

Report on the APEC EWG Expert Group on Energy Efficiency and Conservation

38th APEC Energy Working Group Meeting Bali Indonesia, 16 November 2009

Since the last report from the Expert Group on Energy Efficiency and Conservation (EGEE&C) to the APEC Energy Working Group (EWG) at EWG37 in Santiago Chile, April 2009, the Expert Group has held its 34th Meeting. This was hosted by Chinese Taipei, 6-7 October 2009.

Current EGEE&C Activities

At EGEE&C 34, 23 officials and experts on energy-efficiency from ten APEC economies¹, the Asia-Pacific Energy Research Centre (APERC) and the APEC Market Access Group (MAG) met to discuss current and future projects, economy updates, and the ongoing role of the Energy Standards Information System (ESIS) and to hear a two presentations. One presentation was on the objectives and activities of the APEC Market Access Group. The second presentation was on the activities of APERC. The group also had a joint half day meeting with the Expert Group on New and Renewable Energy Technologies.

Earlier in the year, the Chair of the EGEE&C gave a presentation to the CTI Market Access Group on the activities of EGEE&C. The presentation focused on EGEE&C projects to date and the synergies these projects had with the aims of MAG.

EG&EEC Projects

Workshop on Policies to Promote Energy Efficiency in Transport in APEC Economies: A workshop was held in March 2009 to explore the development of an action plan on Transport energy efficiency and update the earlier transport survey. The proceedings of the workshop and the recommended action plan are available at <http://www.egeec.apec.org/>. Synopses will be presented on three further transport-related proposals at EWG 38.

- Intermodal freight
- Transit oriented development
- Bus rapid transit

Comparison of Building Energy Codes in APEC Economies: A desktop study on Building Energy codes and their implementation is underway and due for completion in November 2009. The study is investigating the long term effectiveness of polices that work and why they work. The aim is to replicate these polices in other economies.

Facilitation of International Harmonization of Standards for Energy Management in the APEC Region: A workshop was planned for October 2009 but has had to be postponed due to scheduling conflicts (a new date will be advised). The project will create a dialogue platform for experts in APEC economies to work towards internationally harmonised standards for industrial sector energy management and share learnings and best practice,

¹ China, Chinese Taipei, Hong Kong, Indonesia, Japan, Korea, Malaysia, New Zealand, Singapore, USA

APEC Expert Group on Energy Efficiency & Conservation (EGEE&C)

Chair: Mr. Terry Collins, New Zealand. terry.collins@eeca.govt.nz

Vice Chair: Mr. Li Tienan, China. litn@cecp.org.cn

Secretariat: secretariat@egeec.apec-esis.org



Reducing Barriers to Trade through Development Of A Common Protocol For Measuring The Seasonal Energy Efficiency (SEER) Of Air Conditioners. A workshop was held in Taipei in October 2009. This project builds an analytical platform to evaluate the SEER values for air conditioners to be traded and to help reach the goal of global energy saving, reduce barriers in trade, and stimulate the air-conditioning markets in APEC economies.

Alignment of National Standby Power Structures: A seminar was planned for late 2009 but has had to be postponed to the second half of 2010 due to scheduling conflicts. The purpose is to assist in the global alignment of standards relating to standby power consumption. This will assist APEC in developing policies that tackle the measurements and reduction of standby power in appliances and electronics.

Cool Roofs in APEC Economies: Review of Experience, Best Practices and Potential Benefits: The RFP process has been completed and several proposals have been received. They proposals are currently being evaluated. The aim of the project is to review best practice and the potential benefits of cool roof design to improve the energy efficiency of buildings. It will explore the benefits for hot and cold climates on roofs over the lifetime of buildings. However, it will focus on hot climates to see if summer benefits outweighed penalties in winter (less heat absorption).

Energy and Water Efficiency in Water Supply: Practical Training on Proven Approaches: A two day workshop for water utility managers is scheduled for Hanoi Vietnam around late 2009 early 2010. The combination of energy efficiency within water services has proven to be very cost effective with payback periods less than a year and some with as little as three months.

Development of LED Lighting Standards and Testing Technology: A workshop was held in Taipei in October 2009. Presentations were given by various LED experts from APEC economies responsible for most of the world's production of LED's. The experts shared their experience of testing technology for LED lighting modulus and fixtures and discussed the future development strategy for the LED optical lighting technology.

EGEEC project synopses seeking APEC funding in 2010 (rounds 1 &2)

Funding sought from	Project	Lead Economy	Amount sought
APEC Trade & Investment Liberalization Fund	<p>Harmonisation of LED Standards</p> <p>Objective of Project:</p> <ul style="list-style-type: none"> To promote the involvement of APEC economies in the development of international standards for light emitting diodes (LEDs) in order to prevent the emergence of a varying number of standards. 	Australia	\$50,000



	<ul style="list-style-type: none"> To work with governments in APEC to exchange information and develop support for harmonizing a set of standards for testing, quality, minimum efficiency, and labeling of LEDs. 		
APEC Trade & Investment Liberalization Fund	<p>Reducing Trade Barriers for Environmental Goods & Services (Energy Efficient Products) in APEC region</p> <p>Objective of Project:</p> <ul style="list-style-type: none"> To help mitigate the impact of climate change by reducing barriers to trade and investment in environmental goods and services (EGS) — specifically energy efficient products. By collating information through mapping out energy relevant information including energy performance standards, labelling, and testing and measurement procedures, currently adopted by individual APEC members, the project will provide good practices for APEC members who have been or will be developing their policies to make energy-efficient products more available in the region. 	Japan	\$75,000
APEC Support Fund	<p>Market Compliance Mechanisms for Energy Efficiency Programs</p> <p>Objective of Project:</p> <ul style="list-style-type: none"> survey strategies used by APEC economies to monitor market compliance with energy-efficiency standards and labeling programs for lighting equipment and other products; identify challenges posed by expanding demands for products; share experience on compliance issues, market survey techniques, sampling efforts, and compliance indicators used by regulation and enforcement agencies 	USA	\$50,000



<p>APEC Support Fund</p>	<p>Street & Outdoor LED Lighting Initiative - Asia (SOLLIA)</p> <p>Objective of Project:</p> <ul style="list-style-type: none"> • Review existing LED streetlighting efforts and outdoor LED lighting status in APEC economies. • Prepare a best practice guidebook for LED outdoor street lighting and recommend practical and cost-effective applications areas for LED products. • Convene a regional workshop to discuss best practices for street/outdoor lighting using LEDs. • Facilitate regional implementation – coordinated pilot and other demonstration projects to lower adoption barriers. • Compile and prepare regional information on LED street and outdoor lighting standards for submission to the APEC Energy Standards Information System (ESIS). 	<p>USA</p>	<p>\$50,000</p>
<p>APEC Operational Account</p>	<p>Best Practices in Energy Efficiency and Renewable Energy Technologies in the Industrial Sector in APEC Region</p> <p>(Joint Proposal EGEE&C and EGNRET)</p> <p>Objective of Project</p> <ul style="list-style-type: none"> • This project will highlight best practices in the use of renewable energy and energy efficient technology based system as they have been applied in APEC industrial sector. The project report will include the development of the industrial sector energy roadmap that would help guide further cooperation in the area of clean and efficient industrial energy systems. 	<p>Thailand</p>	<p>\$50,000</p>
<p>APEC Operational Account</p>	<p>Energy, Transport and Environmental Benefits of Intermodal Freight Transport</p> <p>Objective of Project</p>	<p>USA</p>	<p>\$75,000</p>



**Asia-Pacific
Economic Cooperation**

	<ul style="list-style-type: none"> This study would assess the benefits of intermodal freight strategies that can help APEC economies to shift freight transport from energy-intensive transport modes like trucks to energy-economising modes like rail, barge and ship. 		
APEC Operational Account	<p>Energy, Transport and Environmental Benefits Transit Oriented Development</p> <p>Objective of Project</p> <ul style="list-style-type: none"> This study would assess the benefits of transit-oriented development strategies that can help cities in APEC economies reduce automobile traffic through the clustering of commercial and residential buildings around urban transit routes. 	USA	\$75,000
APEC Operational Account	<p>Energy, Transport and Environmental Benefits Bus Rapid Transit</p> <p>Objective of Project:</p> <ul style="list-style-type: none"> This study would assess the benefits of bus rapid transit systems that have been adopted in many APEC economies. Using a model originally developed in Curitiba, Brazil, bus rapid transit systems encourage the use of buses through the creation of designated bus lanes and fixed bus stations where passengers can pay fares prior to boarding, making bus travel a faster and more convenient alternative means of urban transport. Benefits of bus rapid transit would be evaluated in terms of reduced oil imports, reduced greenhouse gas emissions, and reduced road congestion in the APEC economies that have adopted them. Through a better understanding of these benefits, the expansion of bus rapid transit should be encouraged. 	USA	\$75,000

Issues and Priorities

Strategic Direction



At EGEE&C 32, the group agreed to develop a 2-3 year action plan to direct its activities over the next period. This would assist the group to focus and prioritise its activities and to make better linkages with other APEC and non-APEC forums. While the group has a Mission, Objectives and a Strategy, these are high level and do not identify specific activities.

At EGEE&C 33 it was agreed that a survey of economies energy efficiency priorities and barriers would be prepared and sent to economies for completion. The survey has been completed and a summary of the results was presented to EGEE&C 33 in Chinese Taipei. Analysis of the results has not yet being completed but, it is expected that the analysis will be completed before the end of the year and sent to the group in an out of session paper.

Establishing clear priorities for the group will facilitate engagement with other expert groups where there are overlapping interests (e.g. EGNRET & MAG) and with other regional and international fora. It has recently been noted that there are more and more regional and international foray and initiatives addressing energy efficiency and conservation, including APP Buildings and Appliances Task Force, initiatives under ASEAN, USAID ECO Asia Clean Development and Climate Program, and IEA initiatives on standby power and energy-efficient lighting and appliances. It has been noted that enhanced and systematic international cooperation and leadership is essential in this area. The group is currently endeavoring to coordinate its activities with these groups through a range of channels.

Upcoming EGEE&C Meetings

- **EGEE&C 35:** Chinese Taipei hosted the meeting in the week beginning 5 October 2009, to coincide with a workshop on LED lighting, Seasonal Energy Efficiency Rating for Air Conditioners, EGNRET and Biofuels Workshop
- **EGEE&C 36:** EGRNET and the EGEE&C will hold a joint meeting in New Zealand in the first week of February in Wellington.
- **EGEE&C 37:** Japan has offered to host the next meeting at a date and location to be confirmed.