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**ECONOMIC COMMISSION FOR EUROPE**

**COMMITTEE ON SUSTAINABLE ENERGY**

Steering Committee of the Energy Efficiency 21 Project

Twentieth session  
Geneva, 3-5 June 2009  
Item 6 (a) of the provisional agenda

**CURRENT STATUS OF SUBREGIONAL AND COUNTRY-ORIENTED PROJECTS  
UNDER THE UMBRELLA OF THE ENERGY EFFICIENCY 21 PROJECT**

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

Final Report of Monitoring and Evaluation Adviser on Financing Energy Efficiency Investments  
for Climate Change Mitigation Project for the First Year of Project  
Operations (2008)

Note by the secretariat

**I. INTRODUCTION**

1. The Financing Energy Efficiency Investments for Climate Change Mitigation project is subject to reporting, monitoring and evaluation consistent with Article IX of the Memorandum of Understanding between the United Nations Fund for International Partnerships (UNFIP) and the United Nations Economic Commission for Europe (ECE). Monitoring and evaluation should be carried out by each supporting institution as described in the Project Document (ECE-INT-04-318) signed by the Executive Secretary of ECE and the Executive Director of UNFIP on 22 September 2006.

2. The progress of project operations is reported and reviewed by the Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation and Steering Committee of the Energy Efficiency 21 Project at their sessions. The final report for the First  
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Year of Project Operations (2008) presented in this document has been prepared by Mr. Glen Skovholt, Monitoring and Evaluation Adviser for the United Nations Foundation (UNF) and UNFIP. It reviews, in brief, the objectives of the project, reports on the progress in implementation of the project, and provides comments and suggestions on further implementation of the project.

3. This report is an update of the Mid-Term Report submitted by the Monitoring and Evaluation Adviser in February 2009 and distributed at the 13<sup>th</sup> session of the Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation held in Geneva on 2-3 March 2009.

4. The report is submitted to the United Nations Foundation, the United Nations Fund for International Partnerships, the UNECE Sustainable Energy Division and the Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation.

## **II. REVIEW OF PROJECT OBJECTIVES**

5. As per Project Document the long-term objective of the project is to: “Promote an investment climate in which self-sustaining energy efficiency and renewable energy projects can be identified, developed, financed and implemented by local teams in municipalities, factories and energy utilities.”

6. The project intends to achieve this objective through the following:

- (a) Identify and develop investment projects in the private and public sectors at the local level. This includes: identifying, developing, financing and implementing demand side and supply side energy efficiency and renewable energy projects that meet environmental, health and institutional reform priorities.
- (b) Strengthen energy efficiency and renewable energy policies in the participating countries. The project will assist municipal authorities and national administrations to introduce the economic, institutional and regulatory reforms needed to support investments in energy efficiency and renewable energy projects.
- (c) Promote opportunities for banks and commercial companies to invest in energy efficiency and renewable energy projects through the development of new public private partnership investment funds or financing mechanisms.

7. The Project is also designed to:

- (a) Assist South East European and Eastern Europe, Caucasus and Central Asia countries to enhance their energy efficiency, diminish fuel poverty arising from economic transition and meet international environmental treaty obligations under the UNFCCC and the UNECE;
- (b) Provide a pipeline of new and existing projects to dedicated public private partnership investment funds that can provide up to US\$ 500 million of debt, equity or both to project sponsors;
- (c) Establish an expanded and enhanced network of selected municipalities linked by advanced Internet communications with international partners for value added information transfers on policy reforms, financing and energy management, and

- (d) Provide case study investment projects in renewable energy technologies, electric power and clean coal technologies.

### III. PROGRESS IN IMPLEMENTATION OF THE PROJECT IN 2008

8. Considerable accomplishments were made in 2008, the first year of project operations. The total duration of the Project is four years. Completion of the Project is scheduled at the end of 2011.)

9. Contractors were selected for the three important activities. The contractors presented their vision for implementation of the contracts to the twelfth session of the Ad Hoc Group of Experts on Energy Efficiency Investments for Climate Change Mitigation in December 2008 and detailed work plans to the thirteenth session in March 2009.

- (a) **Conning Asset Management Limited, United Kingdom.** Conning will structure and prepare the investment fund; analyse financial, legal and fiscal issues; solicit public sector entities and private sector investor participation; and prepare the terms of reference for an experienced fund manager.
- (b) **Pöyry Energy Consulting AG, Switzerland.** Pöyry will undertake a regional analysis of policy reforms to promote energy efficiency and renewable energy investments. Among the tasks included in the contract are identification of specific policy, regulatory and institutional “bottlenecks” to energy efficiency and renewable energy market formation and analysis of how policy reforms could transform economically attractive investment projects into bankable projects.
- (c) **Centre for Energy Efficiency EnEffect, Bulgaria.** EnEffect will undertake the development of a website and Internet communications network for the project and local teams of energy efficiency managers. This will include software applications to develop, finance and implement energy efficiency and renewable energy projects, and the development of on-line training for local teams for Internet communications and software use, and a platform for on-line investment project development training courses.

10. National Coordinators (NCs) and National Participating Institutions (NPIs) were selected for all twelve countries.

11. Consultants and members of the Project Management Unit conducted assessment missions in eleven of the twelve countries. The preliminary findings of the assessment missions were presented at the twelfth session of the Ad Hoc Group of Experts. The draft Investor Interest and Capacity Building Needs Report based on the results of the assessment missions prepared jointly by consultants engaged to conduct assessment missions and the Project Management Unit in consultation with NCs and NPIs, was presented to the thirteenth session of the Ad Hoc Group of Experts.

12. As part of the Investor Interest and Capacity Building Needs Report, a proposal has been developed by the consultants and the Project Management Unit for a Business Development Course Programme.

13. The Ad Hoc Group of Experts was delegated the authority by the Steering Committee of the Energy Efficiency 21 Project at its nineteenth in May 2008 to serve as the executive decision-making body for the Financing Energy Efficiency Investments for Climate Change Mitigation Project (ECE/ENERGY/WP.4/2008/3, para. 24 (h)). The thirteenth session of the Ad Hoc Group of Experts reviewed, inter alia, the progress achieved in the first year of project operations (2008) and approved the Work Plan for the second year (2009).

#### **IV. COMMENTS AND OBSERVATIONS ON SPECIFIC ACTIVITIES**

##### **A. Country Assessment Missions**

14. Extensive and intensive assessment missions were conducted in eleven out of twelve countries. The mission to Romania has not taken place because the country has temporarily suspended its participation in the project, however the assessment was done based on the existing data and research available. The missions were conducted over the period from 29 September to 21 November 2009, each lasting from two to four days, and included over 150 separate meetings in 11 countries.

15. The quality of the information that was gained varied. In some instances it was not possible to arrange meetings with important organizations, and in others the level of authority of the officials interviewed was not as senior as expected or would have been preferred.

16. Nevertheless the consultants engaged to conduct the assessment missions submitted comprehensive reports on each mission, which should prove valuable in guiding the further work of the project.

17. A draft Investor Interest and Capacity Building Needs Report on the outcome of the assessment missions was presented to the thirteenth session of the Ad Hoc Group of Experts. The Monitoring and Evaluation Adviser views as positive a decision by the Ad Hoc Group of Experts to acknowledge the value of the report on the assessment missions as a basis for the Regional Analysis of Policy Reforms and as a tool for the NCs and NPIS to promote energy efficiency and renewable energy policies in their countries.

##### **B. National Coordinators and National Participating Institutions**

18. The expertise and commitment of the NCs and NPIS varies widely throughout the twelve countries. Generally, there appears to be a high level of interest but the commitment of the NPIS should be a consideration in prioritizing the implementation of the Project.

##### **C. Capacity Building**

19. One of the most consistent messages from the assessment missions is that there is a significant need to build capacity in nearly every country. Nearly every country assessment

mission report makes reference to lack of capacity in one or more areas. The primary needs cited for capacity building have to do with bankable investment project development and equity and mezzanine finance business development, although other needs are also cited.

20. The Work Plan for the Second Year of Project Operations (2009) recognizes the need for additional training under the section “Trained experts in project development, finance and business planning.” The project budget for training, however, is constrained. Efforts are underway to secure additional funding for this critical activity. It is important that these efforts be successful.

21. A capacity building course programme has been under development by the contractors and the Project Management Unit. The most recent version included in the draft Investor Interest and Capacity Building Needs Report under the title Business Development Course Programme should be effective if fully implemented.

22. The Monitoring and Evaluation Adviser believes that a rigorous Energy Efficiency Business Development Course Programme is a key to the ultimate success of the project. It is encouraging that the Ad Hoc Group of Experts views capacity building for developing bankable projects as an important tool for successful implementation of the project. Customizing the Programme to specific conditions of participating countries and working with the NPIs to prepare more concrete energy efficiency Business Development Course Programme are positive suggestions.

#### D. Investment Fund

23. The Monitoring and Evaluation Adviser has had limited experience with the development of investment funds for energy efficiency and renewable energy projects, so these comments are limited primarily to assessment mission reports and previous experiences that may have relevance to a successful fund.

24. From the Conning presentations it is difficult to assess the extent to which the investment fund will take into account the different situations in each of the twelve countries. But it would seem essential that the fund has to be structured in a way that is sufficiently flexible to address the different needs, interests and capacities of each of the selected countries.

25. Throughout the region, many energy efficiency and renewable energy projects will be relatively small in size. For an investment fund to be interested in investing in these projects, some form of a bundling mechanism would seem to be needed.

26. An energy service company (ESCO) can be an effective method for bundling projects. However, several countries either do not have a functioning ESCO industry or have a very limited one. The extent to which ESCOs can serve as the bundling mechanism is unclear.

27. There is a certain lack of understanding as to how the fund might operate. In general, project finance does not appear to be well understood in many of the targeted countries.

28. The role of equity has been misunderstood, with some participants using the term equity to describe the fund. There is a potential role for equity, but apparently not to the extent some may have envisioned.

29. The consultants who conducted the assessment missions frequently commented that there is not a good understanding of mezzanine finance in the countries.

30. This suggests that any capacity building programme needs to emphasize the various forms of financing, including equity and mezzanine finance, which might be utilized by the fund.

31. Reform of the power sector, including significant privatization, low tariffs in some sectors, and constantly changing prices for energy make it difficult to create an investor-friendly environment. But the market conditions will be dynamic for some time to come so any successful investment fund will need to adjust to such an environment.

E. Regional Analysis of Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments

32. Reform of energy efficiency and renewable energy legislation is a priority in many of the participating countries. Harmonization of a country's energy laws with the relevant European Union (EU) Directives is an important incentive for these reforms, particularly for candidate or potential candidate countries for EU membership.

33. Reports from the assessment missions indicate that some of the reforms, while positive, are insufficient and will need strengthening. Effective implementation of the policies is a particular challenge. In many instances, legislation is more declaratory than operational. A senior government finance official in one of the twelve countries described that country's energy efficiency law by saying "it means nothing." Reforms to strengthen implementation of energy policies are an important component of the overall project.

34. In a presentation made by Pöyry at the twelfth session of the Ad hoc Group of Experts in December 2008, the goal of the project is stated "to promote market formation so that self-sustaining energy efficiency and renewable energy projects can be identified, developed, financed and implemented locally in participating countries." This is added because the original proposal seems deficient in terms of the engagement of the national participating institutions.

35. The NPIs will be an essential resource in analysing each country's policies concerning energy efficiency and renewable energy, and the situation regarding their implementation, as well as policies concerning the investment climate for these projects. Those policy reforms will, inevitably, differ from country to country so it is important that the analysis takes these different situations into account.

F. Website and Internet Communications Network of Energy Efficiency Managers in Eastern Europe

36. The ultimate success of the project depends on close coordination and constant communication between the Project Management Unit, twelve NCs and NPIs, the contractors for

investment fund design, regional analysis of policy reforms, website and Internet communications network and the training consultants. A robust, web-based communications system is essential. EnEffect, the website and internet communications network contractor, has proven experience and its work plan seems designed to achieve this important objective.

G. Work Plan for the Second Year of Project Operations (2009)

37. Establishing a functioning investment fund for the twelve selected countries to increase the efficient use of energy and reduce carbon emissions is an immensely complex undertaking. A review of the tables contained in the 2009 Work Plan clearly confirms the challenge.

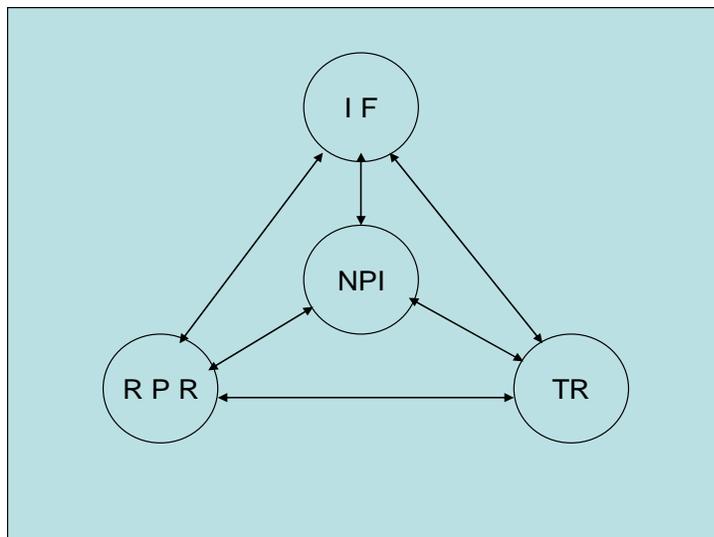
38. A successful project will require strong and constant communication between and among the principal contractors, consultants, National Coordinators, NPIs and the Project Management Unit. The figure 1 is one way of describing how this ongoing communication needs to function. The Monitoring and Evaluation Adviser views as positive a decision by the Ad Hoc Group of Experts at its thirteenth session to acknowledge that the overall success of the Project is critically dependent on the close cooperation and interaction between all parties currently working on its implementation, namely the NCs and NPIs, the contractors, supporting institutions, Project Management Unit as well as other stakeholders who will become involved in the Project.

39. The Project Management Unit is to be commended for its work managing the project to date. It needs to provide strong and active oversight throughout the period of the project. In this regard, it is encouraging that the Project Management Unit has been successful in expanding its professional staff with the recruitment of an associate programme officer.

40. The challenges that lie ahead are considerable and success is not guaranteed but 2008 was a productive year to launch the project.

41. The report of the thirteenth session of the Ad Hoc Group of Experts in March 2009 indicates that a number of issues raised in the Monitoring and Evaluation Adviser's Mid-Term Report are being addressed.

Figure 1: Scheme on the interaction of Project participants



Blue is UNECE Project Management Unit, the overall coordinator  
 I F is investment fund  
 RPR is regional policy reform  
 TR is business development training  
 NPI are the national participating institutions  
 Arrows are the needed communications, including internet communications network

#### H. Workshop on Functioning and Requirements of the Investment Fund

42. The Workshop on Functioning and Requirements of the Investment Fund, held on 2 March 2009 as part of the thirteenth session of the Ad Hoc Group of Experts, provided a useful forum for representatives of the contractors (Conning Asset Management Limited, Pöyry Energy Consulting AG and Centre for Energy Efficiency EnEffect) to have an interactive discussion with NCs and NPIs.

43. Representatives of Conning Asset Management Limited made an important presentation on the criteria for bankable projects, explaining the required elements for preparation of successful project proposals. It is critical that the NPIs understand the criteria.

44. Pöyry Energy Consulting AG presented its vision on interaction with the NPIs and the National Coordinators. It suggests a much improved process of communication and interaction with the national units than was presented in December.

45. The recommendation by the delegates to include analysis of the investment climate in participating countries in the report to be prepared by Pöyry should provide valuable information.

46. Representatives of the NPIs made presentations on the situation in their countries, including priority areas of national energy strategies and legislation, government interest in implementing energy efficiency (EE) and renewable energy resources (RES) projects and current investment opportunities for EE and RES. These presentations provide valuable, on-the-ground information for all Project participants.

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