27th Meeting, Beijing, People's Republic of China, 24-25 March 2004

Summary Record of the 27th Energy Working Group Meeting

The twenty-seventh meeting of the APEC Energy Working Group (EWG) was held in Beijing, the People's Republic of China, on 24-25 March 2004. Australia and the People's Republic of China co-chaired the meeting.

Delegates from Australia; Brunei Darussalam; Canada; Chile; the People's Republic of China; Hong Kong, China; Japan; Republic of Korea; Malaysia; Mexico; New Zealand; the Philippines; Russia; Singapore; Chinese Taipei; Thailand; the United States, and Viet Nam, and representatives from the Asia Pacific Energy Research Centre, the EWG Business Network and the APEC and EWG Secretariats participated in the meeting. Ecuador attended the meeting as observer. The Expert Groups on Energy Data and Analysis (EGEDA), Energy Efficiency and Conservation (EGEE&C), New and Renewable Energy Technologies (EGNRET) and Minerals and Energy Exploration and Development (GEMEED) were represented at the meeting.

A list of participants is at Attachment A.

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

The EWG Lead Shepherd, Mr John Ryan, <u>opened</u> the meeting and <u>invited</u> his Co-Chair, Mr Li Bin, Deputy Director General, Foreign Affairs Department, National Development and Reform Commission, People's Republic of China, to make the opening address. Mr Li Bin warmly <u>welcomed</u> delegates to EWG27 and to Beijing, and invited Mr Zhang Xiaoqiang, Vice-Chairman, National Development and Reform Commission, to provide the opening remarks.

Mr Zhang <u>welcomed</u> delegates to Beijing, <u>noting</u> that the EWG is an active, consensus-based fora that plays an important role in furthering cooperation among member economies to address key energy issues such as energy security, energy sector reform and sustainable development. Mr Zhang <u>emphasised</u> that China attaches great importance to energy cooperation under the APEC framework.

Mr Zhang <u>highlighted</u> several energy developments within China, including in the areas of energy sector reform, energy efficiency, clean energy technologies and energy security. Mr Zhang <u>noted</u> that, although there is much common ground between member economies there are still some key differences, emphasising the importance of consensus, cooperation and reciprocal respect in promoting mutually beneficial exchange.

Mr Zhang <u>reported</u> that significant developments have occurred within China since it last hosted an EWG meeting in 1995. China has experienced enormous economic growth with a relatively lower energy consumption growth rate. However, there are

still great challenges for China's energy sector, including a heavy dependence on oil imports and the need to address environmental impacts.

Mr Zhang <u>reported</u> that in late 2003, China released its New Development Strategy that emphasises the need for strong legal and policy frameworks as China continues to opens its economy to further economic and social advancement. The Strategy emphasises a new scientific concept of development that is broadly all-round, coordinated and sustainable.

Finally, Mr Zhang wished every success to the delegates at EWG27.

Mr Ryan thanked Mr Zhang, on behalf of delegates attending EWG27, for his address and for the excellent meeting facilities provided by China. Mr Ryan also thanked Mr Li for hosting EWG27 and co-chairing the meeting.

Mr Ryan reported that the EWG Business Network (EBN) held their 10th Meeting and hosted a workshop on financing energy infrastructure in Hong Kong, China, the previous week. He then <u>outlined</u> the business for the meeting, drawing attention to several important issues that will be discussed.

The agenda for the meeting was adopted.

2. Report and proposals arising from the 10th Meeting of the EWG Business Network (EBN10)

The United States EBN representative, Mr Tom Fisher, on behalf of the outgoing and incoming EBN Chairs, <u>reported</u> on the outcome of EBN10 held in Hong Kong, China, on 18 March 2004. Mr Fisher thanked the Hong Kong and China Gas Company and CLP Power Hong Kong for hosting the meeting and the EBN Financing Workshop.

Mr Fisher <u>reported</u> that at EBN10, Hong Kong, China, provided a comprehensive overview of Hong Kong, China's economic and energy situation and members gave updates of key energy developments within their economy. The EBN noted the outcomes from EWG26 in Seoul and the key issues to be discussed at EWG27. The EBN indicated strong interest in the project proposals to be considered at EWG27 and expressed a desire to offer the EWG a perspective on future project proposals and suggest areas where new projects could be undertaken. The EBN also looked forward to contributing to the policy dialogue and offered to suggest topics for future policy dialogues, for example, 'financing energy infrastructure projects'.

The EBN discussed the nature of its participation at EMM6 and proposed that, for the government-private sector dialogue, the EBN presented the issue of investment within the context of energy security. Subgroups have been formed to develop this presentation. The EBN also expressed a desire to participate in the ASEAN Energy Business Forum, to be held in Manila from 8-10 June, with the proposal to be progressed by the EBN representative from the Philippines.

Finally, the EBN discussed ways to expand EBN Member participation in EWG activities and agreed that, where possible, the EBN would arrange for at least one

Member to attend each Expert Group Meeting and EWG workshop. Members also considered ways to increase the level of economy representation at EBN meetings and the EBN Chair will soon write to EWG members seeking your support.

The EBN meeting concluded with acknowledgement of the important contribution made over the last two years by the outgoing Chair, Ms Angélica Fuentes Téllez, and welcomed the incoming Chair, Mr Andrew Lloyd, to his new role.

EWG Members <u>supported</u> the EBN proposal to contribute to the development of project proposals, as well as for suggesting topics for future policy dialogues. Japan <u>encouraged</u> the EBN to strengthen its participation in EWG meetings and to more closely interact with APERC, both financially and intellectually. The Philippines <u>thanked</u> the EBN for helping identify topics for the EMM6 public-private dialogue and looked forward to their continued support. The Chair <u>encouraged</u> Members to support EBN efforts to broaden EBN membership.

Mr Fisher also <u>reported</u> on the key outcomes for the EBN workshop on financing energy infrastructure, held at the same venue on 19 March 2004. He <u>reported</u> that the workshop was attended by approximately 40 representatives from government and the private sector and had a number of excellent speakers. The workshop identified several preliminary best practices which will be further developed by the EBN and circulated to EWG Members out-of-session. A report from the Workshop will be posted on the EWG website in April.

Finally, Mr Fisher <u>thanked</u> the hosts and the EWG Secretariat for organising the workshop and Australia for providing financial and logistical support.

Members <u>noted</u> that the workshop is the second of three workshops undertaken by the EWG in 2004 to further the energy investment component of the Energy Security Initiative and that its outcomes will be incorporated into EWG recommendations on energy investment to be submitted to Energy Ministers at EMM6.

Actions Arising/Next Steps

 Members to <u>support</u> efforts to broaden member economy representation on the EBN.

3. APEC and EWG Secretariat Reports

Mr Tong Xianguo, Director (Program) APEC Secretariat, and Mr Aidan Storer, Manager, EWG Secretariat, presented their reports to Members.

Mr Tong <u>reported</u> on APEC developments since EWG26. An Informal SOM was held in Chile in December 2003 and at the meeting, Senior Officials discussed the issue of APEC reform and agreed on a set of immediate actions, including to adopt 3 year sunset clauses for new APEC initiatives, a shorter SOM agenda and to encourage the participation of ABAC at SOM meetings.

The APEC Budget and Management Committee is meeting in Singapore on 24-25 March. A key item on the agenda is a review of the 'Guidebook on APEC Projects',

where the BMC will consider ways to simplify the project format and reimbursement arrangements, encourage more self-funding for TILF Special Account projects, and consider a limit of US\$150,000 for individual projects. The EWG has not submitted any late projects for BMC consideration.

Finally, Mr Tong <u>reported</u> that the APEC Secretariat has signed contracts for four EWG projects approved for 2004, with the other four yet to commence.

EWG Members <u>sought</u> clarification on the sunset clause proposal and to which initiatives this would apply. Mr Tong advised that the initiatives could include those proposed by Leaders, Ministers and Senior Officials. Members <u>requested</u> that the APEC Secretariat keep the EWG informed of developments as the proposal may have implications for the EWG.

Russia <u>reported</u> that the Non-Ferrous Metals Dialogue Terms of Reference were endorsed at SOM I and thanked GEMEED and the EWG for their assistance in this process. The Terms of Reference seek to avoid duplication with work undertaken within the EWG and GEMEED and <u>invited</u> all Members to encourage their economies to participate in the dialogue. The First Meeting of the Non-Ferrous Metals Steering Group will be held on 25 May 2004 and Members are encouraged to provide Russia with possible contact points within their economy.

Mr Storer <u>reported</u> that the EWG Secretariat has prepared a Guide to assist project overseers when implementing APEC-funded projects. It has been approved by the APEC Secretariat and circulated to Expert Group Chairs and posted on the EWG website. The revised APEC Project Evaluation Framework was not endorsed at SOM I and is currently being revised before undergoing a trial process for finalisation at SOM III. The EWG Secretariat will keep Members informed of developments.

A number of key documents have been posted on the EWG website since EWG26 and the website will be further updated in the months leading up to EMM6. The second 'February 2004' edition of the EWG Newsletter is available from the EWG website and members are <u>encouraged</u> to provide the EWG Secretariat with feedback on the document and contribute to future editions.

Finally, Mr Storer <u>advised</u> that the EWG Operational Plan for 2004 has yet to be revised for EWG endorsement. The EWG Secretariat will <u>consider</u> Member comments out-of-session and in consultation with Members.

Japan, New Zealand and the United States <u>thanked</u> the EWG Secretariat for their excellent work on the EWG website and the EWG Newsletter. Australia <u>reported</u> that the EWG was complemented on its website at the recent Asia-Pacific Climate Change Workshop held in Kuala Lumpur, Malaysia.

Actions Arising/Next Steps

- APEC Secretariat to <u>inform</u> Members, through the EWG Secretariat, of developments regarding the proposed sunset clause for APEC initiatives.
- Members to <u>notify</u> Russia of possible contact points for the Non-Ferrous Metals Steering Group.

- EWG Secretariat to <u>inform</u> Members of developments regarding the revised APEC Project Evaluation Framework.
- EWG Secretariat to <u>revise</u> the Operational Plan for 2004 out-of-session and in consultation with Members.
- Members to <u>notify</u> the Secretariat if they wish to contribute to future editions of the EWG Newsletter.

4. Implementation of Type 2 Partnership Initiative: Energy for Sustainable Development

EWG Members <u>noted</u> the progress report on implementation of the EWG Type 2 Partnership Initiative which outlined recent progress of activities being undertaken under the Initiative. Members <u>noted</u> that, since EWG26, several workshops have been held, including on energy infrastructure investment, energy efficiency financing and reducing carbon dioxide emissions from electric power generation, that new APEC-funded projects addressing cross-border gas interconnection, hydrogen, and carbon capture and geological sequestration have commenced, and that the EGEE&C has received a sponsorship offer to help maintain and further enhance the APEC-ESIS website.

Members <u>noted</u> that the proposal for incorporating sustainable development principles in the EWG project proposal process has been implemented, with the first self-assessment reports circulated to Members as background information for ranking project proposals.

Chinese Taipei <u>highlighted</u> that the Type 2 Initiative is a valuable mechanism for demonstrating EWG efforts to further sustainable development within the region and the importance of renewable energy and energy efficiency to these efforts. Chinese Taipei <u>highlighted</u> the role of the APEC-ESIS website and the Standards Notification Procedure to facilitate energy efficiency and <u>thanked</u> Australia and New Zealand for their financial support.

The United States <u>acknowledged</u> the implementation of sustainable development principles into the EWG project process and <u>advised</u> that the workshop on renewable energy financing, originally planned for the second half of 2004, will be held in conjunction with the next EGNRET meeting Hawaii, USA, in May. A white paper will be prepared prior to the workshop.

The United States <u>advised</u> of the outcomes from the workshop on Financing Energy Efficiency Projects held in Melbourne, Australia, on 23-24 March 2004. The United States <u>noted</u> that the workshop was attended by government and private sector representatives from a number of member economies who shared perspectives and identified a range of barriers and best practices to facilitating the financing of energy efficiency projects.

The United States <u>emphasised</u> that outcomes from the workshop provide a solid basis for guiding EWG efforts to address barriers between financing and the deployment of proven technologies and, in doing so, responding to the urgent need for, and significant potential of, energy efficiency improvement.

Members <u>noted</u> the workshop's recommendations and <u>agreed</u> that these be incorporated into EWG recommendations on energy investment, to be submitted to Energy Ministers at EMM6.

Actions Arising/Next Steps

• EWG to <u>forward</u> the recommendations from the workshop on Financing Energy Efficiency Projects to EMM6, as part of EWG recommendations on the broader issue of energy investment.

5. Implementation of APEC Energy Security Initiative

Members <u>noted</u> that the Energy Security Initiative provides a framework through which all energy security activities are undertaken by the EWG, including those identified in the ESI Implementation Plan and the APEC Action Plan to Enhance Energy Security.

Members then discussed each of the components of the Energy Security Initiative.

5.1 Report of the Energy Security Initiative Steering Committee

The Chair of the first meeting of the ESI Steering Committee, Mr David Pumphrey, <u>reported</u> the outcomes of the meeting which was held on 23 March 2004.

Members <u>noted</u> that, at the meeting, the Committee clarified its oversight role, considered key directions given to the EWG on the issue of energy security, discussed progress of the Initiative's implementation, and considered how the Initiative would be reported to EMM6, and any directives to be included in the EMM6 Communiqué.

The Committee <u>noted</u> the excellent progress being made under the ESI and that there are a number of activities to be undertaken during 2004, particularly in the lead up to EMM6. The Committee <u>agreed</u> that the high level of activity needs to be managed in a way that minimises the work demands placed on EWG Members and the EWG Secretariat.

The Committee <u>noted</u> recent developments regarding EWG activities on oil stockpiling, renewable energy financing, methane hydrates, hydrogen, LNG trade and gas market data. The Committee <u>discussed</u> the ESI component of the EWG Lead Shepherd Report to EMM6 and the EMM6 Communiqué, and <u>agreed</u> to convene a meeting the following evening to determine a structure and approach for developing the Communiqué.

Finally, the Committee <u>agreed</u> that, in the future, it would meet on an 'as and when required' basis, and <u>noted</u> the important role of the ESI in supporting efforts to review the Counter-Terrorism Action Plans of member economies.

Actions Arising/Next Steps

 Members <u>agreed</u> to promptly respond, out-of-session, to requests to review and comment on documents generated under the ESI, with a view to approving those items for consideration at EMM6. These documents include an Interim Framework Document on Hydrogen and Fuel Cells and best practices on LNG Trade, strategic oil stocks, and financing clean and efficient energy.

5.2 Energy Emergency Response Arrangements

Members <u>noted</u> that the Energy Security Initiative includes recommendations and actions regarding emergency response arrangements. Specifically, these include sharing knowledge and hosting workshops on emergency response issues, including a standing arrangement whereby an EWG Member presents on their economy's arrangements at each EWG meeting.

Dr Liu Deshun, People's Republic of China, <u>presented</u> the measures it uses to meet its rapidly growing energy demand. China's energy demand grew by 3.43% per annum during 1990-2002, with GDP growth of 9.3% per annum over the same period. According to the research findings of energy experts, at home and abroad, primary energy consumption is expected to grow by 4% per annum over the next two decades, and is projected to be 2.2bn tons of standard coal equivalent (TSCE) by 2010, and 2.9 TSCE by 2020.

China faces many challenges in meeting increased energy demand and has undertaken a number of steps to address this issue. China has sought to increase investment in energy infrastructure and is currently undertaking four major energy infrastructure projects valued at more than 730 billion RMB. China is actively promoting energy efficiency and advocating energy conservation, adopting a balanced approach to energy development and energy conservation under its 10th five-year Energy Development Plan.

China is promoting low energy intensive, technology-based, high value-added industries (eg IT) within its domestic economic structure, and is investing heavily in clean coal technologies (eg PFBC and IGCC power plants) and oil conversion technologies (eg coal liquefaction) to diversify its energy sources and enhance energy security.

China makes efforts to increase the clean energy component of its energy mix from 10.5% in 2002, to 30% in 2020. Of this, 10% would come from hydro, 9% natural gas, 4% nuclear and 7% from other renewables (eg wind, solar and biomass). China also aims to use overseas oil and gas resources appropriately and has established the National Oil Reserve Office under the National Development and Reform Commission.

Members <u>thanked</u> China for the comprehensive and informative presentation and <u>noted</u> the important policy actions that are being implemented to address growing energy demand. Japan and the United States <u>offered</u> to support China in its efforts to further implementation.

In relation to:

- the construction of new oil-stockpiling facilities, China <u>advised</u> Members that suitable sites have yet to be determined;
- the transportation of energy such as coal to the major energy using areas along China's east coast, China <u>advised</u> that power plants will be built close to these areas to minimise transportation; and
- wind power, China advised that it is currently surveying potential sites.

Members <u>expressed</u> support for China's plan to focus on the development of clean coal technology and coal gasification, and looked forward to the outcomes of this work.

Australia <u>nominated</u> to present on their energy emergency response arrangements at EWG28.

Actions Arising/Next Steps

 Australia to <u>present</u> on their energy emergency response arrangements at EWG28.

5.3 Progress of the Monthly Oil Data Initiative

Ms Karen Schneider, Vice-Chair (representative) of EGEDA, <u>reported</u> on the progress of the Joint Oil Data Initiative (JODI) which has been in permanent operation since late 2002. Ms Schneider <u>provided</u> background on JODI and <u>reported</u> that the major challenge continues to be the capacity of economies to report monthly.

All APEC economies have contributed to the JODI exercise and, although timeliness and completeness has improved since EWG26, variations between member economies continue.

At the global level, 80 economies have now provided input to JODI, representing 93% of world oil production and 95% of consumption. Some of the reported data is publicly available from the databases accessible via the JODI website.

To address this work is being undertaken, at the APEC and international levels, to improve the quality, completeness, timeliness and transparency of reporting, and to better coordinate the collection and reporting process. EGEDA is undertaking quality analysis of the data provided with oil stocks being the most difficult to report accurately. Capacity building activities are also being undertaken, including from APERC and EGEDA.

Members thanked Ms Schneider for her report and congratulated EGEDA and APERC for their efforts in coordinating APEC's contribution to JODI. Members noted the importance of capacity building and encouraged economies to use the services offered by APERC and EGEDA. Members requested that, at EWG28, EGEDA report on its capacity building activities.

Actions Arising/Next Steps

- Members to <u>encourage</u> their economies to provide timely and accurate data to JODI.
- Members to <u>utilise</u> the capacity building expertise available within the EWG, APERC and EGEDA, and EGEDA to <u>report</u> on its capacity building activities at EWG28.

5.4 Real-time Emergency Information Sharing

Japan <u>tabled</u> a final proposal for the Real-time Emergency Information Sharing System, outlining its key components and functionality, the role of APERC as System Coordinator and Secretariat (with financial support from METI), and the steps needed to commence its operation, which includes each member economy nominating an emergency contact. Japan <u>confirmed</u> that the monthly oil data posted on the System is sourced from JODI.

Japan also <u>reported</u> on the successful 'live chat' held on 20 February 2004, which involved seven participants from five member economies and lasted two hours. New Zealand <u>expressed</u> its regret for not being able to participate and Members <u>requested</u> that future trials of the system be timed to allow as many member economies as possible to participate.

Members <u>expressed</u> their appreciation for Japan's efforts in developing the System and <u>endorsed</u> the proposal for APERC to act as System Coordinator and Secretariat. Members <u>agreed</u> that implementation of the System should commence but that the timing of emergency 'chats' and the type of information shared needs further consideration in consultation with all Members.

Actions Arising/Next Steps

- Members to <u>advise</u> the System Coordinator of the emergency contacts within their economy.
- The System to <u>commence</u> operation by sharing monthly oil information collected from JODI.
- Emergency contacts to <u>discuss</u> and <u>agree</u> on the type of information to be shared through the System.

5.5 Presentation on Methane Hydrates

The United States <u>introduced</u> the presentation, highlighting that it was introduced under the APEC Action Plan to Enhance Energy Security and forms part of the Energy Security Initiative. The presentation is intended to inform EWG consideration of possible future activities, including whether to participate in the Methane Hydrate International Research Consortium.

Ms Edith Allison, US Department of Energy and representing the ad hoc group on methane hydrates <u>presented</u> the tutorial, describing what methane hydrates are, where they is found, how much may exist, what international research has been undertaken (including in Australia, Canada, China, Japan, New Zealand, the Republic of Korea and the United States) and possible future research

needs. The role of the proposed Research Consortium was <u>outlined</u> and it was <u>proposed</u> that the EWG can assist its efforts to communicate research results to government policy makers.

Members <u>thanked</u> Ms Allison for the informative presentation and in response to questions, Ms Allison advised that temperature determines whether methane hydrates or gas is formed, and that methane hydrates may complement other sources of natural gas as an energy source in the future.

Members <u>agreed</u> that the EWG would be a useful forum through which to communicate research developments to their governments and <u>agreed</u> to discuss this further within their economies. The ad hoc group <u>advised</u> that it will be continuing to meet and will advise the EWG on any key developments.

Actions Arising/Next Steps

- Members to <u>consider</u> the ad hoc proposal within their economies.
- Ad hoc group on methane hydrates to <u>inform</u>, through the EWG Secretariat, Members on key developments.

6. Framework for the discussion of Nuclear Energy within the EWG

The Chair <u>reported</u> that a revised framework prepared by the Republic of Korea and Mexico was circulated to members for EWG consideration and endorsement on 20 February 2004, and invited the Republic of Korea to report on its current status.

The Republic of Korea tabled a <u>revised</u> framework and <u>reported</u> that further revisions were made to incorporate comments provided by Members since 20 February 2004. Members <u>considered</u> the revised framework and, with several further amendments, endorsed the framework.

In identifying next steps, Members <u>agreed</u> to establish, under the leadership of the Republic of Korea and Mexico, an ad hoc group to implement the framework. Canada and the United States <u>nominated</u> to join the ad hoc group and other interested economies were asked to forward their <u>nominations</u> to the EWG Secretariat out-of-session.

The Republic of Korea <u>reported</u> that 9 member economies will participate in the Nuclear Energy Training Program, to be held in Pusan on 5 April – 1 May 2004.

Actions Arising/Next Steps

- The Republic of Korea and Mexico to <u>lead</u> an ad hoc group to implement the Framework.
- Members to <u>notify</u> the EWG Secretariat of their nomination to join the ad hoc group.

7. EWG Project Proposals for 2005

Members <u>noted</u> that 18 project proposals had been submitted for the EWG consideration. Of these, 7 sought funds from the APEC Operational Account, 9 sought funds from the TILF Special Account, and 2 were self-funded.

The APEC Secretariat <u>reported</u> that although, the BMC has yet to determine the available funds for 2005, funding for 2004 suggests that approximately \$US300,000, will be available from the Operational Account and \$US300,000 from the TILF Special Account.

Members <u>endorsed</u> all project proposals. Members <u>ranked</u> the projects in the following order in accordance with the agreed EWG method. Members <u>agreed</u> to submit projects 1-5 for the Operational Account and projects 1-3 from the TILF Special Account to the BMC.

Operational Account projects in order of EWG27 ranking. Projects 1-5 (total value US\$295,700) will be submitted to the APEC Budget and Management Committee):

Submitted to BMC

- 1. Operation of the APEC Energy Database and Analysis **Project 4** (US\$20,000).
- 2. Energy efficiency indicators workshop capacity building & technical co-operation in monitoring energy efficiency progress within APEC economies through disaggregated indicators **Project 2** (US\$50,000).
- 3. Best practice principles & processes for integrated building design **Project 1** (US\$40,000).
- APEC 21st Century Renewable Energy Development Initiative (Collaborative VI): Handbook for Developing City/State Hydrogen and Fuel Cell Programs in APEC Member Economies – Project 7 (US\$75,000).
- 5. Climate change technology road-mapping for power generation in APEC developing economies **Project 6** (US\$110,700 (2005); US\$93,400 (2006)).

Not submitted to BMC

- 6. APEC 21st Century Renewable Energy Initiative (Collaborative VI): Workshop on advances in clean transportation fuels **Project 5** (US\$50,000).
- 7. Symposium on enhanced energy efficiency of common industry equipment **Project 3** (US\$50,000).

TILF Special Account projects in order of EWG27 ranking. Projects 1-3 (total value US\$317,400) will be submitted to the APEC Budget and Management Committee):

Submitted to BMC

- APEC 21st Century Renewable Energy Development Initiative (Collaborative IV): Adoption of renewable energy standards (Phase 2: Final groundwork) – **Project 4** (US\$150,000).
- 2. Carbon Dioxide Capture and Geological Sequestration Potential of the APEC Region (Phase 3) **Project 9** (US\$117,400).

3. Standby power – promoting improved co-operation among APEC economies in programs to reduce standby power losses – **Project 5** (US\$50,000).

Not submitted to BMC

- 4. Universal power supplies Cooperation seminar to reduce energy losses and harmonise on testing methodology **Project 1** (US\$50,000).
- 5. Clean transportation fuels supply security study (Phase 2) **Project 6** (US\$148,000).
- Alignment of testing procedures for fluorescent lamp ballasts in APEC Project 2 (US\$50,000).
- 7. Residential Energy Survey Training, Data Alignment and Database **Project 3** (US\$171,000).
- 8. Power producer benchmarking assessment for Asia **Project 8** (US\$80,900 (2005); US\$85,700 (2006)).
- 9. Applicability of power sector CO2 emissions accounting and trading systems in APEC developing economies **Project 7** (US\$64,200).

Self-funded projects endorsed at EWG27:

- 1. A vision for cooperation on energy standards and labelling programs **Project 1**.
- 2. APEC Clean Fossil Energy Technical and Policy Seminar **Project 2**.

Actions Arising/Next Steps

EWG Secretariat to submit EWG-endorsed projects to the BMC.

8. Policy Dialogue: 'The Role of Energy Services in the APEC Region'

EWG and EBN Members held a <u>policy dialogue</u> on the topic 'The Role of Energy Services in the APEC Region'. As previously agreed, no records of discussion were taken under this item.

Members <u>noted</u> the breadth of the policy dialogue topic for EWG27 and suggested that future topics should be more narrowly focused. Members <u>agreed</u> that for EWG28 the policy dialogue topic would be 'Energy Project Financing' and for EWG29 the topic would be 'Trade in LNG and natural gas' (which could include discussion of the demand for energy and its impact on energy prices and supply).

Both dialogues would incorporate outcomes from EWG workshops and the Chair <u>directed</u> the EWG Secretariat to refine the topics and suggest possible questions out-of-session. APERC <u>offered</u> to provide information to support these dialogues.

Actions Arising/Next Steps

- That the policy dialogue topic for EWG28 be 'Energy Project Financing'.
- That the policy dialogue topic for EWG29 be 'Trade in LNG and natural gas'.

 The EWG Secretariat to <u>refine</u> both topics and suggest possible questions out-ofsession.

9. Report from the APERC President

The APERC President <u>reported</u> on the preliminary findings from APERC's four research projects for 2003-04: 1) Implications of energy trends in China, 2) Electricity Power Grids in the APEC Region, 3) Nuclear Power Generation in the APEC Region, and 4) New and Renewable Energy in the APEC Region.

The APERC President <u>presented</u> and Members <u>endorsed</u> the two research projects planned for 2004-05: 1) APEC Energy Demand and Supply Outlook, 2) New and Renewable Electricity in the APEC Region 2004.

Japan <u>presented</u> the finalised medium-term strategic plan for the support of APERC, highlighting its basic approach, the goals for each activity, the cooperation sought from member economies, the performance indicators it has established to report annually to the EWG, and the requirement that APERC undergo a comprehensive review in late 2007-early 2008. Japan would <u>welcome</u> Member comments on APERC performance indicators out-of-session. Members <u>noted</u> the plan.

Regarding contributions to APERC, Japan <u>reported</u> that they had received responses from only a few economies and requested that they be advised regarding what contributions member economies could make.

Actions Arising/Next Steps

- Members to <u>provide</u> Japan with comments on APERC performance indicators out-of-session
- Members to <u>advise</u> Japan of financial or other contributions they could make to APERC out-of-session.

10. Report of the Meeting of the EWG Expert Groups Chairs and APERC

The EWG Secretariat <u>reported</u> on the outcome of the Expert Group Chairs' Meeting held in Beijing, People's Republic of China, 22 March 2004. The report from the meeting will be <u>posted</u> on the EWG website after EWG27.

Members <u>noted</u> that the Expert Groups have completed and are progressing a number of projects since EWG26, are supporting EWG efforts to apply more rigour to the project proposal process and have sought to more closely interact with each other and APERC. Members also <u>noted</u> that the outgoing EGNRET Chair, Mr Andre van Rest, retired from the US Department of Energy in January 2004 and that the incoming EGNRET Chair is Mr Cary Bloyd.

Members <u>endorsed</u> a proposal by the Expert Group Chairs to have formal representation at EWG meetings.

Actions Arising/Next Steps

Expert Group Chairs to be represented at future EWG meetings.

11. Pledge and Review

The EWG Secretariat <u>introduced</u> the revised proposal for reinvigorating the Program and <u>confirmed</u> that it would comprise two parts: 1) Annual report on a specific topic, and 2) Annual report against an agreed set of performance indicators regarding the implementation of nominated energy efficiency policies and programs.

Members <u>endorsed</u> the revised proposal, <u>noting</u> that the indicators would need to be agreed out-of-session in consultation with the EGEE&C. Members <u>agreed</u> that the revised Program be implemented immediately and that, building on the outcomes from the recent workshop on Financing Energy Efficiency Projects, the topic for reporting to EWG28 be under the theme of 'policy and financial measures to facilitate energy efficiency improvements'. The exact topic will be finalised by the EWG Secretariat out-of-session.

Action Arising/Next Steps

- EWG Secretariat to <u>finalise</u> the topic for EWG28 and <u>advise</u> Members out-ofsession.
- Members, in consultation with the EGEE&C, to <u>identify</u>, out-of-session, a process for developing an agreed set of performance indicators for reporting under the Program.

12. Statements on Notable Energy Developments since EWG26

The Chair <u>thanked</u> Australia; Canada; Hong Kong, China; Mexico; New Zealand; Japan; Russia; Singapore; Chinese Taipei; Thailand and the United States for providing their Statements on Notable Energy Developments. Members who tabled their Statements at the meeting were <u>encouraged</u> to provide an electronic copy to the EWG Secretariat by 9 April 2004, for circulation to Members.

Members noted the Statements.

Action Arising/Next Steps

 Members who tabled their Statements on Notable Energy Developments to provide an electronic version to the EWG Secretariat by 9 April 2004.

13. Report from the 2nd Meeting of the EMM6 Steering Committee

The Chair of the EMM6 Steering Committee, Ms Lilian Fernandez, <u>reported</u> on the outcomes of the meeting which was held on 23 March at the same venue.

Ms Fernandez <u>reported</u> that EMM6 will now take place in Makati City on 10 June at the Shangri-La Hotel. Delegations should register through the EMM6 website by 7 May 2004.

The EMM6 title ('Energy Security in APEC: Cooperation for a Sustainable Future') and draft agenda has been <u>agreed</u>, with agenda items one and two focusing on short and long-term issues respectively. APERC will outline the region's energy outlook and key short-term energy issues. The Lead Shepherd would report on EWG actions to address short-term and long-term issues. The government-private sector dialogue will be on the topic of 'Energy Project Financing'.

Ms Fernandez also <u>reported</u> that the Committee convened another meeting on the evening of 24 March to discuss the structure and process for developing the EMM6 Communiqué. The United States <u>agreed</u> to lead the development of a first draft and to circulate to Members in early April.

Some Members <u>noted</u> that there would likely be the need for another Committee meeting prior to EMM6 and Australia <u>offered</u> to host this meeting. Several Members expressed concerns about their ability to attend this meeting. Members <u>agreed</u> that the drafting process will need to be progressed via e-mail out-of-session. Members also <u>agreed</u> to determine the necessity of another meeting after reviewing the first draft of the Communiqué.

Action Arising/Next Steps

- United States to <u>develop</u> the first draft of the EMM6 Communiqué and <u>circulate</u> to Members in early April.
- Members to <u>determine</u>, out-of-session, whether another Steering Committee Meeting is necessary.

14. Other Key EWG Initiatives for Noting by Members

14.1 Earthquake Response Cooperation Initiative

Chinese Taipei <u>reported</u> on Phase 3 of the Project 'Earthquake Response Cooperation Program for Energy Supply Systems' under the Initiative, which was completed in 2003. Chinese Taipei <u>outlined</u> the Project's rationale and history, including its support at EMM5, and <u>reported</u> that the Project's Final Report was completed in 2003.

Chinese Taipei <u>proposed</u> a future cooperation mechanism to take the work of the Initiative forward, which includes establishing a Cooperation Mechanism Manager, a Program Administrator (to host the website) and, where appropriate, undertake further studies, seminars and workshops.

Chinese Taipei <u>sought</u> the assistance of member economies to propose new projects to further the Initiative.

Members <u>noted</u> the Progress Report and <u>thanked</u> Chinese Taipei for their efforts to address what is a very important Initiative for member economies.

Action Arising/Next Steps

 Members to <u>consider</u> possible projects to progress the Initiative and to <u>notify</u> the EWG Secretariat out-of-session.

14.2 Energy Standards and Labelling Cooperation Initiative

Chinese Taipei <u>advised</u> that it will not make a report under this Agenda Item, but will provide a progress report to Members at a later date.

Action Arising/Next Steps

Nil.

14.3 Energy Literacy Initiative

Japan <u>reported</u> that it is considering ways to progress the Initiative and will provide a progress report to Members at a later date.

Action Arising/Next Steps

Nil.

15. Other Business

Chile <u>reported</u> on the progress of the first 'Meeting of APEC Ministers Responsible for Mining', to take place in Santiago and Antofagasta, Chile, 15-17 June 2004. The idea of the Meeting arose from a recognition that the region's minerals and metals sectors are enormous and that there has not previously been an APEC Ministerial on mining. Its main thematic lines are sustainable development and trade and investment liberalisation, and its outcomes will support policy-making within member economies. The Meeting is being organised by the Chilean Copper Commission and GEMEED members are providing support and advice. Further information is available from www.cochilco.cl.

The United States <u>reported</u> that a Symposium on 'Petroleum Stockpiling in the 21st Century' will be held in Houston, USA, on 30 November - 2 December 2004. The workshop is not an APEC workshop but member economies are strongly encouraged to attend. Further information was tabled at the meeting.

New Zealand reported that the Ministerial Statement from the recent APEC Industrial Science and Technology (IS&T) Ministers' Meeting referred to the work of the EWG in the area of hydrogen. Members noted that this was indication that other areas of APEC recognise the work of the EWG and agreed to monitor the work of the IS&TWG on areas of possible overlap such as hydrogen and alternative fuels. The Chair suggested that the EWG write to the IS&TWG to clarify the respective roles, suggesting that the IS&TWG focus on pre-competitive stages while the EWG focuses on applied stages.

Japan <u>reported</u> that two meetings of the International Energy Forum (IEF) were held the previous week with a new Secretary-General of the Permanent Secretariat. The

9th Meeting of the IEF will be held in Amsterdam, Netherlands, on 22-24 May 2004. The officials agreed to recommend to Ministers that the 10th and 11th IEF meetings will be held in Qatar (2006) and Italy (2008) respectively. China <u>reported</u> that it will co-host the 10th IEF meeting.

Japan also <u>reported</u> that the EWG Lead Shepherd, Mr John Ryan, has been elected to the position of Chairman of the International Energy Agency Governing Board, with the position to commence in January 2006. Members <u>congratulated</u> Mr Ryan and noted that it is good to have a better link between the IEA and the EWG. Mr Ryan <u>thanked</u> Members for the support.

Russia <u>reported</u> that there has been recent restructuring within the Russian Government, and that Members will be <u>notified</u> of any changes to Energy-related agencies in the near future.

The Republic of Korea <u>reported</u> that the 11th Energy Law International Conference will be held on 22-25 June in Seoul, Korea. The topic of the meeting will be 'Towards Energy Cooperation in the Asia-Pacific Region. Further information was <u>tabled</u> at EWG27.

Actions Arising/Next Steps

• The EWG to write to the IS&TWG seeking clarification of the respective roles.

16. Date for Next Energy Working Group Meeting.

Members <u>noted</u> the offer by Viet Nam to host EWG29 in Hanoi, in the first half of 2005. Members <u>thanked</u> Viet Nam for their offer and <u>agreed</u> that the EWG Secretariat work with Viet Nam to identify a suitable date for the meeting.

There was no <u>offer</u> to host EWG28 in the second half of 2004. Members <u>agreed</u> to consider this issue out-of-session and work with the EWG Secretariat to <u>identify</u> a host by the end of April.

Action Arising/Next Steps

- EWG Secretariat to work with Viet Nam to <u>identify</u> a date for EWG29.
- Members to <u>consider</u> whether they can host EWG28 and any future EWG Meetings and <u>advise</u> the EWG Secretariat out-of-session.

17. Document Access

Members <u>agreed</u> that the Summary Record and other final documents from this meeting could be released to the public immediately after the meeting.

Actions Arising/Next steps

 Members to <u>provide</u> the EWG Secretariat with electronic copies of all documents tabled at the meeting by 9 April 2004, to enable the EWG Secretariat to <u>post</u> all appropriate documentation on the EWG website by 16 April 2004.

18. Summary Record of the Twenty-Seventh Meeting

The Summary Record of the meeting was agreed.

Action Arising/Next Steps

Nil

Concluding Remarks

Members <u>recorded</u> their thanks to Mr Li Bin, Deputy Director General, Foreign Affairs Department, National Development and Reform Commission, People's Republic of China, for hosting EWG27 and co-chairing the meeting.

Members also <u>recorded</u> their thanks to Mr John Ryan, for having successfully led the discussions as Chair and their appreciation to the host economy for the excellent meeting facilities and hospitality they enjoyed Beijing. Members also <u>thanked</u> the EWG Secretariat for their efforts.

Attachment A

LIST OF PARTICIPANTS

Chair/Co-Chair

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