

UNITED NATIONS ENVIRONMENT PROGRAMME

GLOBAL ENVIRONMENT FACILITY

PROJECT DOCUMENT

SECTION 1 – PROJECT IDENTIFICATION

- 1.1 **Title of Sub-programme:** Climate Change 2: Increased Access to Local Sources of Financing for Renewable Energy and Energy Efficiency
- 1.2 **Title of the Project:** Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation
- 1.3 **Project Number:** IMIS: GFL-2328-2721-4961
PMS: GF/4040-07-02
- 1.4 **Geographical Scope:** Belarus, Bulgaria, Kazakhstan, Former Yugoslav Republic of Macedonia, Romania, Russian Federation, Serbia and Montenegro, Ukraine
- 1.5 **GEF Implementing Agency:** UNEP
Co-implementing agency: European Bank for Reconstruction and Development (EBRD)
- 1.6 **Project Executing Agency:** United Nations Economic Commission for Europe (UNECE)
- 1.7 **Duration of the Project:** 84 months
Commencing: 1 January 2007
Completion: 31 December 2013

		US\$	%
1.8 <u>Cost of the Project:</u>			
GEF Financing¹:	Full Project	3,000,000	25
Co-financing:²	Full Project:		
	Government of France (FFEM)	2,600,000	
	Governments in the region (in kind)	1,400,000	
	UN Foundation (UNF)	2,000,000	
	European Business Congress (EBC)	260,000	
	UNECE (in kind)	2,800,000	
	Subtotal Co-financing:	9,060,000	75
	Total Project Cost³:	12,060,000	100

¹ The preparation costs for this Full Sized Project were financed without GEF involvement.

² Total co-financing for the Project Development phase amounted to \$200,000 as follows:

UNEP (in-kind)	20,000
UNF/UNFIP	15,000
UNECE (in-kind)	100,000
Government of France	65,000

³ Total cost of the project to the GEF Trust Fund excluding cofinancing for the Project Development phase is US\$12,260,000

1.9 Project Summary:

The overall objective of this project is to promote the formation of an energy efficiency market in Eastern Europe and the CIS so that cost-effective investments can provide a self-financing method of reducing global greenhouse gas (GHG) emissions. The project will (a) establish a dedicated source of equity and quasi-equity finance –an Investment Fund- with the participation of public and private sector investors; (b) enhance the skills of the private and public sector experts at the local level to identify, develop and submit bankable projects for financing to the fund and/or other sources of finance; (c) provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support these investment projects.

The investment potential in Eastern Europe for energy efficiency projects with a payback period of less than five years is estimated to be between US\$ 5 and US\$ 10 billion. This investment volume is so large that the private sector needs to participate in financing such projects. The genuine participation of the private sector in turn will require the formation of a market that can provide opportunities for large investments to be made with low transaction costs that produce adequate returns at an acceptable risk within a reasonable period of time. Therefore, this project is designed to go largely beyond what has been done previously in the form of demonstration investments financed under special conditions in selected Eastern European locations. It is to establish a US\$ 250 million public-private equity Fund, managed by a private experienced Fund Management company, linked to a pipeline of projects that can provide for the large-scale participation of private sector investors in partnership with public entities.

This project is designed to remove key barriers to energy efficiency and energy conservation in eight Eastern European and CIS countries with economies in transition. As a result, it seeks to achieve the objectives of GEF Operational Programmes 5 and 6 in reducing greenhouse gas emissions. The project will represent a reduction of GHG emissions of 10 million tonnes of CO₂ per year, on the basis of the Fund being fully disbursed at the end of the investment period and assuming it has been leveraged to reach a combined volume of investment of US\$ 2 billion.

The costs of the proposed alternative are larger than the baseline project, i.e. the resources that would be allocated to this activity by UNECE and the countries of the region. The support of the GEF and co-financing partners is the incremental cost of the project in which the GEF has a minority share at 24 per cent of project costs. The main innovations of this project are the establishment of a public-private equity fund linked to a pipeline of bankable investment project proposals developed by local experts and supported by government policy reforms.

Signatures:

For UNECE:

Signature: _____

Mr. Marek Belka
Executive Secretary
UNECE

Date: _____

1.03.07

For UNEP:

Signature: _____

Mr. David Hastic
Chief, Budget and Financial Management Service
UNEP

Date: _____

21.12.06

SECTION 2 – BACKGROUND AND PROJECT CONTRIBUTION TO OVERALL SUB-PROGRAMME IMPLEMENTATION

1. Identifiers

Project Number:	2619
Project Title:	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation
GEF Implementing Agency:	United Nations Environment Programme (UNEP)
Co-Implementing Agency	European Bank for Reconstruction and Development (EBRD)
Executing Agency:	United Nations Economic Commission for Europe (UNECE)
Requesting Countries:	Belarus, Bulgaria, Kazakhstan, Former Yugoslav Republic of Macedonia, Romania, Russian Federation, Serbia and Montenegro, Ukraine
Eligibility:	Belarus ratified UNFCCC on 11 May 2000 Bulgaria ratified UNFCCC on 12 May 1995 Kazakhstan ratified UNFCCC on 17 May 1995 Former Yugoslav Republic of Macedonia ratified UNFCCC on 28 January 1998 Romania ratified UNFCCC on 8 June 1994 Russian Federation ratified UNFCCC on 28 December 1994 Serbia and Montenegro ratified UNFCCC on 12 March 2001 Ukraine ratified UNFCCC on 13 May 1997
GEF Focal Areas:	Climate Change
GEF Programming Framework:	Operation Programme 5 – Removal of Barriers to Energy Efficiency and Energy Conservation Operation Programme 6 – Promoting the Adoption of Renewable Energy by Removing Barriers and Reducing Implementation Costs

2. Summary:

This project is the result of a prolonged and concentrated effort undertaken by the UNECE over the last 15 years in Central and Eastern Europe to promote the rational use of energy and to reduce environmental air pollution. Various programmes have been launched during this period in the UNECE framework of Energy Efficiency 21 which has demonstrated that it is possible to finance energy efficiency investments in Eastern Europe that reduce GHG emissions. Financial institutions such as the World Bank, the EBRD and the Nordic Investment Bank (NIB) have played a key role in that respect. But they have also shown that this is a time consuming and labour intensive process that needs to become much more fluid or business-as-usual in order to succeed on any meaningful scale.

Therefore, this project is to promote the formation of an energy efficiency market in Eastern Europe and the CIS so that cost-effective investments can provide a self-financing method of reducing global greenhouse gas (GHG) emissions. It will complement other initiatives and assist participating countries to address the financial, technical and policy barriers to energy efficiency and renewable energy investments. The project will (a) establish a dedicated source of equity and quasi-equity finance –an Investment Fund- with the participation of public and private sector investors; (b) enhance the skills of the private and public sector experts at the local level to identify, develop and submit bankable projects for financing to the fund and/or other sources of finance; (c) provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support these investment projects. Most of the other mentioned financial initiatives in these targeted countries, supported by the GEF or other institutions, are guaranty facilities or credit lines designed to help project promoters access financing sources once they have the required equity in place. However, most firms investing in energy issues, do not wish to pledge their often limited equity for energy efficiency or renewable energy projects. In fact, difficult access to equity is the limiting factor for development of successful ESCOs and other such special purpose vehicles:

the present initiative is addressing precisely this gap, without creating any overlapping with existing or forthcoming initiatives supported by the GEF in Eastern Europe.

The investment potential in Eastern Europe for energy efficiency projects with a payback period of less than five years is estimated to be between US\$ 5 and US\$ 10 billion. This investment volume is so large that the private sector needs to participate in financing such projects. The genuine participation of the private sector in turn will require the formation of a market that can provide opportunities for large investments to be made with low transaction costs that produce adequate returns at an acceptable risk within a reasonable period of time. Therefore, this project is designed to go largely beyond what has been done previously in the form of demonstration investments financed under special conditions in selected Eastern European locations. Its objective is the establishment of a dedicated financial facility, managed by a private experienced Fund Management company, linked to a pipeline of projects that can provide for the large scale participation of private sector investors in partnership with public entities. Based on the lessons learned from earlier financing mechanisms, the project will help leading private and public financial institutions to create a US\$ 250 million public-private equity Fund that can complement other financing schemes including current and planned GEF projects. In parallel to this, UNEP and UNECE will level the playing field by improving the local enabling environment. As a result, the project is expected to leverage an investment volume of up to US\$ 2 billion for energy efficiency and renewable energy projects. The outcome of the project will be solid investments that could represent a reduction of GHG emissions of 10 million tonnes of CO₂ per year, enhanced skills of local experts and policy reforms in participating countries. Hence direct CO₂ emissions reduction for this project stands at 200 million tonnes if we consider a 20 year period, according to GEF standards. Taking into account the possibility the Fund is replicated after demonstrating success, direct post project CO₂ emissions reduction can be estimated again at a 200 million tonnes level over a 20 year period. Finally, in terms of indirect emissions reduction, a conservative estimate based on the volume of most cost-effective energy efficiency investments, leads to a CO₂ reduction figure of 600 million tonnes over 20 years.

3. Costs and Financing (US \$)

GEF:	Full Project:	2.9 million
	Monitoring & Evaluation:	0.1 million
	PDF B	0.0 million
	Subtotal GEF:	3.0 million
Co-financing:	Full Project:	
	Government of France (FFEM)	2.60 million
	Governments in the region (in kind)	1.40 million
	UN Foundation (UNF)	2.00 million
	European Business Congress (EBC)	0.26 million
	UNECE (in kind)	2.80 million
	PDF	
	UNEP (in kind)	0.020 million
	UNF/UNFIP	0.015 million
	UNECE (in kind)	0.100 million
	Government of France	0.065 million
	Subtotal Co-financing:	9.260 million
Total Project Cost:		12.26 million
Leveraged Resources Expected of the Project:		250 million

4. Associated Financing (Million US \$)

It should be noted that the support requested from GEF and other co-financing partners is not to be used in the Fund capital but only to support the technical assistance components of the proposed project: policy reforms, capacity building, pipeline identification and the design, structuring and fund-raising of the Fund, which will be undertaken by a selected highly qualified financial institution. In this framework, co-financing support has been fully approved by the United Nations Foundation (UNF), the United Nations Fund for International Partnerships (UNFIP), the French Ministry of Foreign Affairs (MAE) and the Fonds Français pour l'Environnement Mondial (FFEM) or French GEF (letters of commitment from the UNF and the FFEM are attached in Annex E), as well as other public and private organisations as described hereafter:

1. 'Financing Energy Efficiency Investments for Climate Change Mitigation' (ECE-INT-04-318) approval for US\$ 2 million funding by the United Nations Foundation and United Nations Fund for International Partnerships on 16 June 2004 in Geneva (Switzerland), co-financing to the present project.
2. 'Capacity Building and Support for the Establishment of a Dedicated Fund for Energy Efficiency in Eastern Europe' approval of Euro € 2 million (USD 2.6 million) by the Fonds Français pour l'Environnement Mondial (FFEM) French GEF on 30 March 2005, co-financing to the present project.
3. Host countries 'in kind' contributions will provide most personnel costs for the national supervision and the local implementation of project operations. This will also include the costs of experts taking part in project training courses for business planning and financial engineering to prepare investment project proposals. The facilities and personnel services provided on an 'in kind' basis for project operations are estimated to be approximately US\$ 25,000 for each country per year.
4. The UNECE secretariat will make an annual 'in kind' contribution of US\$ 400,000 of personnel, staff travel, offices, communications, conference services, interpretation, documents translation, reproduction and distribution.

In addition, the project has been accorded one parallel financing grant from an international industrial federation. This grant will provide additional resources to selected project activities that will be pursued jointly with relevant partners at the local and international levels: the European Business Congress (EBC) approved funding of US\$ 260,000 as a co-financing partner for the development of energy efficiency investments in selected participating countries including the Russian Federation.

5. Operational Focal Point Endorsements

1. Mr. Vasiliy Podolyako, Deputy Minister of Natural Resources and Environmental Protection, GEF Focal Point for Belarus, Ministry of Natural Resources and Environment, Belarus, 9 August 2004;
2. Ms. Fathme Iliaz, GEF Focal Point for Bulgaria, Ministry of Environment and Water, Bulgaria, 5 July 2004;
3. Ms Gordana Kozuharova, Head of Department for European Integration, GEF Operational Focal Point, Ministry of Environment and Physical Planning, Former Yugoslav Republic of Macedonia, 2 September 2004;
4. Ms. Liliana Bara, Secretary of State for European Integration, GEF Focal Point, Ministry of Environment, Romania, 8 July 2004;
5. Dr. Mirolsav Nikcevic, GEF Focal Point, Ministry Science and Environment Protection, Republic of Serbia, 12 July 2004;
6. Mr. Anatolii Hrytsenko, Deputy Minister, GEF Focal Point, Ministry of Environmental Protection, Ukraine, 28 October 2004.
7. Mr. Valentin Stepankov, Deputy Minister, GEF National Focal Point, Ministry of Natural Resources, Russian Federation, 01 September 2005.
8. Mr. S. Kesikbayev, Acting Minister, GEF Focal Point, Ministry of Environmental Protection, Kazakhstan, 27 May 2005.

6. IA Contact:

Olivier Deleuze, Officer-in Charge, UNEP/GEF Co-ordination Office, UNEP,
Nairobi, Tel: (254 20) 762 4686; Fax: (254 20) 762 4041/42; Email:
Olivier.Deleuze@unep.org

LIST OF ACRONYMS/ABBREVIATIONS

ARENA-ECO	Agency for Rational Energy Use and Ecology, Kiev, Ukraine
BEEF	Bulgarian Energy Efficiency Fund
CEB	Council of Europe Development Bank
CIS	Commonwealth of Independent States
CBA	Commonwealth Bank of Australia
CDC IXIS	Caisse des Dépôts et Consignations IXIS Financial Engineering
CEEF	Commercial Energy Efficiency Financing
DTIE	UNEP Department of Industry, Technology and Economics
EBC	European Business Congress
EBRD	European Bank for Reconstruction and Development
EE21	UNECE Energy Efficiency 21 programme
ECS	Energy and Communications Solutions LLC
EnEffect	Centre for Energy Efficiency, Sofia, Bulgaria
ENSI	Energy Saving International AS
ESCO	Energy Service Company
FEER	Financing Energy Efficiency in the Russian Federation
FFEM	Fonds Français pour l'Environnement Mondial (French GEF)
FREE	Foundation for Romanian Energy Efficiency
HEECP	Hungarian Energy Efficiency Co-financing Project
IEA	International Energy Agency, OECD
IFC	International Finance Corporation
IREED	UNECE Industrial Restructuring, Energy and Enterprise Development Division
MAE	French Ministry of Foreign Affairs
NC	National Coordinator
NCU	National Coordination Unit
NICE	Energy Saving Centre, Nizhny Novgorod, Russian Federation
NPI	National Participating Institution
PCU	Project Coordination Unit
PPP	Public Private Partnership
PVMTI	Photovoltaic Market Transformation Initiative
PSC	Project Steering Committee
REEF	Renewable Energy and Energy Efficiency Fund
RFI	Renaissance Finance (UK) Ltd.
SDG	Solar Development Group
SEEP	Serbia Energy Efficiency Project
SEFI	UNEP Sustainable Energy Finance Initiative
SPV	Special Purpose Vehicle
TCW	Trust Company of the West
UkrESCO	Ukraine Energy Service Company established by EBRD
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNF	United Nations Foundation
UNFIP	United Nations Fund for International Partnerships
UNOG	United Nations Office at Geneva
USAID	United States Agency for International Development
USDOE	United States Department of Energy

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PROJECT DESCRIPTION

BACKGROUND AND CONTEXT

BACKGROUND

1. Eastern Europe and the CIS suffer from severe economic and environmental problems caused by their inefficient and polluting energy systems. At the same time, some of the best opportunities for reducing global greenhouse gas (GHG) emissions will come from investments to improve energy efficiency in these countries. While the Eastern European economies are two to four times more energy intensive than the western market economies, the energy intensity of Eastern European and CIS economies increased sharply during the first decade of economic transition, although it is now well understood that efficient and reliable energy systems are essential for managing economic transition, enhancing environmental conditions and ensuring energy security.

2. In particular, the eight countries that have been selected in the framework of the present proposal have similar characteristics in terms of what has been accomplished so far in the energy sector and what is still missing. While during the last decade, substantial progress has been achieved in the countries of Central Europe as far energy efficiency is concerned, mainly on a regional basis due to the efforts of the EBRD and the EU, the targeted countries in this proposal are still lagging far behind in terms of energy intensity. The reason for this is that for a long time the transition process has not developed at the same pace that in Central Europe, meaning that neither the appropriate financial instruments nor the adapted private structures such as ESCOs could be established. Still today, the issue of making available the necessary financing for energy efficiency and renewable energy investments is not adequately addressed and this justifies the GEF intervention in some of these countries to provide partial solutions (FEER, FREE, BEEF). Belarus is in this respect an excellent example: while in the previous phase of the UNECE EE21 program, a strong pipeline of energy efficiency bankable proposals has been identified in this particular country, these could not be taken on due to the lack of financial possibilities and the absence of ESCOs in the local market. As a result, only two projects could finally, after a long and cumbersome process, be incorporated in a World Bank sovereign loan to Belarus. More generally, in all these countries, although energy efficiency improvements as well as renewable energy investments are badly needed (also because this is the only self-financing method of reducing GHG emissions in this region). at present, financing energy efficiency or renewable energy in Eastern Europe is still a niche industry. Projects may have high internal rates of return, but do not capture the attention of investors or commercial banks because most projects are small and unfamiliar to local lending institutions. Even high IRRs cannot compensate for the high transaction costs banks incur to undertake the due diligence for small projects and to establish political, financial and institutional support for them. In addition, many experts in Eastern Europe know the technical fixes needed to improve energy efficiency in their municipalities, power stations or factories but they do not know how to formulate investment projects so that they meet banks rules, standards and criteria. Bearing in mind the lack of specific incentives in most of the targeted countries to introduce the relevant regulatory, policy and institutional reforms in the energy sector, all these barriers represent a forbidding environment for realising energy efficiency or renewable energy investments.

3. On the one hand, it has become clear that building technical and financial engineering skills, removing policy barriers and giving local stakeholders experience in financing investments are some of the key changes needed to actually achieve GHG emissions reductions on a large scale. In addition, providing a dedicated funding resource where both the public and private sectors can participate is a necessity in order to meet the huge capital needs that are required to achieve a real impact of the energy production and use patterns in these countries.

4. On the other hand, the substantial experience acquired during the last ten years has shown clearly that it is possible to identify, develop and finance energy efficiency and renewable energy investment projects in

Eastern Europe. It has been in particular demonstrated by the European Bank for Reconstruction and Development (EBRD) that one of the best ways to address the issue of financing energy efficiency investments is through the creation of specific intermediaries called ESCOs, that have both the technical expertise and the financial capabilities to invest on behalf in energy efficiency measures or renewable energy projects and are remunerated on the basis of the results achieved under Energy Performance Contracts (EPCs). The EBRD initiated the creation of 16 such private ESCOS, and IFC participated in some of these initiatives. Unfortunately, these ESCOs were mainly created in Central Europe (Poland, Hungary, Slovak and Czech republics) while the development of this successful concept has remained embryonic in the countries targeted by the present proposal, essentially because the local potential sponsors with the adequate technical skills to create such ESCOs have not the necessary financial capacity to bring the necessary equity basis at the level required to set up soundly that sort of new company. Taking also into account the fact that financial markets in this part of the world tend to become more and more liquid and that new equity needs are appearing with the soaring of ad hoc companies created in order to develop electricity energy production through renewable energy sources (wind farms, for instance), this is the main reason that has led to the concept of setting up an equity dedicated facility instead of focussing on loans granting, as described hereafter.

5. In addition, with energy market deregulation, further energy prices rises and reforms introduced in several countries, energy efficiency and renewable energy technologies as well as related services are beginning to become commercially attractive. Several key projects completed recently with the support of the international community had been designed to take advantage of these market conditions by providing capacity building and promoting policy reforms to support energy efficiency and renewable energy investments. But undoubtedly the major bottleneck is unavailability of project finance from dedicated financial instruments since commercial banks are still reluctant to apply project finance models to energy efficiency and renewable energy projects. In the absence of suitable investment vehicles, private banks and private sector investors remain hesitant to commit themselves to this type of project. As a result, under present conditions in Eastern Europe and the CIS, once the pre-feasibility study business plans have been prepared, finding finance for each project is a time consuming and expensive process. Therefore, linking an investment project pipeline to pre-approved and dedicated funds would be the best way, possibly the only way to make significant progress in this field.

6. As a result, the proposed project would address the three following barriers:

- Lack of awareness from the part of national government ministries and local authorities as well as from the private sector regarding energy efficiency and renewable energy issues, particularly from the perspective of creating a non-distorted energy market;
- Lack of expertise in preparing bankable proposals: this barrier has to be rapidly overcome in order to build a pipeline of projects that, in itself, would make the local financial institutions more confident that a market does exist and, as a result, make them more motivated to provide additional financing;
- Lack of a dedicated equity funding source, given that the capital requirements for significant emissions reductions in this region are so large that only a growing market for implementing energy efficiency technologies with private sector participation will really have an impact.

7. The outcome of the project will be solid investments that could represent a reduction of GHG emissions of 10 million tonnes of CO₂ per year, enhanced skills of local experts and policy reforms in participating countries. This estimate comes from the experience of UNEP and UNECE during the last 5 years of developing and obtaining finance for energy efficiency investment projects in Eastern Europe. During that period some USD 9.7 million of investment project proposals were financed. The detailed feasibility studies showed that an estimated 49,000 tonnes of CO₂ could be avoided per year from these projects. This ratio was applied since it was representative of a meaningful sample. Therefore, a USD 200 investment would yield the reduction of approximately 1 ton of CO₂ per year. Hence direct CO₂ emissions reduction for this project stands at 200 million tonnes if we consider a 20 year period, according to GEF standards. Taking into account the possibility the Fund is replicated after demonstrating success, direct post project CO₂ emissions reduction

can be estimated again at a 200 million tonnes level over a 20 year period. Finally, in terms of indirect emissions reduction, a conservative estimate based on the volume of most cost-effective energy efficiency investments, leads to a CO₂ reduction figure of 600 million tonnes over 20 years.

COUNTRY DRIVENESS AND PREPARATORY PROCESS

8. Each of the project countries is committed to enhancing energy efficiency, developing human capacities, strengthening local communities and improving environmental quality. These features of government policies are cited in UNDP National Human Development Reports and in Country Strategy Notes. Improving energy efficiency to reduce greenhouse gas (GHG) emissions is a declared policy priority in the National Communications of Bulgaria (2002); Kazakhstan (1998); FYR Macedonia (2003); Romania (1998); Russian Federation (2003); Ukraine (1998). The present Project has been formulated with the views, guidance and assistance of States and NGO energy efficiency agencies in participating countries. These agencies have presented the project to national GEF Focal Points. The participants in this process include: Belarus State Committee for Energy Efficiency and Control; Bulgarian State Energy Efficiency Agency; Centre for Energy Efficiency EnEffect (Bulgaria); Energy Department, Ministry of Economy, Former Yugoslav Republic of Macedonia; Ministry of Industry, Energy and Trade, Kazakhstan; Ministry of Science, Industry and Technologies and Ministry of Energy, Russian Federation; Romanian Agency for Energy Conservation (ARCE), Ministry of Energy and Mining, Serbia and Montenegro; State Committee of Ukraine for Energy Conservation and Agency for Rational Energy Use and Ecology (ARENA-ECO).

9. The project proposal has been formulated with the experts from all participating countries in a series of intergovernmental meetings beginning in May 2003. The concept for this proposal followed the completion of earlier work on developing energy efficiency investment projects in selected participating countries under the UNECE Energy Efficiency 21 Project during the last three years (see Annex G for a description of UNECE and EE21 activities). The preparatory process began with a working meeting between country experts and financial experts to explore how a dedicated investment fund could be set up. This was structured at the Seminar on Financing Energy Efficiency Investments in Eastern Europe held on 26 May 2003 in Geneva in which participated key public and private financial institutions as well as energy experts: the European Bank for Reconstruction and Development, EBRD; Renaissance Finance International RFI UK Ltd.; US Department of Energy and US Agency for International Development (USAID); Energy Saving International ENSI representing the government of Norway; Energy Saving Centre NICE, Nizhny Novgorod, Russian Federation; Centre for Energy Efficiency EnEffect, Sofia, Bulgaria; State Committee for Energy Efficiency, Minsk, Belarus; World Bank Group/International Finance Corporation IFC; CDC IXIS Financial Engineering; Dexia Bank; TPF/UkrESCO; IMPAX; Energy Communications and Solutions LLC; and SwissRe (Swiss Reinsurance Company) Greenhouse Gas Solutions. As a result, seminar participants recommended that an investment fund be developed to which a pipeline of the countries present or future investment project proposals could be submitted.

10. An intergovernmental meeting of national experts held after the seminar requested the UNECE secretariat to prepare a complete proposal based on an agreed draft (ENERGY/WP.4/2003/4) for a new energy efficiency project targeting these countries and including the creation of a dedicated investment Fund for submission to donors, co-financing partners and potential Fund investors (ENERGY/WP.4/2003/8). A third regional meeting was held on 24 to 26 May 2004 in Geneva to review the development of the present project proposal. The meeting welcomed the recommendation of the UNFIP Advisory Board to submit the proposal for funding to the United Nations Foundation in June 2004. The meeting also expressed appreciation to the French Ministry of Foreign Affairs, French Global Environment Facility (FFEM), the United States Environment Protection Agency (EPA) and the European Business Congress (EBC) for co-financing the project. Participants requested the preparation and submission of proposals to all these supporting institutions and to the GEF through UNEP. A fourth regional intergovernmental meeting of national experts was held on 29 June to 1 July 2005 to review progress on the present submission to the GEF, confirm commitments of

donor institutions and participating countries as well as to consider possible future preparatory activities as required (ENERGY7WP.4/2005/5).

LESSONS LEARNED FROM PREVIOUS FINANCING MECHANISMS

Types of Financing Mechanisms

11. The Baseline Scenarios of all Central and Eastern European energy efficiency projects submitted to the GEF Council identify the major bottleneck to increased investments as being the difficulty of raising project finance in these countries. This simply seems to confirm the conclusion that suitably designed dedicated financial instruments are essential for Eastern European energy consumers to invest in energy efficiency or renewable energy projects.

12. The present proposal is based on the lessons learned from previous initiatives. In order to analyse a meaningful sample of projects, the following section reviews initiatives undertaken in Central and Eastern Europe as well as in other regions of the world, including projects supported by the GEF and others funded by other donors. These projects launched as dedicated financial instruments have been implemented under various forms (grants, equity participation, credit lines and guarantees) but they are always nominally designated as “Funds”. It is therefore important to distinguish between two main categories:

- a large majority of these so-called funds, have been designed and set-up by and for the sole use of developed countries, particularly in Western Europe: usually based on public budgetary resources, these funds have been designed and managed under the state leadership, exclusively for the needs of the countries in which they were set up and are, therefore, very difficult to extrapolate to other contexts, all the more the information on the management issues and actual results are not easy to collect. In most cases, they have been used to subsidise energy efficiency or renewable energy projects through the allocation of direct grants or loans softened by the introduction of a grant portion. In rare cases, solutions such guarantee mechanisms have been tested, always based on public money made available. During the last ten years, public facilities of this sort have also been established in some economies in transition and, more rarely, in a few developing countries, often with the support of bilateral or multilateral donors;
- the second category is composed, on the contrary, of a few initiatives that have tried to closely associate the private sector to the establishment of the dedicated facility, targeting specifically energy efficiency or renewable energy investments. Most of these initiatives have been designed with the view of developing a financial mechanism adapted to the situation of economies in transition or developing countries.

Review of Some Recent Project Finance Initiatives

13. For the needs of the present proposal, a brief assessment of the following projects, pertaining to the second category described above, has been done in order to better understand their key features and draw lessons:

Table 1. Examples of Energy Efficiency and Renewable Energy Financing Mechanisms

Project	GEF Support	Status
Renewable and Energy Efficiency Fund (REEF)	Yes	Closed after failure, but recently restructured as a purely GEF financed fund
Solar Development Group (SDG)	Yes	Closed after failure
Photovoltaic Market Transformation Initiative (PVMTI)	Yes	Work in progress. GEF has approved an extension until December 2010
EBRD Energy Efficiency and Emissions Reduction Equity Fund (EBRD Fund)	No	Closing after full disbursement
Hungary Energy Efficiency Co-financing projects (HEECP 1 and 2)	Yes	Not fully disbursed yet
Africa Rural Energy Enterprise Development (AREED)	No	Seed investment activity ongoing in Africa, Brazil, China.
Commercial Energy Efficiency Financing (CEEF)	Yes	Similar to HEECP but targeting other countries. Work in progress.
Financing Energy Efficiency in the Russian Federation (FEER)	Yes	CEO endorsed
Romania Credit Line (FREE)	Yes	Work in progress
Bulgaria Credit Line (BEEF)	Yes	Not started yet
Serbia Energy Efficiency Project (SEEP)	Yes	Not started yet

14. Keeping in perspective GEF activities in the Climate Change focal area, targeting exclusively developing countries and economies in transition, one may then consider this list as being almost exhaustive since only a few other funds have actually been launched or announced during the last 5 or 6 years, but either with objectives and through mechanisms that were totally different from what is contemplated by the present proposal (for instance the various World Bank CO₂ Funds; the Finn Fund established by Finland with Finnish tied resources); or through initiatives that sometimes include energy efficiency or renewable energy investments but within a scope which is in reality much broader (such as the AIG Infrastructure Fund for Eastern Europe) or as simple advertisements that have never materialised.

As part of the preparation of the present proposal, a review of all these projects mentioned in the above table has been carried out (based on the documentation available on the internet, or sometimes, on discussions with the consultants involved in the project) with a three-fold objective:

- try to understand whether or not, or to which extent, these initiatives had been successful and what lessons could be learned in this respect regarding the design of further projects aiming at setting up new financing mechanisms;
- analyse the nature of the proposed financial mechanism established in order to support energy efficiency and/or renewable energy investment, and compare with the one suggested in the framework of the present proposal;
- analyse the geographical scope of these initiatives and make sure no overlapping or contradicting approach would exist once the project subject of the present proposal is launched.

15. A short description of most of these projects, including some elements of analysis of their status, results and (expected) impact, is provided below, as part of a general analysis of the type of actions that have been undertaken so far, in the financial sphere. It is however interesting to point out immediately a first distinction to be made between energy efficiency projects (i.e. projects aiming at reducing the baseline energy consumption) and renewable energy projects (i.e. projects aiming at producing energy -most often electricity in developing countries- with other means than fossil fuels). Energy efficiency projects often correspond to a demand-side approach (usually at the end-users level) while renewable energy projects often correspond to a supply-side approach (at the energy producer or manufacturing industry levels). Combining these two approaches in the framework of a unique mechanism has then to be analysed carefully, since the financial and economic characteristics of these two kinds of projects are different. Among these key differences between energy efficiency and renewable energy projects, one is of particular relevance for the design of a promoting financial mechanism. It can be said on the one hand that energy efficiency technologies are today relatively well known and available (at least in the developed countries), at an affordable price, leading to energy efficiency investments with a reasonable payback time. However, most of these investments are small, as compared to the banks criteria, (although it is always possible to find, in the industrial sector particularly, some relatively large energy efficiency investments) and since these projects generate only savings that are difficult to capture (negative cash-flow), it is difficult to attract local banks interest for their financing. On the other hand, it is possible to find much larger investments in the renewable energy sector (particularly on-grid investments based on hydro, geothermal or wind resources) but the cost-effectiveness of such projects is much more difficult to demonstrate, taking into account the present costs of the technologies available and the fuel supply risk (with regard to the sustainability of the resource: drought, no wind periods, etc). In addition, when it comes to considering off-grid renewable energy projects, then the established financial mechanisms have to overcome the double barriers that result from investment costs that (i) are not affordable for a large part of the potential consumers and (ii) are still of a too small size for bank financing. The conclusion is that the Fund contemplated under the proposed project will define distinct implementation methods and use adapted skills for both approaches.

16. Another element to take into account is the exact nature of the contemplated financial mechanism. It should be borne in mind that using the word “Fund” may be misleading, since this word may qualify very different realities. For instance, from the table above, we can distinguish at least three types of Funds:

- Funds that only provide equity or quasi-equity: this implies that Special Purpose Vehicles that would be able to receive the equity participation are created (for example, a specific company established to implement and operate a wind farm or an ESCO set up as an intermediary to finance energy efficiency projects): REEF, SDG, EBRD initiatives belong to this category of equity funds which fundamental advantage is that they may involve the private sector as an investor;
- Funds which are just credit lines established with a donor grant (often the GEF), disbursed under the form of loans, usually at commercial conditions: FREE, BEEF, PVMTI and the SEEP are representative of this category;
- Funds that are also based (essentially, at least at the outset) on GEF grant funding, and are used as a guarantee for loans distributed by local banks for energy efficiency purposes: HEECP 1 and 2, CEEF and the newly endorsed FEER project in Russia illustrate this approach.

17. The following considerations regarding how the mentioned initiatives have been designed should by no way be regarded as a judgement: they only serve to highlight some key characteristics of these projects which will be taken into account for the design of the financial mechanism contemplated by this one. Without pretending to make an exhaustive analysis (which is not the goal of the present proposal), it can then be noted that:

- REEF has been so far the most remarkable success ever achieved in terms of raising private capital to set up a dedicated energy efficiency and renewable energy equity fund: however, the project failed, essentially because return expectations had been initially raised at a level that could not be met. This prevented the Fund Manager from identifying sub-projects that would have been able to meet the Fund's criteria. In addition, the world-wide scope of the Fund associated to the Fund Manager small size are probably also factors that played a negative role;
- Similar comments can be made about the Solar Development Fund (SDG/SDF) which focus was not clearly defined (all sizes and types of renewable energy projects, but with a focus on solar products) and too broad in terms of geographic approach. Again, the choice of a centralised management by a Europe based Fund Manager, which made it compulsory to use the services of local subcontractors bearing no responsibility and with no decision-making power, therefore leading to a lack of trust between the subcontractors and the local entrepreneurs, was questionable.
- PVMTI has highlighted the implementation difficulties of an approach exclusively directed to supporting one single technology in a few targeted countries (India, Morocco and Kenya) with potential but not yet an established market, due to its non-affordability for the majority of the local potential users (rural population). In addition, the slow and cumbersome process to close deals (long legal contracts and conditions for disbursement) was a major barrier to get entrepreneurs and local financial institutions motivated until the disbursement of the funds. Nevertheless, PVMTI has helped to create a market particularly in Morocco but has also shown the necessity to obtain the country's interest and support for the technology (case of Kenya), to set conditions that are realistic with the local market and to raise expectations at a level that can actually be met.
- FREE in Romania illustrates the problem that resides in establishing a dedicated credit line providing loans at conditions which are not very different than those offered by the local banks and without the involvement of intermediaries that would be able to identify and prepare the projects (engineering companies, auditors, ESCOs): as a result, three years after launching, the credit line is used at a very low rate and only a few small projects have been approved so far;
- HECCP 1 and 2 is a remarkable approach: as reported in the GEF Private Sector Review, this project is an innovative financial model established in order to provide loans guarantees. This facility has two components: it provides partial guarantees on a subordinated recovery basis to local banks for specified projects they would not dare to finance without additional comfort as well as technical assistance for building capacity in financial institutions and ESCOs. The guarantee facility's main objective is to expand availability of commercial financing for energy efficiency projects in Hungary and to build a sustainable lending market for energy efficiency investments. Only a few banks have participated in the scheme leading to a relatively small number of projects financed under the guarantee facility, mainly because the terms and conditions were not deemed attractive enough by the banks in regard of the constraints of the procedure. In addition, the choice of the country was questionable, since many other incentives from public local sources and international organizations (including the GEF: for instance the UNDP Public Sector Energy Efficiency Project) had also been introduced during the same period in Hungary and have all contributed, to some extent, to the increase in competition, bank appetite for energy efficiency projects, and openness to innovative approaches. As a result, although there is no doubt

HEECP has helped a few local banks in developing an internal knowledge regarding how to appraise an energy efficiency project on the basis of its cash-flows instead of relying on the borrower's balance sheet and requesting high co-laterals and down payments, the degree to which this has led to a new energy efficiency lending business in the country is difficult to estimate. This impact will have to be measured not just by the number of transactions directly guaranteed, but also by the assessment of whether financial institutions have become able to pick up on the guaranteed pilot loans and develop new business lines without need for further guarantees. In conclusion, it will be interesting to analyse the results of this innovative approach in other countries where it has been replicated under CEEF and more particularly in a more demanding environment such as Russia under FEER.

- Since 2000, UNEP has been working to scale up a Rural Energy Enterprise Development (REED) approach through a partnership involving the public purpose investor E+Co, the United Nations Foundation, the Blue Moon Foundation, SIDA and a diverse group of local enterprise development partners. The African programme, AREED, is the most advanced to date with debt investments in 25 sustainable energy enterprises in the countries of Senegal, Mali, Ghana, Tanzania and Zambia. These investments, ranging in scale from \$8,000 to \$175,000, have seeded businesses in the areas of solar crop drying, sawmill waste charcoal production, efficient cook stove manufacture, wind water pumping, solar water heating, LPG distribution and energy efficiency. Although the REED approach seems promising, it is unlikely to grow to any significant scale if linkages between the different stages of investment are not strengthened and commercial investment capital cannot be encouraged to more significantly participate at earlier stages of a sustainable energy enterprise's development. New approaches are needed that better link the seed capital approach to more mainstream energy investment activity.
- The UNEP led MEDREP has been so far a great achievement in terms of partnering with state utilities, financial institutions and suppliers. Although it is too early to estimate the success of the solar thermal projects developed in Morocco and Tunisia, MEDREP is focused geographically and in terms of technology to be developed. The flexibility of the donor is a major asset in the development of the projects and most of the funds is now committed. In both Tunisia and Morocco, the success of MEDREP projects is certainly due to the partnerships put together particularly with the state utilities which play a key role as intermediaries and the endorsement of the local government to the projects. In Tunisia, a loan facility was implemented to help local financial institutions build loan portfolio in the solar water heating. In Morocco, MEDREP is implementing a loan/leasing facility for solar water heating systems jointly with the state utility, to install collective SWH installations for around 100 hotels.
- The EBRD Energy Efficiency and Emissions Reduction Equity Investment Fund has been relatively successful so far. Although it is too early to estimate the capital returns, this private equity Fund initiated by the EBRD with the support of a large European bank and which raised Euro 71 million from private French and Japanese investors has worked satisfactorily. Most of the committed capital is now disbursed, certainly because its focus was appropriate: geographically, on a few countries only (essentially Hungary, Poland, Czech Republic, Slovakia) and in terms of projects, on energy efficiency investments (which is the major problem of these targeted countries) rather than on renewable energy projects. Its modus operandi has been very much the establishment of local ESCOs that were able to act as appropriate intermediaries while identifying and bundling relatively small projects which financing could be leveraged by local banks.

Project Links with other GEF initiatives in Eastern Europe and the CIS

18. As previously mentioned, some of the GEF Implementing Agencies have already designed schemes aimed at supporting local banks in granting energy efficiency loans or developing other financing mechanisms. After careful review of the GEF pipeline, four such schemes targeting countries included in the scope of the present project have been recently designed and are listed in the table above. None of them

envisage establishing a USD 250 million public private partnership (PPP) investment fund with significant private sector participation to operate in eight countries. They seek to address project finance raising mainly through partial credit guarantees and loans, each in a separate country with essentially GEF resources and local co-financing:

19. The **Bulgaria Energy Efficiency Project (BEEF)** is to support an increase in energy efficiency investments in Bulgaria through the development of a self-sustaining, market-based financing mechanism. The project's goal is focused on the development and implementation of financially profitable energy efficiency investment. GEF financing of some US\$10 million is to provide the seed capital for (BEEF) (US\$8.8 million) and to fund the TA component (US\$1.2 million). As BEEF seeks to make profit, investment financing and partial credit guarantees would be provided on commercial terms. The BEEF would be designed to attract a substantial amount of commercial co-financing (mostly by banks), in addition to a minimum of 20% contribution to project costs by the borrowers. It is to be noted in this regard the complementary role that might be also played by the EBRD Energy Efficiency credit lines to local banks, for on-lending purposes to local enterprises.

20. The **Foundation for Romanian Energy Efficiency (FREE)** has the same objective in Romania as the BEEF in Bulgaria. The project would achieve its goals by buying down the perceived high risk and high transaction costs of initial investments and overcoming the current barriers to expanding investment, through the creation of a self-sustaining, market-based energy efficiency project development and financing fund. This fund is in reality a line of credit provided by the GEF, which is intended to directly support the implementation of energy efficiency projects on fully commercial lending terms, demonstrating means to overcome current barriers and make profits through such projects.

21. The **Financing Energy Efficiency in the Russian Federation (FEER)** project is to build capacity in Russian financial institutions through the process of developing and marketing specialized energy efficiency finance products targeting appropriate market niches and financing energy efficiency projects as a direct result. The Program aims to establish sustainable lending practices in the Russian financial sector that support energy efficiency investment. The Program's focus on transactions is intended to support financial institutions such that they: a) understand that energy efficiency projects are viable investments that improve the financial stability of their clients and reduce the banks' overall risk exposure; b) examine industry related loans and leases from an energy efficiency perspective; c) actively build a portfolio of energy efficiency projects; and (d) develop specialized financial products which target niche markets for energy efficiency finance. IFC will employ contingent financing which uses GEF resources to leverage IFC and private capital. The project will provide partial guarantees, credit lines and related credit enhancement mechanisms to support the financing of energy efficiency projects, energy efficiency product manufacturers and energy efficiency service providers by domestic financial institutions. A Technical Assistance (TA) program is targeted at a range of key stakeholders in order to facilitate development of the energy efficiency market.

22. In addition to these three main projects, but with a completely different objective, one could also mention the Serbia Energy Efficiency Project for Serbia and Montenegro, which focus is on residential buildings and which includes the setting up of a public facility to be established by the Serbian Government.

Conclusions for the Design of the Present Project

23. It appears useful to provide here a few general comments that will justify the choices that have been made while designing the new proposal, as described in the following sections:

- Experience with the setting up of a fully-fledged private equity Fund dedicated to the financing of energy efficiency and renewable energy investments is relatively limited: only a few initiatives that have been developed during the last years can be documented so far (REEF, SDG, EBRD) and these do not

constitute a sufficiently representative sample to fully enable to judge the relevance of the concept of an equity Investment Fund, all the more results are contrasted, from relative failure to estimated success;

- These initiatives however demonstrate the feasibility of attracting private investors to what is still perceived as a high-risk market. But the difficulties faced by some of the attempts may have had a negative impact on the financing and investors communities, which may have lost trust in the actual interest of these mechanisms. On the other hand, the worsening evolution of the world climate change situation is leading a number of key stakeholders in the private sector to adopt a more aggressive and bold attitude, provided the lessons of previous initiatives are transparently taken into account;
- Among these lessons, those of particular importance are as follows:
 - expectations for private investors in terms of returns should not be raised at a level that obviously could not be met. Although the recent (and maybe long term) increase of energy world prices make energy efficiency and renewable energy investments more and more competitive from a macro-economic perspective, this is not always translated in micro-economic terms in the present context of energy policies and domestic energy tariffs in the targeted countries. In other words, it is not reasonable to speculate on rapid high returns from this kind of investments. This leads to the idea that investors profile should be more the one of “patient” capital providers, ready to accept, at least in the short term, lower returns than those they might be accustomed to expect from other types of investments;
 - nevertheless, lower remuneration of the capital invested should be matched by a reduction of the perceived risk. It is therefore necessary to design a scheme that would allow shifting the risks away, at least partially, from the private sector to the public participants. This can be achieved, for instance, by buying down the cost of equity for the private investors. In reality, however, the risk for the investors in an Energy Efficiency and Renewable Energy Fund, lies less in the investments themselves which are now pretty well known, than in the absence of projects. The risk of poor quality of the projects the Fund will invest in still exists but can be very much mitigated by the demonstrated skills and experience of a carefully selected Fund Manager (which role is key, as indicated previously when analysing the cause for failures of some past projects) and by the setting up of internal bodies within the Fund (Investment Committee, Audit Committee) that would supervise the Fund Manager activity;
 - to address the issue of quick disbursement of the Fund in a number of good quality projects, accompanying measures have to be taken, even before the official launching of the Fund, in order to identify a pipeline of suitable proposals, susceptible to meet the Fund criteria, and to overcome the possible institutional difficulties or barriers that may still exist, from an administrative, regulatory or institutional perspective, in the targeted countries. In this regard, the focus should be on what is likely to be the most promising market, clearly the energy efficiency sector in Central and Eastern Europe, while leaving it open the possibility to include some good renewable energy projects when their cost-effectiveness can be ensured (for example, hydro, geothermal or biomass projects).
 - finally, the Fund structuring and design must result from a consensus among the investors: it will therefore not be the intention of UNEP or UNECE to define the Fund architecture and /or to manage it. On the contrary, the process will lead to give responsibility to a Lead Investor and to specialised financial institutions with proven experience in setting up this kind of financial mechanisms and in fund raising, while UNEP and UNECE will take an active part in managing the capacity building and technical assistance components.

24. The proposal described in the following sections incorporates all these elements of feedback as discussed above. In addition, it takes also into account the fact that in some of the countries in the region, particularly Russia, Romania and Bulgaria, other GEF supported facilities are or will be established, as discussed in previous paragraphs. It has been explained why the approaches in these cases cannot be compared to the one contemplated by the present proposal which aims at developing a majority privately owned instrument: in fact they are highly complementary. The Fund envisioned in the present concept will

provide equity and quasi-equity to special purpose vehicles (usually around one third of the total capital needs) and these entities will have, in all cases, to find on the local market the debt portion needed to finance the projects. Apart from finding this debt portion directly from local commercial banks, a solution will also be provided through the mechanisms set up in the framework of these three projects. Therefore, contacts have taken place with the tasks managers and the fund managers of these projects in order to ensure a close coordination between the new proposed Fund and these various facilities is established. It should be however emphasized that the most powerful instrument to trigger the realisation of energy efficiency investments is through the creation of Energy Service Companies (ESCOs), as demonstrated by the successful track record of the EBRD in Central Europe and also by the positive results of the GEF supported EMC project of the World Bank in China and the IFC HEECP project in Hungary. The countries targeted by the present project unfortunately lack these kinds of private structures, mainly because the local potential ESCO sponsors lack the equity basis to form such companies at the adequate level of reliability and creditworthiness. The proposed Fund will precisely address this issue, which will help the setting up of ESCOs and other similar Special Purpose Vehicles (SPVs), susceptible to bundle a large number of relatively small energy efficiency investments or renewable energy projects that might not be directly financed by local or international banks: it is then obvious that these SPVs might become an important user of the above mentioned GEF established facilities, when implemented, either directly or through their local partner banks. It is therefore clear that the proposed Fund, not only will not weaken on-going GEF supported activities, but, on the contrary, will provide added value to these existing or forthcoming facilities.

RATIONALE AND OBJECTIVES (ALTERNATIVE)

25. Given this background and analysis of previous initiatives, the present project will strive to complement the various initiatives mentioned above in some of the targeted countries, while providing a first financing source in those countries where these initiatives have not taken place so far. As already emphasized, this project draws on lessons from previous funds and mechanisms set up by the European Bank for Reconstruction and Development (EBRD) and DEXIA or the International Finance Corporation (IFC) among others, including also the newly created CO₂ Fund set up by Caisse des Dépôts et Consignations, Fortis Bank and DEXIA. Therefore, some of these institutions are anticipated to participate in the project as far as Objective One described below is concerned, as a participant in the Fund and/or in its design (see EBRD letter of intent in Annex F).

26. The objective then is to develop a US\$ 250 million dedicated Investment Fund under a public-private partnership, meaning that the Fund would attract and be constituted through capital commitments made by investors from both the public sector (from the targeted countries as well as from other interested countries) and the international private sector, in a proportion to be further analysed during the Fund preparation, but presently estimated around 65% private and 35% public. The status of the capital commitments would be different for the public and the private portion, since it is expected the public part will play a mitigation risk role vis-à-vis the private part, this role being also further refined under Objective One of this proposal. The contemplated public-private Investment Fund will provide equity or quasi-equity to project sponsors directly through the creation of Special Purpose Vehicles or indirectly through the setting up of Energy Service Companies (ESCOs) that would be able to bundle small energy efficiency projects together in the framework of Energy Performance Contracts (EPCs).

27. The Equity Investment Fund proposed under this proposal would be a dedicated instrument to provide finance for (a) investments that have been already prepared during the previous phases of UNECE programmes Energy Efficiency 2000 and Energy Efficiency 21 (EE21) and therefore constitute a well-defined initial projects pipeline and (b) for new investments that will be identified during the present project as a result of Objectives 2 and 3. Most of the projects that have already been identified during the previous phases of Energy Efficiency 2000 unfortunately could not be funded until now, precisely because of the lack of an appropriate financing mechanism that imposed an inefficient case-by-case approach towards the financial institutions. This pipeline will have to be reviewed and updated by the Fund Manager who will also need to

identify new energy efficiency and renewable energy projects in accordance with the Fund's pre-established eligibility criteria, to complement this initial pipeline. The Fund structure is described more fully in the section on Project Activities below.

28. The project is designed to have three objectives as follows:

Objective 1: Establish a public- private partnership fund in four steps:

- (a) **Structure and prepare the investment fund** under the leadership of a Lead Private Investor including establishing the investment objectives, investment structures, commercial success criteria, sub-projects eligibility criteria, conditions, exclusions and restrictions, hurdle rate, expected returns, exit strategy, coverage by sector and geographical coverage, potential fund size, market, management structure and costs, etc.
- (b) **Analyse the financial, legal and fiscal issues** including the capital structure and all necessary legal arrangements with investors;
- (c) **Solicit public sector entities** from both the targeted countries and other western countries as well as private sector investor participation, on the basis of an investment memorandum to be prepared as part of the activity and;
- (d) **Select an experienced fund manager** through internationally approved procurement procedures.

Objective 2: Develop the skills of the public and private sector experts at the local level to identify, design and submit bankable projects for financing to the Fund Manager.

Objective 3: Raise the general awareness regarding energy efficiency and renewable energy and provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support the investment proposals developed in the framework of the project.

PROJECT ACTIVITIES/COMPONENTS AND EXPECTED RESULTS

29. The project will undertake three types of technical activities, each one related to an Objective. These are for the design and start-up of the investment fund under Objective One, the preparation and technical appraisal of energy efficiency investment project proposals under Objective Two and the advisory services which will include technical assistance under Objective Three. The main features of the technical activities are summarised below.

30. **Investment Fund Design and Start-Up** will involve initially the preparation of an investment memorandum under the responsibility of a Lead Investor, likely to be a large private financial institution (see letters of interest of potential private sector participants in the Fund, contained in Annex F of the present Project Document), to be sent out towards potentially interested public and private investors and describing in depth the Fund's features and characteristics as well as the legal and fiscal modalities for investors to enable them to make commitments to the Fund. This will be followed by a consultative process through meetings and investor seminars to advertise the Fund and discuss the key issues related to its establishment with the potential investors. This task will be supervised by a reputable financial engineering company with a proven track record in developing such financial mechanism and approaches. Technical activities will be completed by preparation of the terms of reference for the selection of a Fund Manager and the organisation of an international tender for engagement of the Fund Manager.

31. **Preparation and technical appraisal of investments** is a process beginning with agreements with the Fund Manager and Fund investors on the investment selection criteria, especially the technical performance of projects that can generate acceptable internal rates of return (IRR) and meet CO₂ emissions reduction targets. These criteria will be disseminated to national teams and become part of the project

identification and selection procedures developed during the technical and financial sessions of adapted training courses. Once candidate investment proposals have been identified, they will be prepared in three phases: technical development, financial engineering and submission/negotiation to the Fund Manager and/ or other sources of financing. International technical experts will assist local project participants in the technical preparation of proposals and work with them on the evaluation of the projects for clearance and reformulation for approval.

32. **Advisory Services:** the project will provide technical assistance through printed and electronic publications to inform experts, policy makers within city administrations, local authorities, energy utilities and national ministries about the policy reforms needed to introduce energy efficiency and renewable energy investments. This aspect continues the broad policy reform and market formation activities of earlier work in this field. New studies will be undertaken and a broad analysis linked to case studies will be directly related to a series of specific investment project proposals. The specificity of the studies provides the value added in which policy makers at different levels can be shown what direct social, environmental and financial benefits will be forthcoming from a specific project or series of projects given that particular policy reforms are made. These may be economic, financial, energy pricing and tariff structure, institutional or comparatively simple administrative reforms. But they are often necessary changes for economically attractive and pre-feasibility study business plans to become bankable projects, which can be financed by the investment Fund.

33. As a result, the project activities will provide an opportunity for investors to participate in energy efficiency projects through a professionally managed Investment Fund established within the framework of the project; develop the skills of the private and public sectors at the local level to identify, develop and implement energy efficiency and renewable energy investment projects; and provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support these investment projects.

OBJECTIVE 1: ESTABLISH A PUBLIC PRIVATE PARTNERSHIP FUND

34. The proposed Fund will be established as a public-private partnership, which means that capital investors in the Fund will come from both the public sector and the private sector. It is the aim of the project and of the present submission to the GEF to fully determine who are the investors and how the Fund will be actually structured and run. However, based on the preliminary discussions that have already taken place during the preparatory phase of this project, a few basis principles can be delineated as follows:

Capital Commitments and Fund Size

35. During the preliminary assessment phase, EE21 has received letters of commitment (see Annex F) from various institutions proposing to create a Fund ranging between US\$ 100 million to US\$ 250 million. It is therefore targeted to set up a first closing for the Fund at the level of US\$ 100 million, with further possible closings until reaching the final objective of US\$ 250 million. The objective is that the first closing would occur at the latest nine months after the dissemination of the official Investment Memorandum describing the general terms and conditions of the Fund, so that the Fund can actually start its activities, while the final closing would occur no later than one year after this first closing has taken place. In order to make this Fund sufficiently attractive to private sector investors, it is intended to mitigate the risks for the private sector through a contribution of the public sector representing around 35% of the total capital commitments. This public participation is expected to come from the governments of the targeted countries in the region where the Fund will operate, as well as from governments from OECD countries or other possible donors **but not from the GEF**. This public investment in the Fund will not be considered as grants or subsidies: when the Fund will exit from its investments (see below), these capital commitments will be recovered by the public investors as it would be the case of the private investors, the difference being that they may, in conditions that will be further elaborated during the Fund structuring, simply yield a return lower than the one allocated to the private investors. This would contribute to reduce the risk of these private investors, in order to provide them an incentive to commit to the Fund, but will at the same time lead to an uneven treatment of investors. This issue will be fully examined during the design phase of the Fund, but is not considered at this stage to be a major obstacle since it is already common practice in the case of companies where different categories of shares involving different rights co-exist.

36. As previously mentioned, various private financial institutions have already made proposals to invest in this Fund at a significant level (more than US\$ 10 million) including:

- SwissRe, Greenhouse Gas Risk Solutions;
- Conning Asset Management;
- TCW Energy and Infrastructure Group;
- Commonwealth Bank of Australia;
- Caisse des Dépôts et Consignations leading a consortium of European banks including Group San Paolo, Bayerische Landesbank and Caixa Geral de Depositos.

In addition, the European Bank for Reconstruction and Development (EBRD) has expressed at several occasions its interest in participating in the project as an investor in the Fund (see Annex F), subject to an adequate structure be designed.

37. During the fund raising phase, other potential investors will be sought, from the financial sector with which UNEP has established a strategic partnership through the UNEP-FI and the SEFI programmes and from the industrial sector, particularly in the energy and utilities area. The following categories of investors are most likely to be solicited:

- Private and public financial institutions: banks and insurance companies based in various parts of the world (USA, Europe, Asia) including local financial institutions in the beneficiary countries;

- Large industrial groups from the targeted countries as well as from western countries that are committed to sustainable development including multi-national petroleum companies, large energy utilities, service industry companies engaged in the environmental sector;
- Targeted funds and green funds created to be leveraging tools in the environmental sector.

38. It is clear that this fund-raising phase is a very sensitive one and that no guarantee can be given that it will be successful. The risk of failure is however mitigated, given the precedents of REEF and the EBRD Funds that were both able to attract significant volumes of private investment. In addition, the intensive preparatory work with key potential investors such as Swiss Re indicates that there is now a growing appetite from the private sector for these types of mechanism, provided they can be made comfortable on the management issues.

Fund Investments

38. The Fund will invest exclusively in energy efficiency and renewable energy projects that have a quantifiable impact on the reduction of greenhouse gas emissions and that are located in the eight targeted countries: Belarus, Bulgaria, Kazakhstan, Former Yugoslav Republic of Macedonia, Romania, Russian Federation, Serbia and Montenegro and Ukraine. A list of eligibility criteria will be established to further determine which kind of projects will be deemed acceptable and under which conditions and/or restrictions. It is expected that the fund will be able to provide equity and quasi-equity financing for setting up project companies and Special Purpose Vehicles (SPV) particularly in the case of on-grid renewable energy projects as well as Energy Service Companies (ESCOs) particularly for dealing with small scale energy efficiency investments. The conditions and limitations under which these instruments will have to be used will also be further defined during the course of project operations and will result in an Investment Memorandum to be agreed on by all investors in the Fund that will describe, inter alia:

- the technical nature of the sought investment and/or the technologies eligible to the Fund in both the energy efficiency and renewable energy fields (for example: co-generation, tri-generation, boilers refurbishment, district heating rehabilitation, street lighting renovation, biomass boilers, mini-hydro equipment, etc);
- the restrictions and limitations the investors and the Implementing Agency will want to introduce in establishing criteria for the Fund (for example: no intervention in companies producing tobacco or weapons, no more than X% in one single country or no more than Y% in one single investment, co-financing requirements and modalities, compliance with GEF policies and COP guidance with respect to CDM and JI procedures, etc);
- the Fund's internal regulations, procedures and bodies (Board of Directors, Investment Committee, Policy Committee, co-financing rights and duties, etc);
- legal and fiscal issues for the investors.

Fund Duration and Exit

40. Given that an important pipeline of projects has been established in previous phases of the EE21 program and that a number of bankable proposals have been prepared, it is anticipated that the Investment Period (the time during which the Fund will invest all its aggregated capital commitments) will not exceed four years from the official closing date. It is then anticipated that the Fund will be able to exit from its investments (by selling its shares or through any other predetermined means) after three to four years, bringing the total Fund duration to around seven or eight years. It should be noted that the envisaged structure is not a revolving fund: once capital is committed, the returns on investments are obtained in the form of dividends or at the exit date and cannot be reinvested, unless the Board of Directors decides otherwise.

Fund Returns

41. As previously indicated and as in any other investment fund, the proposed Fund will make its returns from the dividends received on its shares in the projects it has invested in and from the profit made at the exit time through the selling of these shares. It is one of the key tasks of the Fund Manager to build the contractual arrangements when investing in a project so that the selling of the shares at an appropriate time can be realised in the best possible conditions. It is well known however that although energy efficiency and renewable energy projects may be cost-effective, they have often difficulties in yielding the same level of returns which private investors are accustomed to obtaining from investments in other sectors because of the range of technologies available, energy pricing policies and tariff structures. This is why it is anticipated that, as an incentive for the participation of private sector institutions, the status accorded to the public and private capital commitments will be different. While the final scheme is to be defined in detail and approved by the various public and private targeted investors, it will be based on the following principles:

- If the global fund return is above a certain threshold, public and private investors will receive the same level of returns in proportion to their commitments;
- If the global fund return is below various predetermined thresholds, the public investor's returns will be reduced accordingly so that the private sector share can reasonably be increased and thus its risk mitigated.

Fund Management

42. The Fund will be managed by an experienced Fund Manager that will be hired through an international tendering process, on the basis of terms of reference and selection criteria that will be established during the project, under Objective One. Fund investors will be solicited for proposals of candidates for Fund Manager within the framework of the international tendering process. In general the Fund Manager will:

- Supervise the fund raising phase;
- Prepare all legal documentation regarding the establishment of the Fund and the investors capital commitments;
- Prepare the Fund's guidelines and procedures, as well as the investments eligibility criteria for Fund's Board approval;
- Identify the possible investments, make all necessary technical and financial due diligence, negotiate with sponsors, partners, technology suppliers and possible co-financiers and prepare the projects submissions to the Fund's internal bodies such as the Investment Committee and the Policy and Strategy Committee;
- Prepare all necessary legal and fiscal documentation and agreements for signing by the Board with support of a legal and fiscal advisor, implement and monitor these projects;
- Report to the Board of Directors of the Fund;
- Organise the Fund exit from the projects in the best possible conditions.

The Fund Manager will receive an annual remuneration to be negotiated, paid by the Fund. As an incentive to produce good results, the Fund Manager also usually receives a portion of the actual Fund returns, the carried interest.

Activities Related to Objective 1

43. Activities related to Objective 1 will include:

- (a) The preparation of an Investment Memorandum under the responsibility of a Lead Investor to be sent out towards all potentially interested public and private investors and describing in depth the Fund's features and characteristics as well as the legal and fiscal modalities for investors to enable them to make commitments to the Fund;
- (b) An analysis of the technology risks of energy efficiency and renewable energy technologies and political risks of participating countries based on the past experience of UNEP, UNECE, and other initiatives from a wide range of international sources;
- (c) The organisation of meetings and workshops in various places in OECD countries as well as in the targeted region to advertise the Fund, discuss the key issues related to its establishment with the potential investors and alter if needed accordingly the proposed structure to meet the specific needs or requirements of the key investors;
- (d) The selection of a reputable legal and fiscal advisor susceptible to establish the Fund in the most transparent and cost effective conditions, in an acceptable fiscal location meeting international rules and standards, and to prepare all necessary legal agreements between the Fund and its investors as well as between the Fund and its investment companies;
- (e) The preparation of the terms of reference for the selection of a Fund Manager and the organisation of an international tender.

44. Outputs Expected of Objective 1

- (a) **An Investment Memorandum:** a document legally enforceable to be printed and broadly disseminated among the financial and investors community,
- (b) **Investor Seminars:** presentations and workshops to describe and discuss the main characteristics of the proposed Fund;
- (c) **An Energy Efficiency Investment Fund:** establishment of a public private partnership Investment Fund to provide US\$ 250 million of equity or quasi equity to project sponsors;
- (d) **The selection of an experienced Fund Manager**

OBJECTIVE 2: DEVELOP THE SKILLS OF THE PUBLIC AND PRIVATE SECTOR EXPERTS AT THE LOCAL LEVEL TO IDENTIFY, DESIGN AND SUBMIT BANKABLE PROJECTS FOR FINANCING TO THE FUND MANAGER.

45. This objective is to prepare a substantial pipeline of possible investments in the energy and renewable energy sectors which meet the eligibility criteria established by the Fund and representing an investment volume of at least US\$ 2 billion in the eight participating countries.

Activities Related to Objective 2

- (a) Creation of country teams through a selection process to be defined of local experts suited to the task and design of specialised training sessions as well as the necessary communication and pedagogic tools and material, with the view of making the local participants able do prepare energy efficiency or renewable energy bankable proposals
- (b) Selection of the trainers and organisation of the training sessions in all the targeted countries
- (c) Collection of data related to the investment projects identified by the local experts and drafting as part of the training of the proposals in a format that would be satisfactory to the Fund and to other co-financing institutions.

46. **Outputs Expected of Objective 2**

- (a) **Investment Project Development Standards:** preparation of multilingual (English, French, Russian) terms, definitions, units of measurement and templates suitable for project selection and standard presentation of energy efficiency and/or renewable energy investments developed within the framework of the project with details of total project cost, investment requirements, internal rates of return, CO2 emissions reductions, etc.
- (b) **A network of energy efficiency managers in participating countries:** Local teams in each country trained and linked by Internet for communications, information transfer and distance learning;
- (c) **Trained experts in project development, finance, business planning:** at least 250 energy managers, energy auditors, consultants and commercial bank managers trained during adapted training courses of 2 sessions each including Internet assisted learning;
- (d) **Investment project pipeline:** economic and technical clearance by expert teams of energy efficiency and/or renewable energy investment projects from the project training courses and the National Participating Institutions for submission to the Investment Fund.

OBJECTIVE 3: RAISE THE GENERAL AWARENESS REGARDING ENERGY EFFICIENCY AND RENEWABLE ENERGY AND PROVIDE ASSISTANCE TO MUNICIPAL AUTHORITIES AND NATIONAL ADMINISTRATIONS TO INTRODUCE ECONOMIC, INSTITUTIONAL AND REGULATORY REFORMS NEEDED TO SUPPORT THE INVESTMENT PROPOSALS DEVELOPED IN THE FRAMEWORK OF THE PROJECT.

47. **Activities Related to Objective 3**

- (a) Identification of the gaps in terms of energy efficiency and renewable energy awareness and organisation of training sessions at local levels;
- (b) Analysis of the local energy related institutional framework and identification of the possible barriers to energy efficiency or renewable energy developments, as well as concrete reforms to undertake;
- (c) Organisation of seminars at decision-makers level allowing the presentation and an in-depth assessment of the proposed reforms as well as the necessary means to be made available in order to enforce these reforms;
- (d) Organisation of missions in the field by international experts to assist municipalities and central administrations in the implementation of the suggested reforms.

48. **Outputs Expected of Objective 3**

- (a) **Economic, Institutional and Regulatory Reforms:** A broad analysis of policy reforms needed to promote energy efficiency and renewable energy investments, reduce fuel poverty including case studies of individual projects or classes of projects based on at least 3 workshops with international and local experts;
- (b) **Energy Efficiency and Renewable Energy Strategy:** Senior decision makers from participating countries to examine needed policy reforms and to promote a sound business environment through ad hoc official seminars;
- (c) **Policy Advisory Services:** Series of recommendations reports by international experts to advise city administrations, local authorities and national ministries on reforms to support energy efficiency investment projects.

STAKEHOLDER INCORPORATION

49. The project stakeholders and beneficiaries include a wide range of consumers, groups and agencies in South-Eastern Europe, Eastern Europe and the CIS which should experience financial and non-financial benefits over the life of the proposed project and beyond from the implementation of the sub-projects, dissemination and replication of the successful experience of project outputs. These groups include:

- Industrial and commercial sector consumers
- Households and apartment building occupants
- City and regions administrations
- Municipal energy management teams
- Hospital and health care managers
- District heating utility managers
- Commercial banks
- Investment project managers
- National ministries
- Non-governmental organisations

50. Based on a series of successfully financed investments by the project's Investment Fund, national and international companies and banks will be more inclined to enter new markets for energy efficiency products, services and investments. At the same time, national ministries and administrations will have additional support for implementing energy efficiency strategies from local experience and will benefit from targeted information on how other countries have developed energy conservation laws, standards and regulations. The groups previously mentioned have been consulted on the orientation of the project through meetings of the UNECE in the framework of the Energy Efficiency 21 Programme. Local communities in Eastern European cities have repeatedly expressed the need for enhanced communications, skills and policy reforms to develop and implement energy efficiency investment projects. Representatives of these groups have also expressed the need for this work to the UNECE Committee on Sustainable Energy, UNECE Committee on Environmental Policy, the Environment for Europe process, the Commonwealth of Independent States Inter-State Economic Committee and other international meetings.

INSTITUTIONAL DEVELOPMENT AND HUMAN CAPACITY BUILDING

Institutional Development

51. During recent Institutional development activities of Energy Efficiency 21, a series of studies have been produced on policy reforms needed to promote market formation and support energy efficiency investment project development including:

- Guide for the Promotion of Energy Conservation Regulations in Economies in Transition (ECE Energy Series 16 - 2000)
- Energy Efficiency and Energy Security in the CIS (ECE Energy Series 17 - 2001)
- East West Energy Efficiency Standards and Labels (ECE Energy Series 18 – 2001 CD-Rom e-Book)
- New Energy Security Threats (ECE Energy Series 19 – 2003 CD-Rom)
- CO₂ Emissions Trading Handbook (ECE Energy Series 20 – 2003 CD-Rom e-Book)
- Reforming Energy Pricing and Subsidies (ECE Energy Series 21 – 2003)
- Experience of International Organizations in Promoting Energy Efficiency in Belarus (ECE Energy Series 22 – 2004), Bulgaria (ECE Energy Series 23 – 2004), Kazakhstan

(ECE Energy Series 24 – 2004), Russian Federation (ECE Energy Series 25 – 2004), Ukraine (ECE Energy Series 26– 2004)

- Energy Efficiency Policies and Measures in Europe (ECE Energy Series 27 – 2004 CD-Rom)
- Financing Energy Efficiency and Climate Change: A guide for Investors in Belarus, Bulgaria, Kazakhstan, Russian Federation and Ukraine (ECE Energy Series 28 – 2004 CD-Rom).

52. A wide range of techniques have been used to produce these studies: negotiations through multilateral expert groups; mixed national and international expert teams; international consultant and contractor reports and surveys, seminars and symposia. All these tools and existing instruments will be used in the framework of the present project while new complementary studies will be carried out on a case by case basis in the various countries, depending on the local conditions and obstacles identified for the financing of energy efficiency and renewable energy projects.

Human Capacity Building

53. During the last three years, some 150 energy efficiency managers have been trained in courses on business planning and financial engineering under the Energy Efficiency 21 Project. These training courses have established a level of expertise, which will be developed more deeply and applied more broadly during the present project. Recent experience has shown that trainees from earlier courses can serve as trainers subsequently. For example, the energy efficiency experts trained in EE21 financial engineering courses from Nizhny Novgorod (Russian Federation) that developed and successfully obtained financing from the World Bank for energy efficiency projects, served as trainers for EE21 courses given in Kazakhstan during 2001-2002.

54. The proposed project will use this type of experience to amplify impact of recent results. The training courses and network development will be oriented to:

- Promote the skills of recently trained experts to serve as trainers for experts from their own and neighbouring countries;
- Increase the coverage of training and capacity building to include more municipalities in additional participating countries;
- Identify and train experts to work directly with the Fund Manager of the Investment Fund;
- Develop training courses that deal with a wider range of climate change mitigation technologies including renewable sources of energy and energy efficiency, on both the demand and the supply side;

RISKS AND SUSTAINABILITY

55. The project will demonstrate that the concept of an energy efficiency and renewable energy investment equity fund is a financially sustainable opportunity for public and private sector investors. In order to do this, it will show that a series of cost-effective investment projects can be financed by the Fund so that investors will be interested in participating in this Fund and subsequently in other similar investment fund initiatives. Initially, some public sector resources (aside from the GEF or other co-financiers requested contribution) will be used to provide a risk reduction buffer for private sector investors. The Fund will focus on projects that meet criteria established by both the UNEP/ GEF and the Fund investors. Projects with internal rates of return (IRR) set at a reasonable level and an acceptable level of risk will be a priority for the Fund Manager. The Fund will target projects that significantly reduce GHG emissions and can be replicated. As a result, the Investment Fund itself could also be repeated at much lower cost if it proves successful.

56. The basic concept is that the Fund investments will be highly leveraged, in the first place because other equity contributions from co-investors will be sought and, secondly, because additional financing will come under the form of loans from local banks or international financial institutions. From this standpoint, the facilities established in countries like Romania, Bulgaria or Russia with GEF support will possibly be used,

when and if this will not be considered as duplicating GEF financing for the same investment. This risk is however very much mitigated considering GEF support to this project will not be directed to the Fund itself, but just to its design. In addition, individual investment projects will be sustainable after the completion of the project since they will continue to achieve savings after investments have been repaid.

ECONOMIC

57. The economic upturn that the proposed participating countries have experienced during the last few years with sharply rising GDP growth⁴, falling interest rates and the continuing rise of foreign direct investments have established a positive economic setting for the proposed project. In addition, persistently high oil prices are another important incentive for increased investments in energy efficiency and renewable energy sources. Assuming there is no overall disruption of investment climate in Eastern Europe and the CIS, economic risks should be very low. Nevertheless, several features of the project should diminish this still further. Risk mitigation measures will include promoting supportive government policies, diversification of the project portfolio and targeting a selection of energy efficiency investments on projects that will enhance productivity. Energy efficiency is a declared policy priority cited in the UNDP National Human Development Reports and in Country Strategy Notes for Bulgaria, Kazakhstan, FYR Macedonia, Romania, Russian Federation and the Ukraine. The project will seek to reinforce these measures through the adjustment of energy prices to reflect the costs of production in line with World Bank policy recommendations and earlier UNECE work on reforming energy prices and subsidies⁵.

58. There is a risk that the project will not attract adequate investor interest or public sector participation. This risk is significantly diminished by the initial interest expressed by key investors to participate in the fund as described in the letters from large potential investors (see Annex F). Much more significant commitments are expected when project operations begin since this will include an intensive fund raising phase. Similarly, another risk to consider is that the project could fail to develop a sufficient volume of bankable energy efficiency and renewable energy projects as has been the case for the Renewable Energy and Energy Efficiency Fund (REEF) and the Solar Development Group (SDG). This risk is also mitigated by the pipeline of pre-feasibility investment project proposals developed in an earlier phase of Energy Efficiency 21 and by the focus on economies in transition countries where the energy efficiency potential is huge.

TECHNICAL

59. The technology risks of energy efficiency and renewable energy investment projects are very low. Indeed the related technologies are well known in both eastern and western countries. The inappropriate choice of technology and its improper use upon installation are the only risks that could reduce projected energy savings and affect potential greenhouse gas emissions reductions. But the careful specification of technology to particular applications and proper project oversight should eliminate risks related to technical choices. Similarly, training and technical assistance on energy management and maintenance regimes should ensure that energy saving targets are met. Indeed, the use of Energy Service Companies (ESCOs) to develop and implement investment projects would mitigate risks further since energy savings are guaranteed under performance-based energy service contracts.

POLITICAL AND INSTITUTIONAL

⁴ Percentage changes in real GDP 2003-2004: Belarus 10.0, Bulgaria 5.5, Kazakhstan 9.3, Former Yugoslav Republic of Macedonia 2.5, Romania 7.5, Russian Federation 6.8, Serbia and Montenegro 7.0 and Ukraine 12.4. Source: UNECE and National Statistical Offices.

⁵ See 'Reforming Energy Pricing and Subsidies', ECE Energy Series No. 21, UNECE, United Nations New York and Geneva 2003.

60. While the economic, policy and legal framework in each beneficiary country from national ministries has to become more enabling, project implementation is aimed at the local level to help establish successful precedents for national policy and international treaty obligations. This should mitigate to some degree the effect of national political and economic instability. It should also reduce the risk of policy inertia and vested interests of utilities as obstacles to reforms. The multilateral character of the project with participating Eastern European and CIS countries will also reduce risks. Should the investment climate for energy efficiency projects become too risky in a particular country, the project can focus more heavily on market formation activities such as capacity building and institution strengthening in that location while using its network of communications and contacts to disseminate progress from other locations.

SOCIAL

61. The social risks of the project are low because of strong stakeholder support. Indeed, the range of beneficiaries will widen as barriers to energy efficiency improvements are reduced and incentives are put in place. The social support for the success of the project is closely related to the self-interest of stakeholders and beneficiaries. Bankable projects will be developed to address beneficiary community needs including, for example:

- environment, climate change and sustainable energy issues will be addressed by projects which reduce air borne trans-boundary pollutants SO_x, NO_x, particulates and CO₂ for local populations and in other countries;
- child health will be advanced by improving the efficiency of hospitals and other child health care facilities to produce budget savings and additional purchasing power to expand facilities or provide enhanced health care products and services;
- preventive health will be advanced by projects that use innovative approaches to improving energy efficiency involving public awareness campaigns, by reducing energy costs and improving the health conditions in public housing;
- institutional strengthening of city administration and their energy management teams will be advanced by projects that help overcome the energy non-payment crisis, create jobs in retro-fitting energy-wasteful buildings and industry or in new industries producing energy efficient products.

62. Internet communications will improve the information flow between stakeholders, beneficiaries and local teams with international experts. These teams will assist municipalities and industries in developing energy efficiency projects, advise on related policy reforms needed to support them and seek finance for proposed investments from the Fund and co-financing sources.

STAKEHOLDER PARTICIPATION

STAKEHOLDER PARTICIPATION

63. The deployment of energy efficiency and renewable energy technologies requires the commitment and contribution of a wide range of stakeholders. It also means that use of these technologies can result in an equally wide array of direct and indirect beneficiaries. This project recognises and incorporates the interests of consumers, municipal administrators, energy managers, health care workers, energy utility managers, commercial banks, national energy policy administrators and parliamentarians. Some stakeholders will improve their basic knowledge from (i) training courses to enhance their financial engineering skills, (ii) workshops on policy reforms, (iii) the review of energy policy reforms, (iv) the presentation of case studies analysing specific barriers to financing economically attractive projects and (v) from a selection of energy efficiency and renewable energy investment projects financed by the Fund. Others will directly benefit from lower fuel bills and additional purchasing power for other priorities. National ministries will have additional support and demonstrable results for the sustainable energy policy priorities. Parliamentarians will have case studies related to specific investments to serve as the basis for revisions to energy conservation laws,

standards and regulations. National and international companies and banks will be more inclined to enter new markets for energy efficiency products, services and investments earlier than they otherwise would.

STAKEHOLDER PARTICIPATION STRATEGY

64. The project is designed to provide for the direct contribution of stakeholders who will also benefit from project activities and outputs. Their participation will be through the Project Steering Committee, policy workshops, seminars, energy policy review, case studies, training courses and in the preparation of investment project proposals that may be financed by the Fund. They may serve directly as National Coordinators, within National Coordination Units, implement specific project activities or participate in project events. The role and participation of the main stakeholders are given below.

- *Industrial and commercial sector consumers:* experts from selected industries and businesses will participate in training courses to prepare investment project proposals while others will attend case-study workshops benefiting from capacity building, investment projects and policy reforms. They would work directly with National Coordination Units (NCU) in each country to implement specific project activities.
- *City and regions administrations:* selected local authorities will take part directly in project activities including hosting workshops and developing energy efficiency and renewable projects while others will be informed by national ministries of the results. The local teams will work directly with the NCU and their views, requirements and results will be represented by the National Coordinators at the Project Steering Committee meetings.
- *Municipal energy management teams:* will take part in training courses and benefit from enhanced skills. Their direct counterparts will be with the NCU but they will also have working relations with training course instructors and international experts who will provide technical and financial clearance of their investment project proposals.
- *Hospital and health care managers:* selected hospitals will participate in the development of investment projects, benefiting from the enhanced skills of their energy manager, institutional reforms, lower fuel bills and additional purchasing power for other priorities. Local managers may also participate in the preparation of the case studies to identify specific barriers to financing energy efficiency projects based on proposals they have formulated. They will work directly with local and international experts, reporting to the NCU.
- *District heating and electricity and gas utility managers:* direct participants will benefit from enhanced skills acquired in training courses, information workshops and investment projects, if financed. Local energy utility managers will be especially involved in the policy reforms related to specific projects since the non-payment and barter payment crisis involves them directly.
- *Commercial banks:* selected managers that take part in the project will benefit from increased capacities to evaluate investment project proposals while others will benefit from project information dissemination. Greater experience in project finance offered by this project will allow commercial bank managers to consider applying such practices more commonly during and after the investment period of the Fund.
- *National ministries:* will participate in the Project Steering Committee and have additional support from all project outputs for implementing energy efficiency strategies from local experience.
- *Parliamentarians:* will participate in international seminars and benefit from targeted information on how other Eastern European and CIS countries have developed energy conservation laws, standards and regulations as well as case studies for specific investment projects related to national policy reforms.
- *National and international companies and banks:* will be more inclined to enter new markets for energy efficiency products, services and investments earlier than they otherwise would.

IMPLEMENTATION ARRANGEMENTS

IMPLEMENTING AGENCIES

65. The co-implementing agencies for the Project will be the United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (DTIE) and the European Bank for Reconstruction and Development (EBRD). The EBRD is very committed to supporting energy efficiency investments and investments related to climate-change mitigation in its region. The EBRD role is to participate actively in the structuring and implementation of the Public-Private Partnership Fund under Objective 1 of the project. This will include all related fiduciary responsibilities in which EBRD will a) work with the private lead investors in the Fund and the Fund Manager to advise on an appropriate Fund structure, based on the extensive experience EBRD has in this field; b) help elaborate the investment guidelines for the Fund including environmental and integrity provisions, to ensure these correspond to the Bank's mandate and to internationally recognised rules and c) perform due diligence according to the Bank's procedures on the proposed Fund Manager. A working group which was already set up in 2005 between UNEP/DTIE and EBRD will serve as the institutional framework for the cooperation between the two co-implementing agencies, in addition to the EBRD participation in the Project Steering Committee meetings, as described in 69 below. Meetings of the working group are scheduled to take place alternatively in Paris and London every three months to review project execution, consultants terms of reference and reports, possible work plan alterations and fiduciary and budget issues. Guidance from EBRD will be sought for all aspects related to the design and implementation of the Fund, including providing the adequate contacts during the Fund Manager selection process and then during the Fund raising phase. While the direct involvement of EBRD is limited to Objective 1 of the project, it is nevertheless intended that progress reports regarding Objectives 2 and 3 will be also presented during the working group meetings, so that the project may benefit from EBRD particular experience in the region and avoid possible redundancies with initiatives already taken by the Bank.

66. The UNEP/DTIE has significant experience in assisting government and private sector decision makers on clean energy issues in developing countries and Eastern European economies in transition. In particular, it has focussed on integration of environmental and social costs of energy production, management and use. It works with a broad spectrum of partners including industrial federations, financial institutions, non-governmental organisations and the private sector. Together with the UNEP Sustainable Energy Finance Initiative (SEFI), the UNEP/DTIE has a proven track record in energy efficiency and project finance related issues as well as a long experience of Eastern European countries. Indeed, it is currently reinforcing its capabilities and skills relevant to the scope of the project, with new staff members joining its existing team to consolidate its institutional capacity in this field.

67. UNEP/DTIE will be responsible, in particular, for the scientific project oversight, co-ordination with other GEF projects (particularly those designed by other IAs and developing energy efficiency related financial mechanisms in countries belonging to the targeted group) and internal reporting to the GEF Secretariat on progress of the project. In addition, UNEP will be responsible for reporting the CO₂ emissions reductions resulting from project activities to national registries and/or international inventories.

EXECUTING AGENCY

68. The project will be executed by the United Nations Economic Commission for Europe (UNECE), Committee on Sustainable Energy, Energy Efficiency 21 (EE21) programme. The Committee on Sustainable Energy is one of seven UNECE Committees: its work programme covers the liberalisation of energy markets, energy security, energy reserves classification systems, pricing policy reforms, energy efficiency and renewable for the 54 UNECE member states in Eastern Europe, the CIS, Western Europe and North America. Launched in 1991 by the Ministerial Conference on Sustainable Development in the UNECE Region held in Bergen (Norway), EE21 is one of the major programmes of this Committee on Sustainable Energy. It is implemented through governmentally appointed National Participating Institutions such as government and NGO energy efficiency agencies in 32 UNECE member states. It is supported by the UN regular budget and

by an extra-budgetary trust fund with financial contributions from government departments, the private sector and foundations. The EE21 includes the participation and advice of bilateral aid agencies, international organisations and international financial institutions. An elected Bureau composed of a Chairman and five Vice Chairmen guides the execution of the EE21 work programme. During the last three years, Energy Efficiency 21 has launched or completed six sub-regional projects that each brought together a selection of interested member states, donors and international institutions.

PROJECT STEERING COMMITTEE

69. As a sub-regional project of Energy Efficiency 21, 'Financing Energy Efficiency and Renewable Energy Investment for Climate Change Mitigation' will be executed under the direction of an ad hoc Project Steering Committee (PSC) comprising National Coordinators (NC) who are representatives of National Participating Institutions (NPI) appointed by the Governments of the eight countries targeted by the Project. The Steering Committee will include representatives of UNEP, EBRD and UNECE as well as the co-financing partners and representatives of other International Financial Institutions active in the region (World Bank, IFC, NIB, Black Sea Development Bank, EIB, Council of Europe Development Bank, etc). Similarly, the UNDP European Regional Office in Bratislava (Slovakia) and the UNDP Resident Representatives in the proposed countries have been contacted concerning their participation in the project and in the PSC. Monitoring and evaluation advisers will also participate in the PSC biannual meetings as observers. The co-implementing agencies will determine the private sector participation in the Project Steering Committee. The PSC will elect a Chairman and a Vice Chairman on a rotating basis. The decision-making and guidance of the project will be executed in accordance with the participation and procedures approved by the co-implementing agencies. The PSC will normally meet twice per year in Geneva in the Palais des Nations with complete conference services in English, French and Russian languages although additional ad hoc sessions may be convened as warranted.

70. The composition or national representation on the Project Steering Committee will involve the formal nomination of all participants by their Government or institution. The National Coordinators and the National Participating Institutions are nominated by Governments in accordance with terms of reference to be approved by the co-implementing agencies. National Participating Institutions provide the national coordination of project operations, serve as the host to the National Coordination Unit (NCU) and contribute 'in-kind' resources to support project activities (see National Project Management and Figure 1 below).

Table 2. Composition of the Project Steering Committee

<i>Chairman:</i>	Elected by the PSC on a rotating basis
<i>Supporting Institutions:</i>	GEF UNEP/DTIE and EBRD United Nations Foundation, UN Fund for International Partnership (UNF/UNFIP) Ministry of Foreign Affairs, Fonds Français pour l'Environnement Mondial (MAE/FFEM)
<i>Vice Chairmen:</i>	Elected by the PSC on a rotating basis
<i>Participating Countries:</i>	Belarus, Bulgaria, Kazakhstan, Former Yugoslav Republic of Macedonia, Romania, Russian Federation, Serbia and Montenegro, Ukraine
<i>National Coordinators:</i>	Mr. Lev Dubovik, Chairman, State Committee on Energy Saving (Belarus)
<i>National Participating Institutions:</i>	Mr. Kolio Kolev, Director, Energy Efficiency Agency (Bulgaria) Mr. Zdravko Genchev, Executive Director, Centre for Energy Efficiency EnEffect (Bulgaria) Mr. K. Suleymenov, Ministry of Energy, Industry and Trade (Kazakhstan) Ms. Violeta Keckarovska, Adviser to the Minister of Energy, Ministry of Economy (Former Yugoslav Republic of Macedonia) Mr. Sergey Mikhailov, Ministry of Energy, (Russian Federation) Mr. Corneliu Rotaru, Romanian Agency for Energy Conservation ARCE Ministry of Industry and Trade (Romania) Mr. Boris Reutov, Ministry of Industry, Science & Technology (Russia Federation) Mr. Miroslav Kukobat, Senior Adviser, Federal Ministry of Economy, Serbia and Montenegro Mr. S. Mihailenko, Chairman, State Committee on Energy Conservation (Ukraine) Mr. Mykola Rapsun, President, Agency for the Rational Use of Energy ARENA-ECO (Ukraine)
<i>Monitoring & Evaluation Advisers:</i>	Each supporting institution will assign a monitoring and evaluation adviser to assist the PSC. GEF UNEP/DTIE: To be nominated UNF/UNFIP: Mr. Glen Skovholt MAE/FFEM: To be nominated
<i>Relevant International Projects</i>	Representatives of relevant international programmes and/or International Financial Institutions.

71. The Steering Committee may also comprise representatives of the private sector, commercial banks and non-governmental organisations including industrial federations and relevant international projects including those supported by the GEF and bilateral donors that may be synergetic to the present project.

PROJECT MANAGEMENT UNIT

72. A Project Management Unit (PMU) will be established for the execution of all activities and delivery of outputs in accordance with the timetable, budget and specifications approved by the co-implementing agencies in the project work plan. It will be responsible for servicing the Project Steering Committee, organising its meetings, preparing documentation and reports as required. It will organise the tasks in relation with the design and the setting-up of the Investment Fund and coordinate closely with the Lead Investor and the Fund Manager under Objective 1. The PMU will work closely with National Coordinators and NCU in each country to implement capacity development and technical assistance activities under Objective 2 and the policy and institutional reforms under Objective 3.

73. At the level of activity foreseen for the duration of the project, the PMU will be staffed by one Senior ECE staff member (P.5) (half-time) on the UN regular budget; one Regional Adviser on Energy (L.5) (half-time) on the UN regular budget; one energy economist (L.5) responsible for investment project finance and policy reforms with extra budgetary support; one energy economist (P.4) (full-time) on the UN regular budget and one secretary (G.5) (half-time) on the UN regular budget. The regular staff energy economist (P-4) will provide expertise on energy conservation policy matters, energy efficiency norms and standards especially in relation to the UNECE Committee on Sustainable Energy and Committee on Environmental Policy. The PMU will be subject to audit by the United Nations Board of External Auditors and the Internal Audit Division of the United Nations. Engagement of personnel and procurement of supplies or equipment financed from extra budgetary funds are subject to the regulations, rules, policies and procedures of the Organisation. The UNECE secretariat will make an annual 'in kind' contribution of US\$ 400,000 of personnel described above, staff travel, offices, communications, conference services, interpretation, documents translation, reproduction and distribution. All expenditures will respect the terms and conditions of General Assembly Resolutions 1373 (2001) and 1526 (2004). Disbursements from any contribution to the project from United States sources will adhere strictly to Executive Order 13224 of 25 September 2001.

74. The project will be executed by the United Nations Economic Commission for Europe with the assistance of the United Nations Office at Geneva (UNOG) which is responsible for the financial administration of UNECE executed programmes and projects.

NATIONAL PROJECT MANAGEMENT/ COORDINATION

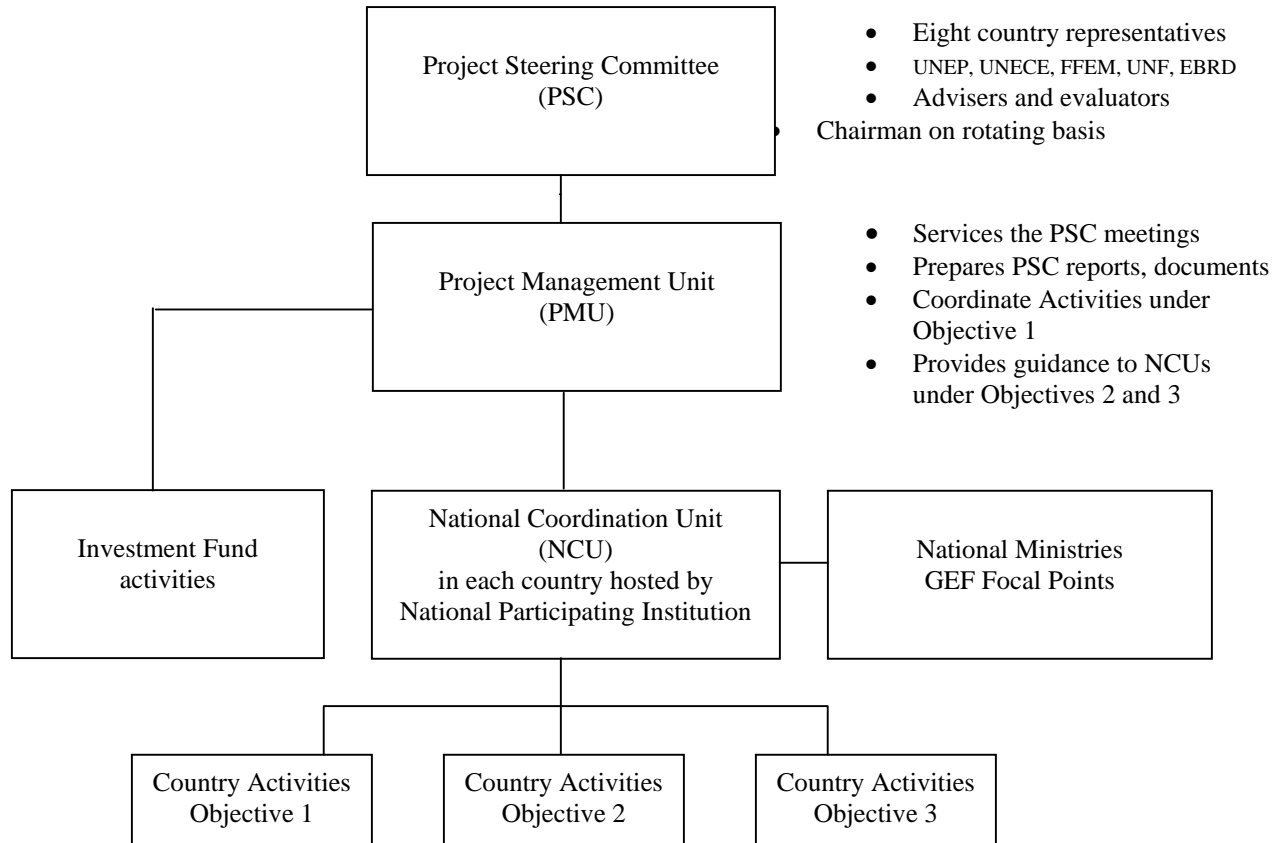
75. The project management structure and coordination effort of each country will be established by the national government ministry or agency responsible for implementing sustainable energy policies. In consultation with the relevant GEF Focal Point, government of each participating country will appoint a National Coordinator (NC), normally a senior representative of the country's National Participating Institution (NPI). The NPI is a government Ministry, agency or professional non-governmental organisation assigned the responsibility for international sustainable energy and climate change mitigation projects.

76. National Participating Institutions:

- serve as the host institution for a National Coordination Unit (NCU) which provides the national coordination of project operations;
- maintain international co-ordination with the PCU located with the UNECE secretariat in Geneva and with the NCUs in other participating countries;
- provide national level coordination with local offices of UNDP and/or UNOPS;
- maintain local coordination with the managers of relevant international projects and financing mechanisms including projects supported by the GEF, EBRD, World Bank, IFC, European Commission, USAID, USEPA and bilateral programmes.
- identify municipalities and industrial plants to participate in investment project development activities;
- serves as the webmaster, either directly or through sub-contract, for the project network of national and international counterparts;
- work with the PCU and international counterparts to organise project training courses, workshops, and seminars;
- provide information, data and assistance for the preparation of the regional energy efficiency policy review, project case studies and the identification of barriers to the implementation of investment projects;
- disseminate the results of project activities through local language publications, Internet posting of relevant project materials, radio and television broadcasts;
- contribute 'in-kind' resources to support project activities (see Project Financing below).

77. The NPI will ensure close coordination and follow-up on policy analyses by providing the information or documentation needed to implement local policy, administrative, regulatory or institutional reforms that support energy efficiency investment projects. This will include assistance in the preparation of international seminars for senior decision makers and/or parliamentarians in the framework of the project.

Figure 1: Structure of the Project and Execution Modalities



REGIONAL PROJECT MANAGEMENT / COORDINATION

78. Project management and co-ordination at the regional level will be carried out by the PMU to ensure co-ordination among participating countries and with other programmes and development efforts. The biannual sessions of the Steering Committee will provide guidance and disseminate information to representatives of governments, the private sector and NGOs from UNECE member states in Eastern Europe and the CIS. The National Coordinating Units and the Project Steering Committee will maintain close coordination with the relevant international projects and financing mechanisms established in the region, including projects supported by the GEF, EBRD, World Bank, IFC, European Commission, EIB, USAID, and bilateral programmes. In particular a permanent working relationship is to be established with the other relevant GEF initiatives in the region (FREE, BEEF, FEER, etc.) on the basis of the contacts already taken with the various concerned tasks managers. It has been agreed, in particular, with the IFC task manager of the FEER project in Russia to closely coordinate in order to ensure both approaches are complementary and, at the same time, avoid any overlapping as far as capacity building, technical assistance and sub-projects preparation activities are concerned. In the same way, the BEEF Fund Manager has agreed to serve on the Project Steering Committee of the present project and, during a recent meeting held in UNECE headquarters in Geneva, has already proposed a collaboration framework between both projects. Similar initiatives have

been taken vis-à-vis UNDP offices and representatives in the region, with the view of making the proposed Fund benefit from the preparatory work already carried out, particularly in Romania and, when it will be approved, under the UNDP future capacity building for public entities GEF project in Belarus.

INCREMENTAL COSTS AND PROJECT FINANCE

INCREMENTAL COSTS

79. This project is designed to remove key barriers to energy efficiency and energy conservation in eight Eastern European and CIS countries with economies in transition. As a result, it seeks to achieve the objectives of GEF Operational Programmes 5 and 6 in reducing greenhouse gas emissions. The costs of the proposed alternative are larger than the baseline project, i.e. the resources that would be allocated to this activity by UNECE and the countries of the region. The support of the GEF and co-financing partners is the incremental cost of the project in which the GEF has a minority share. The main innovations of this project are the establishment of a public-private equity fund linked to a pipeline of bankable investment project proposals developed by local experts and supported by government policy reforms.

80. The GEF, UNF and FFEM support for the Fund and pipeline of projects will reduce transaction costs, absorb the Fund start-up costs, reduce the time needed to raise the Fund and to invest funds into specific projects, improve the conditions local banks will be able to provide in terms of reduced spread on the interest rate and/or the percentage of collaterals or securities required by making them more familiar with project financing techniques in this particular field and encourage private sector investors by reducing the risk through the proposed structure of the Fund. By complementing other financing schemes, including current and planned GEF projects, the US\$ 250 million public-private equity Fund could leverage an investment volume of up to US\$ 2 billion for energy efficiency and renewable energy projects. The outcome of the project will be solid investments that could represent a reduction of GHG emissions of 10 million tonnes of CO₂ per year, enhanced skills of experts and policy reforms in participating countries.

81. It is unlikely that the project activities would take place in the absence of the GEF, UN Foundation and FFEM support. But the objectives of the project are essential to make progress in reducing the barriers to energy efficiency and conservation in the countries concerned. These efficiency improvements are essential, in turn, for reducing GHG emissions. The incremental costs for the design and start-up of a public-private equity fund, in particular, are essential for this financing mechanism to be established at all. The support from GEF, UNF/UNFIP and the FFEM will reduce the initial expenses related to the creation of the Fund and consequently increase its expected returns which will constitute an incentive for private investors to participate. It will also lead to reducing the transaction costs of the financing of individual projects. While specific projects will be cost-effective and self-financing from energy savings in their own right, the Fund will help to ensure that a significant number of CO₂ emissions reduction projects are implemented. More details of the incremental costs are given in Annex A.

Project Financing

82. The project financing is given in Table 3 below.

Table 3. Project Financing by Co-financing Partner and Component

Component	Total Cost (US\$ million)	Co-financing					GEF
		UNF	FFEM	EBC	UNECE	Region	
1. Establish public-private equity fund	3.270	0.500	1.170	--	0.600	--	1.000
2. Develop expert skills and prepare bankable projects	4.450	0.920	0.650	0.130	1.100	0.700	0.950
3. Assistance policy reforms to support investments	3.900	0.500	0.520	0.130	1.100	0.700	0.950
4. Monitoring and Evaluation	0.440	0.080	0.260	--	--	--	0.100
Total	12.060	2.000	2.600	0.260	2.800	1.400	3.000

83. The financing required for the project comprises activities under each immediate objective to be implemented in the eight proposed participating countries together with co-financing partner institutions with compatible mandates to those of the GEF. The resources requested from the GEF would be allocated as follows:

Objective 1: Establish a public- private equity fund:
Objective 1 total resource requirements: US\$ 3,270,000
Objective 1 GEF contribution requirements: US\$ 1,000,000

Objective 2: Develop the skills of the public and private sector experts at the local level to identify, design and submit bankable projects for financing to the Fund:
Objective 2 total resource requirements: US\$ 4,450,000
Objective 2 GEF contribution requirements: US\$ 950,000⁶

Objective 3: Raise the general awareness regarding Energy Efficiency and Renewable Energy and provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support the investment proposals developed in the framework of the project:
Objective 3 total resource requirements: US\$ 3,900,000
Objective 3 GEF contribution requirements: US\$ 950,000³

Monitoring and Evaluation

Monitoring and Evaluation total resource requirements: US\$ 440,000
Monitoring and Evaluation GEF contribution requirements: US\$ 100,000

⁶ As far as the use of this GEF contribution is concerned and in order to avoid the risk of financing the same activities twice from two distinct windows, in Russia, Bulgaria and Romania, contacts with the World Bank/IFC task managers of the facilities set up in these countries have been already taken with the view of establishing an efficient co-ordination.

84. The total participation of the GEF to the technical assistance project budget is for US\$ 3,000,000 within a project total of US\$ 12,060,000 in view of US\$ 4,860,000 in confirmed co-financing arrangements from the United Nations Foundation (UNF), the Fonds Français pour l'Environnement Mondial (FFEM) and the European Business Congress. Letters of confirmation and Board Decision Documents are included in Annex E. The UNECE secretariat will make an 'in kind' contribution of US\$ 2,800,000 and participating countries will provide an 'in kind' contribution of US\$ 1,400,000 (see below).

Project Execution and Support Costs

85. The project will be executed by UNECE.

86. The support costs for the execution of this project will apply to the funds provided by the UN Foundation, the French Government (FFEM), the European Business Congress (EBC) and the GEF, a total of US\$ 7.86 million. It has been agreed between UNEP and UNECE that the support costs will come to a maximum of 8 per cent of the activity costs (excluding monitoring and evaluation) apportioned across the project components as shown in Table 4 below.

Table 4. UNECE Project Execution Support Costs

Component	Support Costs (US\$)	Total Cost (US\$)
1. Establish public-private equity fund	197,777	2,670,000
2. Develop expert skills to prepare bankable projects	196,294	2,650,000
3. Assistance policy reforms to support investments	155,554	2,100,000
Total	549,625	7,420,000

NATIONAL COUNTERPART CONTRIBUTION

87. A prerequisite required of each participating country to start implementation, will be to provide project offices, office equipment, consumables, staff (both professional, including the full-time services on a National Co-ordinator and support personnel) and computer technology for Internet operations for the duration of the project. The precise composition of the national project management teams and their office facilities will be determined during the project inception phase. At a minimum, the National Co-ordinator will need to be equipped with the computer hardware, software, modem and telephone line connection to operate a site on the World Wide Web and to correspond by electronic mail. These communications will be mainly in the English language.

88. The work methods for this project will require the extensive use of the Internet and of electronic communications through the National Co-ordinator and with energy manager of each energy efficiency and renewable energy investment project. Ideally, project team should have access to the World Wide Web and electronic communications. In terms of work months, host countries as an 'in kind' contribution will provide most personnel costs for the local implementation of project operations. This contribution will include the costs of experts taking part in project training courses for business planning and financial engineering. The facilities and personnel services provided on an 'in kind' basis for project operations are estimated to be approximately US\$ 25,000 per year

MONITORING, EVALUATION AND DISSEMINATION

MONITORING AND EVALUATION

89. The project will be subject to the standard reporting, monitoring and evaluation procedures of the UNEP and the EBRD. It will also comply with the UNECE requirements for regular budget and extra budgetary supported activities under the Programme Performance Review of the United Nations system. UNECE will be responsible for a mid-term and an end of project analysis and report, under supervision of UNEP and EBRD. While UNECE and the PMU will monitor closely the indicators for outcomes of the project, UNEP will have special responsibility for evaluating the CO₂ emissions reductions. EBRD monitoring and evaluation role will particularly focus on the project compliance with internationally recognised standards in terms of integrity provisions and environmental safeguards.

90. The progress of project operations will be reported and reviewed by the Project Steering Committee at its biannual sessions. The schedule for project reviews, reporting and evaluation in relation to project milestones will be included in the project work plan and timetable. The evaluation reports of project operations will be used as background documents for assessing the project and for incorporating relevant past experience in the evaluation findings.

91. In addition, the evaluation needs of each supporting institution will also be met through the participation of one or more Monitoring and Evaluation Advisers. A monitoring and evaluation plan will be included in the project work plan to be approved by the co-implementing agencies but the administrative technical and financial arrangements to enable a continued monitoring of the project progress and performance are outlined below. In addition, a method of using the verifiable indicators of performance and means of verification from the Log-frame Matrix contained in Annex B is also summarised.

UNITED NATIONS PROGRAMME PERFORMANCE REVIEW

92. The project is planned to be included in the programme performance review of the Biennium Budgets of 2004-2005 and 2006-2007 Section 20 Economic Development for Europe Sub-programme 5 Sustainable Energy. It is included in the results based budgeting process and is evaluated by indicators of achievement with respect to the expected accomplishment of progress towards the formation of an energy efficiency market in Eastern European economies in transition.

GLOBAL ENVIRONMENT FACILITY AND UNEP

93. External evaluators appointed by UNEP/DTIE will calculate the achievement of impact from data developed by the project. The data from the investment projects developed under the project provide benchmarks for CO₂, NO_x and SO₂ emissions. The potential for reducing such emissions can be calculated for each investment project proposal developed within the framework of project operations. In addition to these project monitoring and evaluation activities, non-governmental organisations with a history of evaluating assistance programs in the energy efficiency field in Eastern Europe will be enlisted to monitor the project and provide feedback.

UNITED NATIONS FOUNDATION

94. The project will be subject to reporting, monitoring and evaluation consistent with Article IX of the Memorandum of Understanding between the United Nations Fund for International Partnerships and the United Nations Economic Commission for Europe. The project will also have a Monitoring and Evaluation Adviser to assist all parties in implementation of the project and report to UNF/UNFIP. This requires field review missions, verbal assessments and written annual reports to the Project Steering Committee. Mr. Glen Skovholt, a former Vice President of Honeywell Inc. has been nominated to serve as the Monitoring and Evaluation Adviser by UNF/UNFIP. A budget of US\$ 80,000 from resources approved to the project by the UNF/UNFIP are planned for monitoring and evaluation. There will also be a separate mid-term independent project review by an external consultant.

FONDS FRANÇAIS POUR L'ENVIRONNEMENT MONDIAL

95. The monitoring and evaluation of this project on behalf of the FFEM will be carried out by an inter Ministerial committee with representatives of the Ministry of Economy, Ministry of Finance, Ministry of Industry, Ministry of Foreign Affairs and the French Agency for Environment and Energy Management (ADEME) which will review progress twice per year. In order to do this, the Ministry of Foreign Affairs and the secretariat of the FFEM will designate a monitoring and evaluation adviser to work with the PMU at the UNECE. The adviser will also verify that project operations are proceeding in accordance with the agreement between the FFEM and the UNECE. A budgetary allocation of Euro 200,000 from FFEM resources approved for the project has been accorded to monitoring and evaluation.

DISSEMINATION OF PROJECT RESULTS

96. The results of project operations will be disseminated by direct communication in training courses, workshops, seminars, biannual PSC meetings and by printed and electronic publications to inform experts, policy makers within city administrations, local authorities, energy utilities and national ministries about the policy reforms needed to introduce energy efficiency and renewable energy investments. This will be accomplished by electronic publishing on the Internet to a dedicated project website, electronic publishing by CD-Rom based e-Books, printed publications distributed in English French and Russian by United Nations publication outlets. As an indicator of performance, at present Energy Efficiency 21 website usage pattern has a daily average of 40 visitors consulting some 300 files rising to a peak of 600 files consulted daily during project meetings extending participation via the Internet.

97. Results are also to be disseminated through the electronic and hard copy publication of policy reform studies as well as posting segments of the studies on the project website. The aim of the studies is to develop a new broad analysis of the reforms needed to promote energy efficiency and renewable energy market formation which are linked to case studies will be directly related to a series of specific investment project proposals. These studies provide an incentive for policy makers at different levels because they can be shown what direct social, environmental and financial benefits will be forthcoming from a specific project or series of projects given that particular policy reforms are made. These may be economic, financial, energy pricing and tariff structure, institutional or comparatively simple administrative reforms. Often these changes are needed for economically attractive and pre-feasibility study business plans to become bankable projects.

98. Results of the project will be disseminated to the general public through United Nations Television (UNTV) that will prepare short video films about the project for broadcast on CNN World

Report, EuroNews and EuroVision. National Participating Institutions will be encouraged to adapt these professionally prepared video for broadcast in local languages directly with UNTV or through the EuroVision network.

WORKPLAN AND TIMETABLE, BUDGET AND FOLLOW-UP

99. Work plan and Timetable

A detailed operational work plan and timetable can be found in **ANNEX 1**.

100. Budget

The grant will be used to finance the activities mentioned in Section 2. A detailed budget in UNEP format based upon the GEF approved budget in GEF format is provided in **ANNEX 2**.

101. Follow-up

The UNEP Task Manager will undertake in the setting up of the Project Management Unit (PMU) which Terms of Reference are detailed in Annex 7A. This process will be launched as a priority task in consultation with the Executing Agency and will establish the job profiles for the extra-budgetary staff members of the PMU, as indicated in paragraph 73 of the present document. The selection process of the extra-budgetary staff members of the PMU will then be carried out by UNECE.

In addition to designing and structuring the PMU, the UNEP Task Manager will engage discussions with the potential investors in the Fund with whom previous contacts have taken place. The purpose of these discussions will be to quickly finalize an agreement with a private company wishing to take a leading position in the Fund and to commit to invest a significant amount of capital. Under the supervision of this Lead Investor and the PMU support, the tasks related to the selection of a Fund Designer (Terms of Reference in Annex 7C) and a Fund Manager will then commence.

INSTITUTIONAL FRAMEWORK AND EVALUATION

102. Institutional Framework

UNECE will be responsible for the implementation of the project in accordance with the objectives and activities outlined in Section 2 of this document. UNEP, as the GEF Implementing Agency, will be responsible for overall project supervision to ensure consistency with GEF and UNEP policies and procedures, and will provide guidance on linkages with related UNEP and GEF-funded activities. The UNEP/DGEF Co-ordination will monitor implementation of the activities undertaken during the execution of the project. The UNEP/DGEF Co-ordination will be responsible for clearance and transmission of financial and progress reports to the Global Environment Facility. UNEP retains responsibility for review and approval of the substantive and technical reports produced in accordance with the schedule of work..

Prior to contracts, sub-contracts, or letters of agreement being entered into by UNECE, UNECE will submit to UNEP/DGEF Coordination copies of all these documents. Within ten working days, UNEP/DGEF Coordination will review, provide guidance and give UNECE substantive clearance on the technical content of these contracts, sub-contracts and letters of agreement.

In the recruitment of all senior project personnel, a selection panel/committee consisting of representatives from UNECE and UNEP/DGEF will conduct the evaluation of the candidates, and based on the recommendations of the panel/committee, UNECE will issue contracts, whose terms and conditions will be cleared by the panel.

All correspondence regarding substantive and technical matters should be addressed to:

At UNECE:

Mr. George Kowalski
Director
Sustainable Energy Division
Palais des nations
1211 Geneva 10 Switzerland
Tel: +41 22 917 2417
Fax :+41 22 917 0038
Email : george.kowalski@unece.org

At UNEP:

Mr. Olivier Deleuze
Officer-in-Charge
Division of GEF Coordination
P. O. Box 30552
Nairobi, Kenya
Tel: (254-20) 762- 4686
Fax: (254-20) 762-4041
Email: Olivier.Deleuze@unep.org

With a copy to:

Ms. Catherine Vallee
Senior Programme Officer
Division of GEF Coordination
P.O. Box 30552
Nairobi, Kenya
Tel: (254-20) 762-5076
Fax: (254-20) 762 4041

Email: Catherine.Vallee@unep.org

At UNEP/DTIE:

Mr. Bernard Jamet
Task Manager
Climate Change
39-43 Quai André Citroën
75739 Paris Cedex 15, France
Tel: 33 1 44 37 18 58
Fax: 33 1 44 37 14 74
Email: bjamet@unep.fr

All correspondence regarding administrative and financial matters should be addressed to:

At UNECE:

Ms Maria Sevilla
Executive Officer
Office of the Executive Secretary
Economic Commission for Europe
Palais des Nations
1211 Geneva 10 Switzerland
Tel: +41 22 917 58 15
Fax: +41 22 917 00 36
Email: maria.sevilla@unece.org

At UNEP

Mr. David G. Hastie
Chief, Budget and Financial Management Service (BFMS)
UNON
P.O. Box 30552
Nairobi, Kenya
Tel: (254-20) 762-3821
Fax: (254-20) 762-3797

With a copy to:

Ms. Elaine King
Fund Management Officer
Division of GEF Coordination
P.O. Box 30552
Nairobi, Kenya
Tel: (254-20) 762-4605
Fax: (254-20) 762-3162/762-4041/762-4042
Email: Elaine.King@unep.org

4.2 Evaluation

Every year, UNEP Division of GEF Coordination will undertake a desk evaluation to measure the degree to which the objectives of the project have been achieved. This will be in addition to the standard mid-term and final evaluations of the project per UNEP procedures as outlined in Section 2, paragraphs 88-94 as well as supervision missions conducted by the UNEP Task Manager and Fund Management Officer.

MONITORING AND REPORTING

103. Management Reports

Progress Reports

Within 30 days of the end of the reporting period, UNECE will submit to UNEP, with a copy to Division of GEF Coordination, using the format given in **ANNEX 5A**, half-yearly progress reports as at 30 June and 31 December.

The Inventory of Outputs/Services should be submitted with all Progress Reports and the Terminal Report. The report is due within 30 days of the end of each half-yearly period when submitted with a Progress Report or within 60 days of the completion of a project when submitted with a Terminal Report. The format of the report is given in **ANNEX 5B**.

Final Report

Within 60 days of the completion of the project, UNECE will submit to UNEP, with a copy to UNEP/DGEF Coordination, a Final Report detailing the activities taken under the project, lessons learned and any recommendations to improve the efficiency of similar activities in the future, using the format provided in **ANNEX 6**.

Substantive Reports

- (i) At the appropriate time, UNECE will submit to UNEP three copies in draft of any substantive project report(s) and at the same time, inform UNEP of its plans for publication of that report(s). UNEP will give UNECE substantive clearance of the manuscript, indicating any suggestions for change and such wording (recognition, disclaimer, etc.) as it would wish to see figure in the preliminary pages or in the introductory texts.
- (ii) It will equally consider the publishing proposal of UNECE and will make comments thereon as advisable. It may request UNECE to consider publication on a joint imprint basis. Should UNECE be solely responsible for publishing arrangements, UNEP will, nevertheless, receive 10 free copies of the published work in each of the agreed languages, for its own purposes.

104. Financial Reports

UNECE shall submit to UNEP quarterly project expenditure accounts and final accounts for each project, showing amount budgeted for the year, amount expended since the beginning of the year, and, separately, the unliquidated obligations as follows:

- (i) Details of project expenditures reported in line with project budget codes as set out in the project document, as at 31 March, 30 June, 30 September and 31 December each year, providing details of unliquidated obligations separately (see formats in **ANNEX 4A** and **ANNEX 4B**). The expenditure accounts will be dispatched to UNEP within 30 days after the end of the quarter to which they refer.
- (ii) The expenditure account as at 31 December is to be received by UNEP by 15 February each year.
- (iii) A final statement of account, in line with UNEP project budget codes, reflecting actual final expenditures under the project, when all obligations have been liquidated.
- (iv) Within 30 days of the reporting period, UNECE shall submit to UNEP GEF Coordination Office, a cofinancing report for the project as at 30 June and 31 December, using the format provided in **ANNEX 3** showing:
 - (a) Amount of cofinancing realized compared to the amount of cofinancing committed to at the time of project approval, and
 - (b) Cofinancing reporting by source and by type.

- ◆ Sources include the agency's own cofinancing, government cofinance (counterpart commitments), and contributions mobilized for the project from other multilateral agencies, bilateral development cooperation agencies, NGOs, the private sector, and beneficiaries.
- ◆ Types of cofinance. Cash includes grants, loans, credits and equity investments. In-kind resources are required to be:
 - dedicated uniquely to the GEF project,
 - valued as the lesser of the cost and the market value of the required inputs they provide for the project, and
 - monitored with documentation available for any evaluation or project audit.

105. **Terms and Conditions**

Non expendable equipment

UNECE will maintain records of non-expendable equipment (items costing US\$1,500 or more as well as items of attraction such as pocket calculators, cameras, computers, printers, etc.) purchased with UNEP funds (or with trust funds or earmarked funds administered by UNEP). UNECE will submit an inventory of such equipment to UNEP, indicating description, serial no., date of purchase, original cost, present condition, location of each item attached to the half yearly progress reports, using the format in **ANNEX 5C**.

Within 60 days of completion of the project, UNECE will submit to UNEP a final inventory of all non-expendable equipment purchased under the project indicating description, serial number, original cost, present condition, location and a proposal for the disposal of the said equipment. Non-expendable equipment purchased with funds administered by UNEP remains the property of UNEP until its disposal is authorized by UNEP, in consultation with UNECE. UNECE shall be responsible for any loss or damage to equipment purchased with UNEP administered funds. The proceeds from the sale of equipment (duly authorized by UNEP) shall be credited to the accounts of UNEP, or to the appropriate trust fund or earmarked fund.

Responsibility for Cost Overruns

Expenditures against the GEF project finance cannot exceed the US\$3 million approved GEF budget allocation. UNECE is authorized to enter into commitments or incur expenditures up to a maximum of 20 percent over and above the annual amount foreseen in the project budget under any budget sub-line, provided the total cost of the UNEP annual contribution is not exceeded. This may be done without prior authorization, but once the need for these additional funds becomes apparent, a revised budget request should be submitted to UNEP immediately. Cost overruns are the responsibility of UNECE unless a revised budget has been agreed with UNEP.

Any cost overrun (expenditure in excess of the budgeted amount) on a specific budget sub-line over and above the 20 per cent flexibility mentioned above should be met by UNECE, which originally assumed responsibility for authorizing the expenditure, unless a revision has been agreed to by UNEP prior to the authorization to cover it. Savings in one budget sub-line may not be applied to overruns of 20 percent in other sub-lines, even if the total cost to UNEP remains unchanged, unless this is specifically authorized by UNEP upon presentation of the request. In such a case, a revision to the project document amending the budget will be issued by UNEP.

Claims by Third Parties against UNEP

UNECE shall be responsible for dealing with any claims which may be brought by third parties against UNEP and its staff, and shall indemnify UNEP and its staff against any claims or liabilities resulting from

operations carried out by UNECE under this project document, except where such claims and liabilities arise from negligence or misconduct of the staff of UNEP.

Cash Advance Requirements

UNEP will issue sub-allotments to UNECE on a yearly basis for each project separately. The sub-allotments will be amended from time to time, based on project revisions. The UNECE will submit project expenditure accounts reports to UNEP on a quarterly basis within the existing United Nations financial procedures (using the format provided in ANNEX 4A).

Publications

For publications issued with UNECE, both the cover and the title page of the publication will carry the logo of GEF and the title Global Environment Facility and UNEP and the title United Nations Environment Programme together with that of UNECE. UNECE will submit three copies of any manuscript prepared under the project for clearance prior to their publication in final form. UNEP's views on the publication and any suggestions for amendments of wording will be conveyed expeditiously to the agency, with an indication of any disclaimer or recognition which UNEP might wish to see appear in the publication.

Amendments

The Parties to this project document shall approve any modification or change to this project document in writing.

ANNEX 1 WORKPLAN AND TIMETABLE

Table A: Project Objectives, Activities and Schedule of Project Operations

Project Objectives and Activities	Schedule of Project Operations																											
	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Objective One: Establish a Public-Private Partnership Fund																												
1.1 Structure and Prepare Investment Fund																												
1.1.1 Negotiate criteria, conditions and terms for participation of the Lead Investor	■																											
1.1.2 Prepare Investment Memorandum under responsibility of Lead Investor		■	■																									
1.1.3 Disseminate Investment Memorandum to public, private sector investors		■	■	■																								
1.2 Analyse Financial, Legal, Fiscal Issues and Technology, Political Risks																												
1.2.1 Assess recent experience of relevant finance mechanisms	■																											
1.2.2 Prepare analysis of the financial, legal and fiscal features of the Fund		■	■																									
1.2.3 Prepare technology and political risk analysis		■	■	■																								
1.2.4 Include analyses in Investment Memorandum, investor solicitation material		■	■	■																								
1.3 Solicit Public and Private Sector Participation in the Investment Fund																												
1.3.1 Prepare investor seminar agenda, presentations with Lead Investor	■	■	■																									
1.3.2 Schedule investor workshops, meetings and seminars		■	■	■																								
1.3.3 Convene investor seminars and solicit investors with Lead Investor		■	■	■	■																							
1.3.4 Confirm investor participation and agreements		■	■	■	■	■																						
1.4 Select Legal and Fiscal Adviser (s)																												
1.4.1 Define legal and fiscal criteria for the location and required fund agreements	■																											
1.4.2 Develop the terms of reference for the legal and fiscal adviser (s)		■	■																									
1.4.3 Recruit legal and fiscal adviser (s)	■	■																										
1.5 Selection of the Fund Manager																												
1.5.1 Establish the tasks and profile of Fund Manager with Lead Investor	■	■																										
1.5.2 Prepare terms of reference for the Fund Manager		■	■																									
1.5.3 Conduct the selection process of the Fund Manager		■	■	■																								

Table A: Project Objectives, Activities and Schedule of Project Operations (continued)

Project Objective, Outputs and Activities	Schedule of Project Operations																											
	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Objective Two: Develop the Skills of Public and Private Sector Experts																												
2.1 Network of energy efficiency managers in participating countries																												
2.1.1 Develop & approve terms of reference for National Coordinators	■																											
2.1.2 Develop & approve terms of reference for National Participating Institutions	■																											
2.1.3 Establish local project expert teams in each country	■	■																										
2.1.4 Establish dedicated project website & on-line project development software	■	■	■	■																								
2.1.5 Develop on-line training for local teams communications and software use	■	■	■	■	■	■			■			■			■			■			■			■			■	
2.2 Trained experts in project development, finance, business planning																												
2.2.1 Select trainers for investment project development, financial engineering	■	■																										
2.2.2 Prepare a project development curriculum, training manuals, software	■	■	■	■																								
2.2.3 Select training course nominees and initial project proposals	■	■	■	■																								
2.2.4 Select training course participants, initial project screening	■	■	■	■																								
2.2.5 Train participants: 6 training courses including internet sessions		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2.2.6 Assist training course participants remotely via internet, e-mail		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2.2.7 Link training course materials, filmed instruction to Internet dissemination		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1.3 Investment project pipeline																												
2.3.1 Establish investment project development expert teams	■	■																										
2.3.2 Prepare project selection criteria with fund manager & fund management teams	■	■	■	■																								
2.3.3 Prepare investment project proposals to meet agreed criteria	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2.3.4 Assess economic, technical and financial viability of projects	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2.3.5 Prepare written evaluation of project for clearance, reformulation or rejection	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
1.3.6 Revise, reformulate projects with sponsors, advise supporting policy reforms				■																								

Table A: Project Objectives, Activities and Schedule of Project Operations (continued)

<u>Project Objectives and Activities</u>	Schedule of Project Operations																											
	Year 1				Year 2				Year 3				Year 4				Year 5				Year 6				Year 7			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<u>Objective Three: Raise Awareness & Provide Assistance to Introduce Reforms</u>																												
3.1 Economic, Institutional and Regulatory Reforms																												
3.1.1 Analyse key energy sector developments of economic transition																												
3.1.2 Review progress of reforms to introduce market based energy systems																												
3.1.3 Prepare Regional Analysis of Policy Reforms for Energy Efficiency																												
3.1.4 Identify specific policy ‘bottlenecks’ to energy efficiency, renewables projects																												
3.1.5 Conduct 3 workshops of international and local experts																												
3.1.6 Prepare 10 case studies of individual projects																												
3.2 Energy Efficiency Seminars																												
3.2.1 Analyse implementation of energy conservation laws, regulations																												
3.2.2 Select key policy makers from countries of case studies																												
3.2.3 Prepare presentations of reforms linked to case study policy bottlenecks																												
3.2.4 Conduct 3 seminars publishing proceedings and reform proposals																												
3.2.5 Disseminate policy reform recommendations (also with 3.1.6)																												
3.3 Policy Advisory Services																												
3.3.1 Review key administrative, institutional & policy barriers to energy efficiency																												
3.3.2 Assess reforms required for financing with Fund Manager																												
3.3.3 Conduct 15 advisory missions to participating countries																												
3.3.4 Convene consultative meetings policy makers, Fund Manager, local teams																												
3.3.5 Prepare analysis economic impact policy reforms																												
3.3.6 Analyse environmental impact, GHG emissions reductions of policy reforms																												
3.3.7 Document and disseminate measures/reforms																												
3.3.8 Evaluate national experiences adoption of recommended policy reforms																												

ANNEX 2 BUDGET IN UNEP FORMAT AND GEF PROJECT COMPONENT

RECONCILIATION BETWEEN THE GEF ACTIVITY BASED PROJECT BUDGET AND THE UNEP BUDGET BY EXPENDITURE CODE													
Project No:	GFL-2328-2721- PMS: GF/4040-06-												
Project Name:	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation												
Executing Agency:	United Nations Economic Commission for Europe (UNECE)												
EXPENDITURE BY PROJECT COMPONENT					EXPENDITURE BY CALENDAR YEAR								
	Fund (1)	Pipeline (2)	TA*(3)	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Total	
UNEP BUDGET LINE/OBJECT OF EXPENDITURE	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	US\$	
10	PROJECT PERSONNEL COMPONENT												
1100	Project Personnel												
1101	308,395	308,395	308,395	925,185	150,000	150,000	150,000	150,000	150,000	150,000	150,000	25,185	925,185
1102		127,500	127,500	255,000	85,000	85,000	85,000						255,000
1199	308,395	435,895	435,895	1,180,185	235,000	235,000	235,000	150,000	150,000	150,000	150,000	25,185	1,180,185
1200	Consultants												
1201	339,500			339,500	200,000	139,500							339,500
1202		219,750		219,750	119,750	100,000							219,750
1203			219,750	219,750	45,950	45,950	45,950	45,950	35,950				219,750
1299	339,500	219,750	219,750	779,000	365,700	285,450	45,950	45,950	35,950	0	0	0	779,000
1300	Administrative support												
1301	124,500	124,500	124,500	373,500	62,250	62,250	62,250	62,250	62,250	62,250	62,250		373,500
1399	124,500	124,500	124,500	373,500	62,250	62,250	62,250	62,250	62,250	62,250	62,250	0	373,500
1600	Travel on official business (above staff)												
1601	40,000	15,000	15,000	70,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	70,000
1699	40,000	15,000	15,000	70,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	70,000
1999	812,395	795,145	795,145	2,402,685	672,950	592,700	353,200	268,200	258,200	222,250	35,185	0	2,402,685
20	SUB-CONTRACT COMPONENT												
2100	Executing agency												
2101	71,605	71,605	71,605	214,815	34,815	30,000	30,000	30,000	30,000	30,000	30,000	30,000	214,815
2199	71,605	71,605	71,605	214,815	34,815	30,000	30,000	30,000	30,000	30,000	30,000	30,000	214,815
2999	71,605	71,605	71,605	214,815	34,815	30,000	30,000	30,000	30,000	30,000	30,000	30,000	214,815
30	TRAINING COMPONENT												
3300	Meetings/conferences												
3301	48,000	35,250	35,250	118,500	21,000	17,000	17,000	17,000	17,000	10,000	19,500		118,500
3399	48,000	35,250	35,250	118,500	21,000	17,000	17,000	17,000	17,000	10,000	19,500	0	118,500
3999	48,000	35,250	35,250	118,500	21,000	17,000	17,000	17,000	17,000	10,000	19,500	0	118,500

ANNEX 2 BUDGET IN UNEP FORMAT AND GEF PROJECT COMPONENT (continued)

40	EQUIPMENT & PREMISES COMPONENT													
4200	Non-expendable equipment (computers, office equipment,etc)													
4201	Office equipment	2,500	2,500	2,500	7,500	7,500								7,500
4299	Sub-Total	2,500	2,500	2,500	7,500	7,500	0	0	0	0	0	0	0	7,500
4300	Premises (office rent, maintenance of premises, etc)													
4301	Office rental	18,000	18,000	18,000	54,000	18,000	18,000	18,000						54,000
4399	Sub-Total	18,000	18,000	18,000	54,000	18,000	18,000	18,000	0	0	0	0	0	54,000
4999	Component Total	20,500	20,500	20,500	61,500	25,500	18,000	18,000	0	0	0	0	0	61,500
50	MISCELLANEOUS COMPONENT													
5200	Reporting costs (publications, maps, newsletters, printing,etc)													
5201	Reporting	40,000	20,000	20,000	80,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	20,000	80,000
5299	Sub-Total	40,000	20,000	20,000	80,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	20,000	80,000
5300	Sundry (communications, postage, freight, clearance charges, etc)													
5301	Communication, postage, freight	2,500	2,500	2,500	7,500	1,500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	7,500
5399	Sub-Total	2,500	2,500	2,500	7,500	1,500	1,000	1,000	1,000	1,000	1,000	1,000	1,000	7,500
5400	Hospitality and entertainment													
5401	Hospitality	5,000	5,000	5,000	15,000	3,000	3,000	3,000	3,000	3,000				15,000
5499	Sub-Total	5,000	5,000	5,000	15,000	3,000	3,000	3,000	3,000	3,000	0	0	0	15,000
5500	Evaluation (consultants fees/travel/DSA, admin support,etc)													
5501	Consultants fees	35,000	35,000	30,000	100,000				50,000		50,000			100,000
5599	Sub-Total	35,000	35,000	30,000	100,000	0	0	0	50,000	0	50,000	0	0	100,000
5999	Component Total	82,500	62,500	57,500	202,500	14,500	14,000	14,000	64,000	14,000	61,000	21,000	0	202,500
TOTAL COSTS		1,035,000	985,000	980,000	3,000,000	768,765	671,700	432,200	379,200	319,200	323,250	105,685	0	3,000,000
					3,000,000									
						* Technical Assistance								
By Objectives (1, 2 & 3)		1,000,000	950,000	950,000	2,900,000									
M & E		35,000	35,000	30,000	100,000									
Total		1,035,000	985,000	980,000	3,000,000									

ANNEX 2A RECONCILIATION BETWEEN THE GEF ACTIVITY BASED PROJECT BUDGET AND THE UNEP BUDGET BY EXPENDITURE CODE

RECONCILIATION BETWEEN THE GEF ACTIVITY BASED PROJECT BUDGET AND THE UNEP BUDGET BY EXPENDITURE CODE						
Project No:	GFL-2328-2721- PMS: GF/4040-06-					
Project Name:	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation					
Executing Agency:	United Nations Economic Commission for Europe (UNECE)					
EXPENDITURE BY PROJECT COMPONENT					Calculate	
	Fund (1)	Pipeline (2)	TA*(3)	Total	activities cost	
UNEP BUDGET LINE/OBJECT OF EXPENDITURE						
	US\$	US\$	US\$	US\$		
10	PROJECT PERSONNEL COMPONENT					
1100	Project Personnel					
1101	Project Manager L5	308,395	308,395	308,395	925,185	925,185
1102	Associate Programme Officer L2/3		127,500	127,500	255,000	255,000
1199	Sub-Total	308,395	435,895	435,895	1,180,185	
1200	Consultants					
1201	Fund designers	339,500			339,500	339,500
1202	Pipeline identification		219,750		219,750	219,750
1203	Advisory services			219,750	219,750	219,750
1299	Sub-Total	339,500	219,750	219,750	779,000	
1300	Administrative support					
1301	Administrative support	124,500	124,500	124,500	373,500	373,500
1399	Sub-Total	124,500	124,500	124,500	373,500	
1600	Travel on official business (above staff)					
1601	Project personnel travel	40,000	15,000	15,000	70,000	70,000
1699	Sub-Total	40,000	15,000	15,000	70,000	
1999	Component Total	812,395	795,145	795,145	2,402,685	
20	SUB-CONTRACT COMPONENT					
2100	Mou/LoA for cooperating agencies					
2101	UNECE support costs	71,605	71,605	71,605	214,815	
2199	Sub-Total	71,605	71,605	71,605	214,815	
2999	Component Total	71,605	71,605	71,605	214,815	
30	TRAINING COMPONENT					
3300	Meetings/conferences					
3301	Meetings/conferences	48,000	35,250	35,250	118,500	118,500
3399	Sub-Total	48,000	35,250	35,250	118,500	
3999	Component Total	48,000	35,250	35,250	118,500	
40	EQUIPMENT & PREMISES COMPONENT					
4200	Non-expendable equipment (computers, office equipment,etc)					
4201	Office equipment	2,500	2,500	2,500	7,500	7,500
4299	Sub-Total	2,500	2,500	2,500	7,500	
4300	Premises (office rent, maintenance of premises, etc)					
4301	Office rental	18,000	18,000	18,000	54,000	54,000
4399	Sub-Total	18,000	18,000	18,000	54,000	
4999	Component Total	20,500	20,500	20,500	61,500	
50	MISCELLANEOUS COMPONENT					
5200	Reporting costs (publications, maps, newsletters, printing,etc)					
5201	Reporting	40,000	20,000	20,000	80,000	80,000
5299	Sub-Total	40,000	20,000	20,000	80,000	
5300	Sundry (communications, postage, freight, clearance charges, etc)					
5301	Communication, postage, freight	2,500	2,500	2,500	7,500	7,500
5399	Sub-Total	2,500	2,500	2,500	7,500	
5400	Hospitality and entertainment					
5401	Hospitality	5,000	5,000	5,000	15,000	15,000
5499	Sub-Total	5,000	5,000	5,000	15,000	
5500	Evaluation (consultants fees/travel/DSA, admin support,etc)					
5501	Consultants fees	35,000	35,000	30,000	100,000	
5599	Sub-Total	35,000	35,000	30,000	100,000	
5999	Component Total	82,500	62,500	57,500	202,500	
	TOTAL COSTS	1,035,000	985,000	980,000	3,000,000	
					3,000,000	
						* Technical Assistance
	By Objectives (1 ,2 & 3)	1,000,000	950,000	950,000	2,900,000	
	M & E	35,000	35,000	30,000	100,000	
	Total	1,035,000	985,000	980,000	3,000,000	
	Activities					2,685,185
	UNECE support costs 8%					214,815
	Sub-total					2,900,000
	M&E					100,000
						3,000,000

ANNEX 3 - FORMAT FOR REPORT ON CO-FINANCING

Project Number:	{Insert IMIS Project Number}						
Title of Project:	{Insert Exact Title of Project}						
Executing Agency:	{Insert Name of Executing Agency}						
Project Duration:	From:	{Insert Date}		To:	{Insert Date}		
Report as at:	Date:	{Insert Date}					
Initial Sources of Co-finance:	Cash Contributions (US dollars):			In-kind Contributions (US dollars):			Comments:
	Original budget (as at approval time)	Latest Revised Budget	Received to date	Original budget (as at approval time)	Latest Revised Budget	Received to date	
Additional co-finance: (not identified at the initial time of GEF approval:							
Total							

Name: _____ {Insert Name of Duly Authorized Person}

Date: _____ {Insert Date}

Title: _____ {Insert Title of the Duly Authorized Person}

ANNEX 4A FORMAT OF QUARTERLY PROJECT EXPENDITURE ACCOUNTS

Quarterly project statement of allocation (budget), expenditure and balance (Expressed in US\$) covering the period

from: {Month, Year} **to:** {Month, Year}

Project No:

Project title:

Executing Agency: {Insert name of Executing Agency}

Project commencing: {Insert commencement date}

Project ending: {Insert completion date}

Object of expenditure by UNEP budget code	Project budget allocation for year {YEAR}	Total Expenditure for quarter {quarter}	Total Unliquidated obligations for quarter {quarter}	Cumulative expenditure for year {YEAR}	Unspent balance of budget allocation for year {YEAR}
1101 Project Manager					
1102 Associate Programme Officer					
1201 Fund Designers					
1202 Pipeline Identification					
1203 Advisory services					
1301 Administrative support					
1601 Project personnel travel					
2201 UNECE support cost					
3301 Meetings conferences					
4201 Office equipment					
4301 Office rental					
5201 Reporting					
5301 Communication, postage, freight					
5401 Hospitality					
5501 Evaluation					
Total					

Signed: _____ Date: _____ Name and Title of duly authorized official of {Insert name of Executing Agency}

NB: Object of expenditure in the report should be exactly as specified in Annex 2.

Appendix 1 to ANNEX 4A: EXPLANATION ON EXPENDITURES REPORTED DURING THE CURRENT REPORTING PERIOD

Project No:

Project title:

Executing Agency: {Insert name of Executing Agency}

Project commencing: {Insert commencement date}

Project ending: {Insert completion date}

	DESCRIPTION	AMOUNT SPENT	CLARIFICATION/BREAKDOWN
1101	Project Manager		
1102	Associate Programme Officer		
1201	Fund Designers		
1202	Pipeline Identification		
1203	Advisory services		
1301	Administrative support		
1601	Project personnel travel		
2201	UNECE support costs		
3301	Meetings conferences		
4201	Office equipment		
4301	Office rental		
5201	Reporting		
5301	Communication, postage, freight		
5401	Hospitality		
5501	Evaluation		
99	TOTAL		

NB: Object of expenditure in the report should be exactly as exactly as specified in Annex 4A.

ANNEX 4B: QUARTERLY EXPENDITURE STATEMENT REPORTING UNLIQUIDATED OBLIGATIONS

Project No:

Project title:

Executing Agency Name:

Unliquidated obligations during _____ **{Period covered}**

Object of expenditure	UNEP Allocation	
1101 Project Manager		
1102 Associate Programme Officer		
1201 Fund Designers		
1202 Pipeline Identification		
1203 Advisory services		
1301 Administrative support		
1601 Project personnel travel		
2201 UNECE support costs		
3301 Meetings conferences		
4201 Office equipment		
4301 Office rental		
5201 Reporting		
5301 Communication, postage, freight		
5401 Hospitality		
5501 Evaluation		
TOTAL		

NB: The unliquidated obligations should be reported in line with the specific object of expenditures as per the project document

ANNEX 5A: FORMAT FOR HALF-YEARLY PROGRESS REPORT
as at 30 June and 31 December

(Please attach a current inventory of outputs/Services when submitting this report)

1. Background Information

1.1 **Project Number:**

1.2 **Project Title:**

1.3 **Division/Unit:**

1.4 **Executing Agency:**

1.5 **Reporting Period (the six months covered by this report):**

1.6 **Relevant UNEP Programme of Work (2004-2005) Subprogramme No:**

1.7 **Staffing Details of Cooperating Agency/ Supporting Organization (Applies to personnel, experts and consultants paid by the project budget):**

Functional Title	Nationality	Object of Expenditure (1101, 1102, 1201, 1301 etc..)

1.8 **Sub-Contracts (if relevant):**

Name and Address of the Sub-Contractee	Object of expenditure (2101, 2201, 2301 etc..)

2. Project Status

2.1 **Information on the delivery of outputs/services:**

	Output/Service (as listed in the approved project document)	Status (Complete /Ongoing)	Description of work undertaken during the reporting period	Description of problems encountered; Issues that need to be addressed; Decisions/Actions to be taken
1.				
2.				
3.				

2.2 **If the project is not on track, provide reasons and details of remedial action to be taken:**

3 Discussion acknowledgment

Project Coordinator's General Comments/Observations	First Supervising Officer's General Comments
NAME: _____ DATE: _____ SIGNATURE: _____	NAME: _____ DATE: _____ SIGNATURE: _____

ANNEX 5B: Attachment to Half-Yearly Progress Report: Format for Inventory of Outputs/Services

a) Meetings

No	Meeting Type (note 4)	Title	Venue	Dates	Convened by	Organized by	# of Participants	List attached Yes/No	Report issued as doc no	Language	Dated
1.											
2.											
3.											

List of Meeting Participants:

No.	Name of the Participants	Nationality

b) Printed Materials:

No.	Type (note 5)	Title:	Author(s)/Editor(s)	Publisher	Symbol	Publication Date	Publication Date
1.							
2.							
3.							

c) Technical Information / Public Information:

No.	Description	Date
1.		
2.		
3.		

d) Technical Cooperation

No.	Type (note 6)	Purpose	Venue	Duration	For Grants and Fellowships		
					Beneficiaries	Countries/Nationalities	Cost (in US\$)
1.							
2.							

e) Other Outputs/Services (e.g. Networking, Query-response, Participation in meetings etc.)

No.	Description	Date
1.		
2.		
3.		

Note 4: Meeting types (Inter-governmental Meeting, Expert Group Meeting, Training Workshop/Seminar, Other)

Note 5: Material types (Report to Inter-governmental Meeting, Technical Publication, Technical Report, Other)

Note 6: Technical Cooperation Type (Grants and Fellowships, Advisory Services, Staff Mission, Others)

ANNEX 5C: INVENTORY OF NON-EXPENDABLE EQUIPMENT PURCHASED AGAINST UNEP PROJECTS
UNIT VALUE US\$1,500.00 AND ABOVE AND ITEMS OF ATTRACTION
As at _____

Project Title: _____

Project Number: _____

Executing Agency: _____

Description	Serial No.	Date of Purchase	Original Price (US\$)	Purchased / Imported from (Name of Country)	Present Condition	Location

The physical verification of the items was done by:

Name: _____ Signature: _____

Title: _____ Date: _____

ANNEX 6: FINAL REPORT

1. Background Information

- 1.1 Project Title:
- 1.2 Project Number:
- 1.3 Responsible Divisions/Units in UNEP:
- 1.4 Project starting date:
- 1.5. Project completion date:
- 1.6 Reporting Period:
- 1.7 Reference to UNEP/DGEF Sub-programmes and expected accomplishments:
- 1.8 Overall objectives of the project: (maximum quarter of a page)
- 1.9 Total Budget (US\$): (specify contributions by donor/s)
- 1.10 Partners and leveraged resources:
Describe collaboration with partners. Specify supporting organizations as well as cooperating agencies and state their role.
List the additional resources leveraged (beyond those committed to the project itself at time of approval) as a result of the project (financial and in-kind)

2. Project Status

- 2.1 Information on the delivery of the project

Activities/Outputs (as listed in the project document)	Status (complete/ongoing)	Results/Impact (measured against the performance indicators stated in the project document)
---	------------------------------	---

1.

2.

- 2.2 List lessons learned and best practices

- 2.3 State how the project has nurtured sustainability. Is the project or project methodology replicable in other countries or regions? If yes, are there any concrete examples or requests?

3. List of attached documents

(for example: publications, reports of meetings/training seminars/workshops, lists of participants)....

Name and Title of Project Coordinator:

Name of Division Director:

Signature:

Date:

Signature:

Date:

ANNEX 7A

TERMS OF REFERENCE OF THE PROJECT MANAGEMENT UNIT

A Project Management Unit (PMU) will be established for the execution of all activities and delivery of outputs in accordance with the timetable, budget and specifications approved by the co-implementing agencies in the project work plan. It will be responsible for servicing the Project Steering Committee, organising its meetings, preparing documentation and reports as required. It will organise the tasks in relation with the design and the setting-up of the Investment Fund and coordinate closely with the Lead Investor and the Fund Manager under Objective 1. The PMU will work closely with National Coordinators and National Coordination Units in each country to implement capacity development and technical assistance activities under Objective 2 and the policy and institutional reforms under Objective 3. More specifically, the PMU will:

- prepare the terms of reference for the selection of the consultants that will be used under the three objectives of the projects to define the Fund structure, to identify the sub-projects pipeline and to engage the tasks related to strengthening the policy and regulatory framework of the targeted countries;
- launch the tenders and manage the selection procedure of these consultants;
- establish the contracts for these consultants and follow-up on their work according to the terms of the contracts;
- report to the Steering Committee and to the Implementing Agencies on the achievements and results of the tasks engaged;
- organise the meetings of the PSC, prepare the background documentation and summary and minutes of the meetings and make sure the recommendations of the PSC are implemented;
- identify the Lead Investor(s) and work in a close relationship with it (them) in order to organise the Fund raising phase, the selection of an appropriate Fund Manager and the Fund first closing (in particular, the PMU will prepare on behalf of the Fund the terms of reference for the Fund Manager and will manage the selection process);
- work in liaison with the selected Fund Manager to make sure actions developed under objectives 2 and 3 are consistent with the Fund's orientations and effectively serve to channel towards the Fund a pipeline of bankable projects;
- organise outreach, communication and information dissemination through the project communication tools (internet, publications, seminars, etc);
- organise the evaluation and monitoring process according to the co-financiers requirements, as well as the reporting according to the various formats stipulated by these institutions.

ANNEX 7B

TERMS OF REFERENCE FOR NATIONAL PARTICIPATING INSTITUTIONS

The project management structure and coordination effort of each country will be established by the national government ministry or agency responsible for implementing sustainable energy policies. In consultation with the relevant GEF Focal Point, government of each participating country will appoint a National Coordinator (NC), normally a senior representative of the country's National Participating Institution (NPI). The NPI is a government Ministry, agency or professional non-governmental organisation assigned the responsibility for international sustainable energy and climate change mitigation projects.

National Participating Institutions:

- serve as the host institution for a National Coordination Unit (NCU) which provides the national coordination of project operations;
- maintain international co-ordination with the Project Management Unit PMU located within the UNECE secretariat in Geneva and with the NCUs in other participating countries;
- provide national level coordination with local offices of the UN system, as required by the PMU;
- maintain local coordination with the managers of relevant international projects and financing mechanisms including projects supported by the GEF, EBRD, World Bank, IFC, European Commission, USAID, USEPA and bilateral programmes.
- identify and suggest to PMU municipalities and industrial plants to participate in investment project development activities;
- serve as the webmaster, either directly or through sub-contract, for the project network of national and international counterparts;
- work with the PMU and international counterparts to support the organisation of project training courses, workshops, and seminars;
- provide information, data and assistance for the preparation of the regional energy efficiency policy review, project case studies and the identification of barriers to the implementation of investment projects;
- disseminate the results of project activities through local language publications, Internet posting of relevant project materials, radio and television broadcasts;
contribute 'in-kind' resources to support project activities.

The NPI will ensure close coordination and follow-up on policy analyses by providing the information or documentation needed to implement local policy, administrative, regulatory or institutional reforms that support energy efficiency investment projects. This will include assistance in the preparation of international seminars for senior decision makers and/or parliamentarians in the framework of the project.

ANNEX 7C

TERMS OF REFERENCE OF THE FUND DESIGNER

The terms of reference of the Fund designer will be more precisely elaborated by the Project Management Unit, once established.

In close coordination with the PMU and the Implementing Agencies, the role of the Fund Designer is to determine the most appropriate Fund Structure, with respect to the situation of the targeted countries and the project objectives. In particular, the Fund Designer will:

- review similar previous initiatives in setting up Funds in the energy and infrastructure sectors,
- analyse the extent to which the provision of debt could complement the instrument for the needs of the targeted countries,
- recommend the most appropriate financing tools to be used by the Fund,
- propose a structure for the Fund that takes into account the objective of creating a public-private partnership,
- establish the Fund's guidelines and procedures,
- define the prudential rules of the Fund and suggest, in particular, the necessary conditions, exclusions and restrictions,
- suggest the composition of the various governance bodies (Board of Directors, Policy Committee, Investment Committee, Audit Committee, etc),
- define all legal aspects related to the establishment of the Fund and its relationship with its investors,
- suggest the most appropriate solutions with respect to solving the fiscal issues in the best interest of the investors, including analysing the most suitable location for the Fund,
- prepare the legal documentation as a template serving as a basis for the negotiations with the potential investors in the Fund,
- determine in this respect the role of the Fund Manager and support the preparation of the terms of reference for its selection,
- draft the Fund Placement Memorandum including a detailed Business Plan for the Fund and serve as an advisor to the PMU and the Lead Investor(s) during the road show for the Fund presentation and the discussion with potential investors.

ANNEX 8

LOGICAL FRAMEWORK MATRIX

Summary	Objectively verifiable indicators	Means of Verification (Monitoring Focus)	Critical Assumptions and Risks
Global Objective			
Energy related CO2 emissions are reduced through the promotion of environmentally sound energy efficient technologies in Eastern Europe and the CIS	Number and dollar value of investment projects developed, number of financed projects, carbon savings (tons/yr) from all energy efficiency and renewable energy investments in participating countries	Data collected by National Participating Institutions, Ministries, International Financial Institutions; reported by delegations to the annual sessions of the EE21 Project Steering Committee	Assuming there is no overall disruption of investment climate in Eastern Europe and the CIS.
Outcomes			
A public-private equity fund linked to a pipeline of bankable investment project proposals developed by local experts and supported by government policy reforms.	At project end, the fund is capitalized with US\$ 250 million and these funds are invested to provide, in average, 50% of the projects equity needs. As a consequence, financed projects are resulting in 10 million tons of carbon reduction per year at project end.	Data collected from the Fund Official reports and National Participating Institutions	Assuming there is no overall disruption of investment climate in Eastern Europe and the CIS.
Objective 1			
Establish a public private partnership	<ul style="list-style-type: none"> (a) An Investment Memorandum is ready and distributed in 6 months (b) 8 Investor Seminars are organized at project month 8. (c) Reputable fund manager identified and selected end of year 1. (d) An Energy Efficiency Investment Fund is set up and attracts US\$ 100 millions end of year 2. (e) Further capitalization to reach US\$ 250 millions is achieved at end of year 3. 	<p>Data from the project and the Fund Manager</p> <p>Minutes and attendees lists.</p> <p>Fund Manager appraised by E&M Advisers reviewed by the Project Steering Committee</p>	Risk that fund concept will not trigger sufficient and adequate investor interest from the private and/or the public sector.
Objective 2			
Develop the skills of public and private sectors experts to identify design and submit bankable proposals	(a) Clear guidelines and criteria established and disseminated for project preparation 6 months after project start.	Data available from Project Management Unit, National Coordination Units.	Low risk of derailment, local teams highly motivated, competent.

	<p>(b) Network of energy efficiency managers with 100 trained experts in 20 local teams are operating at end of year 1.</p> <p>(c) A pipeline of potential projects is developed and suitable projects selected representing: end of year 2: US\$ 0.8 billion corresponding to US\$ 100 million equity from the Fund; year 3: 2 billion corresponding to US\$ 250 million equity from the Fund.</p> <p>(d) A portfolio of projects is ready for presentation end of year 3 for a total of US\$ 150 million fund equity and US\$ 250 million in fund equity by year end 4.</p> <p>(e) Projects are financed by the Fund for a total of US\$ 100 million by end of year 3 (corresponding to a total investment of US\$ 800 million) and for a total of US\$ 250 million end of year 5.</p>	<p>Experts Roster established by project. Lists of experts in project training sessions.</p> <p>Project documentation.</p> <p>Fund manager list of projects presented to the Fund.</p>	
Objective 3			
<p>Raise awareness and foster institutional and regulatory reforms at local and national levels</p>	<p>(a) Economic, institutional and regulatory reforms are identified by end of year 1.</p> <p>(b) 10 Energy efficiency seminars take place to present results and foster dialogue and action during year 2</p> <p>(c) Policy advisory services provided to 30 cities and 10 ministries end of year 3.</p> <p>(d) Reforms are implemented at all levels in at least 5 countries</p>	<p>Assessment of policy seminars, reports</p> <p>Policy maker interviews by Evaluation and Monitoring (E&M) Advisers.</p> <p>Reports, minutes of meetings</p> <p>Official publications.</p>	<p>Risk of policy inertia, energy utilities vested interests as obstacles to reforms.</p>

Components/Activities		
Activities related to Objective 1: Establish PPP Fund (a) Investment memorandum (b) Investor seminars (c) Terms of reference Fund Manager (d) Select Fund Manager	Inputs: GEF: US\$ 1,000 K UNF: US\$ 500 K FFEM: US\$ 1,170 K UNECE: US\$ 600 K Region: -	Assumption: Significant investor interest of both public and private sectors expressed during preparatory phase continues during fund raising.
Activities related to Objective 2: Develop Skills (a) Create country teams (b) Select trainers (c) Verify proposals	Inputs: GEF: US\$ 950 K UNF: US\$ 920 K FFEM: US\$ 650 K UNECE: US\$ 1,100 K Region: US\$ 700 K EBC: US\$ 130 K	Assumption: National experts and local energy managers remain motivated and committed to develop investments for their municipalities, industrial plants
Activities related to Objective 3: Assistance on Reforms (a) Training sessions (b) Appraise barriers (c) Decision maker seminars (d) Field missions	Inputs: GEF: US\$ 950 K UNF: US\$ 500 K FFEM: US\$ 520 K UNECE: US\$ 1,100 K Region: US\$ 700 K EBC: US\$ 130 K	Assumption: National decision makers continue to seek policy options to promote energy efficiency projects, encourage direct foreign investment, enhance energy security and diminish fuel poverty

ANNEX A

INCREMENTAL COSTS

Broad Development Goal

The development goal of the Governments of Belarus, Bulgaria, Kazakhstan, Former Yugoslav Republic of Macedonia, Romania, Russian Federation, Serbia and Montenegro and Ukraine is to achieve reliable and more efficient energy systems to maintain economic growth, promote productivity gains, attract foreign investments and diminish domestic capital flight.

Governments of the region seek to rationalise the large fixed capital investments in their energy infrastructure to keep economic output growing at between 5 to 12 per cent annually and ensure that foreign direct investment will continue to increase. The efficiency improvements needed are also seen as being closely linked to increasing industrial and service sector productivity and rising living standards

Baseline

Each country is committed to enhance energy efficiency, diminish fuel poverty arising from economic transition and maintain the security of their energy supplies. But during economic transition, energy efficiency actually fell in Eastern Europe and the CIS. Between 1989 and 1995 the energy intensity of economic activity improved in Western Europe and North America by about one per cent but it worsened in the CIS by about 5 per cent.

The baseline trend is that national energy efficiency programmes and international projects have had some success on a limited scale. These programmes have demonstrated that it is possible to finance energy efficiency investments in Eastern Europe that reduce GHG emissions. But they have also shown that this is a time consuming and labour intensive process that needs to become much more fluid or business-as-usual in order to succeed on any meaningful scale.

Global Environmental Objective

The key objective of this project is to promote a self-financing method of reducing reduce GHG emissions in Eastern Europe through the formation of a market for cost-effective energy efficiency projects. It will assist participating countries to address the financial, technical and policy barriers to energy efficiency and renewable energy investments. The technical potential in Eastern Europe for energy efficiency projects with a payback period of less than five years is estimated to be between US\$ 5 and US\$ 10 billion. But the capital investment requirements to tap this potential are so large that the private sector needs to participate in financing such projects. The genuine participation of the private sector in turn will require the formation of a market that can provide opportunities for large investments to be made with low transaction costs that produce adequate returns at an acceptable risk within a reasonable period of time.

GEF Project Alternative

As the alternative, this project is designed to provide a bridge between demonstration investments financed under special conditions in selected Eastern European locations to the establishment of an investment fund linked to a pipeline of projects that can provide for the large scale participation of private sector investors in partnership with public entities. The project will (a) establish a dedicated source of project finance with the participation of public and private sector investors; (b) enhance the skills of the private and public sector experts at the local level to identify, develop and submit bankable projects for financing to the fund; (c) provide assistance to municipal authorities and national administrations to

introduce economic, institutional and regulatory reforms needed to support these investment projects.

System Boundary

While the geographical boundary of the project is limited to the eight participating countries, it is expected that project will have a strong multiplier effect on all the countries of the CIS and Southeastern Europe. The project has a strong information dissemination strategy designed to promote the positive experiences achieved and lessons learned to neighboring countries in the region.

Global Environmental Benefits

Based on the lessons learned from earlier financing mechanisms, the project will establish a US\$ 250 million public-private equity Fund that can complement other financing schemes including current and planned GEF projects. The basic concept is that the Fund investments will be highly leveraged and in so doing diminish the risk of any participant. This is because other equity contributions from co-investors will be sought and because additional financing will be needed in the form of loans from local banks or international financial institutions. Therefore, the financing facilities established in countries like Romania, Bulgaria, Former Yugoslav Republic of Macedonia or the Russian Federation with GEF support could participate in co-financing specific projects.

This approach should be highly complementary bearing in mind that GEF support to this project will not be used for the Fund capital itself but only for its design. Assuming the Fund will provide not more than 50 per cent of the equity amount requested by a single project and that additional leverage will be sought through loans in a 25/75 proportion, a simple calculation shows that the Fund could generate, over its 4 years investment period, a volume of projects representing around US\$ 2 billion. The outcome of the project will be solid investments that could represent a reduction of GHG emissions of 10 million tons of carbon per year, enhanced skills of experts and policy reforms in participating countries. The investment fund itself could also be repeated at much lower cost if it proves successful. In addition, individual investment projects will be sustainable after the completion of the project since they will continue to achieve savings after investments have been repaid.

Additional Benefits

This project will have a wide range of benefits to committed stakeholders in participating countries. At the macro-economic level, efficiency improvements in industry and the service sector can contribute to the strong economic growth seen in the region during the last few years. At the same time, environmental, climate change and sustainable energy issues addressed by projects will reduce air borne trans-boundary pollutants of SO_x, NO_x, particulates and CO₂ for local populations and in other countries. Improving the efficiency of hospitals and other health care facilities will produce budget savings and additional purchasing power to expand facilities or provide enhanced health care products and services. Efficiency improvements should reduce energy costs; improve the health conditions and living standards in public housing. Institutional strengthening of city administrations and their energy management teams will be advanced by projects that help overcome the energy non-payment crisis, create jobs in retrofitting energy-wasteful buildings and industry or in new industries producing energy efficient products.

ANNEX A

INCREMENTAL COST MATRIX

Project Activity	Baseline (B)	Alternative (A)	Increment (A-B)
Global Benefits	<ul style="list-style-type: none"> Countries in the region need to enhance energy efficiency to raise productivity, diminish fuel poverty, maintain energy security. National programmes have had limited success; energy intensity of economies rising during economic transition. <p>Baseline: US\$ 4,200,000</p>	<ul style="list-style-type: none"> Energy efficiency market formation boosted by US\$ 250 million PPP Fund Leverage with other funding sources could provide an investment volume of US\$ 2 billion reducing GHG of 10 million tonnes per year Fund could be repeated at lower cost if successful; projects will continue to make GHG reductions for 15-20 years <p>Alternative: US\$ 12,060,000</p>	<p>Increment: US\$ 7,860,000 Cost to GEF: US\$ 3,000,000</p>
Domestic Benefits	<ul style="list-style-type: none"> National programmes and international projects prove energy efficiency projects can be financed Demonstration energy efficiency investments difficult to reproduce Financial, technical and policy barriers inhibit further significant progress 	<ul style="list-style-type: none"> Significant participation of private sector 65%; public entities 35% in dedicated fund to finance projects Pipeline of investment project proposals prepared by local experts Policy reforms to render economically viable projects cost-effective 	
Activities related to Objective 1: Establish a PPP Fund	<ul style="list-style-type: none"> Limited national programmes to support energy efficiency projects International projects, fund mechanisms do not include private sector Funding generally limited to grants, guarantees, tax incentives, catalytic loans <p>Baseline: US\$ 600,000</p>	<ul style="list-style-type: none"> National participation in comprehensive regional project Private sector participation in PPP Fund closer to market conditions needed Leveraged financing with Fund and co-investors <p>Alternative: US\$ 3,270,000</p>	<p>Significant progress towards market formation for cost-effective energy efficiency projects that reduce GHG emissions will be achieved by the establishment a dedicated source project finance reflecting the needs of the private sector investors.</p>

			Increment: US\$ 2,670,000 Cost to GEF: US\$ 1,000,000
Activities related to Objective 2: Develop skills of public, private sector experts	<ul style="list-style-type: none"> Financial engineering skills are increasingly available in Eastern Europe Energy efficiency project identification and development skills are still lacking The application of such skills to develop a pipeline of bankable projects is lacking in all participating countries <p>Baseline: US\$ 1,800,000</p>	<ul style="list-style-type: none"> National and multilateral training courses on business planning, financial engineering for energy efficiency will enable local experts to develop projects A standard approach will allow projects developed in training courses to enter the investment project pipeline <p>Alternative: US\$ 4,450,000</p>	<p>The direct participation of local experts with increased skills will lead to a pipeline of investment project proposals to ensure that the Fund managers have an adequate deal flow to commit investment capital.</p> <p>Increment: US\$ 2,650,000 Cost to GEF: US\$ 950,000</p>
Activities related to Objective 3: Assist municipal authorities, national ministries on policy reforms	<ul style="list-style-type: none"> All participating countries have energy conservation laws, regulations, standards Local authorities and national ministries contend with a range of policy, legal and regulatory barriers to financing energy efficiency investments <p>Baseline: US\$ 1,800,000</p>	<ul style="list-style-type: none"> Specific provisions of policy reforms can transform economically attractive proposals into bankable projects Comparing policy reforms in a regional forum promotes 'best practice' among neighbours and western countries <p>Alternative: US\$ 3,900,000</p>	<p>Increased awareness of policy makers and specific case studies linked to investments will institutionalise the framework of an energy efficiency and renewable energy market</p> <p>Increment: US\$ 2,100,000 Cost to GEF: US\$ 950,000</p>

ANNEX B

LOGICAL FRAMEWORK MATRIX

Summary	Objectively verifiable indicators	Means of Verification (Monitoring Focus)	Critical Assumptions and Risks
Global Objective			
Energy related CO2 emissions are	Number and dollar value of investment projects	Data collected by National Participating	Assuming there is no

reduced through the promotion of environmentally sound energy efficient technologies in Eastern Europe and the CIS	developed, number of financed projects, carbon savings (tons/yr) from all energy efficiency and renewable energy investments in participating countries	Institutions, Ministries, International Financial Institutions; reported by delegations to the annual sessions of the EE21 Project Steering Committee	overall disruption of investment climate in Eastern Europe and the CIS.
Outcomes			
A public-private equity fund linked to a pipeline of bankable investment project proposals developed by local experts and supported by government policy reforms.	At project end, the fund is capitalized with US\$ 250 million and these funds are invested to provide, in average, 50% of the projects equity needs. As a consequence, financed projects are resulting in 10 million tons of carbon reduction per year at project end.	Data collected from the Fund Official reports and National Participating Institutions	Assuming there is no overall disruption of investment climate in Eastern Europe and the CIS.
Objective 1			
Establish a public private partnership	<ul style="list-style-type: none"> (a) An Investment Memorandum is ready and distributed in 6 months (b) 8 Investor Seminars are organized at project month 8. (c) Reputable fund manager identified and selected end of year 1. (d) An Energy Efficiency Investment Fund is set up and attracts US\$ 100 millions end of year 2. (e) Further capitalization to reach US\$ 250 millions is achieved at end of year 3. 	<p>Data from the project and the Fund Manager</p> <p>Minutes and attendees lists.</p> <p>Fund Manager appraised by E&M Advisers reviewed by the Project Steering Committee</p>	Risk that fund concept will not trigger sufficient and adequate investor interest from the private and/or the public sector.
Objective 2			
Develop the skills of public and private sectors experts to identify design and submit bankable proposals	<ul style="list-style-type: none"> (a) Clear guidelines and criteria established and disseminated for project preparation 6 months after project start. (b) Network of energy efficiency managers with 100 trained experts in 20 local teams are operating at end of year 1. (c) A pipeline of potential projects is developed and suitable projects selected representing: end of year 2: US\$ 0.8 billion corresponding to US\$ 100 million equity from the Fund; year 3: 2 billion corresponding to US\$ 250 million equity from the Fund. (d) A portfolio of projects is ready for 	<p>Data available from Project Management Unit, National Coordination Units.</p> <p>Experts Roster established by project. Lists of experts in project training sessions.</p> <p>Project documentation.</p>	Low risk of derailment, local teams highly motivated, competent.

	<p>presentation end of year 3 for a total of US\$ 150 million fund equity and US\$ 250 million in fund equity by year end 4.</p> <p>(e) Projects are financed by the Fund for a total of US\$ 100 million by end of year 3 (corresponding to a total investment of US\$ 800 million) and for a total of US\$ 250 million end of year 5.</p>	<p>Fund manager list of projects presented to the Fund.</p>	
Objective 3			
<p>Raise awareness and foster institutional and regulatory reforms at local and national levels</p>	<p>(a) Economic, institutional and regulatory reforms are identified by end of year 1.</p> <p>(b) 10 Energy efficiency seminars take place to present results and foster dialogue and action during year 2</p> <p>(c) Policy advisory services provided to 30 cities and 10 ministries end of year 3.</p> <p>(d) Reforms are implemented at all levels in at least 5 countries</p>	<p>Assessment of policy seminars, reports</p> <p>Policy maker interviews by Evaluation and Monitoring (E&M) Advisers.</p> <p>Reports, minutes of meetings</p> <p>Official publications.</p>	<p>Risk of policy inertia, energy utilities vested interests as obstacles to reforms.</p>

Components/Activities

<p>Activities related to Objective 1: Establish PPP Fund</p> <ul style="list-style-type: none"> (a) Investment memorandum (b) Investor seminars (c) Terms of reference Fund Manager (d) Select Fund Manager 	<p>Inputs: GEF: US\$ 1,000 K UNF: US\$ 500 K FFEM: US\$ 1,170 K UNECE: US\$ 600 K Region: -</p>	<p>Assumption: Significant investor interest of both public and private sectors expressed during preparatory phase continues during fund raising.</p>
<p>Activities related to Objective 2: Develop Skills</p> <ul style="list-style-type: none"> (a) Create country teams (b) Select trainers (c) Verify proposals 	<p>Inputs: GEF: US\$ 950 K UNF: US\$ 920 K FFEM: US\$ 650 K UNECE: US\$ 1,100 K Region: US\$ 700 K EBC: US\$ 130 K</p>	<p>Assumption: National experts and local energy managers remain motivated and committed to develop investments for their municipalities, industrial plants</p>
<p>Activities related to Objective 3: Assistance on Reforms</p> <ul style="list-style-type: none"> (a) Training sessions (b) Appraise barriers (c) Decision maker seminars (d) Field missions 	<p>Inputs: GEF: US\$ 950 K UNF: US\$ 500 K FFEM: US\$ 520 K UNECE: US\$ 1,100 K Region: US\$ 700 K EBC: US\$ 130 K</p>	<p>Assumption: National decision makers continue to seek policy options to promote energy efficiency projects, encourage direct foreign investment, enhance energy security and diminish fuel poverty</p>

ANNEX C

STAP ROSTER TECHNICAL REVIEW

Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation

The present project's technical and scientific review is based on the following two documents:

- UNEP GEF Project Brief
- Project Executive Summary

The review follows the guideline provided by the “Focal Area-specific Annotations to the GTOR of the STAP Roster Review”.

GENERAL PRESENTATION

The Project submitted by UNEP as Project Implementing Agency and the United Nation Economic Commission for Europe (UNECE) as co-Executing Agency together with UNEP aims at promoting the creation of an energy efficiency and renewable energies market in Eastern Europe and CIS region. The Project's implementation should result in the development of cost-effective investments that would reduce global greenhouse gas emissions.

To achieve this, the Project will establish as primary objective (Objective 1) a dedicated source of project finance (the Fund) with the participation of private and public sectors' investors. To facilitate the establishment and the operations of this Fund, the Project pursues two additional goals:

- enhance the skills of private and public sectors' experts at the local level to identify, develop and submit bankable projects for financing to the Fund (Objective 2),
- provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support these investments projects (Objective 3).

The total project cost is USD 12 million. The GEF contribution to the project is USD 3 million. Other co-financing institutions in cash and/or in kind are the Government of France through the FFEM (French GEF), the governments from countries in the targeted Region, the UN Foundation UNECE and UNEP.

This USD 12 million Project will permit the setting-up of a public-private equity investment fund of USD 250 million which operations developed on a commercial basis will generate a volume of investment in energy efficiency and renewable energies projects of about USD 2 billion. The Project ambition is to go far beyond what has been achieved until now in the region under the form of demonstration investments implemented by different development agencies and donors.

The Implementing Agency has already received the support of the Region's different governments during the project design phase and several private financial institutions expressed their interest in participating in the capital of the Fund.

The Project activities will benefit from the good network of experts and dedicated agencies developed by UNECE under the Energy Efficiency 21 (EE21) project.

The Project Brief is well documented and consistent. The proposed approach to structure the Fund (Objective 1) is very innovative and attractive. Our review conducted according to the guidelines provided in the “Focal Area-specific Annotations to the GTOR of the STAP Roster Review” does not

raise any crucial issue that may prevent the Project's sustainability, even though the Project start-up itself will very much depend:

- on the materialisation of the assumptions that the Implementation Agency has made concerning the possibility of bundling in one single Fund public and private equity,
- on the capability of the Implementing Agency and Executing Agencies to properly manage the overall financial engineering activities related to the design and implementation of an investment Fund.

KEY ISSUES

SCIENTIFIC AND TECHNICAL SOUNDNESS OF THE PROJECT

1. Has the most appropriate and effective approach been used to remove the barriers?

The project aims at developing a sustainable energy conservation market in selected countries from the former central-based economy block. To do so, the project's Implementing Agency follows three complementary/inter-related objectives:

- Objective 1: the setting up of an Equity Investment Fund under a public-private partnership scheme;
- Objective 2: the reinforcement of public and private capacities and expertise in the Fund's countries of operation regarding project identification and structuring of financing for the Fund;
- Objective 3: the increase in the Region of general awareness regarding EE and RE, and the increase of assistance to local and national decision-makers to introduce appropriate reforms to support the investment opportunities developed in the framework of the Project.

We believe that this Project's structure will facilitate the establishment of the Fund in the various countries targeted and will improve the feasibility of investment operations. The second objective, in particular, will allow providing the Fund with the support of a local network of experts that will have been trained to identify, evaluate and structure projects according to the Fund manager's expectations. This objective should also permit to rapidly prepare a large and diversified pipeline for potential projects. This work, which is normally carried out by Fund managers, is costly in time and human resources. It constitutes a large part of the transaction costs. These costs, in turn, strongly condition the size and the minimal profitability of "bankable" projects for the Fund manager. By transferring most of this activity to local teams, the project allows to reduce the operating costs of the Fund manager. Thus, the Fund manager can lower the threshold of the projects (in terms of size and profitability) in which he will invest.

Objective 2 will also contribute to reinforcing the feasibility of the investment operations and permit a wider technical and sector diversification of the Projects' portfolio. The creation of a team of experts in each country will equally allow for a better geographical diversification of the Projects' portfolio.

Objective 3 will permit, on one hand, to reinforce the legitimacy of the Fund for local and central decision-makers, in particular public ones. This is a very important aspect of the Project since a large part of the energy efficiency potential is located at the level of public infrastructure (district heating networks, health establishments, street lighting, administrative buildings, etc.). On the other hand, by providing local and central authorities with expertise and consulting, the Project can support the necessary reforms for a better economic, juridical and financial feasibility of investment Projects (tariff reforms, contractual law, « corporatisation » of public utilities, etc.).

Furthermore, the Project's concept is based on a sound analysis of the difficulties and barriers that have prevented until now, despite the presence of financially viable energy conservation projects, the actual

improvement of the situation regarding energy efficiency and renewable energies in the Region. It also shows the Implementing Agency's strong knowledge and experience background regarding the international and bilateral initiatives undertaken in the Region over the last 15 years to stimulate a market-based approach towards energy efficiency and renewable energy development.

To assess the Project's feasibility, the Implementing Agency has conducted a benchmarking study of the few international initiatives aimed at creating dedicated financial tools (e.g. funds or softened credit lines) in order to foster investment projects in the fields of energy conservation and emission reductions. For those tools that have entered into operation, this benchmarking study highlights the major difficulties encountered. The current Project has used these results to define how the Fund will operate and which accompanying measures are necessary.

One aspect of the Project's approach needs however to be further discussed and assessed. The Fund will be established as a public-private partnership, which means that capital investors in the Fund will come from both the public sector and the private sector. According to the Project Brief, the public participation is expected to come from the governments of the targeted countries and from governments from OECD or other possible donors. This Public Participation aims at mitigating the risks for the private investors and strengthening the Fund's investment operations' legitimacy in the region.

However, public participation will not be considered as grant or subsidies i.e. public capital commitments will be recovered by public investors when the Fund will exit its investments.

In fact, the risk mitigation for the private sector would result from a very innovative approach where different statuses are granted to the public and private capital commitments:

- "if the global fund return is above a certain threshold, public and private investors will receive the same level of returns to their commitments,
- if the global fund return is below various predetermined thresholds, the public investor's return will be reduced accordingly, so that the private sector's share can reasonably be increased and thus their risk mitigate"

From the Consultant point of view this original and very attractive scheme is based on the Implementing Agency's assumption that public investors will accept this difference of status. The question is then, what would happen if public investors or some of them demand to be treated on an equal footing?

2. Has the most appropriate and effective approach been used to reduce the costs of the technologies?

The investment operations of the Fund should yield a financial return for the public and private investors. The Project Brief clearly states that 35% of "public investment in the Fund will not be considered as grants or subsidies: when the Fund will exist from its investments, these capital commitments will be recovered by the public investors as it would be the case of the private investors, the difference being that they may [...] simply yield a return lower than the one allocated to the private investors". Under this obligation scheme, the Fund Manager will have to optimise the projects structuring costs in order to maximise the potential returns on investments of each projects. This should automatically lead the Fund Manager to look for best cost for value technologies.

3. Was the potential market determined on the basis of RETs data and databases?

A priori, the potential market was not determined on the basis of RET's data and database.

The investment potential in Eastern Europe for energy efficiency projects with a payback period of less than five years is, according to the Project Brief, estimated to be between USD5 and USD10 billion. These figures relate to the most interesting and profitable share of the potential market for energy efficiency and renewable energies in the Project's countries of operation, i.e. those investments with a gross financial return above 20%. However the market for EE and RE goes far beyond these figures. As a matter of illustration, a recent study made by the European Commission estimates the energy saving potential in these fields in Eastern countries at 400 Mtoe per year until 2012 for projects having a payback period of less than 15 years. The total investment required to reach this potential is estimated at 224 billion Euro.

When considering the potential market for the Fund, the Consultant understands that the success of the Project will strongly depend on the quality of the Project pipeline, which will, according to the Project Brief, result from activities developed by country teams selected and trained for that purpose (under Objective 2: "to prepare a substantial pipeline of possible investments in the energy and renewable energy sectors which meet the eligibility criteria established by the Fund and represent an investment volume of at least US\$ 2 billion in the eight participating countries.").

Regarding this approach, one could remark that the Project Brief provides strong justifications for selecting an experienced Fund Manager capable in particular of "identifying the possible investments, making all the necessary technical and financial due diligences, negotiating with sponsors, partners, technology suppliers and possible co-financiers and preparing the projects submissions to the Fund's internal bodies". These Fund Manager's responsibilities make from our point of view the activities of the local teams questionable. At what level of "bankability" are the local teams supposed to develop projects? As the Fund Manager will bear the entire responsibility of the Fund's operations and profitability, it is hard to understand how he will be able to take into consideration "bankable proposals" developed by third parties, unless he carries out by himself full projects assessments. If he does so, what would be the legitimacy of the "local teams"? How will local authorities - who are to support the Fund's operations - accept the Fund Manager if he does not take into account the work undertaken by local team?

4. Has an evaluation of the demand-side mechanisms to support after sales-services been undertaken?

From our point of view based on the assessment of similar investment schemes (EBRD Energy Efficiency and Emissions Reduction Fund, Litesko), after sales-services are necessarily integrated in the Fund's investment process as they strongly influence the Fund's investment performance and constitute a key factor to mitigate the technical risks of energy efficiency and renewable energy projects.

In practice, the Fund will mainly invest through Special Purpose Vehicles such as ESCOs which sustainability and profitability are totally dependent on the capability of maintaining the level of savings at the level agreed with the client in the "energy performance contract".

All over the duration of the performance contract, after sales-services remain therefore the ESCO's responsibility. This responsibility is managed directly and / or through a subcontract with local service and maintenance companies. Likewise, most of the energy efficiency and or renewable energy projects reviewed by the Consultant in the Region have been structured by project sponsors using suppliers' guaranties regarding the availability and efficiency of the purchased equipment. It is our understanding that the Fund Manager will adopt a similar approach to mitigate the technical risks of the project.

However, on the longer run, the technical performances of the energy efficiency and renewable energy development projects will depend on the existence, in the concerned countries, of a network of service and equipment providers that are competitive in terms of quality and price.

This aspect is not explicitly mentioned in the Project Brief. We think it should be taken into account in the framework of Objectives 2 and 3, especially since less profitable projects will only be taken into account if the price of the necessary services and equipment is progressively lined-up with local costs. The Project Brief should integrate an activity dedicated to establishing a sustainable after-sales service offer in the Fund's countries of operation.

5. Adequacy of the financing mechanism?

We believe that the proposed financial mechanism will correctly address the region's EE and RE market needs.

- The creation of a Fund under a public / private partnership acts as a relatively strong levy to involve private capital on a market where it is yet quite absent. Public capital will mostly play a role of mitigation risk for this private part. Private sector participation is crucial given the large investment needs in the Region and the poor direct intervention capacities of governments – engaged in public finance stabilizing policies.
- The Fund will intervene on an equity and quasi-equity basis: this is also an adapted approach for the Project's needs. An important share of large EE and RE projects in which the Fund will invest can be optimised on the technical side but also on the profitability side by creating Special Purpose Vehicles in which primary financing needs are satisfied by equity and quasi-equity capital. For small and medium size projects, the Fund will encourage the creation of ESCOs able to manage project design with adapted transaction costs. These ESCOs will be either new structures, either local engineering and maintenance companies in which the Fund will develop a performance contracting activity. Again at this stage, equity or quasi-equity capital will allow to create or reinforce the capitalistic structure of these companies. Then, in a second step, when these companies will have demonstrated their viability, they will be able to use the local financial market to obtain the necessary loans to extend their activities.

6. Adequacy of the introduced financial incentives?

The only financial incentive introduced in the Project is the one described in points 2) and 5). It concerns the role the public share is intended to play in the Fund in terms of risk mitigation for the private sector.

There is no other mention in the Project Brief of Project activities based on financial incentives. Activities under Objective 1 will necessarily be developed on a pure commercial basis. Activities under Objective 2 and 3 will entail direct costs in the form of fees for local and international experts, travel and accommodation expenses, and office and telecommunication equipment purchases.

7. Comments on the design of demonstration projects?

From a technological point of view, in principle, the design of demonstration projects does not fit with the logic of an investment fund as the activities planned under the present Project are all directed to the identification, assessment and financing of EE and RE investments on a commercial basis.

The objective of the Fund is to implement EE and RE investments by respecting the profitability objectives of the investors. This obligation implies, for a given project, that proven technologies and practices are implemented, which thus leaves little space for demonstration.

However, certain investment operations can act as a demonstration in terms of the nature of the operation (e.g. the first energy performance contract with a hospital in the framework of the renovation of its thermal installations, the first re-sale contract for electricity or heat by an IPP, the first unit of combined heat and power supplied by biomass, etc.).

In that respect, the communication and promotion means with which the Implementation Agency intends to disseminate the technical and financial information concerning its operations towards markets and local and national public authorities are well described in the Project Brief. They are from our point of view adapted to a wide dissemination of project results among different targets (local experts, public decision makers, companies and public).

8. Is the barrier removal supported by an underlying policy framework?

The majority of the project countries (Bulgaria, Kazakhstan, FYR Macedonia, Romania, Russian Federation, Ukraine) have declared energy efficiency as a policy priority to reduce GHG emission in their National Communication. All the concerned countries have already developed an institutional and regulatory framework for improving energy efficiency at end-users' level. As in OECD countries, they have all set-up public agencies or similar structures such as State committees to support end-users initiatives aimed at increasing energy efficiency and use of renewable energies. Representatives of these bodies have been involved by the Implementing Agency during the project design phase. These agencies and structures have presented the Project to national GEF Focal Points.

Moreover, the Project encompasses in Objective 3 activities aimed at providing assistance to municipal authorities and national administrations to stimulate and accompany the institutional and regulatory reform process through:

- the analysis of the local energy related institutional framework,
- the organisation of seminars at decision-maker level,
- the organisation of international experts' missions in the targeted countries in order to assist municipalities and central administrations in the implementation of the suggested reforms.

9. Is the proposed activity feasible from an engineering and technical perspective?

While the engineering and technical components of an EE and/or RE project are of utmost importance both in the identification/assessment phase and in the investment phase, this issue is not explicitly addressed in the Project Brief.

However the Project feasibility from an engineering and technical perspective does not raise particular issues for two main reasons:

- the investment operation developed by the Fund will be based on proven technologies (this is a prerequisite to mitigate the project technical risks);
- most of the responsibilities of designing, constructing and managing the new facility will be transferred to the equipment suppliers and / or a third party as an ESCO (after a procurement phase during which the references, the guarantees offered and the reliability of the bidders will be carefully assessed).

In addition, the activities of the Fund are developed in synergy with the activities aimed at increasing local capacities in terms of identification, assessment and structuring of EE and RE projects. These supporting activities will necessarily increase local engineering expertise but also permit to develop, at country and region levels, technology and project references that will facilitate the replication of similar investment projects through the Fund and / or other financial mechanisms.

Identification of global environmental benefits

The Project Brief describes shortly the global environmental benefits - the positive impacts of energy efficiency and renewable energies investments are not questioned.

Projects in which the Fund will invest are expected to provide the following global environmental benefits:

a) GHG emission reductions

- Mainly CO₂: Through direct improvement of fossil fuel combustion in boilers, through reduced final electricity consumption supplied by thermal power plants (and reduced power network losses), through the introduction of renewable energies, through energy recovery and cogeneration systems;
- CH₄: By reducing gas distribution pipes leakages, by using waste from the agro-food and wood industries, etc.

b) Air borne trans-boundary pollutants reduction, thanks to the decrease of primary and final fossil fuel consumption but also through the introduction of improved fossil fuel combustion systems (burners, combustion controllers) and the replacement of outdated facilities by ones that meet current international pollutant emission standards.

c) Water saving: Efficiency improvements in thermal energy generation will result in reduced needs of water in boilers and power plants. The retrofitting of district heating networks will also reduce the high level of water leakages.

d) Water quality: Improved energy management and efficiency will reduce the volumes of energy stored and processed and therefore the risks of infiltration or accidental penetration of liquid fuels in water reserves or rivers. Similar benefit could be expected from reduced volume of solid fuel particles unburned and or spread from inadequate storage facilities.

e) Forest preservation through the introduction of improved management practices and technologies required to secure quality and volumes of supplies for wood and biomass boilers.

However, it is important to draw the attention of the Implementing Agency on the fact that some of these benefits will strongly depend on the quality of the Fund Manager operations and / or ESCOs in which the Fund will have invested. Indeed, several of the above improvements entail over-costs that reduce the profitability of the investments and that investors may want to avoid.

The Implementation Agency will need to provide strong guidance concerning the ethic and environmental principles that should govern Fund Manager's investment policy.

How does the project fit within the context of the goals of the GEF

The Project will develop energy efficiency and renewable energy projects in selected countries from Eastern Europe which economies are two to four times more intensive than the western market economies. The EE and RE projects where the Funds will invest will reduce or avoid fossil fuels

consumption (oil, coal and gas) at end-users' level as well as at power generation' and energy transformation' levels. This avoided energy consumption will primarily result in GHG emissions reduction.

The projects will also contribute to mitigate the impact of the energy sector on land degradation and deforestation through:

- reduced trans-boundary pollutants emissions and then reduced acid rains,
- reduced volumes of infiltration or accidental penetration of liquid fuels in soils and water reserves,
- better management of forestry resources resulting from the development of RE projects using biomass.

Regional context

The regional aspect is an important aspect of the Project which targets a selection of countries from the former Eastern block that present similar characteristics from the point of view of the energy efficiency potential, and to a lesser extent, the renewable energy development potential. However, these countries are at different stages of reform and transition towards market economy. The Project Brief insists on the margins of action that this regional diversity offers in terms of developing a portfolio for the Fund (in particular, the possibility to re-orient the Fund Manager's activities towards one country or another depending on the degree of openness of the energy market and / or the possibilities of involvement of the private sector).

Nevertheless, it would have been useful to have in the Project Brief a presentation of the geographical strategies of the Fund (targeted markets by country or region) that the Implementation Agency intends to promote and discuss with the Fund Manager and the country teams. Finally, within the regional area of the Fund intervention, Russia and to a lesser extent Kazakhstan are distinguished by their status of large energy producers and exporters. So far, this status has discouraged or made more difficult the development of energy service activities. The Project Brief could have exposed the specific means intended to be set up by the Implementation Agency and / or the Fund in order to intervene in these two countries.

Replicability of the project

The Project replicability issue is raised here in different terms than those usually used for classical projects of single operation design.

The Project aims at creating an instrument dedicated to the design and the partial funding of investment operations in the field of energy efficiency and renewable energies. The expected result is the implementation of several projects covering the retrofit or the installation of new equipment consuming or transforming energy in order to improve energy efficiency and / or promote the use of renewable energy sources.

The Fund is expected to bring USD 250 million which should enable to generate a total investment volume of around USD 2 billions and thus create at regional level enough activity to insure the development of an energy efficiency and renewable energies market.

In this framework, the Project replicability could be discussed in three cases:

1st case: At the end of the period set for the first closing (nine months after the dissemination of the official Investment Memorandum) the public and private participations do not allow to reach the objective of USD 100 millions collected. In this case, the proposed public/private capitalisation scheme will have to

be questioned and the conclusion will most certainly be that there is no interest from the public and/or private sector(s) for this field of activity and that the Project is not replicable. This case seems rather unlikely given the expression of interests from public and private operators to support and participate in the Project's activities and the Fund's constitution.

2nd case: At the end of the Fund's investment period set at four years, the funds have not been totally spent. The Fund's renewal and/or the creation of a similar structure will then be strongly questioned.

These two first cases allow us to see the main obstacles to the Project's replicability. These obstacles could come from:

- A too high risk perception from private investors despite the participation of the public sector – this perception could be accompanied by excessive and unrealistic expectations on the rate of return of the invested funds (case n°1).
- The incapacity of the Fund Manager to identify and structure projects according to the Fund's established management rules and/or inadequate projects compared to the Fund's minimal profitability objectives (for economical and or regulatory reasons).

The first exchange of views between the Implementing Agency and potential public and private partners allows, *a priori*, to have no doubt about the interest for and the understanding of the proposed mechanism. There should thus be no difficulties to meet the Fund capitalisation objectives (during the Project preparation phase, the potential partners contacted -their number is necessarily limited- have already expressed their intention to invest for a total amount of USD 50 millions).

Likewise, even if no figure is mentioned in the Project Brief, it clearly appears that the Implementing Agency and its partners are willing to establish a reasonable objective concerning the return on investment in order to avoid the difficulties encountered by other Funds like REEF and/or SDG/SDF.

3rd case: During the 3 to 4 year period in which the Fund sells its shares in the projects it has invested in, i.e. "exits from its investments", it does not find buyers.

The replicability issue will then be raised in terms of technical or financial capacities for local markets to absorb this type of investments. At a more general level, the question will be raised concerning the possibility to create an energy efficiency and renewable energies market in the region.

This case is rather unlikely because, as can be seen from operations supported by the EBRD Energy Efficiency and Emissions Reduction Equity Investment Fund, the progressive reforms launched in the countries targeted by the Fund (Hungary, Poland, Czech Republic, Slovakia) have contributed on the one hand to improve the profitability of and the attraction for projects in which the Fund had invested, and on the other hand to promote the development of energy service companies – creating the good conditions to sell the Fund's participations.

Such a movement can already be observed in the some of the countries targeted by the proposed new investment Fund and should go on, in particular in countries importing energy.

To conclude this part, it seems to us that, given the importance of the considered market in the region targeted by the Project and given the growing pressure from the energy sector on the economical, social and environmental fields, the Project replicability will mainly depend on:

- the initiative capacities of local and international financial institutions and
- the States' commitment to implement the essential reforms supporting and securing investment schemes required to fund energy efficiency and renewable energies projects.

Sustainability of the project

1. Continuity of the generation systems after the subsidies and the intervention?

In the present Project, the issue raised is the capacity of local operators to manage equipment and facilities implemented in the framework of the Fund's operations.

The rules of the Fund define its intervention through the creation or the participation in *ad hoc* companies dealing with design and management of EE and energy generation from renewable sources. This limits poor management risks and/or poor operation of the installations after the Fund exits from its investments (since the management of energy facilities is the core business of these energy service companies).

Moreover, in the Project Brief, the Implementing Agency insists on the importance it intends to give to the procurement procedures that will be used by the Fund Manager in order to insure that adapted and proven technologies are selected.

2. Has an appropriate cost recovery been demonstrated?

The GEF contribution to the financing of the Project (USD 3 million) as well as the contributions of other co-financers will be directed to the support of technical assistance activities under Objectives 1, 2 and 3. Within this framework, direct cost recovery can not be expected nor demonstrated.

However, GEF's contribution to this Project will have an excellent leverage effect as it will generate an expected amount of investment in a magnitude of USD 2 billion.

Under this Project, the actual cost recovery will exist at the Fund's level as the Fund will only search for and invest in cost effective projects.

3. Has the question of competitiveness been raised?

The issue of competitiveness is not addressed in the Project Brief – However this issue is from our point of view not a crucial one for the sustainability of the Project.

The Fund's activities will *a priori* be competitive since the Implementing Agency rightly underlines the need for funding and dedicated financial instruments for EE and RE in the region. The Project answers to this need by bringing equity capital, quasi-equity capital and confirmed EE and RE expertise of the Fund Manager.

This simultaneous input of financial resources and specialised technical expertise seems to us a particularly important aspect of the Project since this expertise will facilitate the investment decision making process and *in fine* the Fund's disbursements.

In the Region, available private funding is not or too rarely used because the local institutions precisely lack this expertise which is absolutely necessary to technically, financially and legally secure the projects. The proposed Fund concept should thus have a competitive advantage compared to classical financial institutions. This advantage should allow the rapid setting-up of a project portfolio.

However, medium and long term success will be characterised by the progressive loss of this advantage, when, step by step, other market operators (in particular banks) will participate along the Fund in investment operations and/or will invest alone in projects – thanks to the enlargement of EE and RE markets.

At the level of individual projects, the Fund Manager's expectations in terms of equipment's and services' price and quality will contribute to the stimulation of competitive strategies from suppliers. The planned

investment volume thanks to the Project (USD 2 billions) is large enough to make the local and international equipment and technology offer evolve in this direction.

4. Has the project taken an approach that stresses continuity for the institutional logistics developments?

This aspect is particularly well addressed by the Project:

- At the level of the Fund's constitution with the direct implication of the countries in the Fund's capitalisation,
- At the level of Objective 3 which aims at developing awareness, capacity building and advice activities for public decision-makers in order to stimulate and facilitate the implementation of reforms favourable to the energy efficiency market extension.

The direct involvement of public authorities in Objective 1 and Objective 3 should moreover put governments in direct contact with the market (because governments will have representatives in the Fund's Strategic Committee) and allow them to better understand the stakes and expected results from the reforms for the development of EE and RE.

5. Have issues of ownership of the technology been considered?

This point is not an issue under the proposed Project. Since the Fund's operations are implemented on a private and commercial basis, the Fund owns directly (through its participations) or indirectly (through the companies such as ESCOs in which it will have invested) part of the projects' equipment until it exits these projects. When the Fund will exit these projects, the ownership will be transferred to the new investor.

SECONDARY ISSUES

Linkage to other focal area

The Project has a direct linkage with the Land degradation focal area and to a certain extent with the Biodiversity one through the positive impact that biomass projects may have on forest preservation.

Linkages to other programmes and actions plans at the regional subregional levels

This issue is not addressed in the Project Brief. However the Consultant considers that the Implementing Agency should, in the Project launching phase, pay a special attention to the identification of possible synergies and partnerships with other initiatives and on-going programmes in the field of EE and RE in the Region and in particular:

- Those developed under the European Commission Technical Assistance Programmes from the DG TREN and RELEX,
- Those developed by regional (EIB, EBRD) and international financial institutions (WB, IFC).

These linkages could facilitate the introduction of the Fund's operations in the Region but also permit to draw additional technical assistance resources that could significantly reinforce the overall Project activity programme.

Other beneficial or damaging environmental effects

Already addressed

Stakeholders' involvement

Project activities and outputs involve and benefit to a wide range of stakeholders: Industrial and commercial sectors' consumers, cities and regions' administrations, municipal energy management teams, hospital and healthcare managers, district heating utility managers, commercial banks, national ministries, parliamentarians, international companies and banks.

This multisector and multilevel approach is from our point of view an advantage of the project. It allows taking into account the specificity of energy efficiency: its multifactor dimension (technical, institutional, economical, local, central and regional).

We wish however to make a remark concerning the involvement of governmental authorities.

At the regional level, the project has been endorsed by GEF Focal Points. It has also received, according to the Project Brief, the support of States, NGOs and energy efficiency agencies. This strong institutional support is however not reflected in the national financial contributions to the Project Costs. Indeed, the Project Brief indicates that these contributions will include “the costs of experts taking part in project training courses for business planning and financial engineering” and that “the facilities and personnel services provided on an “in-kind” basis for project operations are estimated to be approximately USD 25,000 per year”.

However, according to the experience of the Consultant in the Region, whatever the type of projects, it is very hard to get a financial commitment from governments.

Capacity building aspects

Under the project, capacity building activities are designed to reinforce the effectiveness of the investment Fund operation through the development of regional and local expertise in all the fields related to the identification, assessment, implementation and follow-up of EE and RE investment projects (Objective 2). Furthermore, Capacity building activities are also directed to the development of municipal and national administration capacities through advisory services on concrete reforms to undertake, seminars for decision-makers and on field missions by international experts to assist municipalities and central administrations in the implementation of the suggested reforms (Objective 3). More than 60% of the Project's activities budget is devoted to capacity building activities through Objective 2 and Objective 3.

Innovativeness of the project

The innovativeness of the Project relies on two main aspects:

- The financial structuring of the Fund based on a public-private partnership. This new financing tool offers real assets in order to overcome some of the barriers that have prevented until now the development of a sustainable EE and RE market in the Region – the main barrier being the risk perception of private sector investors and the lack of governments and related institutions support towards EE and RE development initiatives.
- The tight relationship established in the Project between the Investment Fund's (and the Fund Manager's) operations and the activities aimed at increasing regional expertise. All the capacity building activities are based on practical tasks which should provide immediate and valuable outputs that will increase the Fund operations' efficiency: (i) Objective 2 will develop the skills of the public and private sectors' experts at the local level to identify, design and submit to the Fund manager bankable projects for financing; (ii) Objective 3 will raise general awareness regarding EE and RE and provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support the investment proposals developed in the framework of the Project.

Paris, June 11th, 2005
José Lopez

Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation

Annex C1. UNEP and UNECE Response to STAP Review

The constructive and helpful comments on the project are greatly appreciated and have been carefully considered in the responses and clarifications noted below. The responses are made in relation to the major areas and points highlighted in the Reviewers Key Issues.

1. Has the most appropriate and effective approach been used to remove the barriers?

Reviewer Comment: “From the Consultant point of view this original and very attractive scheme is based on the Implementing Agency’s assumption that public investors will accept this difference of status. The question is then, what would happen if public investors or some of them demand to be treated on an equal footing?”

Response: It is true that various public organisations, in particular those working on a commercially based principles such as the multi-lateral development banks, might be reluctant to not be treated pari-passu with the private sectors investors or would even strongly oppose to such a difference of status, as far as they are concerned. However, these are not the public organisations that are expected to participate in this risk mitigation mechanism, which will be actually dependent on the support provided by the governments (governments of the eight targeted countries as well as governments of developed countries, particularly in Europe). The European Union is also expected to play an important role in this regard, being at the moment very active in developing similar schemes, as evidenced by the new initiative the EU launched in May 2005, regarding the setting up of a global renewable energy fund established with the view of attracting private “patient capital”, supported by public incentives.

3. Was the potential market determined on the basis of RETs data and databases?

Reviewer Comment: “One could remark that the Project Brief provides strong justifications for selecting an experienced Fund Manager capable in particular of “identifying the possible investments, making all the necessary technical and financial due diligences, negotiating with sponsors, partners, technology suppliers and possible co-financiers and preparing the projects submissions to the Fund’s internal bodies”. These Fund Manager’s responsibilities make from our point of view the activities of the local teams questionable. At what level of “bankability” are the local teams supposed to develop projects? As the Fund Manager will bear the entire responsibility of the Fund’s operations and profitability, it is hard to understand how he will be able to take into consideration “bankable proposals” developed by third parties, unless he carries out by himself full projects assessments. If he does so, what would be the legitimacy of the “local teams”? How will local authorities - who are to support the Fund's operations - accept the Fund Manager if he does not take into account the work undertaken by local team?”

Response: The reviewer rightly points out the need for a close coordination between the Fund Manager and the local teams in charge of identifying and preparing investment proposals. It will be therefore an important task of the PMU to prepare terms of reference that will clearly specify the respective roles of these various entities. In particular, the Fund manager will have to participate in initial training sessions of the local teams to ensure these teams have full understanding of the Fund Manager needs and of the Fund’s eligibility criteria for projects.

4. Has an evaluation of the demand-side mechanisms to support after sales-services been undertaken?

Reviewer Comment: “However, on the longer run, the technical performances of the energy efficiency and renewable energy development projects will depend on the existence, in the concerned countries, of a network of service and equipment providers that are competitive in terms of quality and price. This aspect is not explicitly mentioned in the Project Brief. We think it should be taken into account in the framework of Objectives 2 and 3, especially since less profitable projects will only be taken into account if the price of the necessary services and equipment is progressively lined-up with local costs. The Project Brief should integrate an activity dedicated to establishing a sustainable after-sales service offer in the Fund's countries of operation.”

Response: In reality, this headline of the roster review template is not necessarily applicable in the case of this particular project. The rationale here is to support investments and not technologies per se. In this context, it is expected the Fund Manager will pay particular attention to the technical and technological issues related to each project the Fund will intend to invest in. Clearly, availability in the local markets of the appropriate equipment, devices and services will be key parameters to assess in this respect, without the Fund playing another role than catalysing a demand through its requirements. However, it is correct that under objective 3, the Project management Unit will have the opportunity to develop a dedicated activity in this respect, and make sure that a smooth functioning of the market will help preventing that cost-effective investments are not realised due to a lack of adequate equipment, installation and after-sales services.

6. Adequacy of the introduced financial incentives?

Reviewer Comment: “The only financial incentive introduced in the Project is the one described in points 2) and 5). It concerns the role the public share is intended to play in the Fund in terms of risk mitigation for the private sector. There is no other mention in the Project Brief of Project activities based on financial incentives. Activities under Objective 1 will necessarily be developed on a pure commercial basis. Activities under Objective 2 and 3 will entail direct costs in the form of fees for local and international experts, travel and accommodation expenses, and office and telecommunication equipment purchases.”

Response: As pointed out by the reviewer, the financial incentive resulting from the proposed mechanism comes from the objective of creating a public-private risk-sharing vehicle on the ground, offering funding at a return requirement matching returns of businesses funded. The incentive therefore lies in the possibility of buying down the cost of equity, as opposed to buying down specific risks, through an arrangement between investors whereby the Fund capital will be divided in “A” and “B” shares, with “A” shares being the more patient and “B” shares the more commercial, with different rights and duties associated to these two classes.

8. Is the barrier removal supported by an underlying policy framework?

Reviewer Comment: “The Project encompasses in Objective 3 activities aimed at providing assistance to municipal authorities and national administrations to stimulate and accompany the institutional and regulatory reform process through:

- the analysis of the local energy related institutional framework,
- the organisation of seminars at decision-maker level,
- the organisation of international experts' missions in the targeted countries in order to assist municipalities and central administrations in the implementation of the suggested reforms.”

Response: While the removal of barriers to introducing energy efficiency improvements is supported in the policy framework of all participating countries, the project addresses one of the main obstacles to energy policy implementation – the lack of adequate project finance in the energy efficiency field. The energy conservation laws or relevant chapters of national energy laws in many eastern European and CIS countries are inapplicable because the means to finance significant energy efficiency investments are unavailable to municipalities, public services and commercial enterprises. As a result, this project has been designed in close cooperation with the agencies delegated by governments to implement energy efficiency policies and will work closely with them to overcome barriers they have helped identify.

9. Is the proposed activity feasible from an engineering and technical perspective?

Reviewer Comment: “The activities of the Fund are developed in synergy with the activities aimed at increasing local capacities in terms of identification, assessment and structuring of EE and RE projects. These supporting activities will necessarily increase local engineering expertise but also permit to develop, at country and region levels, technology and project references that will facilitate the replication of similar investment projects through the Fund and / or other financial mechanisms.”

Response: Reducing the risks to potential Fund investors is a key feature of this project. Fortunately, the technical risk of energy efficiency projects is extremely low or nonexistent and comparatively low for renewable energy. Indeed, the technical solutions for improving energy efficiency in eastern Europe are generally well understood by local experts and the technology involved is simple, robust, long lasting and has been demonstrably successful in widespread applications in western countries for the last few decades.

Identification of global environmental benefits

Reviewer Comment: “It is important to draw the attention of the Implementing Agency on the fact that some of these benefits will strongly depend on the quality of the Fund Manager operations and / or ESCOs in which the Fund will have invested. Indeed, several of the above improvements entail over-costs that reduce the profitability of the investments and that investors may want to avoid. The Implementation Agency will need to provide strong guidance concerning the ethic and environmental principles that should govern Fund Manager's investment policy.”

Response: The pre-established eligibility criteria for investment project selection noted in the Project Brief would contain guidance for the Fund Manager reflecting the contents of the Investment Memorandum subscribed to by Fund investors. Indeed, preliminary indications are that selected public and private sector investors may have specific requirements to participate in Funds such as the one envisaged in the project to accommodate their own investment mandates.

Regional context

Reviewer Comment: The regional aspect is an important aspect of the Project which targets a selection of countries from the former Eastern block that present similar characteristics from the point of view of the energy efficiency potential, and to a lesser extent, the renewable energy development potential. However, these countries are at different stages of reform and transition towards market economy. The Project Brief insists on the margins of action that this regional diversity offers in terms of developing a portfolio for the Fund (in particular, the possibility to re-orient the Fund Manager's activities towards one country or another depending on the degree of openness of the energy market and / or the possibilities of involvement of the private sector).

Nevertheless, it would have been useful to have in the Project Brief a presentation of the geographical strategies of the Fund (targeted markets by country or region) that the Implementation Agency intends to promote and discuss with the Fund Manager and the country teams. Finally, within the regional area of the Fund intervention, Russia and to a lesser extent Kazakhstan are distinguished by their status of large energy producers and exporters. So far, this status has discouraged or made more difficult the development of energy service activities. The Project Brief could have exposed the specific means intended to be set up by the Implementation Agency and / or the Fund in order to intervene in these two countries.

Response: Although the reviewer poses relevant questions, it has to be said that it is on purpose these issues have not been fully addressed in the Project Brief. This is because the Fund organisation and strategy have to be defined by the investors in the Fund, and particularly the Lead Investors, and, therefore it would be premature to definitely set the key structuring characteristics of the proposed Fund. However, it is correct to think that the Fund, under its Board supervision, will need to implement various strategies depending on the various targeted countries. For example, the case of Romania where the cooperation established with UNDP team indicates an impressive energy efficiency projects pipeline is quite different from the Russian case, where the opportunities are not as well defined. To cope with such a situation, it is likely that the Fund will organise itself in an adapted manner, for instance through the setting-up of two or three sub-funds, under a Master Fund, with distinct objectives and management tools.

Replicability of the project

Reviewer Comment: “It seems to us that, given the importance of the considered market in the region targeted by the Project and given the growing pressure from the energy sector on the economical, social and environmental fields, the Project replicability will mainly depend on:

- the initiative capacities of local and international financial institutions and
- the States' commitment to implement the essential reforms supporting and securing investment schemes required to fund energy efficiency and renewable energies projects.”

Response: Potential duplication of the Fund is an essential element that has been considered while establishing the general principles delineated in the Project Brief. It will be the role of the Executing Agencies to ensure that the final design of the fund in consultation with the private and public investors that will be interested to participate in, will maintain this key requirement. Therefore, core co-investors are expected to be Governments, International Financial institutions, foundations and corporations who seek to support common sustainable policy objectives such as:

- bringing sustainable development benefits to economies in transition, including reducing energy and/or fuel poverty;
- bridging the finance gap and leveraging funds by catalysing private sector co-investment;
- engaging regional and local specialists in the investment decisions;
- imposing increased commercial discipline on investments;
- realising the potential of many technical assistance programmes through the resolution of the finance obstacle;
- creating a self-sustaining public-private vehicle, providing investment and technical assistance in a “one stop shop”;

obtaining a reasonable return on investment at a reasonable time horizon.

SECONDARY ISSUES

Stakeholders' involvement

Reviewer Comment: “At the regional level, the project has been endorsed by GEF Focal Points. It has also received, according to the Project Brief, the support of States, NGOs and energy efficiency agencies. This strong institutional support is however not reflected in the national financial contributions to the Project Costs. Indeed, the Project Brief indicates that these contributions will include “the costs of experts taking part in project training courses for business planning and financial engineering” and that “the facilities and personnel services provided on an “in-kind” basis for project operations are estimated to be approximately USD 25,000 per year”. However, according to the experience of the Consultant in the Region, whatever the type of projects, it is very hard to get a financial commitment from governments.”

Response: This project proposal of UNEP and UNECE has already received the formal endorsement of the proposed countries. The energy policy priorities of the Eastern European countries, their environmental concerns and international treaty obligations led them to agree on and propose this regional project in 2003. Their initiative to propose this project and anticipate its positive outcome was based at least partly on their successful participation in similar related technical assistance projects during the last few years. Each of the countries is committed to enhancing energy efficiency and improving environmental quality. They have shown that reducing greenhouse gas emissions is a declared policy priority in their National Communications to the GEF. Delegations from all proposed beneficiary countries requested the UNEP and UNECE to assist in the preparation and submit this project to the GEF, the United Nations Foundation and the Fonds Français pour l’Environnement Mondial during the an intergovernmental meeting in May 2003. The project has been formulated with views, guidance and information of national experts. Upon returning to capitals, all delegations have reviewed the project and requested the endorsement of their respective GEF Focal Points

The national participants in the project from beneficiary countries are mandated to implement national energy efficiency policies and/or to fulfil international treaty obligations for reducing greenhouse gas emissions or other air borne environmental pollution by their institution, government department, Ministry, local authority or energy efficiency agency. In every important respect, this project will serve as an enabling mechanism for the more effective implementation of national policies and for the fulfilment of international environmental commitments. The national authorities ‘in kind’ contribution of USD 25,000 per country per year is a significant level of support drawn from the resources of national participating institutions. Participation in the project will require this commitment to be realised concretely in the participation of national experts to prepare investment projects, the support of National Coordination Units to implement project activities and the willingness of local and national authorities to introduce administrative, regulatory and fiscal measures to stimulate the introduce energy efficiency policy reforms. The mandated institutional self-interest and the achievements of representatives from all participating beneficiary countries during the last decade to working multilaterally through the UN system in this field confirm their commitment to the success of this project.

Innovativeness of the project

Reviewer Comment: “The innovativeness of the Project relies on two main aspects:

- The financial structuring of the Fund based on a public-private partnership. This new financing tool offers real assets in order to overcome some of the barriers that have prevented until now the development of a sustainable EE and RE market in the Region – the main barrier being the risk perception of private sector investors and the lack of governments and related institutions support towards EE and RE development initiatives.
- The tight relationship established in the Project between the Investment Fund's (and the Fund Manager's) operations and the activities aimed at increasing regional expertise. All the capacity building activities are based on practical tasks which should provide immediate and valuable outputs that will increased the Fund operations' efficiency: (i) Objective 2 will develop the skills

of the public and private sectors' experts at the local level to identify, design and submit to the Fund manager bankable projects for financing; (ii) Objective 3 will raise general awareness regarding EE and RE and provide assistance to municipal authorities and national administrations to introduce economic, institutional and regulatory reforms needed to support the investment proposals developed in the framework of the Project.”

Response: The project is innovative in setting up a “patient capital” public-private type Fund and in promoting partnerships between the public and private sector locally, with eastern European non-governmental organizations and western professional non-governmental organizations which serve the business community. It establishes strategic partnerships between the GEF Implementing Agency, the UNECE executing and co-operating agencies, the private sector, host country authorities and government sponsors in Western countries.

These partnerships are expressed most effectively through collaboration to develop cost-effective energy efficiency investments that leverage commercial sector financing and additional resources from public and private sector co-financing partners. The approach should provide the conditions, skills and incentives for local stakeholders to engage in entrepreneurial activities which have had a multiplier effect when applied in market economies. Energy efficiency investments developed in the project should provide continuing budget savings for industries, municipalities, hospitals and district heating utilities. While it may take local budget policy reforms to accomplish this, the result should be that hospitals would benefit doubly by using budget savings on other health care priorities. Local communities would also benefit from enhanced safety and personal security from improved public lighting systems.

The project focuses on prevention of financial waste and environmental pollution by reducing energy consumption through efficiency improvements. Innovative Internet communications will link local participants, non-governmental organizations with private sector counterparts in some countries where the Internet is only beginning to emerge as a communications medium. It will allow international investors, including those seeking to participate in Joint Implementation (AIJ) projects, to assess a range of investment opportunities which can be analyzed on-line with value added pre-feasibility information and subsequently bundled together as investment packages. Similar on-line analyses can be performed by eastern, western and joint-venture companies to assess the market for their energy efficiency products and services in the region and provide opportunities for them to develop local partnerships with the support of host country institutions.

ANNEX D

LETTERS OF ENDORSEMENT

R O M A N I A



MINISTRY OF ENVIRONMENT AND WATER MANAGEMENT
12 Libertatii Boulevard, sector 5, Bucharest
Tel. / Fax. +40 21 33 66 954

Secretary of State Cabinet
Nr. 7431 / L.B. / 01.07.2004

To: Mr. Bernard Jamet
*GEF Climate Change Co-ordination
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and Ozone Action Unit*
Fax: 0033 1 44 37 14 74
cc. UNECE Geneva Fax: 0041 22 917 02 27

Ref.: 'Developing Capacities and Removing Barriers to Financing Energy Efficiency Investments for Climate Change Mitigation'

Dear Mr. Jamet,

I would like to express our appreciation to the Global Environment Facilities (GEF) and the United Nations Environment Programme (UNEP) for undertaking projects to promote energy efficiency investments for climate change mitigation.

In my capacity as the GEF Focal Point, I would like to express our support for the draft Project Concept Note that describes the above-mentioned project. I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions.

We look forward to the further development of this project with the GEF and UNEP and its implementation.

Yours sincerely,

Liliana BARA

Liliana BARA
Secretary of State for European Integration
GEF Political Focal Point

**МИНИСТЕРСТВО
ПРИРОДНЫХ РЕСУРСОВ И ОХРАНЫ
ОКРУЖАЮЩЕЙ СРЕДЫ
РЕСПУБЛИКИ БЕЛАРУСЬ**



**MINISTRY
OF NATURAL RESOURCES AND
ENVIRONMENTAL PROTECTION OF
THE REPUBLIC OF BELARUS**

ул. Коллекторная, 10, г. Минск, 220048
Тел.: (37517) 220 66 91; факс: (37517) 220 55 83;
E-mail: minproos@mail.belpak.by

10, Kollektorная str., Minsk, 220048
Tel.: (37517) 220 66 91; fax: (37517) 220 55 83/47 71;
E-mail: minproos@mail.belpak.by

09.08. 2004 № 07-9/1435

Mr. Bernard Jamet
GEF Climate Change Co-ordination
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and OzonAction Unit
39-43 Quai André Citroën
75739 Paris, Cedex 15, France
Fax. 0033 1 44 37 14 74

Dear Mr. Jamet,

**Developing Capacities and Removing Barriers to Financing Energy
Efficiency Investments for Climate Change Mitigation**

I would like to express our appreciation to the Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP) for undertaking projects to promote energy efficiency investments for climate change mitigation.

In my capacity as the GEF Focal Point in Belarus, I would like to express our support for the draft Project Concept Note that describes the above-mentioned project. I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions. We look forward to the further development of this project with the GEF and UNEP and its implementation.

Yours sincerely,

Vasily Podolyako,
Deputy Minister of natural resources
and environmental protection,
GEF Focal Point
Belarus

Letter of Endorsement

Republic of Serbia
MINISTRY FOR SCIENCE AND
ENVIRONMENTAL PROTECTION
Directorate for Environmental Protection
No.: off
Belgrade

Date: 12 July 2004.

Dear Mr. Jamet,

Developing Capacities and Removing Barriers to Financing Energy Efficiency
Investments for Climate Change Mitigation

I would like to express our appreciation to the Global Environmental Facility (GEF) and the United Nations Environment Programme (UNEP) for undertaking projects to promote energy efficiency investments for climate change mitigation.

In my capacity as the GEF Focal Point, I would like to express our support for the draft Project Concept Note that describes the above-mentioned project. I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions. We look forward to the further development of this project with the GEF and UNEP and its implementation.

Yours sincerely,


Professor Nikčević, PhD
Focal Point



Mr. Bernard Jamet
GEF Climate Change Co-ordination
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and OzonAction Unit
39-43 Quai André Citroën
75739 Paris, Cedex 15, France
Fax. 0033 1 44 37 14 74

cc. UNECE Geneva Fax. 41 22 917 0227

Mr. Bernard Jamet
GEG Climate Change Co-ordinator
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and OzonAction Unit
39-43 Quai Andre Citroen
75739 Paris, Cedex 15, France
Fax: 0033 1 44 37 14 74

cc. UNECE Geneva Fax: 41 22 917 0227

Date: 2004-07-05

Letter of Endorsement

Dear Mr. Jamet,

I would like to express our appreciation to the Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP) for undertaking projects to promote energy investments for climate change mitigation and for initiating this particular project – “Developing Capabilities and Removing Barriers to Financing Energy Efficiency Investment for Climate Change Mitigation”.

In my capacity as the GEF Focal Point, I would like to express our support for the draft Project Concept Note that describes the above-mentioned project. I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions. We look forward to the further development of this project with the GEF and UNEP and its implementation.

Yours sincerely, F. Iliaz

Fathme Iliaz

GEF Focal Point
Bulgaria



**MINISTRY OF ENVIRONMENT
AND PHYSICAL PLANNING
Republic of Macedonia**

Our no.: 08-3618/3
Your No.: 12-5020
Date: 02.09.2004

To: Frederic Romig
Sustainable Energy Section, IREED Division
UN Economic Commission for Europe
Palais des Nations, CH-1211 Geneva 10 Switzerland

Subject: Endorsement of Project Proposal "Financing energy Efficiency and Renewable Energy Investments for Climate Change Mitigations "

E n d o r s e m e n t

In my capacity of GEF Operational Focal Point of the Republic of Macedonia, hereby I endorse the submitted project Proposal "Financing energy Efficiency and Renewable Energy Investments for Climate Change Mitigations ", submitted by Ministry of Economy of Republic of Macedonia.

This project will further contribute to the national efforts for fostering development of climate change mitigation, so far now supported by GEF through UNDP. Project will also articulate our already recognized national needs.

Therefore I endorse the submitted Project proposal where the Ministries of Environment are recognized as a National Counter partner Institutions . I would like to take this opportunity to express our readiness and expectations to be active partner in conducting the project activities on national level in the future. Furthermore, Ministry of Environment and Physical Planning, as a national coordinator of UNFCCC and as an initiator and performer of the procedure for ratification of Kyoto Protocol, can provide assistance at consultative and expert level.

Looking forward to continuing our successful cooperation.

Sincerely,

Gordana Kozuharova ,
Head of Department for European Integration
GEF Operational Focal Point

ul. Drezdenska 52, 1000 Skopje
Phone. 02/3066-930 Phone/Fax 02/3066-931
E-mail: infoeko@moe.gov.mk / Web: www.moe.gov.mk

**МІНІСТЕРСТВО
ОХОРОНИ НАВКОЛИШНЬОГО
ПРИРОДНОГО СЕРЕДОВИЩА
УКРАЇНИ**



03035, Київ, вул. Урицького, 35
Тел.: +(380 44) 206 3100; +(380 44) 248 4933
Факс: +(380 44) 206 3107
E-mail: secr@menr.gov.ua

**MINISTRY
OF ENVIRONMENTAL
PROTECTION OF UKRAINE**

35 Urytsky Str., Kyiv, P.O. 03035, Ukraine
phone: +(380 44) 206 3100; +(380 44) 248 4933
fax: +(380 44) 206 3107
E-mail: secr@menr.gov.ua

Our ref: 10456/20/1-2
28 October 2004

Dear Mr. Jamet,

**Developing Capacities and Removing Barriers to Financing Energy Efficiency
Investments for Climate Change Mitigation**

I would like to express our appreciation to the Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP) for undertaking projects to promote energy efficiency investments for climate change mitigation.

In my capacity as the GEF Focal Point, I would like to express our support for the draft Project Concept Note that describes the above-mentioned project. I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions. We look forward to the further development of this project with the GEF and UNEP and its implementation.

Yours sincerely,

Anatolii Ilrytsenko
Deputy Minister,
GEF Focal Point

Mr. Bernard Jamet
GEF Climate Change Co-ordination
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and Ozon Action Unit
39-43 Quai André Citroën
75739 Paris, Codex 15, France
Fax. 0033 1 44 37 14 74

cc. UNECE Geneva Fax. 41 22 917 0227



473000, Астана қаласы, Жібек даяғы, 31 үй
Тел. 59-19-44, факс 59-19-73

473000, город Астана, проспект Победы, 31
Тел. 59-19-44, факс 59-19-73

2008 жылғы 24.05
№ 4-2-1-9/1542-И

№ _____

To: Mr. Bernard Jamet
GEF Climate Change Co-ordination
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and Ozon Action Unit
Cc. UNECE

*Ref.: Developing Capacities and Removing Barriers to Financing Energy Efficiency
Investments for Climate Change Mitigation*

Dear Mr. Jamet,

The Ministry of Environmental Protection of the Republic of Kazakhstan would like to express our appreciation to the Global Environment Facility (GEF) and the United Nations Environment Programme (UNEP) for undertaking projects to promote energy efficiency investments for climate change mitigation.

We would like to express our support for the draft Project Concept Note that describes the above-mentioned project. I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions. We look forward to the further development of this project with the GEF and UNEP and its implementation.

At the same time, We notice that at the moment The Republic of Kazakhstan have not ratified the Kyoto Protocol to the United Nations Framework Convention on Climate Change yet.

Yours sincerely,

Acting Minister

S. Kesikbayev



**МИНИСТЕРСТВО
ПРИРОДНЫХ РЕСУРСОВ
РОССИЙСКОЙ ФЕДЕРАЦИИ**
123995, Москва Д-242, ГСП-5,
ул. Б. Грузинская, 4 / 6
Тел. (7095) 252 0300
Факс (7095) 943 0013

01.09.2006

**MINISTRY
OF NATURAL RESOURCES
OF THE RUSSIAN FEDERATION**
4/6, B. Gruzinskaya Str.,
Moscow D-242, GSP-5, 123995
Tel. (7095) 252 0300
Fax (7095) 943 0013

Европейская экономическая комиссия ООН,
Директору отдела перестройки
промышленности, энергетики и
развития предпринимательства

1-му Джоржу Ковальскому

Уважаемый господин Ковальский!

Министерство природных ресурсов Российской Федерации рассмотрело концессию проекта «Инвестиционное финансирование проектов по энергоэффективности и нетрадиционной энергетике с целью снижения влияния на изменение климата» (далее-Проект) и сообщает.

Учитывая, что основной целью Проекта является предоставление технической помощи странам Европы, в том числе России, для подготовки инвестиционных проектов в области энергоэффективности, а также возобновляемых и альтернативных источников энергии в соответствии с требованиями международных банковских структур и их дальнейшее финансирование из инвестиционного фонда, считаем целесообразным поддержать данный Проект и надеемся, что его реализация позволит российским специалистам подготовить значительное количество инвестиционных проектов в области рационального использования энергии, а также проектов, связанных с уменьшением выбросов в атмосферу «парниковых газов» в рамках выполнения Киотского протокола.

С уважением,

Заместитель Министра,
Национальный координатор ГЭФ

В.Г.Степанков

**Unofficial translation of the GEF Focal Point Letter of Endorsement from
Mr. Valentin Stepankov, Deputy Minister, Ministry of Natural Resources of the
Russian Federation and GEF National Focal Point to
Mr. George Kowalski, Director, UNECE Industrial Restructuring, Energy and Enterprise
Development Division**

01.09.2005

**MINISTRY
OF NATURAL RESOURCES
OF THE RUSSIAN FEDERATION**

4/6 B. Gruzinskaya Street
Moscow D-242, GSP-5, 123995
Tel. (7095) 252 0300
Fax. (7095) 943 0013

United Nations
Economic Commission for Europe
Industrial Restructuring, Energy and
Enterprise Development Division

Dear Mr. Kowalski,

The Ministry of Natural Resources of the Russian Federation has considered the concept of the project “Developing Capacities and Removing Barriers to Financing Energy Efficiency Investments for Climate Change Mitigation” (Project Concept Note) and would like to confirm the following views.

Taking into account that the main aim of the Project is to provide technical assistance to European countries, including Russia, for preparing investment projects in the field of energy efficiency and renewable energy sources in accordance with requirements of International Financial Institutions and their financing from an investment fund later on, we consider it is reasonable to support this Project and express our hope that the realisation of this project will allow Russian experts to prepare a considerable number of investment projects in the field of rational energy utilisation, and also projects related to the reduction of "greenhouse gas" emissions in the atmosphere in the framework of the Kyoto Protocol's implementation.

Yours sincerely,

Deputy Minister,
National GEF Coordinator

V.G. Stepankov

ANNEX E

LETTERS OF CO-FINANCING PARTNERS

1. **United Nations Foundation – United Nations Fund for International Partnerships** Board Decisions providing funding for US\$ 2 million for the Financing Energy Efficiency Investments for Climate Change Mitigation project on the basis of 1:2 co-financing.
2. **Ministry of Foreign Affairs of France** letter of intent to support a proposal for co-financing with the United Nations Foundation on the Financing Energy Efficiency Investments for Climate Change Mitigation project for Euro €2 million within the framework of a Euro €6 million total project budget.
3. **European Business Congress** letter of intent to provide Euro €200,000 for the development and finance of energy efficiency investment projects as a co-financing partner with the United Nations Foundation. Contribution of EBC confirmed for Euro €100,000 subsequent to the meetings of relevant EBC Working Committees.

UNITED NATIONS



NATIONS UNIES

UNITED NATIONS FUND FOR INTERNATIONAL PARTNERSHIPS (UNFIP)
Telephone: (212) 963-6121 • Facsimile: (212) 963-1486

25 June 2004
Ref.: 15th Docket

Dear Ms. Schmögnerová

Outcome of UNF/UNFIP Project Proposal Review

We are pleased to inform you that, as a result of the May/June 2004 deliberations of the UNFIP Advisory Board and the UNF Board of Directors, the following proposal submitted by UNECE has been approved for funding:

- *Financing Energy Efficiency Investments for Climate Change Mitigation*

Both Boards would like to convey their appreciation to the UNECE team for its efforts in preparing the proposal.

During the course of their review, Board members made some comments regarding the above projects that would need to be borne in mind as the project document are finalized. We shall communicate the detailed information directly to the UNFIP focal point within UNECE.

Our Office continues to remain available to facilitate and assist you in your endeavours.

Yours sincerely,

A handwritten signature in blue ink that reads "Amir A. Dossal".

Amir A. Dossal
Executive Director

Ms. Brigita Schmögnerová
Executive Secretary
Economic Commission for Europe
Geneva

cc: Ms. B. Bassani
Ms. M. Kimble
Mr. F. Romig

02 JUL 2004

Terms and Conditions

Grant Title: **Financing Energy Efficiency Investments for Climate Change Mitigation**

Overview: This proposal accelerates and extends the impact of a successful earlier UNF-supported UN Economic Commission for Europe (UNECE) pilot that worked with governments and financial institutions to develop a market for cost-effective energy efficiency projects in Eastern Europe. It also establishes a sustainable, market-based model to finance energy efficiency and renewable energy investments with significant environmental, economic, and social benefits. This proposal would partner UNF and UNECE resources with large European donors and commercial financial institutions to structure new energy efficiency investment funds.

Total Grant Budget: \$6,000,000
UNF Core Funds: \$2,000,000
Third Party Funding: \$4,000,000
Funding Partner(s): French Global Environment Facility (FFEM) of the French Ministry of Foreign Affairs (\$3.6 million)
European Business Congress (\$240,000)
Norwegian Ministry of Foreign Affairs and Vekst Foundation (\$50,000)

Parallel Funding: \$205,000
Parallel Funding Partner(s): U.S. Environmental Protection Agency (\$205,000)

Requesting Organization: UN Economic Commission for Europe (UNECE)
Affiliate Agencies: ESCAP, UNDP-GEF, UN Resident Coordinators
Country or Region: Up to 10 selected countries in eastern Europe, and the Commonwealth of Independent States (CIS)

Project Duration: 48 months

Tranche: XV
Meeting Date: June 16, 2004

Program Area: Sustainable Energy/Climate Change
UNF Program Officer: Duncan Marsh
Partnership Development Officer: Becky Martin
UNFIP Program Officer: Will Kennedy

UNF Board Resolution

Consideration of a Grant Request by UNECE for the project *Financing Energy Efficiency Investments for Climate Change Mitigation*. The Board discussed the issuance of a variable supplemental challenge grant for the project, *Financing Energy Efficiency Investments for Climate Change Mitigation*, requested for funding in the amount of \$6,000,000.00. Following discussion and upon motion duly made and carried, it was:

*RESOLVED, that a grant from the United Nations Foundation is hereby approved in principal in an amount up to Two Million and no/100 Dollars (\$2,000,000.00), payable over a forty-eight (48) month period to the UNFIP Trust Fund on behalf of UNECE for the project **Financing Energy Efficiency Investments for Climate Change Mitigation**;*

FURTHER RESOLVED, that the United Nations Foundation shall contribute up to One Dollar (\$1.00) to this project for every Two Dollar (\$2.00) contribution made by public and private third party donors to the United Nations Foundation in support of said project, with payment by the United Nations Foundation not to exceed the amount of the grant;

FURTHER RESOLVED, that said grant is expressly contingent upon and shall be proportionate to the United Nations Foundation's receipt of contributions for the project from public and private third party donors; and

FURTHER RESOLVED, that subject to the resolutions listed above, the United Nations Foundation shall encourage private and public third party donors to support the project up to and until total funding for the project, inclusive of the grant, equals Six Million and no/100 Dollars (\$6,000,000.00).

Terms and Conditions

- The success of the project will be determined largely on the basis of how well the investment funds are structured, managed, and supported by public and private partners and investors.
- UNECE will initiate an independent mid-term evaluation of project performance no later than December 2005.
- That UNF limit its core contribution to \$500,000 against \$1,000,000 in third party funds prior to operationalizing the planned investment funds

ENK



PARIS, le 6 mai 2005

Monsieur le Sous-Directeur
du Développement économique et de
l'Environnement
Ministère des Affaires Etrangères
DGCID - DCT
20 rue Monsieur
75007 PARIS

2005/STR-FEM-FFEM/PhB-VL n° 121

Objet : EUROPE DE L'EST – « Renforcement des capacités et appui à la mise en place d'un fonds dédié à l'efficacité énergétique en Europe de l'est »

Nous vous confirmons que le comité de pilotage du FFEM, réuni le 30 mars 2005, a approuvé sur la base du rapport de présentation du projet cité en objet, l'octroi d'une subvention d'un montant total de 2.000.000 euros.

Vous trouverez, ci-joint, l'extrait du procès-verbal et la résolution correspondante.

Nous vous remercions de bien vouloir informer les services compétents et les bénéficiaires du projet.

Copie : N. Lambert

P.J. : Extrait du procès-verbal du comité
Copie de la résolution

CID/DCT
ARRIVÉE

10 MAI 2005

Pour :
Cotat° :



NUMERO DU CONCOURS : CZZ 1295.01 E
N° de TIERS : 501104



RESOLUTION DU COMITE DE PILOTAGE DU FFEM

N° FFEM 2005.0004 du 30 mars 2005

INTITULE DU PROJET : Renforcement de capacités et appui à la mise en place d'un fonds dédié pour l'efficacité énergétique en Europe de l'Est

PAYS : Albanie, Bosnie Herzégovine, Croatie, Macédoine, Serbie et Monténégro, Belarus, Moldavie, Ukraine, Kazakhstan et Russie

INSTITUTION PARTENAIRE : Ministère des Affaires Etrangères

FICHE D'IDENTIFICATION ACCEPTEE : 7 juillet 2004

DOMAINE D'APPLICATION : Changements climatiques / Effet de serre

BÉNÉFICIAIRE : Commission Economique pour l'Europe des Nations Unies (CEENU)

MONTANT TOTAL : 6 M €

COFINANCEMENTS :

FEM	2,067 M €
Fondation des Nations Unies	1,933 M €

SUBVENTION FFEM : 2 M €

DATE DE DÉMARRAGE DU PROJET : 2^{ème} semestre 2005

DURÉE DU PROJET : 3 ans

Condition préalable :

- la mise en place du concours est subordonné à la confirmation écrite de l'engagement du PNUE/FEM.

Certifié conforme à la décision du comité de pilotage :

Le Représentant de l'AFD au comité de pilotage du FFEM
Signature :

Date : **03 MAI 2005**



EBC EUROPEAN BUSINESS CONGRESS e.V.
Member of the Board of Executive Directors
and Treasurer

Mr. David M. Carter
Chief Financial Officer
United Nations Foundation
1225 Connecticut Avenue, NW
Suite 400
Washington, DC 20036

Thursday 1 April, 2004

Re: Energy Efficiency 21 Project

Dear Mr. Carter:

During the last few months, we have been discussing with the UNECE secretariat the possible participation of the European Business Congress in the United Nations Economic Commission for Europe Energy Efficiency 21 Project. Following our discussions I am pleased to inform you on behalf of the EBC Working Committees to be involved in the project, that a proposal for a funding pledge of Euro 200,000 will be considered by the relevant EBC Working Committees for Ecology & Health at its next meeting in Moscow later this month and by the EBC Working Committees for Energy and for Industry & Construction at their next meetings in Varna next June. The aforesaid Working Committees and the EBC's Presiding Committee will be considering making this Grant to the United Nations Foundation to be used in support of the Foundation's project on Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation to be implemented by UNECE.

I understand that, subject to satisfactory documentation on the Project and EBC's role therein, the total Euro 200,000 sent to the United Nations Foundation should benefit from any matching funds arrangement decided by the UN Foundation for the Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation project. I will inform you of the decisions of the European Business Congress concerning funding for this project later this month, latest in early July

If you have any questions, please do not hesitate to contact me at +32 2 374 61 66.

Sincerely,

Dr. Karsten Kaempf

Avenue Emile de Mot 19 – 22, B 1000 Brussels , Tel: 0032 2 6411765 Fax: 0032 2 6482161
EBC's Registered Office: Zimmerstr. 56, D 10117 Berlin
e-mails: ebc.sekretariat@t-online.de karsten.kaempf@irelco.net

ANNEX F

LETTERS OF INTEREST OF FUND PARTICIPANTS



Commonwealth Bank of Australia
ABN 48 123 123 124

Institutional Banking, Head Office

Level 15
52 Martin Place
Sydney NSW 2000
Australia

GPO Box 2719
Sydney NSW 1155

Telephone (02) 9312 0477
Facsimile (02) 9312 4828
DX 1020 Sydney (2058 713)

Mario Grech
Executive, Environmental Initiatives
Project & Infrastructure

21 November 2003

Mr George Kowalski
Director, Industrial Restructuring Energy and
Enterprise Development Division
United Nations Economic Commission for Europe
Palais des Nations Bureau 382
CH-1211 Geneva 10
Switzerland

Dear Mr Kowalski,

Thank you for providing the opportunity for the Commonwealth Bank/Swiss Re Joint Initiative to provide additional information on how we can contribute to the objectives of the Energy Efficiency 21 financing mechanism.

The Joint Initiative expects that significant synergies exist between our current activities and product development and the proposed activities of the financing mechanism. It is hoped that substantial additional value can be delivered to the financing mechanism and potential investors through appropriate project selection and delivery of mechanisms to effectively market the Verified Emission Reductions produced.

The Joint Initiative believes it has the skills to provide a number of active operational roles in delivering such additional value. The Commonwealth Bank and Swiss Re have been working together to develop voluntary / compliance offerings to corporate Europe since the end of 2002. Both organizations bring complimentary expertise and financial acumen that make the Joint Initiative uniquely qualified to develop innovative structures for the monetization of emissions reductions.

Please find attached a memorandum in answer to the specific questions requested.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mario Grech".

Mario Grech
Environmental Initiatives
Commonwealth Bank of Australia
Level 15
52 Martin Place
Sydney, NSW 2000

A handwritten signature in blue ink, appearing to read "Christopher Walker".

Christopher Walker
Managing Director
Swiss Re
55 E. 52nd Street
New York, NY 10055
+1 212 317 5280



+61 29312 0477

+1 212 317 5051 (fax)

Walter Blasberg
Managing Director

Conning
CityPlace II
185 Asylum Street
Hartford, CT 06103-4105
Phone: 860-520-1296 Fax: 860-520-1253
bill_shenton@conning.com

November 21, 2003

Mr. George Kowalski
Director, Industrial Restructuring, Energy and Enterprise Development Division
United Nations
Economic Commission for Europe
Palais des Nations
CH-1211 GENEVA 10
Switzerland

Dear Mr. Kowalski,

Thank you for your recent correspondence concerning the Proposals for Energy Efficiency 21 Financing Mechanisms. As indicated, Conning Asset Management is interested in being considered for a mandate to set up an Investment Fund in relation to EE21.

In preparation for the December 2-3 meeting in Geneva, this letter will provide you with information about our firm, which is "practical and warranted at this stage" as well as answer the questions outlined in your letter. In addition, complementary background material is attached hereto.

Overview

Conning Asset Management is a wholly owned subsidiary of Swiss Re, one of the largest reinsurance organizations in the world. Conning is a part of Swiss Re's Financial Services Business Group (FSBG) and has global responsibility for non-proprietary client investments totaling approximately \$39 billion. Conning proposes to develop a \$250 million investment fund to invest in energy efficiency investments in eastern Europe and the CIS. Conning plans to work in affiliation with TCW Group's Energy & Infrastructure Group (EIG) to manage all aspects of this fund.

The TCW Group is an indirect subsidiary of Societe General, SA and manages approximately \$84 billion of assets for institutional clients. TCW EIG is a leader in energy and infrastructure project financing and has funded 143 investments totaling approximately \$2.7 billion. TCW EIG has a 19 year AIMR compliant track record of successful project investing as indicated below:

Mr. George Kowalski
 Page 2

Fund	Committed Capital	Year Est.	No. of Investments	Status	Return (IRR) Before Fees
Fund I	\$100,000,000	1982	5	Liquidated	2.40%
Fund II	300,000,000	1986	17	In liquidation	12%
Cogeneration	600,000,000	1987	44	Currently Investing	15%
Oil & Gas Equity	50,000,000	1988	14	In liquidation	39%
Fund III	208,000,000	1989	13	In liquidation	16%
Fund IV	306,000,000	1993	14	In liquidation	11%
Fund V	650,000,000	1994	14	Fully Invested	12%
Fund VI	278,000,000	1997	11	Fully Invested	16%
GPF	500,000,000	2001	11	Currently Investing	20%-23% Target
Fund X	300,000,000	2003	0	Currently Investing	15%-19% Target
TOTAL	\$3,112,000,000		143		

The combined resources which Conning, Swiss Re and TCW bring to this project are extensive.

Swiss Re is the world's second largest reinsurer with more than 70 offices in 30 countries including offices in Eastern Europe and the CIS. Swiss Re is rated AA by S&P. Swiss Re is a direct insurance provider to the Fortune 2000 and has business units with engineering and technology expertise in the power generation and energy sectors in particular.

As the world's second largest reinsurer, Swiss Re plays a leading role in developing and implementing strategies to deal with the risks and opportunities related to climate change. Swiss Re is committed to the principles of sustainable development and is actively promoting awareness for climate risks, supporting strategies to reduce greenhouse gas emissions and providing new (re)insurance and financing solutions through publications and facilitates ongoing dialogue with stakeholders. Swiss Re was the first financial services company to establish a unit, Greenhouse Gas Risk Solutions, that is dedicated to assisting with Greenhouse Gas emissions reduction efforts. The GHGRS team consists of 3 full-time experts in the GHG marketplace.

[Text of Investment Fund Proposal]

Thank you for the opportunity to provide this information to the United Nations Economic Counsel for Europe. We look forward to our meeting in Geneva on December 2 at 11AM and hope you will contact me about any additional information needs.

Very truly yours,

Walter J. Blasberg
 Managing Director

ENERGY & COMMUNICATIONS SOLUTIONS LLC

Global Infrastructure Solutions

21 November 2003

MEMORANDUM FOR: Steering Committee, UNECE Energy Efficiency 21 Project
FROM: Energy & Communications Solutions LLC Team
SUBJECT: Proposal for Energy Efficiency 21 Financing Mechanisms

Attached please find our responses to the questions posed by Mr. George Kowalski, Director, Industrial Restructuring, Energy and Enterprise Development Division, UN ECE in his memorandum of 14 November, 2003 concerning formation of a financing mechanism or Investment Fund to support the objectives of the UNECE Energy Efficiency 21 Project (EE21).

Mr. Kowalski's questions seek information regarding our background, experience, relationships, intentions, and willingness to make commitments to work with the UN ECE to develop what we would call a "Fund for Sustainable Development" that would promote:

- Sound environmental outcomes,
- Institution building,
- Capacity building in target countries; and
- Good financial returns.

We applaud these objectives; indeed we have been working toward these objectives in the public and private sectors for many years. Our resumes and reputations give testimony to that fact.

The Fund will seek to nurture specific UN ECE policy objectives. We understand those policy objectives. Our team has experience in doing both commercial transactions and establishing new policy within the energy and environmental sectors of your member-countries. Few teams, if any, can make these claims.

The Fund will focus on Central Europe, Eastern Europe, and the countries of the former Soviet Union and the team, accordingly, is composed of persons with experience in these countries and possessing the relevant language skills.

In addition to presenting our team, we also present our expectation of our relationship with you and the relevant United Nations Economic Commission for Europe (UN ECE) affiliates. We also present a tentative schedule of activities and outcomes that will lead to the successful attainment of your goals. A description of our approach follows.

Energy & Communications Solutions LLC (E&CS) has organized a team of experts that will, with partner entities, form a special purpose company that will serve as the management company for the Fund. Thus, throughout this document, when we refer to

2121 K Street, N.W. Suite 800 • Washington, DC 20037

Phone (202) 261-3558 • Fax (202) 261-3508

“we” or “us” or the “proposal team”, we are referring to the special purpose entity that is being formed by those identified in these confidential materials and attached resumes.

If chosen to pursue the raising and management of the fund, we intend to engage an experienced accounting partner so as to assure the transparent, accountable management of the fund’s resources.

Once the accounting firm is engaged we will launch the fund-raising campaign (“road-show”).

Finally, once the threshold level of investment is reached we will open our doors to receive candidate projects from the UN ECE.

In conclusion, we want to expand briefly on our long range intentions. Currently we are seeking the role of Fund Manager BUT that role could expand. The team we have created has extensive experience in developing energy efficiency and renewable energy projects, and in environmental trading. In fact, it is doubtful if a better team could be composed with more experience, on-the-ground knowledge, relationships with financial and environmental entities, and understanding of the policy context in which commercial transactions must take place in emerging markets and transitional economies. Based on our many years of experience with real projects, we have no illusions with respect to the need for and the difficulty of achieving success. Nevertheless, we are excited by the challenge and the opportunity to work with you, in common cause, to make energy efficiency and renewable energy an integral part of the power programs in target countries. Based on this experience, we have specific requests for the EE21 team that will ensure our collaboration will be successful and prompt. These expectations are detailed in the attached “Response Memorandum.”

We look forward to questions you might have regarding these confidential materials and look forward to meeting you on December 3rd to present more fully our credentials, expectations, and plans to breathe life into a private-sector public sector partnership between the UN ECE EE21 programs and our team.

Respectfully,



Robert C. McFarlane
For the E&CS Team and partners



John Palmisano



CDC IXIS

CDC IXIS Financial Engineering &

CDC IXIS Environnement & Infrastructures 254, boulevard Saint Germain 75007 Paris

Press Release

Financial advisory offer by CDC Ixis and its consortium to UNECE for structuring and raising the funds for a PPP vehicle/facility/fund dedicated to financing of energy, energy efficiency and renewable energy projects in central and eastern Europe and the Commonwealth of Independent States (CIS) under the aegis of UNECE Energy Efficiency 21 Project

CDC Ixis, the investment bank of the AAA Caisse des dépôts et consignations and Caisse d'Épargne Groups has shown its high motivation supporting the UNECE contemplated project by gathering a strong European consortium formed by: CDC-CNCE Group (France), ADEME (French Governmental Environmental Agency), San PAOLO IMI – BANCA OPI (Italy) – BAYERISCHE LANDESBANK (Germany) and CAIXA GERAL DE DEPOSITOS (Portugal). Substantial supports from the French Government are under way.

CDC Ixis evaluates that the best solution towards the core objectives of UNECE is a PPP solution. Considering on one hand the local economic and legal frameworks and on the other hand the national and collective interest of these energy and energy efficiency projects, a PPP nature appears as an evident key to success in the different steps and tasks setting up and running the contemplated vehicle.

The appetite of the investors' market should also be motivated by a strong public involvement in the PPP facility. Its role needs to be financially attractive for the individual projects' economy therefore the investment rate of the PPP facility should prove to be attractive. The public funding tranche will have to be calibrated according to three main parameters: the size of the fund, the level of obtainable public funding and the return expected by the private investors.

The experience of CDC Ixis together with the concrete and successful experience of the **FIDEME Fund** has already been clearly contemplated as valuable to UNECE since UNECE has short listed CDC Ixis considering the extensive preparatory work already dedicated to its project.

CDC Ixis' strengths have mainly been identified as follows:

→ At this stage of the preparatory work carried out for UNECE, CDC Ixis has gathered a powerful consortium whose members are: the most important Italian banking group, one of the first German Landesbanken, the most important Portuguese savings bank.

→ **Strong support is given by the French Government** through the participation of ADEME (the French Environmental Agency), the most powerful and experienced of its kind in Europe. Other financial incentives are in an advanced stage of being negotiated with appropriate strong governmental entities;

→ Excellent ranking of CDC Ixis Financial Engineering: **number 8 in the Financial Advisory League Table of PFI;**

→ **Track record of CDC Ixis Financial Engineering shows its strong experience in PPP, energy, infrastructure as well as with governmental institutions;**

→ Extensive experience in the CO₂ market which CDC Ixis will apply to the projects with regard to the possibility of maximising any opportunity to monetize CO₂ emission reductions;

→ An **international financial advising team of 20 persons with working experiences in various countries** such as: France, Germany, Spain, the UK, the US, Latin America, Korea, Japan, India, North Africa. Pascale P. THEVENOUX and Heneage LEGGE-BOURKE, have been appointed as project managers dedicated to the project, under the responsibility of Sébastien CLERC, Head of the Financial Engineering Department. The exact resources needed will be adapted to each phase of the project;

→ CDC IXIS Financial Engineering has its own operational web site www.info-memo.com for its clients or prospective clients as part of its activity as financial adviser or where it has been mandated to raise financing for projects. The site provides clients with secured and registered on-line access to confidential transaction documentation and shared databases;

→ Strong experience of CDC Ixis Private Equity in Europe (i.e. the FIDEME middle office is organized with the private equity teams): 2.7Bn€ of capital-investment assets managed;

→ Ownership and support of our mother companies, the AAA well known and reputable French banking institution Caisse des dépôts et consignations and also the financially strong and dynamic Caisse Nationale de Caisses d'Épargne; these 2 Groups have acquired a notorious presence dealing with governmental institutions and municipalities not only in France.

For more information, please contact:

Pascale P. THEVENOUX or Heneage LEGGE-BOURKE

CDC IXIS Financial Engineering &

CDC IXIS Environnement & Infrastructures - 254, boulevard Saint Germain 75007 Paris

tel : + 33.1.40.49.56.46 @ - mail : p.thevenoux@cdcixis.com



European Bank
for Reconstruction and Development

Jacquelin Ligot
Director, Energy Efficiency Team

Mr Bernard Jamet
GEF Climate Change Co-ordination
United Nations Environment Programme
Division of Technology, Industry and Economics
Energy and OzonAction Unit
39-43 Quai André Citroën
75739 Paris, Cedex 15, France
By Fax: 0033 1 44 37 14 74

4 February 2005

Dear Mr Jamet,

Re: Developing Capacities and Removing Barriers to Financing Energy Efficiency Investments for Climate Change Mitigation

Following the discussions we have had on this project during the last few months, I would like to express our support for this proposal of the United Nations Environment Programme (UNEP) to the Global Environment Facility (GEF) for undertaking energy efficiency investments for climate change mitigation.

I understand that this is being developed together with co-financing from the United Nations Foundation and other supporting institutions building on the experience of UNEP and the United Nations Economic Commission for Europe (UNECE) in this field. We look forward to the further development of this project and could consider the possible participation of the EBRD in the project and/or investment fund following our normal project clearance procedures.

Yours sincerely,

Jacquelin Ligot

Jacquelin Ligot

cc. UNECE Geneva Fax. 41 22 917 0227

One Exchange Square, London EC2A 2JN, United Kingdom

Tel: +44 20 7338 6000 or +44 20 7496 6000 Fax: +44 20 7338 6100 or +44 20 7496 6100 Telex: 8812161 EBRD L.C. Web site: www.ebrd.com

ANNEX G

UNITED NATIONS ECONOMIC COMMISSION FOR EUROPE

The United Nations Economic Commission for Europe (UNECE) is one of five regional commissions of the United Nations system. It was established in 1947 to encourage greater economic co-operation among its members and with other countries of the world. The UNECE comprises the fifty-four countries of Western Europe, Eastern Europe, the Commonwealth of Independent States (CIS) and North America.

The UNECE provides a regional forum for governments and industry to develop conventions, regulations and standards. These serve to harmonise action and facilitate exchanges between member countries by eliminating obstacles or simplifying procedures. As such UNECE provides consumer guarantees of safety and quality, helps protect the environment, facilitates trade and the greater integration of member States at the regional and international level. The main areas of UNECE activity are: economic analysis, environment, transport, development of trade, industry and enterprise, forests and timber, sustainable energy, statistics and human settlements. UNECE provides technical assistance to transition countries and sub-regional groupings, thus enabling them to benefit fully from its analytical, statistical and normative work.

Member states include: Albania, Andorra, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Kazakhstan, Kyrgyzstan, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, San Marino, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, United Kingdom, United States, Uzbekistan.

ANNEX H

RESPONSE TO THE GEF SECRETARIAT REVIEW

Expected at Work Program inclusion:

Endorsement letters are available for all eight countries. However, the letter from Russia needs an English translation. Furthermore, the letter from Russia (indicated on p.4 of Prodoc) is NOT from Russia’s GEF operational focal point

Another letter has been received from the GEF operational focal point and is now attached with the English translation.

Remove coal bed methane from the project proposal (including related co-financing).

This has not been done. Co-financing from the USEPA is still included as part of the co-financing package. The letter of intent from the USEPA specifically refers to coal mine methane projects, which are not eligible for GEF funding under either OP5 or OP6.

This was kept in the project presentation as an element of transparency regarding all the co financing raised and because it is of interest for some of the other co financiers. It is now removed from the submission to the GEF and changes in the co financing presentation have been made accordingly.

Analyze the situation in each of the countries and provide justification for a regional fund that covers 8 different countries.

This is not adequately addressed. (E.g., why is the proposed regional fund the appropriate and effective approach to addressing barriers to energy efficiency financing in the context of Belarus?)

A regional approach is most effective for this project for three main reasons, each one related to each expected output: the public-private investment fund, pipeline preparation and policy reforms. In principle, the multilateral approach provides economies of scale for technical assistance activities, reduces risks to investors in the fund and provides working examples of energy policy reforms for selected countries through reforms adopted by their neighbors.

Public-private fund: the equity fund proposed for this project is not country specific and does not depend on national government grants as some 'quasi-funds' have. Potential Fund investors already contacted have welcomed the proposed approach because it spreads risks across a set of countries and provides for an expanded pipeline of project proposals. The concept for the regional fund is similar to the earlier EBRD Energy Efficiency and Emissions Reduction Equity Fund in Eastern Europe and was endorsed by all the financial institution experts

Explain the rationale for a public-private partnership fund and how it will operate.

This needs to be further addressed, especially in regard to the role of the public sector providing funds to mitigate private sector's investments. Who are these public-sector players? How/why will they play this role? What kind of intent or commitment have they indicated in investing in the proposed fund?

in the 2003 Seminar on Financing Energy Efficiency Investments, including IFC representatives.

Activities under Output No. 2 favour a regional approach because of the economies of scale of directing investment project development work in many countries towards pipeline for the fund. The multilateral approach makes more effective use of training materials and project development software developed in relation to the fund by simply applying this more widely both through in-session training and remotely over the Internet. In addition, it allows expertise in neighboring countries to be applied more readily. This has been successfully accomplished in the past with Russian experts leading training courses in Kazakhstan based on the experience in the EE21 Project.

Policy Reforms: are also most appropriately promoted in international fora and in the regional format. They provide worked examples of reforms successfully applied in one country which can encourage a neighbouring country to try the same reforms. Indeed, examples of this are published in the Guideline to Implementing Energy Conservation Regulations in Central UNECE-CIS work on energy efficiency and energy security in the CIS resulted in a regional strategy for energy conservation of all CIS countries adopted in 2004. The mutually reinforcing aspects of the regional approach are very clear from this experience.

The needs for energy efficiency and renewable energy investment in the targeted countries are estimated in the range of 5-10 billion dollars. Obviously, public money will never be sufficient to meet such a high demand and private participation is indispensable. The objective of the proposed Fund is precisely to attract private sector capital in a way that will, in its turn, leverage additional funding coming from local banks and co-financiers from both the public and private sectors. However, for reasons explained in the project brief, an element of comfort for private investors might reside in the fact that the public sector is also associated to the risk and ready to bear a substantial portion of it. Although this is not an absolute necessity for the Fund and it might well be that, in the end, the Fund will be a purely private endeavour, it has

been considered reasonable to contemplate such a possibility through mechanisms to be further elaborated as part of the proposal. As a result, the precise identification of these public sector players is also part of the project proposal but it would be expected that the governments of the eight targeted countries would significantly contribute to the Fund (either directly or through national public institutions) and that other countries or international institutions will be also solicited during the Fund raising phase.

This is done.

Please indicate on the cover page (and in the text), in term of tons of CO₂, estimated emissions reduction for both the duration of the GEF project (7 years) and the life time of the investments.

In this connection, the project needs to discuss how the fund will be able to leverage \$750 million loan financing for the targeted investments.

The Fund will not itself need to leverage \$750 million financing. Each sub-project in which the Fund will invest will have to submit an appropriate business plan indicating, inter alia, the sources of the debt financing which in general will be provided by the local banks or IFIs such as the EIB, the EBRD, NIB, the Black Sea Development Bank, the Council of Europe Development Bank, etc. Considering the Fund may not contribute more than 50% to a sub project equity needs (additional 50% coming from the local project developers), each sub project will need to raise debt in a volume representing (in average) 3 times the equity amount (meaning six times the Fund equity participation).

In establishing criteria for the fund, it should be noted that GEF funds are not to be diverted for projects that will earn credits under CDM or JI. Funding eligibility must be consistent with GEF policies and COP guidance. This needs to be reflected in the project document.

Changes have been made accordingly (see page of the project brief).

The logframe needs to be strengthened to include detailed and specific indicators and targets for all the outcomes/outputs.

The Logical Framework Matrix has been strengthened to include more detailed objectively verifiable indicators of performance for each Output under each Objective. These indicators of achievement will be used to establish a baseline for the beginning of the project and targets for measuring the performance of the project by the Project Management Unit and the monitoring and evaluation officers assigned to the project by each donor. The targets under Objective 1 will be

The proposal states that “The project will represent a reduction of GHG emissions of 10 million tons of carbon per year”. This appears to be based on an investment of \$2 billion under the assumption of 3:1 leverage of loan financing by the fund. Please explain in detail the basis for this estimate.

The arrangement of project execution needs to be clarified among UNEP and UNECE, including agency fees.

The Prodoc provides a section on lessons learned from previous financing mechanisms, including summary of GEF-funded projects. However, there is no evidence or documentation of direct consultation with other IAs (World Bank/IFC and UNDP) or task managers directly involved in these projects.

largely related to the Fund while under Objectives 2 and 3 targets will be based on the technical assistance activities and their impact. A revised Logical Framework Matrix will be included in final version of the Project Brief.

The estimate comes from the experience of UNEP and UNECE during the last 5 years of developing and obtaining finance for energy efficiency investment projects in eastern Europe. During that period some USD 9.7 million of investment project proposals were financed. The detailed flexibility studies for these projects showed that an estimated 49,000 tons of carbon could be avoided per year from these projects. We have applied the corresponding ratio for this proposal since we consider this is a statistically meaningful sample. Therefore, a USD 200 investment would yield the reduction of approximately 1 ton of carbon per year. Some of the projects referred to above have been financed, completed and are now in operation although monitoring data fuel consumption is not yet available. When they will, we will be in a position to fine tune these figures.

For the estimate of the impact of the investment fund, at USD 200 per ton of carbon emissions avoided, the USD 2 billion of energy efficiency investments would yield 10 million tons of carbon avoided per year. Assuming that the investment projects would have a technical lifetime of 10 years (actually likely to be much longer), then the project would produce a reduction of 100 million tons of carbon.

As far the UNECE is concerned, this will be a project with UNF (US\$ 2 million contribution) and therefore the UNECE will be bound by the standard support cost of the UNF and UNFIP which is a maximum of 5 %.

The other Implementing Agencies have been regularly consulted on the development of this project from its inception. In a 2003 mission to New York and Washington, UNECE and UNEP consulted with UNDP (Dick Hosier, Andy Yager) and the World Bank (Henk Butz and

Such consultation should be conducted prior to WP inclusion. The current submission has not fully or specifically addressed comments by GEFSEC (see above). In fact, there is no specific response to GEFSEC comments.

colleagues, Eastern European section). Discussions also took place with Mr. Ian Johnson and Ms. Lallemand (ESMAP). This was followed by the Seminar on Financing Energy Efficiency Investments in Eastern Europe on 24 May 2004 with presentations by IFC/World Bank, EBRD and 8 other financial intuitions on the concept of the project. The result of this seminar was the basis for the present project submitted to donors by UNEP and UNECE subsequently.

The IAs have been consulted and informed repeatedly since then on the development of the project. UNDP has been consulted in missions to New York in 2003, 2004 and 2005. In June 2004 a meeting was held in Geneva with Mr. Vladimir Litvak (UNDP representative office in Bratislava) on possible UNDP cooperation on the project. In February 2005, a meeting was held with Marcel Alers, the UNDP-GEF representative on UNDP participation in the project. Since then UNEP-DTIE has had several consultation meetings with UNDP office in Paris (Mr. Benoît Lebot). In a June 2005 preparatory meeting held in Geneva, the managers of World Bank and UNDP GEF projects in Romania (FREE and UNDP Energy Efficiency Project) and of the Bulgarian Energy Efficiency Fund (BEEF) provided a variety of modalities for cooperation between this project and their own. Finally, direct consultation with the World Bank task managers of the projects in the Russian Federation, in Romania and in Bulgaria haven also taken place (correspondence by emails is attached).

Both Annex B (logframe) and Annex C (Response to project reviews) are missing (left blank) from the Executive Summary.

These documents were in the Annex: they are now attached to the Executive Summary

Remove pp. 21-25, which is irrelevant to the proposal submission.

Done.

Furthermore, on the cover page, please (1) indicate GEF Focal Area; (2) add OP6 under GEF Operational Program; (3) indicate IA fees; and (4) list all the names and respective countries of GEF focal points, and corresponding dates of endorsement letters.

Done.

Response to the STAP expert review has been provided. The review was done by José Lopez. Was he selected from the STAP roster? The name is not on the STAP roster posted UNEP/STAP web site.

The reviewer was selected out of the roster. This was because none of the experts of the roster had the adequate profile in terms of experience with international finance and particularly the setting up of equity funds. Authorisation to select expert out of the roster was provided by the STAP Chair. The name and CV of this expert are now added to the roster.

The above comments need to be adequately addressed and incorporated in the revised submission (Executive Summary and Project Brief). A specific response to GEFSEC comments is required, with clear reference to the revisions and tracked changes in the project documents.

Done.

ANNEX I: RESPONSE TO WORLD BANK COMMENTS

PROJECT TITLE:
FINANCING ENERGY EFFICIENCY AND RENEWABLE ENERGY EFFICIENCY
FOR CLIMATE CHANGE MITIGATION

"Jamet Bernard" <bjamet@UNEP.FR>
09/19/2005 10:30 AM

To: <ebattaglini@worldbank.org>
Cc: <kristin.mclaughlin@rona.unep.org>, <kingma@ebrd.com>, z Zhang2@thegef.org, <rhosier@thegef.org>, <undpgef@undp.org>, <Catherine.Vallee@unep.org>
Subject: RE: OP5: FSP: Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (UNEP) - Work Programme Submission: WORLD BANK COMMENTS

Dear Ms Battaglini,

I take your point that there are several initiatives in Bulgaria and this is clearly referred to in the project brief. They are each of a different nature however and none of them, if I am not mistaking, is supposed to provide equity, which is the raison d'être of the proposed Fund. I maintain that this is perfectly complementary to the other facilities: if you want to achieve success in disbursing your credit lines, you need to introduce some sort of incentive (as the EBRD rightly does) and/or to create intermediaries such as ESCOs (and for this you need equity) that will be able to draw on your credit lines.

Please note the project has been discussed in depth with Bulgaria representatives and that it has been fully endorsed: these representatives are aware of the various initiatives and have not seen any risk of overlapping.

In addition, we have had a number of consultations related to BEEF: during one of the last coordination meetings held in Geneva, the BEEF local fund manager, Mr Zradko Genchev, made himself a presentation of how the BEEF will be able to collaborate with the proposed Fund (I would be happy to send you the slides he presented).

I am of course at your disposal to continue exploring with you the best means to rule out any risk of duplicating uselessly the efforts and make use of the GEF money in the most efficient way.

Best regards,

Bernard Jamet

-----Original Message-----

From: Lisa Masila [mailto:Lisa.Masila@unep.org]

Sent: Thursday, September 15, 2005 8:20 AM

To: Radka Mark; Jamet Bernard; Hamlin Tom; Peerke de Bakker; Sheila.Aggarwal-Khan@unep.org; Anne-Marie Verbeken; Mahendra.Kumar@unep.org; Liza.Leclerc@unep.org; Wellington Christine; Carmen.Tavera@unep.org; George Manful; Catherine Vallee; Lew Fulton

Subject: CC: OP5: FSP: Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (UNEP) - Work Programme Submission: WORLD BANK COMMENTS

----- Forwarded by Lisa Masila/UNEP/NBO/UNO on 15/09/2005 09:21 -----

Ebattaglini@worldbank.org |

14/09/2005 18:09 |

To: bjamet@unep.fr, gefprojects@unep.org, kristin.mclaughlin@rona.unep.org, gcoordination@thegef.org, undpgef@undp.org

cc: wbgefoperations@worldbank.org, ECACC%WORLDBANK@worldbank.org, Mzeki@worldbank.org, Lisa.Masila@unep.org, kingma@ebrd.com, Cgovindarajalu@worldbank.org, Rkhanna2@worldbank.org, rhosier@thegef.org, cwoerlen@thegef.org, z Zhang2@thegef.org

Subject: CC: OP5: FSP: Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation

UNEP) - Work Programme Submission: WORLD BANK COMMENTS

Please find attached comments from our WB regional colleagues on UNEP's above proposal. Apologies for the late message. We do hope you will address these comments as part of your discussions with GEFSec. We reviewed the UNEP proposal and, unfortunately, we have to maintain our earlier position, regarding the overlap of some of the proposed interventions with existing GEF-funded operations. Our comments relate specifically to

Bulgaria, although they can be extended to other countries as well. Notwithstanding attempts to present the proposed operation as complementary to several ongoing GEF Energy Efficiency (EE) operations in the region, the overlap is full, especially with the GEF-supported Bulgarian Energy Efficiency Fund (BEEF) now in place and open for business. The lack of "dedicated (energy efficiency) finance facility" is the cited Key rationale underlying the regional proposal (p. 3). This is clearly not true in Bulgaria. BEEF is a fully dedicated EE finance facility; the EBRD has opened large EE credit lines in major Bulgarian commercial banks; USAID still has the Municipal EE Program running; and the German government, through KfW, plans to set up a new residential EE facility. Four dedicated EE funding sources in one relatively small country. Should GEF support the establishment of a fifth one, thereby likely weakening, if not undermining, BEEF? We strongly recommend that Bulgaria be taken off the country list prior to Council approval. The UNEP-proposed EE Fund is "designed to go beyond" other initiatives by Being a "public-private" funding facility. Well, BEEF is public-private Partnership both in funding and governance. As a more general point, lack of capital liquidity is progressively becoming a weaker obstacle to EE finance across the region than it used to be. And this trend is predicted to persist. Therefore, attention should be paid to this reality when considering support (even if for project preparation) for new initiatives like the one at hand, which may provide the region with unneeded incremental liquidity.

Best regards.

Emilia Battaglini

GEF Regional Coordinator, Europe and Central Asia

The World Bank

tel (202) 473-3232; fax (202) 614-0696/7/8;

ebattaglini@worldbank.org

----- Forwarded by Emilia Battaglini/Person/World Bank on 09/14/2005 10:50

AM

Forwarded by WBGEF Operations/Service/World Bank on 09/02/2005 05:52

PM

Gefprojects <gefprojects@unep

To: Gcoordination@thegef.org, undpgef@undp.org, Wbgefoperations@worldbank.org, stapsec@rona.unep.org,
gefprojects@unfccc.int

Sent by: Lisa Masila <Lisa.Masila@unep.org>

09/02/2005 11:07 AM

cc: kristin.mclaughlin@rona.unep.org

Subject: CC: OP5: FSP:

Financing Energy Efficiency and Renewable Energy Investments

Mitigation - Work Programme Submission for Climate Change

Dear colleagues,

Please find attached the proposal entitled 'Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation' as part of UNEP's submission to the November 2005 Work Programme.

Kind regards.

UNEP/ Division of GEF Coordination

P.O. Box 30552

00100 Nairobi

Tel: 254-20-624165

Fax: 245-20-624041/42

Email: gefprojects@unep.org

(See attached file: UNEP GEF Project Brief12.pdf)(See attached file: UNEP GEF Executive Summary12.doc)(See attached file: UNEP GEF Project Brief11A.zip)

ANNEX J

EUROPEAN BANK FOR RECONSTRUCTION AND DEVELOPMENT



European Bank
for Reconstruction and Development

Jacquelin Ligot
Director, Energy Efficiency & Climate Change

Ms Monique Barbut
Director
United Nations Environment Programme
Division of Technology, Industry and Economics
39-43 Quai André Citroën
75739 Paris, Cedex 15
France
Fax : +33 1 44 37 14 74

5 May 2006

Dear Ms. Barbut,

Re : UNECE/UNEP Fund for the Financing of Energy Efficiency Investments

Over the last months, EBRD has been in a close liaison with the teams in UNEP and UNECE working to establish an equity and quasi equity fund (the "Fund") which would invest in energy efficiency and renewable energy projects in the countries of operation of EBRD (the "Bank"). I would like to confirm in this respect that EBRD will be happy to support UNEP in a co-implementing role vis-à-vis this Fund.

In this framework, the EBRD will more specifically:

- work with the sponsor/fund manager to advise on the Fund structure;
- help structure the investment guidelines of the Fund, including environmental safeguards and integrity provision, to ensure that these correspond to the Bank's mandate;
- perform due diligence on behalf of the Bank on the proposed Fund Manager.

I would like however to emphasize that these potential EBRD activities do not constitute a commitment neither to design and organize the Fund nor to invest in it. EBRD would expect the sponsor(s) and the Fund Manager of the Fund to be private companies or organizations able to take responsibility for all tasks typically associated with such roles, e.g., fund raising, negotiations with investors, establishment of a project pipeline, evaluation of projects, investment procedures, monitoring, and the eventual return of capital to investors.

Regarding a possible EBRD investment in the Fund, the Bank will, as with any of its projects, act as a commercial investor when evaluating an investment opportunity and

One Exchange Square, London EC2A 2JN, United Kingdom

Tel: +44 20 7338 6000 or +44 20 7496 6000 Fax: +44 20 7338 6100 or +44 20 7496 6100 Telex: 8812161 EBRD LG Web site: www.ebrd.com



will seek to negotiate terms and conditions of investment satisfactory to it. Such terms and conditions could include Bank representation on the Board of the Fund and on the investment committee of the Fund. In any case, any final decision from EBRD to invest in the Fund will be subject to all relevant internal approvals within the Bank and satisfactory final documentation.

We look forward to our continued cooperation on this activity.

Kind regards, *Bien cordialement,*

Jacquelin Ligot

Jacquelin Ligot