campaigns.

- A regional UNDP-GEF project (Energy Efficiency Improvement and GHG Reduction; completed finally in 2010, GEF ID# 267), was nationally executed through the Egyptian Electricity Holding Company. The emphasis was on conducting industrial energy audits with the aim to build towards the development of an ESCO model, with a focus on technologies with short payback period (e.g. power factor improvement and efficient lighting).

- GIZ has been active in Egypt since 2008, notably through a project entitled Egyptian-German Committee on Renewable Energy, Energy Efficiency and Environmental Protection, which is expected to run until 2014. Activities are mainly focused on renewable energy, however regarding energy efficiency also include policy advice, technical support, political and institutional reform support and awareness-raising in households.

- Jordan

The World Bank's Energy Efficiency Investment Support Framework (EEISSF, GEF ID#3671) project concluded in 2011 and has been the most important donor-supported initiative in energy efficiency in Jordan. Previous initiatives have been piecemeal and relatively uncoordinated (e.g. the Jordan Upgrading and Modernization Program (JUMP) and Building Management Systems (BMS)) and did not catalyze the market, or result in significant increases in commercial lending. The EEISF mainly consisted of technical assistance for building institutional and technical capacity and the Jordan Renewable Energy and Energy Efficiency Fund; JREEF). The latter is a single institution for managing credit lines for both energy efficiency and renewable energy. The credit line was designed to scale up measures across all sectors, by means of parallel financing window, such as credit facilitation for commercial projects, for grants for non-commercial projects, and for market development activities.

- Morocco

In Morocco, a first quasi-ESCO (ADS-Maroc) was established in 1993, however it did not succeed as a fully functioning and independent ESCO, and nor did it pave the way for a thriving ESCO market in Morocco. However, there are a number of relevant initiatives in Morocco, most notably, the "Fond de Developpement de l'Energie" (FDE), which was established as a Government of Morocco-owned financial institution focusing on increasing the share of renewable energy in Morocco's electricity generating portfolio (mostly wind power) and energy conservation measures, with an emphasis on industrial energy efficiency and urban transport. The FDE currently has $1 billion in equity, consisting of contributions from the Kingdom of Saudi Arabia, United Arab Emirates, and the King Hassan II Fund. The Government plans to invest some of the FDE funds with the intention of generating commercial returns for the State. For that purpose, it has created an investment fund called "Société d'Investissements Energétiques" (*SIE*) which will make investments in financially viable energy projects. Other relevant projects in Morocco include:

- Energy Efficiency in the Industrial Sector, an AfDB-GEF project (Council approved in 2010; project costs USD 11.5 million, GEF ID #4112) aims to improve the energy efficiency of small and medium Moroccan enterprises (SME) and significantly reduce GHG emissions by removing the regulatory,

financing, and informational barriers that prevent activities and investments in energy efficiency and energy conservation.

- The UNDP-GEF project Energy Efficiency Codes in Residential Buildings and Energy Efficiency Improvement in Commercial and Hospital Buildings in Morocco (IA approved in 2009, GEF ID# 2554) aims to introduce mandatory minimum energy efficiency and performance requirements through the development and introduction of building codes. It provides the basis for institutionalizing the adoption of energy efficiency standards and practices in the commercial and hospital sectors in Morocco.

- Tunisia

Following years of government-led proactive fostering of ESCO activities, there are several ESCOs that are registered with the national energy agency (ANME). Most ESCOs operate in the industrial sector, and do so mainly on projects involving relatively small investments (less than USD 300,000). This is related to the fact that the sector is dominated by SMEs. Significantly, the proportion of audits that are successfully converted into projects is low. Relevant projects in Tunisia include:

- Energy Efficiency and Renewable Investment, a USD 55 million World Bank project (2009-2014), aims to scale up industrial energy efficiency and cogeneration investments to contribute to the Government's current four-year energy conservation program. The project consists of technical and financial assistance. ANME, who possesses considerable business planning and project development expertise, is working closely with private investors to prescreen suitable projects and subsidies (e.g. from the Energy Efficiency and Renewable Energy Fund), which are then used to bring projects in the pipeline to financial closure.

- Development of an Energy Efficiency Program for the Industrial Sector for Tunisia (IBRD, completed in 2010, GEF ID# 1905) made important headway in the area of energy efficiency for the larger and medium-size industries. It consisted of several elements: a financial intermediation mechanism to support private sector energy efficiency investments (through ESCO projects among others); a sustainable partial guarantee fund; technical assistance to local financial institutions, other intermediaries on the development of bankable projects and the mechanisms to secure project financing and creation of ESCOs; energy end-user information dissemination; and the development of a limited number of demonstration projects.

- Experimental Validation of Building Codes and Removal of Barriers to their Adoption is a project that was completed in 2007. This GEF/UNDP project (GEF ID# 520) developed energy efficient building standards for new buildings, which were subsequently adopted by the Government of Tunisia as regulatory measures.

To sum up, the above list of initiatives indicates that efforts have been made and are still underway across these countries with respect to fostering energy efficiency in industry and the public sector. The limited success in scaling up individual projects into sustainable markets, and very limited scale of energy efficiency activities suggests that the proposed program has substantial scope for making a material impact on the creation of a regional energy efficiency and ESCO market. The programmatic approach will make it possible to build on existing work and to create synergies between discrete projects, with the result of drawing together piecemeal initiatives into a comprehensive market development process.

F. INCREMENTAL /ADDITIONAL COST REASONING: DESCRIBE THE INCREMENTAL (GEF TRUST FUND) OR ADDITIONAL (LDCF/SCCF) ACTIVITIES REQUESTED FOR GEF/LDCF/SCCF FINANCING AND THE ASSOCIATED GLOBAL ENVIRONMENTAL BENEFITS (GEF TRUST FUND) OR ASSOCIATED ADAPTATION BENEFITS (LDCF/SCCF) TO BE DELIVERED BY THE PROJECT:

This program will kick-start the ESCO market in Morocco, Tunisia, Egypt and Jordan. Through the creation of a USD 150 million EE/ ESCO fund the program will catalyse the emergence of an ESCO market for energy efficiency, which will contribute to reducing greenhouse gas (GHG) emissions from the industrial and public buildings sector thus

reducing their negative effects on global warming and climate change. The EBRD's PPP platform will enable the emergence of a market for energy efficiency that would not materialise otherwise.

The fund will invest through senior loans, subordinated loans, mezzanine debt, guarantees, equity or quasi equity. Its ability to take a minority equity/ quasi equity stake in projects is particularly additional. It also introduces a streamlined approach for energy efficiency investments in the target sectors (i.e. industrial sector and the public sector).

The fund will provide financial instruments adapted to the respective needs of individual projects:

- Short, medium and long-term senior debt
- Subordinated loans, including mezzanine loans
- Guarantees
- Forfeiting transactions
- Equity participation

The fund will lend directly to projects (approximately 60% of financing volume) but also lend through financial intermediaries which through the support of technical assistance facility would be active in EE financing, namely:

- Commercial banks;
- Leasing and factoring companies;
- Other financial intermediaries.

The program will provide global environmental benefits through the energy efficiency improvements that will ensue from the investments under the program and future ESCO models that will continue in the countries through the established markets resulting from this program. Greater efficiency in the public sector and industries will reduce the final consumption of fossil fuel consumed and thereby contribute to the reduction of roughly 1.35 million tons of CO_{2eq} per year using typical emission factors. Given average useful technology lifetimes of 10 years, this could result in lifetime reductions of 13.5 million tonnes.

G. DESCRIBE THE SOCIOECONOMIC BENEFITS TO BE DELIVERED BY THE PROGRAM 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) OR ADAPTATION BENEFITS (LDCF/SCCF).

In addition to the global environmental benefits mentioned above, this project will also bring the following national and local benefits:

1) *Energy security:* Increasing the energy efficiency of the public sector and in industry contributes to reducing the degree of dependence on imported and polluting forms of energy and this is an important factor driving energy efficiency investments. In addition given the targeted countries' poor natural resource endowments an efficient use of resources is a major policy imperative.

2) *Resilience of national economies:* A more efficient use of energy serves to reduce the targeted countries' resilience to external macroeconomic shocks by decreasing the energy intensity of the countries' economies.

3) *Development of sustainable domestic and regional markets for energy efficient products and services:* The program helps to set the respective countries on to a low-carbon development trajectory by stimulating simultaneously the demand for, as well as supply of, energy efficient products and services. The development of energy efficiency markets in the region promises to increase levels of technology and experience transfer within countries and in the region as a whole, providing examples of institutional structures and business models that are easily replicable.

4) *Local industry:* Greater energy efficiency in SMEs increases local enterprises' financial performance by reducing costs and helping generating an additional profit margin which can be reinvested.

5) *Local economy and employment:* Improving profit margins directly impacts positively on the local economy and more profitable businesses also create employment opportunities which further enhances the project's benefits.

6) *Positive gender impacts:* More profitable business will pay higher incomes and these EE improvements should also lead to improved working conditions in SMEs as well as in the public sector, which will positively benefit the wellbeing of its work force, including women.

H. JUSTIFY THE TYPE OF FINANCING SUPPORT PROVIDED WITH THE GEF/LDCF/SCCF RESOURCES:

The EBRD is considering a wide range of proposals to develop energy efficiency (and ESCO) markets in EBRD countries, with a specific focus on funding energy efficiency projects in the public sector and SMEs in the Industrial sector. The ESCO model has been widely accepted by the Bank as an attractive business model to bridge the gap between end-users and the financing of energy efficiency investments. It typically involves private sector participation and financing, allows technical risks to be transferred away from end-users and financiers, and includes incentives for ESCOs to proactively develop projects. ESCOs can also specialize in packaging smaller EE projects, bundling procurement of goods across several projects and taking on project performance and credit risks. Thus the ESCO model can be used as a mechanism to remove many of the commonly cited barriers to EE investments.

Despite these promising attributes, creating strong and credible ESCOs (and viable ESCO markets) has proven challenging. This is because EBRD countries often lack the legal and financial infrastructure to adapt to and support such business models. New ESCOs also often lack the proper skills (e.g. financial management, credit assessment, risk mitigation etc.) and thus have limited credibility with potential customers and financiers. In addition, EBRD countries often have limited capital markets and a lack of investors willing to create new companies and test new business models.

There are limited commercial sources available for medium to long-term lending for energy efficiency projects in the Public sector and for SMEs in the Industrial sector in the North Africa region and various, material barriers to financing (e.g. lack of technical expertise for appraisal, lack of information about the technical risks and financial benefits of energy conservation and standards improvement, additional costs in loan appraisal etc.) all of which barriers the fund will attempt to address.

As described in section C above the aim of the financing is to act as a catalyst towards the establishment of a sustainable energy efficiency/ ESCO market beyond the completion of the projects which will be financed by the fund. The fund will provide financial instruments that are adapted to the respective needs of individual projects, including short, medium and long-term senior debt, subordinated loans, including mezzanine loans, guarantees, forfeiting transactions, and equity participation.

I. INDICATE RISKS, INCLUDING CLIMATE CHANGE 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:

The potential project risks are listed in the table below, along with mitigation measures:

Risk	**Risk Level**	**Proposed mitigation approach**
Regulatory structure	Medium	The EBRD will work closely with all the relevant government agencies in supporting, drafting and implementing new laws. The availability of funding will provide much needed implementation experience and help create a robust framework.
Institutional capacity	Medium	The EBRD will work on capacity building with all the government

Risk	Risk Level	Proposed mitigation approach
		agencies responsible for energy efficiency in these target sectors.
Private sector interest/ financial viability	Medium	The viability and relative attractiveness of these investments to private sector companies remains a risk. The EBRD will work to ensure that the fund provides competitive financing as well as commercial returns for investors in the fund.
Governance	Low	The fund will have a clear governance structure which will ensure that transparency, accountability, environmental and social responsibility policies are all established. EBRD has significant experience in such funding structures and applies high levels of due diligence to fund operations. The incentive structure for the fund manager will also be fully transparent and aligned with shareholders' interests.
Sector focused fund	Low	The fund is an energy efficiency fund with a specific investment strategy targeting industrial and public sector projects. Its investment focus will therefore be narrower than generalist funds. However, the significant investment needs in this sector in the Region are expected to result in attractive and ample investment opportunities for the Fund.
Political and macroeconomic environment	Medium	The fund will be exposed to macroeconomic, political, and legal risks. Although these risks are largely exogenous to the fund, the investment manager will mitigate the potential impact of these risks through its knowledge of the market, portfolio diversification and co-investing with local strategic and financial investors.
Performance risk	Medium	This risk will be mitigated by a number of measures including: (i) having an investment management team with extensive experience in the target sector and geography, (ii) the presence of C (first loss) shares and (iii) the EBRD's participation on the Supervisory Board of the fund together with other investors in the fund.
Competition risk	Low	The fund will face a limited degree of competition risk. A key competitive advantage of the fund management team will be its local presence, strong local network and robust technical assistance platform.

J. OUTLINE THE INSTITUTIONAL STRUCTURE OF THE PROGRAM INCLUDING COORDINATION AND MONITORING & EVALUATION:

The program will be implemented by the EBRD, making use of both headquarters and country office staff, making use of the "hybrid option" combining options 1 and 2 under the Operational Modalities for PPP Programs (GEF/C.42/Inf.08). Since the eligibility of investments under the proposed structured fund is limited to energy efficiency and small scale renewable energy technologies and a very specific funding facility, with strict criteria this project is eligible under Option 1 - In Advance. Under exceptional circumstances an investment may be desired that does not fit the stated criteria. In this exceptional case GEFSEC agreement would be obtained under Operational Modality option 2. An example of this type of exceptional investment that could be considered is an energy efficiency or small scale renewable energy project in the residential or commercial sectors.

A tender offer will also be launched to identify a qualified fund manager whose role will include (i) identifying and evaluating the fund's investment opportunities, (ii) acquiring, managing and divesting the assets of the fund; (iii) managing the technical assistance facility, and in this role working with partner financial institutions to address new market segments and develop financing products.

The technical assistance facility will focus on the following areas:

- Technical due diligence
- Market and feasibility studies
- Strategy design and business model development for partner financial institutions

- Lending methodology and asset liability management for partner financial institutions

It will also target awareness creation with all stakeholders and provide partner financial institutions with the hands on support they need to optimize new product offerings, address new market segments and develop initiatives. In order to avoid overlaps with existing programs as well as to utilize existing know-how and relationships, close cooperation with the Ministry of Energy and ADEREE (Morocco), the Ministry of Energy and the Agency for Energy Management (AME) in Tunisia and respective Ministries of Energy in Egypt and Jordan will be established and a coordinated approach will be agreed.

All projects approved by the fund will be required to develop a sound monitoring and evaluation plan, and will be required to outline the expected outputs, outcomes and impacts of the project consistent with the GEF operational and strategic priority that the project is attempting to address.

K. IDENTIFY KEY STAKEHOLDERS INVOLVED IN THE PROGRAM INCLUDING THE PRIVATE SECTOR, CIVIL SOCIETY ORGANIZATIONS, LOCAL AND INDIGENOUS COMMUNITIES, AND THEIR RESPECTIVE ROLES, AS APPLICABLE:

The project will work closely with all government ministries and agencies in the countries, in particular the respective Ministries of Industry, Ministries of Economy / Finance, and state agencies for energy efficiency. In each country, local investors will be encouraged to participate in the fund. Discussions, for example, in Morocco with the Société d'Investissements Energétiques (SIE) are underway to define the mechanism through which they could invest in the fund for projects in Morocco.

All stakeholders involved in the project area will be consulted during the Bank's due diligence process when considering a private-sector project. For each project, the EBRD's standard environmental and social policy will be applied. Through the EBRD Environmental and Social Policy, the Bank seeks to ensure that the projects it finances:

- are socially and environmentally sustainable
- respect the rights of affected workers and communities
- are designed and operated in compliance with applicable regulatory requirements and good international practice

More information about this policy, including stakeholder consultation approaches, and how it is applied is available here.

L. INDICATE THE CO-FINANCING AMOUNT THE GEF AGENCY IS BRINGING TO THE PROJECT:

It is envisioned that the EBRD will contribute USD 45 million to the fund in a mezzanine and/or senior tranche.

M. HOW DOES THE PROGRAM FIT INTO THE GEF AGENCY'S PROGRAM (REFLECTED IN DOCUMENTS SUCH AS UNDAF, CAS, ETC.) AND THE AGENCY STAFF CAPACITY IN THE COUNTRY TO FOLLOW UP PROGRAM IMPLEMENTATION:

The EBRD strategy for the SEMED region focuses on:

- Leveraging the Bank's experience to create products for intermediated energy efficiency lending, leasing or private equity capital for energy efficient and renewable energy technologies
- Providing support and funding to Energy Service Companies (ESCO) subject to the creation of an enabling policy and market conditions;

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 (for programs accessible to all GEF Agencies) and

Operational Focal Point Endorsement letter (for programs accessible to GEF Agencies with board) with this template.

NAME	POSITION	MINISTRY	DATE *(MM/dd/yyyy)*
N/A			

B. GEF AGENCY(IES) CERTIFICATION

This request has been prepared in accordance with GEF/LDCF/SCCF policies and procedures and meets the GEF/LDCF/SCCF criteria for project identification and preparation. Following the new project cycle, EBRD will submit all PIFs under the program within 6 months after Council approval of the PFD.

Agency Coordinator, Agency name	**Signature**	**DATE** *(MM/dd/yyyy)*	**Project Contact Person**	**Telephone**	**Email Address**
Marta Simmonetti		09/14/2012	Asari Efiong	+44 207 338 6405	EFIONGA@ebrd.com

ANNEX A

LIST OF PROJECTS UNDER THE PROGRAM FRAMEWORK

Projects Submitted for Council approval in this work program + Future submissions:						
Project Title	**GEF Amount ($)**			**Agency Fee ($)**	**Total ($)**	**Expected Submission Date**
	Focal Area 1	**Focal Area 2**	**TOTAL**			
	Project	Project	Project			
FSP submitted with PFD in the work program						
1.			0		0	Same as program framework document
2.			0		0	
3.			0		0	
4.			0		0	
Total	0	0	0	0	0	
MSPs Submitted for CEO approval						
1.			0		0	
2.			0		0	
3.			0		0	
Total	0	0	0	0	0	
FSP Projects to be submitted in future work programs:						
1.			0		0	
2.			0		0	
3.			0		0	
4.			0		0	
Total FSPs	0	0	0	0	0	
MSP Projects to be submitted for CEO Approval						
1.			0		0	
2.			0		0	
3.			0		0	
4.			0		0	
Total	0	0	0	0	0	

Note: Qualifying GEF Agencies submitting the PFD do not need to fill this table. For all other GEF Agencies, fill in the focal area split, if any. If more than two focal areas involved, add columns as necessary.