



Energy Working Group

**EWG38**  
Bali, Indonesia  
16-20 November 2009

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## **EWG38 Summary Record**

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EWG38 was held in Bali, Indonesia from 16-20 November 2009. The meeting was co-chaired by the Lead Shepherd Dr. Phyllis Yoshida, Assistant Secretary for International Energy Cooperation in the Office of Policy and International Affairs, U.S. Department of Energy, and Mrs. Emy Perdanahari, Director, Ministry of Energy & Mineral Resources, Indonesia. Delegates from Australia; Brunei Darussalam; Canada; Chile; Peoples' Republic of China; Hong Kong, China; Indonesia; Japan; Malaysia, Republic of Korea; New Zealand; Peru; the Philippines; Singapore; Chinese Taipei; Thailand; United States and Viet Nam attended the meeting. The International Energy Agency and Colombia participated in the EWG38 with guest status.

Officials from the Asia Pacific Energy Research Centre (APEREC); Energy Business Network; APEC and EWG Secretariats; Expert Group Chairs on Energy Data and Analysis (EGEDA), New and Renewable Energy Technologies (EGNRET), Energy Efficiency and Conservation (EGEEC); the APEC Biofuels Task Force, and the Energy Trade and Investment Task Force participated to the meeting. The Chair of the Clean Fossil Energy (EGCFE) was not in attendance. The Chair of the Biofuels Task Force reported for him. (Attachment A provides a list of EWG38 participants).

### **1. Opening Addresses and Adoption of the Agenda**

The EWG Lead Shepherd welcomed delegates and thanked Indonesia for the excellent organisation of EWG38 and its associated meetings. The Lead Shepherd introduced members to the Co-Chair, Mrs. Emy Perdanahari, who welcomed delegates to Indonesia. Mrs. Perdanahari stated that the energy sector was changing rapidly, and that energy formed a crucial component of international relations. She also stated that in this time of economic recovery energy security has become a very important for economies' growth. Mrs. Perdanahari stressed out also the importance of linking energy development to sustainability and environmental, including promoting the development of renewable energy. Mrs. Perdanahari thanked Australia for the leadership it had provided to the EWG since 1990, and thanked the U.S. for picking up the lead-role after Australia.

The Lead Shepherd thanked the Co-Chair for her warm welcome. The Lead Shepherd stated that the 17<sup>th</sup> APEC Economic Leaders' Meeting (AELM-17) held in Singapore on November 14-15 2009 stressed the importance of sustaining economic growth and connecting the APEC region. The Chair said that the outcome of that meeting will strongly influence the EWG's work ahead in preparation for the upcoming APEC Energy Minister's Meeting (EMM9) and for APEC Leaders next autumn

The Chair added that the work of the EWG is now more crucial and important than ever to support the APEC region's momentum towards strong, sustainable and balanced global economic growth - as stressed by Leaders at AELM-17. She reminded economies that APEC accounts for half the world's economic output and energy use. In referring back to the AELM, the Chair called for actions to support a balanced, inclusive and sustainable growth, and to accelerate regional economic integration.

The Lead Shepherd reaffirmed the importance of multilateral cooperation particularly in times of economic uncertainty. She emphasized APEC's role as a leader among multilateral bodies and noted its ability to reinforce other multilateral fora such as the G-20 through coordination and cooperation. The Lead Shepherd underlined also the importance of APEC's EWG as a promoter of sustainable and reliable energy resources and in the underlying roles of science, technology, engineering and policy development. The Lead Shepherd indicated that Ministers at EMM9 will likely seek new and improved activity on energy, thus the EWG needs to have a strategic focus going forward. The Lead Shepherd asked members to keep these issues and instructions in mind during EWG38.

### **Actions Arising/Next Steps**

- The agenda for EWG38 was approved by members. No comments or changes were brought forward.

## **2. APEC Secretariat Report**

Mr. Luis Enrique Vertiz, EWG Program Director, advised members of APEC EWG on priorities for 2010 arising from the APEC AELM in Singapore and on project process developments reaffirming APEC's commitment to the energy, climate change and sustainable development. Also, Mr. Vertiz presented the results of the 2009 Budget and Management Committee (BMC) Session #3 Key Points, with particular attention to the current APEC Project Management Reform currently underway.

**2010 APEC AELM Priorities:** Accelerating regional economic integration, supporting multilateral trading systems, and positioning the Asia-Pacific region for sustainable economic recovery were three themes that dominated the agenda of the 17th annual APEC Economic Leaders Meeting (AELM-17), hosted by Singapore Prime Minister Lee Hsien Loong from November 14-15 in Singapore.

The APEC Secretariat stated that in reference to the November 2009 AELM Meeting in Singapore, Japan, as the 2010 APEC Chair, will pursue the APEC 2010 priorities under the theme of "Sustaining Growth, Connecting the Region"

The APEC 2010 priorities are the following:

- Resist protectionism, and provide impetus for the successful conclusion of the Doha Round of negotiations under the WTO in 2010, and support the Multilateral Trading System;
- Accelerate regional economic integration by focussing on:
  - *Strengthening trade and investment liberalization (At-the-border)* by reducing tariffs, non-tariff barriers and other restrictions to trade and investment flows *at-the-border*.
  - *improving the ease of doing business (Behind-the-border)* by simplifying business regulations, as part of its structural reform agenda
  - *Enhancing physical connectivity (Across-the-border)* by improving logistics and transport networks to enhance physical connectivity *across-the-border*
- Strengthen APEC to be the premier forum for economic integration and cooperation in the APEC region, as well as an effective platform for business sector engagement.

## Energy Issues in the AELM:

- Important focus on energy efficiency and energy efficiency improvements (e.g. industry, commercial), biofuels, and renewables,
- Promote climate friendly technologies
- Promote sustainable growth
- Promote Trade in Environmental Goods and Services (EGS) in APEC region
- Support the *APEC Peer Review Mechanism on Energy Efficiency* (PREE)
- Prepare for and contribute to the 9<sup>th</sup> APEC Energy Ministers Meeting (EMM9) in June 2010
- Reviewed commitments from 2007 and 2008 (re: climate change GHG reductions, technology transfer).

**2009 BMC #3 Key Points:** The APEC Secretariat reported that in 2009, the BMC endorsed a series of reviews and reforms in relation to project management. The BMC has endorsed more regular project approval sessions and more rapid disbursement of funds to improve the timeliness and relevance of APEC projects.

Attempts are underway in the APEC Secretariat to improve transparency and put in place a quality assessment framework to help promote: quality, relevance and effectiveness of projects and their approvals. Achieving consistency in project assessment along these lines is important. In terms of project evaluation, elements of evaluation to include relevance, efficiency, impact, sustainability; and streamlined project administration. The SCE to reduce budget ceilings, provide more transparency in role and responsibilities. A revised guidebook is to be produced in 2010. The Secretariat indicated that there is a need to receive evaluation reports on projects which have been lacking and/or not timely. To promote the receipt of these evaluation reports, a 10% hold back of money on projects to now be applied. Work to allow multi year project funding (financing etc.) is also being worked on.

Mr. Vertiz advised that the main objectives of the Project Management Reform in course are to improve the transparency in project proposal evaluation and to streamline project administration. In its evaluation, the BMC stressed out that proposed projects should demonstrate relevance and linkages to the fora's working plan, and should present clear, effective, and achievable objectives.

On the budget side, Mr. Vertiz stated that projects should provide evidence of efficient use of funds and value-added. Finally, projects should be sustainable. Mr. Vertiz warned that the Secretariat will not endorse project proposals that do not meet to some extent all these criteria.

Mr. Vertiz briefly presented the two EWG Projects approved in BMC Session #3:

- EWG22/2009 – APEC Peer Review on Energy Efficiency (PREE): Phase 2 (Japan)
- EWG23/2009 – Operation of APEC Energy Database and Analysis (Japan)

Mr. Vertiz presented a table illustrating the 2010 Project Approval Sessions which indicated the 2010 Submission deadlines for each of the year's three sessions, and their relative notification dates.

Finally, Mr. Vertiz provided information on procedures related to projects ending on December 31, 2009 – the end of the APEC fiscal year. Mr. Vertiz expressed the Secretariat's willingness to be flexible and to grant extensions for projects depending on circumstances.

To the question by the United States on whether the Secretariat will provide also datelines for proposals, Mr. Vertiz indicated that a detailed dateline will be available shortly.

### **Actions Arising/Next Steps**

- APEC Secretariat to follow-up and provide necessary information where appropriate.

### **3. Report from the Chair of the Energy Business Network (EBN)**

The Lead Shepherd stated that the views of the business community are vital if we are to meet the region's growing demand for energy into the future and strongly encouraged member economies to solicit their business communities to participate in EBN activities and meetings.

The EBN Representative, Mr. Robert Pritchard, speaking for the EBN Chair, reported that future EBN meetings will be held on an “as needed” base (as agreed on at the EWG37) as there are currently challenges with EBN membership and participation. The Chair strongly encouraged member economies to have membership on the EBN as the energy private sector role is becoming more and more important. The last meeting, EBN20, was held on 20 April 2009 as part of the previous EWG37 held in Santiago, Chile. Mr. Robert Pritchard stated that the EBN still held to the set of recommendations that they presented to Ministers at the Eighth Energy Ministers Meeting (EMM8) held in May 2007 in Darwin, Australia – to continue to pursue existing and new energy technologies; promote the development of renewable energy technologies and energy efficiency; continue to work on solar, wind and hydro; and on biofuels, particularly 2<sup>nd</sup> and 3<sup>rd</sup> generation biofuels technologies. Mr. Pritchard also stated that EBN would be reviewing and providing an appropriate response to the Declaration from the November 2009 APEC Leaders Meeting in Singapore.

The EWG Chair noted that the last Energy Ministers Meeting (EMM8) was held in Darwin, Australia in 2007. When questioned by the EWG Chair on whether he saw a real role for EBN under the energy umbrella, Mr. Pritchard responded that he certainly did see a role for EBN in that context. Mr. Pritchard then added that the EBN was very pleased to have had a chance to make its presentation at the November 17 Energy Business Forum here at EWG38 in Bali. Furthermore, the EBN Representative expressed EBN’s desire to strengthen the effectiveness of its future inputs to Ministers by trying to coordinate better with the timetables associated with Energy Ministers’ meetings. For the previous Energy Ministerial, EBN inputs were provided one-month prior to the meeting and this was far too late in the process for any serious consideration and uptake by Ministers.

The EWG Chair stated that she had attended on November 12-14, 2009 the APEC CEO Summit in Singapore, an event sponsored by the APEC Business Advisory Council (ABAC). Expressing her views on the event, the EWG Chair said that it was brought to her attention by private sector participants that they sensed an alarming distancing between policy and the private sector, particularly in the energy area, and that actions should be taken to ensure better cooperation between the two parts. In response, the Mr. Pritchard, referring to the EBN report, expressed EBN’s desire to forge a close relationship with ABAC, particularly on key issues such as climate change and mitigation measures.

The EBN Representative furthermore commented on the upcoming UN Copenhagen Climate Change Conference, saying that the EBN was looking forward to receive comments and formulate responses from the business community. According to Mr. Pritchard, the EBN is planning to submit questions and suggestions to the Energy Ministers revolving on the impact of climate change to the energy industry. From a preliminary EBN assessment, the following areas needed to be addressed:

- Inadequacy of current climate policies to the climate change task
- Better coordination climate policies with energy policies
- Affirm the pivotal role of technology
- Accurate setting of emission targets
- Industry role in supporting the IPCC policy recommendation

Mr. Pritchard expressed EBN’s intention to work with ABAC to further probe these areas and to develop a strategy, in consultation with EBN members, to present to EWG39 in March 2010.

**Actions Arising/Next Steps**

- Members to note that the report of the past EBN Chair Dr. David Natusch will be soon accessible from the EWG website.

**4. Policy Dialogue**

Members discussed the topic, “Energy Efficiency in Buildings.” Economies presented achievements, policies being implemented, studies in progress, and expected accomplishments in the area of building efficiency. In addition, Expert Groups presented the findings of their studies on the subject, broadly commented on issues raised by the different economies, and thanked the economies for sharing valuable information and for hosting the experts for their research.

The discussions were insightful, animated and constructive, but in line with EWG policy, no official record was kept of these discussions. Members endorsed the topic “Technology and Policy Strategies for the Deployment of Renewable Electricity” for discussion at EWG39.

In terms of general Policy Dialogue discussion on energy efficiency in buildings, it was noted that we do not have transferability of energy efficiency on buildings between jurisdictions (as we do for appliances). Therefore, an issue for EWG consideration is how APEC can drive energy efficiency forward for buildings when 80 percent of buildings that exist in 2030 will have already been built in 2009. Upgraded energy efficiency standards for building components may be needed. APEC needs to take a systems approach to building energy use and understand how to make efficient building components succeed commercially across the APEC market. How do we signal to the markets and signal to tenants of the future that buildings will cost less to operate with upgraded energy efficiency, so that modelling and ratings system are important? How do we promote a commercial role for voluntary approaches and develop mechanisms upon which people will act to make improvements?

It was noted that the marketplace values governments’ role in setting energy efficiency standards since market actors are more likely to implement efficiency measures if they have a high degree of confidence in the regulatory regime they face. We need to start exploring how to coordinate investments around energy efficiency ratings schemes. APEC is important to facilitate the transfer of knowledge, transfer, of knowledge, principle basis to measure the performance and the standards, metrics used. We have an opportunity to work as a group to have common forms of metrics on codes and apply to economies. We also need to have a significant skill sets that can move across borders that can promote energy efficiency across borders. In the end, there will be an increased capital value of properties that have higher energy efficiency standards, and this can help put efficiency in place.

The APEC EWG and Expert Group on Energy Efficiency and Conservation (EGEEC) are doing some work on zero energy buildings and best practices for energy efficient windows and roofs. EWG should consider a presentation to Ministers to show how such work fits into energy security and environmental priorities for the APEC region. We need to demonstrate to Ministers how our work in the energy efficiency area is progressing and how it can serve those priorities.

Concluding the Policy Dialogue discussion, the EWG Chair shared her view that it is important to bring together the key lessons learned from the “Energy Efficiency in Buildings” topic and push them forward as we prepare for EMM9. She indicated that we need to show the value of APEC work in these areas and synthesize it for Ministers. The Chair requested that APEC expert group chairs help EWG to package energy efficiency activity and report it to energy ministers in a strategic frame.

#### **Actions Arising/Next Steps**

- The Policy Dialogue topic at EWG39 will be “Technology and Policy Strategies for the Deployment of Renewable Electricity.”

### **5. EWG Project Funding 2010 – Procedural Issues**

There were a total of 20 project proposal synopses submitted to members for their consideration. Expert Group and Task Force Chairs and member economies provided a brief presentation on each project proposal. Of the 22 project proposals submitted for consideration in 2010, there were:

- 16 Operational Account (OA) project proposals and APEC Support Fund (ASF) project proposals
- 4 Trade and Investment Liberalisation Facilitation (TILF) Special Account project proposals
- 2 Self Funded projects by Japan (Outlook for Sustainable Fossil Energy Development in APEC, Preparatory Study on “APEC Low-carbon Town Project“)

Details of the EWG new project proposals (OA, ASF and TILF) will be provided in Section 12.

Following the presentations the EWG Secretariat requested members to complete the 2010 project ranking forms, ranking each project proposal in order of preference. Completed forms were then to be submitted to the EWG Secretariat for collation and reporting under Agenda Item 16.

Two self-funded projects proposed by Japan were supported by members and relevant expert groups and thus endorsed.

#### **Actions arising/Next steps**

- As noted at the meeting under the Agenda Item on Document Access, Project Synopses will not be published online.

### **6. EWG Work Plan: 2007-2010 Update**

The Lead Shepherd advised members that the current EWG Work Program for 2007-2010 should recognize the series of directions in play from the set of recent APEC Economic Leaders, Ministers and Energy Ministers meetings (mainly since 2007) such as the 2007 Eighth Energy Ministers (EMM8), the 2008 Twentieth APEC Ministerial Meeting and the Sixteenth APEC Economic Leaders Meeting (AELM-16); and the 2009 Seventeenth APEC Economic Leaders Meeting (AELM-17). The

Chair said that Minister and Leaders' instructions should provide a comprehensive overview of what is expected from the EWG, and should be incorporated into the EWG Work Plan. However, the Chair also made clear that the EWG needs to also start thinking at ways to implement a more strategic approach as it crafts future Work Plans. The Chair referenced the summary report (table dropped at the meeting) provided on the "*Independent Assessment of the APEC Energy Working Group*" that was carried out by consultant David Crossley (Energy Futures Australia Pty Ltd.) for the SCE; a report that was highly praised for its insights, outlook and recommendations for reforms of the APEC EWG.

Members were provided with a list of expected EWG deliverables for 2010, including the EWG's current Terms of Reference.

#### **Actions Arising/Next Steps**

- EWG Secretariat to post the current EWG Work plan on the EWG website.
- Members to consider ways to implement a more strategic approach in the future EWG Work Plans.

### **7. Report of the 23<sup>rd</sup> Meeting of EWG Expert Group & Task Force Chairs and APERC**

The EWG Secretariat reported to members on the 23<sup>rd</sup> Expert Group & Task Force Chairs and APERC Meeting, held on November 16, 2009 and asked Expert Groups to report on proposed and ongoing projects. As a note, the Lead Shepherd asked EWG & Task Force Chairs to give their reports at this agenda item, rather than under Agenda Items 8, 8.1 and 8.2 as had been previously agreed.

#### **The Expert Group on Clean Fossil Energy (EGCFE):**

- Planning and Cost Assessment Guidelines for Making new Coal-Fired Power Generation Plants on Developing APEC Economies CO2 Capture Ready (EWG 01/2008A)
- Implementation of CO2 Reduction Technologies and Methods for Fossil Fuel Installations (EWG 02/2009)
- Increasing the Knowledge and Awareness of Carbon Capture and Storage: CCS Capacity Building in the APEC Region (Phase IV EWG 09/2008A, Phase V proposed)
- Assessment of the Capture and Storage Potential of CO2 Co-Produced with Natural Gas in South-East Asia (EWG 06/2008A)
- Case Studies of Public Education and Information Campaigns in the APEC Economies, and Development of Best Practice Guidelines (EWG 07/2009A)
- Actions by Governments and Industry to Promote LNG Trade and Investment in the APEC Region (EWG 08/2009T)
- Permitting Issues Related to New Coal-Based Power Plants, including Carbon Capture and Storage (proposed)

#### **The Expert Group on Energy Data and Analysis (EGEDA):**

- The Joint Oil Data Initiative (JODI)
- Operation of APEC Energy Data and Analysis (multi-year project, EWG 01/2009 most recently)

*The Expert Group on Energy Efficiency and Conservation (EGEEC):*

Projects related to energy efficiency policies and best practices:

- APEC Peer Review on Energy Efficiency (Phase 2 EWG 11/2009 and Phase 3 proposed)
- APEC Cooperative Energy Efficiency Design for Sustainability (CEEDS) (Phase 1 EWG 14/2009A and Phase 2 proposed)
- Cool Roofs in APEC Economies: Review of Experience, Best Practices and Potential Benefits (EWG 11/2009A)
- Energy-Saving Windows: Survey of Policies and Programs to Promote Advanced Window and Glazing Technologies in APEC Economies (EWG 10/2009A)
- Energy and Water Efficiency in Water Supply: Practical Training on Proven Approaches (EWG 12/2009A)
- Survey of Policies and Programs to Measure and Promote Energy Efficiency in Industry in APEC Economies (EWG 05/2008)
- Best Practices in Energy Efficiency and Renewable Energy Technologies in the Industrial Sector in APEC Region (proposed)
- Street & Outdoor LED Lighting Initiative – Asia (proposed)
- Energy, Transport and Environmental Benefits of Intermodal Freight Transport (proposed)
- Energy, Transport and Environmental Benefits of Transit-Oriented Development (proposed)
- Energy, Transport and Environmental Benefits of Bus Rapid Transit (proposed)
- Training/Workshop on ESCO Business in APEC Economies

Projects related to energy efficiency standards and testing methods:

- Reducing Barriers to Trade through Development of a Common Protocol for Measuring the Seasonal Energy Efficiency (SEER) of Air Conditioners (EWG 01/2009T)
- Alignment of National Standby Power Structures (EWG 02/2009T)
- Facilitation of International Harmonization of Standards for Energy Management in the APEC Region (EWG 05/2009)
- Development and Harmonization of Standards for Indoor Light-Emitting Diodes (proposed)
- Reducing Trade Barriers for Environmental Goods and Services (Energy Efficient Products) in the APEC Region (proposed)
- Survey of Market Compliance Mechanisms for Energy Efficiency Programs (proposed)

*The Expert Group on New and Renewable Energy Technologies (EGNRET):*

- Best Practices in New and Renewable Energy Technologies in Urban Areas in the APEC Region (EWG 04/2008)
- Workshop and Report on Implications of Bio-Refineries for Energy and Trade in the APEC Region (EWG 05/2008A)
- Addressing Grid-Interconnection Issues in Order to Maximize the Utilization of New and Renewable Energy Sources (EWG 02/2009)
- Using Smart Grids to Enhance the Use of Energy Efficiency and Renewable Energy Technologies (EWG 01/2009S)
- APEC SME Renewable Energy Infrastructure Blueprint: Report on Economic Benefits (proposed in cooperation with Small and Medium Enterprise Working Group)
- Wind Power: Current Status and Guidelines for Implementation (proposed)
- The Status and Potential of Electric Vehicles in the APEC Region



The APEC Biofuels Task Force:

- Assessment of Biomass Resources from Marginal Lands in APEC Economies (EWG 11/2008A)
- Assessment of Biomass Resource Elasticity in APEC Economies (EWG 16/2008)
- Study of Employment Opportunities from Biofuel Production in APEC Economies (EWG 07/2008A)
- Biofuel Feedstock Costs, Technology and Economics (EWG 16/2009)
- Resource Potential of Algae for Biodiesel Production in the APEC Region (EWG 18/2009)
- Biofuel Transportation and Distribution Infrastructure Strategies (EWG 20/2009)
- Study of Sustainable Biofuels Development Practices (EWG 19/2009)

**Actions Arising/Next Steps**

- Members to note outcomes of the 23<sup>rd</sup> Expert Group & Task Force Chairs and APERC meeting.

**8. Implementation of the Energy Security Initiative (ESI)**

The 12<sup>th</sup> ESI report presented to the members. The members addressed the short term and long term ESI measures in turn.

**8.1 SHORT-TERM ESI MEASURES**

**8.1(a) Joint Oil Data Initiative**

EGEDA reported that all 21 members are reporting data in a timely and efficient manner in relation to JODI. EGEDA stated that the JODI initiative has become widely recognized by energy analysts around the world and that it has greatly benefited by international data inputs.

EGEDA stated that it was aware of the differing capacities among APEC members to provide this information; nonetheless, EGEDA urged members to continue report timely, accurate, and complete data on oil such as supply, demand, reserves, stocks, and production. EGEDA stated that as the quality of the data submitted to JODI has greatly improved since its inception, but economies still need to keep on focusing on the quality aspect of their reporting.

**Actions Arising/Next Steps**

- Recognising the importance of JODI for the Energy Security, members are asked to provide where possible, quality data for the JODI in a timely manner.

**8.1(b) Maritime Security**

At EMM8, Energy Ministers instructed the EWG to develop linkages with organisations responsible for regional maritime security for reporting to EMM9 in recognition of the implications of energy supply disruptions and limitations to maritime energy transport.

The Lead Shepherd stated that at EWG36 and EWG37 members recognised the importance of information sharing, and maritime security capacity building, diversification of maritime routes and LNG safety issues, and agreed on building upon these efforts.

### **Actions Arising/Next Steps**

- Members to consider areas of cooperation in maritime security.

### **8.1(c) Real-time Emergency Information Sharing System (RTEIS)**

Japan reported on the current developments of the RTEIS system to members and its activities since EWG37. In particular Japan highlighted the system's new functions or expanded functions for communication and data sharing. The presentation included also an overview of the system's Automatic Information Delivery System which is designed to improve international responsiveness in case of disruption. Moreover, following Members suggestions from the EWG37, Japan stated that it extended access in the RTEIS to daily crude oil prices and to JODI data.

Japan requested to members to update their emergency contacts and the RTEIS System users list (i.e., Technical Officials).

### **Actions Arising/Next Steps**

- Members to provide Japan with updated contacts details for the Emergency Contact List and the RTEIS System Users List.
- A copy of Japan's report on the RTEIS System will be available from the EWG website.

### **8.1(d) Energy Emergency Responses including Oil Stocks**

In usual practice with this item, The Host Economy (Indonesia) reported on its energy emergency response arrangements.

Indonesia presented an overview of its O&G industry and on the role of public policy to define the economy's national sustainable development. Indonesia expects that new fuel policy regulations will affect Indonesia's target of energy-mix. In particular, the economy foresees a strong role for palm oil derived biofuels to help it meet its energy-mix targets.

Japan commented that emergency response is an important topic and suggested to be discussed at the EMM9. The United States asked whether Indonesia was considering large hydro projects to diversify its energy mix. Indonesia responded that although it had substantial hydro potential, the difficulty of interconnecting different towns and islands had shifted the focus from large to small hydro projects.

### **Actions Arising/Next Steps**

- The EWG Secretariat to post Indonesia's energy emergency response report on the EWG website.

## **8.2 LONG -TERM ESI MEASURESES**

The Lead Shepherd asked Members to report and discuss the implementation of Energy Ministers EMM8 and APEC Leaders directives relating to the long term initiatives under the ESI.

## 8.2(a) Energy Investment

The Acting Chair of the Energy Trade & Investment Task Force reported on its 2<sup>nd</sup> meeting which took place on 16 November in Bali. Australia provided a progress report on the survey of climate change policies project. Eight member economy responses have been received to date. Australia will follow-up with other member economies shortly to seek their input. Australia also proposed a self-funded project to engage a consultant to review member country submissions and to prepare a discussion paper on climate change policies adopted in the APEC region to inform a follow-up workshop, possibly in the margins of EWG 39, to share information on these policies and approaches. Following the workshop, the consultant will prepare a report summarising the key findings for possible publication EMM9. The project will be fully funded by Australia. We will aim to circulate a project proposal to Task Force members for consideration and endorsement before mid December.

The discussions focussed on four Trade and Investment Projects under consideration outlined below. In the Chair's view there are significant and positive developments to report and that in the lead-up to EMM9 a substantive level of work will have been completed within a two-year time-period.

- Project #1 – “APEC Environmental Goods and Services Work Program.” The United States proposed that the Task Force join with a project, already proposed and endorsed by the Market Access Group (MAG) of the APEC Committee on Trade & Investment,(CTI) to survey major impediments and market drivers to the development of trade in goods necessary for climate change mitigation. A project synopsis was submitted for ranking in EWG format, with energy-related elaborations to the MAG synopsis conveyed by the MAG chair who attended EWG as a guest. The Task Force also considered other opportunities for more effective collaboration with APEC bodies and other international institutions. It was agreed that the Task Force would explore ways of cooperating more closely with the CTI Market Access Group, particularly in relation to activities around promoting energy-related environmental goods. It also considered a business perspective on tackling our energy security and climate change challenges.
- Project #2 –Australia - Climate Change Survey. Eight countries including Canada submitted results on this climate change survey. Other economies were encouraged to submit. The Australian authors hope to identify areas for possible voluntary action and agreements. A consultant will be hired to review the papers and write a roll-up paper to feed into a follow-up workshop at EWG 39 (re: sharing information on policy and approaches). The goal is to publish the Taskforce Report before EMM9, however more responses are required and timing might be difficult. Australia is funding the consultant and will circulate the roll-up paper for endorsement.
- Project #3 – Chinese Taipei – Facilitating Trade in Green Good – Energy Efficient and Renewable Energy Products (solar cells, and LEDs”). The Task Force considered an initiative from Chinese Taipei to develop a more strategic approach to its work on promoting trade in green goods. The initiative would include a range of related activities including: exploring the potential for harmonising standards on green energy products; developing strategies to gradually reduce market access barriers for environmental goods and services; and strengthening capacity building. It would involve collaboration with other relevant APEC fora including the Sub-committee on Standards & Conformance and the CTI Market Access Group. Some initial thoughts were circulated and members have been invited to submit comments to Chinese Taipei before the end of January 2010. Member comments will help guide the development of a more fully worked proposal for consideration at the next Task Force meeting.

- Project #4 – EBN. This proposal related to barriers arising from anti-competitive behaviour of firms. There did not seem to be a lot of discussion on this proposal.

### **Actions Arising/Next Steps**

- Australia to follow-up with those economies who have not yet submitted their climate change survey reports
- Australia to submit in mid-December their self-funded project proposal to EWG members for endorsement.
- EWG members to submit their comments on Chinese Taipei’s initiative to [jschern@moeaboe.gov.tw](mailto:jschern@moeaboe.gov.tw) before end-January 2010.
- United States to consult with the MAG on the most effective approach to developing a full-scale project proposal on impediments and drivers to trade in environmental goods and services, pursuant to endorsement of the project in synopsis form by both MAG and EWG.

### **8.2(b) Natural Gas Trade**

The EGEDA Chair reported on the collection of monthly natural gas data. EGEDA advised that timeliness and completeness of data needs to be improved and will consider providing a capacity building workshop for this purpose during 2010. EGEDA said that most economies had submitted their data. The Lead Shepherd encouraged all Members to submit their data in a timely manner.

### **Actions Arising/Next Steps**

- Members to provide, where possible, quality gas data in a timely manner.
- EGEDA to provide an update on its activities at EWG39.

### **8.2(c) Energy Efficiency**

#### *PREE Lessons Learned*

Viet Nam and APERC presented their report on Viet Nam’s Peer Review on Energy Efficiency. Before beginning the presentation APERC expressed its gratitude to the Government of Viet Nam for its support while carrying out the review.

To contextualize the report APERC noted that since 2006 the Viet Nam government has been strengthening its policy framework on energy efficiency improvements in different areas of the Viet Nam economy. In particular, the government has launched a comprehensive energy efficiency and conservation program called the Viet Nam Energy Efficiency Program (VNEEP). Although praising Viet Nam’s efforts, APERC stated that the process for implementing energy efficiency measures in Viet Nam still faced a number of challenges. In conclusion, the Peer Review team identified that there was a significant gap between the government planning of Energy Efficiency (EE) programs and activities in Viet Nam, and their actual implementation.

The Peer Review team put together 40 recommendations to help the government of Viet Nam push forward its Energy Efficiency program. The recommendations cover the following areas:

- Energy Efficiency (EE) related to institutions
- EE goals, target and strategy
- EE data collection and monitoring
- EE in the industry sector
- EE in the electricity sector
- EE in the residential sector
- EE in the transport sector
- EE in appliances and equipment
- EE-related research and development

Viet Nam added that it had already provided its comments to the Draft Final PREE Report. Also, in reference to the recommendations, it stated that the government still faced many barriers before it could fully implement its EE activities; in particular Viet Nam cited a shortage of human and financial resources. APERC responded that it would work closely with Viet Nam to facilitate the government follow up and possibly implement the some if not all the recommendations.

In reference to Viet Nam's current EE legislation in progress, APERC asked what the prospects were to adopt a new energy conservation law. Viet Nam responded that the law should pass this month (November 2009) and that the National Assembly should already adopt it by early 2010.

EGEEEC commented on the follow up process, suggesting that EWG Expert Groups be involved with the next follow up steps for this project. The EGEEEC said that this effort could be an excellent opportunity in preparation for the EMM9 in 2010 to show that not only the EWG promotes in depth reports on the economies involved but that its process is also thorough and effective. Japan agreed that follow up actions to share experiences of PREE host economies could prove beneficial and it should interest not only the EWG member economies but other economies as well.

Canada asked Viet Nam what kind of expectation the government had in implementing all or part of the 40 PREE recommendations. Viet Nam answered that, though most of the recommendations were on point, its government could not possibly implement them all. Viet Nam said that it was considering sending out requests for support. On this issue, Indonesia agreed that the recommendations could not be easily implemented. It suggested that question on "What can APEC do to support EE programs as a follow up of PREE" could be discussed in the future EWG meetings.

Picking up on Indonesia's comment, the EWG Co-Chair cited the example of Indonesia which has received during the years a number of studies and reviews, but in fact the question now remaining was how to convert these studies into action.

### **Actions Arising/Next Steps**

- APERC to make report available on website. Previous reports have already been posted.
- Viet Nam to consider sending out requests for support for a follow up effort to implement PREE recommendations and the APERC to facilitate the host economy's follow-up efforts.
- EWG, together with EWG Expert Groups, to consider next steps to support EE programs as a follow up of PREE.

### Progress Report on Thailand PREE

Thailand stated that the Peer Review Team's meetings with energy efficiency experts had been successfully held in Bangkok on 9-13 November, 2009. Thailand looks forward to receiving a revised draft Peer Review Report which will be based on the preliminary report presented to the Thai Ministry of Energy on 13 November as well as reviewing a revised draft in timely manner.

The Co-Chair suggested that APERC organize this review in a more focused (economy-specific) manner and to provide the way to bring policies to implementations as well as comprehensive recommendations. APERC responded that it would make the utmost efforts for the review team and the host economy to work closely to understand the unique circumstances of the host economy to provide economy-specific recommendations.

Japan stated that APEC Ministers and Leaders are encouraging APEC economies, in their 2009 Declarations, to participate to PREE activities. Philippines and Indonesia are still evaluating the possibility of hosting a PREE. Chinese Taipei and Peru announced their intention to host a PREE sometime in 2010. The dates have yet to be announced.

#### **Actions Arising/Next Steps**

- APERC and Thailand to finalise the Draft PREE Report and present it at EWG39.
- Confirmation by Chinese Taipei and Peru on hosting next PREE in 2010.

### APERC progress report on the Compendium on Energy Efficiency Policies

The APERC president, Mr. Kenji Kobayashi, presented APERC's latest Compendium on Energy Efficiency Policies. In its presentation APERC explained the methodology used, furthermore it said that it was planning to circulate a draft summary report by early December 2009 for members' comments and updates.

Mr. Kobayashi reminded economies that the compendium is a collection of energy efficiency policies of all APEC member economies including goals and action plan on energy efficiency improvement. He added that the compendium is a basis for information sharing on energy efficiency policies and measures in the region. He also added that the compendium serves as a source of basic information for conducting peer review in volunteered economies. On this matter, the APERC President asked China and Russia to officially confirm if APERC's draft Compendium for China and Russia are correct in timely matter. Also Mr. Kobayashi asked Papua New Guinea to submit their response as well. APERC asked the EWG Secretariat to resend the request to PNG via email.

The Chair asked if economies had any objection to having the files posted on the EWG website and open to the public. Economies showed no objection in principle. On this matter, the APERC President added that when updating the files on its website it will consult with all member economies. Regarding the updating procedure, China commented that EWG make sure that files are updated regularly. The EWG Chair responded that all files should have a date attached to them to avoid

confusion, and that posted files should be organized with an ordering that starts from the most recent to the oldest.

### **Actions Arising/Next Steps**

- APERC to circulate a draft summary report of the Compendium by early December 2009.
- Members to provide comments and update where necessary.
- EWG Secretariat to resend request for responding to the questionnaire on the Compendium to Papua New Guinea.
- APERC to submit revised draft Compendium at the EWG 39 for its endorsement before being posted on EWG and APERC websites

### **Pledge and Review**

Members noted reports submitted under the first component of the Pledge and Review Program. The reports discuss a common topic: *“Outline what Analysis and Actions have been taken to Assess the Recession Mitigating Potential of Energy Efficiency Policies and Programmes.”*

The United States suggested that it might be interesting to discuss the materials submitted in the Pledge and Review process, rather than to just have them tabled. To this end, the United States offered to summarize the submissions at EWG38 on recession mitigating potential of energy efficiency policies and programs prior to EWG39 for discussion then. Chile supported this idea.

Regarding the P&R process, Australia observed that on the first EWG of the year a template is circulated for member economies to update on existing projects or to report on new projects.

Japan suggested discussing the modality of the P&R activity at the next EWG meeting, and the Chair requested interested member economies and expert groups to send their comments on how to deal with the Pledge and Review (P&R) process by mid-January 2010 to the EWG Secretariat.

### **Actions Arising/Next Steps**

- Members and expert groups to send their comments on how to make the P&R process more useful and interesting by mid-January 2010 to the EWG Secretariat.

### **Workshop Report by Chinese Taipei**

Chinese Taipei presented on its workshops “Workshop on Reducing Barriers to Trade through Development of a Common Protocol for Measuring the Seasonal Energy Efficiency of Air Conditioners” and “Workshop for the Development of LED Optical Lighting Standards and Technology.” Chinese Taipei highlighted the major findings of the reports and presented the timeline of past projects. Chinese Taipei said that it received positive comments from workshop participants as well as from economies. Chinese Taipei advised it will provide further details about the workshop to be posted online.

### **Actions Arising/Next Steps**

- Chinese Taipei to provide members with details of the “2009 Workshop for the Development of LED Optical Lighting Standards and Technology” and “Workshop on Reducing Barriers to Trade through Development of a Common Protocol for Measuring the Seasonal Energy Efficiency of Air Conditioners”

### **8.2(d) Renewable Energy**

#### *Progress Report by the Expert Group on New and Renewable Energy Technologies (EGNRET)*

The EGNRET reported to Members on its activities and on the progress of its completed study “Successful Business Models for New and Renewable Energy Technology Implementation in APEC.” EGNRET circulated a tabled document with the executive summary of the study’s report. The study sought to identify business models that have been applied successfully in both developed and developing economies for commercialization of new and renewable technologies. The study was led by New Zealand. The study presents 16 case studies of business models applicable to:

- Heat and power production,
- Renewable fuels (biofuels) production,
- Alternative transport fuels.

EGRNET also outlined the progress of two projects currently underway. The reports are available from the EGNRET website <http://www.egnret.ewg.apec.org>.

### **Actions Arising/Next Steps**

- The EGNRET Chair to report on progress of its activities to EWG39.

#### *Presentation by Colombia on its renewable energy programs*

As a guest to the EWG38, Colombia reported to the EWG Members on its renewable energy activities. The presentation was an overview of issues regarding the production of renewable energy in Colombia, international grid interconnections, and the export of clean electricity from hydroelectric resources to neighbouring countries.

Referring to the suggested cost breakdown for biodiesel plants in Colombia, EGNRET questioned whether Colombia could give the actual cost of the implementations, including servicing and subsidies. Colombia replied that its cost projections included offset from secondary streams of income (e.g. fertilizers).

Regarding the building of hydroelectric facilities, China commented that one of its problems was the huge costs associated with displacing thousands of people from the project sites. Colombia agreed that that was a significant problem, but that the economy has put in place laws that protect people who must be relocated and by forcing the owners of the project (E.G. electric companies) to fully develop a suitable area for people’s relocation. The cost can amount to almost one half of the project’s total cost.



Referring to renewable energy production on islands – a cost generally subsidized by the government – Colombia noted that project costs and electricity output is generally significantly higher than that of the main land, around US\$0.30 per kWh as compared with US\$0.18 per kWh. EGNRET commented that those costs were lower than what the Expert Group had found in many other circumstances.

#### *Progress Report by Chinese Taipei*

Chinese Taipei reported on the “Workshop and Report on Implications of Bio-refineries for Energy and Trade in the APEC Region.” The workshop was held in Singapore on October 2009. The workshop was meant to discuss the future of bio-refineries in many aspects including the technological and economic assessment, market penetration, and trade opportunities. Chinese Taipei noted the objective of the workshop is to provide APEC decision makers with a report underlying the recent advances in bio-refinery development. This project report will integrate and synthesize the information gained in the workshop.

#### Next Steps

- Chinese Taipei to post workshop report on EWG website.

### **8.2(e) Clean Fossil Energy**

#### *Progress Report by the Expert Group on Clean Fossil Energy (EGCFE)*

The Chair of the Expert Group on Clean Fossil Energy submitted a progress report on EGCFE activity since EWG 37, of which highlights were noted by the United States on the Chair’s behalf. A copy of the EGCFE progress report will be available from the EWG website. The EGCFE has three lines of inquiry: natural gas trade, clean use of coal in powerplants, and carbon capture and storage (CCS).

In the gas area, pursuant to the LNG public information and education initiative that was endorsed at EMM7 in Korea, there are projects underway to compare case studies of LNG public information campaigns in APEC economies and develop best practice guidelines for such programs, as well as to assess actions by government and industry to promote LNG trade and investment.

Regarding CCS, a report will soon be ready on planning and cost assessment guidelines for making new coal-fired power plants carbon-capture ready. In a multi-phase project, capacity building workshops on how to assess the potential of CCS technology have been held in China, Mexico and Indonesia, and further workshops are proposed for Malaysia, Thailand and Viet Nam. A new project is proposed on permitting issues related to new coal-fired plants and CCS in developing economies.

#### *Report by Australia on the Global Carbon Capture and Storage Institute (GCCSI)*

Australia reminded Members that the inaugural meeting of the GCCSI was held in Australia on 15 April 2009. The GCCSI has funding of AUD\$100 million annually available to spearhead projects and CCS development initiatives and promotion. Australia advised the Institute has an important role to play in the transition to a new global low carbon economy. There are currently 12 APEC members who are Legal Members of the GCCSI and more are expected to join since the Institute became a legal entity in July 1, 2009.

Australia reminded Members that the objective of the Institute is an international initiative aimed at accelerating the worldwide commercial deployment of at-scale Carbon Capture and Storage (CCS). According to Australia, the GCCSI will play a pivotal role in facilitating the future development and deployment of safe, economic and environmentally sustainable commercial-scale CCS projects.

The GCCSI underlines the need to build capacity on CCS options and to better understand the regulatory options that are available. There is a need to get costs down on new CCS technologies and incorporate those for use in existing plants which are biggest challenge.

Japan, USA and Chinese Taipei expressed their support for the GCCSI initiative.

Indonesia addressed its concern about CCS and just launched the result of the study on Understanding Carbon Capture and Storage Potential in Indonesia. The study was aimed to develop on technical, commercial and regulatory aspects of CCS and its potential in Indonesia both in oil and power sectors.

#### **Actions Arising/Next Steps**

- EGCFE to report on progress of its activities at EWG39.
- Australia to report progress on the GCCSI at EWG39.

#### **8.2(f) Alternative Transportation Fuels**

The Biofuels Task Force (BTF) Chair submitted a progress report on activities since EWG37. He noted that the BTF has recently completed studies of the resource potential of biofuels on marginal lands and of biofuels resource elasticity, while a study of biofuel employment opportunities should be completed shortly. Work has begun on a detailed study of biofuel economics relative to conventional petroleum-based fuels, and will begin shortly on biofuels infrastructure development strategies (in cooperation with the APEC Automotive Dialogue), sustainable biofuel development practices, and resource potential of production of biofuels from algae. Further information is available from the BTF website at [www.biofuels.apec.org](http://www.biofuels.apec.org). A copy of the BTF progress report will be made available there.

A key area of focus for the Task Force is biofuels resource potential. The recently completed study of biofuels on marginal land finds that some 4 million square kilometres of APEC marginal land is available with a potential for producing 1.3 billion tonnes of biomass. If all of this potential could be developed economically, it would replace one-fifth of oil imports into APEC, but further study is needed to assess how much could be produced cost effectively in view of the low yield per hectare. This follows on another study of resource potential, completed a year ago, which found that non-food farm and forest residues could also displace as much as one-fifth of crude oil imports into the region once cost-effective technology becomes available for producing ethanol from cellulosic feedstocks. Together, the two studies show that the strategic potential of biofuels in APEC is significant.

EGNRET reported on its cooperation with the Biofuels Task Force and stated it was currently implementing a project/workshop on the implications of bio-refineries on energy and trade in the region. Further details of EGNRET's project work are available from the website at <http://www.egnret.ewg.apec.org>.

### **Actions Arising/Next Steps**

- BTF to report on progress of its activities on alternative transport fuels at EWG39.

### **8.2(g) Nuclear Energy**

The Philippines stated that it is exploring the possibility of using nuclear energy in the long term and has formed a Task Force to examine this issue in greater detail. The Philippines said that on September 2009 the International Agency for Atomic Energy (IAEA) supported the Philippines' interest. Together with the IAEA, the Philippines are in the process of undergoing studies to identify potential sites. The Philippines said that they expected to organize a number of workshops during 2010 for training and sharing information civil nuclear activities and on how the Philippines could develop a nuclear power program in the long term. Finally the Philippines exhorted APEC economies to work together with the Philippines on this issue.

Japan shared its interest to provide its experiences of long-run safe operation of nuclear energy production for cooperative activities under EWG. Japan also pointed out that nuclear energy could be a part of the EMM9 agenda. Canada, instead, noted that it was currently in the process of restructuring its [Atomic Energy of Canada Limited \(AECL\)](#) – Canada's nuclear platform for nuclear science and technological expertise.

### **Actions Arising/Next Steps**

- Philippines to report on nuclear energy research activities with other APEC economies and the IAEA.

### **8.2(h) Hydrogen and Fuel Cells**

Indonesia explained its R&D activities with regard to fuel cell technology. The report highlighted the development of Polymer Electrolyte Membrane Fuel Cell (PEMFC) applications for motorcycles. According to the study, PEMFC technology can allow a motorcycle to produce 500 watts of energy for 50 km from just one litre of hydrogen, at an average speed of 60 km per hour.

### **8.2(i) Methane Hydrates**

New Zealand reported that it is undertaking studies of its offshore potential for methane hydrates which is considered to be among the largest in the world. The economy's government is planning to focus on developing these offshore fossil resources. New Zealand did not mention, however, any intention to seek cooperation yet from multilateral agencies or APEC economies in this area.

### **8.2(j) Petroleum Infrastructure and Crude & Refined Products**

No updates were reported on the matter. However, the U.S. suggested that in future EWG meetings it may be more time efficient to group all unconventional fossil energy matters together. The EWG Chair agreed that this format suggestion will be taken into consideration.

## **9. APERC President's Report**

The APERC President, Mr. Kenji Kobayashi, advised members on the progress of its activities since EWG37 and on the APEC Energy Outlook that was published in November 2009. The APERC President also reported that Ralph Samuelson, Vice President of APERC, has recently joined APERC and is leading on a number of important research projects. Members can access APERC publications from [www.ieej.or.jp/aperc](http://www.ieej.or.jp/aperc)

The APERC President reported that APERC will continue to assist through the Peer Review on Energy Efficiency Policies (PREE) member economies to realize their aspirational goal of at least 25 percent energy intensity reduction by 2030. Mr. Kobayashi reminded to the group that the report discussed for the EWG38 on Vietnam was the third Draft Review Report, and the fourth PREE was conducted in Thailand just before the EWG38. The President reiterated that any economy (other than Chile, New Zealand, Thailand and Vietnam) is invited to host a Peer Review in 2010.

Mr. Kobayashi said that APERC was currently undertaking three research studies for the fiscal year 2009/10. The areas of study are:

- Peer Review on Energy Efficiency (PREE)
- Cooperative Energy Efficiency Design for Sustainability (CEEDS)
- Energy Overview 2009
- Cooperation activities with the Asia Development Bank

The President reiterated that APERC's budget for 2009 has been reduced by 20 percent and requested EWG members to consider providing financial resources and researchers, to support APERC's work.

The Lead Shepherd with the support of Japan encouraged APEC economies to contribute financial resources and researchers/staff in support of APERC's work program. The APERC President, reminded economies that thanks to their generous past contributions APERC had been able to publish in 2009 the 4th Edition of the APEC Energy Demand and Supply Outlook which is available on the APEC website and it was now looking forward to publish the 2009 version of APEC's Energy Overview. Mr. Kobayashi said that APERC aimed to circulate as timely as possible the draft of the APEC Energy Overview 2009 to all member economies for their peer review. He added that APERC was looking forward to publish the report by March 2010.

The APERC President confirmed that APERC had sent out the invitations to next year's APERC annual conference on March 3-4 2010. On this matter, the EWG Chair questioned Mr. Kobayashi on whether APERC would consider scheduling its annual meeting on a date closer to the one of the next EWG39. Mr. Kobayashi said that APERC will consider the suggestion and try to make it as convenient as possible for EWG Members.

### **Action Arising/Next Steps**

- Endorsement by EWG of the Peer Review Report on Vietnam. Information will be posted on the EWG website.
- APERC to consider preparing the President's Report about the current and future research programmes in APERC which would then be circulated to all APEC economies by the EWG Secretariat at EWG39.
- APERC to submit revised draft Compendium EWG members for their discussion at EWG39 in order to post its most recent Compendium on the website after EWG's endorsement.

- APERC to circulate among member economies the draft version of the 2009 APEC Energy Overview for peer review.

## **10. Statements on Notable Energy Developments since EWG37**

The Lead Shepherd thanked economies for their Statements on Notable Energy Developments. The reports will be available from the EWG website.

In summary, Australia presented its recent notable developments, in particular its AUD 4.5 billion Clean Energy Initiative program announced in the 2009-10 Federal Budget. The program will support the research, development and demonstration of a range of low emission energy technologies. The programs centrepieces include the AUD 2.4 billion Carbon Capture and Storage Flagship Program, the AUD 1.5 billion Solar Flagships Program, and the AUD 465 million Australian Centre for Renewable Energy.

Canada announced that in May 2009 the government revealed a C\$1 billion plan to develop a Clean Energy Fund that would invest in clean energy technology development and demonstration, CCS, renewable and alternative energy, and research. Canada added that its government was supporting the development of the World's First Fully-Integrated Carbon Capture and Storage Project.

Hong Kong, China briefly announced its developments particularly in the area of energy efficiency such as new buildings energy codes, labelling schemes for house appliances and electric devices, and innovative building cooling systems. It also presented plans to adopt greater uptake of renewable energy into the grid.

Indonesia announced its new 2009 law to reform the electricity sector -- the Government Regulation No. 70 Year 2009 concerning on Energy Conservation -- and Indonesia's pledge to reduce emissions independently by 26 %, an effort which could be increased to 41 % with the help of international support. Moreover, as announced during the 2009 G-20 meeting in Pittsburgh, Indonesia reported that it has established a Climate Change Trust Fund (CCTF) which is a new financing mechanism for climate change mitigation and adaptation.

Japan reported on its recent legislation implementations: a Bill promoting the use of non-fossil energy sources, and an amendment to promote the use of alternative energy.

The Republic of Korea announced that its government had proclaimed the national vision "Low Carbon, Green Growth." This new paradigm is coupled with a Five-Year plan for Green Growth that addresses climate change and resource depletion issues.

Finally, the United States announced some of the U.S. Department of Energy activities in the area of research and development of new and clean energy technologies; and it provided an overview of government grant programs to support energy projects by business and education institutions.

### **Action Arising/Next Steps**

- The Notable Energy Development reports to be posted on the EWG website.

## **11. Engagement with Other Fora**

The Lead Shepherd stated that she felt very strongly about opportunities to engage with other international and multilateral groups and organizations. The Lead Shepherd also stated that Energy Ministers have instructed EWG to advance collaboration with other international fora to promote broader energy cooperation, enhance emergency preparedness, promote energy efficient transport and alternative transport fuels, improve energy efficiency and develop cleaner and more efficient energy technologies. As a reminder from EWG37, the lead Shepherd advised that there are two categories in which cooperation with other fora takes place, firstly with APEC-member fora, and secondly with non-APEC member fora. The APEC Secretariat advised that senior officials had delegated authority to APEC Working Groups to approve engagement with APEC member fora. For cooperative activities with non-APEC fora however, approval from senior officials is required and is assessed on a case-by-case basis. The Lead Shepherd finally noted that the EWG needed to further strengthen its collaboration with other international energy fora to pursue its work on a broad range of energy issues, including maritime energy transport security, emergency preparedness, energy efficiency, clean energy technology, etc. Accordingly, she noted, the IEA, the Renewable Energy & Energy Efficiency Partnership (REEEP) and the Energy Charter Secretariat have been granted guest status in the EWG.

Japan noted that its Emergency Preparedness effort had greatly benefitted by multilateral contributions. It also noted that this multilateral project had become an important item in the EMM9 agenda. Japan also noted that while there have been a number of cooperative activities between APEC some economies and the IEA; Japan said that it wanted to encourage additional activities and information sharing between the two groups.

As a guest, the IEA presented its recent publication the “IEA Response System for Oil Supply Emergencies.” The IEA observed that possible areas to expand cooperation between the APEC and the IEA were the Joint Oil Database Initiative (JODI), the Japan-lead project Real-Time Emergency Information Sharing System (RTEIS), Emergency Preparedness/Energy Infrastructure, and oil stocks data collection. The IEA said that it was currently working extensively with non-IEA member countries, in particular ASEAN countries. On this matter, the IEA said that it had been asked by its member countries to expand its training, workshops, and research activities with other non-member countries, especially the APEC economies. The APERC reported that it had begun a cooperative effort with the IEA on energy efficiency.

Most member economies representatives showed appreciation toward IEA’s work comments, and they welcomed further engagement toward strengthening the APEC EWG and IEA relations.

### **Actions Arising/Next Steps**

- EWG members to look into ways to further strengthen their relations with other fora, especially the IEA. Progress on this issue to be reported at the EWG39
- Members to report progress of cooperative activities with international fora at EWG39.

## **12. EWG Project Funding 2010 – Endorsement of Project Proposal Synopses**

The EWG Secretariat described the ranking procedures. She explained that as a general rule, projects that received a low number ranked higher, while projects that received a high number ranked lower.

Members ranked 22 EWG projects synopses in accordance with the agreed EWG procedure (i.e. completion of project ranking templates by individual economies that were collated by the EWG Secretariat). Members were advised of the outcomes of the ranking process. The APEC Secretariat advised that projects that did not qualify for APEC funding may be undertaken in the future as self-funded projects after receiving EWG endorsement. The APEC Secretariat also suggested that project overseers consider submitting project proposals across sessions 2 and 3 to improve the chance of funding. For future reference, project rankings will occur at the second EWG meeting of each year rather than the first.

APEC Secretariat reminded member economies that once projects are ranked they are then sent to the APEC Secretariat for approval. Once projects are approved then Projects Overseers (POs) will be alerted. APEC Secretariat also said that it will announce to POs the date for starting each project. On this matter, EGNRET questioned the APEC Secretariat as to define the exact definition of APEC’s statement saying that “project should be completed within one year.” EGNRET argued that it was not clear whether projects had to be completed within one year starting from project submission, project approval, after the six months technical period after approval, or dependently from some other timeline. EGNRET affirmed that it was important to get this detailed clarified as soon as possible. The APEC Secretariat agreed that the “one year timeline” could be misinterpreted and offered to give economies a clear set of instructions in a timely manner. EGEDA emphasized the importance of hard copy publication of APEC Energy statistics and asked US\$10,000 for that purpose. It was supported by the EWG and EGEDA’s proposal including that amount was approved and ranked. The Lead Shepherd confirmed all project proposals for 2010 were endorsed by the EWG. Details of endorsed EWG projects are provided below.

<b>OPERATIONAL ACCOUNT AND APEC SUPPORT FUND PROJECT PROPOSAL</b>	<b>PROPOSER</b>	<b>Budget</b>	<b>APEC a/c (U.S.\$)</b>	<b>RANKING</b>
APEC Peer Review on Energy Efficiency (PREE) Phase 3	Yota ONO, Japan	\$763,000	\$150,000	<b>1</b>
APEC Cooperative Energy Efficiency Design for Sustainability(CEEDS); Phase 2	Yota ONO/EGEDA	\$730,000	\$150,000	<b>2</b>
Operation of APEC Energy Database and Analysis	Mr. K Matsui/EGEDA	\$214,600	\$20,000	<b>3</b>
Best Practices in Energy Efficiency and Renewable Energy Technologies in the Industrial Sector in APEC Region	Paritud Bhandhubanyong, EGEEC	\$75,000	\$50,000	<b>4</b>
Increasing the Knowledge and Awareness of Carbon Capture and Storage: CCS Capacity Building in the APEC Region (Phase V)	Frank Mourits/EGCFE	\$240,000	\$120,000	<b>5</b>
APEC SME Renewable Energy Infrastructure Blueprint: Report on Economic Benefits	Cary Bloyd/EGNRET; SMEWG	\$120,000	\$80,000	<b>6</b>
Initiative (Collaborative VI): Wind Power: Current Status and Guidelines for Implementation	Andrew Robertson/EGNRET	\$100,000	\$50,000	<b>7</b>

Permitting Issues Related to New Coal-based Power Plants, including Carbon Capture and Storage	Scott Smouse/EGCFE	\$90,000	\$70,000	<b>8</b>
Survey of Market Compliance Mechanisms for Energy Efficiency Programs	Jeff Skeer /EGEEC	\$100,000	\$50,000	<b>9</b>
The Status and Potential of Electric Vehicles in the APEC Region	Andrew Robertson/EGNRET	\$130,000	\$60,000	<b>10</b>
Training/Workshop on ESCO Business in APEC Economies	Ratna Ariati	\$80,000	\$60,000	<b>11</b>
Street & Outdoor LED Lighting Initiative – Asia (SOLLIA)	Jeff Skeer/EGEEC	\$100,000	\$50,000	<b>12</b>
Energy, Transport and Environmental Benefits of Bus Rapid Transit	Jeff Skeer/EGEEC; TPT-WG	\$150,000	\$75,000	<b>13</b>
Energy, Transport and Environmental Benefits of Transit Oriented Development	Jeff Skeer/EGEEC; TPT-WG	\$150,000	\$75,000	<b>14</b>
Workshop on Opportunities for Marine Energy development in APEC Economies	Andrew Robertson/EGNRET	\$100,000	\$50,000	<b>15</b>
Transport, Energy and Environmental Benefits of Intermodal Freight Strategies	Jeff Skeer/EGEEC; TPT-WG	\$150,000	\$75,000	<b>16</b>
<b>Total</b>		<b>\$3,292,600</b>	<b>\$1,185,000</b>	

<b>TRADE &amp; INVESTMENT LIBERALISATION FUND (TILF)</b>	<b>PROPOSER</b>	<b>Budget</b>	<b>APEC a/c (U.S.\$)</b>	<b>RANKING</b>
Reducing Trade Barriers for Environmental Goods & Services (Energy Efficient products) in the APEC region	Akihiko Tamura/EGEEC; MAG	\$75,000	\$75,000	<b>1</b>
Survey of Major Impediments and Market Drives to the Development of Trade in Goods that are Necessary for Climate Change mitigation and Adaptation	Jeff Skeer/ETITF	\$90,000	\$60,000	<b>2</b>
Development and Harmonization of Standards for indoor light emitting diodes (LEDs)	Melanie Slade/EGEEC	\$100,000	\$50,000	<b>3</b>
Barriers to Energy Trade and Investment in the Private Sector	David Natusch/EBN	\$120,000	\$50,000	<b>4</b>
<b>Total</b>		<b>\$385,000</b>	<b>\$235,000</b>	



### **Actions Arising/Next Steps**

- The APEC and EWG Secretariat to report to members on the total amount of APEC funds available, compared to the total amount of funds sought by the EWG for 2009 project proposals.
- EWG Secretariat to make results available to member economies.
- APEC Secretariat to circulate and post online a clear set of instructions for project's timeline.

### **13. Report on Progress towards the EMM9**

Japan presented its work plan in preparation for the next EMM meeting that will be held in Fukui, Japan, on June 19-20, 2010. Japan also announced that in preparation for the EMM9, the next EWG39 will be held on March 9-13, 2010 in Tokyo.

After a deliberation, delegates from member economies proposed that the theme for the EMM9 be "Low-Carbon Paths toward Energy Security". But the theme remains open and Japan invited member economies to submit ideas about a possible strategic theme by 11 December. The United States also proposed some options for areas of discussion on how to structure the time for a one-day meeting on the issue. Referring to the November 2009 Leaders' meeting in Singapore, Chinese Taipei suggested that in preparation for the meeting it would be perhaps beneficial to integrate ideas on the report on Environmental Goods and Services. As a follow up to the discussion, Australia reiterated the points made at the Steering Committee Group Meeting, including: the need for a strategic theme and agenda with an APEC focus, possibly picking up Environmental Goods and Services consistent with the Singapore Leaders Declaration; consider concerns that the Ministers' agenda may be overly ambitious given the short time of the meeting; support of the U.S. view that a transition toward low-carbon technologies could be of interest to the ministers; consider ways to get better interaction between ministers and private sector representatives – possibly the day before the ministerial.

Canada called for the development of an agenda that could bundle important issues into more broad themes along the lines articulated by the United States, Australia and other members. The idea is to have an agenda that can be used to better engage discussions among ministers. In essence: to avoid narrowly focussed technical discussions. In the broader EWG discussion, member economies proposed a list of eight such potential broad thematic areas for possible consideration from amongst which a higher level agenda could be shaped for a one-day Ministerial meeting.

Some of the eight possible overarching themes for EMM9 raised by Australia, Canada, Chile, Korea, New Zealand, Hong Kong and the United States included the following.

- "Greening the Transportation Sector" (possible sub-topics e.g. alternative fuels, electric vehicles, alternative fuels, renewables and alternative storage technologies".
- "Zero Emission Buildings"
- Global Economic Recovery and role Energy Investment Issues (re: possible sub-topics: technology transfer, outlook on energy and economic growth).
- Building on Energy Investment and Trade (from EMM8)
- Carbon Free Power Sector (e.g. CCS + Renewables linkages)
- Natural Gas (e.g. role in Lower carbon economy, bridge to CCS, how to take advantage).
- APEC wide cooperation on energy S&T and R&D
- Civil Nuclear Cooperation (which could incorporate proposed nuclear safety issue).

Finally the EWG Chair said that as APEC economies send their comments to Japan, everyone needs to make sure that their topics and recommendations create a clear link with the Declaration of the November 2009 Leaders Meeting in Singapore. Looking at the past, the Chair added that many ministerials have occurred during 2009 and in some cases leaders have already had more than one opportunity to meet. Thus, it is important that economies think of good themes that will attract Ministers to meet again. The Chair welcomed Australia's suggestion to get input from the private sector. Referring back to her meeting with ABAC, the Chair concluded by reminding members that there is a concern that the EWG does not keep well in touch with the private sector.

Japan concluded by reiterating to members to send comments by 11th of December.

#### **Actions Arising/Next Steps**

- Economies to provide comments to Japan by 11<sup>th</sup> of December.
- The second Steering Committee Meeting will be held in conjunction with the EWG39 Meeting in Tokyo in March.
- 25 December – Preliminary Draft of EMM9 Declaration prepared and distributed by Japan to Members.
- 5 February – Draft EMM9 Declaration

#### **14. Date for Next Meeting(s)**

Japan advised it would host EWG39 in Tokyo, Japan, from 9-13 March 2010. Japan will provide a full schedule to members in the near future. The Lead Shepherd asked members of any plans to host future meetings. On the request of Canada, Canada and Brunei Darussalam informed Members about a switch for hosting future EWG meetings wherein Brunei will now host EWG40 in October 2010 and Canada EWG41 in the first half of 2011. The Lead Shepherd thanked Brunei for responding to the Canadian request. However, Mrs. Yoshida voiced some concern regarding the fact that Brunei's tentative schedule for the EWG40 fell somewhat early in advance of the 2010 Leader's Meeting which is scheduled for November 2010. Brunei Darussalam took note of the concern and said that it will try to work out a solution that will be agreeable for the member economies.

#### **Actions Arising/Next Steps**

- Members to note the dates of EWG39 and EMM9.
- The EWG Secretariat, to work with Japan to prepare for EWG39.
- Japan to inform members in more detail on plans to host the EWG39 meetings.
- Members to note the dates of EWG39 and EMM9 in Japan.
- Brunei Darussalam to further discuss with economies suitable dates for the EWG40
- Members to inform Brunei of any conflicting meetings for the EWG40 dates.

#### **15. Other Business**

None

#### **Actions Arising/Other Matters**

None

## **16. Document Access**

Members decided on the classification of documents from EWG38.

### **Action Arising/Next Steps**

- Members to provide the EWG Secretariat with electronic copies of all documents tabled at the meeting to enable the EWG Secretariat to provide to all members post EWG38.
- EWG Secretariat to work with all member economies and expert groups to make sure that access for EWG39 documents occurs before the meeting. (Please note that the EWG Secretariat has the responsibility to set up a separate secure site for agenda papers one month before the meeting. The host economy has the responsibility to set up the registration site. These are two different sites.)

## **17. Summary Record**

A draft Summary Record of EWG38 will be prepared by the EWG Secretariat. The draft will be then emailed to members for their comments within one week following the conclusion of EWG38, with a final Summary Record provided to all EWG members by the end of December 2009.

### **Actions Arising/Next Steps**

- Members to provide comments on the draft Summary Record by the end of December 2009.
- EWG Secretariat to distribute final Summary Record by the end of December 2009.

The Lead Shepherd closed the meeting and thanked Indonesia for the excellent organisation of EWG38 and its associated meetings. Indonesia said the meeting was very productive and stated we should not lose sight of trying to develop a global energy market characterised by free and open trade and transparent investment frameworks.

The Lead Shepherd thanked the Co-Chair, Mrs. Emy Perdanahari, and she also thanked Australia, the former EWG Secretariat, for the work they had undertaken over the years on behalf of EWG Members. It also thanked Australia for working closely with the new EWG Secretariat to help prepare the EWG38.

EWG Members, knowing that Mrs. McCallum-Johnston will be retiring from her office shortly, showed their utmost gratitude for her outstanding contributions to the EWG activities. The Lead Shepherd said she was looking forward to working with all members at EWG39.

**Attachment A**

<b>EWG38 PARTICIPANTS</b>	<b>ORGANIZATION</b>
<b>EWG38 Co-Chairs</b>	
Phyllis Yoshida (Lead Shepherd)	U.S. Department of Energy
Emy Perdanahari	Ministry of Energy & Mineral Resources, Indonesia
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Luis Enrique Vertiz Avelar	Program Director
<b>EWG Secretariat</b>	
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Daniel P. Colombo	U.S. Department of Energy
Paul Telleen	U.S. Department of Energy
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Douglas Cooke	Department of Resources, Energy & Tourism
Jan McCallum-Johnston	Department of Resources, Energy & Tourism
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Siti Hafsaah Haji Abdul Hamid	Prime Minister's Office – Energy Division
Haji Ismail PD Haji Hashim	Prime Minister's Office – Energy Division
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Rodrigo Iglesias	National Energy Commission
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Yohannes Martin Hasugian	Ministry of Energy & Mineral Resources
Bambang Wicaksono	Ministry of Energy & Mineral Resources

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Reiko Eda	Ministry of Economy, Trade and Industry
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Jeff Skeer	U.S. Department of Energy
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