Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia

Mid-Term Evaluation

UNDP-GEF Medium-Site Project (MSP)

Government of Slovakia
and
United Nations Development Programme / GEF

Official Title:	Removing Barriers to the Reconstruction of the Public Lighting Systems in Slovakia		
Country:	Slovak Republic	**PIMS Number**	2144
		Atlas Project Number	47936
Focal Area	CC	**Project Type (FSP/MSP)**	MSP
Strategic Priority	SP#2	**Operational Programme**	OP#5
Date of Entry into Work Programme	June 16,2005	**Planned Project Duration**	4 years
ProDoc Signature Date	22.11.2005	**Original Planned Closing Date**	November 2009
Total Project Budget			3.206.000 USD
GEF Funding			970.000 USD
GHG Emission Reduction Impacts			63,993 tonnes of avoided carbon equivalent spread over 35 years (project impact lifetime)

Project Summary

The project has three outputs. The first will set up the Investment Facilitation Department (IFD). The outcome of this output will be a fully operational business unit with the capabilities of identifying and brokering public lighting investments. The second output (*to be amended*) will set up a project fund to enable the IFD to build an initial portfolio of investment successes. The sole-purpose of the fund will be to help attract initial investors and enable the IFD to gain the experience, expertise and credibility to operate as a sustainable business entity, independently of project resources. The third output is designed to promote the IFD more widely in the Slovak Republic and, based on early project successes, expand its client base. As such, it will be important to determine independent measurements of energy savings, and present these with investment profiles to demonstrate payback periods and a full scale of positive financial returns. This promotional material will be accompanied by lessons learned from project implementation to create an option for the international transfer of best practices.

List of Acronyms

APR	Annual Project Review
AWP	Annual Worl Plan
CEVO	Centrum pre Verejné Osvetlenie
ECB	the Energy Centre Bratislava
EE	Energy Efficiency
EPC	Energy Performance Contract
ESCO	Energy Service Company
EU	European Union
GHG	Greenhouse Gases
IFD	Investment Facilitation Department
KPI	Key Performance Indicator
LP	Lighting Points (luminary)
NPD	National Project Director
MSP	Mid Size Project
PDF	Project Development Fund
PIR	Project Implementation Review
PL	Public Lighting
PMU	Project Management Unit
QPR	Quarterly Progress Report
RF	Revolving Fund
RFP	Request for Proposals
SC	Steering Committee
UNFCCC	United Nations Framework Convention on Climate Change
USD	United States dollar

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Foreword

The Evaluator was hired in July 2007 by UNDP-Bratislava to conduct a MTE of the project entitled "Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia".

At this point in time, based on information gathered during his site presence (September 3 to 8, 2007), discussions conducted with major stakeholders and project team members as well as site visits to 2 municipalities, the Evaluator feels comfortable in drawing a number of conclusions, to rank the main activities already achieved and outputs in terms of the actual impact at the mid-term of the project's implementation.

The Evaluator is pleased to highlight the close cooperation of the PMU during his mission in Bratislava. Because of the short duration of the site presence, the Evaluator would not have been in a position to fulfill his assignment without the Unit's valuable cooperation.

Louis-Philippe Lavoie
Energy Efficiency Programme Design and Evaluation Specialist
Econoler International Inc.

1. Executive Summary

1.1 Brief Project Description

The implementation of the UNDP/GEF Project "Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia" began in December 2005 with an objective to avoid the emission of 63,993 tonnes of carbon equivalent (or 234,641 tonnes of CO_2) by catalyzing investments in energy efficient public lighting technologies, over the 20-year lifecycle of those investments. The project has three outputs:

- The first will set up the Investment Facilitation Department (IFD). The outcome of this output will be a fully operational business unit with the capabilities of identifying, supporting and brokering public lighting investments.
- The second output *was expected* to set up a project revolving fund to enable the IFD to build an initial portfolio of investment successes. The sole purpose of the fund *was expected* to help attract initial investors and enable the IFD to gain the experience, expertise and credibility to operate as a sustainable business entity, independently of project resources[1]. The outcomes related to Output 2 are the same, but the project will proceed with a direct investment programme by using an alternate financial tool (EPC).
- The third output is designed to promote the IFD more widely in the Slovak Republic and, based on early project successes, expand its client base.

The designed total project budget is 3,206,000 USD, including GEF funding in the amount of 970,000 USD. An amount of 466.500 USD has been designed for the revolving fund (*revision under way*) within Output 2.

The Executing Agency for the project is the Slovak Energy Agency. The National Implementing Agency is the Energy Centre Bratislava (ECB).

The geographical scope of the project is the whole area of Slovakia. In accordance with the upcoming proposed amendment to Output 2, the new focus is now on municipalities of up to 5,000 inhabitants. In accordance with this strategy, the target towards reaching the objectives in terms of GHG reductions is to conduct about 130 PL improvement projects in selected municipalities. For the purpose of proceeding to a follow-up of this KPI, the Evaluator does suggest that the PMU should use the number of lighting points as an indicator rather than the number of project because the energy savings and GHG emission reduction result from LPs improvements. Since the average per project is about 210 LPs ,the target to be reached is about 27,300 LPs.

[1] To describe the activities related to Output 2, verbs in the past tense were used in the TOR since Output 2 is still undergoing amendments.

1.2 Context and Purpose of the Evaluation

This project planned more than five years ago[2] is still a timely project for three main reasons:

(i) the project will have a direct impact on GHG emission reductions and energy savings;

(ii) the project is in line with the recently (July 2007) endorsed national EE policy, which focuses on the sustainable development of the energy sector with an emphasis on reducing GHG emissions by decreasing the total demand side energy consumption. Energy efficiency priorities are part of the overall Energy Policy in Slovakia and were approved by the Government in January 2006. This is a sound signal for all stakeholders and the Policy proves the project is in line with the mainstream in Slovakia. The objective of the Energy Policy is to ensure the reliable supply and efficient use of energy, and to maximize savings on the demand side. Obviously the importance of energy efficiency in Slovakia is increasing alongside rising energy prices. Energy efficiency measures are not included in a single legislative act, but are included in a number of pieces of legislation on energy, including energy performance standards for buildings, etc. In line with the Energy Policy, an Energy Efficiency Strategy is being developed under the supervision of the Ministry of Economy; the Strategy is aimed at: (i) increasing the priority attached to energy efficiency in the country; (ii) raising financial and human resources allocated to this area; (iii) raising the qualification of employees involved in the implementation of energy efficiency programmes; (iv) having access to best international practices; (v) creating a legal framework to facilitate efforts in the field of energy efficiency.

(iii) because of the drastic increase in the cost of electricity over the last 5 years (100%) and an upcoming tariff increase estimated at 4.5% a year, municipalities are more and more concerned about their energy billing.

The MTE has been requested by UNDP/GEF and has two main objectives:

a) Promote accountability for the achievement of the GEF objectives through the assessment of the results, effectiveness, processes and performance of the partners involved in GEF activities. The GEF results will be monitored and evaluated for their contribution to global environmental benefits.

b) Promote learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners, as a basis for decision-making on policies, strategies, programme management and projects and to improve knowledge and performance.

[2] PDFA approved in 2002.

1.3 Main Conclusions, Ratings, Recommendations and Lessons Learned

1.3.1 Main Conclusions

Based on the material made available by the Project Management Unit (PMU) and interviews conducted in the field, the Evaluator has ranked the major project components and outputs.

As a whole, the project is correctly managed, adequately staffed and the Evaluator does not foresee any major risk related to any deviation of the activities leading towards the expected objectives.

The Evaluator is however somewhat concerned about the final quantitative impacts in terms of GHG emission reductions within the project timeframe. The target of reducing GHG emissions of about 64 kt carbon is still reachable but the PMU will have to implement an appropriate strategy. The proposed amendment addresses the right issues in regards to adjusting Output 2 (direct investments for improving PL Systems) taking into consideration the current financial context in Slovakia.

The PMU (IFD) should include some improvements to the activity planning for phasing and implementing the direct investment (EPC) and for proceeding with other resource mobilization in the particular context of Slovakia at this point in time because of the economic integration of Slovakia into the European Union.

Because of the major adjustment required in Output 2, the budget provisions the GEF is proposing for the implementation of PL systems improvement and reconstruction is widely insufficient to ensure that the GHG emission reductions target is reached. The project must mainly rely on other resource mobilizations to fulfill its objectives.

1.3.2 Rating at a Glance

The Evaluator ranked the levels of achievement according to rules based on the following categories: (HS)Highly Satisfactory=6, (S Satisfactory=5, (MS) Moderately Satisfactory=4, (MU) Moderately Unsatisfactory=3, (U) Unsatisfactory=2, (HU) Highly Unsatisfactory=1, (N/A) not applicable

The rating is figured as an average of quantitative rating for (i) Relevance, (ii) Effectiveness, (iii) Efficiency.

Description	Rating	Evaluation Criteria	Comments
Project Concept and Design	**MS**	Relevance: 6 Effectiveness: 2 Efficiency: 4	The rating for effectiveness is low (2) because the project document intended to use the investment fund as a "*Revolving Investment Fund*", which is usually incompatible with projects with such a lengthy payback period.
Project Implementation	**S**	Relevance: 5 Effectiveness: 5	Implementation Efficiency has been rated as (S) Satisfactory even if, for the

		Efficiency: 4	time being, the IFD has not proceeded with direct investments towards improving the PL systems. In the Evaluator's opinion, it was impossible to proceed otherwise since the rules for using the investment fund were not yet established and approved.
Project Outputs, Outcomes and Impacts.	**S**	Relevance: 5 Effectiveness: 5 Efficiency: 4	OUTPUT 1: ***An effective and sustainable advisory service created to catalyze public lighting investments.*** Rating of Outcomes and Impacts related to Output 1: 5 OUTPUT 2: n/a ***Finance technical demonstrations with the support of a concessional fund.*** For the time being, the IFD has not been in a position to proceed with direct investments because the required amendment has not yet been approved. Rating: n/a OUTPUT 3: ***Support investments in energy efficient public lighting through information dissemination*** Impacts and Outcomes for Output 3: rating 5

1.3.3 Recommendations

A Need for Improvement

The proposed amendment document sent to the UNDP in August 2007 is clear, well prepared, comprehensive enough and totally in accordance with the current market situation. The implementation of a revolving fund was not the best way to tackle the problem of investments in PL projects.

The Amendment Request proposes to shift from a revolving fund to a direct investment fund by using the EPC approach. The IFD proposes to proceed with an upfront investment of 33% in PL projects and borrowing the remaining investment cost from a commercial bank. The IFD's upfront investment and the commercial loan must be reimbursed by the energy end-users based on energy-savings results. This is the basic principle of an energy performance contract. The Evaluator paid special attention to reviewing and verifying the data and tables included in the Amendment Request document. In general, the rationale makes sense but the implementation strategy would require some improvements.

Because of the very long payback period, an ESCO would not be naturally inclined to consider proceeding with such an investment since the cash flow generated by the project is too low. Roughly, the investment the IFD can fund by allocating the total investment budget provision of Output 2 is about 1.5 million $. The financial needs in Slovakia to reach the project objectives correspond to an amount of about 8 million dollars.

There is obviously a lack of funds and the IFD should implement a sound strategy to proceed with an additional mobilization of resources, a strong marketing strategy to convince the municipalities to improve their PL systems at this moment and a new work plan for speeding up the whole investment process with the aim of disbursing the investment budget provisions within the project timeframe in accordance with the project objectives.

The use of EPC should be an option among other supports the IFD could provide to municipalities. However, if the amendment is approved, the EPC approach will be the only way to proceed with a *direct investment* in PL improvement projects. In such a situation, activities included in Output 1 (*An effective and sustainable advisory service created to catalyze public lighting investments)* and Output 3 *(Support investments in energy efficient public lighting through information dissemination)* are more important than before since these activities intend to promote PL reconstruction and support municipalities in the implementation of the required improvements, especially by advising decision makers on the best way to have access to alternate funding.

Recommendation 1: CAPACITY BUILDING Programme related to EPC methodology, contractual framework and monitoring and Verification.

Recommendation 2: REVISE THE EPC IMPLEMENTATION STRATEGY to speed up the project selection process and put the emphasis on additional resources mobilization by promoting different performance contracting approaches and other technical services among municipalities.

Recommendation 3: BUNDLE THREE SERIES OF PL PROJECTS with the aim of optimizing the implementation process and cutting the management and equipment supply costs.

Recommendation 4: LAY OUT AND IMPLEMENT AN EFFICIENT MARKETING ACTION PLAN to promote EPC for PL and other technical services.

Recommendation 5: CONSIDER REQUESTING A BUDGET REVISION AND A PROJECT EXTENSION to take into account the incremental costs related to EPC implementation and management and to allot the needed time for the promotion of EPC.

Recommendation 6: REVISE THE COST BREAKDOWN STRUCTURE OF EPC PROJECT transaction cost.

1.3.4 Lessons Learned

Decision making process and Approval.

2 Introduction

2.1 Project Background and Current Situation

The implementation of the UNDP/GEF Project "Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia" began in December 2005 and was officially launched during the Inception Workshop held in April 2006.

The PL Systems Reconstruction Project is intended to reduce the GHG emissions (equivalent CO_2) by about 234 kt CO_2 or 0.5% of the total GHG emissions based on the emissions estimated by UNFCCC[3] of 46,785 kt CO_2 in 2004. Although such a percentage seems very low, it will be a significant contribution to the effort agreed to by Slovakia in accordance with the Kyoto Protocol. Slovakia is currently committed to reducing its GHG emissions by 8% as per the forecast for 2012. It is estimated that the PL Systems Reconstruction Project should contribute by about 6% to the overall national GHG emission reduction target[4].

2.2 Key Issues Addressed and Priority Outcomes from the MTE

The ''*Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia*'' project is at the moment (MT) facing a situation that is not easy to manage.

Currently, although the project is adequately (professional capacity) staffed, well managed and relies on solid national networking, the project risks to incur delays[5] in implementing tangible projects in the field. The brand new approach (EPC) as described in the Amendment Request document is related to Output 2, which will result in shifting from "Concessional Financing" to a direct investment programme by using the Energy Performance Contracting approach.

Such a situation is the result of a drastic change in the financial market conditions and economic environment over the last two years in Slovakia, which led to a significant reduction in interest rates for commercial loans, making the need for concessional project funding obsolete.

Taking into consideration the current situation, the PMU recently proposed a request for an amendment to the UNDP/GEF with the aim of making the

[3] http://unfccc.int/files/ghg_emissions_data/application/pdf/svk_ghg_profile.pdf
[4] As per the Evaluator's estimate.
[5] Currently, activities related to Output 2 have not been launched since all parties knew from the early stages of the project implementation phase (from the Inception Workshop) that, because of the new financial market conditions, Output 2 must be amended prior to proceeding with investments or financial commitments. The Evaluator mentions a risk of ''delays'' because, within the project's timeframe (project ending in 2010), it is now urgent that a decision be made on the most appropriate way to launch activities under Output 2.

investment fund (466.500 USD) provisioned within activities related to Output 2 (*Finance technical demonstration projects with the support of a concessional fund*) operational and more useful. By using a direct financing mechanism rather than only providing concessional funding, the IFD will be required to use new KPIs related to the outcomes resulting from Output 2. The Evaluator also paid special attention to the issue of implementing the EPC approach, which will require a larger effort on the part of the IFD team members since the IFD will be called upon to deal with additional activities to successfully implement and manage the EPCs on a long-term basis.

Because of the major impact of activities linked to Output 2 and the proposed amendment, the Evaluator spent almost 50% of his effort reviewing the rationale of the Amendment Request, validating information and data (information triangulation) and discussing the required implementation strategy. The MTE Report reflects the effort breakdown. In spite of the major effort focused on Output 2, the report also deals with other evaluation priorities: (i) Project Formulation and Relevance; (ii) Project Performance; (iii) Management Arrangements and (iv) Overall Project Success.

The Evaluator considers the short list of recommendations as his major outcomes in view of the new challenge raised by the amendment to Output 2. Recommendations 1 to 6 should be implemented as soon as possible after the amendment has been approved by the UNDP/GEF. In order to speed up the amendment approval process, the Evaluator recommends revising the request for amendment by taking into consideration recommendations 2, 3, 5 and 6 which are key recommendations for the improvement of the proposed amendment.

2.3 Methodology and Structure of the Evaluation

The Evaluator proceeded with the evaluation process in accordance with the guidelines described in the Terms of Reference, but focused on Output 2 and the new project implementation strategy and financial mechanism using the energy performance contract approach.

A set of relevant data and information related to the status of project implementation was provided in the Project Implementation Review (PIR) the IFD prepared in August 2007. This updated information has been useful to the Evaluator in preparing his report. As far as possible, this information and data has been validated during discussions with the IFD Manager.

A mission report (Mission Main Findings) was prepared at the end of the Evaluator's site presence (September 7 2007). This report was discussed with the project team before being sent to UNDP.

A draft report was prepared and sent to UNDP and the project team for their comments. Comments related to some inaccurate data have been taken into consideration in the final version. In order to focus the evaluation on current concerns, the UNDP provided the Evaluator with several comments that, as far as possible, have been taken into consideration in the final report. This final report is being sent to UNDP-Bratislava in mid October 2007, a bit later than the targeted date.

Itinerary and Persons Interviewed

During his one-week site presence, the Evaluator met major stakeholders in 2 municipalities, 2 municipal associations, a commercial bank and proceeded to interview all IFD team members, including the NPD. The list of individuals met is attached in Appendix 1.

The evaluation was carried out in September 2007. Except for half a day spent visiting potential demonstration project sites in the towns of Gbely and Kuklov, the Evaluator spent most of his one-week site presence in Bratislava, from September 3 to September 8, 2007.

3 The Project and its Development Context

3.1 Project Start and Duration

The project document (Prodoc) was signed in December 2005, but the project actually started in practice when the project team held the Inception Workshop in April 2006. The project duration is 4 years.

The project is expected to come to a close in 2010.

3.2 Implementation Status

NOTE: Based on discussions with the IFD Manager, the Quarterly Progress Reports and PIR Report were issued in August 2007.

At the mid-term of project implementation, the Evaluator is somewhat concerned that, at the moment, no PL project has been implemented as a result of a direct involvement of the IFD. The Amendment Request (draft version) was sent to UNDP in August 2007. It is important to mention that the SC and UNDP have requested the PMU to propose an amendment to Output 2 one year after the project starting date. The PMU proceeded so.

This four-year project is one and a half years into its implementation with no major sign of any investment in energy efficient public lighting yet. The main reason for this is that municipalities are waiting for a call from the EU regarding grant financing, which is expected to be more attractive to municipalities than a commercial bank loan. The use of the EPC approach should be a stronger incentive and promotional tool to overcome such a wait-and-see attitude.

Most services are provided by IFD's staff members, some services are provided by external consultants (the energy audits of the largest municipalities, procurement advisory services…). The major services delivered over the first 18 months were energy audits, technical advice and advice on financing based on grant resources.

Generally speaking, the project implementation is proceeding in accordance with the work plan. Despite the delays in the start-up phase caused by the unavailability of experienced professionals on the Slovak labor market, IFD/CEVO is fully staffed and operational. Due to the long project preparation period, many municipalities listed in the project document are no longer interested in cooperating with the project. Some have either reconstructed their PL already or new municipal councils have changed their priorities.

The project team has devoted huge efforts towards acquiring new project partners for the implementation of demonstration projects. Thanks to an intensive information campaign the IFD/CEVO conducted, there is an interest in energy efficient reconstruction projects. Based on contracts, the IFD/CEVO has conducted several energy audits (22) of investments in energy efficient PL reconstruction. After the clarification of the availability of grant funding, an increased interest in the services of the IFD/CEVO is expected. Technically speaking, these projects per se are easy to implement and the funding from the IFD is available. The point is not the actual feasibility of EPC implementation. The point is related to the ‘’willingness’’ of municipal decision makers to proceed with this approach. This is the reason the Evaluator recommended (Recommendation 4) laying out an adapted ‘’marketing strategy’’ to change or at the very least to have influence on the mindset of these people (small cities and communities).

For the last 18 months, except for the reservation related to activities connected to Output 2, the IFD achieved activities in accordance with the planning:

- In April 2006, the IFD its operation and from April 2006 to May 2007, all full-time project team members were hired, office equipment and office spaces were and are still very adequate for the current needs. (Rating 5)
- 22 Energy Audits or PL Energy Audits were conducted in 22 small municipalities. (Rating 5).
- A database of equipment suppliers has been put into operation and updated.
- Promotional material, leaflets and a project Newsletter were issued and other technical and promotional papers were published in several national newspapers and specialized publications. (Rating 5).
- 4 Workshops were held including the Inception Workshop in April 2006. In addition to the WS the project conducted, the PMU was a major player in conducting the EE Conference held in November 2006: (Rating 5).
- Project reporting (AWP, APR, QPR and PIR) was issued on time. (Rating 5).
- In order to implement an appropriate document and file management system, the Evaluator strongly recommends to include a footer and header in all documents that indicate the date, the status (e.g.: working material, draft, final or other) of the reports and the revision number, if need be. The Evaluator also recommends that, if possible, the related Output number be mentioned on each document or report. The project will issue hundreds and hundreds of documents and the following is a deficiency that the Evaluator has noticed in several projects: ‘’ *project management is not sufficiently concerned about the issue of information management*’’. The purpose of this secondary recommendation is to improve the IMS not only for evaluation purposes but also and above all to improve the IMS for all users including UNDP and other external partners.

This type of information makes the monitoring and evaluation tasks easier!

QPRs should be improved for highlighting activities conducted or completed per Output.

- <u>PL Project Implementation</u>: At the moment, no project has been implemented by the IFD. <u>The Evaluator cannot rank this deliverable</u> since Output 2 is currently subject to major adjustments. An Amendment Request was sent to UNDP in August 2007.
- For the time being, the CO/CO_2 emission reductions directly resulting from the project are nil. (Rating 3).

3.3 Development Objectives and Expected Results

As stipulated in the project document, the objective is to avoid 63,993 tonnes in carbon equivalent greenhouse gas (GHG) emissions by catalyzing USD 2.63 million in investments in energy efficient public lighting.

Such an objective is still tangible but the investment required for ensuring an impact in terms of GHG emission reductions is higher than initially estimated. In accordance with the Amendment Request submitted to UNDP in August 2007, the overall investment budget is now estimated at more than 8 million USD. To support such an investment, the IFD is relying on an investment fund of 466.500 USD. Because of the long payback period of investments in PL systems improvement and reconstruction, the turn-over of the investment fund proposed by the GEF will not be as fast as anticipated. In order to mobilize other investments, the project must support and promote investments from other funds, namely the EU Structural Funds and perhaps the Norwegian bilateral financial mechanism.

The long payback period will result in a lack of funding from the project after the first investments phase supported by the GEF. The Evaluator recommends speeding up the investment process with the aim of carrying out a series of 25 projects (or a bit more than 5 000 PL improvements) by the end of 2008. Even if the investment calendar turns out to be a bit longer, let's say until the end of 2009, the lack of funds will simply occur later. After 2009, the project will not be in a position to fund additional projects with its own upfront money (20 to 25% of the total investment is upfront, the remaining amount being in the form of commercial loans – the borrower is the CEVO). In such a case, the CEVO shoould be required to use a Guaranteed Savings EPC scheme rather than Shared Savings EPC in 2008 and 2009. By implementing a Guaranteed Savings EPC approach, the municipalities will be the borrowers, not the CEVO. Another option already mentioned and to be included in the Strategy is to offer a set of technical services to those municipalities that don't agree to proceed with such a business model (EPC). These 3 options (EPC Shared Savings – EPC Guaranteed Savings – and Technical Services) are the most secure ways of reaching the targets by the end of the project timeframe.

The Evaluator assumes that several municipalities will prefer to deal directly with the equipment suppliers. In such a case, the valuable technical services provided by the CEVO to municipalities should ensure the most effective design and a better quality control of the selected equipment and installation. This is the only way for the CEVO to be in a position to include these projects in its project portfolio and to ultimately demonstrate that it has reached the objectives.

In order to reach the development objective related to GHG emission reductions within the project timeframe, the challenge is considerable because of the wait-and-see attitude of project beneficiaries. By implementing a new Marketing Plan (Recommendation # 4) and by offering several options to municipalities (EPC being one of these options), the CEVO should increase the interest of municipalities in establishing a partnership with the project.

Over and above the GHG emission reduction objective, the project should have valuable results in terms of capacity building and business development. For the time being, no Slovakian company is investing in EE projects (including PL projects) through the energy performance contract mechanism. In order to implement such a contracting mechanism in Slovakia, the project intends to manage the IFD as an Energy Service Company that will manage the GEF investment fund (466kUSD). With a leverage of 1 for 4, the IFD should be in a position to finance up to 2 million USD in PL projects within the project timeframe. Since the investment will be reimbursable by the beneficiaries, there should be a sustainable development impact in Slovakia. Such an approach has been implemented in several countries over the last 20 years and it works.

4 Project Evaluation and Rating

4.1 Project Formulation

Project Concept and Design	**MS**	Relevance: 6 Effectiveness: 2 Efficiency: 4

The rating for effectiveness is low (2) because the project document intended to use the investment fund as a "*Revolving Investment Fund*", which is usually incompatible with projects with such a lengthy payback period.

Actually, this approach is the most significant weakness of the project design (PDF). Because of the long payback period on investments in the field of PL, a RF would not be relevant. Other EE projects with short payback periods, let's say shorter than 3 years, can be financed by a revolving fund but not projects in PL systems because the payback period is somewhere between 7 and 10 years, sometimes longer.
The amendment proposed to UNDP/GEF in August 2007 intends to remedy the situation by proposing a major adjustment to Output 2.

<u>Other particular comments</u>:

- The PDF-Project Document is comprehensive, clear and easy to understand. All components are comprehensively described and easy to manage.
- Good appropriateness between budget provisions and each project component. Almost 50% of the GEF grant ($970,000) is provisioned to proceed with direct investments for funding PL improvement projects. The costs related to project management (PMU) as well as full-time and part-time staff members, office rental costs as well as equipment and communications costs are relatively reasonable and represent around 27% of the overall GEF budget. The overall GEF budget is less than 1 million dollars and the IFD is geared towards managing an investment programme of about 8 million dollars. At first glance, t*he percentage on the GEF budget for management is relatively high*, but in light of the total expected project investment (8 million), it sounds good.
- The project is being implemented with qualified team members. They should be very busy during the upcoming years until the project comes to an end: If the proposed amendment is approved by the UNDP/GEF, the IFD will have to manage about 1.5 million USD of direct investments (1/3 in the form of an upfront investment from GEF resources and 2/3 borrowed from a commercial bank). In addition to structuring the financing, the IFD will manage and implement about 25

EPCs including all the needed monitoring (result-based contracts) activities. All these additional tasks were not included in the initial project formulation.

- Relevant stakeholders and decision makers were selected to take part in the SC taking into consideration an adequate balance between government officials (2), external stakeholders from international and national organizations and institutions (9) and the private sector (13).
- By nature, investments aiming to improve public lighting systems cannot provide a very interesting IRR. All projects (first package) selected (22 projects where energy audits were conducted) have an average simple payback period of a bit more than 8 years or longer. Financially, this is relatively long but, by nature, PL systems improvement projects generally result in longer payback periods.

The rating for effectiveness is low (2) because the project document intended to use the investment fund as a "*Revolving Investment Fund*", which is usually incompatible with projects with such a lengthy payback period.

Adjust and /or Add some KPIs

The KPIs related to Output 1 should be revised in order to set a new target in catalyzing public lighting investments. The Evaluator recommends including a performance indicator related to the number of municipalities having invested or that are committed to investing in PL reconstruction as a result of activities conducted under Output 1.

In accordance with the proposed amendment, the performance target should be set to 105 projects conducted (or committed to be conducted) by the end of the project duration, i.e. the end of 2010. The IFD will be required to define what a ''commitment'' to invest will imply.

The KPIs related to Output 2 should also be revised. The Evaluator recommends including a performance indicator related to the number of direct investments resulting from the use of the GEF fund. In accordance with the proposed amendment, the target should be set to 25 projects for which the IFD will proceed with direct investments by the end of the project duration.

Finally, the KPIs connected to Output 3 require a small adjustment: by taking into consideration a target of about 27 300 LPs (in term of number of projects the estimate is: 25 actually achieved through direct investments and 105 others achieved or seriously committed for implementation), the target should now read 130 inquiries rather than 110. **Once again, the KPI related to these targets should be determined based on the number of lighting points as opposed to the number of projects.**

The point is to determine how the IFD will proceed in demonstrating its performance at the end of the project (2010). The additional indicators recommended are essential to proceed with a final evaluation. The Evaluator recommends that the IFD pay close attention to the definition of what is implied by "committed project" since it will be impossible to implement a total of 130 PL reconstruction projects within the project timeframe. What is most important is to be in a position to demonstrate that the outcomes will materialize over a certain period of time after the project has come to an end (2010).

4.2 Lighting Point Projects Implementation

Project Implementation	**S**	Relevance: 5 Effectiveness: 5 Efficiency: 4

At the mid-term of project implementation, the Evaluator is somewhat concerned that, at the moment, no PL project has been implemented as a result of a direct involvement of the IFD. The Amendment Request (draft version) was only sent to UNDP in August 2007. It is important to mention that the SC and UNDP requested that the PMU propose an amendment to Output 2 one year after the project starting date. The PMU proceeded so.

Implementation Efficiency has been rated as (S) Satisfactory even if, for the time being, the IFD has not proceeded with direct investments towards improving the PL systems. In the Evaluator's opinion, it was impossible to proceed otherwise since the rules for using the investment fund were not yet established and approved.

Except for activities related to Output 2 (*Finance technical demonstrations with the support of a concessional fund*), the implementation status is rated[6] SATISFACTORY. Since Output 2 is subject to a major amendment, this component is hard to appraise.

Please have a look at the details related to the Implementation Status in Section 3.2

4.3 Project Outputs, Outcomes and Impacts

Project Outputs, Outcomes and Impacts.	**S**	Relevance: 5 Effectiveness: 5 Efficiency: 4

4.3.1 **OUTPUT 1:** ***An effective and sustainable advisory service created to catalyze public lighting investments.***

[6] *The Evaluator ranked the levels of achievement according to rules based on the following categories: (HS)Highly Satisfactory=6, (S Satisfactory=5, (MS) Moderately Satisfactory=4, (MU) Moderately Unsatisfactory=3, (U) Unsatisfactory=2, (HU) Highly Unsatisfactory=1, (N/A) not applicable*
The rating is figured as an average of quantitative rating for (i) Relevance, (ii) Effectiveness, (iii) Efficiency.

- A PL project design manual has been prepared, a commercial and organizing strategy has been laid out including a price list of services and a database of relevant stakeholders and equipment/services suppliers have been completed. A marketing plan has also been prepared but this document must be revised taking into account the upcoming amendment to Output 2.

- A project management procedure and IFD/CEVO were established, full-time and part-time staff members have been hired, a PL project design manual has been prepared, a commercial and organizing strategy has been laid out including a price list of services and a database of relevant stakeholders and equipment/services suppliers have been completed. A marketing plan has also been prepared but this document must be revised taking into account the upcoming amendment to Output 2.
- Technical training activities targeting the PMU and IFD (CEVO) staff members have been completed. Based on discussions with the project team members, the technical training needs have been adequately covered by the training programmes conducted over the last 2 years.
- Technical and financial assistance activities have involved more than 50 municipalities, 22 audits of PL systems were conducted, contracts were prepared in 3 municipalities for feasibility studies, legal and public procurement advice has also been provided to 3 municipalities. The reports are written in Slovak. It was therefore not possible for the Evaluator to thoroughly assess them. However, in view of the translated Table of Contents and, as far as it has been possible to evaluate these studies, the needed technical and financial data/information was included. As a rule, these studies are ‘’simple’’ since they address only one EC improvement. The technical capacity of the CEVO is such that the Evaluator is confident about the actual quality of the studies.

Rating of Outcomes and Impacts related to Output 1: 5

4.3.2 OUTPUT 2: ***Finance technical demonstrations with the support of a concessional fund.***

For the time being, the IFD has not been in a position to proceed with direct investments because the required amendment has not yet been approved.

Rating: n/a

4.3.3 **OUTPUT 3:** ***Support investment in energy efficient public lighting through information dissemination.***

Activities conducted up to now have successfully addressed the issues related to institutional and technical barriers. The most significant evidence indicating that these barriers have almost all been overcome include:

- the new national EE policy;
- the awareness and willingness of municipal decision makers in regards to PL improvements;
- the involvement of the Association of Municipalities;
- a series of energy audits conducted in the field (22 municipalities); and
- workshops and information dissemination.

These are all positive results related to Output 3.

Rating of Impacts and Outcomes for Output 3: 5

4.3.4 Management Arrangements

General Implementation and Management

As per the rules usually applied in the case of such a MSP, the Evaluator has not noticed any discrepancies or malfunctions insofar as reaching the objectives related to project management arrangements.

The management structure is simple, efficient and effective. The responsibilities are clearly shared between the PM and the Head of IFD and the close collaboration between these two managers is a sound indicator that both parties fully understand their role and responsibility.

The Evaluator has not been in a position to evaluate the effectiveness and efficiency of the project SC because of a lack of time (in the context of a one-week mission) and the fact that he was unable to meet with a number of selected SC members. Nevertheless, the Evaluator noticed that relevant stakeholders and decision makers were selected to take part in the SC taking into consideration an adequate balance between government officials (2), external stakeholders from international and national organizations and institutions (9) and the private sector (13).

Finally, the CEVO has established a solid network in the municipal sector and related associations. The evaluator met 2 associations (see list of persons/organizations met) and he has no doubt about the trusting relationship that exists between the PMU (CEVA-IFD) and these associations. The CEVO has worked very hard over the last 2 years to ensure the credibility of its project. It is also important to mention that the CEVO PM and the NPD were already well known in Slovakia. This facilitated the development of such a network.

Financial Accountability

The Financial Accountability issue is quite difficult to deal with because the financial assessment is relatively lengthy and requires looking at details and proceeding with a number of spot checks. In other words, the Evaluator cannot comment on the reliability of the financial information provided by the CEVO for the purpose of the MTE. This type of a financial evaluation is normally conducted by external auditors, not by a MT Evaluator.

Nevertheless, based on documents made available (AWP Financial Planning for 2006 and 2007), the yearly expenses in 2007 have slightly increased (in comparison with 2006) because of the higher costs related to Management Services and National Experts. Such an increase is acceptable since the PMU has conducted several technical studies in the field and also because an additional staff member (technician) was hired in 2007. The budget planning related to the 2008 AWP should include a provision for the implementation of EPC and to cover new incremental costs mostly related to transaction costs for EPC management and Monitoring and Verification, which are key components for the successful implementation of the EPC mechanism with such a long payback period. The Evaluator has included a recommendation (see recommendation 5) regarding this particular issue. In the opinion of the Evaluator, there is no doubt that the CEVO needs to proceed with a major budget revision in 2008 to cover the new incremental costs in accordance with the Amendment Request submitted to UNDP in August by the CEVO.

The CEVO provided the Evaluator with an example of its Co-financing Evaluation Table (Nov. 2007). The drawback of this co-financing table is related to equity issues (10%) as opposed to the ‘’grant’’ component (34%). The loan corresponds to 56% and, in the opinion of the Evaluator, this percentage could by higher, let say 70 or 75%. The IFD should consider revising the co-financing breakdown structure.

Financial and Management Arrangements

In the opinion of the Evaluator, the time it took to proceed with the needed adjustment related to the project’s financial mechanism was too long. Because of that delay, over the last 2 years, the project has spent time and money without providing the expected tangible results in terms of PL improvements.

Adequacy of the Management Structure towards a Winning Strategy: Since it is never too late to do things properly, the CEVO has proposed a co-financing mechanism along with some selected commercial banks established in Slovakia. The CEVO has the required technical capacity to conduct projects and the financial sector has the ability to evaluate the commercial risks. This is a winning team and a perfect financial management arrangement, The network the CEVO has established with the major municipal associations, municipal decision-makers and the financial sector is a real asset for the successful implementation of a new business model in Slovakia. In other words, the CEVO did not lose its time over the last 2 years,

Low Venture Capital: The major reservation related to such a financial/technical scheme is a result of the low amount of venture capital the CEVO is able to invest from its GEF/UNDP budget provision. Even if the upfront investment were to be 25%, the CEVO will be in a position to conduct about 2 million dollars in projects representing approximately ¼ of the overall investment required to improve 30 000 lighting points.

Major Problem: The major problem with this project is a result of the fact that it is underfunded in terms of venture capital, not because of the new business model (EPC). The Evaluator is not in a position to be of help to the UNDP/GEF on the issue of the mobilization other resources. My one-week site presence was not sufficient to allow me to meet with other multilateral (EU) or bilateral donors. The evaluator met only one commercial bank which mentioned its willingness to support the CEVO. The UNDP should rely on the professional capabilities of the CEVO to address this issue since its business sustainability depends on that particular point.

Market Transformation Takes Time: For the time being, the project has not delivered in accordance with expectations because the original financial mechanism selected to overcome the barriers was not appropriate. A concessional interest rate was an appropriate approach at the time the interest rate was very high in Slovakia. By co-financing the PL improvements, the CEVO is on the right track in spite of the low level of upfront venture capital. The UNDP/GEF made the decision to invest upfront capital based on the sole purpose that the fund would be to help attract initial investors and enable the IFD to gain the experience, expertise and credibility to operate as a sustainable business entity, independently of project resources. This objective is still current and the UNDP/GEF should continue to support such a project.

Take Action: At this point in time, the major issue is to launch the investment process on the fast track with the current available upfront investment budget provision and the new proposed business model. As is the case in other countries, the goal of the UNDP/GEF is to help Slovakia to overcome the barriers and to proceed with the needed market transformation. The amendment required by the CEVO is in line with these objectives.

Deliveries and Project Expenditures: In the view of the Evaluator, the issues related to financial reporting, financial management and accountability are not a concern. Considering the budget provision allocated to the venture capital is very low (less than 500 k$), since the lending procedures will be managed by selected capable commercial banks and because PL projects are easy to implement and to evaluate, this project makes sense in spite of the reservations mentioned above. As long the investment mechanism is not approved (amendment), the CEVO will be facing its operating costs (salaries and expenditures) the same way as it would BAU. In other words, for the time being, the investment ratio on operating costs is very low. Such a situation cannot last much longer.

4.3.5 Additional Comments

- The basic design of the PL reconstruction project is relatively simple and the outcomes as well as the impacts are easy to monitor and evaluate.
- The target in terms of GHG emission reductions is clearly stated: 64 kt CO equivalent.
- In order to reach this target, the IFD will be required to implement about 130 projects (210 luminaries per project as an average). The IFD will have to pay close attention to the use of KPIs regarding "*projects committed for implementation*", once the current project is closed. This will be the key point for assessing the final outcomes and impacts of the projects in terms of GHG emission reductions.
- A major outcome in terms of sustainable development that will result from the project implementation is related to the establishment of the concepts of EPC and ESCO development in Slovakia. In accordance with the proposed amendment, Output 2 should promote the business development of the IFD, which should shift from a service company to an investing company in the field of PL reconstruction and, later on, in the global EE field in Slovakia. If the project leads to such a brand new business development model in Slovakia (in addition to reaching the targeted GHG emission reductions), the project will achieve more than its initial objectives in terms of sustainable development.

- Cost effectiveness had not been included as a KPI.
  The Evaluator estimates the cost of avoided equivalent CO_2 at about 38.8 USD per tonne. For the same range of quantity, the trading price for CO_2 on the European market is currently between 22 and 36 USD per tonne (year 2006). The PL project in Slovakia is therefore not out of the current price range in Europe. Although the cost per tonne of CO_2 avoided is not a GEF requirement, the Evaluator mentions this particular issue because, in his opinion, this is one of the weaknesses in the GEF approach for this project. *This particular issue has been included in my report with the purpose of pushing for changes in policy.*

5 Conclusion and Recommendations

Recommendation 1: CAPACITY BUILDING Programme related to EPC methodology, contractual framework and monitoring and Verification.

The Evaluator noticed that the IFD has not adequately mastered the EPC methodology and implementation procedures. The IFD should consider special training related to both types of EPCs: (i) Shared Savings Performance Contracts and (ii) Guaranteed Savings Performance Contracts. Adaptable models of both types of EPCs should be included in the proposed training delivery. The training should also include guidelines related to the M&V procedures required to implement any EPC.

The CEVO should also consider establishing a twinning arrangement with another similar project in a similar context. For example, UNDP/GEF supports a project aiming to use EPC in the municipal sectors of Ukraine. The project has been implemented in Rivne where a brand new ESCO has been established to manage and implement EPCs. The PL project in Slovakia could perhaps learn from that project.

Recommendation 2: REVISE THE EPC IMPLEMENTATION STRATEGY to speed up the projects selection.

The proposed amendment recommends implementing 5 projects in 2008, 10 in 2009 and 10 in 2010. Because of the project timeframe and also because of the need to proceed with additional resource mobilization (EU Structural Funds), the IFD should consider speeding up its investment programme to disburse its investment budget by the end of 2008 or no later than the end of the first quarter of 2009. Even if the IFD proceeds with an accelerated investment programme (5,250 LPs or about 25 projects), the overall project objective of reducing GHG emissions will not be reached. The investment payback period having estimated to about 8 years, that means the investment fund should be reinvest about twice during the investment timeframe (15 years) According to the IFD's estimate, the resulting impact on GHG emission reductions will be about 24% of the target (63kt CO).

The recommended strategy is the following:

1) Firstly, put the emphasis on the IFD investment programme (EPC Shared Savings) until the first quarter of 2009; and
2) in a second phase (2009 and 2010), take advantage of its successful experience with municipalities to focus the IFD's efforts on resource mobilization (EU Structural Funds) and implementing EPC Guaranteed Savings and other technical assistance and support as well as promoting activities in the municipalities. Such an approach is timely since, based on experience and discussions with a number of stakeholders in Slovakia, the EU Structural Funds will probably no longer be an operational option by the end of 2008;
3) concurrently with ''Phases 1 and 2''and in accordance with a stronger and more aggressive marketing plan, the IFD should promote and offer a set of technical services to municipalities with the goal of them agreeing to take part in PL improvements although several municipalities will likely prefer to carry out their projects by dealing directly with equipment suppliers.

Recommendation 3: BUNDLE THREE SERIES OF PL PROJECTS with the aim of optimizing the implementation process and cut down the management and equipment supply costs.

The implementation of EPC Shared Savings is time consuming and the availability of human resources at the IFD is very limited. By bundling 15 EPC projects in 2008 and 10 projects during the first quarter of 2009, the IFD will reduce the burden of managing 25 RFP for purchasing equipment and scale down the price per unit (Lighting Point). Even if the IFD proceeds with the RFPs per package, EPC contracts will have to be signed with each municipality separately. The total number of PLs will also be variable from a project (municipality) to another.

Recommendation 4: LAY OUT AND IMPLEMENT AN EFFICIENT MARKETING ACTION PLAN to promote EPC for PL.

The key issue is to convince the municipalities to proceed with PL improvements by using the IFD direct investment programme rather than waiting for the upcoming EU grants programme. A strong marketing plan and an action plan should be laid out to overcome this barrier.

The Marketing Plan should focus on the Implementation Strategy Plan described in Recommendation # 2: (i) promote a new business model by using EPCs; (ii) bring out the best in the CEVO in the field of PL project management, quality control, cost control and project financing, including resource mobilization.

Recommendation 5: CONSIDER REQUESTING A BUDGET REVISION AND A PROJECT EXTENSION to take into account the incremental costs related to EPC implementation and to allow for sufficient time for the market (municipal sector) to accept the new business model the CEVO intends to implement.

A budget transfer from Output 2 to Output 1 should be considered. In such a case, the upfront investment by the IFD could be 25% rather than 33%. This lower upfront investment will not have an impact on the overall payback period.

This proposal of lowering the upfront investment aims to provide the needed financial support for CEVO activities and the project extension. The transaction costs, other than actual financial costs, will be more significant by implementing EPC as opposed to a "concessional fund''. The CEVO would require about 100k to 150 kUSD to fund the incremental costs resulting from the implementation of EPC and a one-year extension (this figure must be validated by the IFD). Indirectly, the impact of such a recommendation would likely be a better change towards reaching the project objectives

Recommendation 6: REVISE THE COST BREAKDOWN STRUCTURE OF EPC PROJECT transaction cost.

In the opinion of the Evaluator, the incremental costs related to EPC transaction costs and M&V costs are underestimated. The IFD should proceed with a simulation of a financing plan for a specific project (typical project) with the assistance of a commercial bank. The objective of proceeding so is to determine, in the most comprehensive way, all transaction costs.

6 Lesson Learned

Because the project planning and design cycles are relatively long (about 4 years), it would have been advisable that the PMU and UNDP/GEF pay greater attention to the project's Inception Phase. The lesson learned is related to the pace at which recommendations and the decision-making process on major adjustments evolved within such a GEF project framework.

With the aim of mitigating the project implementation risks, UNDP usually requires the involvement of an international specialist to conduct the Inception Mission and prepare the Inception Mission Report. Such an approach allows UNDP and the PMU to take into consideration the current market changes or economic conditions and consequently proceed with the needed adjustments at the earliest stage of project implementation. Although the tasks conducted and successfully achieved after the Inception Workshop (April 2006), the project has not yet proceeded with any investment because the amendment process related to Output 2 is still underway. Since the new (and improved) economic conditions and the market changes were known to UNDP and the PMU, it was decided at the Inception Workshop to ask that there be a delay of one year prior to submitting an Amendment Request. After assessing the actual situation, this delay was perhaps not required. However, this lesson should be weighed taking into account the difficult choice made by UNDP and the PMU to use low budget provisions to conduct the entire project implementation phase.

Appendix 1: List of Persons Interviewed and Itinerary

SCHEDULE OF MEETINGS

MONDAY		September 03, 2007				
Time	**Place**	**Name**	**position**	**organization**	**phone**	**email**
all day	ECB	Ing. Roman Doubrava	Director of ECB	Energy centre Bratislava	421 2 593 000 91	doubrava@ecb.sk
all day	ECB	Ing. Marek Lipa	Project manager	ECB - department CEVO	421 2 593 000 93	lipa@cevo.sk
all day	ECB	Ing. Marcel Lauko, PhD	Financial expert	ECB - department CEVO	421 2 593 000 94	lauko@cevo.sk
all day	ECB	Ing. Peter Černák	Technical expert	ECB - department CEVO	421 2 593 000 94	cernak@cevo.sk
all day	ECB	Mgr. Vojtech Hollan	PR manager	Energy centre Bratislava	421 2 593 000 91	hollan@cevo.sk, hollan@ecb.sk
all day	ECB	Martina Bačíková	Asistant	ECB - department CEVO	421 2 593 000 94	cevo@cevo.sk
p.m.	ECB	Ing. Darina Pšenáková	Economic manager	Energy centre Bratislava	421 2 593 000 91	psenakova@ecb.sk
p.m.	ECB	Ing. Jiří Balajka	Sector expert for GHG	ECOSYS Bratislava	421 905 734 924	ecosys@orangemail.sk

TUESDAY		September 04, 2007				
Time	**Place**	**Name**	**position**	**organization**	**phone**	**email**
9:00	ECB	Ing. Marcel Lauko, PhD.		CEVO		
10:00	ECB	Ing. Marek Lipa		CEVO		
11:00	ECB	Mgr. Vojtech Hollan		CEVO		
13:00	ECB	Ing. Jozef Mrva	Member of Project Board	ZMOS-Association of municipalities in SR		
14:00	DEXIA	Ing. Vladimír Vacho	Project manager - Head specialist for energy sector	Dexia Banka (Bank)		vvacho@dexia.sk

WEDNESDAY		September 05, 2007				
Time	**Place**	**Name**	**position**	**organization**	**phone**	**email**
09:30	GBELY	Ing. Jaroslav Vlk	Head of the department of construction	Municipality of Gbely	421 905 886 087	vystavba3@gbely.sk

09:30	GBELY	Ing. Jozef Hazlinger	Mayor of Gbely	Municipality of Gbely	421 34 6906411	info@gbely.sk
11:00	KUKLOV	Štefan Šimkovič	Mayor of Kuklov	Municipality of Kuklov	421 346 582 125	obeckuklov@stonline.sk
13:00	ECB	Ing. Kvetoslava Šoltésová, PhD	National project director, SEA	SIEA - Slovak Energy Agency		kvetoslava.soltesova@seabb.sk
15.00	UNDP	Klara Tothova	CST Environmental Officer	UNDP	421 2 5933 7220	klara.tothova@undp.org
17:30	UMS	Marian Minarovič	General secretary	Union of Towns of Slovakia	421 2 544 359 14	umosr@gtinet.sk

Appendix 2: List of Documents Reviewed

- Quarterly Progress Reports
- Annual Work Plan and Financial Table (2006 and 2007)
- Co-financing Table – An example of typical project co-financing (Nov 2007)
- Inception Workshop Report
- Project Implementation Review Report
- Request For Amendment to Output 2
- Project Budget Revision Spreadsheet
- Project Document (PDF-A)

Appendix 3: MTE - Terms of Reference

TERMS OF REFERENCE

**for Project Mid-term Evaluation
of UNDP/GEF Project**

Project Title:	**Removing Barriers to the Reconstruction of public Lighting Systems in Slovakia**
Functional Title:	Consultant for Independent Evaluation
Duration:	Estimated **15 days** total working time over the period of: **20 July – 20 September 2007**
Terms of Payment:	Lump sum payable upon satisfactory completion and approval by UNDP of all deliverables, including the Evaluation report
Travel costs:	The costs of in-country mission(s) of the consultant are to be included in the lump sum.

1. PURPOSE OF THE EVALUATION

The Monitoring and Evaluation Policy at the project level in UNDP/GEF has two overarching objectives:

c) promote accountability for the achievement of GEF objectives through the assessment of results, effectiveness, processes and performance of the partners involved in GEF activities. GEF results will be monitored and evaluated for their contribution to global environmental benefits; and
d) promote learning, feedback and knowledge sharing on results and lessons learned among the GEF and its partners, as basis for decision-making on policies, strategies, program management, and projects and to improve knowledge and performance.

A mix of tools is used to ensure effective Project monitoring and evaluation. These might be applied continuously throughout the lifetime of the project e.g. periodic monitoring of indicators – or as specific time-bound exercise such as mid-term reviews, audit reports and final evaluations.

The evaluation is to be undertaken in accordance with the "GEF Monitoring and Evaluation Policy"(see http://thegef.org/MonitoringandEvaluation/MEPoliciesProcedures/mepoliciesprocedures.html).

The Mid-Term Evaluation is intended to assess the relevance, performance, management arrangements and success of the project. It looks at signs of potential impact and sustainability of results, including the contribution to capacity development and the achievement of global and national environmental goals.

The Mid-Term Evaluation also identifies/documents lessons learned and makes recommendations that project partners and stakeholders might use to improve the design and implementation of other related projects and programs.

2. PROJECT DESCRIPTION

The implementation of the UNDP/GEF Project “Removing Barriers to the Reconstruction of public Lighting Systems in Slovakia” began in December 2005 with an objective to avoid 63,993 tonnes of carbon equivalent (or 234,641 tonnes of CO_2) by catalyzing investments in energy efficient public lighting technology, over the 20 year lifecycle of those investments.

The project has three outputs. The first will set-up the Investment Facilititation Department (IFD). The outcome of this output will be a fully operational business unit with the capabilities to identify, support and broker public lighting investments. The second output was expected to set-up a project revolving fund to enable the IFD to build an initial portfolio of investment successes. The sole-purpose of the fund was expected to help attract initial investors and enable the IFD to gain the experience, expertise and credibility to operate as a sustainable business entity, independently of project resources. The third output is designed to promote the IFD more widely in the Slovak Republic, and based on early project success expand its client base.

At the Local Project Appraisal Committee (LPAC) Meeting in November 2005 the participants confirmed that after the long preparation and approval of the project and due to the current market conditions - ie. banks offering loans with low interest rates - the revolving fund in the proposed set up is no longer reasonable. Therefore, LPAC recommended that project will focus on technical assistance and facilitation of the investments through local financing institutions (loans, EPC, supply contracts, etc.). Further drivers/activities supporting EE investments into PL reconstruction projects needed in Slovakia within the Output 2 were analyzed after the first year of project implementation. Proposal for project amendment has been prepared.

The designed total project budget is 3.206.000 USD, including 970.000 USD GEF funding. 466.500 USD has been designed for revolving fund within output 2.

The Executing Agency for the project is the Slovak Energy Agency. The National Implementing Agency is the Energy Centre Bratislava.

The geographical scope of the project is the whole area of Slovakia, with a focus to municipalities up to 5.000 inhabitants. Up to now activities have been implemented in municipalities indicated in Annex 4.

3. Evaluation Audience

This Mid-term Evaluation of the UNDP/GEF Project is initiated by UNDP as the GEF Implementing Agency. It aims to provide managers (at the Slovak Energy Agency, project, UNDP-Slovakia Project Office and UNDP-GEF levels) with strategy and policy options for more effectively and efficiently achieving the project’s expected results and for replicating the results. It also provides the basis for learning and accountability for managers and stakeholders.

4. EVALUATION OBJECTIVES AND SCOPE

The overall purpose of the evaluation is to measure the effectiveness and efficiency of project activities in relation to the stated objective so far, and to produce possible recommendations on how to improve the management of the project until its completion in November 2009.

The Mid-term Evaluation serves as an agent of change and plays a critical role in supporting accountability. Its main objectives are:

(i) To strengthen the adaptive management and monitoring functions of the project;
(ii) To ensure accountability for the achievement of the GEF objective;
(iii) To enhance organizational and development learning;
(iv) To enable informed decision-making;

Particular emphasis should be put on the current project results and the possibility of achieving all the objectives in the given timeframe, taking into consideration the speed, at which the project is proceeding. More specifically, the evaluation should assess:

<u>Project concept and design</u>
The evaluators will assess the project concept and design. He/she should review the problem addressed by the project and the project strategy, encompassing an assessment of the appropriateness of the objectives, planned outputs, activities and inputs as compared to cost-effective alternatives. He/she should validate the Proposal for Amendment revising Output 2 of the project. The executing modality and managerial arrangements should also be judged. The evaluator will assess the achievement of indicators and review the work plan, planned duration and budget of the project.

<u>Implementation</u>
The evaluation will assess the implementation of the project in terms of quality and timeliness of inputs and efficiency and effectiveness of activities carried out. Also, the effectiveness of management as well as the quality and timeliness of monitoring and backstopping by all parties to the project should be evaluated. In particular the evaluation is to assess the Project team's use of adaptive management in project implementation.

<u>Project outputs, outcomes and impact</u>
The evaluation will assess the outputs, outcomes and impact achieved by the project as well as the likely sustainability of project results. This should encompass an assessment of the achievement of the immediate objectives and the contribution to attaining the overall objective of the project. The evaluation should also assess the extent to which the implementation of the project has been inclusive of relevant stakeholders and to which it has been able to create collaboration between different partners. The evaluation will also examine if the project has had significant unexpected effects, whether of beneficial or detrimental character.

More specifically, the Evaluation will focus on the following aspects:

- **<u>Project design and its relevance</u>** in relation to:
  a) *Development priorities* at the national level;
  b) *Stakeholders* – assess if the specific needs were met;
  c) *Country ownership / drivenness* – participation and commitments of government, local authorities, public services, utilities, residents;
  d) *UNDP mission to promote Sustainable Human Development (SHD)* by assisting the country to build its capacities in the focal area of environmental protection and management;

- **<u>Performance</u>** - look at the progress that has been made by the project relative to the achievement of its objective and outcomes;
  a) *Effectiveness* - extent to which the project has achieved its objectives and the desired outcomes, and the overall contribution of the project to national strategic objectives;
  b) *Efficiency* - assess efficiency against overall impact of the project for better projection of achievements and benefits resulting from project resources, including an assessment of the different implementation modalities and the cost effectiveness of the utilisation of GEF resources and actual co-financing for the achievement of project results;
  c) *Timeliness* of results,

- **<u>Management arrangements</u>** focused on project implementation:
  a) *General implementation and management* - evaluate the adequacy of the project, implementation structure, including the effectiveness of the Project Steering Committee, partnership strategy and stakeholder involvement from the aspect of compliance to UNDP/GEF requirements and also from the perspective of "good practice model" that could be used for replication
  b) *Financial accountability* – extent to which the sound financial management has been an integral part of achieving project results, with particular reference to adequate reporting, identification of problems and adjustment of activities, budgets and inputs
  c) *Monitoring and evaluation on project level* – assess the adoption of the monitoring and evaluation system during the project implementation, and its internalization by competent

authorities and service providers after the completion of the project; focusing to relevance of the performance indicators, that are:

- Specific: The system captures the essence of the desired result by clearly and directly relating to achieving an objective and only that objective.
- Measurable: The monitoring system and indicators are unambiguously specified so that all parties agree on what it covers and there are practical ways to measure it.
- Achievable and Attributable: The system identifies what changes are anticipated as a result of the intervention and whether the result(s) are realistic. Attribution requires that changes in the targeted developmental issue can be linked to the intervention.
- Relevant and Realistic: The system establishes levels of performance that are likely to be achieved in a practical manner, and that reflect the expectations of stakeholders.
- Time-bound, Timely, Trackable and Targeted: The system allows progress to be tracked in a cost-effective manner at desired frequency for a set period, with clear identification of particular stakeholders group to be impacted by the project.

- **Overall success** of the project with regard to the following criteria:
  a) *Impact* - assessment of the results with reference to the development objectives of the project and the achievement of global environmental goals, positive or negative, intended or unintended changes brought about by the project intervention, (number of households benefiting, number of areas with the new technology in place, level of sensitization and awareness about the technology; any change at the policy level that contributes to sustainability of the tested model, impact in private/ public and/ or at individual levels);
  e) *Global environmental benefits* - reductions in carbon dioxide emissions and other green house emissions.
  b) *Sustainability* - assessment of the prospects for benefits/activities continuing after the end of the project, *static sustainability* which refers to the continuous flow of the same benefits to the same target groups; *dynamic sustainability* use and/or adaptation of the projects' results by original target groups and/or other target groups;
  c) *Contribution to capacity development* - extent to which the project has empowered target groups and have made possible for the government and local institutions (municipalities) to use the positive experiences; ownership of projects' results;
  d) *Replication* – analysis of replication potential of the project positive results in country and in the region, outlining of possible funding sources; replication to date without direct intervention of the project;
  e) *Synergies* with other similar projects, funded by the government or other donors.

In addition to a descriptive assessment, all criteria should be rated using the following divisions: *Highly Satisfactory, Satisfactory, Marginally Satisfactory, Unsatisfactory* with an explanation of the rating.

Expected technical assessment and measurement:

The Evaluation Report will present the potential for reduction of CO_2 emissions. Consultant should evaluate/ validate the financial viability and the savings of the investments proposed by this project. The evaluation should be fully supported by financial and measurement data.

The Evaluation Report will validate the Proposal for Amendment for Output 2 of the project. The assessment will be based on the examination of the relevance of proposed strategy and its justification as the most effective route towards results. If this is not, the Evaluation Report will present reasons and propose possible alternative strategies to be applied. The assessment will be fully supported with data on changed project environment and will present indicators measuring the expected results.

For future development support in the region, UNDP is especially interested in the assessment of the support model applied in the project, its implications for the long-term impact and sustainability of the project results.

The Evaluation Report will present recommendations and lessons of broader applicability for follow-up and future support of UNDP and/or the Government, highlighting the best and worst practices in addressing issues relating to the evaluation scope.

5. EVALUATION METHODOLOGY

An outline of an evaluation approach is provided below; however it should be made clear that the evaluator is responsible for revising the approach as necessary. Any changes should be in-line with international criteria and professional norms and standards (as adopted by the UN Evaluation Group – Annex 3). They must be also cleared by UNDP before being applied by the evaluation team.

<u>The evaluation must provide evidence-based information that is credible, reliable and useful</u>. It must be easily understood by project partners and applicable to the remaining period of project duration.

The evaluation should provide as much gender disaggregated data as possible.

The evaluation will take place mainly in the field. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with the government counterparts, the National Project Director from the Slovak Energy Agency, Steering Committee, project team, representatives key municipalities, and key stakeholders.

The evaluator is expected to consult all relevant sources of information, such as the project document, project reports – incl. Annual Reports, project budget revision, progress reports, project files, national strategic and legal documents, and any other material that s/he may consider useful for evidence based assessment.

The evaluator is expected to use interviews as a means of collecting data on the relevance, performance and success of the project. S/He is also expected to visit the project sites.

The methodology to be used by the evaluation team should be presented in the report in detail. It shall include information on:

- Documentation reviewed;
- Interviews;
- Field visits;
- Questionnaires;
- Participatory techniques and other approaches for the gathering and analysis of data.

Although the Evaluator should feel free to discuss with the authorities concerned, all matters relevant to its assignment, it is not authorized to make any commitment or statement on behalf of UNDP or GEF or the project management.

The Evaluator should reflect sound accounting procedures and be prudent in using the resources of the evaluation.

6. DELIVERABLES

The output of the mission will be the **Evaluation Report** in English. The length of the Report should not exceed 30 pages in total (not including the annexes).

Initial draft of the Evaluation Report will be circulated for comments to UNDP, the National Project Director, the Director of the Energy Centre Bratislava and the Project Manager. After incorporation of comments, the Evaluation Report will be finalized. If any discrepancies have emerged between impressions and findings of the evaluation team and the aforementioned parties, these should be explained in an annex attached to the final report.

One mission to Slovakia, Bratislava, and selected project sites will be conducted.

The Evaluation Report template following the GEF requirements is attached in Annex 1 of this TOR.

7. TIMING AND DURATION

The total duration of the evaluation will be **15 days** within the period of **20 July – 20 September 2007,** according to the following plan:

Preparation (home office – during period 20 July – 3 August):
- Collection of and acquaintance with the project document and other relevant materials with information about the project;
- Familiarization with relevant policy framework in Slovakia;
- Design the detailed evaluation scope and methodology (including the methods for data collection and analysis);
- Set up the mission dates and detailed mission programme preparation in cooperation with the Project manager. The Project manager will organize the schedule of the mission and will arrange transportation for the consultant; will arrange for translation/interpretation when necessary
- Communication with the project staff to clarify matters

Mission to Slovakia (5 working days during August 2007):
- briefing with the PMU
- visits to project site(s)
- meeting with the National Project Director, Steering Committee members and stakeholder groups

Elaboration of the draft report (home office - till 7 September):
- Additional desk review
- Completing of the draft report
- Presentation of draft report for comments and suggestions
- additional information and further clarification with UNDP, project management and project staff;

Elaboration of the final report (home office till 20 September):
- Incorporation of comments and additional findings into the draft report
- Finalization of the report

The draft Evaluation report shall be submitted to UNDP for review **within 10 working days after the mission**. UNDP and the stakeholders will submit comments and suggestions **within 5 working days** after receiving the draft.

The finalized Evaluation Report shall be submitted latest **on 20 September 2007**.

8. REQUIRED QUALIFICATION

- University degree in technical, economics or energy/environment related issues;
- Recent experience with result-based management evaluation methodologies;
- Recent experience in evaluation of international donor driven projects;
- Recognized expertise in the field of energy efficiency and public lighting;
- Familiarity with Energy efficiency in public sector
- Familiarity with energy efficiency policies in CEE, especially in Slovakia;
- Experience with financing mechanisms, financial analysis and evaluating financial viability of energy efficiency programs
- Work experience in relevant areas for at least 8 years;
- Conceptual thinking and analytical skills;
- Project evaluation experiences within United Nations system will be considered an asset;
- Fluency in Slovak will be considered an asset;
- Excellent English communication skills;
- Computer literacy;

The evaluator must be independent from both the policy-making process and the delivery and management of assistance. Therefore applications will not be considered from evaluators who have had any direct involvement with the design or implementation of the project, or have conflict of interest with project related activities. This may apply equally to evaluators who are associated with organizations, or entities that are, or have been, involved in the delivery of the project. Any previous association with the project, the Executing of national implementing Agency or other partners/stakeholders must be disclosed in the application. This applies equally to firms submitting proposals as it does to individual evaluators.

If selected, failure to make the above disclosures will be considered just grounds for immediate contract termination, without recompense. In such circumstances, all notes, reports and other documentation produced by the evaluator will be retained by UNDP.

9 APPLICATION PROCESS

Applicants are requested to send in **electronic versions**:

1. current and complete C.V. in English with indication of the e-mail and phone contact
2. price offer indicating the total cost of the assignment (including the daily fee, per diem and travel costs)

by **6 July 2007, 17.00 am** to:

Ms. Klára Tóthová
Environmental Officer
Country Support Team
UNDP, Europe and the CIS
Bratislava Regional Centre
Grosslingova 35
811 09 Bratislava
klara.tothova@undp.org

Appendix 4: Co-financing table

Co financing (Type/ Source)	**IA own Financing (mil US$)**		**Government (mil US$)**		**Other Sources* (mil US$)**		**Total Financing (mil US$)**		**Total Disbursement (mil US$)**	
	Proposed	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**	**Proposed**	**Actual**
Grant			0.74	0.74			0.74	0.74		
Credits										
Loans					1.23	1.23	1.23	1.23		
Equity			0.24	0.24			0.24	0.24		0.03
In-kind										
Non-grant Instruments										
Other Types										
TOTAL			**0.98**	**0.98**	**1.23**	**1.23**	**2.21**	**2.21**		**0.03**

*Other refers to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector etc.

- “Proposed” co-financing refers to co-financing proposed at CEO endorsement.
- Describe “Non-grant Instruments” (such as guarantees, contingent grants, etc): ______
- Explain “Other Sources of Co-financing”: Only loans from private financial institutions are used as the "Other Source of Co-financing"