

# Final Report

Consultancy and advisory support required to setup a revolving fund to support energy efficiency in key industrial sectors within the scope of the UNIDO/GEF project “Energy Efficiency in Key Industrial Sectors”

Contract No. 3000019641

03/2015



Client	United Nations Industrial development Programme (UNIDO) Wagramer Strasse No. 5, 1220 Vienna, Austria
Contractor	Kommunalkredit Public Consulting GmbH Türkenstrasse 9, 1092 Vienna, Austria
Contract	Consultancy and advisory support required to setup a revolving fund to support energy efficiency in key industrial sectors within the scope of the UNIDO/GEF project "Energy Efficiency in Key Industrial Sectors", Contract No.
Contract-No.	3000019641
Document	Final Report
Version and Date	Version 01, 11.03.2015
Prepared by	Alexander Linke

## Summary of main Activities and Outputs

- From March 8 – 13 2014 the Consultant conducted the **first mission to Iran**, meeting key counterparts and representatives from banks and ESCOs.

The findings, conclusions and recommendations based on this first mission were documented in the **first progress report**, submitted to UNIDO on 02.04.2014. This first progress report also included an outline of a framework for an EE revolving fund, draft operational procedures and draft ToR for a local Expert. The Consultant also sent to UNIDO several existing background reports and documents as requested during the first mission, such as energy audit guidelines, financing guidelines as well as a report on preparing bankable EE projects.

- In April 2014 the Consultant commented on the final **ToR for the local Expert** and participated in an **interview** with the preferred candidate in July 2014. In October, the Consultant commented on the work plan of the local Consultant and answered several questions regarding his scope of work and methodology to apply.
- On December 2 2014 the **first version of the report of the local Expert** was submitted. The Consultant reviewed this report and sent his opinion to UNIDO on December 13 2014. The main remark was that the report did not include any discussion on current obstacles for commercial bank lending to industrial enterprises and corresponding (draft) recommendations on how to overcome them.

Therefore the Consultant **recommended** to start with 1-2 “pilot” projects in which part of the available GEF grant funding would be used to identify and prepare a “bankable” project proposal in close cooperation with an industrial company and to provide financial structuring services to approach and negotiate with external financiers a financing package. Then, based on these concrete results of the pilot projects, a more targeted funding scheme can be advised (realistically not a new investment fund with an own legal structure, but rather a grant scheme which would support building a pipeline of projects tailored to the financing structure tested on the pilots).

- In late December 2014 UNIDO informed the Consultant on a **request from IFCO** to prepare an information note on best practice models of energy efficiency financing facilities. After discussing the exact scope for such a report the Consultant prepared the report (“**Key Issues in EE Funds**”) and submitted it to UNIDO on January 15 2015. This report can be considered as the second progress report as stipulated in the contract.

- On January 18 2015 UNIDO sent the **final report of the local Expert**. On January 21 the Consultant sent his **review** to UNIDO, remarking that the report does not clearly propose which financial instrument the proposed EE-fund shall provide.
  
- On March 1 2015 UNIDO sent to the Consultant an **urgent request** to provide an opinion on IFCOs plan to proceed with setting up an EE-fund and utilising the GEF funds. On March 3 2015 the Consultant sent his opinion to UNIDO, recommending not to establish a new “EE fund” but rather start with 1-2 pilot projects, using parts of the GEF-fund in the form of Technical Assistance to structure the pilot projects and arrange for (project) financing.

## **Annexes**

- First Progress Report
- Report on Key Issues in EE Funds (Second Progress Report)
- Mails between the Consultant and UNIDO

# First Progress Report

Consultancy and advisory support required to setup a revolving fund to support energy efficiency in key industrial sectors within the scope of the UNIDO/GEF project “Energy Efficiency in Key Industrial Sectors”

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04/2014



Client	United Nations Industrial development Programme (UNIDO) Wagramer Strasse No. 5, 1220 Vienna, Austria
Contractor	Kommunalkredit Public Consulting GmbH Türkenstrasse 9, 1092 Vienna, Austria
Contract	Consultancy and advisory support required to setup a revolving fund to support energy efficiency in key industrial sectors within the scope of the UNIDO/GEF project "Energy Efficiency in Key Industrial Sectors", Contract No.
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Prepared by	Alexander Linke

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## Findings and Conclusions of the first Mission

- During the first mission only **limited information** on the financing/banking framework for Energy Efficiency could be collected. In a meeting with representatives of Pasargad Energy Development (a subsidiary of Bank Pasargad) and Mellat Bank a preliminary conclusion is that the (private) banking sector in Iran prefers to invest in more profitable greenfield-type of projects rather than in “brownfield” projects like Energy Efficiency. Furthermore, average interest rate of between 20% and 30% p.a. have been reported. Another limiting factor is that banks frequently invest surplus funds in high-interest bearing interbank deposits rather than lending to the corporate sector.
- A **full financing/banking market assessment** as recommended by GEF<sup>1</sup> has not been performed during the formulation stage of the project. Therefore the specific barriers which a dedicated financing instrument should overcome (e.g. lack of liquidity in the banking sector, lack of experience in evaluation EE projects, perceived high credit risk of EE-projects etc.) have not yet been determined in detail or agreed upon with IFCO.
- There is a strong interest of IFCO to explore the role of **ESCOs** in structuring and implementing EE-projects. During the mission the Consultant also met with the ESCO-Association and some selected ESCOs. While the ESCOs seem to have a sufficient level of technical/engineering experience there seems to be a lack of understanding of financing and business-planning aspects. JAICO is currently financing an ESCO-project in Iran focussing on public buildings. Unfortunately the project does not focus on developing a dedicated financing instrument nor on developing standard contracts which could be shared with UNIDO.
- The combination of high interest rates and low/subsidized energy prices results that industrial enterprises perceive EE investments as **low-priority** and non-core investments. The awareness on the government policy to **gradually phase-out energy subsidies** in the coming years is currently not yet widely known in the business community. However, it can be expected that this policy shift will have profound impact on the future profitability of EE investments and thus its importance in the corporate agenda. However, industrial enterprises will need support in developing skills for developing business plans for EE projects and interacting with commercial banks to obtain finance.

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<sup>1</sup> GEF/Worldbank Energy Efficiency Portfolio Review And Practitioners Handbook, 2005

- **IFCOs priorities** regarding the project seem not the fully aligned with the current scope of the project. For example, during the mission the General Director of IFCO stated that he project should not only support larger industrial enterprises but also SMEs. IFCO also showed interest to explore more innovative financing avenues such as carbon finance or white certificates.
- One potential source of public-finance support to EE projects could be a mechanism which uses the proceeds from gas and oil on the international markets generated through a **reduction of domestic energy use** through an increase of energy efficiency. However there is not yet a clear strategy or plan for such a mechanism.

## Recommendations

- UNIDO should hire a **local Consultant** to carry some basic research of the local banking and financing market to support the design process of an appropriate financing instrument. The scope of work for such a local expert could involve the mapping of existing public support schemes for environmental or energy-efficiency projects, current conditions on the financial markets and the lending practises of commercial banks in Iran. Draft Tor for the work of the local Consultant is included in Annex 1.
- Currently IFCO and UNIDO are interacting with some pre-selected companies (e.g. in the brick and iron/steel sector) in implementing the pilot projects (procurement and installation of equipment) and preparing for the energy management trainings only. The Consultant recommends **expanding the scope of interaction with the companies to financing topics**. By carrying out semi-structured interviews or even a survey with selected companies of different size and from different sectors valuable information about current practises of financing and investment decisions, trends in sources of funding (e.g. internal funds versus external borrowing) and financing barriers could be explored. Such information from the corporate sector can then be complemented with the research results from the banking sector to arrive at a balanced assessment on the financing needs and the optimal financial instrument. In Annex 2 a basic set of questions is provided which can serve as a guideline when interacting with companies.
- Currently the project document foresees a training on financial appraisal as part of the component 3 with the objective of supporting industrial enterprises to “assess and prioritize” EE projects<sup>2</sup>. The Consultant recommends **expanding this training to a more comprehensive business plan development training** (e.g. how to prepare “bankable” project proposals and negotiate with commercial banks). The rationale for such a recommendation is that enterprises should learn not only about financial appraisal at the project level but also on the financing criteria applied by financial institutions (e.g. such as credit risk, creditworthiness analysis, project financing techniques, cash-flow modelling, loan agreement covenants, etc.). Such knowledge will be important when industrial enterprises want to present investment projects to commercial banks in order to obtain (project) financing.
- In regards to the set-up of a revolving fund the Consultant recommends a **phased approach**. In the first phase the most suitable financing instrument shall be explored and tested. Specifically it is recommended to

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<sup>2</sup> In fact the project document is ambiguous in terms of the target group for the trainings. The Consultant interprets the project document in the way that those enterprises which implement pilot projects and agree to voluntary energy agreements are the main target group. The proposed training focus of business planning can however also be of interest to ESCOs. Trainings to banks (e.g. loan officers) would require a much different training approach as the participants would already have a sufficient financing knowledge. For banks interesting topics would rather be for example practical advice on developing targeted loan products for EE projects and adapting internal procedures (e.g. loan origination and risk assessment) to EE project. However, support for such tasks should rather be provided via Technical Assistance rather than training.

- a) select at least one interested company, maybe one of the companies currently implementing the pilot projects;
- b) develop with UNIDO/IFCO support a comprehensive “bankable” investment project proposal (energy audit, business plan including cash-flow projections and financing plan);
- c) provide support (as needed) to the company in approaching banks, presenting the project and negotiating a loan package.

Through such a **financial structuring “exercise”** valuable information about actual financing conditions, banking/lending practises and perceived barriers can be determined. Of course, one specific project of one specific company may not be representative for the whole market, still, this approach will yield directly applicable results.

In the second phase the detailed fund structure (built around the selected financing instruments in phase 1) will be further developed (Terms of reference, criteria, etc.).

- UNIDO should systematically use the data/information gained through the demonstration projects to prepare “**case studies**” of actual and real-live investment projects. This might also involve the task of obtaining further (maybe confidential!) information from the participating companies on the overall investment programme of which the demonstration project may be only one component. Depending on the consent of each enterprise to publicly use confidential information such a case study could include a description of the investment planning/evaluation process, the financing structure, implementation methods and a summary of the profitability/IRR calculations. In case some data are confidential and cannot be used a more generic document with anonymized data must be used. Such case studies could also be used for the business planning trainings.
- The Consultant recommends to quickly implement the dedicated **project website** foreseen in Component 2.1 of the project to facilitate communication with stakeholders and interested companies. Ideally such a website has also a section on finance issues, providing information on best-practice examples of financing EE projects (e.g. business plan templates, examples of dedicated international EE financing programs, etc.).

## Framework for a Revolving Fund

Practice shows that too often specific forms of EE financing programs are pre-selected too early in the project cycle before sufficient market analyses (including identified barriers) have been conducted. In order to avoid this situation a phased approach for the selection of the optimal fund structure is recommended.

Whereas the project document and the ToR for this assignment already prescribe a “revolving ESCO-type fund” it is advisable to take a step back and consider what financing instruments are in principle available to support EE projects:

- Investment Grants: The most simple, but also the most unsuitable instrument. It was already discussed in the project document that the GEF funds will not be sufficient to provide a meaningful and replicable support.
- Grant-funded Technical Assistance: Technically speaking this is not a financial instrument per se but rather a specific use for grant funds. Experience has shown that dedicated TA is necessary to complement credit lines and revolving funds.
- Credit Lines: Used extensively by IFIs such as EBRD, IFC, World Bank etc. In most cases these credit lines are commercially priced (interest rates are not subsidized), however complemented by TA (e.g. “free” energy audits). In theory credit lines should only be used if the liquidity situation in the local banking market is constrained, in practice it’s the main “business” for many IFIs<sup>3</sup>. As UNIDO is not an IFI a credit line to local banks is not an option.
- Dedicated debt funds with legal personality: Dedicated debt (or revolving) funds have been implemented in those cases where the local banking market had limited liquidity and a reluctance to lend to EE projects. For example, with GEF support the World bank created the Bulgarian Energy Efficiency Fund 2004 and is still existing today under a new name: <http://www.bgeef.com>. However the set-up of such a fund with own legal personality required substantial TA of around 2 Mio. USD and in addition more than 8 Mio. In initial capitalisation. Thus such a fund is certainly not a solution for all circumstances, however the operation procedures (see Annex 4) used can be seen as best-practice.
- Partial credit guarantees/first loss coverage: Such credit guarantees (on the individual project level or on the portfolio level) can be an effective way to overcome the “perceived” credit risk of EE projects by local banks. This instrument can also be combined with credit lines or (debt) funds. Also it is possible to target such guarantees to those specific risks which banks see most critical (e.g. completion risk, technology risk, operational risk, etc.). However, the perceived credit risk should be differentiated from the mere lack of collateral. If a local bank fully understand the economics of an EE project (basic technical solution, cost savings instead of additional cash-flows) but requires more collateral that the borrower can provide (including a partial guarantee) such an instrument is not a solution!

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<sup>3</sup> See Annex 3 where the generic GEF “decision tree” model for selecting EE financing instruments is presented.

As the creation of a stand-alone fund is costly and complex, in the proposed phased approach the final decision of the fund structure will only be taken in phase 2. The alternative to the creation of a stand-alone fund is to utilise the GEF-funding for

- Financial structuring assistance for individual financing projects (as technical Assistance) to industrial companies or ESCOs;
- Provide a partial credit guarantee to competitively selected banks to support the financing of pilot projects;
- Trainings of selected banks which demonstrated interest in financing EE projects. Topics would include EE financing techniques and how to develop dedicated EE loan products.

## Appendices

## Annex 1: ToR of the local banking/finance Consultant

The objective of this assignment is to research financing conditions for “brownfield” industrial projects and to provide an overview of current lending practises of banks and other financial institutions. This assignment The outcome of this research shall contribute to the selection and design of an appropriate financing scheme supporting the implementation of industrial EE projects.

Specific tasks include:

- Provide a list of all banks and non-bank financial institutions (e.g. such as leasing companies, investment firms, etc.) active<sup>4</sup> in Iran. A brief description of major shareholders, strategic focus (e.g. retail or corporate), product offering (e.g. loans, project financing, leasing, etc.), relative size of lending portfolio per sector and number and location of branch offices shall be included for each financial institution. If a financial institutions has a focus (even if only on paper) on the environment and/or sustainability this should be highlighted.
- Mapping of all public and/or donor funded programmes supporting environmental investment of private enterprises available in Iran. This mapping should include the name of the programme, the name of the entity responsible for or managing the programme, the type of measures supported, the eligibility criteria and the type of financial support granted.
- Presentation of publicly available information on average interest rates and loan repayment periods of the last five years.
- Analysis and summarising of the current lending practice of (private) Iranian banks to industrial companies and the applied credit standards. The analysis should differentiate between loans to SMEs or to larger enterprises as well as short-term and long-term loans. This analysis should be based on existing research documents, the own experience of the Consultant, anecdotal evidence and interviews with financial institutions. Such a summary should include as a minimum lending terms (loan terms and conditions), collateral requirements, typical financial covenants (e.g. debt service coverage ratio) and typical information requirements for prospective borrowers.
- *Optionally: Participate in providing the financial structuring support as recommended in the report.*

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<sup>4</sup> Having a valid licence from the Central Bank.

## Annex 2: "Financing" Questions for Companies

The following generic questions shall provide guidance how the overall approach to business financing and more specifically the (potential) demand for loans can be assessed.

- *What is the average share of own (internal) funds (e.g. retained earnings) or equity (from shareholders) when financing a) fixed capital investments and b) inventory/working capital?*
- *What is your general attitude towards borrowing from commercial banks to finance new capital investments?*
- *Did your company apply for any external loan financing from a commercial bank in the last 12 months?*
  - *Did you receive the loan?*
  - *If the bank rejected your loan application, what were the reasons?*
  - *If your company did not apply for any loan funding, why?*
- *Does your company use an overdraft facility (or credit line) to finance the day-to-day business expenditures?*
- *Did your company ever take out a bank loan in the past, and if yes what was your experience with that?*
- *How important for your company is the access to internal or external funds relative to other factors (such as finding new customers, competition, cost of production/labour, availability of skilled staff and government regulations)?*
- *Did your company ever receive some form of public finance support (e.g. investment grant, subsidized loan, free advisory service, etc.) for investing in environmental project? If yes, please provide more details.*
- *What are the most common financial investment appraisal criteria you are using for deciding on new investments?*

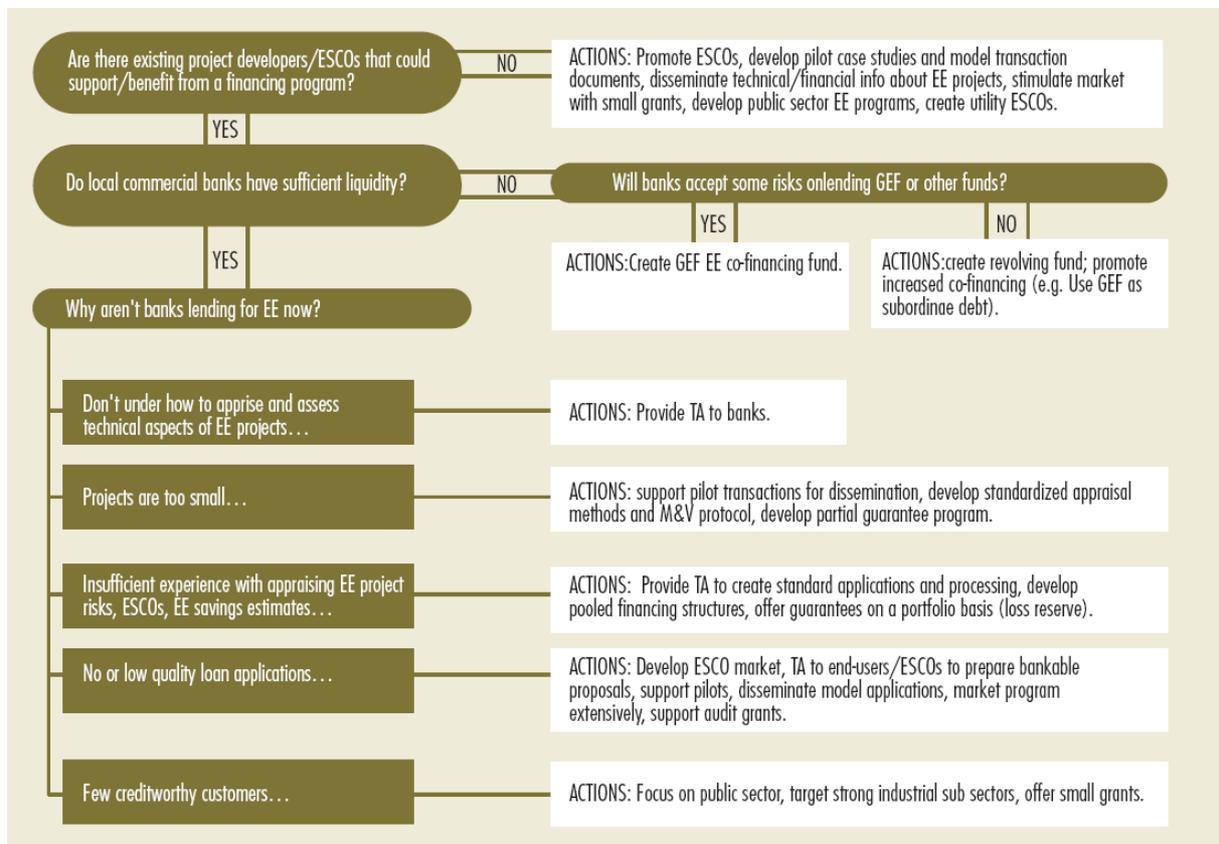
Ideally such questions form part of a survey<sup>5</sup> of a statistically significant number of enterprises carried out periodically to analyse trends.

However, in the setting of the current UNIDO project the Consultant recommends to ask these questions systematically all companies which it engages with during the course of the project.

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<sup>5</sup> Often Central Banks carry out such surveys among enterprises and banks and publish the results.

### Annex 3: GEF “Decision Tree” for selecting EE financing programs



## Annex 4: Operational procedures of the GEF-supported energy Efficiency Fund in Bulgaria (BEEF)

The fund is managed by an outsourced fund manager with the following tasks:

- Manage everyday operations and administration;
- Identify, develop, structure and evaluate EE projects eligible for financing;
- Select co-financing partners and establish long-term relationships with key participants on the market;
- Manage the guarantee facility in a prudent and efficient manner;
- Organize and implement technical assistance (“TA”) initiatives;
- Develop, manage and evaluate the product portfolio;
- Manage the Fund’s financial resources in order to achieve financial sustainability;
- Perform monitoring, reporting and budgeting functions.

The main eligibility criteria are:

- At least half of the project’s benefits should come from measurable energy savings;
- The project should involve the application of well-proven energy saving technology;
- The project cost should range between US\$ 50,000 and US\$ 2,000,000;
- The equity contribution of the Project Developer should be at least 10%;
- The project must have a relatively short payback time (up to five years).

### Project Cycle (as included in the Operational Manual)

#### **Phase 1: Project Identification**

This phase starts with the identification of an idea for an EE project eligible for BEEF support. Project ideas can be generated by three major sources:

- Identified by the fund manager;
- By Project Developers who approach the fund;
- By potential co-financing partners (commercial banks, ESCOs, leasing companies, etc.).

By means of pro-active identification of eligible projects the fund manager assumes responsibility for the generation of the project pipeline. As part of this phase the fund management experts perform the following activities:

- Approach different institutions dealing with EE projects and issues to ensure their effective cooperation and information sharing with BEEF (e.g. Energy Efficiency Agency, municipal organization);
- Approach potential co-financing partners such as major commercial banks and other FIs interested in the EE sector to share project ideas;
- Perform sector analysis to determine likely sources of EE project opportunities;
- Identify key players in the respective sectors and prepare a list of potential Project Developers;
- Approach the potential Project Developers to present BEEF’s activities and discuss opportunities for EE projects financing;
- Prepare a list of identified projects for further consideration.

## **Phase 2: Initial Project Screening**

The purpose of the initial project screening is to gather information that shall enable the fund manager to assess whether the proposed project meets the eligibility criteria of BEEF, whether it fits in the strategic objectives of the Fund and whether it is worth further involvement by the fund manager staff.

As a first step in this procedure the Project Developer prepares an Initial Project Proposal (IPP). It provides a summary of the project rationale and includes a description of project objectives, implementation details, timetable, sources and amount of financing required, and potential for energy savings.

The information provided through the IPP includes:

- Details on Project Developer, including contact details, legal status and activity;
- Details on project partners and the rationale for their involvement;
- Basic information about the project, including technical description, location, lifetime, duration of implementation;
- Description of project financing, including project costs, required financing, share of equity participation, share of other co-financing partners;
- Details on estimated project results and expected benefits, including energy savings achieved.

If the project proposal is rejected, based on the recommendation of the fund manager, the completed IPP form is returned to the Project Developer, together with a rejection notification. A copy of the completed IPP form is filed together with the Initial Appraisal Form by the Expert Project Coordinator.

## **Phase 3: Comprehensive Project Appraisal**

During this phase, the fund manager evaluates the viability of the project from financial, technical, EE and environmental point of view. The project should be evaluated as feasible in each of the described areas of assessment before BEEF can proceed with its support and financing.

The purpose of the technical feasibility assessment is to establish whether the project will achieve the estimated energy savings and GHG reduction and whether it is designed and engineered in compliance with generally accepted technical standards and norms.

In the process of the technical assessment the following basic concerns should be addressed:

- Physical scale, design, engineering, location of the facilities;
- Technology to be used, including types of equipment or processes and their suitability for project needs;
- Approach for installation and/or construction works – subcontracting vs. internally executed;
- Achievability of the implementation schedules;
- Achievability of stated/committed energy savings and GHG reductions;
- Identification of major risks to achieving projected energy savings and GHG reduction;
- Reliability of stated technical specification of the equipment/installation works;
- Reliability of project implementation company/vendor;
- Reliability of project costs estimates, including engineering, design, installation and maintenance costs;
- Appropriateness of the allowance for physical and price contingencies.

The purpose of the financial feasibility assessment is to determine if the proposed project is expected to yield an acceptable financial rate of return and if the Project Developer is able to cofinance part of the project (at least 10% of the total project costs). In the process of the financial assessment, the following issues should be addressed:

- Sufficiency of generated cash flows to meet debt servicing requirements;
- Adequate timing of generated cash flows for project economics;
- Positive net present value of the project;
- Reasonable rate of return on investment;
- Achievability of the financial projections;
- Provision of adequate collateral;
- Financial soundness and ability of the Project Developer to finance own equity.

The purpose of the environmental feasibility assessment is to establish whether the proposed project complies with all regulations and permits provided by the respective regulatory authorities and with the WB requirements. The Expert Project Coordinator should ensure that all environmental permits of the project exist and the project is allowable for implementation.

The results of the comprehensive feasibility assessment of the project are incorporated in the Project Appraisal Report ("PAR"). The PAR is structured to cover the following major areas of information:

- Summary description of the project, including project economics and estimated energy saving and GHG reduction;
- Project risk profile and proposed mitigation steps;
- Project timetable, partners and financing structure;
- Technical feasibility assessment checklist and rationale;
- Financial feasibility assessment checklist and rationale;
- Environmental feasibility assessment checklist and rationale;
- Recommendation.

The PAR is filled out by the fund manager and includes a recommendation on whether BEEF should support the project.

#### **Phase 4: Financial Structuring of the Project**

Following the pre-approval of the project proposal, the fund manager should commence work on the financing structuring of the project. The purpose of this phase is to develop and negotiate financing terms for the project together with the partner co-financiers in a manner that best reflect the specific characteristics of the individual project.

The fund manager approaches a number of potential co-financing partners (FIs) with a proposal for financing of a project that is pre-approved for financial support by BEEF. As part of this step, a draft Term Sheet is provided, including details on the proposed project finance scheme and the terms of BEEF's participation.

The interested FIs should submit the completed Term Sheet with proposed modifications within an agreed timeframe. The fund manager undertakes negotiations on the proposed terms for financing with the FI that has submitted the most favorable financing terms. The FI is entitled to perform additional analysis and assessment procedures of the project. The fund manager is responsible for providing or assisting the FIs in obtaining from the Project Developer all relevant information that the FIs may need to complete their internal project evaluation and credit risk assessment.

After the financing terms and structure of the project are agreed between BEEF, the FI and the Project Developer, the specific provisions of the particular co-financing support are additionally defined in the individual transaction agreement. It shall be based on the initialed

Term Sheet and differ for each particular transaction. The individual transaction agreement shall include, as an attachment, a project monitoring plan, which is detailed later in the section. The fund manager is responsible for negotiating the individual transaction agreement.

#### **Phase 5: Project Approval**

The Executive Director of the fund submits to the Management Board for approval the complete documentation package related to the project financial structuring. This package includes the initialed Term Sheet, the signed Acceptance Letter, the draft individual transaction agreement with the project monitoring plan, as well as any additional relevant correspondence or information obtained since the project preapproval.

The Management Board is responsible for reviewing the submitted documentation. On the basis of that documentation the Management Board can:

- Approve the project and recommend disbursement;
- Reject the project if it is in breach of the investment policy and eligibility criteria. The project can be resubmitted for approval after the required modifications of the financing

parameters are agreed with the FI and the Project Developer.

In the first year of BEEF's operations, the WB shall review all proposals for co-financing and PCGs and the fund shall not enter into any financing agreements without obtaining "no objection" from the WB.

Following the Management Board (and WB, when applicable) approval of the project, the individual transaction agreement is subject to signing. The Executive Director is authorized to sign the individual transaction agreement on behalf of BEEF.

The disbursement of funds to the Project Developer is carried out in accordance with the procedures specified in the Project Financial Management System Manual.

### **Phase 7: Project Monitoring**

Implementation of the project is the sole responsibility of the Project Developer. The fund manager is responsible for monitoring the performance of each project, and for periodically collecting the relevant reported data in accordance with the project monitoring plan. The purpose of the financial monitoring is to ensure that the financing received is utilized in compliance with the financing conditions and to serve as an early warning system for potential financial distress.

The fund manager will also periodically collect data about the EE realization of the projects, including calculations of the energy savings and GHG emissions reductions actually achieved. This information will serve to evaluate the project's compliance with BEEF's objectives and eligibility criteria and to provide the necessary data for the periodical reporting by BEEF to the WB on project implementation progress.

As part of the project monitoring process the fund manager will perform the following tasks:

- Monitoring of repayment performance of principal and interest against terms set out in the facility agreements;
- Site inspections to continually assess project management;
- Collating and analyzing financial information submitted by the Project Developer;
- Maintain a credit file, including all original project cycle documentation, financial statements and spreadsheets, site visit reports, correspondence/memoranda.

## Annex 5: Meeting Schedule during First Mission

### **Monday 10.03.2014**

#### Initial Meeting with IFCO

Mr. Arash Najafi (chamber of commerce)  
Mr. Mirshams (Asia Watt : ESCO)  
Mr. Afzalalqoam (Asia Watt : ESCO)  
Mrs. Faraz Sojdei (Dana energy: ESCO)  
Mr. Farahani (Dana energy: ESCO)  
Ms. Nasim Shekari (UNIDO)  
Mrs. Mahfam Javanbakht (UNIDO)  
Mr. Alaxander Linke (Consultant UNIDO)  
Mr. Sasan Safari (IFCO)  
Mrs. Sara Azimi (IFCO)  
Mrs. Azam Loghmani (IFCO)

### **Tuesday 11.03.2014**

#### Meeting with Mr. Nosratollah Sayfi, CEO IFCO

#### Meeting with Banks

Mr. Hosein Tehrani (Pasargad Energy Development)  
Mr. Reza Derakhshan far (Pasargad Energy Development)  
Mr. Abbas Jafarlou (Mellat bank)  
Mr. Behzad Najafi (Mellat bank)  
Mr. Reza Shafieian (Mellat bank)  
Mr. Jafar Haghshenas (Mellat bank)  
Mr. Gholamreza Hesami (Mellat bank)  
Mr. Ali Rahbar (Mellat bank)  
Ms. Nasim Shekari (UNIDO)  
1Mrs. Mahfam Javanbakht (UNIDO)  
Mr. Alexander Linke (Consultant UNIDO)  
Mr. Sasan Safari (IFCO)  
Mr. Mohamad Eslami (IFCO)

### **Wednesday 12.03.2014**

#### Meeting with JICA

#### Meeting with ESCOs

Mr. Najafi, Senior Advisor of Rahshahr Company – Expert on Management and Planning  
Mr. Mohazab Torabi, DG of Niroo consulting Company and former DG of SABA  
Mr. Mehrazma, Former employee in Budgeting and planning organization, Advisor of energy commission of the parliament

Mr. Mir shams, DG of AsiaWatt Co.(Energy Audit and Energy Efficiency Consulting Company in mineral industries e.g. Brick, cement)

Mr. Bathaei, DG of Pishran Energy (Supplier of Smart control system for the central heating system in building)

Mr. Kenari, Employee in Arian Behsa Co. ( Consulting in EnMS and Energy Audit in industry)

Mr. Safari, DG of Behine-sazan Sanat Tasisat (Energy Auditor company approved by Standard organization)

Mr. Khosro Shahli, DG of Radha Co. (Energy Consulting and Engineering company professional on presenting bankable proposals on several field like oil and gas, environment etc.)

Maryam Shekari , employee in Dana Energy Company – ( Active as ESCO company)

**Thursday 13.03.2014**

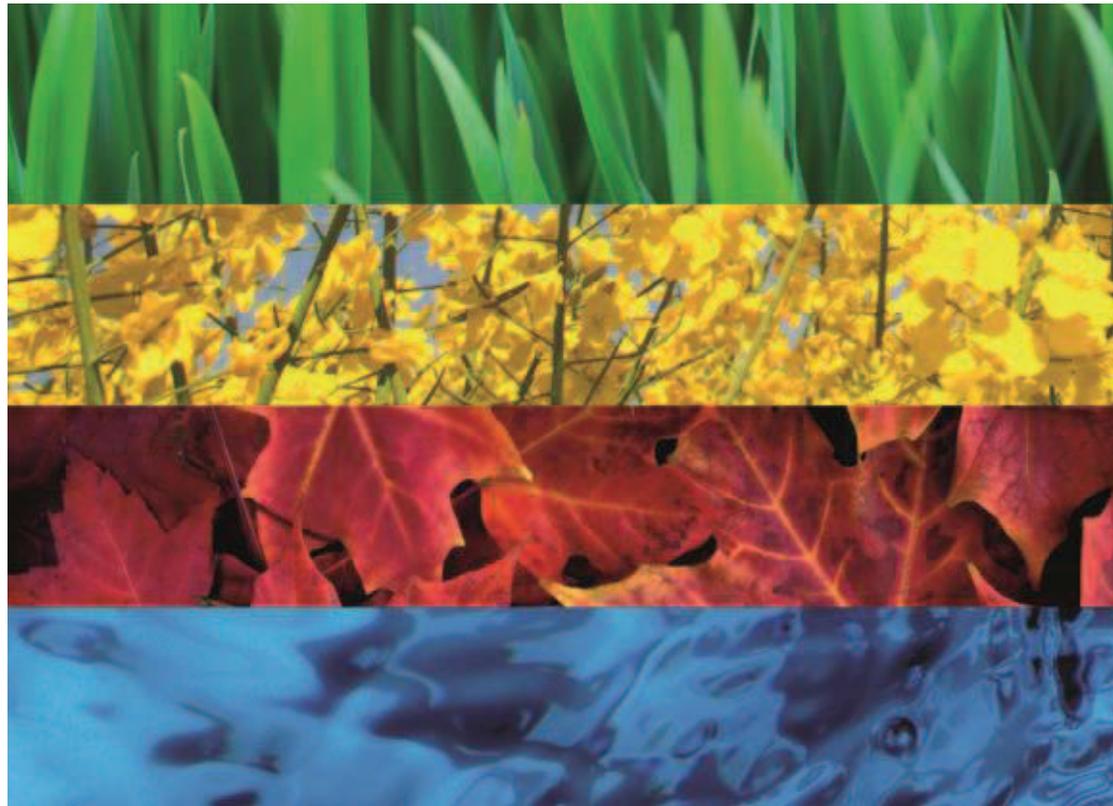
Wrap-Up in UNIDO office

# Key Issues in EE Funds

Consultancy and advisory support required to setup a revolving fund to support energy efficiency in key industrial sectors within the scope of the UNIDO/GEF project “Energy Efficiency in Key Industrial Sectors”

Contract No. 3000019641

01/2015



Client	United Nations Industrial Development Programme (UNIDO) Wagramer Strasse No. 5, 1220 Vienna, Austria
Contractor	Kommunalkredit Public Consulting GmbH Türkenstrasse 9, 1092 Vienna, Austria
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Document	Key Issues EE Funds
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Prepared by	Alexander Linke

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## **Introduction**

The following report provides an **overview** of various important organizational and financial aspects of Energy Efficiency (EE) Investment Funds. The aim of the report is to outline the key issues and provide links to existing publications (“further reading”) which provide a more in-depth analysis of each topic.

There is a wide body of literature which describe existing EE funds, international best-practice as well as recommendations for designing and setting up such dedicated funds. In particular, one recent World Bank report, “*Establishing and Operationalizing an Energy Efficiency Revolving Fund - Guidance Note*” from May 2014 provides a very comprehensive summary of all key aspects of EE funds and is thus highly recommended.

The most important aspect in the design of an EE Fund is the formulation of the overall **investment strategy**. This is not an easy task and needs a lot of preparation and a sound analytical basis of the target market (thematic and/or geographical focus), type of projects to be financed and the definition of the most suitable financing instruments the fund should offer. Nearly all other operational aspects of an EE Fund rest on a consistent and clearly defined investment strategy.

The investment strategy should be operationalized into a **business plan** of the EE fund, including **financial projections** of the fund. At least the business plan should include the following financial indicators:

- Investment profile – the scale and profile of the investments to be made by the fund.
- Operating costs - costs necessary for the running of the fund. This may include Management Fees, Management Costs, deal arrangement fees, envisaged project development costs, project management costs, contingencies for exceptional project management or project restructuring, publicity/marketing costs, etc.
- Envisaged Income Receipts and Capital Receipts – the envisaged scale and timing of resources returned to the fund based on anticipated performance/success of the selected sub-projects.

In principle, any EE Fund should address an clearly identified **market failure** (suboptimal investment situation), which leads to unmet investment needs. Only the existence of such a market failure can be a justification for a public intervention through a EE Fund.

EE Funds should be implemented to support investments that are expected to be **financially viable** but are unable to raise sufficient funding on the market. This may be due to insufficient availability of funding (e.g. high risk of the sector or low profitability expectations) or due to the high costs associated with the available funding sources.

From a purely methodological point of view the following three steps should be taken to analyse a market failures, suboptimal investment situations and investment needs:



Source: Ex-ante assessment methodology for financial instruments in the 2014-2020 programming period, General methodology covering all thematic objectives, Quick reference guide [http://www.eib.org/attachments/documents/jessica\\_ex-ante\\_assessment\\_methodology\\_fis\\_vol0\\_quick\\_guide\\_en.pdf](http://www.eib.org/attachments/documents/jessica_ex-ante_assessment_methodology_fis_vol0_quick_guide_en.pdf)

*From the analytical point of view this guide is very useful, however it was developed for the application within the European Union for the use of EU grants in financial instruments, therefore it is not included in the further reading section.*

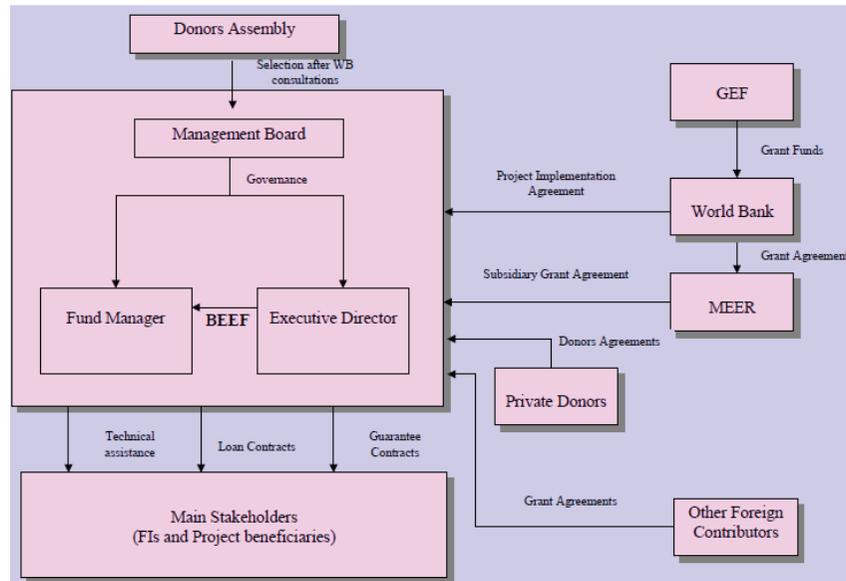
Besides providing finance, EE Funds always have some form of “transformative” mission, such as awareness raising for selected target groups, creating a “EE financing” market through pilot projects, educating market participants (banks, advisors, industrial companies) or promoting specific financing instruments (such as ESCOs).

Throughout this document the experiences from the Bulgarian Energy Efficiency Fund (see: <http://www.bgeef.com/display.aspx>) are mentioned. Set up with the help of the World Bank in 2004, this fund is seen as one of the most successful examples of an EE Fund (at least in Eastern Europe!). The further reading sections contains reference to the publicly available Operations Manual for this fund.

### **Organizational Structure**

The internal organization structure of an EE fund and the governance structure must ensure an efficient operation of the fund and provide the necessary oversight and control functions.

A good example of this overall structure is the Bulgarian Energy Efficiency Fund (shown below, see further reading):



As with all other funding schemes, a **board** will be responsible for the overall strategic guidance of the fund, while on the more operational level an (outsourced) **fund manager** will be responsible for the day-to-day management of the fund and the investment decisions.

The legal structure of a fund is of fundamental importance. An EE Fund can be structured as an **independent legal entity**, governed by agreements between co-financing partners and shareholders. The other possibility is to set up an EE Fund as a separate block of finance, held within an existing financial institution. If an EE Fund only provides investment subsidies (and no financial products such as loans, equity or guarantees) no separate legal entity nor other more elaborated legal structures are in principle necessary.

### **Eligibility Criteria**

The eligibility criteria of an EE fund describe the minimum technical and financial criteria sub-projects (i.e. projects to be financed by the EE Fund) must meet. There is no standard set of eligibility criteria, rather these have to be developed for each specific case.

Eligibility criteria do not only refer to technical criteria (e.g. such as minimum energy savings) but also to project size and commercial/financial aspects (creditworthiness of the borrower, own financial contribution of the company, etc.). Also institutional aspects may play an important role (e.g. implementation capacity of the borrower).

In principle as early as possible in the project cycle (see further below) an acceptable level of creditworthiness of each project to be financed should be established by the fund manager. Otherwise there is the risk that too much time and resources are spent for projects which

### **Project Cycle**

Most EE Funds have a clearly elaborated project cycle, describing and formalising the internal phases and activities from project identification, origination, assessment, financial structuring and approval.

The Operational Manual of the Bulgarian Energy Efficiency Fund includes a detailed description of each phase which can serve as a good example (see further reading).

### **Financial Products**

In general, projects with low risks and stable, even if relatively low, returns are more suited to **debt instruments** (loans at market rates or soft loans). If there is sufficient market interest it may be possible for an EE Fund to secure external co-investment from a private sector financial institution such as a commercial bank or infrastructure fund.

Higher-risk projects with high capital investment, but also with the potential for higher returns, may be more suitable for **equity instruments**. In this case EE Fund could investigate the possibility of securing investment from venture capital funds or other private equity sources.

Non-revenue generating projects, which are unlikely to generate sufficient returns, are more suited for **grant instruments**.

**Guarantees** are suitable for those commercial sustainable projects which external financiers are not willing to finance because of perceived risks (as often the case with EE projects, for example technical risks).

Thus, the ideal financial structure (refinancing) of the fund is closely linked to the financial products it offers and the estimated profitability of the investments.

For example, the Bulgarian Energy Efficiency fund offers loans, partial credit guarantees and portfolio guarantees (taken from the funds website):

**Loans**

<b>Beneficiary</b>	<b>Interest (annual)</b>	<b>Maximal Tenor</b>	<b>Minimal Equity Contribution of the Project Developer</b>
<b>Municipalities</b>	4.5 - 8%	up to 7 years	10 - 25%
<b>Corporate Clients and Private Individuals</b>	5 - 9%	up to 7 years	10 - 25%

### Partial Credit Guarantees (PCGs)

Type of Guarantee	Annual Fee	Maximal Tenor
Partial - 80% on a "pari passu" basis	0.5 - 2 %	up to 7 years
Partial - 50% on a first-loss basis after the bank-creditor	0.5 - 2 %	up to 7 years

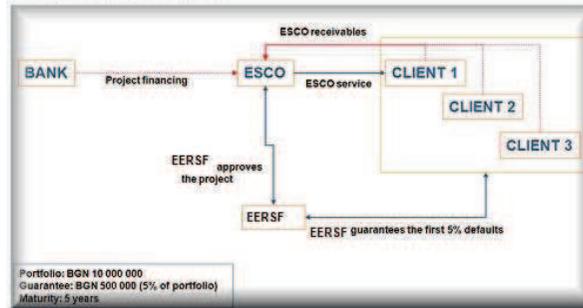
Individual (per project) guarantee commitments shall not exceed **BGN 800 000**.

### Portfolio Guarantees

1) **ESCO portfolio guarantee** - to attract more ESCO companies into this business and to make ESCOs more comfortable by guaranteeing the risk of their counterparties - the project beneficiaries.

2) **Residential portfolio guarantee** - to kick-start the market of EE investments in the residential sector, by providing market products that overcome the lack of legislation in the country.

#### ESCO Portfolio Guarantees



### Support of Private-Sector Projects

When designing a fund to support private-sector sub-projects one should take into account the following five internationally accepted principles:

- Additionality
- Crowding-in
- Commercial sustainability
- Reinforcing markets
- Promoting high standards

The principles were articulated by the leading International Development Banks in 2012 (see further reading).

### **Recommended Further Reading**

- Establishing and Operationalizing an Energy Efficiency Revolving Fund - Guidance Note (2014)
- Energy Efficiency Portfolio Review and Practitioners Handbook (2005)
- Bulgarian Energy Efficiency Fund, Operations Manual (2004)
- Bulgarian Energy Efficiency Fund, Appendices to Operations Manual (2004)
- Unlocking Commercial Financing for Clean Energy in East Asia (2013)
- Thailand's Energy Efficiency Revolving Fund: A Case Study (2005)
- Multilateral Development Bank Principles to Support Sustainable Private Sector Operations (2012)

## Linke Alexander

---

**Von:** SHEKARI, Nasim <N.SHEKARI@unido.org>  
**Gesendet:** Montag, 07. April 2014 13:01  
**An:** Linke Alexander  
**Cc:** GHONEIM, Rana; JAVANBAKHT, Mahfam; AMADIO, Alessandro  
**Betreff:** RE: UNIDO Iran - First Progress Report

Dear Alexander,

Thank you so much for the preliminary report and very useful documents you sent after that. Your ideas and recommendations will be conveyed to IFCO team via our meeting next week and we will get their feedback. Afterwards, if Rana and IFCO agree, we will go ahead with recruiting national expert to do the required job.

Many thanks,

All the best,  
Nasim

---

**From:** Linke Alexander [<mailto:a.linke@kommunalkredit.at>]  
**Sent:** Wednesday, April 02, 2014 11:28 AM  
**To:** GHONEIM, Rana  
**Cc:** SHEKARI, Nasim; JAVANBAKHT, Mahfam  
**Subject:** UNIDO Iran - First Progress Report

Dear Rana,  
Dear Nasim and Mahfam,

please find enclosed the draft version of my first progress report. I will send you in a separate mail some other documents I promised (Guide to bankable EE proposals, Example of Energy audit guidelines, tec.) in a separate mail.

I am available for any comments/remarks/questions.

Best regards,  
Alexander

Alexander Linke  
Head of Energy, Environment and Climate Change Department

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## Linke Alexander

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**Von:** Linke Alexander  
**Gesendet:** Samstag, 13. Dezember 2014 13:19  
**An:** 'Mahdi Samavaty (mahdi.samavaty@gmail.com)  
(mahdi.samavaty@gmail.com)'  
**Cc:** 'JAVANBAKHT, Mahfam'; 'SHEKARI, Nasim'  
**Betreff:** WG: Official Report of Phase I - Edition 1.1: 00

Dear Mahdi,

thank you for your interesting report! I have reviewed it and have no comments. Unfortunately I did not find an outline of current obstacles for commercial bank lending to industrial enterprises and corresponding (draft) recommendations on how to overcome them. Therefore, after my holiday, in early January I will draft my own report which I am obliged to deliver under my ToR recommending a financial scheme.

I will recommend to start with 1-2 "pilot" projects in which part of the available GEF grant funding would be used to identify and prepare a "bankable" project proposal in close cooperation with an industrial company and to provide financial structuring services to approach and negotiate with external financiers a financing package. Then, based on these concrete results of the pilot projects, a more targeted funding scheme can be advised (realistically not a new investment fund with an own legal structure, but rather a grant scheme which would support building a pipeline of projects tailored to the financing structure tested on the pilots).

Best regards,  
Alexander

---

**Von:** SHEKARI, Nasim [<mailto:N.SHEKARI@unido.org>]  
**Gesendet:** Dienstag, 02. Dezember 2014 11:45  
**An:** Linke Alexander; Linke Alexander ([alexanderlinke100@gmail.com](mailto:alexanderlinke100@gmail.com))  
**Cc:** GHONEIM, Rana; AMADIO, Alessandro; JAVANBAKHT, Mahfam; Mahdi Samavaty ([mahdi.samavaty@gmail.com](mailto:mahdi.samavaty@gmail.com))  
([mahdi.samavaty@gmail.com](mailto:mahdi.samavaty@gmail.com)); [MAHDI.SAMAVATY@ut.ac.ir](mailto:MAHDI.SAMAVATY@ut.ac.ir)  
**Betreff:** Official Report of Phase I - Edition 1.1: 00

Dear Alexander,

It is great to inform that the phase (I) - report of Mr. Samavaty- according to his presented plan before, has been submitted as attached.

Thank you and looking forward to your view.

Thank you,  
Regards,  
Nasim

**From:** Mahdi Samavaty [<mailto:mahdi.samavaty@gmail.com>]  
**Sent:** Tuesday, December 2, 2014 1:53 AM  
**To:** JAVANBAKHT, Mahfam  
**Cc:** SHEKARI, Nasim  
**Subject:** Official Report of Phase I - Edition 1.1: 00

Dear Mahfam

Please find official report of phase I which includes all mentioned tasks and duties in financial scheme job description.

Looking forward to get your comments to revise the report if needed.

--

***Sincerely Yours***

**Mohammad Mahdi Samavaty**

***CFA Level II and PhD in Finance Candidate***

***CEO at Vision Capital LLC.***

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Keep going your way comfortable...

## Linke Alexander

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**Von:** Linke Alexander  
**Gesendet:** Donnerstag, 15. Jänner 2015 11:28  
**An:** 'GHONEIM, Rana'  
**Betreff:** AW: Iran Project  
**Anlagen:** EE Fund Report.pdf; Further Reading.7z

**Wichtigkeit:** Hoch

Dear Rana,

as agreed last week please find included my short report on the questions raised by IFCO as well as the reading list (zipped).

As for the immediate use of GEF grants for the revolving fund component I would advise, as already discussed on the phone, to start with 1-2 "pilot" projects in which part of the available grant funding would be used to identify and prepare a "bankable" project proposal in close cooperation with an industrial company and to provide financial structuring services to actually identify and approach external financiers. Maybe such a TA could be developed and delivered in close cooperation with a pre-identified financial institution in Iran. Then, based on these concrete results (which could also serve as empirical evidence of the market gaps), a more targeted funding scheme can be advised (maybe not a new investment fund with an own legal entity as outlined in the attached report but, but rather a grant scheme which would support building a pipeline of projects tailored to the financing structure tested on the pilots).

Please let me know if you have any further questions.

Best regards,  
Alexander

---

**Von:** GHONEIM, Rana [<mailto:R.GHONEIM@unido.org>]  
**Gesendet:** Donnerstag, 08. Jänner 2015 09:15  
**An:** Linke Alexander  
**Betreff:** RE: Iran Project

Sure, I am available now.  
Will you call me?  
Best Regards  
Rana

---

**From:** Linke Alexander [<mailto:a.linke@kommunalkredit.at>]  
**Sent:** Thursday, January 08, 2015 9:13 AM  
**To:** GHONEIM, Rana  
**Subject:** AW: Iran Project

Dear Rana,

can we talk today? I am free until noon, then in a lot of meetings, and tomorrow out of the office, next possibility would be next week.

Best,  
Alexander

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**Von:** GHONEIM, Rana [<mailto:R.GHONEIM@unido.org>]

**Gesendet:** Freitag, 19. Dezember 2014 15:05

**An:** Linke Alexander

**Betreff:** RE: Iran Project

Dear Alexander,

Thanks for the info and hope you will enjoy the holiday. I propose we try and have a short call or meeting during the first week of January (possibly Thursday or Friday?) to discuss the steps forward.

For your information, IFCO has requested us to provide:

- 1- Possible financial models for generation a fund in other countries
- 2- Organizational Structure of the Fund, roles and responsibilities, the members, etc.
- 3- Main components of the fund including workgroups, technical committee, investors, banks, etc.
- 4- Main Criteria for projects acceptance
- 5- How to determine the financial criteria of the fund like, fund ceiling, etc.
- 6- Repayment mechanisms
- 7- What is the required conditions/permissions for transferring the GEF portion to a local fund, i.e. what are the barriers.

It would be great if you can provide us with some best practice models of energy efficiency financing facilities.

Thanks

Best Regards

Rana

---

**From:** Linke Alexander [<mailto:a.linke@kommunalkredit.at>]

**Sent:** Thursday, December 04, 2014 11:42 AM

**To:** GHONEIM, Rana

**Subject:** Iran Project

Dear Rana,

I wanted to inform you that I will leave KPC beginning of next year (probably by mid-March 2015). This was not yet officially announced internally here at KPC, therefore please keep this still confidential. However, I already now wanted to coordinate with you how we will proceed with the Iran assignment. I am not sure Mahdi has so far provided a sufficient level of information and "local insight" to really advise on a concrete funding structure which makes sense in the context of the project.

I would like to finalise the contractually agreed deliverables as soon as possible, but realistically this will be not before end of January 2015 (I will be on holiday from December 18<sup>th</sup> until January 4<sup>th</sup>).

However, to be honest, I am still not clear about the role and obstacles/barriers of commercial financing (coming from local banks and/or other financial institutions) in industrial enterprises you are targeting in your program (I hoped that Mahdi could clarify this). Therefore, as already discussed on the phone, I would rather recommend to start with 1-2 "pilot" projects in which part of the available grant funding would be used to identify and prepare a "bankable" project proposal in close cooperation with an industrial company and to provide financial structuring services to actually identify and approach external financiers. Then, based on these concrete results, a more targeted funding scheme can be advised (realistically not a new investment fund with an own legal structure, but rather a grant scheme which would support building a pipeline of projects tailored to the financing structure tested on the pilots.

If you consider to continue with the assignment (with another KPC expert) I will be happy to provide you with a proposal in January! If you have any other questions please don't hesitate to contact me.

Best,

Alexander

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<http://xmail1.unido.org/canit/urlproxy.php?q=aHR0cDovL3d3dy5rb21tdW5hbGtyZWVpdC5hdC9kaXNjbGFpbWVYLw%3D%3D>

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## Linke Alexander

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**Von:** Linke Alexander  
**Gesendet:** Mittwoch, 21. Jänner 2015 18:21  
**An:** 'SHEKARI, Nasim'  
**Cc:** 'GHONEIM, Rana'; 'JAVANBAKHT, Mahfam'  
**Betreff:** AW: Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Nasim,  
Dear Mahdi,

many thanks for this very comprehensive report!

I will not comment on all sections but initially only on two aspects:

- In chapter 5 you recommend a specific financial scheme (“money market model”). Basically you recommend to set up a fund as a legal entity (called “NGO” by you) which collects GEF funds through UNIDO and from IFCO (and potentially also from other Iranian sponsors). While this is clear to me I don’t understand which financial instrument you propose that this fund grants to the individual projects (a loan, a grant?). Under “money market” normally short-term deposits or lending instruments are understood, how is this connected to your proposal? Do you use “money market” as a term because you propose to deposit the contributions to the fund in a 1-year account?
- I find the shariah-compliant lending mechanisms you describe in chapter 3 very interesting. During my first visit last year I also thought about which of these mechanisms could be used (or have to be used). Do you think its possible that for example the fund purchases equipment (e.g. based on the Ijarah-wal-iqtina) and then transfers this to the industrial company (maybe through an ESCO)? The rental payments to the fund could then be repaid by the energy savings generated.

Best regards,  
Alexander

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**Von:** SHEKARI, Nasim [<mailto:N.SHEKARI@unido.org>]  
**Gesendet:** Sonntag, 18. Jänner 2015 08:24  
**An:** Linke Alexander  
**Cc:** GHONEIM, Rana; JAVANBAKHT, Mahfam; Linke Alexander ([alexanderlinke100@gmail.com](mailto:alexanderlinke100@gmail.com))  
**Betreff:** FW: Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Alexander,  
Please find attached, the report of our national expert.  
We would be thankful to have your view in the most convenient time for sharing it with IFCO.  
Thank you,  
Regards,  
Nasim

**From:** Mahdi Samavaty [<mailto:mahdi.samavaty@gmail.com>]  
**Sent:** Sunday, January 18, 2015 1:48 AM  
**To:** JAVANBAKHT, Mahfam  
**Subject:** Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Mrs. Javanbakht

Please find attached file as final report of EE prject for all phases.

Sorry again to be late and hope the report is useful enough to fulfill the financing task.

Looking forward to reicive your valuable comments to develop the report if needed.

--

***Sincerely Yours***

**Mohammad Mahdi Samavaty**

***CFA Level III Candidate and PhD in Finance***

***CEO at Vision Capital LLC.***

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Keep going your way comfortable...

## Linke Alexander

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**Von:** Linke Alexander  
**Gesendet:** Dienstag, 03. März 2015 12:06  
**An:** 'SHEKARI, Nasim'; 'GHONEIM, Rana'; 'sharif@ifco.ir'; 'AMADIO, Alessandro'  
**Cc:** 'JAVANBAKHT, Mahfam'; 'Mahdi Samavaty (mahdi.samavaty@gmail.com) (mahdi.samavaty@gmail.com)'; 'azadmehr57@gmail.com'; Gauss Martin; Diernhofer Wolfgang  
**Betreff:** AW: \*\* URGENT\*\* Approach on Financial Scheme  
**Anlagen:** AW: Iran Project

**Wichtigkeit:** Hoch

<b>Verlauf:</b>	<b>Empfänger</b>	<b>Übermittlung</b>
	'SHEKARI, Nasim'	
	'GHONEIM, Rana'	
	'sharif@ifco.ir'	
	'AMADIO, Alessandro'	
	'JAVANBAKHT, Mahfam'	
	'Mahdi Samavaty (mahdi.samavaty@gmail.com) (mahdi.samavaty@gmail.com)'	
	'azadmehr57@gmail.com'	
	Gauss Martin	Übermittelt: 03.03.2015 12:07
	Diernhofer Wolfgang	Übermittelt: 03.03.2015 12:07

Dear Nasim,

thank you for your mail! I am not familiar with the recent discussions between UNIDO, Mr. Samavaty and IFCO, but I would like to repeat my recommendation which I sent to Rana on January 15 (see attached mail): I would not recommend at this stage to establish a new "EE fund" but rather start with 1-2 pilot projects, using parts of the GEF-fund in the form of Technical Assistance to structure the pilot projects and arrange for (project) financing. Only after such pilot projects there is sufficient evidence on (financial) market barriers on which the design of a new EE fund should build upon.

I am also not yet convinced on the proposed financial scheme by Mr. Samavaty (in the version sent to me on January 18), because (as mentioned in my e-mail dated January 21) the type of financial instruments (grants? loans at commercial terms? loans at concessional rates? partial guarantees?) to be provided is not specified, however this is a fundamental issue in any EE financing scheme.

Also, the set-up of a new financial mechanism (especially one constituted as a separate legal entity) requires a lot of preparatory efforts, and it is unclear to me whether such efforts are also expected to be funded by UNIDO/GEF. Please see my report on EE funds (part of the attached e-mail) and the attachment "Bulgarian Energy Efficiency Fund Operations Manual" to see the level of detail needed for a new EE fund.

Whether or not to transfer part of the GEF-budget to IFCO is a decision which I cannot comment on, as I also do not know the implementation agreements between UNIDO and GEF. If any funds can be deposited on a USD-account in Iran this is certainly very positive in order to avoid any currency losses. However, as stated above, I would not recommend to transfer any funds to IFCO before agreeing in detail on the structure of financial scheme.

As already mentioned to Rana I will leave Kommunkredit by March 13 and will not be able to continue to work on my assignment. The attached report and my recommendations which I sent to Rana on January 15 was actually the

closing of my assignment. If needed I already offered Rana to discuss with Wolfgang Diernhofer (Head of Department) and Martin Gauss (Senior Consultant) on any follow-up to my assignment, as needed!

Please let me know whether there is any additional issues which I can help to clarify!

Best regards,  
Alexander

Alexander Linke  
Head of Energy, Environment and Climate Change Department

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**Von:** SHEKARI, Nasim [mailto:N.SHEKARI@unido.org]  
**Gesendet:** Sonntag, 01. März 2015 16:01  
**An:** GHONEIM, Rana; Linke Alexander; sharif@ifco.ir; AMADIO, Alessandro  
**Cc:** JAVANBAKHT, Mahfam; Mahdi Samavaty (mahdi.samavaty@gmail.com) (mahdi.samavaty@gmail.com); azadmehr57@gmail.com  
**Betreff:** \*\* URGENT\*\* Approach on Financial Scheme

**Dear All,**

Despite all our efforts to reach Mr. Samavaty for arranging a conference call, we didn't succeed yet. Therefore, I would like to ask Alexander to present his proposal considering the report of national consultant. I should note that from our meeting with IFCO in which report was presented, IFCO was quite satisfied with the proposed method, although there are some comments. The main points of discussion between national expert and IFCO (as far as I got) are outlined below for your kind information.

- 1- IFCO insists on having GEF portion in Iran, but for avoiding to lose money because of reduction in currency value, the account can be in US Dollar and GEF portion can be only spent for the projects, they need USD financing.
- 2- The internal funder can be financial institutions as well as the clients/industries who will request fund. As far as I know IFCO started negotiation with some large companies in this regards, however they need more detail information about financial scheme.
- 3- Membership fee can be defined and received from industries in order to cover the admin costs of the board members and proposed committees.
- 4- Organizational chart can be simplified based on IFCO comments.
- 5- Sepah bank is suggested by IFCO as the first alternative for agent bank. The reason is that IFCO has recently signed a contract with Sepah bank for soft loan agreements.

Please accept my apologies if I couldn't convey the points of discussion in an appropriate way. In fact, Mr. Samavaty was expected to do this and revise the report accordingly. Anyhow, I would be happy to have your comments in the cases I missed or I am not right.

Many thanks for your attention and looking forward to having your view to know how to proceed.  
Kind Regards,  
Nasim



**Nasim Shekari**

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*Note that official weekend for UN agencies in Iran is Friday and Saturday.*

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**From:** SHEKARI, Nasim  
**Sent:** Thursday, January 22, 2015 9:55 AM  
**To:** Mahdi Samavaty ([mahdi.samavaty@gmail.com](mailto:mahdi.samavaty@gmail.com)) ([mahdi.samavaty@gmail.com](mailto:mahdi.samavaty@gmail.com))  
**Cc:** JAVANBAKHT, Mahfam; Linke Alexander ([a.linke@kommunalkredit.at](mailto:a.linke@kommunalkredit.at))  
**Subject:** FW: Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Mahdi,

Please find email below, the view of Alexander on your report.

We look forward to your reply. Indeed, we can hear your answer in the meeting with IFCO next week or you may talk to Alexander on skype.

Kind Regards,  
Nasim



**Nasim Shekari**

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*Note that official weekend for UN agencies in Iran is Friday and Saturday.*

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**From:** Linke Alexander [<mailto:a.linke@kommunalkredit.at>]  
**Sent:** Wednesday, January 21, 2015 8:51 PM  
**To:** SHEKARI, Nasim  
**Cc:** GHONEIM, Rana; JAVANBAKHT, Mahfam  
**Subject:** AW: Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Nasim,  
Dear Mahdi,

many thanks for this very comprehensive report!

I will not comment on all sections but initially only on two aspects:

- In chapter 5 you recommend a specific financial scheme (“money market model”). Basically you recommend to set up a fund as a legal entity (called “NGO” by you) which collects GEF funds through UNIDO and from IFCO (and potentially also from other Iranian sponsors). While this is clear to me I don’t understand which financial instrument you propose that this fund grants to the individual projects (a loan, a grant?). Under “money market” normally short-term deposits or lending instruments are understood, how is this connected to your proposal? Do you use “money market” as a term because you propose to deposit the contributions to the fund in a 1-year account?
- I find the shariah-compliant lending mechanisms you describe in chapter 3 very interesting. During my first visit last year I also thought about which of these mechanisms could be used (or have to be used). Do you

think its possible that for example the fund purchases equipment (e.g. based on the Ijarah-wal-iqtina) and then transfers this to the industrial company (maybe through an ESCO)? The rental payments to the fund could then be repaid by the energy savings generated.

Best regards,  
Alexander

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**Von:** SHEKARI, Nasim [<mailto:N.SHEKARI@unido.org>]  
**Gesendet:** Sonntag, 18. Jänner 2015 08:24  
**An:** Linke Alexander  
**Cc:** GHONEIM, Rana; JAVANBAKHT, Mahfam; Linke Alexander ([alexanderlinke100@gmail.com](mailto:alexanderlinke100@gmail.com))  
**Betreff:** FW: Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Alexander,  
Please find attached, the report of our national expert.  
We would be thankful to have your view in the most convenient time for sharing it with IFCO.  
Thank you,  
Regards,  
Nasim

**From:** Mahdi Samavaty [<mailto:mahdi.samavaty@gmail.com>]  
**Sent:** Sunday, January 18, 2015 1:48 AM  
**To:** JAVANBAKHT, Mahfam  
**Subject:** Official Report of EE Project- Financial Scheme - 1:001 Version

Dear Mrs. Javanbakht

Please find attached file as final report of EE prject for all phases.

Sorry again to be late and hope the report is useful enough to fulfill the financing task.

Looking forward to reicive your valuable comments to develop the report if needed.

--

***Sincerely Yours***

**Mohammad Mahdi Samavaty**

***CFA Level III Candidate and PhD in Finance***

***CEO at Vision Capital LLC.***

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*Keep going your way comfortable...*

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