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COMMITTEE ON SUSTAINABLE ENERGY

Steering Committee of the Energy Efficiency 21 Project
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(Item 5 of the provisional agenda)

**CAPACITY-BUILDING AND SUPPORT FOR THE ESTABLISHMENT
OF AN ENERGY EFFICIENCY FUND IN EASTERN EUROPE**

Note by the secretariat

At its fifteenth session, the Steering Committee expressed appreciation to the French Ministry of Foreign Affairs and the French Global Environment Facility (FFEM) for their participation in financing, co-financing or “in kind” contributions for the project (ENERGY/WP.4/2004/4). Since then, the Bureau and the secretariat have been working together with the French Ministry of Foreign Affairs on the following proposal, which was submitted to the FFEM Steering Committee for consideration at a meeting on 27 October 2004. The FFEM Committee approved funding for the proposal on 30 March 2005 on condition that joint funding would also be approved by other donors including the United Nations Foundation Inc. (UNF - see ENERGY/WP.4/2005/2) and the Global Environment Facility (GEF).

I. BASIC INTRODUCTION

Target countries: Central, Eastern and South-Eastern European transition economies, Commonwealth of Independent States (CIS).

Partner institutions: French partner institution: Ministry of Foreign Affairs. Other partners: UN/ECE, GEF, UNEP, United Nations Foundation Inc. (UNF), ADEME.

FFEM field of operations: combating the greenhouse effect by reducing emissions.

1.1 Project description

General setting: Energy efficiency is a serious problem for the countries of Central Europe, the Commonwealth of Independent States and South-Eastern Europe (described in section 2.2 below). This is severely hampering their economic growth (section 2.1 below). There is thus substantial, economically viable potential for investment in energy efficiency: the Energy Efficiency 21 Project seeks to identify, promote and take advantage of that potential.

Project goals: The Committee on Sustainable Energy's Energy Efficiency 2000 programme was launched in 1991 to stimulate and encourage cooperation among the countries of the United Nations Economic Commission for Europe (ECE, see Annex), the transition countries in particular, in the application of energy-efficient technology and management practices. Having reached a consolidation phase (1994-1997), the programme took on more of a global dimension under the title "Energy Efficiency 21 - an interregional approach".

Over the period 2000-2003, the overall goal of the Project has been to boost regional cooperation in establishing a market for energy efficiency and developing proposals for investment to reduce greenhouse gas emissions in the transition economies.

The ultimate objective of the Project for the period 2004-2007 will remain that of boosting cooperation in the creation of an energy efficiency market and developing proposals to reduce greenhouse gas emissions in the transition economies, with three additional objectives:

- Objective 1: Promote communication among entities involved in the Project and local communities in Central, South-Eastern and Eastern Europe;
- Objective 2: Strengthen energy efficiency and renewable energy policies;
- Objective 3: Promote investment by commercial banks and the private sector.

Substance of the project: These objectives will be reached by means of three main activities pursued by all parties to the Project, as follows:

- Activity 1: Development of promotional tools (communication, training, expert assessment, network moderation) for the public and private sectors, the aim being to identify and arrange financing for energy efficiency and renewable energy projects (energy generation and end use), so as to come up with energy efficiency and renewable energy schemes consistent with environmental, health and institutional reform priorities.

- Activity 2: Strengthening energy efficiency and renewable energy-promoting policies in Project partner countries, helping local communities and national authorities to bring in the economic, institutional and regulatory reforms that are needed to support investment in these sectors.
- Activity 3: Promoting investment by banks and private companies in energy efficiency and renewable energy projects by fostering new public/private funding partnerships or other mechanisms developed by teams of professional financiers. The establishment of a €300 million public/private fund to finance energy efficiency and renewable energy projects is scheduled under this heading.

French, national and international partners: The partners of the Energy Efficiency 21 Project in France are the Ministry of Foreign Affairs, which is submitting the Project to the French Global Environment Facility and has supported it since its inception, in part by financing attendance by representatives of energy authorities, local communities and local research departments in Eastern and South-Eastern Europe at “energy efficiency circles” taking place in France under the umbrella of the Project; and the French Government’s Agency for the Environment and Energy Control (ADEME), which has been party to the discussions on the Project and has also contributed to the “energy efficiency circles”.

CDC IXIS, the investment bank of the Group Caisse des Dépôts, took part in the discussions on activity 3 (establishment of a public/private fund to invest in energy efficiency and renewable energy). It cannot currently be described as a partner in the Project, but is one of the banking consortiums that might finance it. The point remains to be settled, but discussions with CDC IXIS on project start-up have provided an opportunity to see how realistic such a possibility is.

Broadly speaking, the Project partners in Central, Eastern and South-Eastern Europe are the counterparts of the three types of partners outlined above: national authorities (energy, finance and environment), local communities and the private sector. Partnerships of this kind are one area in which UN/ECE has a clearly established comparative advantage.

As the Project is being promoted by UN/ECE, international partners play a key role:

- UN/ECE, through the Project’s Steering Committee, will be the executing agency.
- Partnerships with UNDP/GEF, the European Investment Bank, the European Bank for Reconstruction and Development and the World Bank are being sought.
- The United Nations Foundation Inc. (UNF) has been approached and ought to become a major financial partner. It has already contributed to the UN/ECE Energy Efficiency 21 Programme in the past.
- Participation by the international private sector (engineering companies, businesses and the banking sector) is also sought.

Project duration and timetable: The Project will last three years. Activity 1 (promoting communication among entities involved in the Project and local communities in Central, Southern and Eastern Europe) and activity 2 (strengthening energy efficiency and renewable energy policies) will continue throughout the lifetime of the Project. Activity 3 (promoting investment opportunities for commercial banks and the private sector by establishing a public/private fund) will take place in three phases once a banking consortium has been set up (CDC IXIS has already put forward some proposals).

(a) Phase 1: Initial structuring

- *Given the kind of projects envisaged*, consideration of needs by country and by energy sector; needs audit; request for additional information if necessary:
 - *Potential role for ECE member States*: each member can conduct its own market audit locally (geographical approach, identification of workable projects); initial loading of projects into the pipeline by member States and communities; at this point the Energy Efficiency 21 Project will run training programmes for local entities responsible for energy efficiency - both project sponsors and public bodies;
 - *Potential support from UN/ECE*: helping to examine the resulting information in the light of its accumulated experience;
- *The banking consortium* will raise public funds in collaboration with UN/ECE and, possibly, with help from an agency specializing in undertakings of this kind from investors in the public tranche of the financial partnership (UNEP, European Investment Bank, European Union, European Bank for Reconstruction and Development, World Bank, regional programmes, etc);
- *Creation of optimum structure, taking account of the various tranches that may need to be structured*: governmental funds, junior public or private funds, private investment; making allowance for the legal and fiscal constraints on each investor; making provision for restrictions on funds invested (this is more likely to be an issue with investments by public bodies). The exact size of the fund cannot be determined at this stage, before it has been ascertained how eager public bodies are to invest; the banking consortium will also validate a structure that should be attractive to private investment institutions interested in the energy efficiency sector;
- *Establishment of a financial model*: this will include investment criteria, internal returns on projects, risk-sharing (based on a risk matrix), exit strategies etc., so as to predict a return on investment for public and private investors;
- *Initial validation of the fund structure, which must allow for flexible investment by the PPP fund*: at this point it will be necessary to define intervention criteria by country, project type, investment duration, investment type (debt, mezzanine debt, equity) and compatibility with the local legal and tax system. This will lead to the selection of the most acceptable jurisdiction for the establishment of the fund. The costs of legal and tax advice during this phase will be high: the banking consortium and UN/ECE

will need the backing of a renowned international specialist law practice. Legal validation of the structure is essential if the fund is to be well subscribed by public and private investors;

- *The banking consortium* will obtain the necessary authorizations (governmental and European) with ECE backing. This may take some time and delay the structuring exercise, especially as validation will embrace the issue of “carbon credits”.

(b) Phase 2: Raising private funds while continuing the structuring exercise

- *Identification of a broader range of financial institutions; publication of the final memorandum of information; syndication of the fund by means of a “road show” with UN/ECE and an auction to obtain the best possible rate on the private funds raised;*
- *Final adjustments to the financial model;*
- *Closing subscription.*

NB: The time the tasks described above will take should not be underestimated, given the innovative aspect of the product.

(c) Phase 3: Establishing the fund and launching investments, last stage of the structuring exercise

- *Establishment of fund procedures with the fund manager in order to ensure that the interests of UN/ECE are safeguarded: rules of procedure, investment committee, commercial strategy, application approval procedure, investment strategy, pipeline maintenance, cooperation with other funds and financial bodies, information for investors in the fund etc.*

II. FFEM ELIGIBILITY CRITERIA

2.1 Contribution to local economic and social development

Trends in economic growth, energy consumption and energy supply in the transition economies vary. Transition economies within Europe can be grouped into three broadly similar categories:

- *Countries which joined the European Union in 2004: the Baltic countries (Estonia, Latvia, Lithuania), Czech Republic, Hungary, Poland, Slovakia, Slovenia;*
- *South-East European countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Romania, Serbia and Montenegro, The former Yugoslav Republic of Macedonia;*
- *Commonwealth of Independent States (CIS) countries outside Central Asia: Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine and the Russian Federation, which has energy problems of its own because of its status as a major producer and exporter of hydrocarbons.*

At the close of the 1980s, all the countries in this zone were forced to review their development model amidst a deep economic crisis. They have since experienced different trends. The countries which have joined the European Union have enjoyed the strongest economic growth. By the beginning of the year 2000 they had regained, and then surpassed, their 1990 levels of development. Per capita GDP within the group is, however, still below 50% of the European Union average.

Trends in the South-East European countries have been less favourable. Overall, per capita income there in the year 2000 was roughly one quarter that of the European Union.

Lastly, the trend in the CIS countries has been towards a net decline in per capita income since 1990. Per capita income in 1998 was half of its 1990 value, though it has risen since. The table below shows energy supplies and dependencies for these different economic areas and the European Union in 2001. Apart from the Russian Federation, each grouping is, to a varying extent, a net importer of energy. Without serious efforts to promote energy efficiency and develop renewable sources of energy, their economic growth will serve to make them more energy-dependent.

Energy supplies and dependencies, 2001

	Countries joining EU	South-East Europe	CIS* other than Russian Federation	Russian Federation	European Union**
Total consumption (Mtoe)	199	75	189	622	1 490 (1 517)
Coal	90	16	47	119	221 (222)
Oil	45	26	38	126	604 (613)***
Natural gas	41	19	81	320	348 (353)
Primary electricity	16	10	23	48	270 (280)
Biomass	7	4	1	9	47 (49)
Proportion met by internal production (Mtoe)	123 62%	48 64%	109 58%	622 100%	763 (991) 50% (64%)
Coal	90	13	45	119	102 (103)
Oil	3	9	21	126	155 (320)
Natural gas	7	12	20	320	192 (242)
Primary electricity	16	10	22	48	267 (277)
Biomass	7	4	1	9	47 (49)
Net imports (Mtoe)	57 38%	27 37%	81 42%	0 0%	763 (557) 50% (36%)
Coal	-16	3	2	-12	119 (119)
Oil	41	17	17	-218	490 (330)
Natural gas	34	7	61	-137	152 (108)
Primary electricity	-2	0	1	-2	2 (0)

* Non-Central Asian.

** Figures in parentheses include Norway.

*** Differences between the figures for consumption and for proportion met by internal production and imports are due to variations in stocks.

The breakdown of energy consumption and supplies reveals a number of characteristic features:

- *Countries joining the European Union:* The main component of demand in the countries joining the European Union in 2004, unlike that within the Union itself, is coal, which the countries mostly produce and consume themselves, although they also export some. Oil and natural gas rank second in energy consumption, and are mostly imported. Imports of oil and petroleum products account for 13% of imports by the European Union plus Norway, natural gas for 31%. Together, therefore, these countries can export part of the energy they produce but they remain dependent on outside sources. All in all, imports help to meet 38% of demand, virtually the same proportion as in the European Union plus Norway or as in South-East Europe.
- *South-East Europe:* The flow of trade among countries in this grouping is quite different from that of the countries joining the European Union, with a much more even distribution of imports; they are most dependent on outside sources for oil, which accounts for 65% of imports. If their energy intensity matched that of the European Union, they could meet their entire needs from domestic production. That would not be true of the countries joining the European Union, whose exports would rise and imports would fall: they would nonetheless find it harder to forgo external sources, of oil in particular, on which they are heavily dependent (91% of their oil is imported).
- *European CIS countries other than the Russian Federation:* These export no energy products, and import over 40% of the energy they consume. The chief reason is the demand for natural gas, most of which is imported from the Russian Federation. Better energy efficiency would enable them to reduce their energy dependency sharply: with over three times the European Union's energy intensity, they have plenty of room for improvement.
- *Russian Federation:* The Russian Federation has abundant energy. Despite reduced levels of production, it is still a major exporter of hydrocarbons - the world's third largest oil exporter and largest exporter of natural gas. Its energy exports account for the bulk of its finances. It thus has an interest in maintaining a high export flow; one way of accomplishing this is to come to grips with its domestic consumption.

2.2 Helping to preserve the world environment

The project will help to preserve the world environment by cutting greenhouse gas emissions in two ways:

- Improving energy efficiency;
- Promoting renewable energy.

Energy efficiency: The first way has great potential in Eastern and South-East Europe, where economies are notably energy-intensive.

Energy intensity is an overall indicator relating a country's energy consumption to its level of economic activity.

A country's energy intensity is the ratio of its energy consumption to its gross domestic product (GDP). Primary energy intensity is calculated from the consumption of primary energy, final intensity from the consumption of final energy and, by extension, electrical intensity from the consumption of electricity in relation to GDP. GDP figures are calculated at purchasing power parity.

Energy intensity is a measure of how "energy-thrifty" a country or type of development is. Its value depends on two factors:

- The nature and mix of economic and social activities and consumer needs;
- The efficiency with which energy is consumed in different applications.

The table below gives energy and electrical intensity values for the countries indicated in 2001.

Countries joining the European Union

2001	Lithuania	Latvia	Poland	Estonia	Slovakia	Hungary	Czech Republic	Slovenia
Final intensity (toe/US\$ 1 000)	0.18	0.18	0.18	0.21	0.21	0.15	0.20	0.15
Primary intensity (toe/US\$ 1 000)	0.30	0.21	0.26	0.40	0.32	0.21	0.28	0.20
Electrical intensity (kWh/US\$)	0.24	0.25	0.27	0.40	0.37	0.25	0.35	0.32

South-East Europe

2001	Bosnia and Herzegovina	Serbia and Montenegro	Albania	The former Yugoslav Republic of Macedonia	Bulgaria	Romania	Croatia	EU
Final intensity (toe/US\$ 1 000)	n/a	n/a	0.05	0.19	0.21	0.17	0.20	0.12
Primary intensity (toe/US\$ 1 000)	n/a	n/a	0.08	0.33	0.41	0.25	0.23	0.17
Electrical intensity (kWh/US\$)	n/a	n/a	0.20	0.55	0.62	0.25	0.34	0.26

CIS other than Central Asia

2001	Georgia	Republic of Moldova	Armenia	Azerbaijan	Ukraine	Belarus	Russian Federation
Final intensity (toe/US\$ 1 000)	0.16	0.20	0.10	0.26	0.47	0.28	0.34
Primary intensity (toe/US\$ 1 000)	0.21	0.28	0.19	0.54	0.73	0.35	0.53
Electrical intensity (kWh/US\$)	0.47	0.22	0.39	0.62	0.59	0.35	0.51

In 2001, all the eastern countries other than Albania and Georgia were more energy-intensive than the European Union (see table above), with primary energy intensity ranging from par with the European Union in Hungary to four times the European Union value in Ukraine.

Final energy intensity ratios are roughly commensurate.

Electrical intensity ratios are also mostly higher than in the European Union - twice as high in the case of the Russian Federation. There is thus substantial potential for electricity savings which it would be particularly profitable to explore since electricity delivery costs are high in all countries (though these are not always reflected in the cost to the consumer).

Renewable energy: Considerable technical potential has been identified in biomass, wind energy, solar energy, hydropower and geothermal energy. Not all these technologies are at the same level of maturity, however, and while they may be technically up to the mark, a number of conditions need to be met before they can be economically competitive: the hydropower and geothermal energy can be competitive with coal and natural gas when the resource is easily accessible, of good quality and close to the consumer. Further elements are required, on the other hand, to make biomass, solar and wind energy directly competitive in Eastern European countries: improved technology, government support for renewable energy or the pursuit of projects enabling advantage to be taken of carbon credits.

2.3 Exemplary and innovative

The three project activities form a whole, combining the moderation of a network of operators involved in energy management with the creation of a financing tool in the form of a public/private investment fund.

Even though energy efficiency is one of the keys to a successful transition for the countries concerned, funding for this sector over the past decade has been hugely inadequate. This is principally because of the difficulties financial institutions have had in establishing long-term funding, whose success depends in part on long-term contracts with public and private entities being honoured, in a financial, legal and fiscal setting that most banks still judge to be inadequate. It must be added that the average size of each project - small by banks' conventional standards - makes incentive mechanisms necessary.

One important initiative which FFEM already supports was launched by the European Bank for Reconstruction and Development in association with DEXIA, backed by private Japanese investors, in early 2000. This was the creation of a capital investment fund to invest in energy efficiency in Eastern Europe.

The project now under consideration takes account of the lessons of that first experiment and of other, earlier initiatives in other parts of the world (the International Finance Corporation's Renewable Energy and Energy Efficiency Fund (REEF), the PhotoVoltaic Market Transformation Initiative, SDG etc.) while seeking to go much further both in the size of the fund envisaged and in the approach taken, a frank public/private partnership enabling the public sector to give preference to the funding of energy efficiency projects heavily geared towards the private sector while capitalizing on the accumulated experience and know-how of UN/ECE.

Such a public/private investment vehicle will streamline the approach to and examination of projects by means of a specialist investment team, and will encourage private investment by establishing a large enough public-sector contribution to smooth risks and improve the return on private investors' capital. It will also provide a means of alerting and training local communities that might be interested in contributing towards the public-sector tranche, while rationalizing the use of any subsidies that have been granted or sprinkled about up to now. The vehicle managers will be able to optimize their financing by using external sources of subsidies or preferential funding from European Union, World Bank, European Investment Bank and European Bank for Reconstruction and Development regional programmes, etc. supplementary assistance and finance which project managers - whether private or local communities - do not necessarily know how to handle.

2.4 A reproducible demonstration

Given the size of the energy efficiency market and the store of confidence already built up by UN/ECE in the transition economies, it is clear that the project is a reproducible demonstration.

2.5 Post-project economic and financial durability

The entire project, especially investments by the PPP fund, will be guided by a threefold objective:

- Securing a reasonable return on the funds invested;
- Helping to structure and broaden the market for energy efficiency and renewable energy on a commercial footing; and
- Acquiring and exploiting carbon credits.

Whatever the outcome as regards the third objective, the way the project has been set up optimizes the potential for disbursing the fund under good conditions, and thus its durability.

2.6 Ecological and environmental viability

The reader is referred to paragraph 2.2 above as regards viability from the world environment standpoint. As regards the local and regional environment, the project will also help to limit the substantial pollution currently observed in the energy sector.

2.7 Social and cultural acceptability

This might indeed initially be problematic. ECE and the Energy Efficiency 21 Project have created a network of influential personalities in the main social settings concerned. This, coupled with an extensive public information campaign, will maximize the social acceptability of the project.

2.8 Appropriate organizational and institutional setting

Institutionally, the project will be assembled under the auspices of the United Nations Economic Commission for Europe and by the Steering Committee of the Energy Efficiency 21 Project. Decision-making procedures and project guidance will be as in the Energy Efficiency 21 Project. Energy Efficiency 21 will coordinate with other development programmes and activities through annual meetings of its steering committee, which comprises representatives of States, businesses and financial bodies from the 32 ECE States in Eastern Europe, the Commonwealth of Independent States, Western Europe and North America. The Energy Efficiency 21 Project includes participation by and opinions from bilateral agencies, international organizations and international financial institutions such as the European Commission's SAVE, PHARE and TACIS programmes, the European Bank for Reconstruction and Development, the World Bank, the International Finance Corporation, the UNDP Global Environment Facility, the OECD International Energy Agency, USAID, the Inter-State Economic Committee of the Commonwealth of Independent States and European Energy Charter. Non-governmental organizations involved in Project activities include the Alliance to Save Energy, the World Energy Council, Black Sea Economic Cooperation, and the Vienna International Council.

The project will be supervised by the ECE secretariat; some services will be provided under contract issued by ECE or with subsidies from the ECE Subsidies Committee. The project will be partly financed out of the regular budget for UN/ECE and partly from a trust fund supported by public and private contributions (businesses and banks). The project manager will be financed from the regular ECE budget, while an expert in investment funds and an expert on renewable energy will be financed out of extrabudgetary resources. Recruitment and procurement of supplies, services and equipment will be subject to the rules and regulations, policies and procedures of the United Nations.

The project delivery systems will have access to the Participating National Institutions network in order to accelerate work in association with local project promoters on the preparation of bankable schemes for both private and public entities.

III. INDICATIVE COST AND FUNDING FORECAST

3.1 Indicative cost

The indicative cost of the project is €6 million over three years, as shown in the table below:

Category of expenditure	Total (euros)
Personnel, domestic and foreign travel	1 500 000
Service providers (training, financial structuring, project evaluation)	2 500 000
Training (for local community officials)	1 750 000
Equipment (electronic and communications)	150 000
Miscellaneous	100 000
Total	6 000 000

3.2 Funding forecast

The funding forecast, following the headings of the conceptual framework (part V), is as follows:

Objective 1: Promote communication among entities involved in the Project and local communities in Central, South-Eastern and Eastern Europe

Category of expenditure	FFEM funding (euro)	United Nations Fund	Other funding	Total (euro)
<i>Establishment of a network of energy efficiency officials in ECE member States: Establishment of two local teams in local communities to be identified in 10 or so participating countries, training, Internet connection (www.ee-21.net), information transfer and remote instruction by ECE (see section 3.2)</i>	100 000	200 000	300 000	600 000
<i>Tuition for experts in project management, finance and financial engineering: Training 200 local community energy officials, commercial bank officials and experts: three courses of six lessons including computer-assisted training</i>	100 000	600 000	100 000	800 000

Category of expenditure	FFEM funding (euro)	United Nations Fund	Other funding	Total (euro)
<i>Establishment of a project pipeline:</i> Financial and technical validation by a team of experts, to meet the needs of the PPP vehicle, of a hundred or so project business plans for coping with energy needs and supplies from (a) course participants (b) national member institutions (c) managers of funds financing projects and fund managers in Eastern European countries (d) ad hoc working groups on electricity and coal within a sustainable development framework (e) Energy Efficiency 21 experts on renewable energy, to consider financing solutions appropriate to the area in question	200 000	200 000	200 000	600 000
Total budget to meet Objective 1	400 000	1 000 000	600 000	2 000 000

Objective 2: Strengthen energy efficiency and renewable energy policies

Category of expenditure	FFEM funding (euro)	United Nations Fund	Other funding	Total (euro)
<i>Economic, institutional and regulatory reform:</i> Extensive, detailed analysis of the reforms needed to encourage investment in energy efficiency and renewable energy projects and reduce the use of fossil fuels, including 10 case studies of individual projects or project types in three workshops moderated by local and international experts	200 000	200 000		400 000
<i>Seminars on energy efficiency:</i> Three seminars for decision makers in member States, based on the analyses and projects used above to discuss reform and promote a fair business environment	200 000	150 000	150 000	500 000
<i>Practical advisory services:</i> At least 15 missions to be undertaken by international experts to advise local communities and national ministries on the reforms to carry out in order to support energy efficiency investment projects	200 000	150 000	250 000	600 000
Total budget to meet Objective 2	600 000	500 000	400 000	1 500 000

Objective 3: Promote investment by commercial banks and the private sector

Category of expenditure	FFEM funding (euro)	United Nations Fund	Other funding	Total (euro)
<i>Financing mechanisms for energy efficiency projects:</i> Establishment of an initial €300 million public/private fund to finance energy efficiency and renewable energy projects; study of financing mechanisms and legal and fiscal aspects	800 000	200 000	1 000 000	2 000 000
<i>Development of project financing standards:</i> Identification of criteria for investment in energy efficiency and renewable energy projects, in several languages (including English, French and Russian), formulation of definitions, measurement units and plans acceptable by ECE standards, publication on Internet	100 000	150 000		250 000
<i>Inventory of an investment project pipeline:</i> standard presentation of investment in energy efficiency and renewable energy projects, showing total project cost, investment required, internal rate of return and calculated reductions in greenhouse gases	100 000	150 000		250 000
Total budget to meet Objective 3	1 000 000	500 000	1 000 000	2 500 000
Total budget to meet the three objectives of the Energy Efficiency 21 Project	2 000 000	2 000 000	2 000 000	6 000 000

3.3 Expected FFEM financing

FFEM has been asked to provide €2 million in financing.

IV. FURTHER PREPARATIONS

4.1 Responsibility for preparation

Preparations will have to be made for the programme, the feasibility study under activity 3 (establishment of an investment fund) in particular. The Ministry of Foreign Affairs will oversee the energy aspect of the study.

4.2 Provisional timetable

- *Programme preparation:* July-October 2004

- *Submission to FFEM Steering Committee:* November 2004
- *Programme launch:* First quarter of 2005

4.3 Points for further study

- How to coordinate the technical, institutional and financial aspects;
- Detailed architecture of the investment fund;
- Feasibility of establishing the fund;
- Co-financing.

4.4. Project preparation fund

A project preparation fund of €50,000 is requested for the feasibility study and detailed programme set-up.

V. DRAFT CONCEPTUAL FRAMEWORK

The project description is presented below in conceptual framework form.

Objective 1: Promote communication among entities involved in the Project and local communities in Central, South-Eastern and Eastern Europe

Component	Expected outcome	Verifiable indicators	Assumptions and risks
1.1. <i>Establishment of a network of energy efficiency officials in ECE member States</i>	Establishment of two local teams in local communities to be identified in 10 or so participating countries, training, Internet connection (www.ee-21.net), information transfer and remote instruction by ECE (see section 3.2)	Team composition; Internet pages created, how often visited; number of courses given	Experience accumulated under the EE21 programme ensures risk will be minimal
1.2. <i>Tuition for experts in project management, finance and financial engineering</i>	Training 200 local community energy officials, commercial bank officials and experts: three courses of six lessons including computer-assisted training	Number of officials and courses	ditto
1.3. <i>Establishment of a project pipeline</i>	Financial and technical validation by a team of experts, to meet the needs of the PPP vehicle, of a hundred or so project business plans for coping with energy needs and supplies from (a) course participants (b) national member institutions (c) managers of funds financing projects and fund managers in Eastern European countries (d) ad hoc working groups on electricity and coal within a sustainable development framework (e) Energy Efficiency 21 experts on renewable energy, to consider financing solutions appropriate to the area in question	Number of projects Statistical evaluation of project and business plan quality	ditto

Objective 2: Strengthen energy efficiency and renewable energy policies

Component	Expected outcome	Verifiable indicators	Assumptions and risks
2.1. <i>Economic, institutional and regulatory reform</i>	Extensive, detailed analysis of the reforms needed to encourage investment in energy efficiency and renewable energy projects and reduce the use of fossil fuels, including 10 case studies of individual projects or project types in three workshops moderated by local and international experts	Workshops conducted Case-study evaluation	Slow reform in the energy sector - hence the value of demonstrations and consciousness-raising
2.2. <i>Seminars on energy efficiency</i>	Three seminars for decision makers in member States, based on the analyses and projects used above, to discuss reform and promote a fair business environment	Number of seminars held	Inherent difficulty of dialogue between national authorities and business in Eastern European countries
2.3. <i>Practical advisory services</i>	At least 15 missions to be undertaken by international experts to advise local communities and national ministries on the reforms to carry out in order to support energy efficiency investment projects	Number of missions Quality of reports	Need for appropriate teaching methods

Objective 3: Promote opportunities for investment by commercial banks and the private sector

Component	Expected outcome	Verifiable indicators	Assumptions and risks
3.1. <i>Financing mechanisms for energy efficiency projects</i>	Establishment of an initial €300 million public/private fund to finance energy efficiency and renewable energy projects; study of financing mechanisms and legal and fiscal aspects	Establishment of fund Disbursement of fund	There are risks associated with the largely unfavourable business environment and with private-sector interest
3.2. <i>Development of project financing standards</i>	Identification of criteria for investment in energy efficiency and renewable energy projects, in several languages (including English, French and Russian), formulation of definitions, measurement units and plans acceptable by ECE standards, publication on Internet	Number of criteria and standards published, international recognition of these standards	Criteria and standards must be drawn up in close cooperation with professionals and the banking sector
3.3. <i>Inventory of an investment project pipeline</i>	Standard presentation of investment in energy efficiency and renewable energy projects, showing total project cost, investment required, internal rate of return and calculated reductions in greenhouse gases	Number of projects inventoried	Project quality to provide a good demonstration

For further information:E-mail: gianluca.sambucini@unece.orgInternet: www.unece.org/ie/; www.ee-21.net
