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COMMITTEE ON SUSTAINABLE ENERGY

Steering Committee of the Energy Efficiency 21 Project

Ad Hoc Group of Experts on Energy Efficiency

Investments for Climate Change Mitigation

Seventh meeting, 1–2 December 2005

**Financing Energy Efficiency and Renewable Energy Investments
for Climate Change Mitigation***

Note by the secretariat

During its sixteenth session in July 2005, the Steering Committee “requested the Bureau and the secretariat to continue its work towards completing the Project Plan 2006–2009, including the creation of financing mechanisms or Funds following the approval of proposals to donors, co-financing partners and potential Fund participants and specification of the annual ‘in-kind’ contributions from the participating countries” (ENERGY/WP.4/2005/5).

A new technical assistance project related to the investment fund and financial mechanism was approved in June 2004 by the United Nations Foundation and a complementary project was endorsed more recently by the French Ministry of Foreign Affairs and the Fonds Français pour l’Environnement Mondial (FFEM). The Global Environment Facility (GEF) is the third co-financing partner for this work in partnership with UNEP, one of the GEF Implementing Agencies. This note provides a preliminary summary of the background, objectives, activities, work methods, organisational structure, budget, monitoring and evaluation procedures of the new project for discussion with project participants, supporting institutions and executing agencies. After consideration by the Ad Hoc Group of Experts, a final ‘Project Document’ will be prepared that will serve as the implementing instrument of the project.

* This document has been processed following late submission to provide for the most recent data concerning the GEF proposal

1. EXECUTIVE 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 Project which has 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.

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 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 project 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.

2. 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

3. ASSOCIATED FINANCING

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, 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 (UNF) and United Nations Fund for International Partnerships (UNFIP) 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.

4. RATIONALE AND OBJECTIVES

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 take 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 Carbon

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.

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).

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 establishment of 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.

5. PROJECT ACTIVITIES/COMPONENTS AND EXPECTED RESULTS

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.

Investment Fund Design and Start-Up will involve initially the preparation of an investment memorandum under the responsibility of a Lead Investor 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 mechanisms 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.

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 carbon 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.

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. 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.

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.

5.1 Objective 1: Establish a Public Private Partnership Fund

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 preliminary discussions that have already taken place during the preparatory phase of this project, a few basic principles can be delineated as follows:

5.1.1 Capital Commitments and Fund Size

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 explained in section 5.1.4, 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.

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 also sent a letter, expressing its interest in possibly becoming an investor in the Fund.

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. 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.

5.1.2 Fund Investments

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, The former Yugoslav Republic of Macedonia, Romania, Russian Federation, Serbia and Montenegro and Ukraine¹. 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 (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, 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.

¹ The combined project supported by the three main donors is anticipated to include: Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Kazakhstan, The former Yugoslav Republic of Macedonia, Republic of Moldova, Romania, Russian Federation, Serbia and Montenegro, and Ukraine.

5.1.3 Fund Duration and Exit

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 project 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.

5.1.4 Fund Returns

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.

5.1.5 Fund Management

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. 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 (see 3.1.6), 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 and 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.

5.1.6 Activities Related to Objective 1

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) 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 accordingly alter, if needed, the proposed structure to meet the specific needs or requirements of the key investors;
- (c) 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;
- (d) The preparation of the terms of reference for the selection of a Fund Manager and the organisation of an international tender.

5.1.7 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**

5.2 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.

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.

5.2.1 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 to 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.

5.2.2 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 two 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.

5.3 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.

5.3.1 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.

5.3.2 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.

5.4 Stakeholder Incorporation

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. 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.

6. IMPLEMENTATION ARRANGEMENTS

6.1 Implementing Agency

The Implementing Agency for the Project will be the United Nations Environment Programme (UNEP) Division of Technology, Industry and Economics (DTIE). 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 focused 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.

As the Implementing Agency, UNEP will have overall responsibility for the implementation of the project. UNEP/DTIE will be responsible 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 carbon emissions reductions resulting from project activities to national registries and/or international inventories.

6.2 Executing Agency

The project will be executed by the United Nations Economic Commission for Europe (UNECE), Committee on Sustainable Energy, Energy Efficiency 21 (EE21) programme. The European Bank for Reconstruction and Development (EBRD) will provide advisory support in relation to Objective One as part of the activities of the Energy Efficiency Working Group established between the EBRD and UNEP/DTIE. 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, bringing together a selection of interested member states, donors and international institutions.

6.3 Project Steering Committee

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 and UNECE as well as the co-financing partners and representatives of International Financial Institutions active in the region (EBRD, 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 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 of the Project Document as approved by all co-financing partners. 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.

The composition of 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 included in the Project Document. 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. The Steering Committee will also comprise representatives of relevant international projects including those supported by the GEF and bilateral donors that may be synergistic to the present project.

6.4 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 set out in the Project Document. 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.

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.

To the extent possible, the project will be executed with the assistance of the United Nations of Project Services (UNOPS) under existing Memoranda of Understanding (MOU) between UNOPS and UNFIP or through an MOU between UNOPS and the United Nations Office at Geneva (UNOG) which is responsible for the financial administration of UNECE executed programmes and projects. The UNOPS offices in Geneva and New York have been consulted on the present project proposal and are willing to support project activities through both its regional and country offices in the Europe and the CIS.

6.5 National Project Management / Coordination

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 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;
- serve 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).

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.

6.6 Regional Project Management / Coordination

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, USEPA 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: as an example, it has already been agreed that the BEEF Fund Manager will serve on the Project Steering Committee. Similar initiatives have been taken vis-à-vis UNDP regional offices and representatives.

7. PROJECT FINANCE

Table 1. 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	4.170	0.500	1.170	--	0.600	--	1.900
2. Develop expert skills to prepare bankable projects	4.100	0.920	0.650	0.130	1.100	0.700	0.500
3. Assistance policy reforms to support investments	3.550	0.500	0.520	0.130	1.100	0.700	0.500
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

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\$ 4,170,000

Objective 1 GEF contribution requirements: US\$ 1,900,000

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\$ 4,100,000

Objective 2 GEF contribution requirements: US\$ 500,000²

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\$ 3,550,000

Objective 3 GEF contribution requirements: US\$ 500,000

7.1 Monitoring and Evaluation

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

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

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

² As far as the use of this GEF contribution is concerned and in order to avoid the risk of financing similar activities from two distinct windows, in Russia, Bulgaria and Romania, a close coordination is already agreed with the task managers of the established GEF supported initiatives.

the United Nations Foundation (UNF), the Fonds Français pour l'Environnement Mondial (FFEM) and the European Business Congress. 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).

7.2 Project Execution and Support Costs

This project will be executed by UNECE with the co-financing support of the United Nations Foundation (UNF) in accordance with the Memorandum of Understanding between the United Nations Fund for International Partnerships (UNFIP) and the United Nations Economic Commission for Europe of 8 June 1999. The UNF grant provides for US\$ 2 million of co-financing on a 1:2 basis to the level of US\$ 6 million. Under the agreement between the UNF and the UNFIP, the United Nations system receives project execution support costs of 5 per cent for any UN Foundation co-financing project. The UNECE has previously implemented a UNF/UNFIP supported project with co-financing partners on this basis (ECE-CIS-99-043). The UNECE support costs will reflect this agreement.

The UN Office of Project Services (UNOPS) offices in Geneva and New York have expressed their interest in assisting in the execution of the project on a cost-based level of support costs or for an 8 per cent flat rate fee. The UNOPS participation in the execution of the project will be conducted through their office in Geneva and local offices in selected participating countries. The terms of their participation will be established in a Memorandum of Understanding between UNECE and UNOPS and/or through the MOU already established between UNOPS and UNFIP.

The support costs for the execution of this project would 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. Under the conditions outlined above, the support costs would come to a maximum of 8 per cent for UNECE and UNOPS apportioned across the project components.

7.3 National Counterpart Contribution

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.

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.

8. MONITORING, EVALUATION AND DISSEMINATION

8.1 Monitoring and Evaluation

The project will be subject to the standard reporting, monitoring and evaluation procedures of the UNEP, GEF and the UNECE requirements for regular budget and extra budgetary supported activities under the Programme Performance Review of the United Nations system. UNEP and UNECE will be responsible for a mid-term and an end of project analysis and report. While UNECE and the PMU will monitor closely the indicators for outcomes of the project, UNEP will have special responsibility for evaluating the carbon emissions reductions (see 8.3 below). 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.

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 Document 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 of the project.

8.2 United Nations Programme Performance Review

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.

8.3 Global Environment Facility and UNEP

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.

8.4 United Nations Foundation

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 is planned for monitoring and evaluation. There will also be a separate mid-term independent project review by an external consultant.

8.5 Fonds Français pour l'Environnement Mondial

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.

8.6 Dissemination of Project Results

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 eBooks, 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. 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.

For further information:

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