# The Energy Efficiency Thematic Group (EETG)

(of the World Bank Group)

# 2006-2007 Annual Report

## August 17, 2007

## First Year Highlights of the Energy Efficiency Thematic Group

- The Energy Efficiency Thematic Group (EETG) of the World Bank Group was established on August 31, 2006, with support from the Energy Sector Management Assistance Program (ESMAP) in the Energy, Transport and Water Department.
- The membership of the EETG has grown steadily and currently stands at over 150 staff/consultants, representing different practices, networks and operational regions, and offices within the WBG (World Bank, IFC, and MIGA), with active involvement of many core staff on a regular basis.
- Since its establishment, the EETG has held **regular meetings**, a total of 14 meetings (as of date), including one training workshop and one international video conference, which covered contemporary topics of interest within the broad area of energy efficiency.
- The EETG meetings during the first year have featured a total of **over 25 speakers**, including over 15 Bank staff and 10 external energy efficiency experts.
- During the first year of its operation, a total of 430 participants attended the EETG meetings, with average attendance of over 30 participants per meeting.
- Of the total number of 430 participants that attended EETG meetings in the first year, roughly two-thirds were staff/consultants of the WBG, and the balance one-third were external participants, representing over 25 different international, bilateral, NGOs, and private sector organizations and partners.
- Topics of discussion in the EETG meetings have ranged across a diverse set of issues related to the energy efficiency sector, including innovative financing, investments, technology, policy, regulation, pricing and carbon finance.
- The EETG has had **active cooperation** and joint meetings with other similar groups/ events, such as the Air Quality Thematic Group, ESMAP Knowledge Exchange Series and Carbon Finance Unit Initiatives.
- The EETG has provided an effective platform to promote **networking between WBG** staff and experienced practitioners and researchers from the external energy efficiency community.
- The EETG meetings have stimulated exchange of new ideas/ approaches, operational knowledge and tools amongst WBG staff/consultants from various sectors, working/interested in the area of energy efficiency. These interactions have helped start specific cross-sectoral collaborative initiatives, for instance, a recentlycompleted study which analyzed the synergies and opportunities for scaling up energy efficiency through programmatic Clean Development Mechanism (CDM); and a concept paper prepared for the establishing a proposed International Carbon Finance - Energy Efficiency Network.

## I. Background

The Energy Efficiency Thematic Group (EETG) is a World Bank Group (WBG) -wide voluntary working group focusing on energy efficiency issues. It was **established on August 31, 2006**, through the support from the **Energy Sector Management Assistance Program (ESMAP)** in the Energy, Transport and Water Department of the Bank.<sup>1</sup>

The EETG brings together staff and consultants of the WBG, from various practices, networks, regions and offices, interested/ working in the area of energy efficiency. The EETG is committed toward facilitating the exchange of operational knowledge and tools among staff working/interested in the area of energy efficiency, and toward finding effective approaches to mainstreaming energy efficiency into non-energy sectors (e.g., transport, urban, carbon finance, etc.).

# II. Key Activities of EETG

Since its inception, **membership of the EETG has steadily grown to over 150 staff and consultants**, representing various practices, networks, offices and operational regions within the WBG. The EETG has been organizing regular meetings, around discussion/ presentations on current energy efficiency-related topics which are of relevance to operations, in terms of scaling up energy efficiency investments. Senior Bank and IFC staff and well-known experts from outside the Bank Group have delivered presentations or facilitated discussions during these meetings. In all, the fourteen (14) meetings – including one training workshop and one international video conference - covering **over 15 internal and 10 external speakers**, have been held so far. **These meetings have been very well attended and have, in total, attracted 430 WBG staff and external participants, with an average of over 30 participants per meeting.** Some of these meetings have been held in close collaboration with other similar groups/ events, such as the Air Quality Thematic Group, ESMAP Knowledge Exchange Series and Carbon Finance Unit Initiatives.

In addition to facilitating networking amongst WBG staff and consultants working on energy efficiency issues, the EETG also serves as an informal forum to promote the networking between the WBG and experienced energy efficiency practitioners and researchers from the external community. The EETG meetings and discussions during the first year of its operations have included interactions with a wide range of stakeholders including staff/representatives working in the area of energy efficiency **from 25 external organizations**, including the Global Environment Facility (GEF), Inter-American Development Bank (IADB), Asian Development Bank (ADB), World Energy Council (WEC), International Energy Agency (IEA), US Agency for International Development (USAID), US Department of Energy (USDOE), US Environment Policy Administration (USEPA), US Department of State, National Renewable Energy Laboratory (NREL), United Nations Environment Program (UNEP), United Nations Industrial Development Organization (UNIDO), Renewable Energy and Energy Efficiency Partnership (REEEP), and many consulting firms, research organizations, NGOs, etc.

The EETG Secretariat is currently located within ESMAP, ETW. An electronic discussion/ distribution list of the EETG ("EE Group") helps facilitate both formal and informal virtual

<sup>&</sup>lt;sup>1</sup> The establishment of the Energy Efficiency Thematic Group was one of the outputs under an ESMAPfunded activity, "Energy Efficiency Needs and Toolkit Assessment" (P101646), initiated in FY2007.

communications, ranging from regular meeting notices (see Annex A for an illustrative example of an EETG meeting announcement), distribution of presentations after the meetings, organizing meetings in smaller groups, soliciting responses to individual technical queries, and getting peer reviews done on project concepts and designs, etc. for energy efficiency projects. Several of the EETG events in 2007 were also linked into the World Bank's Learning Management System (LMS).

## III. Summary of the EETG Meetings

The table below provides a brief summary of the EETG meetings held during the first year of its operations (see Annex B for pictures from some of these meetings).

Date of Meeting	Meeting Topic	Moderator and/or Speaker(s)	Description of the Topic	Number of Participants				
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	1	2006		·				
Aug 31	Inception/ Scoping Meeting of the Energy Efficiency Thematic Group		This scoping meeting focused on basic organizational structure of the EETG, operational modalities and identification of activities to be implemented through the EETG	17				
Sept 20	Programmatic Clean Development Mechanism (CDM) and Energy Efficiency: Opportunities for Synergies	Chairs: Robert Taylor (EASTE) and Leiping Wang (EASTE); Speakers: Klaus Oppermann (ENVCF) and Martina Bosi (ENVCF).	A presentation and discussion centered primarily on the challenges of integrating CDM and carbon finance into energy efficiency operations in the WBG. Suggestions made to help mainstreaming CDM into scaling up energy efficiency operations.	24				
Oct 12	The Economics of Dynamic Pricing and Smart Metering: A US Perspective <sup>2</sup>	Speakers: Ahmad Faruqui and Peter Fox- Penner, The Brattle Group, USA.	A presentation and discussion on the state-of-art in time of use rates and metering in the US, even among smaller/retail customers: dynamic pricing (including real time pricing) and smart metering. Presented demand response to dynamic pricing.	20 <sup>3</sup>				
Oct 25	Approaches to mainstreaming energy efficiency in the non- core energy sectors in the WBG	Chair and Speaker: Russell Sturm (IFC)	A brainstorming discussion focusing on approaches to mainstreaming energy efficiency in the non-core energy sectors (such as transport) in the WBG.	35 <sup>1</sup>				
Nov 20	Regulatory Energy Efficiency Initiatives in the State of Maharashtra, India	Chair: Ede Ijjasz (ETWES); Speaker: Pramod Deo, Maharashtra Electricity Regulatory Commission, India; Discussants: Prasad Tallapragada (AFTEG), Eric Groom (IEF) and Ashok Sarkar (EWTES)	A presentation and discussion focusing on the energy efficiency- related regulatory and innovative pricing initiatives undertaken by the Maharashtra Electricity Regulatory Commission in India. Initiatives cover innovative tariffs and demand side management.	40 <sup>1</sup>				
	2007							
Feb 22	Integrated Gasification	Chair: Bilal Rahill (SASSD); Speaker:	A presentation providing an overview of the IGCC technology with a focus	37				

Energy Efficiency Thematic Group Meetings (August 2006 – August 2007)

<sup>&</sup>lt;sup>2</sup> Co-organized with ESMAP Knowledge Exchange Series.

<sup>&</sup>lt;sup>3</sup> Estimated number of participants.

Jul 12	The Clean Energy Wiki and Energy Efficiency Portal - Introduction and Discussion	(Alliance to Save Energy). Moderators: Gary Stuggins (ETWEN), Ashok Sarkar (ETWES), Richard Forrest (ETWEN), Jessica Morey (ETWEN)	Viideo conference linking six sites in Washington DC, London, Vienna, Moscow, Manila, Paris. To present and discuss about the Clean Energy Wiki and its Energy Efficiency Portal (under construction) and about collaborative steps for taking it	60
Jun 21	Energy Efficiency Initiatives in the Public Sector	Chair: Todd Johnson (LCSEG); Speakers: Anke Meyer, Varadarajan Atur (ECSSD), Jeffrey Harris	potentially for carbon finance projects. Being composed of a series of presentations and discussions, which examined the international experiences and models of public sector energy efficiency improvement	36
Jun 12	Monitoring and Verification (M&V) of Energy Savings for Energy Efficiency Investments - The Use of an International M&V Protocol - IPMVP	Speaker: Pierre Baillargeon, Econoler International, Quebec, Canada	projects and programs. A half-day training seminar on a leading international standard in M&V for energy efficiency projects, the International Measurement and Verification Protocol (IPMVP). It presented IPMVP and showed how IPMVP's different methodologies can be applied in the market place, and patorticily for earbor finance.	24
June 11	Building Energy Efficiency Codes and Carbon Finance, Opportunities Ahead	Speaker: Pierre Baillargeon, Econoler International, Quebec, Canada	Discussions on innovative ideas about how building codes can be incorporated in carbon finance strategies, to effectively deliver emission reduction in newly- constructed buildings, and CDM	29
May 9	Energy Demand Management of Buildings and GHG Reduction Potential in China	Moderaor: Martina Bosi (ENVCF); Speaker: Prof. Trevor Davies, University of East Anglia, United Kingdom	A presentation and discussion on a UK management support system for low carbon practices in buildings energy management, and its potential adaptation in China.	13
Mar 21	Mobilizing Commercial Lending for Energy Efficiency/ Renewable Energy Projects: IFC's Evolving Approach	Chair: Russell Sturm, IFC; Speakers: Ian Crosby (IFC-Moscow), Miles Stump (IFC, Russia), Calvin Xu (IFC, China), Pavol Vajda (IFC, Slovakia)	A presentation and discussion on the development of IFC's effort to promote sustainable commercial finance for energy efficiency and renewable energy in six Central European countries, Russia, and in China. Featuring experienced program managers of IFC in the field. Shared practical experience and lessons- learned.	41
Mar 14	Energy Efficiency in Buildings: Experiences from the India	Chair: Ede Ijjasz (ETWES); Speaker: S Raghupathy, CII-Godrej Green Building Center, Hyderabad, India.	A presentation on the green building movement and achievement of a public-private partnership in India, for energy efficiency improvements in buildings. Followed by extensive discussions.	33
	Combined Cycle (IGCC): Technology Progress and Implications on Energy Efficiency and Air Quality Improvements <sup>4</sup>	Tan-Ping Chen, Nexant Inc., San Francisco.	on its energy and environmental benefits and also barriers in applying the technology in China and India.	

<sup>&</sup>lt;sup>4</sup> Co-organized with the Air Quality Thematic Group.

	Approach to Energy Savings	Delhi, India.	traditional energy audits, was presented along with relevant examples of applications in the refinery, petro-chemical, paper and sugar industries.	
Aug 23 - <i>planned</i>	Scaling Up Demand Side Energy Efficiency Improvements Through Programmatic Clean Development Mechanism (CDM) <sup>5</sup>	Moderators: Ashok Sarkar (ETWES) and Martina Bosi (ENVCF); Speakers: Christiana Figueres and Michael Philips		

# IV. Impact of the EETG Activities

Based on the feedback received from WBG staff/consultants, it is clear that the EETG has started making an impact in terms of facilitating the exchange of new ideas, operational knowledge and tools amongst WBG staff/consultants working/interested in the area of energy efficiency, and toward finding effective approaches to mainstreaming energy efficiency into non-energy sectors (e.g., transport, urban, carbon finance, etc.). This is in line with the cross-sectoral strategies envisaged under the Energy Efficiency for Sustainable Development (EEfSD): World Bank's Energy Efficiency Scale Up Action Plan for FY07-09. For instance, the lessons and practices presented by IFC energy efficiency colleagues in the March 21, 2007 meeting on mobilizing commercial financing to energy efficiency and renewable energy projects generated ideas that are also being considered by the task team for World Bank's China's energy efficiency financing project, which is under preparation. Furthermore, interactions between core energy sector and carbon finance sector colleagues of EETG, have led to specific collaborative initiatives, including a recently-completed study which analyzed the synergies and opportunities for scaling up energy efficiency through programmatic Clean Development Mechanism (CDM); and a concept paper prepared for the establishing a proposed International Carbon Finance -Energy Efficiency Network.

In addition to facilitating close interactions amongst WBG staff/consultants working on/interested in developing energy efficiency projects and programs, the EETG has also served as an informal platform to promote effective networking with experienced practitioners and researchers from the external energy efficiency community.

# V. EETG Coordination and Contacts

## Technical Support:

- Ashok Sarkar, Sr. Energy Specialist, ETWES, (<u>asarkar@worldbank.org</u>)
- Xiaoyu Shi, Research Assistant, ETWES, (xshi@worldbank.org)

## Logistics/LMS Support:

- Eileen Fredriksen, Sr. Know. Mgmt Assistant, ETWEN (<u>efredriksen@worldbank.org</u>)
- Nyra Wallace, Program Assistant, ETWES (<u>nwallace@worldbank.org</u>)

# EE Thematic Group E-Mail address: eetg@worldbank.org

<sup>&</sup>lt;sup>5</sup> To be co-organized with the Carbon Finance Unit.

Annex A: Illustrative Sample of an EETG Meeting Announcement

The Energy Efficiency Thematic Group (EETG) of the World Bank Group

Invites you to a BBL Discussion

**Energy Efficiency Initiatives in the Public Sector** 

Date : Thursday, June 21, 2007 Time : 12:30 pm - 2:00 pm Venue : MC9-100

Chaired by: Todd Johnson, Sr. Energy Specialist, The World Bank

#### **Speakers**

Anke Meyer, Energy Consultant, The World Bank; Varadarajan Atur, Sr. Financial Specialist, The World Bank; Jeffrey Harris, Vice President, Alliance to Save Energy; &

#### **Description**

The World Bank Group is committed to scaling up its support for energy efficiency (EE) in developing countries. This EETG meeting is part of a series, exploring best practices and tools in the area of EE investment and policy initiatives. In most countries the public sector is one of the biggest consumers of energy and buyers of energy-consuming equipment. But this sector is for many reasons notoriously wasteful. This session will examine the international experiences and models of public EE improvement programs in several countries and focus on key elements of these projects and programs which would be useful for replicating these successes across other client countries. The session outline is as follows:

- Overview of models and international experiences in public sector EE development;
- Case Studies: Public building retrofits in Serbia, North-American experience with public building retrofit and EE purchasing programs, Energy Saving Partnerships for public buildings in Berlin, etc.;
- Question and Answers

#### **Bio of Speakers**



## **Registration**

Bank Staff planning to attend the BBL may kindly register at LMS through the following link: http://lms.worldbank.org/topclass/tce730iis.dll?Plugin-catreg-enroll-1152673

#### About the EETG

The Energy Efficiency Thematic Group (EETG) brings together staff and consultants of the World Bank Group (WBG) from various practices, networks and regions interested in the area of energy efficiency. The EETG has been organizing regular monthly meetings such as this one, since its establishment in August 2006, through the support from the Energy Sector Management Assistance Program (ESMAP) in the Energy, Transport and Water Department of the Bank. Unless otherwise noted, most meetings are open to external participants also. For further information about this event or the EETG, please contact:

- Ashok Sarkar (ESMAP) at asarkar@worldbank.org, 473-5391, or
- Xiaoyu Shi (ESMAP) at xshi@worldbank.org, 458-5817.

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## Annex B: Pictures from Recent EETG Meetings

EETG Meeting and Video Conference July 12, 2007

The Clean Energy "Wiki" and Energy Efficiency Portal -Introduction and Discussion



#### EETG Meeting June 11, 2007

Building Energy Efficiency Codes and Carbon Finance, Opportunities Ahead



EETG Meeting, March 21, 2007

Mobilizing Commercial Lending for Energy Efficiency/ Renewable Energy Projects: IFC's Evolving Approach