



Energy Working Group

EWG35

Iquitos, Peru, 5–6 March 2008

EWG35 Summary Record

The 35th Meeting of the APEC Energy Working Group (EWG) was held in Iquitos, Peru, from 5–6 March 2008. Mr John Ryan, EWG Lead Shepherd chaired the meeting, and Mr Juan Valdivia Romero, Minister, Peruvian Minister of Energy and Mines, and Mr Pedro Gamio Aita, Peruvian Vice-Minister, Energy and Mines Co-Chaired the meeting.

Delegates from APEC economies Australia; Brunei Darussalam, Canada; Chile, People's Republic of China; Hong Kong, China; Indonesia, Japan; Republic of Korea; Malaysia; Mexico; New Zealand; Peru; Philippines; the Russian Federation; Singapore; Chinese Taipei; and the United States attended the meeting.

Representatives from the Asia Pacific Energy Research Centre (APEREC); Energy Business Network (EBN); APEC and EWG Secretariats; Expert Groups on Energy Data and Analysis (EGEDA), New and Renewable Energy Technologies (EGNRET), Clean Fossil Energy (EGCFE), Energy Efficiency and Conservation (EGEEC); Chair of the APEC Biofuels Task Force (BFTF) and the Energy Efficiency and Renewable Energy (EE & RE) Financing Task Force; also participated in the meeting. A list of EWG35 participants is at **Attachment A**.

1. Opening Addresses and Adoption of the Agenda

The EWG Lead Shepherd welcomed delegates and thanked Peru for hosting EWG35 and associated meetings. The Lead Shepherd introduced members to the Co-Chair, Mr Juan Valdivia Romero, Minister for Energy and Mines, Peru and Mr Pedro Gamio Aita, Vice-Minister, Ministry of Energy and Mines.

The Co-Chair also welcomed EWG35 delegates to Peru noting the opportunity EWG35 provides to implement the instructions of APEC Energy Ministers from EMM8 in Darwin. The Co-Chair noted that Peru is committed to energy security, energy efficiency and the development of new renewable energy. He expressed his hope that the outcomes of this meeting will contribute to the further development of energy trade and investment in the region, and noted the importance of energy to sustainable development. The Co-Chair also noted the importance of environmental considerations in the EWG's work to mitigate global warming.

The Lead Shepherd thanked the Co-Chair for his welcome. The Lead Shepherd reminded members that the Darwin Declaration formed an important component of APEC Leader's consideration of clean development and climate change at their meeting in Sydney. Leaders subsequently called for specific action to improve energy efficiency and to accelerate the adoption and deployment of clean energy technologies including setting individual goals and action plans for improving energy efficiency.

The Lead Shepherd asked members to keep these directives in mind as they worked through the agenda for EWG35.

The EWG35 Draft Agenda was adopted by members without amendment.

2. APEC Secretariat Report

Mr Sun Tao, Energy Program Director, APEC Secretariat, tabled a report on developments since EWG34. Mr Tao noted APEC's theme in 2008, 'A New Commitment to Asia Pacific Development', and the continuing drive of APEC to progress the goals of trade and investment facilitation in the region.

The APEC Secretariat reported on items of interest to members, with specific attention paid to the Project submission and consideration process and time frame. In 2008 there will be three BMC meetings. BMC 1 was held last week held in Lima. While no project proposals were considered, issues related to the consideration and endorsement of projects were discussed. BMC 2 will be held on April 17 in Singapore and will consider urgent project proposals. None have been received to date. BMC3 will be held 22-23 October in Singapore. EWG project proposals will be considered then.

The deadline for submission of full project proposals to the PMU is 23 September 2008. Comments will be made and the final submission date is 1 October 2008. Recommendations will be submitted to BMC by 8 October.

The EWG secretariat will work with the APEC Secretariat and develop a time frame for submission of full proposals to the EWG Secretariat to allow more time for members to review them and to take account of the two stage process of seeking project co-sponsors and endorsement from EWG members and then submission to the APEC Secretariat. Early submission is encouraged. Project proposals will be approved according to the priorities of APEC Leaders and Ministers.

The APEC Secretariat noted the Revised EWG Terms of Reference as endorsed by members.

It was also noted that a project proposal for the review of fora including the EWG has been approved by SCE, but is still subject to approval by BMC2. An independent consultant will conduct the review, including the internal working of the group. The review will include analysis of the EWG's responses to Leaders and Ministers instructions. There was general discussion about the project and the selection of a consultant to undertake the review.

The Lead Shepherd thanked the APEC Secretariat for its report to members.

Actions Arising/Next Steps

- Full Project proposals to be submitted to the APEC Secretariat via the Project Data Base (APEC Information Management Portal - AIMP) by 23 September 2008.

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

EBN18

Dr David Natusch, EBN Chair, reported on the activities and outcomes from EBN18 and noted that three economies participated at EBN18. Three key issues were outlined for the EBN:

- ongoing improvement in linkages with ABAC;
- current state of uncertainty amongst the private sector of how to respond to current energy security imperatives of governments; and
- the impact of climate change.

EBN Chair reported that members had discussed possible topics for the policy dialogue at EWG36. EBN members have proposed that the policy dialogue topic for EWG36 be "Definition and Formulation of Best Practise Principles for the Energy Sector".

As directed by APEC Energy Ministers at EMM8, EBN Members discussed the review of the Best Practice Principles (BPPs) in preparation for their contribution and participation in the APEC Energy Trade and Investment Roundtable and Study scheduled to be held in Cairns, Australia, September 2008. The Best Practice Principles addressed by the EBN are as follows.

- Manual of Best Practice Principles for Independent Power Producers.
- Recommendations Concerning Accelerating Investment in Natural Gas Supplies, Infrastructure and Trading Networks in the APEC Region.
- Facilitating the Development of Liquefied Natural Gas (LNG) Trade in the APEC Region.
- Ten Priorities for Financing Energy Infrastructure Projects within the APEC Region.

Working groups will be established to consider the review of the above BPP's and outcomes will be reported back to the EWG. The EBN Terms of Reference are currently being reviewed out-of-session with the aim of making the EBN more effective. The final will be completed shortly and submitted to the EWG Secretariat.

Energy Business Forum

The Energy Business Forum was held in the afternoon of 4 March 2008 and titled 'Situation and Perspectives for the Energy Sector in Peru'. The following presentations were given.

- Situation and Perspectives for the Energy Sector in Peru - Carlos del Solar (President & GM, Hunt Oil Co. of Peru).
- Camisea Project: LNG Export Project and Gas Fired Power Generation- Norberto Benito (Peru Country Manager, Pluspetrol).
- LNG Export Project - Barbara Bruce (General Manager, Peru LNG).
- Gas Fired Power Generation - Ignacio Blanco (Peru Country Manager, Endesa)
- Project of Crude Heavy Operation Bock 67, James Dean
- El Platanal Hydroelectric Project - Pedro Lerner (General Manager, El Platanal S.A.)
- Ethanol and Biodiesel Projects - Angel Irazola (Director – Romero Group)

New Projects Portfolio

- Power Generation – Jorge Aguinaga (Director General, Electricity, Ministry of Energy & Mines)
- Hydrocarbons – Ronald Egúsquiza (Promotion Manager, Perupetro)
- Alternative Fuels – Guillermo Ferreyros (General Manager, Maple Energy)
- Petrochemical Project – David J. Pruett, Sr. Vice President, Operations, CF Industries.

Members thanked Peru for providing such an interesting and useful information session to the EWG and business representatives.

Actions Arising/Next Steps

- EBN Members to review the Best Practice Principles and to report back to EWG36.
- EBN Members to review the EBN Terms of Reference out-of-session and to submit the final to the EWG Secretariat.
- EBN members to progress nominations for the next EBN Chair out-of-session.

4. Policy Dialogue

Members discussed the topic of be *Policies and Programs to Promote Clean Transport Fuels in APEC Economies*. As previously agreed, no records of the discussion were taken.

Members discussed potential topics for the policy dialogue at EWG36.

Actions Arising/Next Steps

- The topic for the policy dialogue at EWG36 will be "Assessment of the Effectiveness of Government Policies in Addressing Liquid Fuel Security."

5. EWG Project Funding 2009 – Procedural Issues

EWG members were provided with synopsis of 2009 project proposals.

The APEC Secretariat outlined the process for determining caps on individual project proposals. The Lead Shepherd stated that unless there were any objections, project proposals submitted are considered to be endorsed. Furthermore, projects that do not receive funding could be undertaken as Self Funded projects.

Expert Group and Task Force Chairs provided a brief presentation on each project proposal (see below). Of the 29 2009 project proposals submitted, there were:

- 10 Operational Account project proposals;
- 6 Trade and Investment Liberalisation Facilitation Special Account project proposals;
- 12 APEC Support Fund project proposals; and
- 1 Self Funded project.

EWG 2009 PROJECT SYNOPSES:

APEC Operational Account

O1	Addressing Grid-interconnection Issues in Order to Maximize the Utilization of New and Renewable Energy Sources	Koichi Inoue, EGNRET
O2	Capacity Development Workshop - Facilitation of International Harmonization of Standards for Energy Management in APEC	Li Tienan, EGEEC
O3	Fossil Power Plant Efficiency and CO2 Emissions Monitoring and Reporting in Developing Asian APEC	Scott Smouse, EGCFE

Economies

O4	Implementation of CO2 Emission Reduction Technologies and Methods for Fossil Fuel Installations	Scott Smouse, EGCFE
O5	Operation of APEC Energy Database and Analysis	Kenichi Matsui, EGEDA
O6	Potential for Biomass-to-Liquids (BTL) production and trading throughout the APEC region	Nichola Bennett, EGNRET
O7	Carbon footprints associated with New and Renewable Energy production and use in APEC economies	Nichola Bennett, EGNRET
O8	Renewable electricity and electric vehicles - status and potential in APEC economies	Nichola Bennett, EGNRET
O9	Workshop on Opportunities for Marine Energy development in APEC economies.	Nichola Bennett, EGNRET
O10	Overview of APEC Energy Working Group Projects - Stage 3	Jan McCallum-Johnston, Australia

APEC Support Fund (ASF)

A1	Energy and Water Efficiency in Water Supply: Practical Training on Proven Approaches	Jeffrey Skeer, EGEEC
A2	APEC 21st Century Renewable Energy Development Initiative (Collaborative I): Survey of Best Practices of Building integrated Energy Efficiency and Renewable Energy in APEC Economies	Harvey Major, EGNRET
A3	Survey of Cool Roofs in APEC Economies: Experience, Best Practices and Potential Benefits	Jeffrey Skeer, EGEEC
A4	Energy-Saving Doors and Windows: Survey of Policies and Programs to Promote Advanced Fenestration Technologies in APEC Economies	Jeffrey Skeer, EGEEC
A5	Carbon Capturing Biofuels Resource Potential	Jeffrey Skeer, BTF
A6	Resource Potential of Algae for Biodiesel Production	Tom Beer, BTF
A7	Biofuel Feedstock Costs, Technology & Economics	Jeffrey Skeer, BTF
A8	APEC 21st Century Renewable Energy Development Initiative (Collaborative V I): Workshop on the use of renewable energy technologies in disaster response	Harvey Major, EGNRET
A9	Sustainable Biofuels Development Practices	Jeffrey Skeer, BTF
A10	Case Studies of Public Education and Information Campaigns in APEC economies, and Development of Best Practice Guidelines	Scott Smouse, EGCFE
A11	Overview of Energy Diversification Policies in APEC to Mitigate Long Term Energy Security Risks	Francisco Acosta Arredondo, EGCFE
A12	APEC Peer Review on Energy Efficiency(APEC/PREE)	Kotaro Kimura, Japan

APEC Trade and Investment Liberalisation Fund (TILF)

T1	Reducing barriers to trade through development of a common protocol for measuring the seasonal energy efficiency (SEER) of air conditioners	Robert Hu, EGEEC
T2	Supporting APEC Energy Standards Information System (ESIS) System	Robert Tromop, EGEEC
T3	Alignment of national standby power approaches	Rachael ClarkeEGEEC

T4	CFL Round-Robin Testing to Benchmark Regional Testing Laboratory Capacity	Melanie Slade , EGEEC
T5	Survey on Best-practices in Promoting Efficient Lighting Products and Phasing out incandescent Bulbs in APEC Economies	Li Tienan, EGEEC
T6	Harmonization of methodologies to assess the impacts of energy efficiency standards in APEC economies	Juan Mata Sandoval, (M), EGEEC
Self Funded Projects -		
SF	APEC 2008 Photovoltaic Conference	Huey-Chin Yeh, Chinese Taipei

Members were requested to complete the 2009 project ranking forms, ranking each project proposal in order of their preference. Completed forms were then to be submitted to the EWG Secretariat for collation and reporting to members under Agenda Item 12 – 'EWG Project Funding 2009 – Endorsement of Project Proposals'.

6. Implementation of the APEC Energy Security Initiative (ESI)

The EWG Lead Shepherd presented the 9th Report on Implementation of the Energy Security Initiative to members for their consideration and comment. In addition, members also noted the instructions of APEC Leaders, APEC Ministers and Energy Ministers – including the Darwin and Sydney Declarations from 2007 and discussed strategies for implementation in the both the short and long term areas of the ESI.

6.1 Short-term ESI Measures

Members reported on and discussed implementation of EMM8 Energy Ministers instructions relating to each of the short-term measures under the APEC Energy Security Initiative (ESI).

6.1(a) Joint Oil Data Initiative

The Co-Chair of the Expert Group on Energy Data and Analysis (EGEDA) reported progress on this short term initiative. EGEDA encouraged members to continue to provide data for the JODI in a timely manner.

6.1(b) Maritime Security

At EMM8, Energy Ministers instructed the EWG to develop linkages with organisations responsible for regional maritime security for reporting to EMM9.

The Lead Shepherd asked members to consider appropriate representation at a Transportation Working Group meeting in Manila in April 2008. In response, Japan reported that they will consider attending future Transport Working Group meetings. The Lead Shepherd requested that outcomes be reported to members at EWG36.

Actions Arising/Next Steps

- EWG Secretariat will assist Japan to develop a presentation to be given at the next TWG Maritime Security Sub-Group 14 – 18 April in Manila.

6.1(c) Real-time Emergency Information Sharing System (RTEIS)

APEC Energy Ministers have encouraged APEC economies to participate in the RTEIS system and to develop and communicate energy emergency response mechanisms and contingency plans, including an APEC Rapid Response Points of Contact Network for the Protection of Critical Infrastructure.

Japan reported on the RTEIS system, advising members that they held a 'chat' on 30 October 2007 to discuss development of the Protection of Critical Energy Infrastructure Network for the sharing of information. Participants were Australia, Japan, Hong Kong China and New Zealand.

Japan requested that Russia provide a list of contact points for the development of the APEC Rapid Response Points of Contact Network for the Protection of Critical Infrastructure. Russia noted that it did not participate in the chat held on 30 October, and advised that its contact details would be made available. Russia also requested an additional chat be held addressing the APEC Rapid Response Points of Contact Network for the Protection of Critical Infrastructure and that it would participate.

It was noted that there may be limitations to the sharing of information due to specific economy sensitivities. As noted at EWG34 in Hong Kong China, a list of contacts from all economies is required. It was noted that depending on the topic, different contacts would participate in the chats.

The EWG Lead Shepherd suggested that a list of core contacts be developed for initial consultation regarding future RTEIS chats and future topics for discussion.

Actions Arising/Next Steps

- EWG members to provide Japan with a core contact point for future participation in RTEIS 'chats' and for consultation regarding the development of the APEC Rapid Response Points of Contact Network for the Protection of Critical Infrastructure.
- Japan to organise an additional chat regarding APEC Rapid Response Points of Contact Network for the Protection of Critical Infrastructure and future emergency response topics for discussion.

6.1(d) Energy Emergency Responses including Oil Stocks

In line with APEC EWG practice for this agenda item, Peru provided a report to members on its energy emergency response arrangements. The report was tabled and will be available on the EWG website.

Actions Arising/Next Steps

- EWG Secretariat to post Peru's report on the APEC Energy web site.
- EWG Secretariat to liaise with members regarding a topic for presentation under this agenda item at EWG36.

6.2 Long-term Measures

Members reported on and discussed implementation of EMM8 Energy Ministers' instructions relating to each of the long-term measures under the ESI, specifically:

6.2(a) Energy Investment

The Chair of the Energy Efficiency and Renewable Energy Financing Task Force tabled a progress, report and informed members about the seminar on local bank training for financing energy efficiency and renewable energy that was held in Mexico City on 28-29 November 2007.

It was noted that the Energy Efficiency and Renewable Energy Task Force has now completed the activities it was established to undertake. Members therefore congratulated the Task Force on its achievements and thanked its members for their contributions.

The Lead Shepherd observed that a new Task Force might be created to address the broader energy investment issues that may be raised at the APEC Energy Trade and Investment Roundtable.

APEC Energy Trade and Investment Study and Roundtable

Australia reported progress of the APEC Energy Trade and Investment Study and Roundtable. The contract to undertake the study consultancy has been awarded to PriceWaterhouseCoopers. The Study Project Charter, the Expert Consultation List and the Literature review list were tabled for members comment. Members were advised that a draft study report will be circulated for comment by the end of May 2008, with the final report expected to be circulated by the end of June.

The APEC Energy Roundtable will be held in Cairns, Queensland, Australia, from 24 - 25 September 2008. Members were advised that an event web page will be created soon and that it will include registration and accommodation booking facilities.

The Roundtable agenda is still in development and a draft will be circulated to members shortly for comment. A Roundtable notice was also circulated to members.

Best Practise Principles

The EBN Chair reported that EBN members will review the uptake and currency of the APEC priorities for Financing Energy Infrastructure Projects within the APEC region. Dr Natusch stated that EBN working groups will be established to review the Best Practise Principles out of session. Working groups will report back to EBN19 in September 2008.

Actions Arising/Next Steps

- Outcomes from the Energy Trade and Investment Roundtable will be reported to the EWG.
- The Lead Shepherd will write to APEC Energy Ministers out of session with the outcomes of the APEC Energy Trade and Investment Study and Roundtable.
- EWG Secretariat to explore reporting of outcomes of the Energy Trade and Investment Roundtable to the next meeting of APEC Finance Ministers.
- Members to provide comment on the APEC Energy Trade and Investment Study Project Charter, the Expert Consultation list, and the Literature Review list to the EWG Secretariat by 14 March 2008.
- Australia to develop and circulate draft agenda for the APEC Energy Trade and Investment Roundtable to members for comment out-of-session.
- Australia to advise members when the event web page and registration facilities become available.
- EBN to establish working groups to undertake a review of Ten Priorities for Financing Energy Infrastructure Projects within the APEC Region and report back to EWG36.
- EWG Secretariat to post progress report for the Energy Efficiency and Renewable Energy Financing Task Force on the EWG web site.

6.2(b) Natural Gas Trade

Chinese Taipei reported to members on progress of the LNG Public Education and Communication Information Sharing Initiative.

The Chair of EGCFE tabled a report on the APEC Natural Gas Utilisation Workshop (26-29 August 2007) and the LNG Public Education Workshop (5-7 November 2007) both held in Guangzhou, People's Republic of China.

The Co-Chair of EGEDA provided members with a report on the trial collection of monthly natural gas data and advised members that the gas data will become publicly available in April 2008. EGEDA also proposed to establish a JODI like network for natural gas. The Lead Shepherd requested members to submit their natural gas data in a timely and accurate manner.

Members noted the report of the APGAS3 Forum, held in San Diego from 16-18 September 2007. Members also noted that APGAS4 was proposed to be held in the second quarter of 2009.

The Chair of the EBN discussed approaches to reviewing the uptake and currency of the APEC Best Practice Principles as instructed by Energy Ministers at EMM8. The Chair advised that the Best Practice Principles to be addressed by the EBN are:

- recommendations concerning accelerating investment in natural gas supplies, infrastructure and trading networks in the APEC Region; and
- facilitating the Development of LNG Trade in the APEC Region.

Working groups will be established by the EBN to undertake the reviews of Best Practice Principles.

Actions Arising/Next Steps

- Members to continue to provide natural gas data to EGEDA in a timely and accurate manner.
- EBN to report on review of Recommendations Concerning Accelerating Investment in Natural Gas Supplies, Infrastructure and Trading Networks in the APEC Region; and Facilitating the Development of Liquefied Natural Gas (LNG) Trade in the APEC Region at EWG36.

6.2(c) Energy Efficiency

Pledge and Review

Members noted the APEC economy reports submitted under the second component of the Pledge and Review Program, specifically, Information Sharing on Economy-Specific Energy Efficiency Policies and/or Programs. The following economies submitted their Pledge and Review reports; Australia, Canada, Chile; Indonesia, Mexico, USA, New Zealand, Japan, Korea, Chinese Taipei.

Expert Group Reports

The EGEEC reported to members on progress of its current activities and also noted potential areas of future work.

The United States updated members on progress of its project on Transportation Energy Efficiency Policies. The importance of activities regarding energy efficient transport to the work of the EWG was noted.

The Chairs (or representative) of EGEEC and EGEDA reported on the Applying Energy Indicators in APEC Economies - Capacity Development Workshop that was held in Singapore 17–21 September 2007.

Peer Review on Energy Efficiency (PREE)

Japan provided a verbal report on the Peer Review Mechanism on Energy Efficiency (PREE). Japan called for a compilation of economies policies as outlined in its EWG Project Proposal.

Two activities are proposed to be undertaken as part of the PREE, namely:

- (a) peer reviews of volunteer member economies (PREE); and
- (b) compilation/compendium of energy efficiency policies of the APEC member economies.

APEREC reported on its plans for the recruitment of energy efficiency specialists to lead review teams and requested economies to assist in the identification of suitable candidates. Japan also called for economies to volunteer experts to participate as part of the review team. It is expected that one or two PREE Reports will be presented at EWG37. Through the EWG secretariat, Japan will consult with economies on the proposed agenda for reviews and the appointment of energy efficiency experts for the review team. Japan also noted that any voluntary contributions from members to the PREE would be most welcomed. The EWG Secretariat will provide secretariat services to help facilitate PREE coordination amongst members.

New Zealand volunteered to undergo a PREE for presentation at EWG36 or EWG37. Chile also volunteered to undergo a PREE for presentation at EWG37.

As noted in the PREE proposal, an APEC economy that is also a member of the IEA may submit for peer review the energy efficiency chapter from IEA's most recent in-depth review of its energy policies. Accordingly, the United States tabled the energy efficiency chapter from its 2008 IEA Review, noted the key points, and welcomed comments. The Review chapter provides an example of the type of analysis that will be undertaken through the PREE. Japan also indicated that it would be pleased to submit the energy efficiency chapter from its 2008 IEA Review when finalised. Indonesia, which is not an IEA member, but recently received an IEA Review, noted that the energy efficiency chapter of the IEA Review is not yet finalised but will be provided to members at EWG36.

Canada expressed its support for the PREE. Australia also expressed its support for the PREE noting that in the first instance, it will direct resources to the sharing of relevant information and that it hopes to volunteer for the PREE in the near future.

Japan's revised PREE proposal was endorsed by EWG members.

Energy Efficient Transport

The United States updated members on progress with the survey of information on transportation energy efficiency policies and the development of best practice principles for energy efficient transport, noted that there will be a follow-up workshop in late 2008, tabled a preliminary draft of the survey report, and encouraged members to provide additional or amplified examples. Copies of the revised survey report will be made available from the EWG web site in April 2008.

Pledge and Review topic for EWG36

The Chair's representative, EGEEC proposed the Pledge & Review topic for EWG36 be "Report Progress on Developing Capacity to Collect, Manage and Analyse Energy Data." This proposal was endorsed by members. A template will be circulated by the EGEEC for completion by economies.

Actions Arising/Next Steps

- EWG Secretariat to contact members to request nominations from economies to undergo a PREE.
- Japan to consult with member economies, through the EWG Secretariat on a proposed agenda for PREE reviews.
- EWG Secretariat to work with Japan and APERC to coordinate a review team and arrange PREE's for New Zealand and Chile for reporting at EWG37.
- EGEEC to circulate the next Pledge and Review topic template for completion by economies for EWG36.

6.2(d) renewable energy

The EGNRET representative tabled a progress report and informed members that it now has a web site (the web site URL is provided in the progress report). Members were updated on current activities as well as recently completed projects. The report will be available on the EWG web site

Actions Arising/Next Steps

- EWG Secretariat to post the EGNRET progress report on the EWG web site.

6.2(e) clean fossil energy

The Chair of EGCFE tabled a progress report and informed members of current activities as well as recently completed projects. The report will be available on the EWG web site.

Actions Arising/Next Steps

- EWG Secretariat to post the EGCFE progress report on the EWG web site.

6.2(f) alternative transportation fuels

The Chair of the APEC Biofuels Task Force tabled a progress report and informed members of current activities and upcoming priorities in the areas of biofuel economics and resource assessment.

The representative of EGNRET tabled a progress report and informed members of its recently completed projects and its current activities including those related to biofuels technologies.

Actions Arising/Next Steps

- EWG Secretariat to post progress reports for the Biofuels Task Force and EGNRET on the EWG web site.

6.2(g) nuclear energy

The United States noted that the Global Nuclear Energy Partnership now has 18 members, including APEC economies Australia, China, Japan, Russia and United States, which have signed a statement of principles for expanding the safe and peaceful use of civilian nuclear energy, including enhanced safeguards, international fuel service frameworks, and advanced technologies. To achieve a nuclear fuel cycle that enhances energy security while promoting non-proliferation, GNEP seeks to have

economies with secure, advanced nuclear capabilities provide fuel services (fresh fuel and recovery of used fuel) to economies that agree to employ nuclear energy for power generation purposes only.

Australia noted that it does not intend to pursue civilian nuclear power as part of its energy mix. However, Australia is still active in promoting nuclear safeguards and a secure nuclear fuel cycle.

Chile advised members that a Commission has been established to undertake an analysis of the advantages and disadvantages of the development of a nuclear energy power plant. The report was released at the end of 2007. The commission will continue to undertake work in this area.

Peru advised members that the development and deployment of civilian nuclear power is currently being considered, including an examination of law on domestic investment in nuclear energy.

Due to the high level of electricity demand, Indonesia advised members that it is currently considering the deployment of nuclear power, however to address public concerns, it is intensifying efforts in public education and information provision on nuclear power.

6.2(h) hydrogen and fuel cells

There were no developments reported.

6.2(i) methane hydrates

Korea updated members on activities regarding development of methane hydrates in their economy, noting that they intend to engage with other economies on this topic in future. Korea has set a target date for the commercial production of methane hydrates by 2015.

The Chair of EGCFE advised that the United States has undertaken exploratory activities with Korea and Japan in this field and offered to provide an update on bilateral and multilateral activities in regard to methane hydrates at EWG36.

Actions Arising/Next Steps

- Chair of EGCFE to provide a report on bilateral and multilateral activities in regard to methane hydrates at EWG36.

6.2(j) petroleum infrastructure and crude and refined products

APERC requested that members provide information on subsidies and taxes applying to liquid fuel products in operation in their economies.

Peru reminded members of its work to improve the production capacity and quality of its heavy oil production process, as presented at the Energy Business Forum.

Actions Arising/Next Steps

- APERC to formally contact members seeking advice on taxes and incentives for LPG, diesel, middle distillates (transportation fuels) in their economies.

7. Report of the 20th Meeting of EWG Expert Group & Task Force Chairs and APERC

The EWG Secretariat reported to members on the 20th Meeting of EWG Expert Group & Task Force Chairs and APERC, held on 3 March 2008, Iquitos, Peru.

The report of the EWG Secretariat and the Progress Reports of the Expert Groups and Task Forces will be available from the EWG website.

Actions Arising/Next Steps

- EWG Secretariat Report and Progress Report of the Expert Groups and Task Forces to be posted on the EWG website.

8. APERC President's Report

The APERC President, Mr Kimura, reported to members on progress of APERC's current activities since EWG34, including its following four research projects.

- Understanding Energy in China – Phase I.
- Energy Efficiency in the APEC region.
- Urban Transport Energy Use in the APEC Region – Phase II.
- Understanding International Energy Initiatives – Phase II.

APERC reported on its following recent activities.

- APERC Mid Year Workshop held 29-30 November 2007 in Tokyo.
- EGEDA meeting held 14-15 January 2008.
- APERC Annual Conference held 20-22 February 2008 in Tokyo.
- APERC Advisory Board Meeting held 22 February in Tokyo.

In addition, APERC outlined its proposed new research studies for 2008/09, specifically:

- APEC Energy Demand and Supply Outlook;
- Understanding Energy in China – Phase II; and
- APEC Peer Review on Energy Efficiency.

In regard to the PREE, APERC noted the need to undertake further work to develop Terms of Reference and guidelines for the conduct of the reviews. Japan's PREE proposal will form the basis of this work. Japan also requested that economies volunteer to undergo a Peer Review.

The Philippines noted that it did not receive an invitation to the last APERC Annual Conference and requested that APERC ensure it is invited to all APERC conferences. The Lead Shepherd suggested that APERC update its contact list to ensure current delegates are invited to APERC events.

Australia noted its difficulty with timing and its inability to send a representative to the last APERC Annual Conference.

APERC requested that members provide data on installed power generation capacity by fuel (e.g. coal, natural gas) and by size.

The Lead Shepherd noted that APERC would welcome financial contributions from member to assist APERC in conducting its work.

The Lead Shepherd acknowledged with appreciation the very important role that APERC and its research outcomes play in the APEC region. He commended APERC on its previous and planned work.

Members can access APERC publications from www.ieej.or.jp/aperc

Actions Arising/Next Steps

- The EWG Secretariat will work with Japan, consult with members to develop the practical arrangements for the conduct of the PREE.
- APERC to make formal approaches to economies (via email or letter) when requesting information and data input from APEC members.
- APERC to update its contact list to ensure that all EWG members are invited to APERC events.

9. Statements on Notable Energy Developments since EWG34

The Lead Shepherd thanked Australia; Hong Kong, China; Indonesia, Japan, Republic of Korea, Mexico, New Zealand, Chinese Taipei and the United States for their Statements on Notable Energy Developments. Members who tabled statements at EWG35 were requested to e-mail electronic copies to the EWG Secretariat for posting on the EWG website by 30 March 2008.

Action Arising/Next Steps

- Members who tabled their statements at EWG35 to e-mail electronic versions to the EWG Secretariat by 30 March 2008.

10. Engagement with Other Fora

The Lead Shepherd stated that Energy Ministers have instructed the 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.

The Lead Shepherd stated that EWG Guests now included the International Energy Agency, the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Energy Charter Secretariat (ECS).

Members were also advised that the Asia Pacific Partnership on Clean Development and Climate's Buildings and Appliances Task Force has been given guest status on the EWG Expert Group on Energy Efficiency and Conservation until 31 December 2009. The EGEEC noted that that the APP Buildings and Appliances Task Force has been invited to participate in their next meeting.

The Lead Shepherd noted that the EWG has been encouraged to collaborate on alternative fuels with the IEA and the Global Bioenergy Partnership and requested that the APEC Biofuels Task Force and EGNRET report to EWG36 on potential areas of cooperation.

Members were advised that the APEC Agricultural Technical Cooperation Working Group (ATCWG) had requested cooperation with the EWG on agricultural related bio-fuel projects and

that Brazil has been granted guest status on the APEC Biofuels Task Force and attended a meeting of the APEC Biofuels Task Force.

The Chair of the Biofuels Task Force reported to members on future cooperation between the EWG and the Global Bioenergy Partnership and advised that the Biofuels Task Force will present to the group in regard to sustainable development.

The Chair of the Biofuels Task Force also noted that he has been in contact with the ATCWG for the purpose of cross referencing project proposals to BMC and to coordinate requests to the BMC. It was also noted that a US-ASEAN meeting in Thailand is being organised to address the bioethanol standards work being undertaken under ASEAN and the East Asia Summit.

Japan noted that it would be beneficial to cooperate with the Energy Charter Secretariat (ECS) on energy trade and investment matters. Japan requested that the ECS be invited to attend the next meeting of the EWG to make a presentation. The Lead Shepherd noted that the ECS is also likely to be involved in the upcoming APEC Energy Trade and Investment Roundtable.

Russia noted the work of the International Energy Forum and linkages with the Joint Oil Data Initiative (JODI).

Actions Arising/Next Steps

- EWG Secretariat to contact the Energy Charter Secretariat to arrange a presentation at EWG36.
- Members to notify EWG Secretariat of engagement and outcome of cooperation activities when they are undertaken so that they may be included in agenda papers for the meeting.
- Japan to send a representative to the next APEC Transportation Working Group Maritime Security Sub-Group meeting in Manila, Philippines, 14 – 18 April 2008. EWG Secretariat to provide relevant briefing and presentation.

11. EWG Work Plan: 2007-2009

The Lead Shepherd advised members that the current EWG Work Program for 2007-2009 incorporates Ministers and Leaders instructions and provides a comprehensive overview of what is expected from the EWG. It was noted that the work plan will be updated for EWG36.

Actions Arising/Next Steps

- EWG Secretariat to post the agreed Work plan on the EWG website.
- EWG Secretariat to update the work plan for EWG36.

12. EWG Project Funding 2009 – Endorsement of Project Proposals

Members noted that 29 project proposals for 2009 had been submitted to EWG35 for consideration, endorsement and ranking by members. Members ranked the projects in accordance with the agreed EWG method.

Members agreed to submit to the BMC the following 2009 project proposals:

- 10 Operational Account projects;

- 6 Trade and Investment Facilitation Account projects; and
- 12 APEC Support Fund projects.

There was 1 self funded project submitted for the information of EWG members.

Members ranked the projects in the following order in accordance with the agreed EWG method.

Operational Account and APEC Support Fund Projects

Operational Account and APEC Support Fund Projects total \$US1,356,970

ASF & OPERATIONAL PROJECTS 2009

PROJECT TITLE	EG Chair/ Overseer	Project No.	Budget	APEC US\$	Total Value	Final Rank	Accumulated Total
APEC Peer Review on Energy Efficiency(APEC/PREE)	Kotaro Kimura, Japan	A12	\$3,500,000	\$50,000	116	1	
Operation of APEC Energy Database and Analysis	Kenichi Matsui, EGEDA	O5	\$145,000	\$30,000	125	2	80,000
Addressing Grid-interconnection Issues in Order to Maximize the Utilization of New and Renewable Energy Sources	Koichi Inoue, EGNRET	O1	\$75,000	\$50,000	126	3	130,000
Resource Potential of Algae for Biodiesel Production	Dr Tom Beer, BTF	A6	\$97,500	\$50,000	159	4	180,000
Implementation of CO2 Emission Reduction Technologies and Methods for Fossil Fuel Installations	Scott Smouse, EGCFF	O4	\$160,000	\$80,000	162	5	260,000
Overview of APEC Energy Working Group Projects - Stage 3	Jan McCallum-Johnston, Australia	O10	\$50,000	\$50,000	164	6	310,000
Capacity Development Workshop - Facilitation of International Harmonization of Standards for Energy Management in APEC	Li Tienan, EGEEC	O2	\$85,000	\$55,000	165	7	365,000
Sustainable Biofuels Development Practices	Jeffrey Skeer, BTF	A9	\$120,000	\$80,000	176	8	445,000
APEC 21st Century Renewable Energy Development Initiative (Collaborative I): Survey of Best Practices of Building integrated Energy Efficiency and Renewable Energy in APEC Economies	Harvey Major, EGNRET	A2	\$150,000	\$100,000	178	9	545,000
Fossil Power Plant Efficiency and CO2 Emissions Monitoring and Reporting in Developing Asian APEC Economies	Scott Smouse, EGCFF	O3	\$120,000	\$80,000	197	10	625,000

Overview of Energy Diversification Policies in APEC to Mitigate Long Term Energy Security Risks	Francisco Acosta Arredondo, EGCFFE	A11	\$130,000	\$50,000	199	11	675,000
Potential for Biomass-to-Liquids (BTL) production and trading throughout the APEC region	Nichola Bennett, EGNRET	O6	\$112,500	\$75,000	203	12	750,000
Carbon footprints associated with New and Renewable Energy production and use in APEC economies	Nichola Bennett, EGNRET	O7	\$138,000	\$92,000	208	13	842,000
Biofuel Feedstock Costs, Technology & Economics	Jeffrey Skeer, BTF	A7	\$75,000	\$50,000	216	14	892,000
Case Studies of Public Education and Information Campaigns in APEC economies, and Development of Best Practice Guidelines	Scott Smouse, EGCFFE	A10	\$160,000	\$80,000	239	15	972,000
Renewable electricity and electric vehicles - status and potential in APEC economies	Nichola Bennett, EGNRET	O8	\$112,500	\$75,000	240	16	1,047,000
Workshop on Opportunities for Marine Energy development in APEC economies.	Nichola Bennett, EGNRET	O9	\$75,000	\$50,000	253	17	1,097,000
Carbon Capturing Biofuels Resource Potential	Jeffrey Skeer, BTF	A5	\$90,000	\$60,000	260	18	1,157,000
APEC 21st Century Renewable Energy Development Initiative (Collaborative V I): Workshop on the use of renewable energy technologies in disaster response	Harvey Major, EGNRET	A8	\$75,000	\$50,000	268	19	1,207,000
Energy-Saving Doors and Windows: Survey of Policies and Programs to Promote Advanced Fenestration Technologies in APEC Economies	Jeffrey Skeer, EGEEC	A4	\$100,000	\$50,000	272	20	1,257,000
Survey of Cool Roofs in APEC Economies: Experience, Best Practices and Potential Benefits	Jeffrey Skeer, EGEEC	A3	\$100,000	\$50,000	276	21	1,307,000
Energy and Water Efficiency in Water Supply: Practical Training on Proven Approaches	Jeffrey Skeer, EGEEC	A1	\$49,970	\$49,970	295	22	1,356,970

Trade and Investment Facilitation Special Account Projects

Trade and Investment Facilitation Special Account Projects total \$US375,000

TILF PROJECTS 2009

PROJECT TITLE	EG Chair/ Overseer	Project No.	Budget	APEC US\$	Total Value	Final Rank	Accumulated Total
Reducing barriers to trade through development of a common protocol for measuring the seasonal energy efficiency (SEER) of air conditioners	Robert Hu, EGEEC	T1	\$250,000	\$60,000	47	1	
Alignment of national standby power approaches	Rachael Clarke, EGEEC	T3	\$50,000	\$50,000	63	2	110,000
CFL Round-Robin Testing to Benchmark Regional Testing Laboratory Capacity	Melanie Slade, EGEEC	T4	\$160,000	\$80,000	64	3	190,000
Harmonization of methodologies to assess the impacts of energy efficiency standards in APEC economies	Juan Mata Sandoval, (M) EGEEC	T6	\$120,000	\$100,000	70	4	290,000
Survey on Best-practices in Promoting Efficient Lighting Products and Phasing out incandescent Bulbs in APEC Economies	Li Tienan, ECEEC	T5	\$85,000	\$55,000	71	5	345,000
Supporting APEC Energy Standards Information System (ESIS) System	Robert Tromop, EGEEC	T2	\$60,000	\$30,000	73	6	375,000

Self Funded Projects

SF	APEC 2008 Photovoltaic Conference	Chinese Taipei
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Actions Arising/Next Steps

- Project proponents to develop full-length project proposals for submission to the EWG Secretariat by 4 September 2008.

13. Review of EWG Lead Shepherd and Secretariat Arrangements

The Lead Shepherd noted the APEC guidelines concerning the rotation system for the Lead Shepherd position. The Lead Shepherd invited nominations from members for the EWG Lead Shepherd and EWG Secretariat roles.

As no nominations were received, Australia announced that it will continue to provide the Lead Shepherd and EWG Secretariat. Members indicated their support and appreciation of Australia's role in providing these roles. At the same time, Australia noted that forthcoming budget cuts could affect its ability to perform these functions.

Actions Arising/Next Steps

- Australia will continue to undertake the responsibilities of the EWG Lead Shepherd and EWG Secretariat roles.
- The EWG Lead Shepherd and Secretariat arrangements will be reviewed at each EWG meeting when an economy exceeds the maximum permitted period.

14. Date for Next Meeting(s)

The Philippines advised members that it will host EWG36 during last week of November or the first week of December 2008 and agreed to provide further details out-of-session. The meeting will be held in Metro Manila. EWG36 will be held back to back with celebrations of the Philippines' National Energy Week.

Actions Arising/Next Steps

- EWG Secretariat to work with the Philippines to finalise the date for EWG36 and to make arrangements for the meeting.

15. Other Business

The high level of paper consumption at EWG meetings and it agreed that one copy of EWG meeting papers will be provided per delegation.

Actions Arising/Other Matters

- One copy of EWG meeting papers will be provided per delegation.

16. Document Access

Members decided on classification of documents from EWG35. Only project proposals that are approved for funding will be made available to the public.

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 post on the EWG website.

17. Summary Record

A draft Summary Record of EWG35 was prepared by the EWG Secretariat and made available electronically to members at the meeting. The draft will also be emailed to members for their comments within the coming two weeks.

Actions Arising/Next Steps

- Members to provide comments on the draft Summary Record by 21 March 2008.

The Lead Shepherd closed the meeting and thanked the hosts for their excellent organisation of the meeting and their kind hospitality.

The Co-Chair, Mr Pedro Gamio Aita, Vice-Minister, Ministry of Energy and Mining also provided his closing comments, thanking members for their participation, noting the importance of this forum for the development of best practices, the sharing of information, and the strengthening of international relationships. The co-chair thanked Iquitos for hosting the meeting and passed on the regards of Mr Juan Valdivia Romero, Minister, Peruvian Minister of Energy and Mines.

All relevant papers and presentations, including the Summary Record will be posted on the EWG website.

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List of EWG35 Participants

EWG35 Co-Chairs

Minister Juan Valdivia Romero (Peru)	Ministry of Energy and Mines
Vice Minister Pedro Gamio Aita (Peru)	Ministry of Energy and Mines
John Ryan (Australia)	Department of Resources, Energy and Tourism

Australia

John Griffiths	Department of Resources, Energy and Tourism
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Brunei Darrusalam

Mohammad Anas Abdul Latrif	Prime Ministers Office
Hj Alidi Mahmud	Prime Ministers Office
Ahmad Haji Mohamad	Prime Ministers Office
Siti Hafsa Hajj Abdul Hamid	Prime Ministers Office

Canada

Steve Dandzurovski	Natural Resources Canada
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Chile

Carlos Pina	National Energy Commission
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People's Republic of China

Xianguo Tong	Ministry of Foreign Affairs
Yihui Wang	National Development and Reform Commission
Ziming Xu	National Development and Reform Commission

Hong Kong, China

Mak Ka Chun	Electrical & Mechanical Services Department
Sit Wing Hang	Electrical & Mechanical Services Department

Indonesia

Sugeng Mujiyanto	Ministry of Energy & Mineral Resources
Maritje Hutapea	Ministry of Energy & Mineral Resources
Lydia Hardiani	Ministry of Energy and Mineral Resources
Ms Indarti	Ministry of Energy and Mineral Resources
Mr Madjeli	Ministry of Energy and Mineral Resources

Japan

Shigeru Kimura	Institute of Energy Economics Japan
Yukinori Seki	Ministry of Economy, Trade and Industry
Kiyoshi Mori	Ministry of Economy, Trade and Industry
Koichi Murakami	Ministry of Foreign Affairs

Korea

Gue Jae Jeong	Korea Energy Economics Institute
Youchon Oh	Ministry of Commerce, Industry and Energy
Dong Sik Shin	Korea Energy Management Corporation

(Korea cont.)

Young Soo Lee
Seung Man Park

Korea Gas Corporation
Korea National Oil Corporation

Malaysia

P Jayanthi Paramaguru
Somasundram Ramasamy

Ministry of Energy, Water and Communications
Ministry of Energy, Water and Communications

Mexico

Leydi Barcelo

Secretariat of Energy

New Zealand

Nicola Bennett

Ministry of Economic Development

Peru

Jorge Aguinaga Diaz
Gustavo Navarro Valdivia
Amadeo Prado Benitez
José Robles Freire
Humberto Armas Infante
Luis Zavaleta Vargas
Luis Vilchez Leon
Julio Cesar Romani
Ivan Llamas Montoya
Verónica Rojas Montes

Ministry of Energy and Mines
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Ministry of Energy and Mines
Ministry of Energy and Mines
Ministry of Energy and Mines
Nuclear Energy Peruvian Institute
Ministry of Energy and Mines

The Philippines

William Quinto

Department of Energy

The Russian Federation

Igor Shcheulov
Marina Mikaelyan
Dmitry Piskunov

Ministry of Industry and Energy
Ministry of Industry and Energy
Ministry of Industry and Energy

Singapore

Latha Ganesh
Siew Kwong Wong
Shi Siam Poh

Energy Market Authority
Energy Market Authority
Energy Market Authority

Chinese Taipei

Jyuung-Shiauu Chern
Huey-Ching Yeh
Yu-sin Wang
Feng Shuo Yang

Ministry of Economic Affairs
Bureau of Energy, Ministry of Economic Affairs
Taiwan Institute of Economic Research
Taiwan Institute of Economic Research

United States of America

Jeff Skeer
Marcos Mondojana
Joel Kopp

Department of Energy
US Embassy, Lima, Peru
Department of State

APERC

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Sau Yi Wan
Satoshi Nakanishi

Asia Pacific Energy Research Centre
Asia Pacific Energy Research Centre

EGEDA

Jane Melanie

Australian Bureau of Agricultural Resource Economics

EGEEC

Robert Tromop

Energy Efficiency and Conservation Authority

EGCFE

Scott Smouse

US Department of Energy

EGNRET

Dr David Natusch
(Representing Dr Cary Bloyd)

Resource Development Ltd

EBN

Dr David Natusch
Jonathan Leuchs

Resource Development Ltd
US National Centre for APEC

APEC Secretariat

Sun Tao

Director (Program)

EWG Secretariat

Stacey Matthews
Andrew Scally
Jan McCallum-Johnston

Department of Resources, Energy and Tourism
Department of Resources, Energy and Tourism
Department of Resources, Energy and Tourism