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Spotlight on the UNECE Energy Efficiency 21 Project



The Energy Efficiency 21 Project (**EE21**), a key operational activity of the UNECE, is a region-wide project to enhance both the trade and co-operation in energy efficient, and environmentally-sound techniques and management practices. The aim of the project is to help close the energy efficiency gap between actual practice and best available technologies and between UNECE countries, in particular market developed countries and economies in transition.

The EE21 Project assists UNECE member states to implement greenhouse gas (GHG) mitigation strategies and to develop related energy efficiency investment projects. The successor to the Energy Efficiency 2000 Project that was launched in 1991, EE21 commenced as a three-year project in June 2000 at the conclusion of the third phase of the Energy Efficiency 2000 Project. The EE21 Project supports the efforts of Central and Eastern Europe and CIS countries to enhance their energy efficiency and energy security in order to ease the energy supply constraints of economic transition.

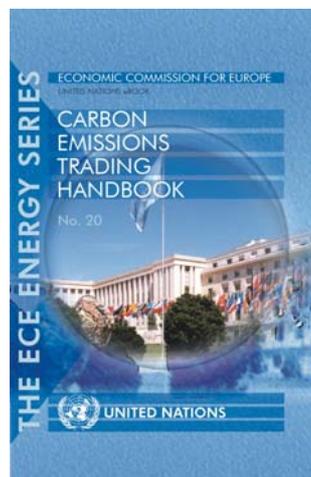
Energy Efficiency 21 Project Financing Mechanism

When the leaders of the G-8 countries issued their Evian Summit Statement on 2 June 2003, they called for the development of cleaner, sustainable and more efficient technologies to improve public health and reduce pollution worldwide. In particular, they appealed for the promotion of rapid innovation and market introduction of clean technologies by international organisations, including UNECE. Following this Statement, on 27 June the Steering Committee of the Energy Efficiency 21 Project launched its next three-year phase (2003-2006) with a Seminar on 'Financing Energy Efficiency

Investments' that included presentations from major financial institutions and investment fund managers active in the field. The Seminar recommended the development of an EE21 Project Financing Mechanism or Investment Fund to which the pipeline of investment project proposals resulting from the present phase and developed in the new phase (2003-2006) could be submitted. The EE21 Project Steering Committee endorsed this proposal to establish a Financing Mechanism or Fund that would provide for the more rapid introduction of cleaner energy technologies in transition economies.

Carbon Emissions Trading Handbook

Developed by the EE21 Project and scheduled for launch in September 2003, this United Nations eBook explains how carbon emissions trading can contribute to reducing GHG emissions through the development of energy efficiency projects. The booklet explores some of the policy and commercial issues of global warming and environmental programmes based on credit trading mechanisms that have been in use for 25 years. It also describes an enclosed interactive CD-ROM containing an introductory UN Television (UNTV) film and a step-by-step handbook on carbon trading



procedures with related case studies and UN documents. These are complemented by emissions reduction calculation software that project developers can use to estimate carbon credits accruing from their energy efficiency investment projects and a training course with filmed instruction and slide presentations covering risk management, emissions trading and the Kyoto Protocol. The booklet concludes with a Glossary of Terms frequently used in emissions trading. **Order information:** UN Sales Number GV.E.03.0.9; ISBN 92-1-101054-3 ISSN 1014-7225.

Not an official record - For information only

Energy Efficiency 21 Project 2003-2006 - Objectives and Activities

The new phase of EE21 will rely on the lessons learned from earlier project operations and reflect key decisions of the World Summit on Sustainable Development (WSSD) held in Johannesburg. The **General Objective** is to enhance regional cooperation on energy efficiency market formation and investment project development to reduce GHG emissions in transition economies. This will be implemented through three immediate objectives and related activities: (i) **Development of carbon emissions trading standards** and emissions tracking based on specific energy efficiency projects developed and financed within EE21 and monitored and evaluated for Assigned Amount Units (AAU) in line with the UN Framework Convention on Climate Change (UNFCCC) Kyoto Protocol Mechanisms;

(ii) **Financing energy efficiency investments** through advisory services to project sponsors and investors on bankable projects, including submission to sources of finance and negotiation through Energy Efficiency Seminars for projects that meet the criteria of the Kyoto Protocol; and (iii) **Promotion of a sound business environment** and corporate governance to introduce the economic, institutional and regulatory reforms needed to support energy efficiency investments to reduce GHGs and implement the Kyoto Protocol Mechanisms. The project will be supported partly by the regular budget of the ECE and by an extra-budgetary trust fund based on financial contributions from government departments, commercial companies and the financial community.

Carbon Trading in the ECE Region: Rationale for a Region-Wide Emissions Trading Scheme

As a contribution to the current debate on the most efficient ways to reduce CO₂ emissions in the UNECE region, the UNECE secretariat estimated the marginal costs of CO₂ emissions reductions within a static framework. This framework assumed that CO₂ emissions reductions were achieved through corresponding reductions in Gross Domestic Product (GDP) and, therefore, it provides an upper limit of the costs that would be incurred to achieve the required emissions reductions. Obviously, in practice, the costs will be lower since emissions reductions can be achieved over time

through energy conservation, improving energy efficiency, interfuel substitution to lower carbon fuels and through technological innovation along the whole of the energy chain. Nonetheless, these costs are illustrative of the differences in abatement costs between developed and transition market economies and the advantages that could be gained from a CO₂ emissions trading scheme (Table 1 refers). It should be noted that a 15 % reduction in CO₂ emissions from 1999/2000 levels in developed market economies would meet the current Kyoto Protocol targets for the whole of the ECE region.

Table 1. Estimate of Marginal Costs of CO₂ Emissions Reductions – UNECE Region, 1999, in US\$/CO₂ tons

Reduction (%)	Developed Market Economies (DME)	Transition Market Economies (TME)
	US\$/CO ₂ ton	US\$/CO ₂ ton
1	127	18
2.5	317	45
5	633	91
7.5	950	135
10	1,267	181
12.5	1,583	226
15	1,900	272

Note: One ton of carbon (C) is equivalent to 3.667 tons of CO₂

Source: UNECE Econometric Output

Footnote: The data indicate that the marginal costs of CO₂ abatement are much lower in transition market economies than in developed market economies for any given level of reduction. This result advocates the introduction of a CO₂ emissions trading scheme within the UNECE region with benefits for both groups of countries. Assuming all required CO₂ emission reductions could come from transition market economies and, that say, the anticipated reduction of the total CO₂ emissions in developed market economies is in the amount of 1,426 million tons, or 15 per cent compared to their level in 1999, the total base for the creation of a "clean air" market in the UNECE region would range from 25.7 to 206.7 billion US\$.

Additional Information on UNECE's Efforts to Promote and Enhance Energy Efficiency...

The UNECE's activities in the area of energy efficiency are managed by the Sustainable Energy Section of the Industrial Restructuring, Energy and Enterprise Development Division (IREEDD), notably by Frederic Romig (frederic.romig@unece.org) and Sead Vilogorac (sead.vilogorac@unece.org). For further information on the UNECE's work on energy efficiency, please visit the Sustainable Energy pages of the UNECE website at: www.unece.org/ie/se/eneffic.html and/or go directly to the EE21 website at: www.ee-21.net

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