

**United Nations Development Account**

**Eighth Tranche**

**Promoting Energy Efficiency Investments for  
Climate Change Mitigation and Sustainable Development**

(Global Development Account Project 12/13 AB)

Project ROA-232-8

Thematic cluster: Sustainable development, environment and natural resources

implemented by

United Nations Economic Commission for Europe (UNECE)  
Sustainable Energy Division

in collaboration with

Economic and Social Commission for Asia and the Pacific (UN ESCAP),  
Economic and Social Commission for West Asia (UN ESCWA),  
Economic Commission for Africa (UN ECA), and  
Economic Commission for Latin America and the Caribbean (UN ECLAC)

**EVALUATION REPORT**

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Evaluator: Ralph Wahnschafft  
Consultant, Independent Advisor on Sustainable Development Policies

## Table of contents

page

Executive Summary	3
1. Introduction: Background and objective of the project evaluation	4
a) Purpose of evaluation	4
b) Scope of evaluation	4
c) Methodology of evaluation	4
d) Limitations of evaluation	5
2. Review of the project concept	5
a) Development concerns to be addressed by the project	5
b) The project development objective	7
c) Expected accomplishments	7
d) Indicators of achievement	8
e) Main project activities	8
f) Implementation arrangements	9
g) Beneficiaries	10
3. Findings: Assessing project accomplishments	10
a) Implementation of activities 1 and 2 and assessment of project achievements in capacity development for energy efficiency projects	10
b) Implementation of activities 3 and 4: Assessing (initial) progress in energy efficiency policy reforms and financing of energy efficiency investments	18
c) Implementation of activity 5 and assessment of achievements in financing energy efficiency investments	26
d) Implementation of activity 6: End-of-project Global Workshop	29
e) Minor modifications in project implementation arrangements	30
f) Additional capacity building initiatives	30
g) Implementation rate	31
4. Conclusions and recommendations	31
a) Project relevance	31
b) Effectiveness of the project	32
c) Efficiency of the project	33
d) Gender concerns	34
e) Outlook and suggestions for future DA project implementation	35

## ANNEXES

Annex 1: Terms of reference	37
Annex 2: List of documents reviewed	41
Annex 3: Simplified logical framework	46
Annex 4: Standard Questionnaire for Regional Commissions on Project Implementation	48
Annex 5: List of interviewees	60

<b>List of Tables</b>	<b>Page</b>
Table 1 Overview on delivery of Regional Training Courses on Business Planning for Energy Efficiency Projects	11
Table 2 Overview on delivery on regional workshop for national policy makers on energy efficiency investment projects	16
Table 3 Overview on national case studies: Assessments of policy frameworks and options for promoting energy efficiency investments	18
Table 4 Comparative Assessment of National Energy Efficiency Policies	21
Table 5 Overview on delivery of regional seminars on policy reforms to promote financing on energy efficiency investments	23
Table 6 Proposed energy efficiency policy measures or reforms for participating countries	25
Table 7 Energy efficiency and renewable energy project proposals formulated by participants who attended the UN ECA training course	27
Table 8 Overview on end of project Global Workshop	29
Table 9 Overview of additional follow-up energy efficiency training activity	31

## Executive Summary

An international consultant was engaged to evaluate the implementation the United Nations Development Account Project “*Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development (Global Project: 12/13 AB)*” (Project ROA-232-8). The evaluation was conducted on the basis of a comprehensive desk review of available relevant documents. The evaluator consulted staff members of all five United Nations Regional Commissions on their strategies, methods, experiences, achievements and on challenges faced in the implementation of their respective elements and activities of this global project in their respective regions. This report summarizes the findings, conclusions and recommendations of the evaluation. The report is prepared in line with UNECE requirements for evaluation.

### *Conclusions and Recommendations*

With its substantive emphasis on promoting energy efficiency investments, the project has focused on what is probably the most critical and the weakest dimension of any national energy efficiency promotion programme in any country. The project was based on a thorough problem analysis and thus devised a concept combining three essential action areas: (a) training of candidate project developers to prepare more and better bankable proposals on energy efficiency investments; (b) initiation of a thorough policy debate in participating countries to improve incentives for investors in energy efficiency projects, and to create better business environments; and (c) advocacy for the creation of new regional, national or local energy efficiency financing schemes.

The project was well formulated and highly relevant to achieving the development objective. The project objective and activities fell well within the mandates of the five Regional Commissions and were fully aligned with approved programmes of work. Project implementation was guided by clearly defined indicators of achievement and all essential outputs have been produced as planned. The training courses were well attended by candidate project developers, and the policy dialogues regularly involved key stakeholders and leading policy decision makers. Implementation of proposed energy efficiency policy reforms will, of course, take time, and ultimate outcomes cannot always be predicted, but the project can be credited for having successfully initiated several national consultation processes. In the Latin American region, some new financing schemes for energy efficiency investments have already been established. The project has also enabled professional networking not only at regional, but also at inter-regional and global levels.

The evaluation concluded that the project has been implemented effectively, efficiently and with good success. UN ECE has clearly demonstrated leadership, not only in the project initiation, but also in project execution. UN ECE has shared its experiences, its information materials and its training curricula with the other Regional Commissions, inspiring a concerted global cooperation to enhance sustainable development. By providing the project with its budget, the Development Account has enabled all five Regional Commissions to synchronize their political messaging on energy and energy efficiency policies for sustainable development. The Development Account has enabled the five Regional Commissions to work together in a productive way, to gain greater visibility, and to demonstrate effective international cooperation in the spirit of a “One UN”.

The evaluation report concludes with some practical suggestions for possible consideration in the planning of future projects, including addressing language and gender concerns, and options for making better and more effective use of UN RC websites for the dissemination of information.

## Evaluation Report

### 1. Introduction: Objective and background of project evaluation

#### a) Purpose of evaluation

The purpose of the evaluation is to review the implementation of the UN Development Account Project “*Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development (Global Project: 12/13 AB)*” and to evaluate the extent to which the three main project objectives were achieved. The main objectives were to

- a) develop the skills of the public and the private sectors at the national level to identify, develop and implement energy efficiency 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.

#### b) Scope of evaluation

The evaluation was guided by the objectives, indicators of achievement and means of verification established in the logical framework of the Project document. The evaluation considered the impact of the Project on the capacity of the member States of the UN Regional Commissions (RCs) to attract investments in energy efficiency projects in the context of climate change mitigation and sustainable development.

In accordance with its ToR (see also Annex 1) the evaluation includes an assessment of

- a) the *project relevance* with regard to the above mentioned objectives;
- b) the *effectiveness of the project* in terms of implementation of planned activities and achievement of target outcomes;
- c) the *efficiency of the project* in terms of cost-effective utilization of allocated funds.

#### c) Methodology of evaluation

The evaluation is primarily based on a desk review of documentation provided by the lead implementing UN Department, the United Nations Economic Commission for Europe, and by the four other Regional Commissions (UN ESCWA, UN ECA, UN ESCAP and UN ECLAC). Information was also obtained from project files, relevant conference and workshop documentation and other official records, as well as internet resources.

In order to ensure availability of complete and comparable data sets, a detailed questionnaire was prepared by the consultant and sent to all implementing partners.

The evaluation consultant conducted brief visits to UN ECE in January 2015, and to UN ESCAP in February 2015 to collect relevant data, and to discuss achievements and challenges of individual project components. Relevant staff members of the other Regional Commissions were contacted by electronic communications.

#### **d) Limitations and constraints of project evaluation**

No major limitations were encountered during this project evaluation. All officers who were consulted in the process of information and data collection or during the subsequent discussion and analysis phase were always found to be keen to provide the inputs required.

Some Regional Commissions were only able to submit their implementation data and their questionnaires after some delay. Hence, the schedule for completion of the evaluation had to be adjusted accordingly.

It should also be noted that some of the project outputs, notably the final business proposals and the corresponding loan applications of individual participants, are essentially private and confidential and, therefore, had to remain beyond the scope of this evaluation report.

### **2. Review of the project concept, objectives and activities**

#### **a) The main sustainable development concerns addressed by the project: Promoting investment in energy efficiency for climate change mitigation<sup>1</sup>**

Enhancing access to sustainable and affordable energy, including by the urban and rural poor, improving efficiency in the production, transmission and end use of fuels, increasing the share of renewable sources of energy in total energy supply, and further advancing modern energy technologies are all important dimensions of enhancing sustainability in the energy sector. This has repeatedly been called for by important United Nations Conferences and Summits, including the UN Conference on Sustainable Development held in Rio de Janeiro, Brazil in June 2012.<sup>2</sup>

The United Nations Development Account project entitled “*Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development (Global Project: 12/13 AB)*” (Project ROA-232-8) was launched in early 2012 to promote efficiency in energy use in all regions of the world, and in particular in developing countries and in countries with economies in transition.

Enhancing the efficiency of energy use in privately and publicly owned industries, buildings, transport fleets, and home appliances can offer multiple benefits, including lower operating costs for manufacturers, builders, transport operators, or other energy or electricity end users. Improved energy efficiency is also seen as one of the most cost-effective ways to reduce greenhouse gas emissions and to mitigate the threats of climate change. For energy import dependent countries, efficiency in energy use can also contribute to greater energy security.

Most industrialized countries, as well as some developing countries, already have regulatory frameworks that encourage the use of energy efficient technologies and related technical or advisory services. Mandatory or voluntary periodical energy audits, tax rebates or other financial incentives for energy efficiency investments, or restrictions or penalties on the continued use of obsolete

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<sup>1</sup> A summary profile with information on the DA Project is also accessible on the UN ECE webpage under: [http://www.unecce.org/energy/gee21/promoting\\_eei.html](http://www.unecce.org/energy/gee21/promoting_eei.html)

<sup>2</sup> United Nation General Assembly, Resolution A/RES/66/288 (adopted 27 July 2012), The Future We Want

equipment are all possible options for market interventions that aim to increase energy efficiency and reduce environmental impacts, such as air, noise, water, or soil pollution. However, in many other developing countries, and in several countries with economies in transition, such regulatory frameworks are still lacking, incomplete or not adequately implemented or enforced. Hence, one of the objectives of the project was to encourage participating countries to prepare for or adopt reforms or new regulations, to establish new incentives for investments and to consider new financing institutions or mechanisms for energy efficiency projects, in particular targeting needs of large scale energy users, such as energy-intensive industries or buildings.

Whereas the financial, economic and environmental advantages of energy efficient technologies are widely accepted in principle, actual investments in such projects often still do not occur. In its problem analysis, the project identified the following three main development challenges and obstacles to energy efficiency investments which it also seeks to address:

***(a) Insufficient technical and managerial capacities to formulate and initiate larger scale energy efficiency projects, and to secure the necessary project financing for implementation***

In many developing countries, and in several of their economic sectors, technical and managerial capacities for the design and implementation of larger scale energy efficiency projects and the corresponding entrepreneurial initiatives are still lacking.

In many companies, municipalities, power stations or factories, local experts actually know the technical solutions needed to improve energy efficiency, but they do not know how to formulate investment projects so that their proposals meet banks rules, standards and selection criteria for lending.

In some developing countries, and in several of the countries with economies in transition, new businesses, such as Energy Service Companies (or ESCOs) have started to operate and to successfully market their services, but in many other countries such innovative business models are still unknown.

Capacity building and training of national experts in formulating bankable energy efficiency project proposals was thus selected as one of the priority activities to be conducted under this project.

***(b) Lack of access to equity investment and (commercial) bank financing for energy efficiency projects***

Whereas projects that propose investments to improve productivity and/or to reduce energy consumption for the given level of output or service may well offer good internal rates of return (IRR), they often still do not attract the attention of investors or commercial banks. The project analysis found that in some cases, individual projects are simply too small to be of interest to financial institutions. Hence, mechanisms for bundling of otherwise independent smaller projects or the launching of a special funding window for small projects were considered as alternative options. It was also observed that even high IRRs cannot always compensate the high transaction costs that some banks may incur when they undertake the due diligence necessary prior to their lending.

Thus, a further priority activity under the project was to establish an inventory of feasible energy efficiency projects that were considered eligible for financing. The sharing of the inventory with financial institutions was expected to facilitate actual project realization.

***(c) Lack of an enabling policy environment and insufficient incentives for the promotion of energy efficiency investments***

As indicated above, it was found that many developing countries and countries with economies in transition still lack adequate regulatory frameworks that encourage investments in energy efficiency. It was observed that in some Latin American and in some Asian developing countries, significant efforts had already been undertaken to launch public advocacy campaigns aimed at greater efficiency in energy use, reduced energy costs, and lower levels of emissions of air pollutants or greenhouse gases. In Latin America, Brazil, Chile, Colombia and Mexico, as well as several of the Small Island Developing States in the Caribbean are among the countries which already have comprehensive energy efficiency improvement campaigns. In Asia, China, India, Pakistan and Thailand, as well as Singapore are among the countries that are keen to curb their growing dependency on energy imports through the promotion of energy efficiency. However, in many other developing countries, notably also in Western and in Central Asia, as well as in Africa, national regulatory and policy frameworks for energy efficiency market formation are still lagging behind.

In view of the above, the project also included a series of assessments and studies to be conducted in participating countries, as well as some regional policy seminars aimed at facilitating regional and, indeed, inter-regional exchanges of experiences on successful policy measures and options for enhancing investments in energy efficiency and energy saving projects.

**b) Development Objective of the Project.**

The overall goal of the project was to strengthen capacities of developing countries and countries with economies in transition to attract investments in energy efficiency projects in the context of climate change mitigation and sustainable development.

No	Expected Accomplishments	Indicators of Achievement	Activities	Results
EA1	Improved capacity of national project developers, energy experts and middle-level managers in developing countries and countries with economies in	IA1.1 Increased number of national officials and experts able to design and implement energy efficiency investment projects;	A1 Five regional trainings (one in each region) for project developers, national officials and experts to receive training in project development/ formulation, finance and business planning (in support of EA1)	Achieved



	transition to develop energy efficiency investment projects in private and public sectors	IA1.2 Increased number of energy efficiency investment project proposals in the public and private sectors prepared by national experts in beneficiary countries and submitted for consideration to domestic and international investors, banks and other financial institutions;	A2 Five regional workshops (one in each region) for national policy makers to: <ul style="list-style-type: none"> <li>- provide knowledge on EE investment projects, which concerns both the regulatory and policy requirements and purely technical aspects that countries would need to deal with when attracting and implementing investments based of foreign or national capital.</li> <li>- analyze investment project pipeline / inventory of energy efficiency project proposals (see A 5 below);</li> <li>- and to disseminate UNECE experience acquired in implementing the FEEI Project to stakeholders, including representatives from the business and banking sectors</li> </ul>	Achieved
EA2	Improved regulatory and institutional framework for promotion of new financing mechanisms for energy efficiency projects	IA2.1 Increased number of regulatory measures prepared for adoption by beneficiary countries to promote energy efficiency market formation;  IA2.2 Number of implemented institutional changes, which promote new financing mechanisms for energy efficiency projects	A3 Fifteen case studies on the experience of energy efficiency policies and reforms (to be discussed at five regional policy seminars) (in support of EA2).  A4 Five policy seminars focusing on policy reforms to promote financing of energy efficiency investments with the aim of strengthening the capacity of national and local policymakers in each region (in support of EA2).	Achieved  Achieved



The project aimed to leverage additional resources from national and international partners in the various regions. The project was also expected to benefit from inter-agency cooperation, including inter-agency coordination under UN-Energy.<sup>3</sup>

#### **d) Beneficiaries**

The project document identified the participating Member States of the UN Regional Commissions as the ultimate project beneficiaries.

### **3. Findings: Assessing project accomplishments**

#### **a) Implementation of activities 1 and 2 and assessment of project achievements in capacity development for energy efficiency projects**

*Expected accomplishment 1: Improved capacity for national project developers, energy experts and middle-level managers in developing countries and countries with economies in transition to develop energy efficiency projects in private and public sectors*

In accordance with the project document five regional training events (one in each of the five continents/regions) have been organized in 2012 and 2013 with the aim of achieving expected accomplishment 1. Each Regional Commission was provided a budget of US\$ 55,400 for the implementation of this activity element.

The training courses were designed to build capacities and to meet the interests and the needs of the participating experts. The curriculum focused on financial engineering and business planning skills. The curriculum aimed to enable participants to identify, select and develop energy efficiency and renewable energy investment projects and prepare bankable project proposals.

In their selection of participants organizers reportedly emphasized a set of competence criteria to ensure that all participants meet minimum qualifications in terms of educational and professional background, language and communication abilities, and professional positions and interests. In particular UN ECE and UN ESCAP emphasized the use of a desirable “project developer profile” with a view to guide participating countries and organizations in their nomination of participants.

A complete set of training materials, handouts, exercises and forms was compiled by training consultants and made available to participants attending the business planning courses.

Most of the training materials that were used under this project have been tested under earlier UN ECE projects, including the *UN ECE Project on Financing Energy Efficiency and Renewable Energy Investments for Climate Change Mitigation (FEEI)*. All training materials were adjusted and customized to reflect the skills and interests of the participants.

The training curriculum developed for and by UN ECE includes various components, including:

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<sup>3</sup> UN Energy is an inter-agency coordinating mechanism established in 2004 to promote United Nations system-wide coherence in energy-related work.

- (a) Preparation and presentation of a technical proposal
- (b) Preparation and formulation of a business plan
- (c) Preparation of project and company cash flow analysis, including use of software/excel tool
- (d) Financial projections, including cash flow, sensitivity and financial analysis
- (e) Risk assessments: Borrower / sponsor risk, completion risk, technology risk, input and supply risk, operation risk, environmental risk, sales risk
- (f) Project implementation and management: tendering procedures, time schedule, etc

The materials used in the trainings have also been made available to participants on CD Rom and on-line. Relevant sources and materials are referenced at the end of this report.

Table 1 provides a summary overview of the five regional training courses, including titles, venues, timing and level of participation.

**Table 1: Overview on delivery of  
Regional Training Courses on Business Planning for Energy Efficiency Projects**

Region	Title	Venue	Timing	No of participants
UN ECE (in cooperation with UN ESCAP)	International Training Course on Business Planning for Energy Efficiency Projects	Almaty, Kazakhstan	3-4 April 2013	More than 80 representatives of private and public companies from 23 countries of South-Eastern and Eastern Europe, the Caucasus, Central, Northern, South-Eastern and Southern Asia, as well as the Russian Federation and Turkey attended and learned to prepare and implement EE projects.
UN ESCAP (in cooperation with UN ECE)	International Training Course on Business Planning for Energy Efficiency Projects	Istanbul, Turkey	20-21 June 2013	
UNECA	International Training course on Business Planning for Energy Efficiency Projects	Cape Town, South Africa	6-8 August 2013	21 Participants from 11 countries in Africa (Kenya, Ethiopia, Tanzania, South Africa, Malawi, Egypt, Zambia, Mozambique, Senegal, Ghana, and Rwanda) attended and learned how to design and implement EE projects.
UN ESCWA	Regional Training on Technical & Economic Aspects for developing energy efficiency (EE) investment projects	Tunis, Tunisia	24-26 September 2012	23 participants from 11 ESCWA member countries attended and learned how to design and implement EE projects.
UN ECLAC	International Training course on Business Planning for Energy Efficiency Projects (implemented in cooperation with Latin American Development Bank – CAF)	Panama City (Marriott Hotel), Panama	24 September 2013	Total 16 participants, including representatives from public and private sector from Argentina, Bolivia, Brasil, Costa Rica, Chile, El Salvador, Guatemala, Mexico, Paraguay, Panamá, and Uruguay increased their capacity to develop and implement EE projects.

### UN ECE and UN ESCAP: Concepts, experiences and self-evaluation of Activity 1

In implementing this Development Account project UNECE and UN ESCAP have often cooperated closely, in particular on activities carried out in the Central Asia sub-region (where most countries are simultaneously member states in both Regional Commissions). UN ECE and UN

ESCAP conducted both of their two regional training events jointly, one training course was held in Almaty, Kazakhstan, and the other in Istanbul, Turkey. Both courses were very well attended.<sup>4</sup>

Upon completion of both trainings participants were invited to provide ad-hoc feed-back using evaluation questionnaires. Some 70 per cent of the participants handed in their questionnaires. The usefulness and quality of the trainings was rated on average at 4.3 points out of maximum 5 points for Almaty, and at 4.2 points out of maximum 5 points for Istanbul. In general, the participants were fully satisfied with the training courses. Participants valued the opportunity of networking with participants from other countries and to learn from their various experiences. Participants also appreciated opportunities to interact with the trainer(s) during individual meetings.

Participants rated the following topics as the most interesting: (a) explanation of elements of an “information memorandum” vis-à-vis a more complete business plan; (b) methods for risk assessments and the preparation of a related presentations; (c) information on different types of financing, loans, and repayment methods; (d) options for securing funding for “non-profit” projects; (e) lender requirements; and (f) sharing of sample profiles of bankable energy efficiency projects.

Some participants also suggested some additions and improvements for future training courses, including (a) presentation of more practical examples, (b) more handout notes with more details, (c) more in-depth discussion of negotiation skills, (d) additional explanation of business projection methods, including various assumed inflation factors, (e) additional information on “Energy Service Companies (ESCOs)” and their business models, and (f) the inclusion of more co-presenters or local resource persons in the delivery of the courses.

In both locations (Almaty, Kazakhstan, and Istanbul, Turkey) the majority of participants expressed their complete satisfaction and gratitude to the conference organizers for well-organized events.<sup>5</sup>

### **UN ECA: Concepts, experiences and self-evaluation of Activity 1**

UN ECA organized its regional training course on energy efficiency projects in Cape Town, South Africa, 6-8 August 2013. The training event was attended by 19 participants from 11 African developing countries, and serviced by 2 staff members of ECA and the international training consultant. Representatives of the Infrastructure Consortium for Africa (ICA) based in Kigali, Rwanda, and the African Institute for Economic Development and Planning (IDEP) based in Dakar, Senegal, also attended and supported the training event.<sup>6</sup>

A detailed report on the training was prepared by ECA staff and is available from the ECA Secretariat. ECA staff reportedly conducted oral post-event discussions with participants to solicit their feedback on the usefulness of the training. The ECA report states two important outcomes: (a) As a result of the training, nine energy efficiency and renewable energy project proposals and initiatives were identified that were considered commercially feasible and principally eligible for project financing. ECA staff offered to continue to assist the participants who attended the training with the further follow up guidance and support with a view to continue to promote their proposals.

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<sup>4</sup> The participants who attended the training events included both men (79%) and women (21%).

<sup>5</sup> For further details please see online evaluation reports for UNECE / UN ESCAP Business Planning Events, [http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/invest\\_ce\\_train\\_Almaty2013/InformationReport.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/invest_ce_train_Almaty2013/InformationReport.pdf)

<sup>6</sup> The participants attending the event included 18 men and 3 women.

(b) The participants also felt that more training on energy efficiency and more training on harnessing renewable energy should be offered in the African region, and they thus welcomed the announcement of the IDEP representative who offered to organize similar trainings in other countries of Africa in the future. The IDEP offer indicates that the Development Account project may well have had impacts and benefits well beyond the immediate implementation framework.

### **UN ESCWA: Concepts, experiences and self-evaluation of Activity 1**

UN ESCWA's *Regional Training on Technical and Economic Aspects of Developing Energy Efficiency Investment Projects* was held in Tunis, Tunisia, 24-25 September 2012, and was attended by 44 participants<sup>7</sup>, including 23 participants supported under the Development Account project, and 21 participants supported from other or own sources.

The training discussed project development processes, including (a) assessment of current situation in the relevant economic sectors (e.g. buildings, industry, etc.) and identification of technical potentials for energy efficiency improvements; (b) methods of economic and institutional analysis of potentially viable projects; and (c) management aspects in project design, planning and implementation. The training identified and recommended concepts and mechanisms for project finance and business planning. It suggested potential regional and international donors that are active in the UN ESCWA region. The training also discussed potentials for accessing sources of climate financing, such as CDM and NAMAs.

UN ESCWA was successful in partnering with the Tunisian National Agency for Energy Conservation (ANME) which co-hosted the event, supported the catering and provided technical resource persons. The training was organized in conjunction with another UN ESCWA Expert Group Meeting (*Arab Regional Forum on Means to Upscale Energy Efficiency Projects in the Building Sector*).

Participants were generally quite satisfied with the quality of the training, which is also reflected in the participants' feed-back questionnaires which were reviewed by the evaluator.

### **UN ECLAC: Concepts, experiences and self-evaluation of Activity 1**

In preparing for project implementation UN ECLAC felt that many of the candidate energy efficiency project developers were already quite competent and possessed most of the essential skills needed for professional project formulation. Several developing countries of the Latin American region also already had portfolios of proposed energy efficiency projects prepared by both public and private sectors. However, it was also observed that finding viable financing opportunities still posed a great challenge. Hence, implementation of the project was still considered relevant for the Latin American region.

UN ECLAC decided to implement the training activity in a slightly modified format. Rather than organizing a separate training course and policy workshop, UN ECLAC conducted activities 1 and 2 of the work plan as integrated elements together with other previously planned training and workshop events.

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<sup>7</sup> 76 per cent of the participants were men, and 24 per cent were women.

The Ministry of Energy of Panama supported the project objectives and hosted the first of the regional training events. UN ECLAC was also successful in arranging a direct participation and content delivery by representatives of the Latin American Development Bank (CAF) and other financial entities. In this manner, the organizers in Latin America opened additional opportunities for direct engagement between candidate project developers and representatives of financial institutions, and also widened the outreach of their activity.

UN ECLAC also invited feed-back from participants at the end of each of its sessions. Participants were asked to evaluate their overall satisfaction on a scale of 1 to 5 (excellent - bad). All of the participants who attended the training in Panama submitted their questionnaires. Eleven participants rated the event as excellent (scale 1) and five participants as good (scale 2). It can be concluded that participants were fully satisfied with the delivery of this activity in terms of both, contents and logistics.

### **Summary of conclusions and recommendations on implementation of activity 1:**

Based on the information provided by the Regional Commissions and presented by the evaluator here above it can be concluded that all five regional training courses on formulating energy efficiency projects have been implemented effectively.

However, in his review of the interviews, the questionnaires, and the webpages of the Regional Commissions, the evaluator identified the following issues and submits the following two practical suggestions for consideration in any eventual follow-up or future projects:

- (1) Considerable efforts, staff time and project resources have been invested in the development of the training course curriculum and the training and information materials. In some cases, these training materials were published on-line and made available to the interested public.<sup>1</sup> However, most of the Regional Commissions have not (yet) electronically published all training materials. The effectiveness of the training and the number of (indirect) beneficiaries could be increased if the option of electronic publication would have been used more systematically.

The evaluator noted that some Regional Commissions face budgetary constraints when it comes to webpage design and webpage maintenance. The evaluator recommends that future DA project proposals may include an explicit budgetary provision for electronic publications, if needed

- (2) The evaluator also noted that the original master copy of the training materials was provided in English, as well as in Russian language, for the benefit of participants from the Central Asia region. In the ESCWA region, some training materials have been prepared in Arabic. However, it would appear that the training materials have not as yet been translated into either French, or Spanish, which could have been useful for participants from Francophone parts of Africa, or for participants from the Latin American and Caribbean region.

The evaluator suggest that for the planning for future DA projects which have a similar global scope adequate provisions should be considered to translate essential training

## Activity 2: Regional workshops for national policy makers on energy efficiency investment projects

As a further activity, the DA project encouraged all five Regional Commissions to develop and conduct five regional workshops (one in each region) for national policy makers to (a) provide knowledge on EE investment projects, (b) help analyze the existing investment project pipeline of energy efficiency project proposals and possible constraints in securing financing; and (c) disseminate globally the UNECE experience on Promoting Energy Efficiency Investments acquired during the preceding UN ECE Project on Financing Energy Efficiency Investments (FEEI). An average budget of US\$ 51,400 was provided to each of the five UN Regional Commissions for this activity. Table 2 provides an overview on the implementation of this project component.

**Table 2: Overview on delivery on regional workshop for national policy makers on energy efficiency investment projects**

Region	Title	Venue	Timing	No of participants
UN ECE and UN ESCAP joint seminar	Inter-regional Workshop on Energy Efficiency Investment Projects Pipeline	UN Conference Centre, Bangkok, Thailand	23-24 April 2014	49 participants from 18 countries of the UN ECE and UN ESCAP regions <sup>8</sup>
UN ECA	Due to limited project resources and relatively high costs for intra-regional travel of participants UN ECA decided to combine its activity 2 and activity 4 into only one event, which was held in Addis Ababa, Ethiopia, in April 2014 under the operational title: <i>Regional Seminar on enabling policies for financing energy efficiency investments</i> . The activity and its outputs are summarized and discussed under activity 4 further below in this report (page 23).  UN ECA also actively participated in the end-of project <i>Global Workshop on UNDA Project: Promotion of Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development</i> , held in Hammamet, Tunisia, 4-7 November 2014.			
UN ESCWA	Regional workshop on developing a regional energy efficiency investment pipeline	El-Gouna, Hurghada, Egypt	19-20 June 2014	56 participants from 12 developing countries of the Arab region
UN ECLAC	Regional training session on energy efficiency market development and project finance (in cooperation with Latin American Development Bank, IADB, and German Technical Cooperation Agency (GIZ) and International Energy Agency (IEA)	Mexico (in cooperation with national Ministry of Energy, Ministry of Finance, and National Energy Efficiency Commission)	22 November 2013	46 participants from 19 countries (Argentina, Bolivia, Brasil, Colombia, Costa Rica, Chile, Dominican Rep., Ecuador, El Salvador, Grenada, Guatemala, Honduras, Mexico, Nicaragua, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay).

<sup>8</sup> The 49 participants included 11 women participants (or approximately 22 per cent)



## UN ECE and UN ESCAP: Concepts, experiences and self-evaluation of Activity 2

UN ECE and UN ESCAP also implemented Activity 2 jointly. Instead of holding two separate smaller regional events UN ECE and UN ESCAP conducted one joint event which was held at the UN Conference Center in Bangkok, Thailand, 23-24 April 2014. The *Inter-regional Workshop on Energy Efficiency Investment Projects Pipeline* targeted project developers and owners, policy makers and experts in the field of sustainable use of energy, and representatives of business and banking communities. Forty participants from 18 countries of South-Eastern and Eastern Europe, Caucasus, Central, Northern, and South-Eastern Asia took part in the event. The Workshop reviewed the investment project pipeline, provided additional financial analysis of selected projects, served as a place for national presentations and dialogue on energy efficiency investment project proposals, and looked at the experience of financial institutions with energy efficiency financing instruments.

Workshop participants identified a number of success factors for financing and implementation of energy efficiency projects, including (i) existence of appropriate legislation, norms and standards, government programmes and policies; (ii) support from international donors (soft loans, grants); (iii) support from regional and municipal authorities and national governments; (iv) public awareness of the benefits of energy efficiency; (v) adequate level of demand for energy efficiency audits and technical advisory services. The workshop participants also identified important barriers to energy efficiency investments which interested countries need to address, including administrative barriers, such as problems in dealing with bureaucracy in obtaining permits and licenses. Participants also noted that energy efficiency projects face additional financial challenges during periods when energy costs are low. The Bangkok workshop also discussed and propagated the business model of energy service companies (ESCOs) which are not yet widely known or applied in Eastern Europe or the developing countries of Asia.<sup>9</sup>

Upon completion of the event, the UN ESCAP and UN ECE secretariats collected and analyzed the feed-back from participants who expressed their complete satisfaction with the content and the delivery of the workshop programme.<sup>10</sup>

## UN ESCWA: Concepts, experiences and self-evaluation of Activity 2

UN ESCWA organized a *Regional workshop on developing a regional energy efficiency investment pipeline* which was held in El Gouna, Hurghada, Egypt, 19-20 June 2015. The event was attended by 56 participants from 12 UN ESCWA member states, including 36 participants who were supported under the Development Account project. 80 per cent of the participants were men, and 20 per cent of the participants were women.

The event was held back to back with the *Arab Forum on Renewable Energy and Energy Efficiency* organized by the League of Arab States (LAS). The Arab Forum focused on a related topic of

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<sup>9</sup> The complete workshop materials are available at: <http://www.unece.org/index.php?id=35165> and <http://www.unescap.org/events/inter-regional-workshop-energy-efficiencyinvestment-projects-pipeline>

<sup>10</sup> UN ESCAP / UN ECE: Summary analysis of feedback provided by participants attending the “Inter-regional Workshop on Energy Efficiency Investment Projects Pipeline”, held at UNCC in Bangkok 23-24 April 2014 (internal document)

“*Enhancing the role of Small and Medium Enterprises-SMEs in the development of sustainable energy in the Arab region*”. Most of the participants who attended the UN ESCWA event also attended the LAS Energy Forum. The coordinated implementation of the two events offered various advantages, including more effective utilization of project budgets, and greater opportunities for information exchange and experience sharing.

Participants were invited to provide feed-back, including via a feed-back questionnaire. Some 40 per cent of participants rated their experience as excellent, and another 40 per cent of the participants rated their experience as very good. Some suggestions were made on possible improvements in the future, which UN ESCWA will take into account in its future planning.

The UN ESCWA staff in charge of implementation of this DA project advised that relevant training materials, presentations and reports are planned to be uploaded to the UN ESCWA webpage by the end of May 2015. At the time of final review of the draft evaluation report (June 2015) some but not all of the proceedings of the UN ESCWA activities have been uploaded to the Regional Commission webpage.

## **UN ECLAC: Concepts, experiences and self-evaluation of Activity 2**

UN ECLAC organized its energy efficiency policy workshop in the form of a *Special session on market development and project finance* which was held in Mexico City on 22 November 2013 as a part of the *Fourth Regional Energy Efficiency Policy Dialogue*. The event was co-hosted by the Government of Mexico, and supported by the Latin American Development Bank (CAF), the Inter-American Development Bank (IADB) and the German Bank for Reconstruction and Development (KfW). The event was attended by 46 participants from 19 countries of the region. UN ECLAC was again successful in mobilizing relevant partner organizations and it used the DA budget to leverage additional resources. Contributions of counterpart organizations were typically provided in kind, and they are therefore difficult to measure or to quantify. However, the counterpart contributions mobilized and covered travel costs of a similar number of participants and resource persons as were covered by UN ECLAC under the DA project.

UN ECLAC project activities also found the full support of the Member States. The fore mentioned event was co-hosted by the Ministry of Energy (Secretaría de Energía), the Ministry of Foreign Affairs (Secretaría de Relaciones Exteriores), and the National Energy Efficiency Commission – (Comisión Nacional de Uso Eficiente de Energía - CONUEE) of the Government of Mexico.

UN ECLAC reported that participants expressed their complete satisfaction with the logistics and the substantive content of project activity 2. However, no detailed report or analysis of participant feed-back was available to the evaluator.

### Summary of conclusions and recommendations on implementation of activity 2:

Activity 2, comprising the five workshops on energy efficiency policies as listed above, have been implemented as planned. The various events were organized at different times during 2012 and 2013, depending on the respective programmes of work. In most cases, the level of participation was good, both in terms of numbers of participants, as well as in terms of the participants' professional interests and positions.

Most of the Regional Commissions were successful in leveraging counterpart resources in kind to increase the numbers of participants and the outreach of the project activities.

### b) Implementation of activities 3 and 4 : Assessment of (initial) progress in energy efficiency policy reforms and facilitation of energy efficiency investments

*Expected accomplishment 2: Improved regulatory and institutional framework for promotion of energy efficiency projects and financing of their investments*

**Activity 3:** In order to promote national and international dialogue on potentials for improving existing regulatory and institutional frameworks and to encourage energy efficiency investments, the project provided a limited budget to support the preparation of a total of 15 national case studies (3 national case studies in each of the five regions). Each Regional Commission was provided a budget of US\$ 28,400 to conduct and support the country/case studies. Table 3 provides an overview on all national case studies that have been conducted under the DA project.

**Table 3: Overview on national case studies: Assessments of policy frameworks an options for promoting energy efficiency investments**

Country	Title	Author	Comments	Publication
<b>UN ECE – Europe</b>				
Armenia (also a member State of ESCAP)	Cogeneration-based District Heating Restauration Project in Avan District of Yerevan City, Armenia		Study financed by UNDP/GEF (not DA resources)	Yes (UNECE webpage)
Azerbaijan (also a member State of ESCAP)	Azerbaijan national case study for promoting energy efficiency investment: An analysis of the policy reform impact on sustainable energy use in buildings	Prof. Fegan Aliyev, Inter- national Eco- energy Academy, Baku	Study financed from DA project	Yes (UNECE webpage)
Belarus	Removing Barriers to Energy Efficiency Improvements in the State Sector in Belarus		Study financed by UNDP/GEF (not DA resources)	Yes (UNECE webpage)
Croatia	Promoting energy efficiency investments for climate change mitigation and sustainable development: Lessons learned from UNDP-GEF project in Croatia		Study financed by UNDP/GEF (not DA resources)	Yes (UNECE webpage)
Georgia (also a member State of ESCAP)	Municipal energy efficiency policy reforms in Georgia	Energy Efficiency Center Georgia	Study financed from DA project	Yes (UNECE webpage)

Montenegro	Case Study Montenegro - An Analysis of the Policy Reform Impact on Energy Performance in Buildings,	Rakocevic, Lucija, and Kovacevic, Igor	Study financed from DA project	Yes (UNECE webpage)
<b>UN ESCAP – Asia-Pacific</b>				
China	Case study on China’s industrial energy efficiency policies	Li Tienan, Center for Industrial Energy Efficiency, for UN ESCAP	Study financed from DA project	Yes (UNECE webpage)
Tajikistan (also a member State of UNECE)	National case study of the energy production and consumption sector in the Republic of Tajikistan	Report prepared by Olimbekov, Kosimbek, Tajikistan, for UN ESCAP	Study financed from DA project	Yes (UNECE webpage)
Thailand	Promoting energy efficiency investment for climate change mitigation and sustainable development: Thailand case study	report prepared by Bangviwat, Athikom, and Chaisinboon, Orathai, for UNESCAP	Study financed from DA project	Yes (UNECE webpage)
<b>UN ESCWA – Western Asia<sup>11</sup></b>				
Egypt	Policy Reforms to Promote Energy Efficiency in the Transportation Sector in Egypt	UN ESCWA (prepared by Hamed Korkor and several staff)	Study financed from DA project	Yes (UNECE webpage)
Kuwait	Analysis of Economical and Environmental Benefits of Promoting Energy Efficiency or Buildings in Kuwait	UN ESCWA (prepared by Moncef Krarti, consultant)	Study financed from DA project	Yes (UNECE webpage)
Tunisia	Case Study Tunisia: Policy reforms that were implemented to promote energy efficiency in the industrial sector	UN ESCWA (report prepared by Missaoui, Rafik)	Study financed from DA project	Yes (UNECE webpage)
<b>UN ECA – Africa</b>				
Morocco; South Africa; Zambia	Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development Case - Studies of Policy Reforms and Regulatory Frameworks	UN ECA (prepared by several resource persons and ECA staff)	Studies financed from DA project (Three country studies combined in one report)	Yes (UNECE webpage)
<b>UN ECLAC – Latin America and the Caribbean</b>				
Brazil	Improving energy efficiency in the Brazilian sugarcane industry for climate change mitigation and sustainable development	Maes, Jair (as consultant for UN ECLAC)	Study financed from DA project	Yes (UNECE webpage)
Uruguay	Improving Energy Efficiency in the Uruguay Rice Industry for Climate Change Mitigation and Sustainable Development	Garmendia, Martin (as consultant for UN ECLAC)	Study financed from DA project	Yes (UNECE webpage)
Chile	Under preparation		Study financed from DA project	
<b>Total</b>	A total of 17 case studies/country reports have been prepared under the project (one study is still under preparations but is planned to be completed by June 2015)		Fourteen case studies were financing by the DA project; three additional case studies were financed by UNDP/GEF	

Note: All national case studies can be accessed via: [http://www.unece.org/energy/gee21/promoting\\_eei.html](http://www.unece.org/energy/gee21/promoting_eei.html)

<sup>11</sup> A Regional Synthesis Report is under preparation by Mr. Ziad Jaber (individual consultant of UN ESCWA)

The objective of the national case studies was to review existing national energy efficiency policies and regulations with a view to propose eventual improvements. Each Regional Commission selected three countries and assigned individual experts or institutions to conduct national or sector specific energy efficiency studies and policy reviews. In accordance with the project plan the provisional findings of the draft reports were presented and discussed at the respective regional policy seminars.

A total of 14 country case studies have been prepared with DA budget support, and one additional study is still under preparation<sup>12</sup>. During the period under review, the UNDP/GEF programme also supported studies in 3 additional countries (with no financial implications on the Development Account). A total of 17 country reports / case studies have been reviewed in the context of this evaluation.

The evaluator found that the format of the country reports and their presentations varied greatly. In some cases advance draft copies of the reports have been uploaded instead of final versions. The individual reports do not have a standard cover page.

Recommendation: Review the format of the online publications of the country reports (on UN ECE webpage), and standardize all formats and cover pages.

The country reports/case studies typically focus on one or the other selected economic sector. Several of the reports present information on good/best practices, and all reports conclude with some specific policy recommendations.

In order to make full use of the reports UN ECE appointed a consultant to undertake a comparative analysis and prepare a synthesis of the case studies / country reports. At the time of the preparation of this project evaluation, a final draft of the Synthesis Report was already available. The Synthesis Report entitled “*Analysis of National Case Studies on Policy Reforms to Promote Energy Efficiency Investments*” is intended to be published by UN ECE during the coming months.

The Synthesis Report established a catalogue of regulations and measures that are desirable and typically conducive to investments in energy efficiency. The report reviewed and compared the national energy efficiency policies of participating countries against established benchmarks in three different policy areas: (a) legal, institutional, regulatory incentives, (b) economic and financial incentives, and (c) socio-political incentives.

Table 4 provides an overview of this comparative assessment. A “green dot” indicates that existing incentives are considered sufficient, a “yellow dot” indicates that some improvements will be needed, whereas a “red dot” indicates significant deficiencies which require urgent and significant reforms before investments in energy efficiency (retrofit) projects can be expected to occur.

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<sup>12</sup> UN ECLAC reported that one of its national consultants whilst travelling in Guatemala was kidnapped along with his son and abducted for a period of one month. The consultant was eventually released unharmed but was nevertheless unable to complete the work. UN ECLAC has since appointed a different consultant from a different country (Chile) to prepare an assessment of the national energy efficiency policy. The report is expected to be completed by the end of May 2015.

**Table 4: Comparative Assessment of National Energy Efficiency Policies**

Country	Benchmark Components		
	Legal, Institutional, Regulatory Incentives	Economic and Financial Incentives	Socio-Political Incentives
Armenia	●	●	●
Azerbaijan	●	●	●
Belarus	●	●	●
Croatia	●	●	●
Georgia	●	●	●
Montenegro	●	●	●
China	●	●	●
Tajikistan	●	●	●
Thailand	●	●	●
Egypt	●	●	●
Kuwait	●	●	●
Tunisia	●	●	●
Brazil	●	●	●
Uruguay	●	●	●
Morocco	●	●	●
South Africa	●	●	●
Zambia	●	●	●

- - Sufficient level
- - Basic level
- - Insufficient level

Source: Alexandre Chachine, UNECE Consultant, Draft Synthesis Report

**Summary of conclusions and recommendations on implementation of activity 3:**

The synthesis report demonstrates the relevance of the country studies and their findings. The review and the report show that all participating countries have already started to formulate and to implement some form of energy efficiency policy. However, the scope and the degree of maturity of these policies obviously differ from country to country. Some countries have been more successful on the path towards achieving the benchmark, working on all or most of the aspects of energy efficiency policy, whereas some other countries may be focusing only on one or the other particular aspect, sector or measure, and may still need to consider additional reform measures. The country reports / case studies clearly flag the areas in which additional action is needed.

### **Summary of conclusions and recommendations on implementation of activity 3 (cont'd):**

The synthesis report is an essential component of the project as it helps to identify and to articulate a common global political message: The essential message illustrated by the synthesis report is that energy efficiency policies can only be expected to be successful and to achieve the desired impact if the entire policy environment is favorable. Countries should, therefore, aim to act simultaneously on all fronts, including institutional, legal, regulatory, economic, financial and socio-political levels, with a view to create a favorable business environment for national and international investors to perform their activities in the area of energy efficiency on the territory of the individual project country.

**Activity 4:** In addition, each of the five Regional Commissions was provided with a budget of US\$ 48,400 to conduct a regional policy seminar focusing on possible reforms for making access to financing easier for promoters of energy efficiency projects. Table 6 presented on page 23 here below provides an overview on the policy seminars that have been implemented under this activity.

### **UN ECE and UN ESCAP: Concepts, experiences and self-evaluation of Activity 4**

UN ECE and UN ESCAP also implemented Activity 4 jointly. Instead of holding two separate smaller regional events UN ECE and UN ESCAP conducted two joint events:

UN ECE and UN ESCAP collaborated with the Government of Kyrgyzstan and the United Nations Development Programme (UNDP) in co-organizing policy seminar “Case studies on energy efficiency financing and promotion of advanced energy efficiency technologies” under the framework of the *Third International Forum on Energy for Sustainable Development*. This Forum was held at the Issyk Kul Lake, Kyrgyzstan on 12-14 September 2012. Some 130 participants from 22 countries attended this Forum.

UN ECE and UN ESCAP collaborated with the Government of Georgia in co-organizing the *Fourth International Forum: Energy for Sustainable Development*, which also served as a forum for capacity building and information exchange on energy efficiency promotion policies. Policy seminar on “Case studies on policy reforms to promote financing energy efficiency investments and advanced energy efficiency technologies” was conducted under the framework of the Forum. Some 210 delegates from 28 countries attended the Forum, but the DA project only needed to provide travel cost support for a limited number of participants. UN ECE and UN ESCAP have successfully leveraged additional resources in support of the project and its objectives.

All documentation and information materials pertaining to the event held in Georgia, including the agenda, the joint statement, all technical presentations, and the media coverage are posted on the UNECE website (<http://www.unece.org/index.php?id=32843>). A detailed technical summary report prepared by UN ECE and UN ESCAP is also available on-line.<sup>13</sup>

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<sup>13</sup> For more detailed information please see <http://www.unece.org/index.php?id=32843#/> and/or [http://www.unece.org/fileadmin/DAM/energy/se/pdfs/ee21/Forum\\_September\\_Tbilisi\\_September13/Summary\\_Forum\\_Tbilisi2013Final.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/ee21/Forum_September_Tbilisi_September13/Summary_Forum_Tbilisi2013Final.pdf)

**Table 5: Overview on delivery of regional seminars on policy reforms to promote financing on energy efficiency investments**

Region	Title	Venue	Timing	No of participants
UN ECE and UN ESCAP	Regional policy seminar: Case studies on energy efficiency (EE) financing and promotion of advanced energy efficiency technologies (Third International Forum: Energy for Sustainable Development )	Issyk Kul Lake, Kyrgyzstan	12-14 September 2012	35 participants from 21 countries (including 11 women participants)  In total 130 participants from 22 countries attended this Forum
	Regional Policy seminar: Case studies on policy reforms to promote financing energy efficiency investments and advanced energy efficiency technologies (Fourth International Forum: Energy for Sustainable Development)	Tbilisi, Georgia	17-19 September 2013	45 participants (including 15 women participants)  In total of 210 participants from 28 countries took part in this Forum
UN ESCWA	Regional Seminar on Enabling Policies for Financing Energy Efficiency Investments	Tunis, Tunisia	14-15 April 2014	53 participants from 12 countries of the Arab world attended the regional seminar <sup>14</sup>
UN ECA	Regional Seminar on Enabling Policies for Financing Energy Efficiency Investments	Addis Ababa, Ethiopia	25-26 June 2014	19 participants from African developing countries (incl. Botswana, Ethiopia, the Gambia, Ghana, Malawi, Nigeria, South Africa, Tanzania, Uganda, Zambia, Zimbabwe) and 4 UN ECA support staff and resource persons
UN ECLAC	V. Regional Policy Dialogue on Energy Efficiency: EE project markets in Latin America	Lima, Peru (Peruvian Ministry of Foreign Affairs Auditorium)	27-28 October 2014	Total of 101 participants from 22 Latin American developing countries (DA Account covered travel costs for 26 participants and UN ECLAC staff)
UN ECLAC	Regional Energy Efficiency Project Workshop (additional activity)	Montevideo, Uruguay	September 2014	

<sup>14</sup> The Development Account project provided travel cost support for only 24 out of the 53 participants. The other participants were supported by their own organizations. 82 per cent of the participants were men, and 18 per cent were women.



## **UN ESCWA: Concepts, experiences and self-evaluation of Activity 4**

ESCWA organized a Regional Seminar on “*Enabling Policies for Financing Energy Efficiency Investments*” in Tunis, Tunisia, 14-15 April 2014. The seminar was arranged in cooperation with the Regional Center for Renewable Energy and Energy Efficiency (RCREEE) and the Tunisian Agency for Energy Conservation (ANME), with additional contributions and support by the Energy Department of the League of Arab States. The objective of the seminar was to provide a platform for dialogue and exchange of experiences, in particular about policy reform options to that can facilitate financing of energy efficiency (EE) investments and strengthen the capacity of national and local policymakers in the region. The regional seminar focused on a discussion of the experiences and model projects implemented in Tunisia and options for their potential replication in other countries of the Arab world. In addition, draft reports on the three national case studies conducted in the region were presented and discussed, including the study on energy conservation and energy efficiency potentials in the transportation sector in Egypt, the study on possibilities for energy savings in commercial and institutional buildings in Kuwait, and the study on energy efficiency potentials in industries in Tunisia. Experiences made in other countries of the Arab region were also presented and discussed.

In the self-assessment of the ESCWA staff, the Regional Seminar has provided an important opportunity for information exchange and discussion. However, no detailed assessment of participant feedback or self-evaluation was provided. UN ESCWA colleagues informed that the related materials will be uploaded to the webpage by the end of May 2015. At the time of the final review of the evaluation report (end of June 2015) the updating of the webpage was still pending.

## **UN ECA: Concepts, experiences and self-evaluation of Activity 4**

As mentioned earlier, UN ECA combined the project resources allocated for activity 2 and activity 4 and conducted one event under the operational title *Regional Seminar on Enabling Policies for Financing Energy Efficiency Investments*, which was held at the UN ECA Conference Facility in Addis Ababa, Ethiopia, 25-26 June 2014. The event was attended by 19 participants from 11 African developing countries, as well as UN ECA staff and resource persons. Upon completion of the activity UN ECA issued a detailed report, including an analysis of the potentials for enhancing energy efficiency and for increasing the use of renewable sources of energy in Africa. The UN ECA report also discussed the multiple challenges and difficulties which project developers, managers and investors are typically faced with in countries of the African region. The UN ECA Regional Seminar and its concluding recommendations highlighted the fact that energy policy makers in Africa have for a long time entirely focused on the expansion of power generation and distribution capacities, so as to better meet the unmet demand, and to reduce energy poverty still prevailing in many of the least developed countries. In these efforts, energy efficiency potentials have often been overlooked or underestimated. UN ECA experts, consultants and resource persons have also pointed out the need for African developing countries to manufacture their own products (e.g. CFL lights) for use in regional and national energy saving projects and programmes. Responding to the recommendation of the delegations and the experts from the region, the UN ECA secretariat committed to support

dedicated energy efficiency initiatives throughout the region, also beyond the lifetime of the Development Account project.

It is methodologically difficult to determine more precisely the effectiveness of project activities 3 and 4 because decision making processes on any eventual regulatory modifications or reforms will typically require the participation of various national entities and institutions, and will thus also require time beyond the timeframe of the project.

However, as also shown by the country reports, several new policy measures and improved incentives for energy efficiency projects have already been proposed and are currently under consideration in several countries that participated in this project. This shows that the project was effective in initiating consultative processes towards positive energy efficiency reforms. Specific recommendations included in the country reports are listed in overview Table 7 here below.

**Table 6: Proposed energy efficiency policy measures or reforms for participating countries**

Country	Recommended policy measures or reforms
<b>UN ECE – Europe</b>	
Armenia	Proposed public-private partnership for restoration of cogeneration-based district heating system in Avan District of Yerevan City, Armenia
Azerbaijan	Proposed measures for improving efficiency of energy use in (public) building in Azerbaijan
Belarus	Removing barriers to energy efficiency improvements in the State Sector in Belarus
Croatia	Proposal of continued comprehensive national programme for energy efficiency promotion in Croatia
Georgia	Proposals for municipal energy efficiency policy reforms in Georgia
Montenegro	Studies and suggestions for policy reforms to improve energy use in buildings
<b>UN ESCAP – Asia-Pacific</b>	
China	Recommendations for energy efficiency policies for 12 <sup>th</sup> 5 Year Plan and 1000 Enterprises Energy Conservation Action Programme
Tajikistan	Strategic recommendations for improvements in energy production and consumption in the Republic of Tajikistan
Thailand	Recommendation on Thailand's 20 year energy efficiency improvement plan and strategy
<b>UN ESCWA – Western Asia</b>	
Egypt	Suggestions for investments in improving energy use in the transportation sector in Egypt
Kuwait	Discussion of reforms to promote energy efficiency in the design and operation of buildings in Kuwait
Tunisia	Discussion of policy reforms to promote energy efficiency in the industrial sector in Tunisia
<b>UN ECA – Africa</b>	
Morocco; South Africa; Zambia	Suggested measures for support of renewable energy projects and programmes, including bioenergy
<b>UN ECLAC – Latin America and the Caribbean</b>	
Brazil	Proposed measures for improving energy efficiency in the Brazilian sugarcane industry
Uruguay	Proposed measures for improving energy efficiency in the Uruguay rice industry
Chile	Proposals still under preparation

Note: All national case studies can be accessed via: [http://www.unecce.org/energy/gee21/promoting\\_eei.html](http://www.unecce.org/energy/gee21/promoting_eei.html)

The project can be expected to demonstrate its full effectiveness in the longer term once a number of countries have had sufficient time to consider proposed reforms, consult, decide and implement.

### **c) Implementation of activity 5 and assessment of accomplishments in increasing financing for energy efficiency projects**

In order to encourage and to facilitate financing of energy efficiency investments the DA project also supported the development an investment project pipeline to include proposals from all five regions. A budget of US\$ 15,400 was made available to each Regional Commission for implementing this project element. Under this activity, selected energy efficiency project proposals, which are considered qualified and complete and which contain all essential information for an independent financial analysis by a bank, would be included in an inventory and recommended to appropriate financial institutions for their consideration.

As a result of the trainings and the follow-on consultations a considerable number of business proposals have reportedly been formulated in line with the “Standard Project Identification Format”. However, real business plans typically include commercially relevant information and are therefore treated mostly confidential. Assessment of the quality of individual business proposals / loan applications is thus beyond the scope of this evaluation.

### **UNECE and UN ESCAP**

As a result of the joint training courses held in Almaty and in Istanbul some 32 project ideas and proposals were selected which suggested financial viability and promised good returns. The aggregate value of the proposed projects amounted to about US\$ 190 million.

The 32 project proposals were prepared by participants from Albania, Armenia, Azerbaijan, Bosnia, China, Croatia, Georgia, Kazakhstan, Macedonia, Montenegro, Pakistan, Serbia, Tajikistan, Thailand, Turkmenistan, Ukraine, Uzbekistan. The projects were subsequently analyzed from the point of payback period (PB), discounted net present value (NPV) on full project cost, and internal rate of return on all project investment. Most of the projects, particularly industrial energy efficiency projects, promised good returns and were financially attractive for developers and investors.

As of October 2014, 18 of the 32 proposals had already secured full or partial financing from various sources (equity, commercial loans, soft loans, grants, government funding, international financing institutions and mezzanine financing), whilst several other projects were still applying for financing or had their applications still under review.<sup>15</sup> The aggregate funding provided for the successful projects amounted to US\$ 139 million.<sup>16</sup>

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<sup>15</sup> [http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/Inter-regional\\_Workshop\\_EE\\_Bangkok\\_April\\_14/InformationReportThailandFinal.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/Inter-regional_Workshop_EE_Bangkok_April_14/InformationReportThailandFinal.pdf)

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[http://www.unece.org/fileadmin/DAM/energy/se/pp/gee21/Workshop\\_Israel\\_Feb\\_15/UNECEBadakerDzioubinski.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pp/gee21/Workshop_Israel_Feb_15/UNECEBadakerDzioubinski.pdf)

## UNECA

As a result of the training event in South Africa, 9 new project proposals were identified and recommended for financing.

**Table 7: Energy efficiency and renewable energy project proposals formulated by participants who attended the UN ECA training course**

Nationality / Country	Professional association of project developer	Type of business proposal
Zambia	Biofuels Association of Zambia	Energy efficiency in biofuels industry
Zambia	Centre for Energy, Environment and Engineering	Energy management
East African Community	East African Community	Solar home systems
Kenya	African Centre for Technology Studies	Waste to energy
Ethiopia	Ministry of Water and Energy	Mini hydro power plant
Malawi	Department of Energy Affairs	Mini hydro power plant
Tanzania	Ministry of Internal Affairs	Briquetting biomass
Egypt	Egyptian Electricity Holding Company	Smart metering
Zambia	Zambia Development Agency	Mini hydro power plant

## UN ESCWA

A total of 17 energy efficiency project ideas were first articulated by project developers from 7 countries of the Arab region (including Lebanon, Libya, Morocco, Palestine, Sudan, Tunisia, Yemen). In some cases, the data necessary for project formulation were incomplete. However, 13 out of the 17 proposed projects ideas were further assessed, discussed and formulated as project proposals, with related guidance and assistance provided by an independent consultant of UN ESCWA. A detailed report with summary project profiles has been prepared by the consultant (Rafik Missaoui) and can be obtained from the UN ESCWA Secretariat.<sup>17</sup> Most of the proposed projects focused on improvements in the energy management of larger buildings, as well as on improved and more economic street lighting. However, the energy efficiency project pipeline of the Arab region also includes proposals on modernizations in industry and transportation (one proposal each), as well as efficiency improvements in power distribution and district cooling (also one proposal each). Some of the proposals were backed by influential institutions and were expected to materialize in the foreseeable future, in spite of the many challenges and business risks faced by project developers in the fore mentioned countries.

In several of the developing countries of the Arab region Governments provide favourable conditions and incentives for energy efficiency investments. In Lebanon, the Central Bank provides,

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<sup>17</sup> UN ESCWA, Promoting energy efficiency investments for climate change mitigation and sustainable development: Energy efficiency investment pipeline (internal document, prepared by Rafik Missaoui; December 2014)

through accredited commercial banks, interest free loans for selected energy efficiency projects. The Palestinian authority has also set up a revolving fund to finance energy efficiency retrofits in the public sector institutions. The Tunisian Government established a fund to reimburse investors in energy efficiency a portion of their project preparation, planning and design costs. The Fund was also established to help finance energy efficiency project implementation. The Government of Egypt also recently announced a national energy efficiency initiative of “*Shamsic Ya Misr*”. This initiative is managed by a national unit reporting directly to the Prime Minister’s office. As also noted by UN ESCWA, implementation of the said promotional measures were not necessarily a direct or indirect result of the project. However, the Development Account project still contributed to the process of further advancing such measures through regional consultations and exchanges of experiences which in the assessment of the ESCWA staff may well lead to further replication of similar measures in more countries in the years to come.

## **UN ECLAC**

At the time of the preparation of this report the UN ECLAC project pipeline included some 28 projects in five Latin American countries totaling investments for US\$ 919.48 million. The largest proposed project concerned the upgrading of the national power distribution system in Ecuador (approx. US\$ 473.2 million) to reduce technical and non-commercial losses.

UN ECLAC reported that its inventory of project proposals (also known as “Project Pipeline”) has been transmitted to several regional financial entities. In addition, ECLAC has announced that it would also circulate information on the proposals by internet/email to potentially interested partners.

UN ECLAC also reported on some important developments and achievements for improved conditions for financing of energy efficiency projects in Latin America: In response to various proposals and requests, including proposals of UN ECLAC, the Latin American Development Bank (CAF) officially announced in 2014 the creation of a new Regional Energy Efficiency Fund/Facility for energy efficiency projects (totaling US\$ 400 million, with an initial allocation of US\$ 120 million). This new Regional Energy Efficiency Fund was first announced by CAF’s Energy Vice-President Mr. Hamilton Moss at a plenary session of the ROA 232/8 Regional Policy Workshop.

The recent establishment of this fund is therefore seen by ECLAC staff at least in part as a direct result of its advocacy for better financing opportunities for energy efficiency projects and the implementation of DA project ROA-232-8. The establishment of the Special Fund also illustrates the effectiveness of the project.

### **Summary of conclusions and recommendations on implementation of activity 5:**

In each of the five regions, implementation of project activity 5 has made very good contributions to advancing investments on energy efficiency projects. It is recommended that Regional Commissions continue to monitor and document progress and success of selected projects as ‘best practice’ examples.

**d) Inter-regional cooperation, exchange of experiences and coordination under a global initiative (Activity 6): End-of-project Global Workshop**

As foreseen in the project document, a Global Workshop of the UN Development Account project “Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development” involving all five UN RCs was conducted in late 2014. The Global Workshop was conducted in conjunction with the 5<sup>th</sup> International Forum on Energy for Sustainable Development, hosted by the Government of Tunisia, and held in Hammamet on 4-7 November 2014. The Workshop gathered government officials and project developers from all regions along with major domestic and foreign investors to facilitate exchange of expertise, lessons learned and best practices and to promote greater investment flows into energy efficiency projects. The event was convened as to share experiences with programmes for training on financial engineering and business planning as well as case studies on policy reforms to promote energy efficiency investments and discuss a project pipeline from each region. All Regional Commissions were represented and contributed to the programme.

**Table 8: Overview on end of project Global Workshop**

Region	Title	Venue	Timing	No of participants
UN ECE In cooperation with all other UN Regional Commissions	5 <sup>th</sup> International Forum on Energy for Sustainable Development (including Global Workshop on UNDA Project: Promotion of Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development)	Hammamet, Tunisia	4-7 November 2014	246 participants from 45 countries from all regions of the world

The event was very well attended. A total of 246 participants from 45 countries registered and attended the Forum.<sup>18</sup> On the same occasion, the Executive Secretaries of all five Regional Commissions adopted a joint statement<sup>19</sup>, which may be considered politically relevant in that it outlines a global consensus position on energy policies for sustainable development, highlighting the importance of measures to enhance energy efficiency. Funding provided by the Development Account has thus enabled the five Regional Commissions to work together and to demonstrate a “One UN” approach which is based on professional competence, commitment to sustainable development and action for greater international cooperation.

**Summary of conclusions and recommendations on implementation of activity 6:**

The Global Workshop and the Joint Statement by the Executive Secretaries of all five Regional Commission has provided an important opportunity to advocate energy efficiency promotion policies for sustainable development and climate change mitigation and to demonstrate coordinated global UN cooperation in the spirit of a “One UN” approach.

<sup>18</sup> The total number of 246 participants included 47 women participants (or approx. 23 per cent)

<sup>19</sup> Text of the Joint Statement of the five Executives Secretaries is accessible through this link:

[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/ee21/Forum\\_November\\_Tunisia/Joint\\_Statement\\_Fifth\\_International\\_Forum\\_Final\\_All.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/ee21/Forum_November_Tunisia/Joint_Statement_Fifth_International_Forum_Final_All.pdf)

#### e) Minor modifications in the initially envisaged implementation arrangements

With UN Development Account projects there is typically a longer time span between the original project formulation, project review, project approval and final project implementation, during which some changes can occur. In the case of the project under review and evaluation, the following two minor modifications occurred, but did not affect the outcomes of the project:

- (a) As envisaged in the project document the UN ECE Secretariat, acting as the executing agency for the project, periodically reported its capacity building activities to the *UNECE Group of Experts on the Global Energy Efficiency 21 project*.<sup>20</sup> However, the separate reporting was discontinued when the Group of Experts was later dissolved.
- (b) The original project document includes the United Nations Department of Economic and Social Affairs (UN DESA) as a collaborating implementing partner with some planned activity under A.2 (case studies element). However, due to time and staff constraints, UN DESA informed UN ECE in January 2013 that it would not be able to implement its element. The initially earmarked resources and tasks have been re-allocated, and the withdrawal of UN DESA did not seem to have had any negative impacts on project implementation. A representative of UN DESA took part in the end-of-project Global Conference.

The United Nations Industrial Development Organization (UNIDO) is one of the other UN organizations that implement projects related to industrial productivity improvements, including energy efficiency. However, as a specialized agency UNIDO could not be allocated Development Account resources. In the interest of coordination, UNIDO staff was periodically invited to various of the capacity building activities. However, UNIDO staff rarely participated, essentially due to budget constraints. Coordination of project activities was, however, arranged, inter alia through periodical consultations under UN-Energy, where all UN Regional Commissions, as well as UNIDO are active members.

#### f) Additional capacity building activities

After receiving various expressions of interest, UN ECE and UN ESCAP co-organized as a follow-up capacity building activity an *Inter-regional Workshop and a Study Tour on Energy Efficiency and Renewable Energy Projects and Policies*. The training and study tour was hosted by Israel's Agency for International Development Cooperation (MASHAV), with participation of Eilat Renewable Energy Center and the Center for International Agricultural Development Cooperation (CINADCO). 21 participants from 13 countries of South-Eastern and Eastern Europe, Caucasus and Central Asia participated in the activity.

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<sup>20</sup> United Nations Economic Commission for Europe, Document ECE/ENERGY/WP.4/ GE.2/2013/4; Committee on Sustainable Energy; Steering Committee of the Energy Efficiency 21 Programme; Group of Experts on Global Energy Efficiency 21 (GEE21); Fifth Session Geneva, 16 April 2013; Item 4 of the Provisional Agenda: Recent developments of the Global Energy Efficiency 21 project: Training course on financial engineering and business planning; Recent developments of the Global Energy Efficiency 21 project - Training Course on Financial Engineering and Business Planning Background paper; Note by the secretariat [http://www.unece.org/fileadmin/DAM/energy/sc/pdfs/gee21/invest\\_ee\\_train\\_Almaty2013/ECE.ENERGY.WP.4.GE.2.2013.4\\_e.pdf](http://www.unece.org/fileadmin/DAM/energy/sc/pdfs/gee21/invest_ee_train_Almaty2013/ECE.ENERGY.WP.4.GE.2.2013.4_e.pdf)

**Table 9: Overview of additional follow-up energy efficiency training activity**

Region	Title	Venue	Timing	No of participants
UN ECE	Inter-regional Workshop and Study Tour in Energy Efficiency and Renewable Energy Projects and Policies	Israel	8-12 February 2015	21 participants from 13 countries

Upon completion of the activity participants expressed their satisfaction with the organization of the additional capacity building activity, including the substantive content of the technical presentations and the logistic arrangements. A complete documentation of the proceedings of the training can be accessed on-line on the UN ECE webpage specifically in the section “Summary of participants’ evaluations”. Direct link:  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/iws\\_ee\\_re\\_Israel.Feb2015/InformationReportIsraelWorkshopRev1.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/geee/iws_ee_re_Israel.Feb2015/InformationReportIsraelWorkshopRev1.pdf)<sup>21</sup>

As a further additional activity, ESCWA also organized an Expert Group Meeting on “Promoting Large-Scale Energy Efficiency Programs in the Existing Building Sector in the Arab Region” which was held in Beirut, Lebanon, 12-13 May 2015. The EGM was organized in cooperation with UNEP and explored opportunities for launching a collaborative regional initiative to promote energy efficiency in building throughout the Arab region. Detailed information on the EGM and its proceedings are planned to be up-loaded to the UN ESCWA webpage in the near future.

**g) Implementation rate**

According to the latest available financial statement (30 June 2015) the implementation rate of the project already reached 99 per cent.

**4. Conclusions and recommendations**

**a) Project relevance**

The project was well formulated and highly relevant to achieving the development objective.

The project objective and the capacity building activities fell well within the mandates of the Regional Commissions.

The project was also fully aligned with the relevant approved programmes of work of the Regional Commissions.

Each UN Member State determines its own national energy development strategy and related priorities. Security and affordability of energy supply and efficiency of energy use are of crucial importance, in particular for energy import dependent developing countries and their economies.

<sup>21</sup> for detailed proceedings and other further information please see: <http://www.unece.org/index.php?id=38564#/>



The project has demonstrated its relevance beyond any doubt. The Regional Commissions and their activities under Development Account project ROA 232-8 were always welcomed by host countries, collaborating partner organizations and large groups of interested participants.

With its thematic and substantive emphasis on promoting energy efficiency investments, the project has focused on what is probably the most critical and weakest dimension of any national energy efficiency promotion programme.

**Recommendation:** In the assessment of the evaluator, continued advocacy for improved energy efficiency promotion policies will be essential to further enhance economic development that is sustainable and environmentally benign. **The Regional Commissions may consider to formulate follow-up project proposals for further extra-budgetary funding from bi- or multi-lateral sources.**

#### b) Effectiveness of the project

The project design reflected an appropriate balance between a common standard framework for general energy efficiency related capacity building on one hand, and the necessary flexibility that the various Regional Commissions require to define their own regional programmes on the other. This has given all Regional Commissions the opportunity to design and schedule their activities in accordance with priority needs articulated by their own constituencies in their respective regions.

The project and all participating Regional Commissions have produced all planned outputs. The training courses were well attended by candidate project developers, and the policy dialogues regularly involved key stakeholders and policy decision makers with personal authority.

A project implementation was guided by clearly defined indicators of achievement. The review of the available data, including (a) numbers of trainees and workshop and seminar participants, (b) numbers of new energy efficiency investment projects finalized, proposed for funding (or actually already funded), and (c) number of measures initiated to improve regulatory and/or institutional frameworks for energy efficiency promotion supports the conclusion that the project was highly effective, at least in the short term. Even if not easily quantifiable, the positive impact of the project can be seen in all areas: (a) Candidate energy efficiency project developers have been provided training, assistance, and guidance in larger numbers, resulting in (b) A considerable number of energy efficiency project ideas and project proposals have been reviewed, modified and prepared in a format as required by financial institutions. (c) Various initiatives, legislative amendments and institutional reorganizations have been proposed, as detailed in Table 6. Any national legislative measures, amendments or reforms will, of course, require further stakeholder consultations and longer time for decision making. Whereas the ultimate outcomes and the full effectiveness of the project can, of course, only be determined after a longer period of time, and will be affected by many other influencing factors, the project can nevertheless be credited for having successfully initiated such consultative processes, and to have made substantive contributions to the debate.

Several of the Regional Commissions, most notably UN ECLAC, have reported distinct advances of national energy efficiency policies and legislation in several of their member countries. In particular,

during the Regional Workshop representatives from the Colombian Ministry and Development Bank shared their experience in working with the national industrial association in identifying EE project portfolios and promoting their matching with the available credit lines. Their input was key for drafting regional policy recommendations.

In Chile the authorities in charge of EE policies actively participated in the project activities and shared their lessons learned from their partial success in trying to implement a KfW funded credit line for EE projects in Chile. Through this experience they realized the need to invest further in outreach and capacity building to achieve increase up-take of EE credit lines by the small-medium enterprise sectors. These same authorities engaged CAF to take advantage of the new EE Fund/Facility and are currently during the project workshop.

In fact ECLAC took advantage of the project activities by convening the national authorities most involved in their implementation to join the project Regional Expert Workshop in Montevideo, in order to share their experience, and help draft EE Policy Recommendations to share with the whole region. These draft recommendations formed the basis for the official 18 Regional EE Policy Recommendations officially adopted at the final Regional Policy Workshop.

**Recommendations for enhancing effectiveness of project implementation:**

**Greater use of electronic media for dissemination of training materials and project outputs:** Considerable efforts, staff time and project resources have been invested in the development of the training course curriculum and the training and information materials. In some cases, these training materials were published on-line and made available to the interested public. However, most of the Regional Commissions have not (yet) electronically published all training materials. The effectiveness of the training and the number of (indirect) beneficiaries could be increased if the option of electronic publication would have been used more systematically.

The evaluator noted that some Regional Commissions face budgetary constraints when it comes to webpage design and webpage maintenance. The evaluator recommends that future DA project proposals may include an explicit budgetary provision for electronic publications, if needed.

**Multilingualism:** The evaluator also noted that the original master copy of the training materials was provided in English, as well as in Russian language, for the benefit of participants from the Central Asia region. In the ESCWA region, some training materials have been prepared in Arabic. However, it would appear that the training materials have not as yet been translated into either French, or Spanish, which could have been useful for participants from Francophone parts of Africa, or for participants from the Latin American and Caribbean region. The evaluator suggests that essential training materials are translated into all relevant (regional) UN languages to increase the readership and the effectiveness of the capacity building efforts.

**c) Efficiency of the project**

The planned budget for the Development Account project was US\$ 1,250,000.00, not including staff time or in-kind contributions. The project was implemented within the planned budget.

The project has been implemented in a highly cost conscious and cost-efficient manner measured by (a) the number of trainees and workshop participants (see tables 2, 5, 8, and 9) relative to the training budget (US\$ 55,400 per Regional Commission), and (b) by the number of country studies that have been initiated and completed under the project (see tables 3 and 6) with only limited DA funds available (US\$ 9,000 per country study, inclusive of travel costs and secretariat services). The budgets allocated for country/case studies and the budgets made available for travel of participants and resource persons for the various training courses, workshops and seminars were rather limited. This has encouraged the participating Regional Commissions to liaise with and coordinate their activities with like-minded initiatives of other organizations, including regional development banks, national UNDP offices, and other donor or technical cooperation agencies, including USAID and GIZ. The Regional Commissions have successfully used the DA account to leverage additional resources from third parties.

Project activities have also been implemented in a time effective manner. By the time of the original target completion date (December 2014) all originally planned activities had already been completed. However, a 6 months extension of the project has been requested and approved to complete some remaining reports, prepare and up-date webpages, and to implement some additional activities, which were proposed to be conducted within the given mandate and within the originally approved budgets.

The project has also greatly contributed to and has facilitated professional networking not only at regional, but also at inter-regional and global levels. The project has brought together UN staff members and national experts from different continents and regions and has provided opportunities for discussion on methods and curricula for capacity building,

**Recommendation:** The project has been planned and implemented in a cost effective way. However, the evaluator recommends a review of the format of the online publications of the country reports (on UN ECE webpage). Greater standardization of cover pages and uniformity of layout can improve the visibility of project outputs and attract additional readers.

#### **d) Gender concerns**

As stated in the project document, UNECE and the other Regional Commission partners committed to paying particular attention to gender balance during project implementation. However, the project failed to achieve notable progress in this area.

The data collected in the scope of the review of ROA-232-8 project implementation suggests that on the various events that have been supported under this project between 12 and 24 per cent of participants were women. Whilst the share of women participation is still rather low, it should be noted that the project deals with an industry in which women are traditionally less represented. No significant difference could be observed when comparing the different regions.

The consultant observed that only two of the consultants or individual contractors that were hired by the project for short term assignments were women.

**Recommendation:** It is recommended that future DA projects may place greater emphasis on gender balance in their implementation, e.g. by setting more ambitious indicative targets for women participation as beneficiaries, resource persons or consultants.

### e) **Conclusions and Recommendations for further planning and DA project implementation**

Development Account projects provide an important source of funding for operational projects and capacity building activities of the United Nations Secretariat and its various departments, including the Regional Commissions.

Project ROA-232-8 is one of the relatively fewer Development Account projects that are entirely “global” in their conceptual approach, in terms of the development concerns to be addressed, in terms of solutions to be found, and in terms of institutional involvement. Project ROA-232-8 involved **all** UN Regional Commissions.

UN ECE has demonstrated leadership in the project formulation and in project execution and it deserves recognition of its outstanding initiative. At the same time, the project implementation was organized in a democratic manner. All Regional Commissions had an equal financial share in the common project to implement a common work plan, and all Regional Commissions had the freedom to shape the various activities and implement them in their respective region as was seen appropriate by the respective Commission and its member states.

UN DA Project ROA 232-8 has enabled the Secretariat to implement a genuine “global campaign”, and appear as a true “One UN”. The “Joint Statement on Sustainable Energy” adopted by the Executive Secretaries of all five Regional Commission underlines the notion of coordinated intra-UN cooperation.

In September 2015, the United Nations General Assembly and a Special Summit is expected to adopt the Post-2015 Development Agenda, including the proposed United Nations Sustainable Development Goals. SDG Goal 7 calls for “*ensuring access to affordable, reliable, sustainable and modern energy for all*”. Further international and, indeed, global cooperation will surely be needed if the world community is to make progress towards this goal.

### **Recommendations**

1. UNECE should review of the format of the online publications of the country reports (on UN ECE webpage). Greater standardization of cover pages and uniformity of layout can improve the visibility of project outputs and attract additional readers.
2. The synthesis report articulated a common global political message that energy efficiency policies can only be successful if the entire policy environment is favorable. Countries should, therefore, aim to act simultaneously on all fronts, including institutional, legal,

regulatory, economic, financial and socio-political levels, with a view to create a favorable business environment for national and international investors to perform their activities in the area of energy efficiency on the territory of the individual project country. The RCs should publish the Synthesis Report, as planned, in electronic and printed formats, and disseminate it widely among project participants and other potentially interested stakeholders.

3. Regional Commissions should continuously monitor and document progress and success of selected projects as 'best practice' examples in the area of energy efficiency financing.
4. The Regional Commissions may consider to formulate follow-up project proposals for further extra-budgetary funding from bi- or multi-lateral sources.
5. UNECE should increase its use of electronic media for dissemination of training materials and project outputs. The effectiveness of the training and the number of (indirect) beneficiaries could be increased if the option of electronic publication would have been used more systematically. Future DA project proposals should include an explicit budgetary provision for electronic publications to ensure the maximum use of the investment in training materials.
6. Essential training materials should be translated into all relevant (regional) UN languages to increase the readership and the effectiveness of the capacity building efforts.
7. Future DA projects should place greater emphasis on gender balance in their implementation, e.g. by setting more ambitious indicative targets for women participation as beneficiaries, resource persons or consultants.
8. Administrators of the Development Account may consider supporting similar "global project initiatives" in future that can enable UN Departments, including the Regional Commissions, to "act as one", on enhancing sustainability in the energy sector, or on addressing other relevant global sustainable development concerns.

## Annex 1

### Terms of Reference for evaluation of UN Development Account Project IMIS: 2923 (ROA-232-8) “Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development”

#### I. Purpose

The purpose of this evaluation is to review the implementation and assess the extent to which the objectives of the completed UN Development Account project “Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development” (hereinafter “Project”) were achieved, and provide recommendations to enhance the impact of the Project, and to effectively implement similar projects in the future.

#### II. Scope

The evaluation will be guided by the objectives, indicators of achievement and means of verification established in the logical framework of the Project document. The evaluation will consider the impact of the Project on the capacity of the member States of the UN Regional Commissions (RCs) to attract investments in energy efficiency projects in the context of climate change mitigation and sustainable development.

#### III. Background

In 2012, the Sustainable Energy Division of the United Nations Economic Commission for Europe (UNECE) launched a project under the United Nations Development Account (UNDA). It stemmed from UN calls at Conference of the Parties -14 in Poznan in December 2008, following a mandate by the UNECE Committee on Sustainable Energy for inter-regional cooperation and a system-wide approach to the issues of energy and climate change. The project was implemented from 2012 to 2014.

UNECE led on the overall execution of the project, with ESCAP, ESCWA, ECLAC and ECA responsible for implementation in their respective regions. The targeted beneficiaries were the member states of all UN RCs.

*The objectives of the project were to:*

- (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.

*All projects funded from the United Nations Development Account require independent evaluation upon completion of the project.*

#### IV. Issues

The evaluation should review the following aspects of the project implementation and results:

- *Relevance:*

- Was the project relevant to the objective of UNECE to support member States in improving energy efficiency?
- Was the project design and implementation appropriate for meeting the project's objective?

- *Effectiveness:*

- Did the project achieve the results expected during the project design in terms of the planned activities, outcome, and impact?

- *Efficiency:* a measure of how well inputs (funds, staff, time, etc.) are converted into outputs.

- Did the project achieve its objectives within the anticipated budget and allocation of resources?
- Were the activities implemented according to the planned timeframe?
- Were the activities implemented in the required sequence needed to ensure the greatest impact of the project?

#### V. Methodology

*What method(s) (such as desk review of records and data, surveys & interviews, field visits, focus groups) will be used for the evaluation? What data are already available from other sources?*

The evaluation will be conducted on the basis of a **desk review** of all the relevant documents obtained from project files including:

- official records;
- report on the responses to the questionnaires administered to participants of training workshops in project development, finance and business planning (as well as the raw data from these questionnaires);
- national studies, training programmes/materials and seminars/workshops programmes compared with the logical framework of the Project
- documented output of the activities and monitoring reports will be reviewed
- conclusions and recommendations of case studies and the progress achieved in preparation of an investment project pipeline will be measured or estimated

A questionnaire will be developed for dissemination to assess the perspective from member States in all regions. This questionnaire will be followed up by selected interviews (methodology to be determined by the evaluator).

The report will summarize the findings, conclusions and recommendations of the evaluation. An executive summary (of no more than 2 pages) will briefly summarize the project, the methodology of the evaluation, key findings, conclusions and recommendations.

All material needed for the evaluation, will be provided to the consultant: project document and reports, meeting reports and publications, list of involved experts that can be interviewed by telephone. UNECE project staff will be contacted to obtain clarifications and any missing data.

## **VI. Evaluation Schedule**

- A. Preliminary research –2-5 January 2015
- B. Data Collection – 6-20 January 2015
- C. Data Analysis –20-30 January 2015
- D. Draft Report (include timing for review) - 31 January – 15 February 2015
- E. Final Report 28 February 2015

## **VII. Resources**

*The requirement for an external evaluation is specified in the project document. The resources available for this evaluation are 2% of the total budget of (1,250,000 USD).*

The payment of USD 22,000 will be paid upon satisfactory delivery of work on 28 February 2015. In addition, one P4 staff member will provide support to the consultant by ensuring the provision of all necessary documentation needed for the desk review. The staff member will also guide the evaluator on the appropriate recipients for the questionnaire, and for follow up interviews, and ensure that the necessary communications with these recipients are introduced by the secretariat.

## **VIII. Intended Use/Next Steps**

The findings of the evaluation will inform follow up actions and initiatives required to disseminate the knowledge created and enhance its use. The evaluation is expected to provide guidance on how to enhance the impact of the project. The advice provided may include recommendations on how to continue cooperation among all UN RCs on energy issues. The outcomes of the evaluation will also contribute to the broader lessons learned of the UNDA, by being made available on the UNECE public and internal websites, as well as submitted to UN DESA in UNHQ.

## **IX. Criteria for Evaluators**

Evaluators should have:

- an advanced university degree or equivalent background in relevant disciplines, with specialized training in areas such as evaluation, project management, social statistics, advanced statistical research and analysis.
- relevant professional experience in design and management of evaluation processes with multiple stakeholders, survey design and implementation, and project planning, monitoring and management.
- demonstrated methodological knowledge of evaluations, including quantitative and qualitative data collection and analysis for end-of-cycle project evaluations.
- knowledge of sustainable energy issues, preferably in the UNECE region.



- demonstrated high level of proficiency in communicating analytical reports in English.

Evaluators should declare any conflict of interest to UNECE before embarking on an evaluation project, and at any point where such conflict occurs.

## Annex 2 List of Documents Reviewed

The following documents were reviewed, apart from other general information resources on the internet:

### **General documents related to UN DA project:**

United Nations Development Account project document: *“Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development”*, to be implemented by Economic Commission for Europe, in collaboration with the Economic and Social Commission for Asia and the Pacific, the Economic and Social Commission for Western Asia, the Economic Commission for Africa, the Economic and Social Commission for Latin America and the Caribbean, and the Department of Economic and Social Affairs within the framework of UN-Energy (dated 09 February 2012)

United Nations Development Account project: *“Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development”*, on UN Development Account webpage:

<http://www.un.org/esa/devaccount/projects/2012/1213AB.html>

United Nations Economic Commission for Europe (UN ECE) (also on behalf of Co-operating agencies: UNECA, UN ECLAC, UN ESCWA, and UN ESCAP): Annual Progress Report on implementation of DA Project 12/13 AB (ROA-2012-0036-0870-6875) for period 01/2013-12/2013: Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development (internal document)

United Nations Economic Commission for Europe (UN ECE) Final Project Completion report 2015 (under preparation)

### **Proceedings and electronic documentation of training events on business planning**

United Nations Economic Commission for Europe (UN ECE), Document CE/ENERGY/WP.4/GE.2/2013/4 ; Committee on Sustainable Energy; Steering Committee of the Energy Efficiency 21; Programme Group of Experts on Global Energy Efficiency 21 (GEE21); Fifth Session Geneva, 16 April 2013 Item 4 of the Provisional Agenda: Recent developments of the Global Energy Efficiency 21 project: Training course on financial engineering and business planning; Recent developments of the Global Energy Efficiency 21 project - Training Course on Financial Engineering and Business Planning Background paper; Note by the secretariat  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/invest\\_ee\\_train\\_Almaty2013/ECE\\_ENERGY.WP.4.GE.2.2013.4\\_e.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/invest_ee_train_Almaty2013/ECE_ENERGY.WP.4.GE.2.2013.4_e.pdf)

Training materials for Business Planning Course, prepared by Renaissance Financing International (RFI) for UN ECE (available on CD ROM, in both English and Russian Languages)

- CD-ROM containing principal standard documentation, templates and other relevant information on preparation of the bankable project proposals
- ECE Manual on Business Planning: How to Construct a Business Plan for Energy Efficiency Projects
- CEI-ECE Project Opportunity Methodology

- EBRD Guide to Energy Efficiency Bankable Proposals
- ECE Sources of Financing Energy Efficiency Projects in Central and Eastern Europe
- RFI Renaissance Finance International Ltd. Sources of Funds
- RFI Renaissance Finance International Ltd. Financial Proposals Introduction

UNECA (2013): Report on regional training on energy efficiency investments in Arica, Cape Town, South Africa, 6-8 August 2013 (report available from UN ECA and UN ECA Consultant)

UNECE / UNESCAP (2013): International Training Course on Business Planning for Energy Efficiency Projects, Almaty, Kazakhstan, 3-4 April 2013  
<http://www.unece.org/index.php?id=32455#/>

UNECE / UNESCAP - Information Report on International Training Course on Business Planning for Energy Efficiency Projects, Almaty, Kazakhstan, 3-4 April 2013  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/invest\\_ee\\_train\\_Almaty2013/InformationReport.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/invest_ee_train_Almaty2013/InformationReport.pdf)

UNECE / UNESCAP (2013): International Training Course on Business Planning for Energy Efficiency Projects, Istanbul, Turkey, 20 - 21 June 2013  
<http://www.unece.org/index.php?id=32820#/>

UNECE / UNESCAP - Information Report on International Training Course on Business Planning for Energy Efficiency Projects, Istanbul, Turkey, 20 - 21 June 2013  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/Invest\\_ee\\_train\\_Istanbul2013/InformationReportCourseTurkey.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/Invest_ee_train_Istanbul2013/InformationReportCourseTurkey.pdf)

United Nations Economic and Social Commission for Western Asia (UN ESCWA); Note for Information of Participants: Regional training workshop and expert group meeting on energy efficiency, Tunis, Tunisia, 24-26 September 2012  
<http://css.escwa.org.lb/sdpd/1893/infonoteEn.pdf>

### **Case studies / country reports**

Fegan Aliyev, International Eco-Energy Academy, Baku, Azerbaijan: National case study for promoting energy efficiency investment: An analysis of the policy reform impact on sustainable energy use in buildings  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/projects/cs/CS\\_Azerbaijan.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/projects/cs/CS_Azerbaijan.pdf)

Ministry of Energy, Santiago de Chile, Chile (May 2014): Agenda de Energía, Undesaño País, Progreso para todos (The National Agenda for Energy Development) (published in Spanish)

Secretariat of Energy of Government of Mexico, National Commission for Efficient Use of Energy, National Plan of Work for Year of 2014 (in Spanish) (available at UN ECLAC)

UN ECA (2014), Promoting Energy Efficiency Investments for Climate Change Mitigation and Sustainable Development, Report on Regional Seminar on Enabling Policies for Financing Energy Efficiency Investments, Addis Ababa, 25-26 June 2014 (report available from UN ECA)

UNDP/GEF (Project 00035799) Cogeneration Based District Heating Restoration Project in Avan District of Yerevan City, Armenia (Case study report for UNECE Energy Efficiency Project)  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/projects/cs/CS\\_Armenia.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/projects/cs/CS_Armenia.pdf)

UNDP/GEF Project (2007-2011): Removing Barriers to Energy Efficiency Improvements in the State Sector in Belarus  
[http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/projects/cs/CS\\_Belarus.pdf](http://www.unece.org/fileadmin/DAM/energy/se/pdfs/gee21/projects/cs/CS_Belarus.pdf)

UNDP/GEF Project (2005-2011): Promoting energy efficiency investments for climate change mitigation and sustainable development: Lessons learned from UNDP-GEF project in Croatia  
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### Annex 3: Simplified Logical Framework (from Project Document)

Intervention logic	Indicators	Means of verification	Risks/Assumptions
<p><b>Objective:</b> Strengthen capacities of developing countries and countries with economies in transition to attract investments in energy efficiency projects in the context of climate change mitigation and sustainable development.</p>			
<p>Expected accomplishment 1: 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.</p>	<p>IA1 Increased number of national experts able to design and implement energy efficiency investment projects</p>	<p>Questionnaire  National Reports on EE investment project proposals</p>	<p>Economic barriers (institutional, legal, financial)  Financial constraints could limit participation of national experts</p>
<p>1.1 Main activity Provide technical assistance to the national officials and experts through five regional trainings (one course for each region) in project development, finance and business planning (in support of EA1) to educate participants on mentioned issues.</p>			
<p>1.2 Main activity Develop and conduct five regional workshops (one in each region) in order to:</p> <ul style="list-style-type: none"> <li>- provide knowledge on EE investment projects, which concerns both the regulatory and policy requirements and purely technical aspects that countries would need to deal with when attracting and implementing investments based of foreign or national capital.</li> <li>- analyze investment project pipeline (inventory of energy efficiency project proposals, see A5);</li> <li>- disseminate UNECE experience acquired in implementing the FEEI Project to stakeholders, including representatives from the business and banking sectors.</li> </ul>			
<p>Expected accomplishment 2: Improved regulatory and institutional framework for promotion of new financing mechanisms for energy efficiency projects.</p>	<p>IA2 Increased number of regulatory and institutional measures prepared for adoption by beneficiary countries to promote energy efficiency market formation.</p>	<p>Case studies.  Questionnaire</p>	<p>Weak political support/regulations  Lack of transparency</p>
<p>2.1 Main activity Develop fifteen case studies on the experience of policy reforms in cooperation with national coordinators and national participating institutions in beneficiary countries to be discussed at five regional policy seminars</p>			
<p>2.2 Main activity Conduct five policy seminars focusing on policy reforms to promote financing of energy efficiency investments with the aim of strengthening the capacity of national and local policymakers in each region.</p>			

<p>Expected accomplishment 3: Increased financing for investments in energy efficiency projects, including through the innovative financing mechanisms.</p>	<p>IA3 Increased number of beneficiary countries, which improved financing of energy efficiency projects.</p>	<p>Inventory of energy efficiency project proposals  Energy Efficiency Indicators (World Energy Council)</p>	<p>Weak political support  Lack of transparency</p>
<p>3.1 Main activity Develop an investment project pipeline: inventory of energy efficiency project proposals, each of which contains standard presentation of energy efficiency investment project, with details of the total cost of the project, investment requirements, projected internal rates of return and carbon dioxide emission reductions for submission to domestic and international investors, banks, investment funds, and other financial institutions in beneficiary countries</p>			
<p>3.2 Main activity In cooperation with all UNRCs, plan and execute an end-of-the-project global workshop to bring together officials from the regions along with major domestic and foreign investors to facilitate exchange of expertise, lessons learned and best practices and promote greater investment flows into the EE projects.</p>			
<p>Monitoring and evaluation of the project evaluation</p>			



**Annex 4: Questionnaire for Survey**

United Nations Development Account Project (Project Number 12/13AB)

**PROMOTING ENERGY EFFICIENCY INVESTMENTS FOR CLIMATE CHANGE  
MITIGATION AND SUSTAINABLE DEVELOPMENT (2012-2014)**

Implemented by

Economic Commission for Europe

In collaboration with

the Economic and Social Commission for Asia and the Pacific (UN ESCAP),  
the Economic and Social Commission for Western Asia (UN ESCWA),  
the Economic Commission for Africa (UN ECA),  
the Economic and Social Commission for Latin America and the Caribbean (UNECLAC)

**End of Project Independent Evaluation**

As foreseen in the project plan, UN ECE has recently appointed an independent expert to undertake the mandatory evaluation of the above mentioned Development Account project. In order to enable the evaluator to compile a good summary overview of the various activities implemented by the five participating Regional Commission secretariat offices, you are kindly requested to complete this questionnaire at your earliest convenience.

Kindly provide your assessment of the various accomplishments as detailed as possible, so that the successes and the achievements of the project, as well as any challenges faced during the implementation, can be described correctly and objectively.

The Questionnaire is standardized for all participating Regional Commissions, but also provides ample scope for region-specific annotations. Completion of the questionnaire will not require much time.

Please transmit the completed Questionnaire, together with any supplementary documents, at your earliest convenience directly to Mr. Ralph Wahnschafft -[Ralph.Wahnschafft@yahoo.com](mailto:Ralph.Wahnschafft@yahoo.com). Kindly also cc your communication to [Viktor.Badaker@unece.org](mailto:Viktor.Badaker@unece.org) for information.

**Questionnaire**

**Name of Regional Commission:** .....

**Contact person(s):** ..... **Tel:** ..... **e-Mail:** .....

**Please complete the Questionnaire by 14 February 2015 at the latest to enable a timely completion of the Independent Evaluation.**

## Summary Overview on Project Implementation by Regional Commission

<b><u>EXPECTED ACCOMPLISHMENTS</u></b>	<b><u>MAIN ACTIVITIES (as per Project Document)</u></b>
<p><b>E.A.1 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></p>	<p>Activity 1.1. Provide technical assistance to the national officials and experts through five regional trainings (one course for each region) in project development, finance and business planning to educate participants on mentioned issues.</p> <p>Note: Each Regional Commission Secretariat was provided a budget of US\$ 55,400 for implementation of this activity component (including for travel of participants, consultants, travel of staff, and operating expenses)</p> <p>Please provide detailed information and a self-evaluation on the implementation of this project activity in your region:</p>
<p>Please describe the implementation of this activity element by the Regional Commission</p>	<p>Title of regional training event:</p> <p>Venue:</p> <p>Date(s):</p> <p>(Co)Host (if different organization):</p> <p>Total number of participants:</p> <p>Number of participants supported under DA project:</p> <p>Gender balance: Male      Female:</p>
<p>Leveraging resources</p>	<p>Did other (inter)national organization(s) attend the training at own cost or contribute to the delivery of the programme? Which ones? Please describe:</p> <p>(please expand box if needed)</p>

Documentation and dissemination of training materials or other technical information:	<p>Did the Regional Commission Secretariat publish the training materials/presentations/proceedings in hard copy or electronic format?</p> <p>If yes, please insert weblink:</p>
	<p>Did the Regional Commission Secretariat experience any difficulties in implementing this activity element?</p> <p>Not applicable .... If yes, kindly explain: ....</p>
(Self)Evaluation of implementation by Regional Commission	<p>Did the Regional Commission Secretariat collect and analyze any feed-back from participants who attended the training?</p> <p>If yes, kindly explain:</p> <p>Please insert or attach electronic (self)evaluation (summary) report, if available:</p> <p>(please expand box, as needed)</p>
<b>Relevant indicator of achievement</b>	<p>IA1.1 Increased number of national officials and experts able to design and implement energy efficiency investment projects;</p> <p>Please summarize / comment / provide self-assessment on achievement by Regional Commission:</p> <p>(please expand box, as needed)</p>
Please provide any other comments or relevant information	<p>(please expand box, as needed)</p>

<p><b>E.A.1 (continued)</b></p> <p><b>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></p>	<p>Activity 1.2. Develop and conduct five regional workshops (one in each region) in order to:</p> <ul style="list-style-type: none"> <li>- provide knowledge on EE investment projects, which concerns both the regulatory and policy requirements and purely technical aspects that countries would need to deal with when attracting and implementing investments based of foreign or national capital.</li> <li>- analyze investment project pipeline (inventory of energy efficiency project proposals);</li> <li>- disseminate UNECE experience acquired in implementing the FEEI Project to stakeholders, including representatives from the business and banking sectors</li> </ul> <p>Note: Each Regional Commission Secretariat was provided a budget of US\$ 51,400 for implementation of this activity component (including for travel of participants, consultants, travel of staff, and operating expenses)</p>
<p>Please describe the activity element implemented by your Regional Commission</p>	<p>Title of regional workshop:</p> <p>Venue:</p> <p>Date(s):</p> <p>(Co)Host (if different organization):</p> <p>Total number of participants:</p> <p>Number of participants supported under DA project:</p> <p>Gender balance: Male      Female:</p>
<p>Leveraging project resources:</p>	<p>Did other (inter)national organization(s) attend the regional workshop at own cost or contribute to the programme? Which ones?</p> <p>(please expand box, if needed)</p>

<p>Documentation and dissemination of materials or other technical information:</p>	<p>Did the Regional Commission publish the training materials/presentations/proceedings in hard copy or electronic format?</p> <p>If yes, please insert weblink:</p>
	<p>Did the Regional Commission experience any difficulties in implementing this activity element?</p> <p>Not applicable .... If yes, kindly explain: ....</p>
<p>(Self)Evaluation of implementation by Regional Commission</p>	<p>Did the Regional Commission collect and analyze feed-back from participants who attended the regional workshop?</p> <p>If yes, kindly explain:</p> <p>Please attach electronic (self)evaluation (summary) report, if available:</p>
<p><b>Relevant indicators of achievement</b></p>	<p>IA1.1 Increased number of national officials and experts able to design and implement energy efficiency investment projects;</p> <p>IA1.2 Increased number of energy efficiency investment project proposals in the public and private sectors prepared by national experts in beneficiary countries and submitted for consideration to domestic and international investors, banks and other financial institutions;</p> <p>Please summarize / comment on achievement by Regional Commission:</p> <p>(please expand box as needed)</p>
<p>Please provide any other comments or relevant information</p>	<p>(please expand box, as needed)</p>

<p><b>E.A.2 Improved regulatory and institutional framework for promotion of new financing mechanisms for energy efficiency projects</b></p>	<p>Activity 2.1. Develop fifteen case studies (three for each Regional Commission) on the experience of policy reforms in cooperation with national coordinators and national participating institutions in beneficiary countries to be discussed at five regional policy seminars</p> <p>Note: Each Regional Commission was provided a budget of US\$ 28,400 for implementation of this activity component (including for consultants, travel of staff, contractual services, and operating expenses)</p>
<p>Please describe the activity element implemented by your Regional Commission</p>	<p><b>Case study / country study 1</b></p> <p>Title:</p> <p>Name of author(s):</p> <p>Published by Regional Commission:   yes                   no</p> <p>Weblink to publication:</p>
	<p><b>Case study / country study 2</b></p> <p>Title:</p> <p>Name of author(s):</p> <p>Published by Regional Commission:   yes                   no</p> <p>Weblink to publication:</p>
	<p><b>Case study / country study 3</b></p> <p>Title:</p> <p>Nam of author(s):</p> <p>Published by Regional Commission:   yes                   no</p> <p>Weblink to publication:</p>

	<p><b>Other related publications by Regional Commission</b></p> <p>Title:</p> <p>Author(s):</p> <p>Published: yes            no</p> <p>Weblink to publication:</p>
<p>(Self)Evaluation of implementation by Regional Commission</p>	<p>Did the Regional Commission experience any difficulties in implementing this activity element?</p> <p>Not applicable: ....    If yes, kindly explain: .....</p>
<p><b>Relevant indicators of achievement</b></p> <p>(Self)Evaluation of implementation by Regional Commission</p>	<p>IA2.1    Increased number of regulatory measures prepared for adoption by beneficiary countries to promote energy efficiency market formation;</p> <p>IA2.2    Number of implemented institutional changes, which promote new financing mechanisms for energy efficiency projects;</p> <p>Did the case studies / country reports include action oriented conclusions and recommendations on regulatory measures?</p> <p>If yes, which ones? Please describe, or attach report with recommendations.</p> <p>(please expand box as needed)</p>
<p>Please provide any other comments</p>	<p>(please expand box, as needed)</p>

<p><b>E.A.2 Improved regulatory and institutional framework for promotion of new financing mechanisms for energy efficiency projects</b></p>	<p>Activity 2.2 Conduct five policy seminars (one in each region) focusing on policy reforms to promote financing of energy efficiency investments with the aim of strengthening the capacity of national and local policymakers in each region</p> <p>Note: Each Regional Commission was provided a budget of US\$ 48,400 for implementation of this activity component (including for travel of participants, consultants, travel of staff, contractual services, and operating expenses)</p>
<p>Please describe the activity element implemented by your Regional Commission</p>	<p>Title of Regional Policy Seminar:</p> <p>Venue:</p> <p>Date(s):</p> <p>(Co)Host (if different organization):</p> <p>Total number of participants:</p> <p>Number of participants supported under DA project:</p> <p>Gender balance: Male      Female:</p>
<p>Leveraging project resources:</p>	<p>Did other (inter)national organization(s) attend the Regional Policy Seminar at own cost or contribute to the programme? Which ones?</p>
<p>Documentation and dissemination of Policy Seminar Proceedings or other technical information:</p>	<p>Did the Secretariat of the Regional Commission publish the proceedings in hard copy or electronic format?</p> <p>If yes, please insert weblink:</p>



<p>(Self)Evaluation of implementation by Regional Commission</p>	<p>Did the Secretariat of the Regional Commission experience any difficulties in implementing this activity element?</p> <p>Not applicable .... If yes, kindly explain: .....</p>
<p><b>Relevant indicators of achievement</b></p> <p>(Self)Evaluation of implementation by Regional Commission</p>	<p>IA2.1 Increased number of regulatory measures prepared for adoption by beneficiary countries to promote energy efficiency market formation;</p> <p>IA2.2 Number of implemented institutional changes, which promote new financing mechanisms for energy efficiency projects;</p> <p>Did the Regional Policy Seminar identify action oriented energy efficiency policy recommendations?</p> <p>Please summarize / comment on achievement by Regional Commission:</p> <p>(please expand box as needed)</p>
<p>Please provide any other comments</p>	<p>(please expand box as needed)</p>

<p><b>E.A.3. Increased financing for investments in energy efficiency projects, including through the innovative financing mechanisms</b></p>	<p>Activity 3.1. Develop an investment project pipeline: inventory of energy efficiency project proposals, each of which contains standard presentation of energy efficiency investment project, with details of the total cost of the project, investment requirements, projected internal rates of return and carbon dioxide emission reductions for submission to domestic and international investors, banks, investment funds, and other financial institutions in beneficiary countries</p> <p>Note: Each Regional Commission was provided a budget of US\$ 15,400 for implementation of this activity component (including for consultants, travel of consultants, travel of staff, and operating expenses)</p>
<p>Please describe the activity element implemented by your Regional Commission</p>	<p>Did the Secretariat of the Regional Commission compile an inventory of energy efficiency project proposals as envisaged in the Project Document?</p> <p>Yes (completed):    yes (under preparation):    No:</p> <p>Number of energy efficiency proposals developed:</p>
<p>Compilation and dissemination of inventory of energy efficiency project proposals</p>	<p>Did the Secretariat of the Regional Commission publish the inventory of project proposals (in hard copy or electronic format)?</p> <p>If yes, please attach or insert weblink:</p>
	<p>Did the Secretariat of the Regional Commission experience any difficulties in implementing this activity element?</p> <p>Not applicable .... If yes, kindly explain: .....</p>
<p><b>Relevant indicators of achievement</b></p>	<p>IA3.1    Increased number of beneficiary countries, which improved financing of energy efficiency projects;</p> <p>IA3.2    Increased number of financial institutions that are engaged in investments to energy efficiency projects in beneficiary countries.</p>



	<p>Did any of the participating representatives of the region announce any follow-up measures or initiatives?</p> <p>Did the Regional Commission Secretariat publish the proceedings, conclusions or recommendations of the end-of-project global workshop on the Regional Commission webpage?</p> <p>Is the Regional Commission Secretariat planning any follow-on activities, trainings, events or publications (planned to be financed from sources other than the UN Development Account)?</p>
<p>Please provide any other comments</p>	<p>Are there any concluding comments on experiences or other relevant observations that the Regional Commission Secretariat wished to be reflected in the Evaluation Report?</p> <p>(please expand box, if needed)</p>
	<p style="text-align: center;"><b>Thank you very much in advance!</b></p>

Please send completed Questionnaire as soon as possible directly to

[Ralph Wahnschafft@yahoo.com](mailto:Ralph_Wahnschafft@yahoo.com) with cc to: [Viktor.Badaker@unece.org](mailto:Viktor.Badaker@unece.org)

## **Annex 5: List of stakeholders consulted (by Organization)**

### **UN ECE – Sustainable Energy Division**

Mr Scott Foster, Director, Sustainable Energy Division, UN ECE  
(in person, during ToB to Geneva)

Ms. Charlotte Griffith, Senior Economic Affairs Officer, Sustainable Energy Division, UN ECE  
(in person, during ToB to Geneva)

Mr. Victor Badaker, Economic Affairs Officer, Sustainable Energy Division, UN ECE  
(in person, during ToB to Geneva)

Mr Oleg Dzioubinski, Economic Affairs Officer, Energy Efficiency, Sustainable Energy Division,  
UN ECE (in person, during ToB to Geneva)

Mr. Branko Milicevic, Economic Affairs Officer, Sustainable Energy Division, UN ECE  
(in person, during ToB to Geneva)

### **UN ECE – Programme Management Unit**

Ms. Zamira Eshmambetova, Director, Programme Management Unit, OES, UN ECE  
(in person, during ToB to Geneva)

Ms. Catherine Haswell, Senior Programme Officer, Programme Management Unit, OES, UNECE  
(pre-evaluation orientation, and review of report)

### **UN ESCAP – Environment and Development Division**

Mr. Rae Kwon Chung, Director, Environment and Development Division, UN ESCAP  
(in person, during ToB to Bangkok)

Mr. Hongpeng Liu, Chief, Energy Security and Water Resources Section, UN ESCAP  
(in person, during ToB to Bangkok)

Mr. Sergey Tulinov, Economic Affairs Officer, Energy Security and Water Resources Section, UN  
ESCAP (in person, during ToB to Bangkok)

Mr. Kohji Iwakami, Economic Affairs Officer, Energy Security Section, UN ESCAP  
(in person, during ToB to Bangkok)

### **UN ESCAP Programme Management Division**

Mr. Edgar Dante, Programme Management Officer, Programme Management Division, UN  
ESCAP (in person, during ToB to Bangkok)

## **UN ESCWA – Energy Section**

Mr. El Habib El Andaloussi, Chief, Energy Section, Sustainable Development and Productivity Division, UN ESCWA (via email communications)

Mr. Mongi Bida, First Economic Affairs Officer, Energy Section, Sustainable Development and Productivity Division, UN ESCWA (via email communications)

## **UN ECA**

Mr. Stephen Karingi, Director, Regional Integration, Infrastructure and Trade Division, UN ECA (via email communications)

Mr. Monga Mehlwana, Industrialization and Infrastructure Section, Regional Integration, Infrastructure and Trade Division, UN ECA (via email communications)

Mr. Soteri Gatera, Senior Economic Affairs Officer, Industrialization and Infrastructure Section, Regional Integration, Infrastructure and Trade Division, UN ECA (via email communications)

## **UN ECLAC – Natural Resources and Energy Unit**

Mr. Manlio Coviello, Chief, Natural Resources and Energy Unit, UN ECLAC (via email communications)

Mr. Jean Acquatella Corrales, Economic Affairs Officer, Natural Resources and Energy Unit, UN ECLAC (via email communications)

## **UN DESA – Sustainable Development Division (Secretary, UN-Energy)**

Mr Ivan Vera, Sustainable Development Officer, Division for Sustainable Development, UN DESA (in person, during personal visit to NYC)

## **Independent consultants**

Mr. Alexandre Chachine, Natural Gas and Energy Efficiency Expert, Consultant, UN ECE (in person, during ToB to Geneva)

Mr. Deltcho Vitchev, Director, Renaissance Finance International Ltd., London; Consultant UNECE (via email communications)