

FINAL EVALUATION REPORT

of the

UNDP/GEF Medium Size Project

Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia

Atlas Project ID: 47936

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This Final Evaluation Report was prepared for UNDP Bratislava Regional Centre RBEC by:

Jiří Zeman, International Consultant

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Profile of the consultant:

This final term evaluation was performed by Mr. Jiří Zeman, who has 20+ years of professional experience in energy efficiency, renewables, climate change and energy utilities primarily in Central and Eastern Europe and Central Asia. He has served as a Deputy Director of a leading energy efficiency consulting organization SEVEN, The Energy Efficiency Center in Prague, the Czech Republic, as a Solution Architect at a Utility Competence Center of Hewlett Packard for Central and Eastern Europe, Middle East and Africa, and since 2009 he serves as a freelance consultant. Mr. Zeman has developed, implemented and evaluated a series of UNDP/GEF energy efficiency projects in the region of Central and Eastern Europe and Central Asia.

Contact details: Mr. Jiří Zeman
 Murmanská 5
 100 00 Praha 10
 Czech Republic
 Email: jirkazeman@seznam.cz
 Tel: +420-776818363

Disclaimer of potential conflict of interest

I have worked for 15 years till mid 2006 with SEVEN, o.p.s., a not-for-profit Energy Efficiency Centre in Prague. During this period I have met at several international events with former directors of Energy Center Bratislava: Mr. Michael Wild, Mr. Vladimír Hečl and Mr. Roman Doubrava.

SEVEN has worked together with ECB and other partners on two international projects financed by the EU Intelligent Energy Europe program: ELAR in 2004-2006, and CF-SEP in 2006-2008.

I have not been directly involved in any of these projects neither in the implementation phase, nor in the project development/preparatory phase.

Before the evaluation mission to Bratislava within this UNDP/GEF project, I have not met current director of ECB, Mr. Marcel Lauko, nor Mr. Marek Lipa, director of CEVO.

I have no other connections to ECB/CEVO and I do not feel any potential conflict of interest in performing the final evaluation of this project.

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Abbreviations and acronyms

APR	Annual Project Review
AWP	Annual Work Plan
CEVO	Centrum pro verejné osvetlenie (Public Lighting Center)
ECB	Energy Center Bratislava
EE	Energy Efficiency
EPC	Energy Performance Contracting
ESCo	Energy Service Company implementing EPC services
GEF	Global Environment Facility
IFD	Investment Facilitation Department, project department of the Energy Center Bratislava
LPAC	Local Program Appraisal Committee
PDF	Project Development Facility
PIMS	Project Information Management System (UNDP GEF)
PIR	Project Implementation Review
PIU	Project Implementation Unit
SIEA	Slovak Innovation and Energy Agency
STE FEI	Slovak Technical University, Faculty of Electrical Engineering and Information Technology
ToR	Terms of Reference
UNDP	United Nations Development Programme
ZMOS	Združenie miest a obcí Slovenska - Association of Slovak Towns and Municipalities

1. Executive summary

1.1 Brief description of project

The project has been prepared since 2000 and the Project Document was signed on November 22, 2005 when the project implementation period started. The originally planned project implementation period of 4 years has been extended four times till November 2011, ie. in total by 2 additional years.

GEF contributed with 970 000 USD grant to the total project budget of 3 206 000 USD.

The objective of the project was to avoid 63 993 tons in carbon equivalent (or 234 641 tons of CO₂) (including post project emission savings) by catalyzing USD 2.63 million in investments in energy efficient public lighting.

The project has been designed with three outputs:

- 1. An effective and sustainable advisory service created to catalyze public lighting investment - A fully operational business unit with the capabilities to identify and broker public lighting investments.*
- 2. Finance technical demonstrations with the support of a concessional fund - A project fund to enable the IFD to build an initial portfolio of investment successes. The sole-purpose of the fund was 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.*
- 3. Support investment in energy efficient public lighting through information dissemination - Promote the IFD more widely in the Slovak Republic, and based on early project success expand its client base.*

Since terms and conditions on the financial market have improved significantly in early 2000s, and at the launch of the project in 2005 banks were already offering long-term loans to municipalities with affordable interest of ca 4% compared to 10-20% before 2000, the project decided not to implement Output 2 – concessional fund.

In 2008, after the MTE and 2+ years after the project launch, the Output 2 has been redefined and the originally planned concessional fund was replaced with a creation of a project ESCo company – CEVO Ltd. - to deliver co-financed energy performance contracting (EPC) projects in public lighting.

Revised specification of Output 2: *To stimulate energy efficient PL systems reconstructions through direct participation of the IFD in these reconstructions*

1.2 Context and purpose of the evaluation

This Final Evaluation has been performed on a request of UNDP Bratislava Regional Centre, RBEC, it is part of a standard project monitoring and evaluation procedure.

The Final Evaluation has been performed in February – March 2012, and the MTE report was finalized in April 2012.

1.3 Main conclusions, recommendations and lessons learned

At the beginning of project implementation public lighting has been specified by the Slovak government as a priority area for EU structural and EEA/Norway funds. In 2008 and 2010 a total of 44 mil EUR (about 60 mil USD) grant scheme for public lighting has been opened in three calls. Projects from two calls have been implemented until 2011, the last call has not been evaluated yet and funds disbursed (as of March 2012), and implementation of these projects is pending.

This massive subsidy scheme providing 90% and 95% subsidy for the total investment costs has been definitely the most popular source of financing during the project implementation period for public lighting reconstructions especially in small and medium-sized municipalities. Commercial financing, although available and affordable remained as a second option only.

The project has worked closely with these available grant schemes and has prepared 90 projects (energy audits, feasibility studies/technical-economic studies, application for grant financing), of which 32 have been implemented already by commercial companies on the market, including one project implemented by CEVO. In addition to this, CEVO has submitted proposals to another 44 public tenders to reconstruct municipal street lighting, 10 tenders have been cancelled. CEVO won 9 cases, ie. 26% out of remaining 34 tenders, and has already implemented 6 projects under commercial terms, with no direct utilization of UNDP/GEF funds. One of these projects has been implemented and financed with a combination of own municipal funds and commercial loan, without the use of the state subsidies.

Availability of massive grants eliminated interest of municipalities in commercial financing including EPC. Thus, the project did not succeed to deliver and implement any EPC project. Only one municipality Snina has decided so far to open a tender for EPC in public lighting reconstruction. CEVO had prepared and submitted an EPC proposal, however the municipality decided at the end, in 2011, to cancel the tender and no EPC project has been implemented.

As a result of this, 400 000 USD of GEF funds budgeted in Output 2 as an equity finance to capitalize CEVO in order to be able to accommodate commercial loan to provide financing for the EPC project in Snina, has not been utilized and remained unspent.

The project and CEVO have delivered good results and achieved its targets in Output 1 and 2 with support of EU subsidies: CEVO has developed 90 projects for implementation, of them 36% have been implemented already with grant financing mainly, and in few cases with commercial financing. The quality of projects developed by CEVO was reported by SIEA to be excellent and they served as an example for other project developers. Within Output 3, the project and CEVO have delivered number of presentations, have published and disseminated to all municipalities Svetlos magazine with information on best practices and typical mistakes in public lighting project development and implementation and helped to increase awareness among municipalities as well public lighting suppliers.

Without EU subsidy scheme, when taking into account only commercially financed projects, the project targets 1-4, 8 and 9 are not achieved.

After MTE, the project focused on EPC supply services, creating CEVO as an ESCo company, but it underestimated the need for independent advisory services that would serve as an EPC market catalyst,

providing independent training and information both to municipalities and service suppliers, potential ESCos, and assisting municipalities specifically with EPC tender preparation and evaluation.

Although the project failed to deliver core result in Output 2 – EPC projects implemented, and thus 41% of GEF funding remain unspent, all other project targets as specified in the LogFrame, ie. 10 out of total 11 targets have been reached with the support of EU grant scheme.

Except for one project implemented with commercial financing, the project failed to mobilize commercial financing for energy efficiency public lighting reconstructions.

The financial and public lighting markets are already well developed in Slovakia. Banks consider municipalities to be in general credible clients and compete to offer affordable long-term financing. There are number of companies competing to supply public lighting solutions. However, this situation has developed independently from project activities.

The main project impact is in Output 1 and 3: the project has significantly improved a standard of a good quality project development (energy audits, feasibility/technical studies), and helped to raise awareness of municipal decision makers and suppliers in good quality technical solutions for public lighting. As a result of this, installation of low quality 36 W fluorescent lighting sources has decreased significantly.

However, the core objective of the project to mobilize commercial financing and to implement EPC projects remained unfulfilled.

This was primarily not because of underperformance of ECB, the implementing agency, nor of CEVO, the newly created business entity – supplier of public lighting solutions. The key problem is that the project design did not reflect properly already relatively well developed market in Slovakia in 2005, after joining EU, when several public lighting projects have been implemented already with commercial financing.

The project failed to implement radical and effective enough adaptive management when it faced massive EU grant scheme of 60 mil USD in public lighting that effectively decreased interest of mainly smaller municipalities in commercial financing. Instead of it the project has been revised after MTE to create and ESCo company (CEVO, Ltd) to offer and implement EPC projects in public lighting. Without independent advisory services to municipalities in development and evaluation of EPC projects and tenders, there was not sufficient demand for EPC projects. Only one municipality decided to open an EPC tender, where CEVO has submitted its offer, but the tender was at the end, after municipal elections, cancelled, and CEVO failed to implement any EPC project. The market potential for EPC solutions in public lighting has been overestimated, and the difficulties in developing EPC market have been underestimated.

The overall rating of the project is **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

Summary of key recommendations:

- Use tons of CO₂ (or CO₂ equivalent) as an indicator in GEF projects only instead of tons of carbon equivalent.
- The project objective and targets should be expressed in measurable direct project GHG emission reductions only and should not be combined with post project emission reductions.

- The project focused on developing and strengthening public lighting market both on the demand and supply side. On one hand the project served municipalities and developed and disseminated information on energy efficiency opportunities in public lighting reconstruction, and prepared 90 projects for implementation. On the other hand it has set up CEVO, a daughter company of ECB, as a private commercial business to implement public lighting projects and EPC projects. One cannot serve in the same time on both sides to prepare projects and to implement projects without conflict of interest. The project and CEVO eliminated this potential conflict of interest by focusing on project development activities in early years of UNDP/GEF project implementation (2005-2009), and on public lighting project implementation (since 2009).
- If a project focuses on developing energy efficiency market and targets its activities both on the demand and supply market side (clients and suppliers), the potential conflict of interest should be properly addressed, evaluated and explicitly taken into account already during the project development phase, when deciding if project activities will focus on demand or rather on supply side of market development.
- GEF funds should primarily be used for supporting and developing the demand on the market (strengthening the overall framework conditions, capacities of local stakeholders and decision makers to develop and implement energy efficiency projects, improvement of legislative framework and support for economic reforms if needed etc.), rather than to fund and support one selected (private) business entity because of potential market distortions.
- Implementing and executing agencies as well as project steering committee should be informed at the very beginning of project implementation about the detailed rules and applicability of adaptive management.
- Ideally, the project development and approval period for GEF projects should be shortened from multi-year to several months period.
- Energy Performance Contracting is a difficult business and it requires lots of time and efforts to develop the market to be ready for EPC, including information dissemination, training and assistance to EPC clients (municipalities) in EPC project development and tendering. Focus on supporting ESCOs only without adequate assistance to EPC clients includes a risk that EPC market development would be delayed if successful at all. GEF projects supporting EPC market development should focus primarily on independent EPC market development advisors/catalysts serving both potential EPC clients and potential ESCOs.
- Specification of project indicators, baselines and targets should be self-explaining and detailed enough, including specific method of calculation if needed. Wording of indicators and targets and method of calculation should be defined in a required detail and specification in addition to their overview in LogFrame matrix.
- Financial planning and project budgets in Atlas structure only do not provide sufficient detail for control of cost justification. Financial plans, budgets as well as expenditures, should be tracked by individual project activities or sub-activities if needed, in order to be able to properly evaluate cost-effectiveness.
- The evaluator recommends to terminate the project and to return unused funds of 0.4 mil USD to GEF.

Main lessons learned:

- If the economic situation or other external factors change significantly, and designed project outputs and activities become outdated, projects should implement adaptive management and propose adequate changes and adjustments immediately, without any unnecessary delays.
- Both executing and implementing agencies and members of the steering committees should be informed at the very beginning of the project implementation, at the Inception Workshop at latest, about UNDP/GEF project implementation principles and rules, and especially about potential of effective adaptive management.
- GEF project development and approval period should be ideally much shorter, within months rather than years, and more effective, focusing primarily on key aspects of the project, ie. objectives, outcomes, budget etc., and not so much on details that can be changed later on during project implementation.
- Utilization of ATLAS structure in financial planning and reporting does not support effective financial management. Effective daily project and financial planning and management needs more detailed focus and tracking of project budget and expenditures by individual project activities.
- The impact and the lengthy bureaucratic process of implementing massive state subsidies of 44 mil EUR have been underestimated. Massive state subsidies effectively decreased interest of municipalities to utilize commercial financing – including EPC.
- In developing new EPC markets the role of independent and experienced advisor/consultant serving as an EPC facilitator and market catalyst should not be underestimated, nor the lengthy period of typically multiple years needed for EPC market development.
- Limited need to guarantee energy savings in public lighting and limited number of projects with sufficiently short payback in Slovak street lighting effectively decrease EPC market potential. The real potential for EPC projects in the Slovak public lighting has been overestimated.
- The project would have benefitted if already in the project design phase the early project proposal would have been reviewed by an advisor independent from the implementation agency, and experienced both in best international practices in public lighting and with a thorough understanding of specifics of Slovak market in that development phase. The project, as it was designed, would have been more appropriate for earlier phases of market transformation in Slovakia (in mid nineties). In 2005, when the project implementation has started, Slovakia was already an EU member, and the market transformation, including financial and public lighting markets, was already rather advanced. In combination with massive EU grants available, the focus of the project on mobilizing commercial financing for public lighting reconstructions seems not to have been properly targeted.

2. Introduction

2.1 Purpose of the evaluation

This terminal evaluation has been performed on a request of the UNDP Bratislava Regional Centre RBEC as a standard mandatory requirement of all UNDP projects. The terminal evaluation mission took place in Slovakia in February and March 2012.

The objective of this evaluation is to assess the achievement of project's objective, the affecting factors, the broader project impact and the contribution to the general goal/strategy, and the project partnership strategy. It also provides the basis for learning and accountability for managers and stakeholders and for providing important lessons learned which can be applied to the design of future UNDP projects which aim to remove barriers to energy-efficiency.

According to the GEF and UNDP/GEF Monitoring & Evaluation Policies, the 2009 Handbook on Planning, Monitoring and Evaluating for Development Results, the terminal evaluation has four objectives:

- i. Monitor and evaluate results and impacts;
Analyze and evaluate effectiveness of the results and impacts that the project has been able to achieve against the objectives, targets and indicators stated in the project document;
- ii. Provide a basis for decision making on necessary amendments and improvements;
Assess effectiveness of the work and processes undertaken by the project as well as the performance of all the partners involved in the project implementation;
- iii. Promote accountability for resource use;
Provide feedback and recommendations for subsequent decision making and necessary steps that need to be taken by the national stakeholders in order to ensure sustainability of the project's outcomes/results; and
- iv. Document, provide feedback on, and disseminate lessons learned.
Reflect on effectiveness of the available resource use; and document and provide feedback on lessons learned and best practices generated by the project during its implementation.

2.2 Key issues addressed

The following key issues have been addressed in the final evaluation:

Relevance of the project with national development priorities, and its appropriateness,
Effectiveness of the development project and partnership strategies,
Contribution and worth of the project to national development priorities
Key drivers and success factors enabling successful, sustained and scaled-up development initiatives, alternative options and comparative advantages of UNDP
Efficiency – cost-effectiveness of funds spent to reach project objectives and results
Risk factors and risk management strategies

Sustainability - level of national ownership and measures to enhance national capacity for sustainability of results

Impact of the project implemented on human development

A specific attention has been paid, in addition to the project implementation itself, to the evaluation of recommendations of the mid-term evaluation, to the role of UNDP, and the use of Logical Framework matrix, definition of indicators and targets.

2.3 Methodology of the evaluation

The methodology used for the project final evaluation is based on the UNDP/GEF Monitoring & Evaluation Policies and includes following key parts:

- I. Project documents review prior to the evaluation mission
- II. Evaluation mission and on-site visits, interviews with project management, UNDP, project partners and stakeholders, as well as with independent experts.
- III. Drafting the evaluation report and ad-hoc clarification of collected information/collection of additional information
- IV. Circulation of the draft evaluation report for comments
- V. Finalizing the report, incorporation of comments

2.4 Structure of the evaluation

This final evaluation report follows the structure and content as specified in its Terms of Reference and according to the evaluation template of the Handbook on Planning, Monitoring and Evaluating for Development Results.

3. The Project and its development context

3.1 Project start and its duration

The initial project idea has emerged in 2000. The project proposal “Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia” has been prepared in 2001 with a support of GEF which provided a grant through the PDF A facility in the amount of 25 000 USD; the project proposal was approved by GEF in 2002.

The Project Document has been approved by GEF in May 2005, and signed by both parties on November 22, 2005, when the project implementation period effectively started. The planned duration of the project was 4 years; the original planned project termination was November 2009.

Project implementation period has been extended four times by 2 years in total. The original scheduled project termination in November 2009 was postponed by a year till November 2010. The next 6-month extension till the end of May 2011 was approved at the end of 2010. The third project extension approved in May 2011 prolonged the project implementation period by 4 months until September 2011. In September 2011 the last extension of 2 months till November 30, 2011 has been approved.

The project has not been yet officially closed, and thus is still in the implementing period, although without any further activities since November 2011.

The total project duration has been 6 years – November 2005 through November 2011 (six and half years till April 2012).

Inception Report has been prepared in April 2006 and proposed revision of LogFrame matrix. Some of the LogFrame indicators and targets have been revised and redefined to be more specific and relevant.

The Mid-Term Evaluation Report has been prepared in December 2007, and based on its recommendations a revised LogFrame has been approved in the Project Revision in February 2008.

This project amendment has changed the project Output 2 from creating a concessional fund to establishment of a project business entity that will offer and implement co-financed (subsidized) Energy Performance Contracting projects.

3.2 Problems that the project seeks to address

The Project Document identified several barriers and problems to be addressed by the project:

- In most cases, street lighting in Slovakia has been installed in 1970s and 1980s, and in the project formulation period in early 2000s, its effective lifetime has expired already and replacement and/or modernization were needed. New energy efficient technologies provide opportunity to decrease energy consumption and save GHGs.
- However, only few small and medium-sized municipalities are aware of this potential.
- Most of small municipalities have limited experience and financial capacity to develop, finance and implement energy efficiency projects in street lighting (Out of total 2891 municipalities in Slovakia, 68% of municipalities have less than 1000 inhabitants, 40% less than 500 inhabitants)

- Street lighting is only one among other municipal responsibilities, and often street lighting reconstruction does not have a high priority.
- Limited experience with third-party financing.

Largest municipalities have been identified to be in a better financial situation as well as to have access to qualified staff, and to be attractive enough for commercial solutions available on the local market.

3.3 Immediate and development objectives of the project

The project objective was defined to *avoid 63,993 tons of carbon equivalent (or 234,641 tons of CO₂) over the 20 year lifecycle of the technology by catalyzing 2.63 mil USD investments in energy efficient public lighting.*

The target of 63.993 ktons of carbon equivalent savings has been calculated over the whole lifetime of the technology, and combines direct, direct post-project and indirect (post-project) GHG savings:

- 12.255 ktons of carbon equivalent of direct life cycle emission savings from projects implemented within UNDP/GEF project period with investment of 2.63 mil USD secured by the project IFD (Investment Facilitation Department) – *direct GHG emission reduction*
- 16.945 ktons of carbon equivalent of life cycle emission savings from projects implemented within 12 years after UNDP/GEF project termination with 3.85 mil USD investment provided by the revolving/concessional fund – *direct post-project GHG emission reduction*
- 34.793 ktons of carbon equivalent of life cycle emission savings from projects implemented by IFD after UNDP/GEF project termination with annual investment of at least 1 mil USD over *unspecified time period* – *indirect post-project GHG emission reduction*

The Inception Report specified the *goal of the project: to avoid carbon emissions by building a sustainable entity whose business model is to catalyze investment in energy efficient public lighting.*

3.4 Main stakeholders

The project executing agency is SIEA, Slovak Innovation and Energy Agency, (formerly SEA – Slovak Energy Agency), a state energy agency promoting energy efficiency.

Implementing agency is ECB – Energy Center Bratislava, a not-for-profit non-governmental information and consulting organization. Its mission is to promote efficient use of energy and utilization of renewable energy sources.

Main project stakeholders identified to be actively involved in project implementation include:

- Small and medium-sized municipalities and regional governments
- Association of Slovak Towns and Municipalities (ZMOS)

- Equipment manufacturers and service companies
- Slovak Technical University, Faculty of Electrical Engineering and Information Technology (FEI STU)
- Banks and project donors (Tatra Banka, Kommunal Kredit Austria, IFC)

Municipal tax payers were identified as ultimate beneficiaries of the project.

3.5 Results expected

The project has been designed according to the Project Document to have three key components and to deliver three outputs. Out of total 970 000 USD GEF contribution, the Project Document has budgeted 408 580 USD for Output 1, 466 500 USD for Output 2, and 94 920 USD for Output 3.

Output 1: An effective and sustainable advisory service created to catalyze public lighting investment

Set-up of the Investment Facilitation Department (IFD) of the Energy Center Bratislava. The outcome of this output will be a fully operational business unit with the capabilities to identify and broker public lighting investments.

Output 2: Finance technical demonstrations with the support of a concessional fund.

Set-up of a project fund to enable the IFD to build an initial portfolio of investment successes. The sole-purpose of the fund is 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 concessional fund has been originally planned to combine GEF grant of 466 500 USD with local commercial financial sources (of 1.5 mil USD) and thus to provide loans for municipal public lighting reconstructions with preferential conditions (loans with subsidized interest).

Output 3: Support investment in energy efficient public lighting through information dissemination

The third output has been designed to promote the IFD more widely in the Slovak Republic, and based on early project success expand its client base. As such it will be important to make independent measurements of energy savings, and present these with investment profiles to demonstrate payback periods and the full scale of positive financial returns. This promotional material will be accompanied by lessons learned from project implementation to create the option for international transfer of best practice.

Due to implemented economic reforms and legislative changes, the general terms and conditions for municipal debt financing have significantly improved by the launch of the project compared to the 2000, when the project idea was born. Interests of commercial loans for municipalities decreased from some 15-20% before 2000 to about 4% in 2005. Banks ranked municipalities to be least risky clients. Commercial financing became in general available for municipalities. Subsidized loans were not found anymore to be as attractive as in the past. In the same time, however, applied limits on indebtedness in public sector, and municipalities thus sometimes preferred out-of-budget financing, such as outsourcing.

Based on these facts, the Local Program Appraisal Committee held on July 6, 2005 recommended the project to focus on technical assistance and facilitation of the investment with local financial institutions, and to postpone decisions on conditions and structure of the project fund till the Inception Workshop. The Inception Workshop and Report did not however, recommend any specific solution for the Output 2, and activities under Output 2 were put on hold.

After Slovakia joined European Union on May 1, 2004, EU structural funds as well as European Economic Area and Norway grants started to be prepared for financing country development priorities in Slovakia. During the first years of project implementation (2006, 2007) country priorities have been defined, and public/street lighting has been specified among country priorities eligible for grant financing. The preparation of the EU and EEU/Norway grant scheme has been delayed and the actual calls for grant applications for public lighting reconstruction have been several times postponed until 2008. Finally on April 23, 2008 the call for the EEA/Norway grant scheme have been officially published with a total budget of almost 3 mil EUR for public lighting reconstruction, and on September 9, 2008 a first call on EU Structural Funds with a total budget of 700 mil SKK (23.2 mil EUR) for public lighting reconstruction has been published as well. The second call of the EU Structural Funds for public lighting reconstruction with a budget of 17.6 mil EUR has been officially published on March 15, 2010, however the applications for these Second Call have not yet been evaluated and grants have not been yet distributed (as of March 2012). The total amount of grants assigned for municipal public lighting reconstruction in Slovakia in this period is 43.78 mil EUR, ie. ca 60 mil USD.

Because of this massive grant scheme, municipalities, especially the small and medium ones, became interested in applying for grants that cover 90% to 95% of the total investment costs, and their potential interest in commercial financing decreased.

In response to this situation the project and the MTE then proposed to redefine the Output 2, and instead of creation of a small concessional fund that would offer soft loans, to focus Output 2 activities to develop an ESCo company from the project IFD, to offer Energy Performance Contracting services for reconstruction of municipal public lighting, and to use the Output 2 budget to provide subsidized EPC services at least for the first projects.

The project has been officially revised by the February 2008 Project Revision that reformulated the Output 2. The new wording stated as follows:

Output 2: To stimulate energy efficient public lighting systems reconstructions through direct participation of the IFD in these reconstructions.

This formulation meant transformation of the IFD department of ECB into a private commercial entity – CEVO s.r.o. - a daughter company of ECB that would develop, finance and implement public lighting reconstruction projects with guaranteed performance and energy savings.

The project revision also specified change in Output 2 budget. Originally, the whole Output 2 budget of 466 500 USD has been planned for the concessional fund. The approved project revision allocated 66 500 USD for IFD capacity building in EPC and EPC marketing campaign, and 400 000 USD has been allocated for actual EPC and other technical services provided by IFD.

4. Findings and conclusions

4.1 Project Formulation

4.1.1 Project Relevance and Implementation Approach

The project correctly identified untapped opportunities to increase energy efficiency in public/street lighting in Slovakia especially in small and medium-sized municipalities.

However, it underestimated the rapidly developing market – in terms of providing both affordable financial services, as well as engineering and implementation services in public lighting.

Even before the project document has been drafted, first commercial projects improving energy efficiency in public lighting have been implemented already in Slovakia.

Smaller municipalities typically were underfinanced, and had other more urgent investment priorities, where they were potentially exposed to a risk of sanctions, such as waste-water treatment plants etc., and thus they did not prioritize their investment to improving public lighting.

The core of the project was to create a business unit that will identify and develop municipal street lighting projects, broker public lighting commercial financing with a support from the GEF grant (concessional fund), and disseminate information on best practices in street lighting to expand client base of the project created business unit. After MTE, as a response to already available affordable commercial finance for municipalities (with 4% interest on loans) and massive EU grant scheme for public lighting reconstruction in Slovakia (60 mil USD grant scheme), the project has been revised to establish instead of the 1.5 mil USD concessional fund a commercial entity – ESCO, that should implement Energy Performance Contracting.

The core project strategy was clearly defined in the Project Document and its revisions. However, some of the project details were not defined that clearly, and were somewhat non-consistent or confusing. For example:

- The project document highlighted in some parts that public lighting reconstruction projects have short payback (page 18), in other parts it mentioned that public lighting projects have long payback (page 39).
- The text description of the project management structure (page 28) – SEA/SIEA Executing Agency, ECB Implementing Agency, does not correspond with the project implementation structure (page 29), where ECB is assigned a role of the Executing Agency.

The project design included potential risks and conflict of interest that were not addressed.

- The first project component was designed to assist municipalities in developing street lighting projects, but in the same time it was designed to create a business entity to implement street lighting projects. The need for independent credible consulting services for municipalities in developing projects, and especially in case of EPC projects (preparation and evaluation of EPC tenders, and evaluating actual performance of implemented EPC projects), was underestimated.
- The decision to create CEVO as a commercial business entity offering EPC services means that the project (CEVO, nor ECB) cannot in the same time provide consulting services to municipalities independently from supplier interests. This conflict of interest was incorporated in the original

project design as well, before it was decided to establish an ESCo - CEVO, although the risk was expressed less explicitly.

- The small concessional fund (1.5 mil USD soft loan facility) was found not attractive enough for municipalities because of massive grant scheme (60 mil USD) was available for financing municipal public lighting reconstruction. Instead of the concessional fund it was decided to establish an ESCo, to use GEF funds of 0.4 mil USD to capitalize it, and to start to offer commercial EPC services. EPC services provide third-party financing and guarantee service performance; however the total costs of EPC services in general are thus higher than a simple supply contract. It is not clear why the project expected that municipalities would opt for EPC services in the time period when they had a chance to apply for a 95% grant from EU structural funds (and 90% grant the from EEA/Norway grant scheme).
- It is evident that EPC might be a potential alternative for municipalities after the EU/EEA grant schemes would be distributed. However, it still would be a difficult business that would require independent consulting support for municipalities. Since ECB has established CEVO as a commercial business entity offering EPC services, neither CEVO nor ECB can offer independent services for project development and especially for EPC tender preparation and evaluation to municipalities, although ECB has perhaps the best expertise and capacity to do so in the Slovak market (if it is not currently the only entity able to do so on the Slovak market). Surprisingly, this risk of lack of independent consultancy to support municipalities especially in EPC tender preparation and evaluation was not identified by the MTE evaluator, an experienced expert in EPC, who recommended to ECB to establish CEVO as an ESCo offering EPC services.
- EPC projects have high transaction costs and require short payback should the investment be repaid from savings only. Such suitable projects could be found and implemented in public lighting reconstruction, however on exceptional basis only – in markets with similar conditions as in Slovakia. Typically, the public lighting reconstruction projects have longer payback, because they often include extension of the current public lighting system to comply with technical norms and standards. Thus, more common practice in street lighting are long term service contracts that include municipal payment for a lighting point which provide motivation for the service supplier to modernize the public lighting installation and install more efficient technology on its own account, without the need for municipality to directly pay the actual investment costs (the municipality however pays for the whole service from its operational budget). These types of contracts could be interpreted as a sort of EPC, however the costs typically cannot be recovered from savings only.

The project evaluated soft loans as not attractive enough for relatively poor smaller municipalities but in the same time it proposed delivery of EPC solutions that are in principle more costly than simple supply contracts because of costs of energy savings guarantee.

The key problem is that the project design did not reflect properly already relatively well developed market in Slovakia in 2005, after joining EU, when several public lighting projects have been implemented already with commercial financing, and did not implement effective adaptive management to redesign the project that faced massive EU subsidies in public lighting after MTE.

The rating of the Project Relevance and Implementation Approach is **Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.1.2 Analysis of Logical Framework (project logic/strategy, indicators)

The project Logical Framework has been defined in the Project Document and revised after Inception Workshop and after Project Revision has been approved in February 2008. See all three versions of the Logical Framework in Annex 1.

The objective of the project is expressed in tons of carbon equivalent that combines CO2 emission savings as well as CO emission savings. CO is not directly a GHG, but has an important impact on creating greenhouse effect. 1 ton of carbon is an equivalent of 3.65 tons of CO2.

The target of the project objective is a life time reduction of 63,993 tones of emissions in carbon equivalent. As it is described in Chapter 3.3 Immediate and development objectives of the project, this target combines together direct project, direct post-project and indirect post-project carbon emission savings. Although it is important for the project to estimate direct and indirect post-project emission reductions, the post-project emissions reductions are based only on estimated assumptions of future, post-project development and cannot thus be verified and quantified neither during project implementation period, nor at its end at the time of final evaluation. Thus, post project emission reductions (direct or indirect) should not be expressed as targets in the LogFrame. The project has identified this problematic issue and in the PIMS the LogFrame target and achievements are interpreted correctly only for measurable direct project emission reductions – 12 255 tons of carbon equivalent life-time emission reductions.

LogFrame indicators are relatively well defined and sufficiently SMART - Specific, Measurable, Attainable, Relevant and Trackable, except for the indicator 11 “Percent share of target group used information provided by IFD for present or future PL EE reconstruction“ which should be more specific, and target of indicator 3 “Increasing investment into EE PL reconstruction” which is unnecessarily difficult to evaluate if it is expressed as a share on total municipal expenditures rather than an absolute number.

However, the specification of indicators, baselines and targets in the LogFrame is in some cases rather brief and not fully self-explaining. The wording of several indicators and targets in PIMS slightly differs from the LogFrame wording, and is more explanatory.

Rating of the Logical Framework is **Moderately Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
		MS			

4.1.3 Lessons from other relevant projects incorporated into project implementation

The project design and implementation incorporated international experience from implementing concessional funds and street lighting energy efficiency projects; ECB itself as well as project partners and consultants have good track of experience or access to experience from implementing and financing street lighting projects.

However, some of critical lessons learned available in the period of project formulation and implementation already, were not taken into account – such as the need for independent consultancy assisting municipalities to prepare and evaluate EPC tenders. Also the difficulties in developing EPC market, and related demanding time period, were underestimated.

The level of market development in Slovakia was underestimated, both in terms of providing financial services as well as engineering and implementation services, as well as impact of heavy subsidies available on interest of municipalities to utilize commercial financing.

4.1.4 Country ownership/drivenness

The project idea originated with and was fully developed by ECB staff – Slovak information and consulting organisation with support from UNDP.

The importance of the street/public lighting for the country was clearly demonstrated by the fact that the Slovak Republic has decided public lighting to be one of its priority areas for grant financing from EU structural funds - EEA/Norway grants.

Ironically, the strong country priority for public lighting reconstruction and modernization, as demonstrated by allocating 60 mil USD of grants to public lighting, undermined successful implementation of Output 2, because neither concessional fund nor EPC services were competitive to such massive grant scheme available for public lighting projects during the UNDP/GEF project implementation period.

The country ownership and drivenness is rated **Highly Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.1.5 Stakeholder participation in the design phase

During the design phase the project developers, ECB, consulted with relevant local and international stakeholders, including:

- State Energy Agency
- Local municipalities
- Local financial institutions/banks
- Local experts in public lighting – Slovak Technical University, public lighting professionals
- International financial institutions – IFC, Austrian Kommunal Kredit
- Slovak Union of Towns and Municipalities – ZMOS
- Governmental agencies – Slovak Agency for Environment

Stakeholder participation in the design phase is rated **Highly Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
HS					

4.1.6 Replication approach and sustainability

The project has been designed to use GEF funds to create a sustainable business unit that would catalyze commercial financing for public lighting project and that would be active on a Slovak public lighting market in a long term, after the project termination. The designed activities of the business unit IFD included two goals that potentially might be in conflict of interest: to broker deals between the financiers, investors (municipalities) and service providers (ESCOs), and to serve itself as a service supplier (ESCO) as well.

Creating a business is by definition a risky venture. GEF, when it decided to support this project, implicitly accepted such risk. GEF has successful experience working with the World Bank in supporting development of innovative business schemes and entities – such as HEP ESCO in Croatia.

At the beginning of the project implementation, there have been already commercial activities implemented on the Slovak public lighting market. Siemens for example has launched its public lighting modernization project in Bratislava in 1997 already, followed by other projects in Trnava (1998), Svätý Jur (2000), Bernolákovo (2001), Dunajská Streda (2001), Trenčín (2003), Poprad (2004), and Bardejov (2004). Commercial activities focused primarily on large cities, although mid-size municipalities were not excluded (Bernolákovo has 4 500 inhabitants).

The focus of the UNDP/GEF project and IFD's activities was primarily on small and mid-size municipalities where the competition was not that active, because of the smaller size of potential projects, and because small municipalities did not prioritize public lighting modernization that high, and did not have sufficient capacity to prepare and finance good quality projects.

So although there has been already competition among suppliers on the Slovak public lighting market, the market segment of small and medium-sized municipalities was not yet fully occupied at the beginning of the project, but could have been expected to become more competitive over the period of project implementation.

The prospect of business activities supported by the project to continue in a sustainable way after project termination was exposed to market risks, but in principle realistic.

Replication approach and sustainability is rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.1.7 Cost-effectiveness

The project expects to avoid total of 63,993 tons of carbon equivalent from direct, post-project and indirect savings. With a GEF grant of 970 000 USD, this means that the estimated costs of total carbon equivalent saved is around USD 15/ tC, or USD 4.2/tCO₂.

These costs of CO₂ emission reductions USD 4.2/tCO₂ are well comparable with actual market price of traded CO₂ emission reductions.

If applied to direct project emission savings of 12 255 ton of carbon equivalent and total GEF budget of 970 000 USD, the costs of CO₂ emission reductions would be 79 USD/tCO₂ which is far above standard CO₂ emission savings costs.

Cost-effectiveness is rated **Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.1.8 UNDP comparative advantage

It is a question if UNDP and GEF should serve as a venture capitalist and capitalize new private business entities (CEVO is controlled by not-for profit ECB, which owns 51% share in CEVO, the remaining 49% of CEVO are owned by CEVO managers) to implement energy efficiency projects decreasing GHG emissions, or rather if UNDP and GEF should support and implement projects that support development of policies, legislation, economic reforms, know-how transfer and strengthening of local capacities to develop and implement GHG reduction projects, in another words support creation of demand for energy efficiency services, but to leave it up to the businesses to supply such services if a real demand and market for such services would be developed.

Both approaches are legitimate, and direct support to private businesses is implemented by numerous international donors including World Bank, EBRD, EU Structural Funds etc., although such financial support distort market competition.

Direct support of business entities requires, in addition to standard evaluation of project risks, to understand in detail and properly evaluate market and business risks.

UNDP seems to be better positioned for implementing projects that support the framework conditions and create demand for, rather than supply of energy efficiency business solutions. However, this does not mean that UNDP should not seek new innovative and effective solutions and projects.

If UNDP decides to directly support private business entities, it should be explicitly stated in its development policy/strategy, and specific market and business analytical skills and expertise should be available during project proposal preparation and evaluation.

UNDP comparative advantage is rated **Moderately Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
		MS			

4.1.9 Linkages between the project and other interventions within the sector

Street/public lighting has been identified as a priority of the Slovak government and three grant schemes has been established with funding from the EEA/Norway grants and EU structural funds. The EEA/Norway grants with a total budget of 2.98 mil EUR have been published in 2008 and 46 projects have been implemented by the end of 2011. The grant scheme provided 90% subsidy. The first call of EU Structural Funds with a total budget of 23.2 mil EUR has been published in 2008 and 117 projects have been implemented with a 95% subsidy. The second call of the EU Structural Funds providing 95% subsidy with a budget of 17.6 mil EUR has been published in 2010, however the decision on selection of projects is still pending (as of March 2012) and projects have not yet been implemented.

The total amount of the subsidy scheme of 43.8 mil EUR covers some 260 projects. Although the amount of the subsidy is enormous, it covers only some 9% of the total number of municipalities in Slovakia.

It should be noted that such massive subsidy scheme in public lighting actually undermined achievement of project goal to facilitate utilization of commercial finance in public lighting projects.

Linkages between the project and other interventions within the sector are rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.1.10 Management arrangements

The Slovak Innovation and Energy Agency (SIEA) has been assigned a role of the project executing agency, Energy Center Bratislava has served as an implementing agency. SIEA, the executing agency, has appointed a National Project Director. IFD, the Investment Facilitation Department, is a project department established by the Energy Center Bratislava, lately as a separate commercial entity CEVO, s.r.o., to implement the project.

A Project Steering Committee, responsible for strategic guidance, and co-ordination of the project with other national activities, has been established to oversee project implementation.

The Project Evaluation Committee/Project Board was planned to be responsible for final approval of project investments from the project fund.

Inception Report specified the role of the Project Board for more operational decisions, as shown in the following chart. The Project Board consisted of the UNDP representative, National Project Director (SIEA), and representatives of ECB and CEVO.

Chart 1: Project Management Structure



Management arrangements are rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.2 Project Implementation

4.2.1 Implementation approach

The project implementation approach focused on achieving the project objective of reducing direct life-cycle emission savings of 12 255 tons of carbon equivalent by brokering and catalyzing commercial investment for implementation of energy efficiency public lighting reconstruction in primarily small and medium-sized municipalities. Project activities have been structured in three main project components – project outputs:

1. An effective and sustainable advisory service created to catalyze public lighting investment
2. To stimulate energy efficient PL systems reconstructions through direct participation of the IFD in these reconstructions
3. Support investment in energy efficient public lighting through information dissemination

Output 1 and 3 of the project addressed correctly the needs of the local market and primarily of small and medium-sized municipalities, and focused on energy efficient public lighting reconstruction project development activities, and on disseminating information and best practices in public lighting reconstruction among municipal decision makers.

The originally planned project Output 2: *Finance technical demonstrations with the support of a concessional fund* has been replaced because commercial loan financing became in general available and affordable even for small municipalities at the beginning of project implementation period, with long term loans provided by banks with an interest of around 4%.

The updated Output 2 planned to create a commercial entity from IDF and a limited company CEVO has been established to implement EPC projects with the initial support from the project funds.

During the project implementation period a massive grant scheme for public lighting reconstruction has been prepared and finally set up with funding from the EEA/Norway funds and EU Structural funds in the total amount of 43.8 mil EUR.

In this situation, when such a large subsidy scheme was available for municipalities, the interest for commercial financing of public lighting reconstruction projects, including EPC projects financed by an ESCo, naturally decreased significantly.

The project did not assume that the grant scheme could be available over such an extensive period starting in 2008 with the EEA/Norway funds and the first call of the EU Structural funds, and still in 2012 the second call of the EU Structural funds has not yet been evaluated and eligible projects for subsidy have not been selected. Thus the interest of small and medium-sized municipalities in commercial finance has been reduced over an extensive period of development and availability of the massive grant schemes.

From the today's perspective it is evident that the project focus on utilization of commercial financing could hardly compete with the available massive grant scheme.

The focus on delivery of EPC services by CEVO established to serve as an ESCo practically eliminated the opportunity for the project to serve in the same time as an independent consultant to the same municipalities to prepare and develop public lighting projects and to assist them with preparation and evaluation of EPC public tenders. And this activity, independent advisory support to municipalities to prepare and evaluate EPC projects and tenders is critical for EPC market development.

Also the market potential for implementing EPC projects in public lighting seems to have been rather overestimated. Although some projects do have a short payback enough to provide sufficient savings to pay for the upfront investment costs of public lighting reconstruction, more typically the payback is rather long (10-20+ years) for EPC contracts and thus requires additional funding. This is because the public lighting reconstruction projects often require also modernization of the lighting infrastructure as well as installation of additional lighting points to deliver good quality and even lighting according to the technical standards.

Although there do exist examples of “pure” EPC projects in public lighting, more typical are long-term service contracts with provisions on public lighting modernization.

EPC in general is rather difficult business especially if EPC is not yet well established on the market; it often requires significant amount of time dedicated to market development, specific training and assistance of municipal decision makers in EPC project development, tendering and evaluation.

Implementation approach for Outputs 1 and 3 is rated Satisfactory, for Output 2 is rated Marginally Unsatisfactory.

Since the Output 2 is a core of the project, the overall rating of implementation approach is **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.2.2 The logical framework used during implementation as a management and monitoring and evaluation tool

The project logical framework was primarily used for regular reporting, monitoring and evaluation of project achievements. During this process it was realized that the wording of some LogFrame indicators and targets is not SMART enough, and the definition of those indicators and targets has been specified in more detail by UNDP in the combined Project Annual Review and Project Implementation Report. However, no formal decision on revision and specification of LogFrame indicators and targets has been submitted to the evaluator.

LogFrame indicators and targets as specified in the Project Document and revised after MTE are by definition rather general for daily project management. More detailed indicators reflecting achievements in individual activities are better suited for daily management and monitoring of project activities. Thus, in addition to LogFrame indicators and targets, achievements in project activities have been regularly monitored and reported in Quarterly Progress Reports and discussed at Project Board meetings.

The logical framework used during implementation as a management and monitoring and evaluation tool is rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.2.3 Effective partnerships arrangements established for implementation of the project with relevant stakeholders involved in the country

The project has established a good partnership with relevant stakeholders, including local public lighting experts from the Technical University as well as from commercial companies, municipalities, Slovak Innovation and Energy Agency, which served as a project executing agency, local banks, and with other agencies and entities that organized seminars and conferences for municipalities on public lighting.

The originally developed partnership agreements with local and international financial institutions and banks were not implemented after the decision was taken not to continue with implementation of the originally planned concessional fund.

Partnerships arrangements established for implementation of the project with relevant stakeholders is rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

4.2.4 Feedback from M&E activities used for adaptive management

The feedback from the project monitoring and evaluation activities, and specifically from the MTE, was used to redesign the Output 2, which focused instead of implementing concessional fund on creating a business company CEVO, serving as an ESCO to offer and implement EPC projects in public lighting.

Although the project did implement adaptive management and changed after the MTE the focus of the Output 2, it stayed with the aim to mobilize commercial financing, although it was (and still is) difficult for the commercial financing and EPC to compete with available governmental subsidy schemes primarily in small municipalities. However, in the same time in several cases implementation of commercially financed public lighting projects continued – independently from the project.

The project implementation agency, ECB, was not aware that with adaptive management, the project could redefine its output substantially, if it would support achievement of the project objective. They neither received such information from their UNDP counterparts. This is one of the reasons why the project stuck with the focus on mobilizing commercial financing, and implementing EPC, even in the period when it had to face massive competition from the governmental subsidy scheme for public lighting reconstruction.

Another issue is effectiveness of implemented adaptive management. Proposed EPC solutions included third-party financing to be provided by CEVO that was estimated to consist of the UNDP/GEF equity grant to CEVO of about 30% combined with a commercial loan to CEVO of about 70%, at an interest of about 5%. Third-party financing means that municipalities would not need to pay upfront costs, but an annual service fee. However, from a financial point of view it is not clear why this structure of financing was estimated to be more attractive for municipalities than the originally planned soft loans to be provided by a concessional fund. If the project would provide interest free loans and a free technical assistance, the costs of financing would be zero to municipalities (or even negative) compared to a combined interest of third-party financing provided by ESCo/CEVO of at least some 3-4%.

The project did not implement adaptive management effective enough to reflect already well developed market combined with massive EU subsidy scheme for public lighting.

The overall adaptive management is rated **Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.2.5 Financial planning

Project financial records, including financial plans, as described and approved in Annual Work Plans, Quarterly Work Plans, as well as financial reports on actual spending of the project, are properly tracked and documented by the project financial officer.

The project has been subject to one external financial audit, which found the project finance to be properly managed.

The structure of financial plans follows the ATLAS structure for each of the project output. However, the project expenditures are tracked in detail by individual bills assigned to each specific project activity within each project output. This allows the project management to have up-to-date overview on actual project spending not only by summary per project output, but in detail per each project activity.

Of the total GEF contribution of 970 000 USD, 557 001USD has been spent, primarily for delivery of Output 1 and 3. 400 000 USD budgeted for Output 2 remained unspent.

Following tables summarize updated project budgets for each year of project implementation as shown in Annual Work Plans and actual project expenditures.

Table 1: Annual Project Budgets

	2005	2006	2007	2008	2009	2010	2011
Output 1	32 210	176 965	165 499	121 000	88 890	13 101	0
Output 2	0	0	0	266 500	136 937	406 145	400 000
Output 3	6 110	38 207	43 020	24 500	15 456	16 427	13 000 ¹
Total	38 320	215 172	208 519	412 000	241 283	435 673	413 000

Note 1: Amount budgeted for terminal evaluation

Table 2: Annual Expenditures

	2005	2006	2007	2008	2009	2010	2011	Total
Total	945	73 030	132 390	217 353	110 610	22 673	0	557 001

Total project expenditures over the whole project implementation period 2005-2011 are **557 001 USD**.

13 000 USD has been budgeted for terminal evaluation. The remaining unspent resources (Output 2) are **400 000 USD**.

Project finance is properly planned and managed. However, due to the project underperformance in Output 2 42% of total project budget remained unspent.

Financial planning is thus rated **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.2.6 Monitoring and evaluation

The project was subject to standard regular project monitoring and evaluation summarized in Project Annual Reviews and Project Implementation Reports.

Steering Committee meetings have been held between 2006 and 2009. Meetings of the Project Board have been held regularly in 2007 through 2009. Meetings and coordination with UNDP were held during the whole implementation period on an ad hoc basis.

The Mid-Term Evaluation was conducted in 2007. The recommendations of the MTE were incorporated into Project Revision approved and adopted in 2008. The key change was redefinition of Output 2 and establishment CEVO as a business entity, limited commercial company, whose mission was to serve as an ESCo company delivering EPC projects.

In 2012 the project has been subject to this final evaluation.

The decision based on MTE recommendations to establish an ESCo and to deliver EPC solutions for municipal public lighting projects showed that it was a risky decision, because no EPC project has been implemented. It is not clear why it has been decided to implement EPC instead of originally planned soft loans, when EPC solution is in principle more expensive than standard commercial financing, although without the need to pay up-front costs, and because of the structure of planned EPC financing the potential of ESCo to leverage commercial financing is lower than originally planned soft loans.

The formal process of project monitoring and evaluation is rated Satisfactory, however the actual results and decisions based on mid-term evaluation are rated **Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.2.7 Execution and implementation modalities

The project has been executed by SIEA, the state Slovak Innovative and Energy Agency, and implemented by an NGO Energy Center Bratislava, as designed in the Project Document.

The project has been implemented according to the project design and project outputs as specified in the Project Document and Project Revision of 2008.

Project implementation period has been extended four times. The original scheduled project termination in November 2009 was postponed by a year till November 2010. The next 6-month extension till the end of May 2011 was approved at the end of 2010. The third project extension approved in May 2011 prolonged the

project implementation period by 4 months until September 2011. In September 2011 the last extension of 2 months till November 30, 2011 has been approved.

The rationale for no-cost project extension was to provide additional sufficient time for negotiation, preparation and implementation of EPC projects. Snina municipality has been preparing an EPC tender for public lighting reconstruction since late 2009, the tender was published in June 2010, and CEVO has prepared and submitted an EPC proposal for this tender in October 2010. The last two project extensions were approved to allow CEVO to attend the tender, since it has been delayed and postponed. After municipal elections, the EPC tender in Snina has been cancelled in September 2011 (a year after a deadline for submission of offers).

Even four project extensions in total of two years did not lead to progress in Output 2 and no EPC project has been implemented.

4.2.1 Management by the UNDP country office

The NGO implemented project has established good communication with UNDP office in Bratislava and UNDP experts actively participated in all project meetings and properly supported the project implementation agency - ECB.

UNDP and the project implemented adaptive management and approved project revision in 2008 that redefined outcome 2 to establish CEVO as a commercial entity to implement EPC projects. However, this adaptive management was not successful and no EPC projects have been implemented.

It was only one municipality (Snina) that has prepared an EPC tender. CEVO has submitted its offer, but the tender was cancelled in late 2011. The 400 000 USD allocated to the Output 2 budget, ie. 42% of the total GEF budget, were planned to be used basically as equity financing for CEVO to leverage commercial financing, a bank loan, for the implementation of the Snina EPC project which had an estimated total costs of ca 2 mil EUR. However, after cancellation of the EPC tender, these 400 000 USD remained unspent.

There was a good chance that the project budget would be fully used if CEVO would win the EPC tender. However, neither the UNDP nor the implementing agency ECB/CEVO prepared an alternative solution and effective adaptive management for the case if CEVO would not win the EPC contract.

Management by the UNDP country office is rated **Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

4.2.2 Coordination and operational issues

The project has been professionally managed, both at ECB and CEVO. The ECB as an NGO has limited business experience in implementing energy efficiency investment projects; it is focused more on providing consulting services, information and policy advice. However, the CEVO Ltd. Company and its management has been found to have a good business drive, management as well as expert skills in public lighting technologies and solutions, including EPC.

However, neither ECB and CEVO, nor UNDP evaluated properly risks associated with EPC implementation in public lighting, difficulties of developing EPC market, lack of independent advisory services to

municipalities to prepare and evaluate EPC projects and tenders, and underestimated impact of massive EU subsidies.

4.2.3 Co-financing and in-kind contributions

The project has been designed in early 2000s to broker and catalyze commercial financing for implementation of energy efficiency public lighting reconstruction projects. The project objective was to leverage a total of 2.63 mil USD investment for implementing public lighting projects. Commercial financing, mainly suppliers' loans, were available in that time already for municipalities, and public lighting projects have been implemented and financed with commercial funding in large as well as smaller municipalities since 1997. However most of small and medium-sized municipalities did not rank public lighting as their investment priority.

Coincidentally, in the mid-late 2000s, the Slovak government has prioritized public lighting for its Operational Program grant scheme financed from the EEA/Norway and EU Structural Funds. A total of 43.8 mil EUR (60 mil USD) grant funding became available, giving a slight priority for projects implemented in smaller municipalities. A total of 26 mil EUR (34 mil USD) grants have been already distributed and projects implemented. Although this grant scheme was not designed to directly co-finance the UNDP/GEF project, these grants are shown in the following Table 3: Financial Planning Co-financing, because the project has developed and prepared projects that received funding from this subsidy scheme and were implemented as well.

Table 3: Financial Planning Co-financing

Co financing (Type/Source)	IA own Financing (mill US\$)		Government (mill US\$)		Other* (mill US\$)		Total (mill US\$)		Total Disbursement (mill US\$)	
	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
- Grants			60	34			60	34		
- Loans/Concessional (compared to market rate)	2.63	0					2.63	0		
- Credits										
- Equity investments					3.2	2	3.2	2		
- In-kind support										
- Other (*)										
Totals	2.63	0	60	34	3.2	2	65.83	36		

* Other is referred to contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector and beneficiaries.

4.3 Results

4.3.1 Attainment of objectives

Project goal: *Avoid carbon emissions by building a sustainable entity whose business model is to catalyze investment in energy efficient public lighting*

Project objective: *Avoid 63,993 tons in carbon equivalent greenhouse gas (GHG) emissions by catalyzing USD 2.63 million in investments in energy efficient public lighting*

Indicator 1: Annual reductions in carbon equivalents

Target 1: By the end of year 1: 0 tons of C equivalents, by the end of year 2: 160 tons of C equivalents per year, by the end of year 3: 1048 tons of C equivalents per year – a total of 1208 tons of C equivalents annually

Achievement: *Implemented PL reconstructions developed by the project: 1 611 tons of carbon equivalent annual reductions*

Rating: *The target has been achieved. Highly Satisfactory.*

Indicator 2: A life time reduction of emissions in carbon equivalent

Target 2: 63 993 tons of emissions in carbon equivalent (Only direct project impact is measurable, relevant measurable target is 12 255 tons of C equivalents)

Achievement: *Implemented PL reconstructions developed by the project: A life time reduction of 14 012 tons of carbon equivalent*

Rating: *The target has been achieved. Highly Satisfactory.*

Indicator 3: Increasing investment into EE PL reconstruction

Target 3: 2% increase of investments into EE reconstruction projects, baseline 4.32 mil USD (2% increase of share of investments into EE PL reconstruction projects on total municipal investments, baseline 0.569%)

Achievement: *2.3 percent point increase. 24.5 mil USD spent on PL reconstructions with the support of the state grant scheme, ie. 2.9% of total budget of municipal capital expenditures of 855 mil EUR in 2012. Total data on PL projects implemented with commercial funding were not included – not available.*

Rating: *The target, taking into account the grant scheme only, has been achieved. Highly Satisfactory.*

Output 1: *An effective and sustainable advisory service created to catalyze public lighting investment*

Indicator 4: Number of projects with signed legal contracts prepared by IFD

Target 4: By the end of year 1: signed legal contracts - projects identified for financing through commercial or grant resources in amount of USD 350,000, by the end of year 2: signed legal contracts - projects identified for financing through commercial or grant resources in amount USD 1,140,000, by the end of year 3: signed legal contracts - projects identified for financing through commercial or grant resources in amount of USD 1,140,000 – (cumulative 2.63 mil USD)

Achievement: 6 013 614 USD invested from grants and commercial funds in projects prepared by IFD

Rating: The target, taking into account the grant scheme only, has been achieved. Highly Satisfactory.

Indicator 5: Increased using of grant resources for PL reconstruction

Target 5: 10 % increase in number of applications submitted for financing from support programs by the end of the project (Baseline 50 applications).

Achievement: 161 submitted grant applications, 222% increase

Rating: The target has been achieved. Highly Satisfactory.

Indicator 6: IFD sustainability, independence

Target 6: IFD independent by the end of the project

Achievement: 100% of IFD (CEVO) costs covered by own revenues. (In 2011-3/2012 CEVO has implemented 5 PL projects with total investment costs of 1.2 mil USD and with no funding from the UNDP/GEF project).

Rating: The target has been achieved. Highly Satisfactory.

Output 2: To stimulate energy efficient PL systems reconstructions through direct participation of the IFD in these reconstructions

Indicator 7: Number of light points (LP) reconstructed through UNDP/GEF co-financed EPC services

Target 7: By the end of 1st year of providing EPC services: 4,200 LP reconstructed, by the end of 2nd year of providing EPC services: 5,250 LP reconstructed, by the end of 3rd year of providing EPC services: 6,300 LP reconstructed

Achievement: 0 – no EPC project implemented

Rating: Highly Unsatisfactory

Indicator 8: Number of light points (LP) reconstructed through services not co-financed from UNDP/GEF resources

Target 8: By the end of 1st year of providing EPC services: 0 LP reconstructed, by the end of 2nd year of providing EPC services: 3,150 LP reconstructed, by the end of 3rd year of providing EPC services: 6,300 LP reconstructed

Achievement: 6 782 reconstructed lighting points in projects prepared by CEVO, implemented by CEVO and other suppliers and financed mainly by the state subsidy scheme (EEA and EU Structural Funds). Another 728 lighting points were reconstructed by CEVO in additional 6 projects implemented without direct support of UNDP/GEF funds, of which one financed by a bank loan.

Rating: The target has been achieved. Highly Satisfactory.

Indicator 9: Average annual energy savings per reconstructed light point (LP)

Target 9: 320 kWh/LP.year

Achievement: 465 kWh savings per LP annually, calculation based on SIEA methodology

Rating: The target has been achieved. Highly Satisfactory.

Output 3: Support investment in energy efficient public lighting through information dissemination

Indicator 10: Number of enquiries logged by the IFD by the end of the project from municipalities and other investors, on topic listed above

Target 10: By the end of year 1: 20 enquiries logged, by the end of year 2: 70 enquiries, by the end of year 3: 110 enquiries logged, (cumulatively 200 enquiries logged)

Achievement: Total of 322 enquiries logged

Rating: The target has been achieved. Highly Satisfactory.

Indicator 11: % share of target group used information provided by IFD for present or future PL EE reconstruction

Target 11: 10 % of adequate sample of target group used information provided by IFD through dissemination campaign for PL EE reconstruction and/or used these information for operation, maintenance and planned investments into PL

Achievement: 51% of target municipalities used information provided (Data are based on questionnaires and ex-post interviews with municipalities attending seminars and information events organized by the project).

Rating: The target has been achieved. Highly Satisfactory.

Note:

Achievements of targets (specifically targets 1-6 and 8-9) are based exclusively on utilization of EU grant scheme (with an exception of only one commercially financed project implemented by CEVO). No EPC project has been implemented (target 7).

The project failed to deliver the core goal to mobilize commercial financing for energy efficiency retrofits of municipal public lighting in Slovakia.

Table 4: Summary overview of target achievements

Target #	Target	Achievements and ratings
<i>Project objective: Avoid 63,993 tons in carbon equivalent greenhouse gas (GHG) emissions by catalyzing USD 2.63 million in investments in energy efficient public lighting</i>		
1	Annual reductions of 1 208 tons of carbon equivalent	1 611 tons of carbon equivalent
2	Life-time reductions of 12 255 tons of carbon equivalent	14 012 tons of carbon equivalent
3	2% increase of share of investments into EE reconstruction projects on municipal investment budget	2.3 percent point increase
<i>Output 1: An effective and sustainable advisory service created to catalyze public lighting investment</i>		
4	Number of signed legal contracts for projects identified for financing through commercial or grant resources in amount of 2 630 000 USD cumulatively	6 013 614 USD
5	10 % increase in number of applications submitted for financing from support programs	222% increase – 161 applications
6	IFD/CEVO sustainable and independent	IFD covers 100% of its costs from its own revenues
<i>Output 2: To stimulate energy efficient PL systems reconstructions through direct participation of the IFD in these reconstructions</i>		
7	6,300 LP reconstructed by EPC	0 – no EPC project implemented
8	6,300 LP reconstructed by other than UNDP/GEF funds	6 782 + 728 LP
9	320 kWh average annual energy savings per reconstructed light point (LP)	465 kWh annual savings per lighting point
<i>Outcome 3: Support investment in energy efficient public lighting through information dissemination</i>		
10	Total of 200 enquiries logged by the IFD by the end of the project from municipalities and other investors	322 enquiries logged
11	10 % of a target group used information provided by IFD for PL EE operation, reconstruction, maintenance	51%

Target ratings are shown in colors:

The target has been achieved - Highly Satisfactory

Target has NOT been met – Highly Unsatisfactory

Taking into account the EU grant scheme utilized for financing of public lighting projects, 10 out of 11 targets have been achieved and are rated highly satisfactory.

The target 7, which is a critical indicator of the Output 2 – implementation of EPC projects, has not been met and no achievement has materialized in terms of lighting points reconstructed by EPC.

Except for one project, no commercial financing has been mobilized for implementing public lighting projects and related emission savings.

If EU grants would not be taken into account but only mobilized commercial financing, targets 1-4 and 8-9 would not be met.

When the grant scheme is taken into account, the project has delivered good results in Output 1 and 3 - *An effective and sustainable advisory service created to catalyze public lighting investment*, and *Support investment in energy efficient public lighting through information dissemination*. However, it failed to deliver its key mission to mobilize commercial finance and implement EPC projects. In Output 2 - *To stimulate energy efficient PL systems reconstructions through direct participation of the IFD in these reconstructions*, although no EPC project has been implemented, CEVO has succeeded to implement 7 public lighting projects with a total investment of 1.3 mil USD and an average energy savings of 293 kWh per lighting point. Out of these projects, six projects were financed with the support of the state grant scheme, and one project in Čata with investment of 79 000 USD has been financed without a subsidy, using combination of municipal own financial resources and a commercial loan.

Between 2010 and early 2012, CEVO has participated in and submitted offers to 43 public tenders for reconstruction of municipal public lighting systems with a total investment costs of more than 10 mil USD. In 9 tenders CEVO won with a total project costs of 1.7 mil USD; the success rate is 20%.

Snina was the only municipality which decided to open a tender on EPC project in public lighting. CEVO has submitted an offer on EPC services, however the tender was at the end and after municipal elections cancelled. There was no alternative plan how to utilize project funds and deliver Output 2 results in case this only EPC tender would fail.

Within Output 1 supported by the UNDP/GEF project, IFD/CEVO has prepared 90 projects with total costs of 38 mil USD. Out of these 90 projects 32 projects, ie. 36% have been already implemented with the support of EU grants and the results are reported in the LogFrame targets achievements.

Within the Output 3 the project has delivered numerous information outreach activities, including presentations at seminars and conferences targeted to municipal decision makers that were organized by ECB/CEVO or other parties. Between May 2007 and May 2010 the project has published a newsletter Svetlonos disseminated to all Slovak municipalities that provided information on energy efficient public lighting reconstruction. Both the Svetlonos magazine as well as presentations delivered at seminars and conferences are available for download at the CEVO web page at www.cevo.sk.

The following table provides a summary overview of information outreach activities, including seminars, conferences, broadcastings, and press.

Table 5: Overview of project information activities

Type	Date	Name	Place	Organisers	No. of participants
	2006				
C	November 7-9	ENEF - international conference - special section about Public lighting	Banska Bystrica	ASENEM/IFD - CEVO	80
B		during ENEF - two press conferences - STV (Slovak Television - broadcasted in regional News)	Banska Bystrica		
S	24th October	Energy services and municipality	Žilina	ECB	30
S	23rd June	Public lighting 2006 - presentation of the project on seminar	Banská Bystrica	IFD - CEVO	60
C	27th June	conference „Study on complex Biomass Treatment in common border Region HU – SK – UA“ - presentation of the project	Prešov	Slovak Energy Agency	40
P		the brochure „Public lighting 2006“		IFD - CEVO	250 pieces
	2007				

B	16th January	local radio station Regina Banska Bystrica - presentation of the project	Banská Bystrica	IFD - CEVO	
S	February 12-13	workshop "Local actors working together to build a sustainable energy community"	Bratislava	ECB	70
C	February	international conference ISBF 2007	Bratislava	ECB	160
S	April	Qualitative preparation of municipalities for the future	Nitra	Regional developing agency Topolciansko	74
C	15th May	Slovalux 2007	Nové Zámky	Typhoon s.r.o.	80
S	22 th May	Seminar - Project presented within project Energy 4 Cohesion	Veľký Krtíš	ECB	40
S	5th June	Public Lighting 2007:	Žilina	IFD - CEVO	78
P		newspaper - weekly periodic - 12 articles reconstruction of public lighting systems		IFD - CEVO	
P	mid. May	Svetlonos - e-magazine	1st edition	IFD - CEVO	e-magazine
B	September 11	Press conference about the project	Bratislava	IFD - CEVO	
		information published in print medias, Slovak TV(TV Markiza) and in radio broadcasting			
P	September	Svetlonos	2nd edition	IFD - CEVO	3300 pieces
S	November 7-8	Progressive attitude towards energy in municipalities (Progresívne prístupy k energetike v samosprávach) - seminar	Žilina, Košice	ECB+British embassy	44+42
S	28 th November	Mesto – Obec – Efektívna energia - seminar	Bratislava	UMS	40
B		Interview of project manager about PL reconstruction in village Slovenská Ľupča-radio Regina, Slovak Radio	Banská Bystrica	IFD - CEVO	
P		Case study of public lighting reconstruction with support od IFD		IFD - CEVO	150 pcs.
P	November	Svetlonos	3rd edition	IFD - CEVO	3400 pieces
	2008				
S	7 th February	Modernisation and remote control of public lightning (Modernizácia a diaľkové riadenie verejného osvetlenia)	Prešov	IFD - CEVO/OSVO	60
P	January	Svetlonos	4th edition	IFD - CEVO	3400 pieces
C	24 th of April	Energy planning and effective management on municipal level - conference	Banska Bystrica	UMS	38
S	20th May	Public Lighting 2008 - seminar	Banska Bystrica	IFD - CEVO	112
B		PR manager has been interviewed by various journalists about project and financing of PL reconstructions			
P	January	Svetlonos	5th edition	IFD - CEVO	3400 pieces
P	September	Svetlonos	6th edition	IFD - CEVO	3300 pieces
B		PR manager interview - Slovensky rozhlas Regina Banska Bystrica (regional radio broadcasting) -project and financing of PL reconstructions			
P		7 articles - EPC model and public lighting in Obecne Noviny (municipally newspaper), Komunalne financie, Hospodarske noviny (financial newspapers)			
P	December	Svetlonos	7th edition	IFD - CEVO	3200 pieces
S	2 th of October	EPC services + Removing barriers to the reconstruction of public lighting systems in Slovakia	Levice	IFD - CEVO	15
S	3 th od October	EPC services + Removing barriers to the reconstruction of public lighting systems in Slovakia	Lucenec	IFD - CEVO	10
S	6 th od October	EPC services + Removing barriers to the reconstruction of public lighting systems in Slovakia	Trencin	IFD - CEVO	13
S	8 th of October	EPC services + Removing barriers to the reconstruction of public lighting systems in Slovakia	Humenne	IFD - CEVO	7
S	9 th of October	EPC services + Removing barriers to the reconstruction of public lighting systems in Slovakia	Poprad	IFD - CEVO	7
S	17 th of October	EPC services + Removing barriers to the reconstruction of public lighting systems in Slovakia - seminar	Bratislava	IFD - CEVO	16

C	October 21-23	ENEF - international conference	Sliac - Sielnica	ASENEM	80
	2009				
C	February 9-10	ISBF - EPC financing	Bratislava	ECB	70
P	March	Svetlonos	8th edition	IFD - CEVO	3200 pieces
P	March	Svetlonos	9th edition	IFD - CEVO	3300 pieces
S	19th May	Public Lighting 2009 - seminar	Bratislava	IFD - CEVO	67
P	September	Svetlonos	10th edition	IFD - CEVO	3200 pieces
P	June	Svetlonos	11th edition	IFD - CEVO	3200 pieces
	2010				
C	October 12-14	ENEF - international conference	Banska Bystrica	ASENEM	80
P	May	Svetlonos - printed	12 th edition	IFD - CEVO	3200 pieces
	2011				
S	7th June	Public Lighting 2011	Banska Bystrica	IFD - CEVO	66

Note: S – seminar, C – conference, P – press, B - broadcasting

Although 10 out of 11 targets have been achieved with the support of EU grant scheme, the overall rating of the attainment of objectives is **Unsatisfactory** due to the fact that the core target of Output 2 – implementation of EPC project and mobilization of commercial financing has not been achieved.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
				U	

Rating of the project outcome relevance is *Satisfactory*.

Rating of the project outcome effectiveness is *Unsatisfactory*.

Rating of the project outcome efficiency is *Satisfactory*.

4.3.2 Project Impact

Based primarily on interviews with the State Innovative and Energy Agency, public lighting companies in Slovakia, competitors to CEVO, and mayors of municipalities that have implemented public lighting reconstruction projects, the evaluator found that the project significantly helped to cultivate the public lighting market in small and medium-sized municipalities.

Although there were commercial activities implemented in public lighting already before the launch of the project, there still remained unaddressed potential primarily in small and medium municipalities.

The project targeted primarily smaller municipalities and through its activities it was reported by third parties it significantly improved the quality of project development, and practically introduced a new quality standard for development of energy efficiency public lighting project development, including energy audits, feasibility studies.

The project/CEVO has prepared 30% of projects submitted for grant financing from the EEA/Norway funds, and SIEA, who administrated the subsidy scheme, reported that the quality of projects

developed by CEVO was “incomparable” with most of other proposals. Over the time other market participants increased their skills and quality of project development utilizing the experience and information the project has developed.

The information dissemination activities within Output 3 had measurable impact also in increasing awareness of municipalities in opportunities in energy efficient public lighting reconstructions, in raising awareness of best practices as well as in understanding of shortcomings of cheap solutions (such as widespread 36 W compact fluorescent lights combined with lighting fixtures with insufficient optical quality and ingress protection).

The project failed to deliver originally planned Outcome 2 utilization of a concessional fund to attract commercial finance for public lighting reconstructions. This Outcome has not been implemented because at the launch of the project terms and conditions of commercially available finance (bank loans) became already affordable for municipalities (interest rate decreased from original 20% to 4%) and soft loans have been evaluated not to be attractive enough anymore. The core of the revised Outcome 2 – implementation of EPC projects in public lighting – has not materialized either, and no EPC project has been implemented. It should be noted, that this was not due to underperformance of CEVO, but because the project revision underestimated difficulties in developing EPC market, and overestimated the potential for EPC in public lighting.

Only one municipality (Snina) has opened a tender for EPC project in public lighting and CEVO has submitted its proposal. However, this tender was at the end - after several extensions – cancelled, and no EPC project has been implemented.

CEVO has prepared 91 public lighting projects, of them 32, ie. 35% have been implemented so far, mostly with a subsidy from the state grant scheme, and in few cases with combination of own municipal funds combined with commercial debt financing.

In addition to this CEVO has submitted proposals in 44 public tenders to implement energy efficiency public lighting reconstruction in municipalities where it did not prepare the project. 10 of them have been cancelled, CEVO won 9 cases, ie. 26% out of those that were not cancelled, and 7 projects have been implemented so far by CEVO with a total investment of 1.3 mil USD. One of these projects in Čata has been financed by own municipal funds in combination with commercial bank loan, six projects used the state subsidy scheme.

CEVO became a recognized player on the public lighting market in Slovakia. Although not the only one. The public lighting market including smaller municipalities became over the last decade quite competitive, and even the largest international companies enter the market of smaller municipalities – thanks to a massive EU grant scheme. In several cases CEVO competed directly with large international companies like Siemens and Eltodo.

Despite the fact that there are those massive subsidies available for public lighting reconstruction projects, several municipalities already decided not to rely on grants and to utilize commercial financing.

The project had a significant highly satisfactory impact on improvement of developed public lighting projects (financed typically by EU grants) and on awareness rising and information dissemination to practically all municipalities in Slovakia on how to prepare a good quality public lighting projects (Output 1 and 3).

However, the project failed (with one exception) to mobilize commercial financing for public lighting projects and to deliver and implement EPC projects (Output 2). In the same time several other companies on the market did deliver several commercially financed public lighting projects (in addition to majority of projects financed by EU grants).

Rating of the project impact is **Moderately Unsatisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
			MU		

4.3.3 Sustainability

The project has in principle delivered sustainable results in Output 1 and 3.

The local capacity to develop good quality and bankable public lighting projects has increased. Awareness of municipal decision makers in energy efficiency potential of public lighting has been raised; information on best practices as well as on typical mistakes in implementing public lighting projects is available to all interested parties.

Although the project failed to deliver core result in Output 2, implementation of EPC project, the EPC expertise is in place and CEVO is skilled in development of EPC projects and it is operational even without UNDP/GEF funding – CEVO already implemented 7 public lighting projects since 2009 with local financing, both the state grant scheme and commercial loans – without any financing from UNDP/GEF project.

Commercial financing is available under affordable terms and conditions for municipal public lighting projects, the second call from the EU Structural Funds in the amount of 17.6 mil EUR has not yet been disbursed and projects will still be implemented, there are numerous companies active on the market and serving small municipalities as well. These conditions improved independently from the project but have a direct impact on sustainability of results of the UNDP/GEF project.

CEVO is well positioned to be operational on the already competitive public lighting market in the future as well and to recover its costs from revenues from project implementation.

Rather questionable is if CEVO will continue to offer EPC services and third-party financing even after project termination when the project funds intended for its capitalization would not be available any more.

Theoretically, CEVO may partner with a private investor to raise its capital, or find alternative ways of project financing. The market is sufficiently developed for this. However, the EPC market potential in public lighting in Slovakia is rather limited, the EPC market rather underdeveloped, and thus not attractive enough on a commercial basis.

More feasible seems to be another strategy of CEVO to serve primarily smaller municipalities under a long-term service contracts and to implement energy efficiency reconstructions in phases over the life-time of the contract.

In Output 3 the sustainable impact of the project minimal. The project has established CEVO as a sustainable business entity in public lighting. However, nowadays it is just another player on already quite developed and competitive market of public lighting in Slovakia that covers also small municipalities thanks primarily to the massive EU grant scheme.

Sustainability rating is **Moderately Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
		MS			

- Financial resources dimension of sustainability: *Moderately Likely*
- Socio-political dimension of sustainability: *Likely*
- Institutional framework and governance dimension of sustainability: *Likely*
- Environmental dimension of sustainability: *Likely*

4.3.4 Contribution to upgrading skills of the national staff

The project was not designed primarily to focus on capacity building and improvement of local skills. However, through its activities the project did influenced local experts and decision makers in two main areas:

First, the project has increased awareness of energy efficiency opportunities and best practices in public lighting among municipal decision makers, and second, it has also, through leading by example, indirectly improved the quality of project development and project proposals submitted for financing from the state grant scheme.

The project has directly influenced understanding among municipal decision makers what are suitable public lighting technologies and what are not. Direct impact of the project is that utilization of cheap but not suitable fluorescent lighting sources quite common in smaller municipalities has significantly decreased.

Contribution to upgrading skills of the national staff is rated **Satisfactory**.

Highly Satisfactory	Satisfactory	Moderately Satisfactory	Moderately Unsatisfactory	Unsatisfactory	Highly Unsatisfactory
	S				

5. Recommendations

- The project objective was expressed in tons of carbon equivalent reduced. The calculation took into account CO₂ and CO emissions. The contribution of CO is only about 4‰ and is thus negligible. 3.666 tons of CO₂ is an equivalent of 1 ton C. GHG reductions expressed in tons of carbon equivalent might get easily confused with tons of CO₂ savings. *Thus I would suggest using tons of CO₂ (or CO₂ equivalent) as an indicator in GEF projects only.*
- The project objective combined direct project GHG emission reductions with direct and indirect post project GHG emission reductions and expressed its objective in a single number. Although it is important to estimate project direct and indirect post-project GHG emission reductions, they cannot be combined with direct project GHG emission reductions, since they are based on post project assumptions and cannot be evaluated neither at the end of the project. *The project objective should be expressed in measurable direct project GHG emission reductions only.*
- The project focused on developing and strengthening public lighting market both on the demand and supply side. On one hand the project served municipalities and developed and disseminated information on energy efficiency opportunities in public lighting reconstruction, and prepared 90 projects for implementation. On the other hand it has set up CEVO, a daughter company of ECB, as a private commercial business entity to implement public lighting projects and EPC projects. One cannot serve in the same time on both sides to prepare projects and to implement projects without conflict of interest. The project and CEVO eliminated this potential conflict of interest by focusing on project development activities in early years of UNDP/GEF project implementation (2005-2009), and on public lighting project implementation (since 2009). However, this risk should be properly addressed, evaluated and explicitly taken into account already during UNDP/GEF project development phase, when deciding if project activities will focus on demand or rather on supply side of market development.
- In my opinion, public funds, including GEF funds, should primarily be used for supporting and developing the demand on the market (strengthening the overall framework conditions, capacities of local stakeholders and decision makers to develop and implement energy efficiency projects, improvement of legislative framework and support for economic reforms if needed etc.), rather than to fund and support one selected (private) business entity because of potential market distortions. And if the support of international financing organizations goes to private entities, it should be ideally based on competitive selection principles. However, this is not always the case – see for example a successful HEP ESCO project supported by World Bank and GEF in Croatia. Nevertheless, I would suggest that already in the project proposal it would be clearly justified why it is better to support one pre-selected private business entity rather than to provide capacity development training and support to all relevant entities – and competitors on the market should the project focus on supporting supply rather than demand side.
- Adaptive management is a strong tool that allows to effectively changing project focus if properly justified. There are solid UNDP rules for approving adaptive management changes in

project implementation, so that it would not be misused. However, sometimes the project management tends to stick to originally planned focus even if the external factors would require more crucial changes. In any way both implementing and executing agencies as well as project steering committee should be informed by UNDP at the very beginning of project implementation about the detailed rules and applicability of adaptive management, as this was probably not properly communicated during project implementation period.

- The UNDP/GEF project development period covers typically several years. Especially in emerging markets this is rather long period over which the overall situation on the market can change significantly. Thus the approved GEF projects might need significant changes at the very beginning of their implementation if their designed focus is not relevant anymore to the new situation. Ideally, the project development and approval period for GEF projects should be shortened from multi-year to several months period.
- Energy Performance Contracting is definitely an interesting option for implementing energy efficiency projects especially but not only in public facilities, however it is neither the only nor necessarily the cheapest option. In any way EPC is a difficult market and it requires lots of time and effort to develop the market to be ready for EPC. Typically services of EPC market catalyst – an advisor independent of other particular business interests (such as of suppliers and service providers) - are needed to help to train both potential EPC clients and ESCOs, and later on to assist EPC clients (municipalities) to develop EPC projects and tenders and to evaluate them properly. If the EPC market is to be developed from scratch, it typically requires multi-year activities until first EPC projects are implemented successfully. Focus on supporting ESCOs only without adequate support to EPC clients includes a risk that the EPC market development would be delayed if successful at all.
- Specification of project indicators, baselines and targets should be self-explaining and detailed enough, including specific method of calculation if needed. The LogFrame typically does not allow including in its matrix all the details but rather just a headline or name of the indicator and target. Wording of indicators and targets should be defined in required detail and specification in addition to their overview in LogFrame matrix.
- Financial planning and project budgets in Atlas structure only do not provide sufficient detail for control of cost justification. Financial plans, budgets as well as expenditures, should be tracked by individual project activities or sub-activities if needed, in order to be able to properly evaluate cost-effectiveness. This applies for financial budgets in project documents as well.
- The total of 400 000 USD of GEF funds remained unspent because the project failed to deliver and implement EPC projects in public lighting. These funds will be returned to GEF if the project is terminated. Thus the evaluator had to consider if the project should be terminated and unused funds returned to GEF, or if the project should be extended and changed accordingly.

Based on interviews with project stakeholders and independent market players, the evaluator considered as a best potential extension option to implement a demonstration project in selected municipality that would demonstrate different public lighting technologies in real world and provide hands-on experience to decision makers on different quality of lighting using different technologies from different manufacturers. However, such activity would

require in addition to financing the upfront installation costs also provision of long term services to maintain lighting system, and organization and financing monitoring of energy consumption as well as organization and hosting of excursion of municipal decision makers from Slovakia and preferably from other neighboring countries as well. The decision on potential project extension should thus be based on a detailed sub-project proposal and analysis, including scope and total costs of the sub-project, realistic timeframe, binding commitment of the participating municipality to implement the demonstration project, and a binding commitment, including financial commitment, of an entity that would operate the demonstration project and organize information dissemination events and host excursions in the future as well (this could be the selected municipality, ECB, some of regional energy agencies/centers, NGOs or others). The total costs of the demonstration project are expected to be significantly lower than the remaining unspent 400 000 USD, which means that part of these funds would be returned to GEF anyway even in case of project extension.

However, both the public lighting market as well as the financial market is already well developed and highly competitive in Slovakia. Banks rate municipalities in general as credible clients and compete to offer long-term debt financing to municipalities with affordable terms (interest rate of ca 3-4%). And municipalities, even the small ones, do take out commercial loans for their investment projects, if they rate it as their priority. There is a number of qualified companies and suppliers of energy efficient public lighting solutions, including financially strong companies that can provide suppliers loans as well. Technical knowledge, as well as capacity to develop good quality public lighting projects has been developed and is in place, with significant impact of the UNDP/GEF project. Public lighting sector, and primarily the segment of small and medium sized municipalities, received massive financial support in the form of grants of total 60 mil USD to facilitate implementation of energy efficiency public lighting reconstruction projects. From this point of view an additional 0.4 mil USD project would have a limited impact, even if designed in an optimum way. The public lighting and financial market in Slovakia is simply already quite well developed. The only decisive factor is the financial capacity of municipalities to finance all their investment priorities. And of course not all municipalities rank public lighting among their top priorities.

Thus I would recommend to terminate this UNDP/GEF project and to return unused funds to GEF – to be used for market transformation in other less developed markets.

6. Lessons Learned

- The situation on the Slovak financial market has significantly improved over the period of project preparation between 2000 and 2005 when commercial finance became affordable even for smaller municipalities, and a creation of a concessional fund, as planned in the Project Document, was found not to be essential anymore. However, the decision on how to redesign the Output 2 was delayed until the Project Revision was adopted in 2008 after the mid-term evaluation. The project did not use the opportunity to propose adequate changes in Output 2 already in the Inception Report and thus more than two years of project implementation were spent without any activities in Output 2. *If the economic situation or other external factors change significantly, and designed project outputs and activities become outdated, projects should implement adaptive management and propose adequate changes and adjustments immediately, without any unnecessary delays.*
- Adaptive management, if justified to support overall project objectives, can significantly change specification of project outputs and related activities, and there is no need to be bound with the original project outputs as approved in the Project Document if they become outdated, and if the newly proposed outputs do support achievement of project objectives more effectively. The implementing agency was not aware of the possibility of such fundamental adaptive management changes, and neither the implementing agency nor UNDP have implemented adaptive management effective enough so that the project would reach its core objectives and utilize its budget. *Both executing and implementing agencies and members of the steering committees should be aware of and informed at the very beginning of the project implementation, at the Inception Workshop at latest, about UNDP/GEF project implementation principles and rules, and especially about potential of effective adaptive management.*
- With such a big potential of adaptive management to effectively change the focus of UNDP/GEF projects under implementation, it seems rather irrational to have in place such a lengthy and costly procedure for GEF project development and approval. Typically the project proponents do have a good project idea which fits with GEF priorities or not. And any lengthy and costly project development and justification usually does not add much value to the core of the project idea, but just make the proposal only longer and formally better. However, even with formally perfectly developed project proposal, project outcomes could still be significantly changed during project implementation, if external factors change, and if properly justified. The situation especially in emerging markets can change significantly over few years only, and GEF project development cycle should reflect the fact that in some cases prepared projects are outdated already in the time of their approval. *GEF project development and approval period should be ideally much shorter, within months rather than years, and more effective, focusing primarily on key aspects of the project, ie. objectives, outcomes, budget etc., and not so much on details that can be changed later on during project implementation.*
- *Utilization of ATLAS structure in financial planning and reporting does not support effective financial management. Effective daily project and financial planning and management needs more detailed focus and tracking of project budget and expenditures by individual project*

activities. Structuring project budget and expenditures for each project outcome by ATLAS budget lines does not delivery much value added for the project management.

After the MTE, the project has been revised in 2008 and Output 2 was redefined. The key change was a plan to set up CEVO, a daughter company of the implementing agency ECB, as a commercial business entity that would serve as an ESCO and implement EPC projects in public lighting. CEVO was set up, it has implemented 7 public lighting projects, but it did not manage to implement any EPC project. Only one municipality has opened an EPC tender, CEVO has submitted its proposal but at the end the EPC tender has been cancelled.

- Project revision focusing on delivery of EPC services has been approved in 2008, in the same year when first two state subsidy schemes (EEA/Norway funds and first call from the EU Structural funds) with total funds of 26 mil EUR have been approved and opened. Within two years, in 2010 the second call from the EU Structural funds with a funding of 17.6 mil EUR has been opened. EPC services offered by CEVO thus had to compete with massive free subsidies of 44 mil EUR total. *The impact and the lengthy bureaucratic process of implementing those massive subsidies have been underestimated. Massive state subsidies effectively decreased interest of municipalities to utilize commercial financing – including EPC.*
- EPC is a difficult business and it requires a long time and lots of efforts to develop the market (both clients – municipalities, and suppliers – ESCOs) to understand EPC principles, detailed specifics of EPC public tendering, to be ready to successfully tender and implement EPC projects. Independent advisors/consultants that facilitate EPC deals, educate and train both municipalities and ESCOs in EPC project development, tendering and evaluation, and that assist municipalities in preparation and evaluation of their EPC tenders is critical for effective development of the EPC market. Such independent EPC advisor/consultant serves as a catalyst of EPC market development. However, services of such EPC advisors and market catalysts typically do not generate sufficient revenues to be attractive enough for commercial consulting organizations especially at early stages of EPC market development without external funding. The project has decided to establish commercial ESCo to offer EPC services, but *the need to develop EPC market first was underestimated.* Once the project has decided to establish CEVO as an ESCo, CEVO nor ECB could in the same time serve as an *independent* consultant assisting market players in developing EPC market – because of a conflict of interest. There was no other entity on the public lighting market that could serve as an EPC market advisor/catalyst. As a result market opportunities for EPC projects in public lighting remained limited. *In developing new EPC markets the role of independent and experienced advisor/consultant serving as an EPC facilitator and market catalyst should not be underestimated, nor the lengthy period of typically multiple years needed for EPC market development.*
- EPC is not necessarily the least cost solution, because it incorporates costs of energy performance guarantee. In street lighting calculation of energy savings due to installation of more efficient light sources is quite straightforward. EPC projects require sufficiently short payback so that the initial investment costs as well as other service costs and guarantee costs could be recovered within the contract period. Some of public lighting reconstruction projects in Slovakia do have a short payback as well, but most typically the real payback is a bit

higher, often more than 10 years (10-20+), because the project requires modernization not only of the lighting sources, but of cables and other infrastructure as well, and/or installation of more lighting sources to comply with technical standards of quality of street lighting. *These two factors – limited need to guarantee energy savings and limited number of projects with sufficiently short payback – effectively decrease EPC market potential. The real potential for EPC projects in the Slovak public lighting has been overestimated. More typically long-term service contracts are used that include provisions for lighting system renovation and guarantee on maintenance and service costs, but no energy performance costs.*

- The UNDP Regional Technical Advisor John O'Brien suggested that "the project would have benefitted greatly with an experienced international advisor to guide it and lead it through the adaptive management process". The project would for sure have benefitted if already in the project design phase the early project proposal would have been reviewed by an advisor independent from the implementation agency, and experienced both in best international practices in public lighting and with a thorough understanding of specifics of Slovak market in that development phase. The project, as it was designed, would have been more appropriate for earlier phases of market transformation in Slovakia (in mid nineties). In 2005, when the project implementation has started, Slovakia was already an EU member, and the market transformation, including financial and public lighting markets, was already rather advanced. In combination with massive EU grants available, the focus of the project on mobilizing commercial financing for public lighting reconstructions seems not to have been properly targeted.

7. Annexes

Annex 1: Original Project Document LogFrame with revisions from the Inception Report and Project Revision

Initial Logframe Matrix (from signed project document)

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS AND RISKS
<p><u>Project Objective:</u></p> <p>Avoid 63,993 tonnes in carbon equivalent greenhouse gas (GHG) emissions by catalysing USD 2.63 million in investments in energy efficient public lighting.</p>	<p>At project completion:</p> <ul style="list-style-type: none"> • Reductions in carbon equivalents by 1,209 tonnes over the three-year project (through energy saving of 2,634 MWh), • A life time reduction of 63,993 tonnes of emissions in carbon equivalent 	<ul style="list-style-type: none"> • Project investment monitoring • GEFSEC Cluster reviews 	<ul style="list-style-type: none"> • <i>That government decentralization reforms continue in the current direction of fiscal federalism</i> • <i>That electricity prices continue to tend towards EU norms</i>
<p><u>Output 1:</u> An effective and sustainable advisory service created to catalyze public lighting investment</p>	<p><i>by end of year 1 (annual target)</i></p> <ul style="list-style-type: none"> • The IFD will have a pipeline of projects with signed legal contracts: <ul style="list-style-type: none"> - USD 350,000 in projects identified for financing through the project fund¹; <p><i>by end of year 2 (annual target)</i></p> <ul style="list-style-type: none"> • The IFD will have a pipeline of projects with signed legal contracts: <ul style="list-style-type: none"> - USD 700,000 in projects identified for financing through the project fund; - USD 440,000 in project independently of the project fund. <p><i>by the end of year 3 (annual target)</i></p>	<ul style="list-style-type: none"> • Signed loan agreements with municipalities. • Contracts with other cofinancers • Signed service contract on technical and financial services • External evaluation 	<ul style="list-style-type: none"> • That the IFD can generate municipal interest in the services offered by them • That the IFD can convince municipalities to invest their own funds in energy efficient public lighting • That concessional financing will continue to be available to Slovakia

¹ See Annex V for revolving fund loan structure.

OBJECTIVES	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS AND RISKS
	<ul style="list-style-type: none"> • The IFD will have a pipeline of projects with signed legal contracts: <ul style="list-style-type: none"> - USD 700,000 in projects identified for financing through the project fund; - USD 440,000 in project independently of the project fund. 		
<p><u>Output 2:</u> Finance technical demonstrations with the support of a concessional fund.</p>	<p><i>By end of year one (annual target)</i></p> <ul style="list-style-type: none"> • Revolving fund capitalised as per the cash flow analysis in Annex IV • USD 300,000 disbursed in loans from the project fund for PL demonstration projects <ul style="list-style-type: none"> • 80% of full repayments made on time <p><i>By end of year 2(annual target)</i></p> <ul style="list-style-type: none"> • USD 600,000 disbursed in loans from the project fund for PL demonstration projects <ul style="list-style-type: none"> • 90% of full repayments made on time <p><i>By end of year 3(annual target)</i></p> <ul style="list-style-type: none"> • USD 600,000 in loans disbursed from the fund for financing two demonstration projects 90% of full repayments made on time 	<ul style="list-style-type: none"> • Tatra Banka financial reports • External evaluation 	<ul style="list-style-type: none"> • That the concessions offered by the project fund will be of a sufficient incentive for municipalities to invest in energy efficient public lighting.
<p><u>Output 3:</u> Support investment in energy efficient public lighting through information dissemination</p>	<ul style="list-style-type: none"> • 200 enquiries logged by the IFD by the end of the project, from municipalities and other investors, on topic listed above. • A 2% increase in public procurement of sodium lamps and timer switches (independent of project loans). 	<ul style="list-style-type: none"> • Enquires log • Market evaluation results 	<ul style="list-style-type: none"> • Lack of information on energy efficiency projects and their benefits.

Modified Logframe Matrix (after Inception Workshop)

Project Strategy	Objectively verifiable indicators				
Goal	This project aims to avoid carbon emissions by building a sustainable entity, who's business model is to catalyse investment in energy efficient public lighting				
	Indicator/Indikátor (quantified and time-bound)	Baseline	Target	Sources of verification	Assumptions and risks
<p>Objective of the project</p> <p>Avoid 63,993 tonnes in carbon equivalent greenhouse gas (GHG) emissions by catalysing USD 2.63 million in investments in energy efficient public lighting.</p>	<ul style="list-style-type: none"> Annual reductions in carbon equivalents 	<ul style="list-style-type: none"> Annual emission production 13 500 Gg C equivalents in the year 1999 Update for year 2005 is 13 050 Gg C equivalents 	<p><i>By the end of year 1:</i></p> <ul style="list-style-type: none"> 0 tonnes of C equivalents <p><i>By the end of year 2:</i></p> <ul style="list-style-type: none"> 160 tonnes of C equivalents per year <p><i>By the end of year 3:</i></p> <ul style="list-style-type: none"> 1048 tonnes of C equivalents per year 	<ul style="list-style-type: none"> Project investment monitoring GEFSEC Cluster reviews Create register of emissions? 	<ul style="list-style-type: none"> That government decentralisation reforms continue in the current direction of fiscal federalism That electricity prices continue to tend towards EU norms Prioritisation of investment into infrastructure (preferences of investment projects into waste water treatment, waste management, building
<ul style="list-style-type: none"> A life time reduction of emissions in carbon equivalent 		<ul style="list-style-type: none"> 63,993 tonnes of emissions in carbon equivalent 			

	<ul style="list-style-type: none"> Increasing investment into EE PL reconstruction 	<p><u>108 mil. SKK invested into EE public lighting projects in the year 2005</u></p>	<p><i>2% increase of investments into EE reconstruction projects</i></p>		<p><i>of water-supply systems, public health, and etc).</i></p>
<p>Output 1:</p> <p>An effective and sustainable advisory service created to catalyze public lighting investment</p>	<ul style="list-style-type: none"> Number of projects with signed legal contracts prepared by IFD 	<p>No centre of excellence to support energy efficiency PL investment exists, nor are there plans to set one up.</p>	<p><i>by the end of year 1:</i></p> <ul style="list-style-type: none"> signed legal contracts - projects identified for financing through commercial or grant resources in amount of USD 350,000 <p><i>by the end of year 2:</i></p> <ul style="list-style-type: none"> signed legal contracts - projects identified for financing through commercial or grant resources in amount USD 1,140,000 <p><i>by the end of year 3:</i></p> <ul style="list-style-type: none"> signed legal contracts - projects identified for financing through commercial or grant resources in amount of USD 1,140,000 	<ul style="list-style-type: none"> Signed loan agreements with municipalities Contracts with other cofinancers Signed service contract on technical and financial services External evaluation List of projects submitted and approved for financing from support programmes – 	<ul style="list-style-type: none"> That the IFD can generate municipal interest in the services offered by them That the IFD can convince municipalities to invest their own funds in energy efficient public lighting No motivation to realise complex solutions of PL reconstruction projects IFD convince interest if FI's to finance PL reconstruction projects and creation of financial products specialized on EE PL reconstruction. IFD convince interest of municipalities to submit application for

	<ul style="list-style-type: none"> Increased using of grant resources for PL reconstruction in SKK/year 	<p>50* applications</p> <p>*estimation based on available information, will be specified later when data from ministry will be obtained</p>	<ul style="list-style-type: none"> 10 % increase in number of applications submitted for financing from support programmes by the end of the project. 	<p>web pages, statistics</p> <ul style="list-style-type: none"> Project reports IFD business plan evaluation Self assesment of IFD going out of questionnaires and internet survey Statistics, questionnaires Database of companies, meeting minutes 	<p>financing through grant resources and will actively contribute to its preparation.</p> <ul style="list-style-type: none"> FI's criteria's for financing, which can not be met by municipalities and/or other investors Increase of interest rates Grant resources (SF and others) will be not allocated also for EE public lighting reconstruction projects Limited amount of grant resources supporting EE reconstruction of PL systems Conditions of grant schemes (maximal /minimal amount of grant). Time consuming process of calls for proposals publication and evaluation can influence successful accomplishment of individual projects
	<ul style="list-style-type: none"> IFD sustainability, independence 	<ul style="list-style-type: none"> Current situation – IFD 	<ul style="list-style-type: none"> IFD independent by the end of the project 		
Output 2: Finance					

<p>technical demonstrations with the support of a concessional fund.</p>					
<p>Output 3 Support investment in energy efficient public lighting through information dissemination</p>	<ul style="list-style-type: none"> Number of enquiries logged by the IFD by the end of the project, from municipalities and other investors, on topic listed above. 	<ul style="list-style-type: none"> 0 clients of IFD 	<p>by the end of year 1: 20 enquiries logged by the IFD from municipalities and other investors, on topic listed above.</p> <p>by the end of year 2: 70 enquiries logged by the IFD from municipalities and other investors, on topic listed above</p> <p>by the end of year 3: 110 enquiries logged by the IFD from municipalities and other investors, on topic listed above</p>	<ul style="list-style-type: none"> Enquires log Monitoring report 	<ul style="list-style-type: none"> IFD convince interest of municipalities/investors in offered services Lack of information on energy efficiency projects and their benefits.

	<ul style="list-style-type: none"> • % share of target group used information provided by IFD for present or future PL EE reconstruction 	<ul style="list-style-type: none"> • <i>No information dissemination on public lighting EE reconstruction</i> 	<p><i>10 % of adequate sample of target group used information provided by IFD through dissemination campaign for PL EE reconstruction and/or used these information for operation, maintenance and planned investments into PL.</i></p>	<ul style="list-style-type: none"> • Annual IFD telephone enquiry after 6 months from particular dissemination campaign 	<ul style="list-style-type: none"> • Strong lobby by suppliers to do reconstruction on their own way • Unwillingness of municipalities to respond for questionnaires
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Proposed Logframe Matrix (with new Output 2 indicators regarding EPC services provided by the IFD)

Project Strategy	Objectively verifiable indicators				
<i>Goal</i>	This project aims to avoid carbon emissions by building a sustainable entity, who's business model is to catalyse investment in energy efficient public lighting				
	Indicator/Indikátor (quantified and time-bound)	Baseline	Target	Sources of verification	Assumptions and risks
<p>Objective of the project</p> <p>Avoid 63,993 tonnes in carbon equivalent greenhouse gas (GHG) emissions by catalysing USD 2.63 million in investments in energy efficient public lighting.</p>	<ul style="list-style-type: none"> Annual reductions in carbon equivalents 	<ul style="list-style-type: none"> Annual emission production 13 500 Gg C equivalents in the year 1999 Update for year 2005 is 13 050 Gg C equivalents 	<p><i>By the end of year 1:</i></p> <ul style="list-style-type: none"> 0 tonnes of C equivalents <p><i>By the end of year 2:</i></p> <ul style="list-style-type: none"> 160 tonnes of C equivalents per year <p><i>By the end of year 3:</i></p> <ul style="list-style-type: none"> 1048 tonnes of C equivalents per year 	<ul style="list-style-type: none"> Project investment monitoring GEFSEC Cluster reviews Create register of emissions? 	<ul style="list-style-type: none"> That government decentralisation reforms continue in the current direction of fiscal federalism That electricity prices continue to tend towards EU norms Prioritisation of investment into infrastructure (preferences of investment projects into waste water treatment, waste management, building
<ul style="list-style-type: none"> A life time reduction of emissions in carbon equivalent 		<ul style="list-style-type: none"> 63,993 tonnes of emissions in carbon equivalent 			

	<ul style="list-style-type: none"> Increasing investment into EE PL reconstruction 	<u>108 mil. SKK invested into EE public lighting projects in the year 2005</u>	2% increase of investments into EE reconstruction projects		<i>of water-supply systems, public health, and etc).</i>
<p>Output 1:</p> <p>An effective and sustainable advisory service created to catalyze public lighting investment</p>	<ul style="list-style-type: none"> Number of projects with signed legal contracts prepared by IFD 	No centre of excellence to support energy efficiency PL investment exists, nor are there plans to set one up.	<p><i>by the end of year 1:</i></p> <ul style="list-style-type: none"> signed legal contracts - projects identified for financing through commercial or grant resources in amount of USD 350,000 <p><i>by the end of year 2:</i></p> <ul style="list-style-type: none"> signed legal contracts - projects identified for financing through commercial or grant resources in amount USD 1,140,000 <p><i>by the end of year 3:</i></p> <ul style="list-style-type: none"> signed legal contracts - projects identified for financing through commercial or grant resources in amount of USD 1,140,000 	<ul style="list-style-type: none"> Signed loan agreements with municipalities Contracts with other cofinancers Signed service contract on technical and financial services External evaluation List of projects submitted and approved for financing from support programmes – web pages, 	<ul style="list-style-type: none"> That the IFD can generate municipal interest in the services offered by them That the IFD can convince municipalities to invest their own funds in energy efficient public lighting No motivation to realise complex solutions of PL reconstruction projects IFD convince interest if FI's to finance PL reconstruction projects and creation of financial products specialized on EE PL reconstruction. IFD convince interest of municipalities to submit application for
		50 applications in program			

	<ul style="list-style-type: none"> Increased using of grant resources for PL reconstruction 	period 2004 - 2006	<ul style="list-style-type: none"> 10 % increase in number of applications submitted for financing from support programmes by the end of the project. 	<ul style="list-style-type: none"> statistics Project reports IFD business plan evaluation Self assesment of IFD going out of questionnaires and internet survey Statistics, questionnaires Database of companies, meeting minutes 	<ul style="list-style-type: none"> financing through grant resources and will actively contribute to its preparation. FI's criteria's for financing, which can not be met by municipalities and/or other investors Increase of interest rates Grant resources (SF and others) will be not allocated also for EE public lighting reconstruction projects Limited amount of grant resources supporting EE reconstruction of PL systems Conditions of grant schemes (maximal /minimal amount of grant). Time consuming process of calls for proposals publication and evaluation can influence successful accomplishment of individual projects
	<ul style="list-style-type: none"> IFD sustainability, independence 	<ul style="list-style-type: none"> Current situation – IFD 	<ul style="list-style-type: none"> IFD independent by the end of the project 		
Output 2:					
To stimulate	<ul style="list-style-type: none"> Number of light 		<i>by the end of 1st year of</i>	<ul style="list-style-type: none"> Contracts with 	<ul style="list-style-type: none"> stable level of

energy efficient PL systems reconstructions through direct participation of the IFD in these reconstructions	points (LP) reconstructed through UNDP-GEF co-financed EPC services	0 LP	<i>providing EPC services:</i> <ul style="list-style-type: none"> • 4,200 LP reconstructed by the end of 2nd year of providing EPC services: • 5,250 LP reconstructed by the end of 3rd year of providing EPC services: • 6,300 LP reconstructed 	municipalities <ul style="list-style-type: none"> • Technical documentation • Invoices from contractors for PL system reconstructions 	economic and financial situation of municipalities <ul style="list-style-type: none"> • development of PL market in current trends • lack of EPC based realizations in PL reconstructions – non-confidence of municipalities; • local government elections in shorter period than duration of most of EPC projects in PL; • legislation gaps;
	<ul style="list-style-type: none"> • Number of light points (LP) reconstructed through services not co-financed from UNDP-GEF resources 	0 LP	<i>by the end of 1st year of providing EPC services:</i> <ul style="list-style-type: none"> • 0 LP reconstructed by the end of 2nd year of providing EPC services: • 3,150 LP reconstructed by the end of 3rd year of providing EPC services: • 6,300 LP reconstructed 	<ul style="list-style-type: none"> • Contracts with municipalities • Technical documentation • Invoices from contractors for PL system reconstructions 	

	<ul style="list-style-type: none"> • Average annual energy savings per reconstructed light point (LP) 	n/a	<ul style="list-style-type: none"> • 320 kWh/LP/year 	<ul style="list-style-type: none"> • Contracts with municipalities • Technical documentation • Invoices for electricity consumption of PL systems 	
Output 3 Support investment in energy efficient public lighting through information dissemination	<ul style="list-style-type: none"> • Number of enquiries logged by the IFD by the end of the project, from municipalities and other investors, on topic listed above. 	<ul style="list-style-type: none"> • <i>0 clients of IFD</i> 	<p><i>by the end of year 1:</i></p> <p><i>20 enquiries logged by the IFD from municipalities and other investors, on topic listed above.</i></p> <p><i>by the end of year 2:</i></p> <p><i>70 enquiries logged by the IFD from municipalities and other investors, on topic listed above</i></p> <p><i>by the end of year 3:</i></p> <p><i>110 enquiries logged by the IFD from municipalities and other investors, on topic listed above</i></p>	<ul style="list-style-type: none"> • Enquires log • Monitoring report 	<ul style="list-style-type: none"> • IFD convince interest of municipalities/investors in offered services • Lack of information on energy efficiency projects and their benefits.

	<ul style="list-style-type: none"> • % share of target group used information provided by IFD for present or future PL EE reconstruction 	<ul style="list-style-type: none"> • <i>No information dissemination on public lighting EE reconstruction</i> 	<p><i>10 % of adequate sample of target group used information provided by IFD through dissemination campaign for PL EE reconstruction and/or used these information for operation, maintenance and planned investments into PL.</i></p>	<ul style="list-style-type: none"> • Annual IFD telephone enquiry after 6 months from particular dissemination campaign 	<ul style="list-style-type: none"> • Strong lobby by suppliers to do reconstruction on their own way • Unwillingness of municipalities to respond for questionnaires
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Annex 2: Final evaluation TOR

**GEF/UNDP MSP:
“Removing Barriers to the Reconstruction of Public Lighting Systems in Slovakia”**

Terms of Reference

for final evaluation of the project

Type of Contract: Contract for Services of an Individual Contractor

Languages Required: English

Duration: 20 February – 30 April 2012 (estimated 18 working days)

Location: home based and with up to 3 two day missions to Slovakia

Payment schedule:

- First payment: 25% of the total contract upon acceptance by UNDP Project Manager of the first mission workplan;
- Second payment: 75% of the total contract upon submission and acceptance of the final Evaluation Report

Application Deadline: Friday 27th January 2012

Please note that UNDP is not in the position to accept incomplete applications - please make sure that your application contains all details as specified below in this notice.

1. BACKGROUND

In accordance with UNDP/GEF M&E policies and procedures, all projects supported by the GEF should undergo a final evaluation upon completion of implementation.

The Final Evaluation is intended to assess the relevance, performance 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 Final 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.

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

This Final Evaluation is initiated by UNDP Bratislava Regional Centre as the GEF Implementing Agency for this project and it aims to provide managers (at the level of national ministries and UNDP/GEF) with a comprehensive overall assessment of the project and with a strategy for replicating the results. It also provides the basis for learning and accountability for managers and stakeholders.

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 CO₂) by catalyzing investments in energy efficient public lighting technology, over the 20 year lifecycle of those investments.

Project description

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 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 based on the MTE recommendations.

The project amendment was signed in February 2008. The objective of the Amendment was to adapt Output 2 (Project fund) to changing conditions in the Slovak financial and municipal sector. The amendment replaced the concessional fund in output 2 with co-financed energy performance contracting (EPC). The project Investment Facilitation started offering reconstructions of public lighting systems based on the EPC (Energy Performance Contracting) concept. However, to date this has not been successful and it has been difficult to convince stakeholders to take out loans for energy-efficiency projects.

Outcomes 1 and 3 have been successfully finished within the initially planned duration of the project, e.g. till November 2009. Several activities (from these outcomes) previously financed from project resources are continuously being offered and provided as commercial services of the project Investment Facilitation Department (CEVO Ltd.).

From 2008 until end of 2010 hundreds of municipalities were informed by the IFD about the possibilities of realization of energy effective PL system reconstruction through EPC. Despite this awareness raising however, EPC has not been carried out by municipalities in the Slovak Republic.

A project extension has been granted to the end of April 2012, aiming to reach a final decision on the ongoing public procurement, in which the project Investment Facilitation Department (CEVO Ltd.) is participating with an EPC offer. The contract was not awarded, so the investment based on EPC was finally not implemented.

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, out of this 400.000 was not delivered yet.

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 2](#).

2. DESCRIPTION OF RESPONSIBILITIES

The objective of the Evaluation is to examine the achievement of project objective, the affecting factors, the broader project impact and the contribution to the general goal/strategy, and the project partnership strategy.

The Evaluation will include the assessment of the achievements of the project, measured against planned outputs set forth in the Project Document in accordance with rational budget allocation, and the assessment of features related the process involved in achieving those outputs, as well as the impacts the project. The evaluation will also address the underlying causes and issues contribution to targets not adequately achieved.

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.

The scope of the Evaluation will cover all activities undertaken in the framework of the project. The evaluators will compare planned outputs of the project to actual outputs and assess the actual results to determine their contribution to the attainment of the project objectives. It will evaluate the efficiency of project management, including the delivery of outputs and activities in terms of quality, quantity, timeliness and cost efficiency.

The evaluation will assess the aspects as listed in evaluation report outline attached in [Annex 1](#).

Products expected from the evaluation

The key product expected from this final evaluation is a comprehensive analytical report in English that should, at least, follow minimum GEF requirements as indicated in [Annex 1](#).

The Final Evaluation Report will be stand-alone document that substantiates its recommendations and conclusions. The report will have to provide to UNDP complete and convincing evidence to support its findings/ratings.

The Final Evaluation Report will include a section on lessons learnt and recommendation for replication and transfer of the experience related mainly to:

- post-project sustainability of the efforts both in terms of governance and in terms of environmental benefits;
- capacity building ;
- successes and challenges.

Special attention shall be paid to the Lessons Learnt section, as the EPC approach was unsuccessful and was finally not implemented.

The Evaluation Report will also include the assessment of the alternative utilization of the Output 2 budget other than for EPC investment.

The report together with the annexes, shall be presented in electronic form in MS Word format.

Responsibility for Expenses and their Reimbursement

The Consultant will be responsible for all personal administrative and travel expenses associated with undertaking this assignment including office accommodation, printing, stationary, telephone and electronic communications, and report copies incurred in this assignment. For this reason, the contract is prepared as a lump sum contract.

The remuneration of work performed will be conducted as follows:

- First payment: 25% of the total contract upon acceptance by UNDP Project Manager of the first field visit workplan;
- Second payment: 75% of the total contract upon submission and acceptance of the final Evaluation Report

Evaluation approach

An outline of an approach for the review is provided below; however it should be made clear that the consultant is responsible for revising the approach as necessary. Any changes must be cleared by UNDP before being undertaken by the consultant.

The review must provide evidence-based information that is credible, reliable and useful. It must be easily understood by project partners and informative to UNDP related to issues for future programming.

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

The evaluation will be home based with up to three missions to the Slovak Republic with a minimum of one 6 day mission or alternatively two three day missions or alternatively three two day missions. The evaluator is expected to follow a participatory and consultative approach ensuring close engagement with the government counterparts, the National Project Manager, Steering Committee, project team, and key stakeholders as part of the mission or missions.

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, Mid-Term Evaluation Report, 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. Interviews will be held with the following organizations and individuals at minimum: UNDP Regional Centre Bratislava, Ministry of Environment of the SR, Slovak Energy Agency - Project Director; Steering Committee members; Project Team, sample of supported municipalities.

S/He is also expected to visit some of the project sites as part of one of the missions.

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 Consultant 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 Consultant should reflect sound accounting procedures and be prudent in using the resources of the assignment. The principal responsibility for managing this evaluation lies with UNDP Regional Center for Europe and CIS (Bratislava). UNDP will contract the evaluator and ensure the timely provision of per diems and travel arrangements within the country for the evaluator. UNDP and the Project Manager will be responsible for liaising with the evaluator to set up stakeholder interviews, arrange field visits, coordinate with the project partners, etc.

The timeframe and duration of activities are estimated to be broken down as follows:

Activity	Duration (estimated) / days	Timing and deadline
Completion of Assignment Workplan, Table of Contents for Assignemnt	1	2 nd half of February
Desk review, Questions, Analysis, Phone Interviews other ...	3	End of February
Phone Interviews with UNDP Project Manager, Project Team, UNDP BRC Staff	Approx. 1	End of February
Field visits, interviews, questionnaires, de-briefings which includes three (3) two day missions to Slovakia	Minimum 6	In March and April (or one 6 day mission or two 3 day missions)
Drafting of the Draft evaluation report – during in-country mission and in home-office	Approx. 5	6th April
Validation of preliminary findings with stakeholders through circulation of draft reports for comments,	Approx. 1	13th April

Activity	Duration (estimated) / days	Timing and deadline
meetings and other types of feedback mechanisms		
Finalization of the evaluation report (incorporating comments received on first draft)	Approx. 1	27th April
TOTAL working days	Approx.18	

The report shall be submitted to the UNDP RBEC Energy and Environment Team (Ms. Klara Tothova, address: Grosslingova 35, 811 09 Bratislava, Slovakia, tel.: 00421-2-59337 220, e-mail: klara.tothova@undp.org and Mr John O'Brien john.obrien@undp.org, tel: +421 2 59337 413)

Prior to approval of the final report, a draft version shall be submitted for comments to UNDP by **6 April 2012**. UNDP and the stakeholders will submit comments and suggestions within 10 working days after receiving the draft.

The finalized Evaluation Report shall be submitted latest on **27th April 2011**.

If any discrepancies have emerged between impressions and findings of the consultant and the aforementioned parties, these should be explained in an annex attached to the final report.

3. COMPETENCIES

Required competencies:

- Strong interpersonal skills, communication and diplomatic skills, ability to work in a team
- Ability to plan and organize his/her work, efficient in meeting commitments, observing deadlines and achieving results
- Openness to change and ability to receive/integrate feedback
- Ability to work under pressure and stressful situations
- Strong analytical, reporting and writing abilities

4. QUALIFICATIONS

Required qualification:

- A. Master degree in economics, engineering, environmental science or equivalent experience.
- B. At least 10 years of professional experience field of energy efficiency, especially in public sector, and public lighting.

- C. Familiarity with energy efficiency policies in CEE, especially in Slovakia;
- D. Recent knowledge of the GEF Monitoring and Evaluation Policy;
- E. Recent knowledge of UNDP's results-based evaluation policies and procedures
- F. Recent experience in evaluation of international donor driven development projects;
- G. Excellent English writing and communication skills
- H. Knowledge of MS Word, Excel and email communication software;

5. EVALUATION OF APPLICANTS

As all candidates on the UNDP Bratislava Regional Centre climate change mitigation roster are technically qualified and have gone through an extensive application process to have been short-listed, the lowest financial offer which offers value for money to UNDP shall be selected.

The award of the contract will be made to the individual consultant whose offer has been evaluated and determined as:

- a) the lowest technically qualified financial offer
- b) available to carry out the assignment within the deadlines indicated in the TOR;

6. APPLICATION PROCEDURES

Please send your application to klara.tothova@undp.org and john.obrien@undp.org by **Friday 27th January 2012**.

The application should contain:

- **Cover letter** explaining why you are the most suitable candidate for the advertised position and a **brief methodology** on how you will approach and conduct the work (based on commenting on the requirements indicated in this TOR).
- **Updated P11 form** including latest experience in similar projects and updated contact details of referees (blank form can be downloaded from http://europeandcis.undp.org/files/hrforms/P11_modified_for_SCs_and_ICs.doc);
- **Financial Proposal*** - specifying a total Lump Sum Amount for the tasks specified in this announcement. The financial proposal shall include a breakdown of this lump sum amount (number of anticipated working days – in home office and on mission, travel – international and local, per diems and any other possible costs), using the following template. For missions please note that you may select either one 6 day mission, two 3 day missions, or 3 two day missions.

	Nr. of units*	Units	Rate / USD	Total / USD
Work in home office**				
		man/days		0
		man/days		0
		man/days		0
Work on mission**				
		man/days		0
		man/days		0
		man/days		0
Sub-total fee				0
Travel costs				
International travel to and from country/ies		mission		0
DSA		overnights		0
Local travel		destination		0
Sub-total travel costs				0
TOTAL				0
* Estimates are indicated in the TOR, the applicant is requested to review and revise, if applicable.				
** Add rows as needed				

Please note that the **financial proposal is all-inclusive** and shall take into account various expenses incurred by the consultant/contractor during the contract period (e.g. fee, health insurance, vaccination, office costs and any other relevant expenses related to the performance of services...). All envisaged **travel costs** must be included in the financial proposal. This includes all travel to join duty station/repatriation travel.

Payments will be made to the consultant in two installments as follows:

- 1) 25% of the lump sum amount following signing of the contract and preparation and submission of the workplan/table of contents to UNDP and prior to the first mission;
- 2) 75% of the lump sum amount upon satisfactory completion of the final report and following confirmation from UNDP that the consultant has delivered on the contract obligations in a satisfactory manner.

Individual Consultants are responsible for ensuring they have **vaccinations/inoculations** when travelling to certain countries, as designated by the UN Medical Director. Consultants are also required to comply with the UN **security directives** set forth under dss.un.org

General Terms and conditions as well as other related documents can be found under: <http://europeandcis.undp.org/home/jobs>

Qualified **women** and members of **minorities** are encouraged to apply.

Incomplete applications will not be considered. Please make sure you have provided all requested materials

Annex 1

Evaluation Report: Sample Table of Contents for Final Project Evaluation

Minimum GEF requirements¹

Executive summary

- ♣ Brief description of project
- ♣ Context and purpose of the evaluation
- ♣ Main conclusions, recommendations and lessons learned

Introduction

- ♣ Purpose of the evaluation
- ♣ Key issues addressed
- ♣ Methodology of the evaluation
- ♣ Structure of the evaluation

The project(s) and its development context

- ♣ Project start and its duration
- ♣ Problems that the project seek to address
- ♣ Immediate and development objectives of the project
- ♣ Main stakeholders
- ♣ Results expected

Findings and Conclusions

(In addition to a descriptive assessment, all criteria marked with (*) should be rated²)

- ø Project formulation
 - Implementation approach (*) (i)
 - Analysis of LFA (Project logic /strategy; Indicators)
 - Lessons from other relevant projects (e.g., same focal area) incorporated into project implementation
 - Country ownership/Driveness
 - Stakeholder participation (*)
 - Replication approach
 - Cost-effectiveness
 - UNDP comparative advantage
 - Linkages between project and other interventions within the sector
 - Management arrangements

- ø Implementation

¹ Please refer to GEF guidelines for explanation of Terminology

² The ratings will be: Highly Satisfactory, Satisfactory, Marginally Satisfactory, Unsatisfactory

Implementation approach (*) (ii)

The logical framework used during implementation as a management and M&E tool
Effective partnerships arrangements established for implementation of the project with
relevant stakeholders involved in the country/region
Feedback from M&E activities used for adaptive management

- ♣ Financial Planning
- ♣ Monitoring and evaluation (*)
- ♣ Execution and implementation modalities
- ♣ Management by the UNDP country office
- ♣ Coordination and operational issues

0 Results

- ♣ Attainment of objectives (*)
- ♣ Sustainability (*)
- ♣ Contribution to upgrading skills of the national staff

Recommendations

- ♣ Corrective actions for the design, implementation, monitoring and evaluation of the project
- ♣ Actions to follow up or reinforce initial benefits from the project
- ♣ Proposals for future directions underlining main objectives

Lessons learned

- ♣ Best and worst practices in addressing issues relating to relevance, performance and success

Annexes

- ♣ TOR
- ♣ Itinerary
- ♣ List of persons interviewed
- ♣ Summary of field visits
- ♣ List of documents reviewed
- ♣ Questionnaire used and summary of results

Annex 2

SITES WITH PROJECT INTERVENTIONS

	Municipality	Number of capita
1.	Snina	21.325
2.	Revúca	13.466
3.	Šamorín	12.481
4.	Trstená	7.551
5.	Gbely	5.149
6.	Sučany	4.620
7.	Veľký Šariš	4.600
8.	Slovenská Ľupča	3.066
9.	Zemianska Oľča	2.620
10.	Moravany nad Váhom	2.080
11.	Častá	2.078
12.	Madunice	2.038
13.	Radošina	1.981
14.	Borský sv. Jur	1.551
15.	Čáry	1.250
16.	Poloma	967
17.	Kuklov	806
18.	Nižný Slavkov	805
19.	Hronsek	623
20.	Vyšný Slavkov	340

Annex 3: Itinerary

First mission, February 13-17, 2012

February 13, 2012

Travel to Bratislava

February 14, 2012

Meeting with the project management

Mr. Marcel Lauko, Director, Energy Center Bratislava

Mr. Marek Lipa, Director, CEVO, s.r.o.

Ms. Darina Pšenáková, Financial Manager, Energy Center Bratislava

Meeting with John O'Brien, Regional Technical Advisor, UNDP Bratislava and Ms. Klára Tóthová, Environmental Officer, UNDP Bratislava

February 15, 2012

Meeting with the project team

Mr. Marcel Lauko, Director, Energy Center Bratislava

Mr. Marek Lipa, Director, CEVO, s.r.o.

Meeting with Mr. František Tyukos, Mayor, Imeľ municipality

Meeting with Mr. Eduard Kačík, Director, Lightech engineering, s.r.o.

February 16, 2012

Meeting with:

Ms. Ida Ivánová, Head of the office, Vlčany municipality

Mr. Gabriel Duka, Mayor, Kravany nad Dunajom municipality

February 16/17, 2012

Return travel

Second mission, March 13-16, 2012

March 13, 2012

Travel to Banská Bystrica

Meeting with Mr. Juraj Klukan, Director, H+W Service, s.r.o.

Telephone interview with Mr. László Pomothy, InLight, s.r.o.

March 14, 2012

Meeting at SIEA with Ms. Kvetoslava Šoltésová

Meeting at Mýto pod Ďumbierom with Mr. Roman Švantner, Mayor

Travel to Bratislava

Meeting with John O'Brien, Regional Technical Advisor, UNDP Bratislava

March 15, 2012

Meeting with the project management

Mr. Marcel Lauko, Director, Energy Center Bratislava

Mr. Marek Lipa, Director, CEVO, s.r.o.

March 15/16, 2012

Return travel

Annex 4: List of persons interviewed

1. Mr. Marcel Lauko, Director, Energy Center Bratislava
2. Mr. Marek Lipa, Director, CEVO, s.r.o.
3. Ms. Darina Pšenáková, Financial Manager, Energy Center Bratislava
4. Ms. Kvetoslava Šoltéssová, Director of Legislation, Methodologies and Training, Slovak Innovation and Energy Agency
5. Mr. Eduard Kačík, Director, Lightech engineering, s.r.o.
6. Mr. Juraj Klukan, Director, H+W Service, s.r.o.
7. Mr. László Pomothy, InLight, s.r.o.
8. Mr. Gabriel Duka, Mayor, Kravany nad Dunajom municipality
9. Mr. František Tyukos, Mayor, Imeľ municipality
10. Ms. Ida Ivánová, Head of the office, Vlčany municipality
11. Mr. Roman Švantner, Mayor, Mýto pod Ďumbierom
12. Mr. John O'Brien, Regional Technical Advisor – Climate Change Mitigation, UNDP Bratislava
13. Ms. Klára Tóthová, Environmental Officer, UNDP Bratislava

Annex 5: List of documents reviewed

General documentation

- UNDP Programme and Operations Policies and Procedures
- UNDP Handbook for Monitoring and Evaluating for Results
- GEF Monitoring and Evaluation Policy
- GEF focal area strategic program objectives

Project documentation

- GEF approved project document and Request for CEO Endorsement
- Project Inception Report
- Annual work plans
- Annual Project Reports
- Project Implementation Review
- CDR
- Quarterly Reports
- Project Advisory Board Meeting minutes
- Updated risk log

Project web site

www.cevo.sk

Project deliverables

- Energy Audits,
- EPC contract,
- overview of projects prepared,
- overview of projects implemented,
- Svetlonos magazine
- project presentations
- project financial records
- other relevant project documentations

Annex 6: Comments by stakeholders (only in case of discrepancies with evaluation findings and conclusions)