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**Economic Commission for Europe**

Committee on Sustainable Energy

**Steering Committee of the Energy Efficiency 21 Programme****Twenty-third session**

Geneva, 25 April 2012

Item 7 of the Provisional Agenda

**Draft Programme Plan 2012–2015 for the Energy Efficiency 21 Programme****Draft Programme Plan 2012-2015 for the Energy Efficiency  
21 Programme****Note by the secretariat***Summary*

At its twenty-second session on 21 April 2011, the Steering Committee of the EE21 Programme requested the secretariat to prepare a Draft Work Programme for the next 3-year phase of the EE21 Programme (2012-2015) for the next session of the Steering Committee (ECE/ENERGY/WP.4/2011/2, para. 27 (z)). In line with the previous phases and the strategy of the EE21 Programme to promote regional and global initiatives on energy and sustainable development, the General and Immediate Objectives of the Programme for 2012-2015 are to contribute to reducing greenhouse gas emissions through projects in which the United Nations Economic Commission for Europe (UNECE) serves at the Executing Agency, Associated Agency or provides direct value-added information dissemination services.

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## I. Introduction

1. The nineteenth session of the Committee on Sustainable Energy held in November 2010 welcomed the progress achieved in the implementation of the Energy Efficiency 21 Programme (EE21) and the sub-regional, country-oriented and inter-regional projects and interdivisional activities under the umbrella of the EE 21 Programme (ECE/ENERGY/84). Climate change mitigation efforts are made at the UNECE through the EE21 Programme, which has operated since 1991 to enhance trade and cooperation in energy efficient, environmentally-sound techniques and management practices, and to promote energy efficiency market formation and investment project development.

2. The Steering Committee of the EE21 Programme at its twenty-second session on 21 April 2011 expressed appreciation for the financial support to the EE21 Programme and its projects provided by the United Nations Foundation and United Nations Fund for International Partnerships; Fonds Français pour l'Environnement Mondial (French Global Environment Facility); United Nations Environment Programme/Global Environment Facility; European Business Congress; the Government of the Russian Federation; European Commission; the Government of Austria; the Government of Italy; and the M2M Partnership and the United States Environmental Protection Agency (ECE/ENERGY/WP.4/2011/2, para. 27 (dd)).

## II. Objectives, activities and outputs

3. Following the previous phases and in line with the strategy of the EE21 Programme to promote regional initiatives on energy and sustainable development, the General and Immediate Objectives of the Programme for 2012-2015 are described below. The structure of the Energy Efficiency 21 Programme provides for cross-cutting Objectives and Activities that are largely implemented through the sub-regional and inter-regional projects and interdivisional activities in which the UNECE serves as the Executing Agency, Associated Agency or provides direct value-added information dissemination services.

4. The Programme will assist economies in transition to develop and promote sustainable energy policies, pursue energy efficiency strategies, reduce greenhouse gas emissions to meet international treaty obligations and enhance the security of energy supplies by producing the specific outputs listed below from operational activities in the industry, housing and services, transport and energy sectors through national actions, bilaterally and multilaterally especially through UNECE.

### A. General objective

*General Objective:* Enhance regional cooperation on energy efficiency market formation and investment project development to reduce greenhouse gas emissions in economies in transition.

### B. Immediate objectives

*Immediate Objective 1:* Accelerate *regional networking* between national participating institutions and international partners by enhanced Internet communications for value added information transfers on financing energy efficiency projects and training, contributing to regional cooperation on sustainable energy development and debate to mitigate global energy security risks.

**Output 1.1 Energy Efficiency 21 Website: [www.ee-21.net](http://www.ee-21.net)**

*Activities:* Strengthening and sustainable development of the EE21 website with the following features:

- 1.1.1 Multilingual English and Russian versions with reports posted in both languages;
- 1.1.2 Expanded links to other websites;
- 1.1.3 On-line distance training on project finance and the Kyoto Protocol mechanisms;
- 1.1.4 On-line portfolio of investment opportunities and other related services.

**Output 1.2 Networking should be strengthened to comprise in-depth information exchanges and discussions during project meetings, seminars and related events.**

*Activities:*

- 1.2.1 Organization of specific seminars to develop and strengthen networking activities and information exchanges;
- 1.2.2 Training workshops organized to harmonize specific tools for networking activities;
- 1.2.3 Specific advisory services provided for policy reforms and institutional capacity building to facilitate exchange of information and development of awareness on the link between energy efficiency and climate change mitigation.

*Immediate Objective 2:* Promote *municipal level projects* to enable local and concrete energy efficiency development, also strengthening reforms, skills and capacities needed for investment projects that meet international environmental treaty obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and UNECE.

**Output 2.1 Municipal Level Projects.**

*Activities:* Facilitate and promote capacity building at municipal and local technical expert level to identify, develop, finance and implement energy efficiency projects and enhance public and private partnerships for investment opportunities, through:

- 2.1.1 Training seminars to enhance awareness from the part of national government ministries and local authorities as well as from the private sector regarding energy efficiency and renewable energy issues, particularly from the perspective of creating a non-distorted energy market;
- 2.1.2 Training on financing energy efficiency investment projects to create local expertise in preparing bankable proposals, including those procedures related to the implementation of flexible mechanisms in the Kyoto Protocol;
- 2.1.3 Creation of an Investment Project Pipeline. This is one of the main efforts to promote government and municipal authority incentives to investors, as well as public private partnership for the identification, development, financing and implementation of energy efficiency and renewable energy investment projects, including biomass energy projects, and coal mine methane (CMM) projects.

**Output 2.2: Development of innovative financing mechanisms.**

*Activities:* Promote opportunities for banks and commercial companies to invest in energy efficiency and renewable energy projects through the development of innovative financing mechanisms, including investment funds, mainly through provision of technical assistance.

*Immediate Objective 3:* Develop and harmonize regional policies and standards to introduce economic, institutional and regulatory reforms needed to support energy efficiency investments to reduce greenhouse gas emissions.

**Output 3.1 Promotion of policy reforms as outlined in the Global Strategy to Promote Energy Efficiency Market Formation and in the Regional Analysis of Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments.**

*Activities:* Promote implementation of the recommendations identified in the Global Strategy to Promote Energy Efficiency Market Formation and in the Regional Analysis of Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments through conferences and seminars, technical assistance to the governments, and adjusting Global Strategy to the specific conditions of regions and countries.

**III. Work methods**

5. The EE21 Programme will be implemented within UNECE under the auspices of the Committee on Sustainable Energy during three years beginning 1 July 2012. The Committee on Sustainable Energy will review progress of the Programme and provide general guidance at its regular sessions. The EE21 Programme is implemented through the sub-regional and inter-regional projects and interdivisional activities that are included in its 3-year Programme Plan.

6. A Steering Committee is appointed by Governments of UNECE member States under the auspices of the Committee on Sustainable Energy to review progress and provide detailed guidance on the execution of the project. The Steering Committee will normally hold an annual session, but may meet more frequently if necessary. The Steering Committee is composed of governmental delegates from National Participating Institutions, international organizations, commercial companies, banks and international financial institutions.

7. The execution of the Programme is under the purview of the UNECE Executive Secretary. The Director of the UNECE Sustainable Energy Division is responsible for the implementation of Programme activities while daily operations will be the responsibility of the Programme Manager. The Programme is implemented by the Programme secretariat within the Sustainable Energy Division. The Programme secretariat, at the level of activity foreseen for 2009-2012, will be staffed by one Senior UNECE staff member (P-5) half-time, two UNECE staff members (P-4), one Associate Programme Officer (P-2), one Regional Adviser on Energy (P-5) half-time, one Programme Assistant (G-5) half-time. One UNECE staff member, Economic Affairs Officer (P-4) will serve as Programme Manager.

8. The work methods of the Programme implementation will include activities for all participating countries in its Steering Committee, Groups of Experts Meetings, conferences, seminars, workshops and through subregional and interregional projects and interdivisional cooperation activities (see Annexes I-VII).

9. At its nineteenth session on 28-29 May 2008, the Steering Committee of the EE21 Project delegated the Group of Experts on Energy Efficiency Investments for Climate

Change Mitigation to serve as the executive decision-making body for the Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation Project, a subregional project of the EE21 Programme (ECE/ENERGY/WP.4/2008/3, para. 24 (h)).

10. In November 2008, the UNECE Committee on Sustainable Energy mandated the Global Energy Efficiency 21 Project (GEE21) to transfer the experience of the energy efficiency (EE) projects in the UNECE region to other regions of the world. At its 18th Session in November 2009, the Committee on Sustainable Energy endorsed the Terms of Reference to establish the Group of Experts on Global Energy Efficiency 21 and agreed to approve the establishment of the Group of Experts on Global Energy Efficiency 21 (ECE/ENERGY/80), para. 17 and 19 (g). This initiative has received both United Nations regular budget support and extrabudgetary financial support from the Russian Federation.

11. For selected activities, the Programme will be implemented through contractors, consultants, and representatives of supporting institutions and interested donor countries in cooperation with experts from the countries with economies in transition, in particular, National Coordinators and National Participating Institutions. National Participating Institutions may be involved in implementing specific activities through grant agreements with the UNECE. These organizations and individuals in cooperation with the secretariat will report progress to the annual session of the Steering Committee of the Programme, to the relevant Groups of Experts and may be requested to report to the annual session of the Committee on Sustainable Energy.

#### **IV. Participation and procedures**

12. The EE21 Programme will be implemented by:

(a) The Committee on Sustainable Energy, which considers reports on the Programme at its annual sessions.

(b) UNECE Governments, which:

(i) appoint national participating institutions and national coordinators;

(ii) advise on policies, legislation, incentives, standards;

(iii) possibly host UNECE conferences, seminars or workshops;

(iv) contribute to project financing, including in-kind contributions;

(v) nominate participants to meetings organized in the framework of the EE21 Programme and other relevant UNECE meetings

(c) The Steering Committee of the EE21 Programme, which reviews progress and provides guidance on the execution of the Programme, meeting at least once each year for the duration of the Programme. The Steering Committee determines the activities, results, work methods, participation and procedures, budget, calendar of events and timetable of the Programme, and secures cooperation with other UNECE Sectoral Committees, in particular, the Committee on Environmental Policy. The Chairman of the Steering Committee reports on the progress and activities of the Programme to the Committee on Sustainable Energy. The Steering Committee is composed of:

(i) Government representatives and/or representatives of national participating institutions;

- (ii) interested intergovernmental organisations which will be invited to participate according to UNECE practice;
- (iii) representatives of the European Union (EU), European Commission, United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP), Global Environment Facility (GEF), United Nations Industrial Development Organization (UNIDO), International Energy Agency (IEA/OECD), World Bank, European Bank for Reconstruction and Development (EBRD), Energy Charter Secretariat, European Business Congress (EBC) and other international organizations concerned with cooperation in energy efficiency and environmental matters.
- (d) National Participating Institutions, which:
  - (i) suggest venues for training courses, negotiations and project meetings;
  - (ii) with the endorsement of National Coordinators, serve as Lead Institutions for specific activities of the EE21 Programme;
  - (iii) nominate experts for preparation of technical papers, participants and rapporteurs for UNECE conferences, seminars and workshops and Programme events;
  - (iv) nominate experts to take part in Programme activities;
  - (v) provide information to the Programme secretariat on the activities carried out to produce reports and publications;
  - (vi) disseminate Programme information nationally;
  - (vii) provide liaison between local organizers and experts and the Programme secretariat.
- (e) The United Nations Economic Commission for Europe, which reviews progress of the Programme at its bi-annual sessions.
- (f) The Programme secretariat, which:
  - (i) plans the detailed operations of the Programme;
  - (ii) coordinates activities with national participating institutions, local organizers, contractors, consultants, national experts, and international organizations, in particular, in the framework of UN-Energy;
  - (iii) organizes UNECE conferences, seminars and workshops and produces reports and publications;
  - (iv) services the meetings of the Steering Committee of the EE21 Programme.
- (g) Contractors, consultants, and representatives of supporting institutions and interested donor countries in cooperation with experts from the countries with economies in transition. These organizations and individuals in cooperation with the secretariat report progress to the annual sessions of the Steering Committee of the Programme.

## V. Budget and trust fund

13. The EE21 Programme will be financed by a United Nations trust fund or by support to its projects (see Annexes I-VII). Participating UNECE Governments, as well as international organizations and private companies can support the overall EE21 Programme directly in three ways through:

- (a) in-kind contributions for:
  - (i) supporting the project activities of the national participating institutions;
  - (ii) providing experts to work as consultants to the Programme secretariat on a non-reimbursable basis;
  - (iii) organizing and hosting meetings;
  - (iv) preparing technical and economic reports, statistics, energy data and other information related to Programme activities;
- (b) providing experts and consultants to the Programme secretariat to work in Geneva;
- (c) co-financing the Programme by direct contributions to the trust fund.

14. For planning purposes contributions should be envisaged on an annual basis over the three-year period of the project.

15. Contributions to the Trust Fund are subject to a 13 per cent charge for programme support unless otherwise agreed through the United Nations Office for Project Services (UNOPS). They are subject to audit by the United Nations Board of External Auditors and the Internal Audit Division of the United Nations. Additional or special audit arrangements cannot be made. Engagement of personnel and procurement of supplies or equipment financed from trust funds are subject to the regulations, rules, policies and procedures of the Organization.

16. The subregional and inter-regional projects and interdivisional cooperation activities implemented within the framework of the EE21 Programme have their own budgets, cost plans and funding.

## Annex I

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

#### (Subregional project of the EE21 Programme)

<i>Project title</i>	Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation
<i>Countries</i>	Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, the former Yugoslav Republic of Macedonia, Kazakhstan, Republic of Moldova, Romania, Russian Federation, Serbia, and Ukraine
<i>Duration</i>	48 months
<i>National Implementing Agencies</i>	Municipal authorities, Ministries of Energy, Ministries of Environment, energy conservation agencies, National Participating Institutions
<i>Executing Agency</i>	United Nations Economic Commission for Europe
<i>UN Cooperating Agencies</i>	United Nations Environment Programme (UNEP)
<i>Starting date</i>	January 2008
<i>Government Inputs</i>	(in-kind) \$25,000 annual contribution of each participating country
<i>Supporting Institution</i>	\$2.5 million from the Fonds Français pour Environnement Mondial (FFEM), \$3 million from United Nations Environment Programme (UNEP)/ Global Environment Facility (GEF), \$0.25 million from European Business Congress (EBC), and \$2 million matching funds from United Nations Foundation (UNF)/ United Nations Fund for International Partnerships (UNFIP)
<i>UNECE Inputs</i>	(in-kind) \$2 million
<i>Total cost of the project</i>	\$10.95 million

#### Brief description

The project is to assist South-Eastern Europe (SEE) and Eastern Europe, Caucasus and Central Asia (EECCA) countries to enhance their energy efficiency, diminish fuel poverty

arising from economic transition and meet international environmental treaty obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and ECE. It is to accelerate and extend the impact of an earlier UNF supported project (ECE-CIS-99-043) that successfully leveraged \$15 million of financing for energy efficiency investments in Eastern European hospitals, municipal lighting and district heating systems. It will support the creation of a dedicated investment fund and will provide a pipeline of new and existing projects to dedicated public private partnership investment funds that can provide up to \$250 million of mezzanine and/or equity financing to project sponsors. It will establish an expanded and enhanced network of energy efficiency managers for value-added information transfers on policy reforms, financing and energy management. The project will (a) 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; (b) provide assistance to municipal authorities and national governments to introduce economic, institutional and regulatory reforms needed to support these investments; and (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 fund.

To facilitate establishment of an investment fund, the following major activities have been accomplished since the beginning of the project:

(a) Assessment missions to participating countries have been conducted, and Investor Interest and Capacity Building Needs report prepared as their outcome;

(b) Three contractors have been selected following an international competitive bid tender process:

(i) Conning Asset Management Limited, United Kingdom as the Investment Fund Designer;

(ii) Pöyry Energy Consulting AG, Switzerland to undertake Regional Analysis of Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments (work completed); and

(iii) The Centre for Energy Efficiency EnEffect, Bulgaria has been selected to undertake the Development of a Website and Internet Communications Network of Energy Efficiency Managers in Eastern Europe;

(c) National Participating Institutions have been awarded two sets of grants to develop national project websites, provide national policy information for the regional analysis of policy reforms, develop national case studies on overcoming barriers to energy efficiency investments, develop indicative project pipeline, and assist in organizing business development training activities;

(d) The Regional Analysis of Policy Reforms to Promote Energy Efficiency and Renewable Energy Investments study has been prepared, including the conclusions and recommendations for implementation by the Governments of participating countries;

(e) The project regional website has been designed, established on the online platform, launched and is fully operational. The national webpages are also prepared in the framework of the regional website;

(f) Several policy seminars, workshops, conferences and business development trainings have been conducted in the framework of the Project;

(g) Over 400 project proposals have been submitted for the indicative project pipeline for the future investment fund.

## Annex II

### Global Energy Efficiency 21

(Interregional project of the EE21 Programme)

#### A. Analysis of Advanced Technologies in Energy Efficiency and Renewable Energy in the Framework of the Global Energy Efficiency 21 Project and Preparation of Recommendations on its Application with Special Emphasis on Central Asian Region<sup>1</sup>

(Subregional project of the EE21 Programme and subproject of the GEE21 Project)

<i>Project title</i>	Analysis of Advanced Technologies in Energy Efficiency and Renewable Energy in the Framework of the Global Energy Efficiency 21 Project and Preparation of Recommendations on its Application with Special Emphasis on Central Asian Region
<i>Countries</i>	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan
<i>Duration</i>	3 years (2011-2013)
<i>National Implementing Agencies</i>	Ministries of energy and other relevant government agencies from the participating countries
<i>Executing Agency</i>	United Nations Economic Commission for Europe
<i>Supporting Institution</i>	Government of the Russian Federation
<i>Starting date</i>	January 2012
<i>Budget available</i>	US\$ 210,000

#### Objective

The primary objective of the project is to identify the most effective institutional, legal, financial, technical and other mechanisms to improve performance in energy efficiency (EE) and renewable energy (RE), with an emphasis on the identification of appropriate EE and RE technologies for the Central Asian region.

#### Brief description

The project "Analysis of Advanced Technologies in Energy Efficiency and Renewable Energy in the Framework of the Global Energy Efficiency 21 Project and Preparation of

<sup>1</sup> Detailed information on this project is available in ECE/ENERGY/WP.4/2012/5, Annex I.

Recommendations on its Application with Special Emphasis on Central Asian Region" was approved by the UNECE Executive Committee in November 2011.

The project will assist the Governments and other stakeholders in the Central Asian region to overcome barriers and introduce advanced technologies in energy efficiency (EE) and renewable energy (RE) to support low-carbon economic and environmental sustainable development. The project is also designed to explore how the experience of national and international energy efficiency and renewable energy programmes can be applied with the assistance of the UNECE to the countries of the region to improve their capacity to implement advanced EE and RE technologies under their national conditions.

### **Expected accomplishments**

The project will perform an analysis of existing world experience in development and application of advanced energy efficiency and renewable energy technologies. It will produce recommendations to improve capacity of Central Asian countries to implement policies and practices strengthening technological capabilities on advanced EE and RE technologies. It will also assist countries of the region in their efforts in developing common regional energy policy.

### **Main activities**

- (a) Develop a regional network of national experts assigned by national institutions to this project;
- (b) Convene inception meeting of experts/officials to exchange information and experience on energy efficiency and renewable energy policies;
- (c) Undertake five National Studies;
- (d) Undertake a comprehensive, systematic and forward-looking Regional Study;
- (e) Convene the regional meeting to consider the Regional Study as guidance for the national experts and publish it in the Russian and English languages;
- (f) Prepare a final Report and publish it in English and Russian.

### **Budget**

The budget for the implementation cycle 2011-2013 is US\$ 210,000.

The UNECE will provide an 'in-kind' contribution of project counterparts in staff time, documents preparation and distribution, publications and conference services.

## **B. Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development<sup>2</sup>**

### **(Interregional project of the EE21 Programme and subproject of the GEE21 Project)**

<i>Project title</i>	Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development
<i>Countries</i>	Member States of the UN Regional Commissions
<i>Duration</i>	3 years (2012-2014)
<i>Executing Agencies</i>	United Nations Economic Commission for Europe (UNECE) - lead agency, Economic and Social Commission for Asia and the Pacific (ESCAP); Economic and Social Commission for Western Asia (ESCWA); Economic Commission for Africa (ECA); Economic and Social Commission for Latin America and the Caribbean (ECLAC); and United Nations Department of Economic and Social Affairs (UN DESA)
<i>Starting date</i>	2012
<i>Supporting Institution</i>	United Nations Development Account
<i>Budget available</i>	\$ 1,250,000

### **Objective**

This project is funded from the eighth tranche of the United Nations Development Account (UNDA). The objective of the project is capacity building for development of energy efficiency (EE) investment projects. It will assist UN Regional Commissions (RCs) to strengthen capacities of their member states to attract investments in energy efficiency projects in the context of climate change mitigation and sustainable development.

### **Brief description**

UNECE experience combines technical assistance in design and implementation of investment projects, advice on policy and institutional reforms, and direct links with financial institutions (e.g. banks and investment funds) in order to establish mechanisms, which are able to fast-track the development of self-sustained markets for energy efficiency.

The project will replicate this experience in other countries in different parts of the world through cooperation between the UN Regional Commissions, as well as cooperation within the UN-Energy framework.

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<sup>2</sup> Detailed information on this project is available in ECE/ENERGY/WP.4/2012/5, Annex II.

The project will (a) develop the skills of the public and private sectors at the national level to identify, develop and implement EE investment projects; (b) provide assistance to authorities to introduce regulatory and institutional reforms needed to support these investment projects; and (c) enhance financing of energy efficiency projects in selected countries. The project will provide case studies on the experience of policy reforms, regional trainings, workshops and seminars focusing on policy reforms and investment projects development. The project will be led by the UNECE and jointly implemented with all United Nations Regional Commissions, the Department of Economic and Social Affairs and national counterparts to strengthen their capabilities through a number of capacity building activities. While the project includes activities in policy reforms, the main focus will be capacity building for the development of energy efficiency investment projects.

### **Expected accomplishments**

- (a) Improved capacity of national project developers, energy experts and middle-level managers in developing countries and countries with economies in transition to develop energy efficiency investment projects in private and public sectors;
- (b) Improved regulatory and institutional framework for promotion of new financing mechanisms for energy efficiency projects;
- (c) Increased financing for investments in energy efficiency projects, including through innovative financing mechanisms.

### **Main activities**

- (a) Five regional trainings (one course for each region) in project development, finance and business planning;
- (b) Five regional workshops (one in each region) to analyze investment project pipeline;
- (c) Fifteen case studies on the experience of policy reforms to be discussed at five regional policy seminars;
- (d) Five policy seminars focusing on policy reforms to promote financing of energy efficiency and renewable energy investments in each region;
- (e) Development of an investment project pipeline;
- (f) One end-of-the-project global workshop.

### **Budget distribution between the Executing Agencies**

The project budget for the implementation cycle 2012-2014 US\$ 1,250,000 will be distributed as follows:

UNECE - US\$ 428,400

ESCAP - US\$ 200,400

ECA - US\$ 200,400

ESCWA - US\$ 200,400

ECLAC - US\$ 200,400

DESA - US\$ 20,000

## Annex III

### Enhancing Synergies in the Commonwealth of Independent States (CIS) National Programmes on Energy Efficiency and Energy Saving for Greater Energy Security<sup>3</sup>

#### (Subregional project of the EE21 Programme)

<i>Project title</i>	Enhancing Synergies in CIS National Programmes on Energy Efficiency and Energy Saving for Greater Energy Security
<i>Countries</i>	CIS member countries (Armenia, Azerbaijan, Belarus, Moldova, Kazakhstan, Kyrgyzstan, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan)
<i>Duration</i>	36 months
<i>National Implementing Agencies</i>	Ministries of Energy and Natural Resources, Ministries of Environment, Ministries of Economy and other related organizations and institutions
<i>Executive Agency</i>	United Nations Economic Commission for Europe
<i>Budget available</i>	\$150,000
<i>Starting Date</i>	December 2011

#### Objective

The main objective of the project is to enhance synergies among the CIS countries promoting energy efficiency and energy saving improvements in order to strengthen countries' energy security and competitiveness.

#### Brief Description

Energy efficiency and energy saving measures are crucial for the CIS countries since they can reduce domestic energy consumption and release energy resources thus enhancing security of supply. Moreover energy efficiency improvements can help raise industrial productivity, diminish fuel dependency and reduce air pollution and greenhouse gas emissions.

Despite this potential, implementation of energy efficiency and energy saving initiatives is hindered by varying levels of economic development and a wide range of policy, regulatory, institutional and financial barriers. Regional cooperation can contribute greatly to overcoming these obstacles since many of the opportunities and constraints for the future

<sup>3</sup> Detailed information on this project is available in ECE/ENERGY/WP.4/2012/7.

development in the area of energy efficiency and energy saving are common among the CIS member states.

Thus synergies through development of common and mutually beneficial rules and norms in energy efficiency and energy saving would create energy security climate to accomplish transition period and achieve sustainable economic development.

### **Expected Accomplishments**

(a) Analysis of existing national energy programmes and their application in CIS countries in the context of potential mutual cooperation;

(b) Improved capacity of CIS countries to implement policies and practices on energy efficiency and energy saving improvements and to enhance regional energy cooperation.

### **Main Activities**

(a) Establishing a functional network to serve as a forum for sharing information among appropriate partner institutions in CIS countries for identifying and developing energy efficiency improvements in the production, transportation and use of energy resources and enhancing energy cooperation;

(b) Conducting a study on energy policy, regulatory, institutional and financial conditions for energy efficiency and energy saving improvements in each participating country and making recommendations on the development and application of energy efficiency and energy saving measures in the CIS countries;

(c) Organizing a workshop on national programmes and potential cooperation in energy efficiency and energy saving for the government, industry, and academia representatives;

(d) Providing technical assistance to strengthen national and regional institutions in the policy analyses and regional cooperation on energy efficiency and energy saving issues.

### **Budget**

The project budget for the implementation cycle 2011-2013 is US\$ 150,000. UNECE will provide an 'in-kind' contribution of project counterparts in staff time, documents preparation and distribution, publications and conference services.

## Annex IV

### Enhancing Energy Security and Improving Access to Energy Services through Development of Public-Private Renewable Energy Partnerships

#### (Interregional project of the EE21 Programme)

<i>Project title</i>	Enhancing Energy Security and Improving Access to Energy Services through Development of Public-Private Renewable Energy Partnerships
<i>Countries</i>	Selected Member States of the five UN Regional Commissions
<i>Duration</i>	36 months
<i>National Implementing Agencies</i>	National government agencies in selected participating countries responsible for energy and rural development as well as relevant regional organizations
<i>Executive Agencies</i>	Economic and Social Commission for Asia and the Pacific (ESCAP) - lead agency, United Nations Economic Commission for Europe (UNECE) <sup>4</sup> , Economic Commission for Africa (ECA), Economic and Social Commission for Latin America and the Caribbean (ECLAC), and Economic and Social Commission for Western Asia (ESCWA), UN Department of Economic and Social Affairs (DESA)
<i>Budget available</i>	US\$ 1,006,500 (total), of which UNECE - US\$ 59,500
<i>Starting date</i>	November 2010

#### Objective

The main objective of the project is to build capacity of policymakers, civil society and the private sector for engaging public-private partnerships (PPPs) to enhance the application of renewable energy and improve access to energy services.

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<sup>4</sup> At the UNECE the project is implemented by the Sustainable Energy Division with support from the Economic Cooperation and Integration Division.

## **Brief description**

The project aims to improve access to energy services for the rural poor and promote the application of renewable energy through PPPs. At the same time, it also promotes social inclusiveness (including gender responsiveness) as one of the key requirements for developing PPPs.

The project will build the capacity of policymakers, civil society and the private sector for engaging PPPs to enhance and improve access to affordable energy services in an integrated manner utilizing locally available renewable energy resources. It will develop a set of guidelines and tools to build up PPPs for rural areas and propose strategies and policy options.

The project will be implemented through learning-by-doing approach to increase awareness and understanding of the issues on widening access to energy services for the rural poor. Various activities including policy dialogues, gap analysis, workshops and study tours will be organized at the national, regional and inter-regional levels, and pilot projects based on business models will be conducted in selected countries.

Collaboration with existing regional and subregional institutions and centres of excellence is expected to sustain and enhance project impacts and ensure sharing of good practices at the regional and inter-regional levels. The project will benefit from the work already done by ESCAP and its partner organizations.

## **Expected accomplishments**

(a) Enhanced capacity of participating countries to develop effective policies and programmes to scale up the use of renewable energy for integrated rural development and create an enabling environment to deploy PPPs in enhancing and widening access to affordable renewable energy services in rural areas of developing countries;

(b) Enhanced collaboration on the application of PPPs for better access to energy services among existing regional and subregional institutions and centres of excellence;

(c) Increased use of locally available renewable energy resources, such as biomass, small hydro, solar and wind, through the development and implementation of demonstration projects and initiatives on PPPs.

## **Main Activities**

(a) Conducting a regional assessment of policy options, good practices and business models for PPPs on the provision of renewable energy services in rural areas, detailed descriptions of market segmentation, impact on men and women, financial and institutional arrangements for project design and management, and the roles and responsibilities of different stakeholders. An interregional expert group meeting (EGM) will be organized to review the assessment and share experience on different models;

(b) Regional and national capacity-building through training, seminars and study tours for policymakers, decision makers and members of national teams as advocates of partnership models; development of guidelines and training materials, including training modules on an enabling environment for establishing PPPs and on the criteria for selection of appropriate partnership models that are responsive to specific development needs, as well as their affordability in different client communities. A national team will be formed in each selected country to implement the activities;

(c) Developing demonstration projects, in consultation with host countries, partner institutions, the private sector and the UN country teams to ensure synergies with other related initiatives. The national team from ESCAP, ECA and ECLAC region will identify and implement one collaborative demonstration project each with PPP model in support of the development of strategies and policies focusing on energy services for cooking, lighting and productive use of renewable energy resources for sustainable and inclusive development in rural areas.

(d) Organizing two regional and subregional forums to share experiences, lessons learned and best practices on PPP approaches and to initiate an effective network among relevant institutions, universities and centres for sharing information and sustaining capacity-building activities;

(e) Undertaking an evaluation of the project by an external consultant and discussing the findings of the evaluation report with all project implementation partners.

### **Budget**

Total project budget for the implementation cycle 2010-2013 is US\$ 1,006,500, of which US\$ 59,500 is allocated to the UNECE. Co-financing for the project will be explored with the supporting institutions of government departments, international organizations and public and private sector companies currently financing UNECE projects on energy security and renewable energy. It is expected that 'in-kind' support contributions may come from related UNECE intergovernmental bodies, notably the Committee on Sustainable Energy and the Energy Efficiency 21 Project. UNECE will provide an 'in-kind' contribution of project counterparts in staff time, documents preparation and distribution, publications and conference services.

## Annex V

### Mitigating Climate Change through Attracting Foreign Direct Investment in Advanced Fossil Fuel Technologies<sup>5</sup>

#### (Interregional project of the EE21 Programme)

<i>Project title</i>	Mitigating Climate Change through Attracting Foreign Direct Investment in Advanced Fossil Fuel Technologies
<i>Countries</i>	Afghanistan, China, India, Kazakhstan, Kyrgyzstan, Mongolia, Tajikistan, Ukraine and Uzbekistan
<i>Duration</i>	2010-2012
<i>National Implementing Agencies</i>	Ministries of energy, economic development, and finance, organizations and institutions dealing with attracting foreign direct investments, energy and electricity generation companies of the participating countries
<i>Executive Agencies</i>	United Nations Economic Commission for Europe (UNECE) - lead agency; United Nations Conference on Trade and Development (UNCTAD); United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)
<i>Supporting Institution</i>	United Nations Development Account
<i>Budget available</i>	US\$ 629,900

#### Brief description

This project is funded from the seventh tranche of the United Nations Development Account (UNDA). In its execution UNECE, as the principal agency, cooperates closely with the United Nations Conference on Trade and Development (UNCTAD) and the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP).

The nine countries are confronted with the lack of investment in a cleaner electricity production from coal and other fossil-fuels. The project aims to enhance the countries' ability to attract foreign direct investment (FDI) needed for electricity production based on advanced fossil fuels technologies.

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<sup>5</sup> Detailed information on this project is available in ECE/ENERGY/WP.4/2012/6.

## Objective

To enhance the nine countries' abilities to attract FDI into advanced fossil fuels technologies, which would in turn support their energy security and low-carbon sustainable development, helping mitigate climate change.

## Expected accomplishments

- (a) Increase skills need to develop and maintain an attractive investment climate that encourages foreign direct investment into electricity generation based on advanced fossil fuel technologies;
- (b) Improve cooperation between energy policy makers in the countries covered by the project and the prospective investors;
- (c) Increase skills to develop pre-feasibility studies on the power sector and related fossil fuels projects in each targeted country.

## Main activities

- (a) Develop a baseline study for each targeted country, as well as a comparative analysis of all countries, with regard to the electricity generation capacities and infrastructure and the possibility to deploy advanced fossil fuel technologies;
- (b) Develop and arrange five workshops within the region to allow for networking among the officials in the region;
- (c) Provide technical assistance to the national officials through broad-based technical training workshops;
- (d) Provide technical assistance to national experts and institutions to develop pre-feasibility studies on advanced and cleaner electricity generation and related fossil fuels-based energy project in each of the nine countries;
- (e) In cooperation with officials from the region, organize an end-of-the-project workshop and conference in or near the Eastern European/Central Asian region, involving all nine countries, with the objective of bringing together officials from the region along with major domestic and foreign investors to encourage greater investment flows into a cleaner power sector of these countries.

## Budget distribution between the Executing Agencies

The project budget for the implementation cycle 2010-2012 US\$ 629,900 is distributed as follows:

UNECE - US\$ 411,350

UNCTAD - US\$ 155,550

ESCAP - US\$ 63,000

## Annex VI

### Buy Smart – Green Procurement for Smart Purchasing

#### (Subregional project of the EE21 Programme)

<i>Project title</i>	Buy Smart – Green Procurement for Smart Purchasing
<i>Countries</i>	Austria, Czech Republic, Germany, Italy, Latvia, Sweden, and Slovenia
<i>Duration</i>	30 months
<i>Implementing Agencies</i>	Environmental Protection and Energy Conservation Agencies at the local and national levels. Project leader – Berliner Energieagentur (Germany)
<i>Starting date</i>	May 2009
<i>Supporting Institutions</i>	€56,304 from European Commission, IEE Programme and SAVE actions
<i>Partner Inputs</i>	€20,198
<i>Total cost of the project</i>	€76,502

#### Brief description

The main purpose of Buy Smart is to promote, implement and further develop the procurement of energy efficient products in private and public institutions, by using green procurement guidelines and other promotion and support tools based on eco-efficient criteria from well-established environmental and energy labels. A consortium of eight experienced institutions in seven EU Member States will implement the proposed project with support from national Steering Committees in each participating country.

#### Objectives

Specific strategic goals of the Buy Smart project are: (i) to raise awareness about energy and environmental labels and evaluate how they can provide better criteria for green purchasing; (ii) to raise awareness about the potential of green procurement to reduce energy consumption and CO<sub>2</sub> emissions; (iii) to provide an easy access to green criteria and standardized tools for professional purchasers; (iv) to improve knowledge of policymakers with the aim of increasing their support for green procurement; (v) to cooperate with e-procurement platforms with the purpose of integrating green procurement modules into the e-procurement procedures; and (vi) to enhance the cost-efficiency of green products and services for European private businesses and public authorities.

## **Main activities**

A dedicated website [www.buy-smart.info](http://www.buy-smart.info) will be on-line by the end of summer 2009, where developed tools and an overall explanation of the harmonized procedure could be downloaded in English and in the national languages of the participating partners. Effective dissemination activities have been foreseen to complement the project strategy. Press releases, articles, presentations, workshops and conferences are planned for the whole duration of the project to ensure raising awareness on green procurement and energy and environmental labels. An international conference will be organized at the completion of the project to allow sharing of its major outcomes with an audience of international experts. Policy recommendations will be developed for national governments with a view to supporting the strengthening of green procurement in the revised versions of the respective National Energy Efficiency Action Plans in 2011.

The Steering Committee of the ECE Energy Efficiency 21 Programme is expected to contribute to the project implementation and accomplishment of the project goals by facilitating the widespread dissemination of the information to the international experts in energy efficiency. Reports on progress of the project will be provided to the annual sessions of the Steering Committee of the EE21 Programme.

## Annex VII

### Cooperative Project on Methane Capture and Use

#### (Subregional project of the EE21 Programme)

<i>Project title</i>	Cooperative Project on Methane Capture and Use
<i>Countries</i>	Kazakhstan, Ukraine and China
<i>Duration</i>	12 months
<i>National Implementing Agencies</i>	Ministries, companies, organizations and institutions from energy, coal and industry sectors of the participating countries
<i>Executing Agency</i>	United Nations Economic Commission for Europe (UNECE)
<i>Budget available</i>	US\$ 100,000
<i>Supporting Institutions</i>	Methane to Market (M2M) Partnership of the United States Environmental Protection Agency (EPA) and UNECE

#### Brief description

At its third and fourth sessions, the UNECE Ad Hoc Group of Experts (AHGE) on CMM agreed that the global coal mining industry lacked a set of recommended (accepted) principles and standards to guide mine operators, regulators, government officials and technical professionals in more effectively managing their methane problems, especially in emerging economies. In this respect the Cooperative Project on Methane Capture and Use to Improve Mine Safety was launched at the 4th session of the AHGE on CMM (October 2008). The organizations supporting the initiative (UNECE and M2M Partnership) aim to contribute to improving mine safety practices through the development of a publication providing “Best Practices Guidance on Effective Methane Drainage and Use in Coal Mines”. The publication would detail the benefits, objectives and principles of coal mine methane drainage and utilization in order to reduce fatalities and injuries of mine workers, protect mine property, reduce greenhouse gas emissions and efficiently utilize valuable energy resources. The supporting organizations are planning to launch the best practice guidance at a high-level event at the M2M Partnership Expo in India in March 2010 involving senior corporate, government and international officials.

Although the benefit of developing and publishing the best practice guidance is obvious, the value of the project will be maximised only if the content of the document is exposed to a wide audience that subsequently adopts the best practices as a part of the normal course of coal mining. Therefore the project intends to disseminate the best practices guidance to a targeted audience through a series of regional workshops that are held at locations central to coal mines that frequently experience accidents caused by methane gas emissions into the coal mines. Globally recognized experts will present topics that are directly taken from the best practice guidance in a way that allows the audience to understand the technical and

other benefits and potential ways of adopting these practices within the existing mining environment.

The workshops will also serve as a method of assessing the potential of follow-on work that will be accomplished by local workshops, which will be held for the benefit of mines willing to cooperate. These workshops will be focused on the problems that local mines are experiencing, will include analysis of safety issues related to CMM, and presentation of potential options for resolving the issues in a cost effective manner. In addition to increasing safety the project will also contribute to CMM market creation.

## **Objective**

The objective of the project is to reach out, train, create awareness and spread the knowledge of best practice guidance on effective methane drainage and use in coal mines and to foster continuous improvements in this field in the emerging economies.

The main output is to perform the necessary work to plan and hold three workshops; in conjunction with them assessments of mining conditions and of extant gas drainage and recovery practices will be performed by a team of experts. The output will comprise recommendations that can lead to improvement of gas drainage and use practices at mining areas in selected countries of the UNECE region (Kazakhstan and Ukraine) and China. Coal mining companies within these regions that indicate willingness to cooperate will be selected for additional follow-up in the form of a focused consultation at which the experts will present material useful to the mining professionals wishing to implement best practices for drainage and use of methane. The UNECE project manager will identify international CMM experts and work with them for selection of coal mining companies that will be good targets for the analysis and follow-up workshops. Development of these criteria will be done in concert with development of an analysis template and workshop framework. These outputs and the resulting documents will be published by the UNECE.

A project website, available to the public, will be developed using the existing UNECE website (<http://www.unece.org/energy/cmm/Welcome.html>), which will encourage efficient project replication and make available the work products derived from this project by routinely updating the website with reports and other materials produced during the project. The website will function as a mode of contact and solicitation for expert assistance and will be linked to the M2M Partnership Project Database.

For these activities the UNECE and the AHGE on CMM will identify and secure candidate sites for workshops and encourage the participation of coal mines, in which methane related mine safety problems continue to plague the industry.

## **Expected accomplishments**

The main outcome of this project is the dissemination of the best practice guidance, in order to encourage the adoption of those practices by industries to improve safety, environmental, and economic conditions within coal mining areas that continue to experience costly methane related accidents.

As CMM is captured, it could be consumed or sold as energy fuel and thus will contribute to CMM market formation. Members of the project team will conduct a series of workshops in the project countries (Ukraine, Kazakhstan and China) to explain and publicize the best practice guidance documents and convey the information in the document within the relevant UNECE member countries. In addition to holding workshops to explain best practices, these experts, with the help of national experts, will conduct assessments of

the conditions and practices existing in the project country's coal mining regions that hamper achievement of optimal recovery and use of coal mine methane. The existing practice may result in unsafe work conditions. The experts will present the results of their assessment at the workshops and recommend practices that could lead to higher methane recovery and use and improved safety. Where possible, individual mines in the project country will be identified where the project team will provide consultation focused on specific issues hampering optimal methane recovery and use.

### **Main activities**

(a) Conducting assessments of the conditions and practices that are unique to the project country's coal basins and coal fields. These assessments will identify problems that hamper improvement in recovery and use of coal mine methane and in turn negatively impact mine safety;

(b) Suggesting best guidance practices that will lead to increased methane recovery and utilization and improved mine safety. Key representatives of the mining industry and local government will be invited and encouraged to participate in these workshops;

(c) Providing recommendations on ways to assure adoption of best practices, identifying sources of training relevant to mining conditions. Where possible, individual mines will be identified and invited to participate in a focused consultation by the team experts. The consultation will provide specific suggestions for improving methane recovery and use at the selected mine.

## Annex VIII

### Interdivisional Cooperation Activities of the Energy Efficiency 21 Programme

#### Energy Efficiency in Housing

<i>Project title</i>	Implementation of Action Plans on Energy-efficient Housing
<i>Countries</i>	UNECE member States
<i>Duration</i>	24 months
<i>Estimated budgets</i>	US\$ 150,000
<i>Executing Agency</i>	UNECE (Housing and Land Management Unit, Trade and Sustainable Land Management Division)

#### General objective

To assist UNECE Governments to improve energy efficiency in the housing sector and enhance energy performance of buildings.

#### Background

As part of its programme of work, the UNECE Committee on Housing and Land Management (CHLM) is addressing the issue of energy efficiency in housing. It has undertaken an in depth-analysis of the situation of energy efficiency in housing in the region and identified the main areas requiring intervention and action. To assist member States in developing a policy framework to remove existing barriers to the application of environmentally sustainable technology in buildings, an “Action Plan for Energy-efficient housing in the UNECE region” was issued in 2011. This Action Plan contains 12 goals, addressing three policy areas focused on governance and financial infrastructure, technological upgrades and affordability. Each goal contains a list of targets and measures proposing actions to be taken by the respective government.

Based on this Action Plan, the Government of Montenegro approached CHLM to draft a national action plan for energy efficiency measures in the residential sector which will facilitate the integration of the Plan in the national legislation. As a follow-up, CHLM envisages to provide similar advisory services to other UNECE member States.

#### Description of activities

To help other Governments in the region integrate this Action Plan in the national legislation, the UNECE is planning to organize national training workshops on energy-efficient housing in Albania, Armenia, Kyrgyzstan and the Russian Federation in the course of 2012. Requested by the respective Governments, these workshops represent an important capacity building activity to assist Governments in improving the performance of buildings.

In addition, the need was identified to underpin the Action Plan with best practice examples of energy-efficient buildings in the countries of South-Eastern Europe, Eastern Europe, Caucasus and Central Asia by publishing a Best Practices Casebook. This casebook would underline viability of energy-efficient housing, trigger interest and increase acceptability of national stakeholders in this field to, eventually, create demand for energy-efficient retrofitting and construction of new buildings. With the support of UN-Habitat and the City of Vienna, UNECE is planning to develop such a Casebook. UNECE has secured US\$ 30,000 for this activity. Additional funding (US\$ 50,000) from UN-Habitat and the City of Vienna is yet to be confirmed.

The casebook is expected to be a practical tool for decision-makers, and as such will be developed in close consultations with policymakers of member States. Some of the consultations are planned back-to-back with the training workshops on energy-efficient housing in 2012.

Based on the activities, actions and solutions proposed in the Action Plan, a proposed future activity could be the development of an Implementation Manual on energy efficiency in housing. The guidelines in such a Manual could elaborate on the different measures and targets presented in the Action Plan and illustrate them with practical examples thus advising member States in the implementation of the proposed actions. This Manual should focus on the set-up of a financial and legal institutional framework needed to implement improved energy efficiency in the residential building sector. It would specifically target non-EU member States and, as such, guide governments in mainstreaming of energy efficiency aspects into national and local strategies. Funding for developing such a Manual (estimated budget US\$ 70,000) has yet to be identified.

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