



EWG33 SUMMARY RECORD

The 33rd meeting of the Energy Working Group (EWG) was held in Auckland, New Zealand, from 26–30 March 2007. Mr John Griffiths, Acting Lead Shepherd, and Mr David Smol, Deputy Secretary, Ministry of Economic Development, co-chaired the meeting.

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

Representatives from the Asia Pacific Energy Research Centre (APEREC); Energy Business Network (EBN); APEC and EWG Secretariats; APEC Business Advisory Committee (ABAC); Pacific Islands Forum (PIF); Expert Groups on Energy Data and Analysis (EGEDA), New and Renewable Energy Technologies (EGNRET), Clean Fossil Energy (EGCFE), Energy Efficiency and Conservation (EGEEC), Minerals and Energy Exploration and Development (GEMEED); Chair of the Biofuels Task Force and the Energy Efficiency and Renewable Energy Financing Task Force; and a representative from the Renewable Energy & Energy Efficiency Partnership also participated in the meeting. A list of participants is at [Attachment A](#).

1. Opening Addresses by the Co-Chairs of the Meeting and Adoption of the Agenda

The New Zealand co-Chair welcomed the EWG to Auckland and gave an address on the energy challenges facing the APEC region with reference to New Zealand's recently released energy policy. The importance of international partnerships and collaboration to achieve energy security goals and sustainable development objectives was recognised.

The Acting Lead Shepherd thanked New Zealand and welcomed delegates to EWG33. He relayed apologies from Mr John Ryan, EWG Lead Shepherd, for his unavoidable absence. Mr Griffiths highlighted to Members the importance of EWG33 as an opportunity to demonstrate the significance of EWG work to Energy Ministers when they next meet at the 8th Meeting of Energy Ministers (EMM8) in Darwin, 27–30 May 2007.

The Draft Agenda was adopted with minor modifications.

2. APEC and EWG Secretariat Reports

The APEC Secretariat reported the latest developments in APEC since EWG32 and priorities for APEC in 2007. Mr Tong outlined activities during the APEC 2007 year and noted the relevance to the EWG of responding to the Energy Security instructions in the Ha Noi Declaration objectives. In particular, the APEC Secretariat provided an update of discussions at the January 2007 Informal SOM, noting that the EWG Lead Shepherd has presented to senior officials on the importance of the EWG as a means to develop energy initiatives for the Energy Report to Leaders being developed by the SOM Chair.

The APEC Secretariat provided further information on APEC Reform and membership and drew attention to the procedure by which a decision will be taken on the proposed formation of an APEC Mining Working Group.

The APEC Secretariat advised members of BMC Meetings and funding for 2008 Projects and commented on the *APEC Information Management Portal* (AIMP).

Mr Griffiths noted that Mr Tong will soon conclude his term in the APEC Secretariat and thanked him on behalf of the EWG for his excellent work in support of the EWG during his term as Director (Program). EWG Members applauded his contribution and wished him well for the future.

The EWG Secretariat reported that 22 project proposals had been received for funding and advised on the submission procedure for fully-developed project proposals to be submitted to EWG Secretariat. The EWG Secretariat further noted that an initial request for Guest Status had been received from Pakistan and for renewal of Guest Status from Colombia. These requests would be put to EWG Members for endorsement on receipt of letters addressing the criteria for the granting of Guest Status. The Renewable Energy and Energy Efficiency Partnership (REEEP) has been granted guest status for three years. The EWG Secretariat also reminded members to update their economy details.

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

The EBN Chair reported on outcomes of EBN16 and stated that concerns expressed at EBN 15 had been positively progressed. He noted that the EBN report submitted to EWG33 had not as yet received sign off by all members.

The Business Forum was held in the afternoon of 27 March 2007 on the topic of 'Energy Business and Carbon Emissions: Impacts, Costs and Responses' and considered the following issues:

- The concept of "Food Miles" and their likely impact on International Trade,
- Costs associated with Carbon Capture and Sequestration,
- Carbon Zero Energy Operations and their associated costs,
- Carbon Taxes and their likely impact on Energy Business, and
- Carbon Emissions Trading.

The EBN Chair advised that the EBN had agreed that in future 'individual economy updates' will be on a voluntary basis and reflect specific concerns of EBN members, to be called 'Energy Business Issues'.

The EBN has appointed a drafting committee (Australia, Philippines and EBN Chair) to pull together the different streams of recommendations that have been received by the EBN from the Australian Energy Alliance, APGAS and EBN15.

The United States raised questions on the expansion of EBN membership and suggested that it be included as a future topic for discussion.

Australia provided guidance on the EBN's proposed approach to presentations at EMM8 and emphasised that Energy Ministers have been invited to attend the EMM8 APEC Energy Business Forum, providing a brief update on arrangements for the Forum. Australia further noted the structure and operation of the Australian Energy Alliance as a possible template for other economies to consider in increasing energy business engagement.

The Summary Record of EBN16 will be posted on the EWG website.

Actions Arising/Next Steps

- EBN to progress preparations for EMM8.

4. Policy Dialogue

Members discussed the topic of '*Improving Cooperation between National (State Owned) and International (Private Sector) Energy Companies*'. As previously agreed, no records of the discussion were taken.

The EWG34 Policy Dialogue is "Energy Efficiency in Transport".

5. APEC Energy Security Initiative (ESI)

5.1 Overview

Members noted the 'Seventh Report on Implementation of the Energy Security Initiative' and Energy Security Initiative Fact Sheets prepared by the EWG Secretariat. Australia noted that the Fact Sheets will be provided to Ministers as part of the delegate information package.

Actions Arising/Next Steps

- Members to provide any comments on the ESI Fact Sheets to the EWG Secretariat as soon as possible.

5.2 Short-term Measures

Joint Oil Data Initiative – The EGEDA Chair reported on progress made by APEC Economies in reporting its energy data to JODI and, with Japan, encouraged economies who have not yet submitted data to do so promptly.

Actions Arising/Next Steps

- Japan offered to provide training to member economies to enable better reporting of oil data.

Sea-lane security – The EWG Secretariat reported on contact with the APEC Transportation Working Group (TPTWG), noting that the Group had provided a tabled report on their activities. Members discussed possible areas for collaboration.

Actions Arising/Next Steps

- Members agreed to retitle 'Sea-Lane Security' to 'Maritime Security' to more fully encapsulate range of possible engagement.
- Members welcomed a possible invitation from the Transportation Working Group to attend a meeting of the Maritime Security Sub-Group in Chinese Taipei later this year.

Real-time Emergency Information Sharing System (RTEIS) – Japan presented on progress of the RTEIS since EWG32. Japan reiterated the importance of the RTEIS system and encouraged broader participation by economies.

Energy Emergency Responses, including Oil Stocks – New Zealand reported on its energy emergency response arrangements and particularly New Zealand's Oil Emergency Response Strategy. APERC presented on outcomes from *Petrostocks 2007*. Republic of Korea asked Members to provide feedback on any other issues to be raised at next Petrostocks conference, to be held in Washington DC.

The Russian Federation gave a presentation to members on the establishment of an 'APEC Rapid Response Network/Points of Contacts for Protection of Critical Energy Infrastructure'. Members were receptive to the project and asked Russia to investigate linkages with the RTEIS. Australia indicated that the proposal should be cognisant of the operation of other regional critical energy infrastructure fora, with Mexico welcoming the proposal as an opportunity to expand upon such other initiatives. Australia further noted that there may be lessons to be learned from the RTEIS in its ongoing efforts to encouraging wider participation by member economies. The EGNRET Chair noted his laboratory's involved in research on critical infrastructure protection

Outcomes of discussion are to be reported to the next Counter Terrorism Task Force (CTTF) meeting at SOMII (21 April in Adelaide, Australia).

Action Arising/Next Steps

- EGNRET to explore other international work that has been done on critical infrastructure protection.
- Russian Federation to work with RTEIS and EGNRET to develop the proposal and identify linkages with RTEIS and other potential critical infrastructure protection networks.
- Russian Federation to report to CTTF at SOMII on the endorsement of their proposal by EWG Members.

5.3 Long-term Measures

Alternative Transportation Fuels – The Chair of the APEC Biofuels Task Force (BFTF) presented the findings of the Task Force. A summary of information collected by the Task Group on Biofuel Economics and Trade showed ethanol production from sugarcane and corn to be cost-competitive with gasoline and biodiesel production from palm to be cost-competitive with conventional diesel. A summary of information collected by the Task Group on Biofuel Resources showed that if non-food feedstocks are considered, biofuels could potentially displace a substantial percentage of conventional oil use over time.

The Chair responded to a procedural question by affirming that the findings are being presented first to EWG Members, then as messages to Energy Ministers at EMM8 and potentially to Leaders if Energy Ministers so decide. The BFTF is presenting as much information to EWG Members as possible in the hope that Members will absorb the findings and pass these findings on to their Energy Ministers.

Japan discussed how to summarise the messages from this Report, especially the importance of Research and Development and the next generation of ethanol production.

The Pacific Islands Forum (PIF) sees opportunities in sugar cane and coconut oil.

Responding to a question concerning extra costs of producing vehicles able to use any combination up to 85%, suggestions have been made that this would be on the order of

US\$30 per vehicle. Constraints would more likely be on the fuel production side, in terms of available biomass resources, than the vehicle production side.

From the APEC Secretariat's point of view, the Agricultural Technical Cooperation Working Group (ACTWG) also deals with this issue (enhancing production of biomass) and is very interested in the Biofuels Task Force work. The APEC Secretariat will bring this to the attention of the ACTWG at their next meeting in May in Brisbane, Australia, EGNRET reported that they looked at the effect of rising prices on base products and considered that technologies tend to develop to account for this.

The Chair of EGNRET reported on current projects being undertaken on guidelines for development of biodiesel standards; and implementation guidelines for alternative transport fuels. He also noted that EGNRET and the Biofuels Task Force have met together twice since EWG32.

Energy Investment – The Chair of the Energy Efficiency and Renewable Energy Financing Task Force reported on progress and announced a Workshop on Financing of Public Sector Energy Efficiency Projects, in conjunction with the Asia Development Bank, to be held 26–27 June Manila, the Philippines. The Task Force sought EWG support to invite ASEAN to jointly plan and fund the event. The EWG supported this proposal to go to SOM for endorsement.

Action Arising/Next Steps

- The Chair of the Energy Efficiency and Renewable Energy Financing Task Force will submit a proposal to SOM for support to approach ASEAN.

Natural Gas Trade – Chinese Taipei reported on progress of the LNG Public Education and Communication Information Sharing Initiative and the establishment of an LNG information web site which includes a number of case studies. Chinese-language case studies will be translated for the EWG later this year.

An Information Checklist for interested economies has been developed, and Members were encouraged to participate. The Checklist will be circulated to members by the EWG Secretariat, to be returned to Chinese Taipei before 15th April for posting on the LNG web site.

The Expert Group on Clean Fossil Energy (EGCFE) reported on progress of the proposed LNG Public Education Campaign Information Workshop to be held 27 - 31 August 2007 in Guangzhou, PRC.

APGAS

An update on work by the APGAS Forum was presented by the Technical Director. The eight conclusions and recommendations from the 2004 APEC study on gas trade in the Asia Pacific were recapped for members. Australia noted that the EMM8 Government–Business Private Sector dialogue would provide the opportunity for APGAS to present recommendations to Ministers.

The 3rd APGAS Forum will be held in San Diego, 17–18 September 2007. Member economies are encouraged to attend.

Members expressed support for the work of the APGAS forum.

The Vice-Chair of EGEDA reported on latest development in gas data collection. Data quality submitted was high, but completeness of data was still an issue. Japan supported the work of EGEDA in gas data collection

Energy Efficiency – The EWG Secretariat reported on progress of the Pledge and Review Program and advised members that reports on economy policies/programs were received from Australia, Mexico, Japan, Korea, New Zealand and Chinese Taipei. No consolidated report was presented at this meeting due to only two reports on the selected common topic received at EWG32.

The A/g Chair of EGEE&C proposed the next topic for EWG 34:

“What are your economies policies and programs to advance energy efficiency and trade and efficient products (appliances)?

Supplementary Question – Specifically, what measures are undertaken to align your efforts with other with APEC and international economies standards and procedures.”

The topic was endorsed, and the EGEE&C will prepare a reporting template to assist Member economies in their reporting to EWG34.

Japan noted that this work is likely to complement the proposed Peer Review Mechanism and suggested this round of Pledge & Review focus on appliances, while consecutive rounds could focus on vehicles and other ‘products’ for the collation of information round by round, as a basis for comparison.

The United States sought clarification on whether the topic would include office appliances as well as home appliances, and it was noted that office products would be included in the topic for EWG 34.

Indonesia sought clarification on the inclusion of work being undertaken by that economy under ASEAN programs. Other multilateral and bi-lateral relationships are to be included to cover the range of ‘international economic standards’ referred to in the topic.

APERC reported to Members on outcomes from the workshop on 'Data Availability for Producing Energy Efficiency Indicators in the region', held in Japan, 26–27 October 2006.

Japan expressed its support for the outcomes of the workshop and its contribution to energy consumption policies within APEC, while recognising the challenges of data collection. It was also noted that energy indicators and data collection can be useful for the forthcoming Peer Review Mechanism process in terms of understanding trends within APEC economies.

The United States expressed a need to better understand the indicators that are available. While not all economies have sufficient data to track all indicators, perhaps there is a sub-set of indicators that could practically be applied to most APEC economies. Also, if the main objective of an indicator is to track the progress of individual economies toward voluntary goals, then it is not critical that every economy have sufficient data to use that indicator, only that the economy in question have sufficient data. It was suggested that a matrix of indicators be developed, showing which indicators can practically be implemented for which economies, and which would fairly track progress toward efficiency goals regardless of shifts in economic structure.

The A/g Chair of EGEE&C reported to Members on outcomes from the APEC/IEA Energy Indicators Workshop' held in Australia , 7–8 November 2006, and expressed appreciation for the cooperation from IEEJ and APERC in this project.

Members discussed various issues related to the development of energy indicators and noted that industrial energy efficiency indicators should be impervious to shifts of energy-intensive industry in and out of economies to fairly reflect progress toward greater energy efficiency,

APERC advised that it is working on a set of policy implication/arrangement indicators that compare cities in different economies, which is much easier than economy to economy comparisons, and is willing to share these indicators with EGEDA.

Members noted that in some cases it has been difficult to measure progress in energy efficiency due to problems with collection of data in energy sources including biomass. Indonesia questioned the technical impact of EGEDA's work on domestic collection of data and requested that analysis be done in-country to monitor progress and methodologies.

Finally, members noted that particular sectors can be compared across economies to monitor progress in that sector. Other indicators can be used for various purposes and would encourage a diversified approach to development of indicators.

This was followed by Agenda item 8 and 13.

Actions Arising/Next Steps

- The EGEE&C will develop guidelines for Pledge and Review reporting on a common topic, to be distributed to members before EWG 34; and
- The United States will discuss a matrix of energy indicators with EGEDA out-of-session.

Renewable Energy – The Chair of the Expert Group on New and Renewable Energy Technologies (EGNRET) reported to members on current activities and outcomes from the two EGNRET meetings held since EWG32.

Clean Fossil Energy – The Chair of the Expert Group on Clean Fossil Energy (EGCFE) reported to members on major activities completed.

Hydrogen – The Chair of the Expert Group on New and Renewable Energy Technologies (EGNRET) reported to members on current activity in the APEC Region.

Methane Hydrates – The Chair of the Expert Group on New and Renewable Energy Technologies (EGNRET) provided an update advising that a number of projects in this area are underway or have been recently completed in the APEC Region and will continue to report progress to this forum.

Nuclear Energy – Australia provided an update of activities, advising members that at EWG32 a proposal to hold a meeting of Regional Safeguards Authorities was endorsed. In February 2007, the Director General of the Australian Safeguards and Non-Proliferation Office (ANSO) invited senior officials involved in nuclear non-proliferation, safeguards and nuclear security (physical protection) matters in APEC economies and representatives from the IEA to participate in a meeting in Sydney during the week beginning 25 June 2007 to

discuss establishment of an informal Asia-Pacific safeguards association. The Chair of BAPETEN, Indonesia's nuclear regulator has agreed to co-host and co-chair this meeting. Organisation of the meeting is progressing.

Actions Arising/Next Steps

- Australia to provide a briefing on the outcomes to EWG3.

Petroleum Infrastructure and Crude Oil and Refined Products – APERC reported to Members that it is currently looking at petroleum infrastructure investments in the United States, to be reported at EWG34.

6. EWG Project funding Proposals for 2008 - Presentations

Expert Group and Task Force Chairs submitted 22 project proposals to EWG33 for consideration and endorsement by Members for BMC funding. Of the 22 projects submitted there were:

- 9 Operational Account projects;
- 3 TILF Special Account projects; and
- 10 APEC Support Fund projects.

There were no self-funded projects proposals submitted.

The APEC Secretariat explained the process for determining caps on individual project proposals, which is dependant on budgets and the number of proposals received.

Mr Griffiths explained that unless there are specific objections, all proposals submitted are considered to be endorsed. Endorsed projects that do not receive funding may be undertaken as self-funded projects.

Project proposals were presented by the Expert Group and Task Force Chairs.

Members were asked to complete proformas ranking the projects and provide them to the EWG Secretariat for collation and reporting back to EWG members under Agenda item 14.

PIF noted that many of the projects proposed by EGEE&C are relevant to that forum and they look forward to collaborating to share information.

The APEC Secretariat noted that a number of projects were submitted for more than one category of funding and informed project proponents that they only apply for one category of funding.

7. Report of the Meeting of Expert Group and Task Force Chairs and APERC

The EWG Secretariat reported to members on the 18th Meeting of EWG Expert Group and Task Force Chairs and APERC held on 26 March 2006, Auckland. This report will be posted on the EWG web site.

The United States put forward a request to invite Brazil to future meetings of the Biofuels Task Force. A request to grant Guest Status to Brazil will be presented to EWG Members for endorsement out-of-session.

Japan noted that MRM3 has proposed to establish a Mining Working Group which would combine GEMEED and the Non-Ferrous Metals Dialogue, commenting that the creation of a new APEC working group will add to the administrative bureaucracy of APEC at a time when it is pursuing structural reform.

The Expert Groups and Task Forces presented their progress reports to EWG33. These reports will be posted on the EWG website.

Actions/Next Steps

- The Biofuels Task Force Chair will present a request for Guest Status for Brazil to be forwarded by the EWG Secretariat to EWG Members for endorsement ‘
- APERC will invite Expert Group and Task Force Chairs to its Workshop being held in conjunction with EWG34.
- Expert Group and Task Force progress reports will be posted on the EWG website.

8. Report from the APERC President

Mr Kuramoto, APERC President reported to Members on progress of projects since EWG32, specifically:

- Urban Transport Use in the APEC Region;
- A Quest for Energy Security in the 21st Century – Resource and Constraints; and
- Understanding International Energy Initiatives

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

The APERC President also thanked Japan and Australia for their financial support of APERC’s activities. Japan also stated its appreciation of the financial support provided to APERC.

Members noted that the role of APERC is growing and that it will also have a role in the proposed Peer Review Mechanism; however, its budget is decreasing while the work load is increasing. This is a trend that should be reversed. APERC would welcome financial contributions from APEC members.

The A/g Lead Shepherd noted that Mr Kuramoto will finish his term as APERC President and Members joined in thanking him for his service.

9. Report from the 2nd Meeting of the EMM8 Steering Committee

Australia reported on the outcomes of 2nd EMM8 Steering Committee meeting on 26 March. It was noted that the paragraphs on biofuels were not finalised during the declaration drafting session. Australia and the United States have drafted new paragraphs and members are asked to consider these out-of-session.

Actions Arising/Next Steps

- Australia to circulate Meeting Summary, EMM8 Draft Agenda and the Draft Declaration next week.
- Australia to provide members with details of Preparatory Meetings in Darwin 27, 27 May 2006.

10. Report from the 3rd Meeting of Ministers Responsible for Mining

Australia reported on outcomes from the 3rd Ministers Responsible for Mining Meeting (MRM3). Ministers agreed to 10 Mining Policy Principles, a Study on barriers and impediments to trade and investment in minerals and mining in the APEC Region, developing a proposal to establish a Mining Industry Working Group. The Russian Federation have agreed to chair the Mining Working Group, should it be established.

Mining Officials will report to SOMII in April on progress of the Study.

Chinese Taipei questioned where work related to coal and petroleum would sit if a Mining Working Group were to be established. The GEMEED Acting Chair indicated that traded commodities may fall under MWG while energy sources would sit under EWG – splitting upstream and downstream components of the minerals and energy markets.

11. EWG's Type 2 Partnership Initiative: 'Energy for Sustainable Development'

The EWG Secretariat submitted the Draft Revised Type II Partnership Initiative submission to EWG Members for their consideration and endorsement. An appendix will be added to the version distributed to members – annotated list of EWG projects since 2002. EWG Members endorsed the Draft Submission.

Actions Arising/Next Steps

- Australia to provide members with the appendix for endorsement out-of-session for submission to UNSD by 15 April 2007.

12. Statements on Notable Energy Developments since EWG32

The Chair thanked Australia; Hong Kong, Japan, Korea, Mexico, New Zealand, Chinese Taipei, Thailand and the United States for their Statements on Notable Energy Developments. Members who tabled their Statements at EWG33 were requested to e-mail an electronic copy to the EWG Secretariat for posting on the EWG website.

Action Arising/Next Steps

- Members who tabled their Statements at EWG33 to e-mail an electronic version to the EWG Secretariat for posting on the EWG website.

13. Collaboration with the International Energy Agency (IEA) and Engagement with other International Fora

The EWG Secretariat reported to Members that there is considerable cross-fora activity taking place. The Chair of the EGCFE reported on outcomes of G8 on Clean Energy for a Sustainable Energy Future and noted a global study on the efficiency of coal fired power plants to assess which are the most cost effective and have the lowest emissions.

The EWG Secretariat advised members that the IEA Committee on Energy Research and Technology met in February 2007 and it has been provided with contact details for Expert Groups and Task Forces, as well as copies of their progress reports to EWG32. The EWG Secretariat also advised that the one-year agreement for EWG to attend at IEA without SOM approval is coming to an end. APEC Secretariat advised that a new proposal is to be made to SOM to extend the arrangement and that SOM would consider this proposal in September.

Members expressed support for APEC EWG – IEA collaboration.

EWG Members endorsed the granting of Guest Status for the Renewable Energy and Energy Efficiency Partnership (REEEP). The REEEP representative reported to members on its objectives and activities, including the completion of economy case studies. REEEP explained that there are a number of opportunities for co-funding of projects between REEEP and EWG and proposed an APEC EWG – REEEP co-funded project to complete more economy case studies.

The United States supported this proposal and would like the EGEE&C to work with REEEP in future to come up with new project proposals, and also supported the proposal to conduct more economy case studies.

The APEC Secretariat reminded Members that the use of joint titling of projects requires approval from Senior Officials. Applicants for joint projects should also be mindful of the funding approval timeframes of participating fora to ensure compatibility.

14. EWG Project Funding Proposals for 2008 – Endorsement

Members noted that 22 project proposals had been submitted to EWG33 for consideration and endorsement by Members.

Members endorsed all of the 2008 EWG project proposals. Members ranked the projects in the following order and in accordance with the agreed EWG method.

Members agreed to submit projects:

- 6 Operational Account projects;
- 3 TILF Special Account projects; and
- 13 APEC Support Fund projects.

No self-funded projects proposals were submitted.

Operational Account Projects

Operational Account projects to be submitted for BMC funding, in ranked order:

1. Operation of APEC Energy Database and Analysis;
2. APEC 21st Century Renewable Energy Development Initiative (Collaborative VI): Practical roadmaps towards the development of NRE in the APEC Region;
3. APEC 21st Century Renewable Energy Development Initiative (Collaborative VI): Successful Business Models for New and renewable Energy Technology implementation in APEC Economies;
4. APEC 21st Century Renewable Energy Development Initiative (Collaborative VI): Best Practise in New and Renewable Energy Technologies in Urban Areas in the APEC Region;
5. Survey of Policies and Programs to Measure and Promote Energy Efficiency in Industry in APEC Economies;
6. Status and Prospects for Coal-to-Liquids Technologies, Including Global Climate Implications.

Operational Account Projects total US\$300,000

TILF Special Account Projects

TILF Special Account projects to be submitted for BMC funding:

1. Reducing Trade, Regulatory, and Financing Barriers to Accelerate the Uptake of Clean Coal Technologies by Developing Economies in the Asia Pacific Region;
2. Facilitation of Increased Trade in Energy-Efficient Products through Establishment of an APEC Energy Efficiency Labelling Network;
3. Reducing barriers to trade through development of a common protocol for measuring the seasonal energy efficiency (SEER) of air conditioners.

TILF Projects total US\$240,000.

APEC Support Fund Projects

1. Planning and Cost Assessment Guidelines for Making New Coal-Fired Power Generation Plants in APEC Developing Economies CO₂ Capture Ready (EGCFE)
2. Workshop on Policies to Promote Energy Efficiency in Transport in APEC Economies (EGEEC)
3. Study of Employment Opportunities from Biofuel Production in APEC Economies (Biofuels Task Force)
4. Field Measurements of Standby Power in Developing Economies (EGEEC)
5. Assessment of Biomass Resources from Marginal Lands in APEC Economies (Biofuels Task Force)
6. APEC 21st Century Renewable Energy Development Initiative (Collaborative I): Workshop on Policies to promote New and Renewable Energy Utilization in APEC Economies – Policies Enforced and Policies to be Developed (EGNRET)
7. Workshop and Report on Implications of Biorefineries for Energy and Trade in the APEC Region (EGNRET)
8. Assessment of the Capture and Storage Potential of CO₂ Co-Produced with Natural Gas in South-East Asia (EGCFE)
9. Comparison of Building Energy Codes in APEC Economies (EGEEC)
10. Assessment of Biomass Resource Elasticity in APEC Economies (Biofuels Task Force)
11. APEC 21st Century Renewable Energy Development Initiative (Collaborative VII): Case studies of new and renewable energy applications in rural education and the role of new and renewable energy in rural electrification and distributed power (EGNRET)

12. Increasing the Knowledge and Awareness of Carbon Capture and Storage: Capacity Building in the APEC Region (EGCFE)

13. Case Studies of LNG Public Education and Information Campaigns in APEC Economies and Development of Best Practise Guidelines (EGCFE)

APEC Support Fund Projects total US\$738,000.

The APEC Secretariat brought to the attention of members a joint United States, New Zealand and Canada project to hold an APEC Environmental Goods Workshop. EWG members have been invited to make suggestions. More details can be sought from the APEC Secretariat.

Action Arising/Next Steps

- Project proponents are to develop full-length project proposals for submission to the EWG Secretariat by 1 May 2007.

15. Other Business

No other business was raised at EWG33.

16. Date for Next Meeting(s)

Hong Kong, China advised Members it will host EWG34 from 3-7 September 2007 and have provided further details to members. The Acting Lead Shepherd thanked Hong Kong, China for agreeing to host EWG34.

Canada was scheduled to host EWG35 in 2008. As a representative was unable to attend EWG33, Peru asked the APEC Secretariat to make representations on its behalf regarding its offer to host EWG35 during Peru's APEC Host year. Canada and Members agreed to this proposal.

17. Document Access

Members decided on classification of documents from EWG33.

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.

18. Summary Record

Due to time restrictions, a first draft Summary Record was made available at EWG33. A subsequent draft will be circulated to Members for comment after EWG33. The final Summary Record incorporating all comments will then be emailed to all EWG Members.

LIST OF PARTICIPANTS

Co-Chairs

John Griffiths

Australian Government Department of Industry,
Tourism and Resources

David Smol

New Zealand Ministry of Economic Development

Australia

Gary Walker

Department of Industry, Tourism and Resources

Lee Kerr

Department of Foreign Affairs and Trade

Peter Roberts

Department of Foreign Affairs and Trade

Brunei Darussalam

Siti Hafsa Abdul Hamid

Office of the Minister of Energy in the Prime Minister's
Office

Haji Alidi Haji Mahmud

Office of the Minister of Energy in the Prime Minister's
Office

Ahmad Haji Mohamad

Office of the Minister of Energy in the Prime Minister's
Office

Canada

Claude Gauvin

Natural Resources Canada

People's Republic of China

Li Cong

National Development and Reform Commission

Cheng Xin

National Development and Reform Commission

Hong Kong, China

Welman Leung

Electrical and Mechanical Services Department

Ho Sai King

Electrical and Mechanical Services Department

Indonesia

Maritje Hutapea

Ministry of Energy and Mineral Resources

Mulyaningati RAF Listyawardhani

Ministry of Energy and Mineral Resources

Emy Perdanahari

Ministry of Energy and Mineral Resources

Subiandrio

The Embassy of Indonesia for New Zealand

Japan

Jun Arima

Agency for Natural Resources and Energy

Koichi Murakami

Ministry of Foreign Affairs

Shigeru Kimura

Institute of Energy Economics, Japan

Republic of Korea

Kyo Huung Han

Ministry of Commerce, Industry and Energy

Dong-Sik Shin

Korea Energy Management Corporation

| | |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Malaysia Mohd Azman Hj. Mohd Ariffin Zuraidah Kamarudin Somasundram Ramasamy | Ministry of Energy, Water and Communications Petronas Ministry of Energy, Water and Communication |
| Mexico Leonardo Beltran | Secretariat of Energy |
| New Zealand Stuart Calman Nichola Bennett Anthony Simpson | Ministry of Economic Development Ministry of Economic Development Ministry of Foreign Affairs and Trade |
| Papua New Guinea Vore Veve | Department of Petroleum and Energy |
| Russian Federation Igor Scheulov Lyaysan Zagidullina | Ministry of Industry and Energy Ministry of Industry and Energy |
| Singapore Abdul Rashid Bin Ibrahim Latha Ganesh | Energy Market Authority Energy Market Authority |
| Thailand Reukrit Kenharaj Sittichod Wantawin | Ministry of Energy Ministry of Energy |
| Chinese Taipei Huey-Ching Yeh Jyuung-Shiauu Chern Feng-Shuo Yang Yu-Hsin Wang | Ministry of Economic Affairs Ministry of Economic Affairs TIER TIER |
| United States of America Stephen Gallogly Jeffrey Skeer | Department of State Department of Energy |
| Viet Nam Vu Van Thai | Ministry of Industry |
| APEC Secretariat Tong Xianguo | Director (Program) |

EWG Secretariat

Jan McCallum-Johnston
Stacey Matthews

Department of Industry, Tourism and Resources
Department of Industry, Tourism and Resources

Expert Group and Task Force Chairs

Andrew Dickson
Robert Tromp
Scott Smouse
Cary Bloyd

Expert Group on Energy Data and Analysis
Expert Group on Energy Efficiency and Conservation
Expert Group on Clean Fossil Energy
Expert Group on New and Renewable Energy
Technologies

Katie Lawrence

Expert Group on Minerals and Energy Exploration
and Development

Jeffrey Skeer

Energy Efficiency and Renewable Energy Financing
Task Force
APEC Biofuels Task Force

Asia Pacific Energy Research Centre (APERC)

Susumu Kuramoto, President
Yonghun Jung, Vice-President
Naoko Doi,
Alicia Aponte
Li Ji

Observer

Paul Fairbairn

Pacific Islands Forum

Guest

David Crossley

Renewable Energy and Energy Efficiency Partnership

ABAC

Craig Simonetto

Gavin Anderson & Company, Australia

APEC ENERGY BUSINESS NETWORK MEMBERS (EBN)

David Natusch, Chair

Resource Development Limited, New Zealand

Australia

Brad Haynes
Robert Pritchard

Chevron
Australian Energy Alliance

Japan

Shigeru Kimura
Hiroshi Urano

Institute of Energy Economics, Japan
Tokyo Gas Company Ltd

Korea

Joonbeam Kee

Korea National Oil Corporation

Philippines

Rosario B. Venturina

Trans-Asia Power Generation

Russian Federation

Vasily P Kalinin

Viktor Snegir

Inter RAO UES

Sakhalin Energy Investment Company Ltd

Thailand

Siwanan Na Nakorn

Energy Fund Administration Institute

United States

Jonathan Leuchs

National Centre for APEC

Expert Group Chairs

Scott Smouse

Cary Bloyd

Expert Group on Clean Fossil Energy

Expert Group on New and Renewable Energy
Technologies

EWG Secretariat

Jan McCallum-Johnston

Australian Government Department of Industry,
Tourism and Resources