



## Summary Record of the 29<sup>th</sup> Energy Working Group Meeting

The twenty-ninth meeting of the APEC Energy Working Group (EWG) was held in Hanoi, Viet Nam, on 16-17 March 2005. John Ryan, EWG Lead Shepherd, and Dr. Cao Quoc Hung, Director General of International Cooperation, Ministry of Industry, Viet Nam, co-chaired the meeting.

Delegates from Australia; Canada; Chile; the People's Republic of China; Hong Kong, China; Japan; Republic of Korea; Malaysia; New Zealand; Papua New Guinea; the Philippines; Russian Federation; Singapore; Chinese Taipei; Thailand; the United States and Viet Nam; representatives from the Asia Pacific Energy Research Centre (APEREC), the EWG Business Network (EBN), the APEC and EWG Secretariats, and the Expert Groups on Clean Fossil Energy (EGCFE), Energy Data and Analysis (EGEDA), Energy Efficiency and Conservation (EGEE&C), and New and Renewable Energy Technologies (EGNRET) participated in the meeting.

A list of participants, including observers, is at [Attachment A](#).

### 1. Opening Address by the Meeting Chair and Adoption of the Agenda

The EWG Lead Shepherd, Mr John Ryan, opened the meeting and invited his co-chair, Dr Cao Quoc Hung, to make the opening address.

Dr Hung warmly welcomed delegates to EWG29 and to Hanoi. Dr Hung reported that Viet Nam is committed to sustainable economic development and is undertaking a range of domestic energy reforms. In the power sector, Viet Nam passed its Electricity Law in 2004 which will take effect from July 2005, and its efforts to encourage domestic and foreign investment has resulted in their growing share of Viet Nam's power generation and distribution. There are several joint ventures in the coal and oil and gas sectors.

Dr Hung emphasised the importance that Viet Nam places on international cooperation, where it has helped Member Economies to diversify their energy mix, improve energy efficiency and promote energy for sustainable development. Dr Hung expressed Viet Nam's appreciation for the opportunity to participate in, and learn from, a range of EWG workshops and activities.

Finally, Dr Hung wished all delegates a successful EWG meeting and an enjoyable stay in Hanoi.

Mr Ryan thanked Dr Hung, on behalf of delegates attending EWG29, for his address and for the excellent facilities provided by Viet Nam.

Mr Ryan expressed his condolences to those Economies affected by last December's Indian Ocean Tsunami, and noted that the EWG would discuss its response to this disaster during EWG29. Mr Ryan then outlined agenda for the meeting, drawing attention to several important issues.

The agenda for the meeting was adopted.

## **2. Report from the Chair of the EWG Business Network**

The EBN Chair, Mr Andrew Lloyd, reported outcomes from the EBN Business Forum and EBN12, both held in Hanoi on 15 March 2005.

Mr Lloyd reported that the EBN Business Forum, 'Opportunities and Challenges in Viet Nam's Energy Sector', was highly successful, with over seventy delegates from the business, finance and government sectors attending. The Forum enabled participants to develop an understanding of Viet Nam's energy development objectives and to hear the experiences of energy companies working within Viet Nam. Participants also used the Forum to explore best practices in energy infrastructure financing and how they might apply to Viet Nam, including building local energy market and finance capacity.

Mr Lloyd reported that EBN12 was most constructive, with the EBN discussing outcomes from the Business Forum and sharing energy developments within their Economies. The EBN also explored ways to more closely engage with EWG Expert Group activities, and the EWG Secretariat agreed to a proposal to e-mail a monthly reminder to the EBN highlighting upcoming meetings and workshops, and reports from recently completed projects.

The EBN discussed its role in relation to natural gas trade, noting that several of its Members will participate in next week's APEC LNG Workshop in Taipei. The EBN expressed support for a proposal to establish an annual Asia Pacific Gas Forum (APGAS) as a mechanism to bring together government and industry stakeholders to explore policy and technical issues. The EBN sought EWG endorsement of the APGAS proposal.

Members raised several questions regarding the APGAS proposal, noting that it was one of the key recommendations from the EWG project, 'Best Practices in Cross-border Interconnection of Natural Gas in APEC Member Economies'. The EBN Chair reported that the EBN and interested companies will be working to ensure that a first meeting will take place in September 2005, in Perth, Australia. The EBN Chair reported that the Forum would be seeking participation from a wide range of stakeholders but would not be open to the public, and agreed that it be renamed 'APEC Gas Forum'. Members supported the holding of a first meeting in September, requesting that its outcomes be reported to the EWG for consideration prior to its endorsement as an annual event.

The EBN discussed the APEC Foresighting Future Fuel Technologies project, noting the interest that workshop participants had shown in the EBN and EWG Expert Groups. The EBN agreed to consider its participation in the upcoming technology road-mapping workshops in Canada and Chinese Taipei.

Finally, Mr Lloyd reported that EBN12 was his last meeting as EBN Chair. The new Chair is Mr Toru Mihara, Japan, with the United States continuing its role as Vice-Chair. Members endorsed an EBN proposal to have two Vice-Chairs, with the second Vice-Chair to be identified by the EBN out-of-session.

Members thanked Mr Lloyd for his report and for serving as EBN Chair for the last twelve months. Members agreed that the EBN Business Forum was a highly successful and worthwhile event, and a format that should be considered in the future. Members also agreed that the success of the Forum and EBN12 highlights the benefit of holding EBN activities back-to-back with EWG meetings.

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

- EBN to report to the EWG outcomes from the first meeting of the APGAS Forum.

### **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 reported that the Theme for APEC 2005 is 'Towards One Community: Meet the Challenge, Make the Change', and the three Sub-themes are: 1) stock-take of progress towards the Bogor Goals, 2) ensure a transparent and secure business environment, and 3) build bridges over differences. In the wake of the Indian Ocean Tsunami, a major impact issue for relevant APEC Working Groups and committees will be to develop a work plan to respond to, and prepare for, emergency and natural disasters.

The BMC recently approved three of six EWG project proposals submitted for urgent funding, with the other three to be considered in April. The BMC requested that all EWG proposals submitted as TILF Special Account projects be resubmitted as Operational Account projects as their TILF linkages were insufficient, although the limited funds remaining in this Account will make it difficult for these proposals to secure funding. The Revised Evaluation Framework for APEC projects is now in place, with Operational Account proposals to undergo the new Quality Assessment Framework.

Mr Storer reported that, after EWG28, the EWG Lead Shepherd wrote to the APEC Secretariat's 2004 Executive Director and the 2005 SOM Chair expressing the EWG's concern with the lack of APEC funding for EWG projects. Both noted the importance of energy security as an issue for APEC economies but the Executive Director advised that the request was beyond the APEC Secretariat's mandate. The EWG Lead Shepherd reported the APEC Energy Security Initiative and CAIRNS Initiative at SOM I in March 2005, emphasising the importance of the EWG's work and the comprehensive work program endorsed by APEC Energy Ministers and Economic Leaders.

In response to a question regarding Executive Director's advice, the APEC Secretariat stated that it was beyond its mandate to address EWG concerns regarding funding for EWG projects, as this is a matter for the BMC. The EWG Lead Shepherd suggested that the issue may be addressed through better communication, and asked that the APEC Secretariat provide the EWG with information on funding for EWG projects in comparison to other Working Groups in recent years before Members consider next steps.

In response to APEC Trade Ministers' calls for closer links between APEC and OPEC, the EWG Lead Shepherd recently invited OPEC to present at an upcoming EWG meeting. This invitation was positively received, with OPEC expressing a desire to send a representative to EWG30.

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

- APEC Secretariat to provide the EWG with information on recent funding trends for EWG projects.

## 4. Tsunami Impacts and EWG Responses

The Chair again expressed the EWG's condolences to those affected by the Indian Ocean Tsunami and invited Members to consider what the EWG could do to respond.

Malaysia and Thailand reported the impact of the Tsunami on their Economies and energy sectors, and briefly outlined their governments' responses. Japan suggested that the Real-Time Information Sharing System could be a useful mechanism to support the APEC response.

Australia reported that at SOM I, APEC Senior Officials agreed to develop a coordinated APEC response to the Tsunami which includes establishing a Virtual Task Force for Emergency Preparedness. Their first meeting will be held in Bali, Indonesia, in late April, with the EWG Lead Shepherd invited to participate. Members agreed to consider the EWG's response in light of the outcomes of this meeting.

The EGNRET Chair reported that it has submitted a project proposal for consideration at EWG29, which seeks to respond to impacts of the Indian Ocean Tsunami.

### Actions Arising/Next Steps

- EWG Lead Shepherd to report the outcomes of the first meeting of the Virtual Task Force to Members out-of-session.

## 5. Implementing the APEC Energy Security Initiative

Members noted that, in November 2004, APEC Economic Leaders and Ministers endorsed the CAIRNS Initiative developed at EWG28, which sets out a comprehensive work program for 2005. Members also noted the 'Third Report on Implementation of the Energy Security Initiative' prepared by the EWG Secretariat.

Members then considered the APEC Energy Security Initiative's short and long-term measures.

### 5.1 Short-term measures

**Oil price impacts** – The Chair reported that this is a new activity under the CAIRNS Initiative, with the aim of quantifying the effects of substantial increases in oil prices on macroeconomic indicators and patterns of trade in the APEC region. To progress this measure, Thailand and Australia submitted a joint project proposal to APEC for urgent funding in January 2005. Members noted that the BMC will consider funding for this project in April.

Members agreed that given the project's complexity and the intention that it be completed in the second-half of 2005, it will need to be carefully planned and involve broad participation from Member Economies.

**Joint Oil Data Initiative (JODI)** – EGEDA reported the Economy reporting progress of JODI, with most Member Economies collecting and reporting data, although variations in timeliness and quality continue (12 submit data within one month, 4 within two months, and 2 report after two months). A main development for 2005 will be the public release of the global JODI database and as such, there is an urgent need for Member Economies to improve the quality and timeliness of

their data. EGEDA encouraged Members to complete and forward their JODI questionnaire to the Coordinating Agency by the end of March. The first JODI newsletter was recently published and is available from the JODI website.

Members agreed that JODI is an important initiative, and thanked EGEDA for their efforts to help Member Economies report quality and timely data.

In relation to a proposal at EWG28 to report natural gas data on a monthly basis (EGEDA currently collects data on a quarterly basis), EGEDA reported that, as natural gas trade in the region is dominated by LNG, commercial issues will make it difficult to impose additional reporting requirements. As such, EGEDA sought the advice of Members, who agreed that it would be beneficial if more data was available on natural gas, and requested that EGEDA identify and report to the EWG for comment what data is currently available and options for providing further data.

Members also noted that links to a range of currently available gas market databases are on the EWG website.

***Real-time Emergency Information Sharing System (RTEIS)*** –Australia reported that its self-funded project to develop an Operational Manual for the RTEIS is underway and will be completed in June 2005, with copies of the Manual to be distributed to all Member Economies.

Japan reported that since EWG28, data on monthly oil trends has been available from the RTEIS. The chat facility has not been used since EWG28, although Japan and Canada have been exchanging monthly oil price data via the bulletin board. Japan will also contribute to the development of the Operational Manual.

***Energy Emergency Response*** – Ms Jane Melanie, ABARE, reported preliminary findings of an EWG project to ‘Assess the potential costs of energy supply disruptions in the APEC region’.

The project focuses on security of energy production and transportation, exploring the costs of supply disruptions and possible strategies to respond. It found that Members Economies are particularly vulnerable to oil supply disruptions, given that APEC as a whole is a net oil importer whilst being a net exporter of coal and natural gas. The project explores three energy supply disruption scenarios, finding that disruptions create winners and losers, with costs borne by net importers and gains received by net exporters. It recommends that Member Economies develop a mix of emergency and long-term strategies, establish strategic oil stocks, promote energy diversification, undertake R&D and technology adoption, remove market impediments, and undertake regional cooperation through the APEC Energy Security Initiative.

The project’s draft report will be circulated to the EWG for comment out-of-session.

***Strategic Oil Stocks*** – The United States presented a proposal for implementing ‘Best Practices for the Establishment and Management of Strategic Oil Stocks’, as endorsed at EMM6. A workshop will be held in Honolulu, USA, in the second half of 2005 and prior to EMM7. Its objective is to discuss and refine implementation, including implementation in the context of varied stockpile models and economy specific situations, the feasibility of joint or regional oil stocks, how to use the IFAT model, and the identification of priority principles.

Members endorsed the proposal.

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

- Members to encourage their Economies to provide timely and accurate data to JODI.
- EGEDA to identify and report to the EWG what data is currently available and options for providing further data.
- Members to comment on the draft report of the EWG project to 'Assess the potential costs of energy supply disruptions in the APEC region' out-of-session.

## **5.2 Long-term measures**

**Energy Investment** – The United States reported implementation of the recommendations endorsed at EWG28, which includes the establishment of an Energy Efficiency and Renewable Energy Task Force and the development of a framework for an IFAT Program to Build Local Commercial Capability.

Eight economies have joined the Energy Efficiency and Renewable Energy Task Force: Australia, the People's Republic of China, the Republic of Korea, Mexico, New Zealand, the Philippines, Chinese Taipei and the United States. The Chairs of the Expert Groups on Energy Efficiency and Conservation and New and Renewable Energy Technologies were also invited to join. The Task Force held its first meeting in conjunction with EWG29.

A framework for a technical assistance program to build local commercial infrastructure is being developed with input from the Task Force and EWG projects.

APEC recently approved urgent funding for 'Development of Energy Efficiency Financing Best Practices and Guidelines', with the project to commence in the first half of 2005. Two proposals have been submitted for consideration at EWG29:

- Develop Market Capacity to Commercialize Financing of Clean and More Efficient Energy Projects (Self-Funded); and
- Information Sharing on Financing Public Sector Energy Efficiency and Renewable Energy Projects (Operational Account).

Japan suggested that in order to facilitate investment in the upstream oil producing sector, as identified in the CAIRNS Initiative, 'APEC Energy Outlook 2005', which APERC is currently developing, will be useful.

**Energy Efficiency** – Members noted the Pledge and Review's consolidated report developed from individual economy reports on the topic 'Financial measures to encourage the uptake of energy efficient technologies/equipment in the industrial and commercial sectors'. Members agreed that the topic for EWG30 be the same as for EWG28, and encouraged all Members to submit a report. Members noted a proposal from Japan to develop, through the EGEE&C, guidelines to encourage all Member economies to report under the reinvigorated program.

Members agreed to nominate policies and programs for monitoring under the Pledge and Review program out-of-session.

Australia reported that, in response to a recommendation in the 'Energy Investment Report' endorsed at EMM6 it will undertake, in consultation with

Thailand, a self-funded project to develop a case study on Thailand's Energy Efficiency Revolving Fund. This project will be completed in June 2005.

**Natural Gas Trade** – Members noted that Chinese Taipei will host the workshop, 'Expanding the LNG Market in APEC: Policies, Commercial Practices and Technologies', on 21-23 March 2005, in Taipei. The workshop agenda, developed by Chinese Taipei and the EGCFE in consultation with Member Economies, will seek to progress best practices and recommendations identified in 'Facilitating the Development of Liquefied Natural Gas (LNG) Trade in the APEC Region' endorsed at EMM6. Outcomes from the workshop will be submitted to EWG30 for consideration and endorsement.

Australia reported outcomes from the recently completed project 'Best Practices in Cross-border Interconnection of Natural Gas in APEC Member Economies'. The project recommends that best practices be adopted at the project, national and international levels, and proposes the establishment of an APEC Gas Forum. Members noted that these findings will be discussed at next week's LNG workshop in Taipei.

The EGCFE Chair reported that the EGCFE project, 'The Prospects for Natural Gas as a Clean Energy Source in Developing APEC Economies', will commence in 2005 and be completed by early 2006.

**Nuclear Power** – The Republic of Korea reported that the 2<sup>nd</sup> Training Program for APEC Nuclear Power Engineers will be held from 22 August – 16 September 2005 in Ulsan. Interested Economies were also encouraged to join the ad hoc group. The group was encouraged to progress activities identified in the Nuclear Framework endorsed at EWG27.

**Methane Hydrates** – Members noted that the first organisational meeting of the Methane Hydrates International Research Consortium, originally scheduled for 7-8 December 2004, has been postponed indefinitely, and that the ad hoc group has not undertaken any other activities at this time.

**Clean Fossil Energy** – Members noted a range of projects being undertaken under this measure, primarily by the EGCFE. Phase 3 of the 'Carbon Dioxide Capture and Geological Sequestration' project recently received urgent APEC funding and will commence in the first half of 2005. The EGCFE held its most recent Clean Fossil Energy Technical and Policy Seminar in Cebu, the Philippines, January 2005.

**Renewable Energy** – EGNRET held a 'Technical Workshop to Support Village Power' in Christchurch, New Zealand, in November 2004, as part of its 21<sup>st</sup> Century Renewable Energy Development Initiative. The workshop report will be posted on the EWG website.

The People's Republic of China reported that, as a follow-up activity to the CAIRNS Initiative, it will host a two-day 'APEC Workshop on the Development of Renewable Energy in the APEC Region' in Beijing or Shanghai in late summer (July-September) 2005, and will provide details to Members once the agenda has been finalised. China also circulated its 'Medium and Long Term Energy Conservation Plan' for Members' information.

**Hydrogen, Fuel Cells and Alternative Fuels** – The United States reported that, in response to directions from EMM6, coordination between the EWG and the

International Partnership for a Hydrogen Economy (IPHE) is taking place via EWG presentations at IPHE meetings, and IPHE participation in EGNRET activities.

EGNRET is undertaking several projects on hydrogen and fuel cells, including the 'Development of a Handbook of Hydrogen Codes and Standards. EGNRET has also established an 'alternative transport fuels' collaborative under the 21<sup>st</sup> Century Renewable Energy Development Initiative.

The EGCFE completed a 'Clean Transportation Fuels Supply Security' project in 2003, and has submitted a proposal for Phase 2 of this project to EWG29.

The EWG Secretariat reported outcomes from the scenario workshop held under the 'APEC Foresighting Future Fuels Technology' project in Krabi, Thailand, 13-15 December 2004. Members noted that the EWG Secretariat, on behalf of the Lead Shepherd, reported relevant EWG activities at the workshop, with participants expressing strong interest in the EWG's Expert Groups and EBN. Members noted that the project's first technology road-mapping workshop will be held in Vancouver, Canada, 27-29 April 2005, and were encouraged to identify suitable experts to attend.

Chinese Taipei presented a self-funded proposal to host, as a joint EWG-IS&TWG activity, the project's second technology road-mapping workshop in Taipei in August 2005. Members endorsed the proposal.

***Petroleum Infrastructure and Crude and Refined Products*** – Members noted that this is a new measure identified in the CAIRNS Initiative. Japan reported that APERC is currently developing a scoping paper and outline for a study to identify problems and enhance efficiency in refining, transport and distribution of crude oil and petroleum products.

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

- Members to report the topic 'Financial measures to encourage the uptake of energy efficient technologies/equipment in the industrial and commercial sectors' for EWG30.
- As agreed at EWG27, Members to nominate and provide basic information on key energy efficiency policies and programs within their economy to the EWG Secretariat out-of-session.
- Members to encourage economy experts to participate in the Foresighting Future Fuel Technologies technology road-mapping workshops.

## **6. EWG Project Proposals for 2006**

Members noted that 18 project proposals had been submitted for EWG consideration.

The APEC Secretariat reported that available funds will likely be less than for 2004, with approximately \$US1-1,500,000 available from the Operational Account and \$US4,500,000 from the TILF Special Account. Each Working Group is allocated no more than 15% from each Account.

Members endorsed all project proposals. Members ranked the projects in the following order in accordance with the agreed EWG method. Members agreed to submit projects 1-6 from the Operational Account and projects 1-6 from the TILF Special Account to the BMC.

Members requested that, when developing full proposals, Project Overseers consider reducing the amount sought from APEC funds, including options for self-funding. Members also emphasised that proposals should reflect APEC-wide priorities and that TILF Special Account proposals should identify strong TILF linkages.

*Operational Account projects in order of EWG29 ranking. Projects 1-5 (current total US\$325,000) will be submitted to the APEC Budget and Management Committee:*

Submitted to BMC

1. Operation of the APEC Energy Database and Analysis – **Project 1** (US\$20,000)
2. APEC 21<sup>st</sup> Century REDI (Collaborative 6): Renewable Energy Products Database: Paving the Way for Deployment of Renewable Energy – **Project 2** (US\$50,000)
3. APEC 21<sup>st</sup> Century REDI (Collaborative 6): Evaluation of the Role of Village Power Applications in Response to Tsunami Recovery Effort – **Project 5** (US\$50,000)
4. Information Sharing on Financing Public Sector Energy Efficiency and Renewable Energy Projects – **Project 4** (US\$50,000)
5. Cost, Cost-effectiveness & Benefits of Environmental Regulations that Promote Clean Coal Technology Implementation in APEC Economies – **Project 8** (US\$80,000)
6. APEC 21<sup>st</sup> Century REDI (Collaborative 6): Handbook for Developing City/State Hydrogen & Fuel Cell Programs in APEC Member Economies – **Project 3** (US\$75,000)

Not submitted to BMC

7. Symposium on Promoting Energy Efficiency of Air Conditioners – **Project 6** (US\$50,000)
8. Clean Transportation Fuels Supply Security Study, Phase 2 – **Project 10** (US\$148,700)

*TILF Special Account projects in order of EWG29 ranking. Projects 1-6 (current total US\$470,000) will be submitted to the APEC Budget and Management Committee:*

Submitted to BMC

1. APEC 21<sup>st</sup> Century Renewable Energy Development Initiative (Collaborative 8): Local Banks Training Program for Financing Energy Efficiency & Renewable Energy Projects – **Project 1** (US\$50,000)
2. Harmonisation of Standards & Labelling for Compact Fluorescent Lamps in Order to Reduce Trade Barriers in APEC Economies – **Project 2** (US\$50,000)
3. Government Sector Energy Management: Best Practices Inventory & Comparative Analysis – **Project 3** (US\$150,000)
4. Mineral Exploration in APEC Economies – **Project 4** (US\$100,000)
5. Study Tour by APEC Economy Representatives to LNG Liquefaction and Receiving Terminals – **Project 7** (US\$120,000)

6. Workshop on Exchange of Information on Public Education Campaigns Related to LNG in APEC Economies – **Project 9** (\$US100,000)

*Self-funded projects endorsed at EWG29:*

1. APEC Clean Fossil Energy Technical and Policy Seminar
2. Develop Market Capacity to Commercialize Financing of Clean and More Efficient Energy Projects
3. Foresighting Future Fuels Technology Road-mapping Workshop
4. Energy Standards and Labelling Information Network

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

- Project overseers to develop full proposals for those projects to be submitted to the BMC.
- EWG Secretariat to advise project overseers as to the deadline for submitting proposals out-of-session.

#### **7. Implementation of Type 2 Partnership Initiative: Energy for Sustainable Development**

Members noted the 'Progress Report on Implementation of Energy for Sustainable Development since EWG27. Members also noted that energy will be one of the main themes considered by the UN Commission for Sustainable Development in 2006 and 2007, and that the EWG will likely be expected to report the Initiative's implementation.

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

- Nil.

#### **8. Policy Dialogue: 'Trade in Natural Gas and LNG'**

EWG and EBN Members held a policy dialogue on the topic 'Trade in Natural Gas and LNG'. As previously agreed, no records of discussion were taken.

Members agreed that the dialogue topic for EWG30 will be 'How to accelerate the development and deployment of new energy technologies (business, government, researchers, international collaboration)'.

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

- That the policy dialogue topic for EWG30 be 'How to accelerate the development and deployment of new energy technologies (business, government, researchers, international collaboration)'.

#### **9. Report from the APERC President**

Mr Masaharu Fujitomi, APERC President, reported APERC Activities and Performance since EWG28.

APERC is undertaking two research projects in 2004-05 and beyond, 'Energy Demand and Supply Outlook' and 'New and Renewable Electricity in the APEC Region'. APERC held its Annual Conference in Tokyo, Japan, on 23-24 February

2005, where several key areas for APERC focus were identified: urbanisation and energy consumption, water and energy consumption, and energy efficiency improvement. Members, Expert Groups and the EBN agreed that water and energy consumption is a particularly important issue for Member Economies, and welcomed APERC work in this area.

The APERC Project Advisory Group includes representatives from Australia, Canada, the People's Republic of China, Indonesia, Japan, Malaysia, the Republic of Korea, Chinese Taipei, the United States and Viet Nam.

In response to suggestions from EWG Members, APERC has revised its website and published a CD-ROM which contains all APERC research reports published since 1996. Copies of the CD-ROM were circulated at EWG29.

APERC has also facilitated cooperation with other research organisations, exchanging cooperation MOUs with the Korea Electrotechnology Research Institute and Korea Gas Corporation, and planning to exchange MOUs with Circum-Pacific Council and the Lawrence Berkeley National Laboratory. APERC also made 31 presentations to outside workshops between January and December 2004.

The APEC Secretariat reminded Members that it is the repository of all APEC MOUs and that MOUs between APEC fora and other organisations need the approval of APEC Senior Officials. The APEC Secretariat agreed to follow-up this issue and report to the EWG out-of-session.

APERC thanked economies for their ongoing support, including Japan's and Australia's financial contribution and the provision of visiting researchers. Members thanked APERC for their ongoing contribution to the work of the EWG, and looked forward to their support in the lead-up to EMM7.

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

- Nil.

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

Members noted the report from the 14<sup>th</sup> Meeting of Expert Group Chairs and APERC, held at the same venue on 14 March. At the meeting, Chairs reported on a range of recent and upcoming Expert Group projects and activities, and discussed EWG urgent projects submitted to the BMC, project proposals for 2006, and the Foresighting Future Fuel Technologies project.

The EWG Secretariat also reported that most Expert Groups have now revised their Terms of Reference, and these will be circulated to Members in late March for endorsement. Members had endorsed the EGEDA Terms of Reference in February 2005, and GEMEED will revise their Terms of Reference at their meeting in May.

Members noted that, in November 2004, EGNRET re-elected the United States as Chair and the People's Republic of China as Vice-Chair for the next two-year term. In early 2005, EGCFE re-elected the United States as Chair for the next four years.

Members noted an amendment to the GEMEED Progress Report, where the 1<sup>st</sup> meeting of the Non-Ferrous Metals Dialogue will be held in late May 2005 in the Republic of Korea, with outcomes to be reported to the APEC Committee on Trade and Investment.

The Summary Record from the Meeting will be posted on the EWG website after EWG29.

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

- The EWG Secretariat to circulate, in late March, the revised Terms of Reference of the EGCFE, EGEE&C and EGNRET.
- The EWG Secretariat to circulate GEMEED's Terms of Reference once they have been revised.

### **11. Statements on Notable Energy Developments since EWG28 (November 2004)**

The Chair thanked Australia; Hong Kong, China; Japan; the Republic of Korea; Malaysia; New Zealand; Russia; Singapore; Chinese Taipei and the United States for providing their Statements on Notable Energy Developments. Members who tabled their Statements at EWG29 were encouraged to e-mail an electronic copy to the EWG Secretariat by 25 March 2005, for posting on the EWG website.

Members noted the Statements.

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

- Members who tabled their Statements at EWG29 to e-mail an electronic version to the EWG Secretariat by 25 March 2005.

### **12. Other Key EWG Initiatives for Noting by Members**

#### **12.1 Measuring the Impact of New Technologies on the Energy Sector in APEC Member Economies**

Jane Melanie, ABARE, reported key findings from the recently completed project, 'New Energy Technologies: Measuring Potential Impacts in APEC'.

The project assesses the current status of energy technologies in the electricity and iron and steel sectors in APEC Economies, and analyses three alternative scenarios for the future development and adoption of new technologies in these sectors, particularly their impact on energy consumption and greenhouse gas emissions: 1) high technology development, 2) accelerated adoption, and 3) high technology development and accelerated adoption. The project provides several policy recommendations designed to promote investment in new technologies, both at the national level and within a regional cooperation framework, highlighting the need for a continued emphasis on R&D and technology transfer.

Copies of the report were distributed at EWG29 and will be available from the EWG and ABARE websites.

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

- Nil.

### **13. Other Business**

Members noted the report of Member Economy Counter-Terrorism Action Plans (CTAPs) prepared by the EWG Secretariat in accordance with the proposal

endorsed at EWG28. The report identifies capacity building needs, particularly in relation to data management, and common trends and approaches to energy security across Member Economies. It also highlights the commitment of Member Economies to JODI, the Real Time Information Sharing System and sea-lane security initiatives.

Members also noted that the APEC Secretariat recently requested updates on individual Member Economy CTAPs, and were encouraged to regularly update and review the 'energy security' section of their Plan.

**Actions Arising/Next Steps**

- Nil.

#### **14. Future Meetings of Energy Ministers**

The Republic of Korea presented its proposal to host the 7<sup>th</sup> Meeting of APEC Energy Ministers (EMM7) in Seoul or Kyungju on 12 October 2005. EMM7 would be held the day before the 2<sup>nd</sup> Meeting of Ministers Responsible for Mining (MRM-2), with a site visit to be held on 14 October. EMM7 has been proposed in response to concerns about the impact of sustained high oil prices on the APEC region, and would explore short- and long-term policies and measures to respond to these impacts.

Members welcomed and endorsed the Republic of Korea's proposal, agreeing that EMM7 would be timely in light of high and volatile oil prices. Members agreed that they would need to develop a strong and very focused EMM7 agenda that is consistent with the directions from EMM6 and the CAIRNS Initiative, and with a Communiqué that includes several key announcables from Ministers. The Republic of Korea agreed to work with the EWG Secretariat to prepare a revised draft EMM7 agenda for circulation to Members for comment by early April.

Members noted that the proposal to hold MRM-2 back-to-back with EMM7 may create additional demands on some Ministers, and that GEMEED was directed at MRM-1 to prepare a draft work program for MRM-2. GEMEED will consider whether there are issues that require decisions at a Ministerial level.

Australia announced its proposal to host the 8<sup>th</sup> Meeting of APEC Energy Ministers during its APEC year in 2007. Members noted this proposal.

#### **15. Date for Next Energy Working Group Meeting.**

The Chair reported that the date and venue for EWG30 has yet to be finalised, and Members will be notified out-of-session.

The Chair sought endorsement of the Draft Schedule for Future EWG Meetings. Members endorsed the approach although several Members indicated that they would seek to amend the timing of their hosting. Members agreed that these would need to be negotiated with other Members out-of-session, well in advance of their hosting.

**Action Arising/Next Steps**

- EWG Secretariat to notify Members of a date and venue for EWG30 as soon as it is finalised.

## **16. Document Access**

Members agreed that, with the exception of Attachment A to Agenda Item 13, Counter-Terrorism Action Plans, the Summary Record and other final documents from EWG29 could be released to the public immediately after the meeting.

### **Actions Arising/Next steps**

- Members to provide the EWG Secretariat with electronic copies of all documents tabled at the meeting by 25 March 2005, to enable the EWG Secretariat to post documentation on the EWG website by 1 April 2005.

## **17. Summary Record of the Twenty-Ninth Meeting**

The Summary Record of the meeting was agreed.

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

- Nil

In closing, Members thanked the Viet Nam Government for hosting EWG29 and to the EWG Secretariat for its efforts.

**LIST OF PARTICIPANTS**

**Chair**

John Ryan Department of Industry, Tourism and Resources,  
Australia

**Australia**

Vicki Brown Department of Industry, Tourism and Resources

**Canada**

Gil Winstanley Natural Resources Canada

**Chile**

Fernando Ayala Ambassador, Embassy of Chile in Viet Nam  
Sergio Narea Embassy of Chile in Viet Nam

**People's Republic of China**

Qin Zhang National Development and Reform Commission  
Xin Cheng National Development and Reform Commission

**Hong Kong, China**

Tat Ping Uy Electrical and Mechanical Services Department  
Welman Leung Electrical and Mechanical Services Department

**Japan**

Kenji Goto Agency for Natural Resources and Energy, METI  
Hitoshi Shimoda Agency for Natural Resources and Energy, METI  
Reiko Eda Agency for Natural Resources and Energy, METI  
Natsuki Shirozu Ministry of Foreign Affairs  
Shigeru Kimura Energy Data and Modelling Center, IEEJ

**Republic of Korea**

Jae-do Moon Ministry of Commerce, Industry and Energy  
Kyo Hyoung Han Ministry of Commerce, Industry and Energy  
Seo Won-Sam Ministry of Foreign Affairs  
In-Chul Hwang Korea Energy Management Corporation  
Bong Seob Son Korea National Oil Corporation  
Joonbeom Lee Korea National Oil Corporation  
Gue Jae Jeong Korea Energy Economics Institute

**Malaysia**

Took Gee Loo Ministry of Energy, Water and Communications  
Mohd Farid Mohd Amin PETRONAS

**New Zealand**

Caroline Parlane Ministry of Economic Development

**Papua New Guinea**

Martin Bonou Department of Petroleum and Energy

**Philippines**

Lilian C. Fernandez Department of Energy

**Russia**

Igor Shcheulov Ministry of Industry and Energy  
Alexey V Pinchuk Ministry of Industry and Energy  
Kirill Muradov Ministry of Foreign Affairs

### **Singapore**

Siew Kwong Wong Energy Market Authority  
Josephine Tan Energy Market Authority  
Latha R Garnesh Energy Market Authority

### **Chinese Taipei**

Yunn Ming Wang Bureau of Energy, Ministry of Economic Affairs  
Jyuung-Shiauu Chern Bureau of Energy, Ministry of Economic Affairs  
Jeffrey Ming-Shan Fang TIER

### **Thailand**

Sittichod Wantawin Energy Policy and Planning Office  
Reukrit Kenharaj Energy Policy and Planning Office

### **United States of America**

David Pumphrey Department of Energy  
Larisa Dobriansky Department of Energy  
George Zeigler Department of Energy  
Steve Gallogly Department of State  
Thanh Tu Nguyen United States Embassy  
Jay T. AVECILLA United States Embassy

### **Viet Nam**

Cao Quoc Hung Ministry of Industry  
Vu Van Thai Ministry of Industry  
Ngo Huy Toan Ministry of Industry  
Nguyen Thi Thu Hong Ministry of Industry  
Nguyen Phuong Mai Ministry of Industry  
Trieu Thi Thuy Trang Ministry of Industry  
Nguyen Tuan Anh Ministry of Industry  
Tran Nam Binh Ministry of Foreign Affairs  
Nghien Van Lap Electricity Viet Nam  
Do Van Ha PETROVIETNAM  
Le Tri Hung VINACOAL

### **APEC Secretariat**

Mr Tong Xianguo Director (Program)

### **EWG Secretariat**

Aidan Storer Department of Industry, Tourism and Resources  
Joel Tu Department of Industry, Tourism and Resources

### **Expert Group Chairs**

Scott Smouse, Chair, EGCFE  
Jane Melanie, Vice-Chair, EGEDA  
Fanghei Tsau, Chair, EGEE&C  
Cary Bloyd, Chair, EGNRET

### **Asia Pacific Energy Research Centre (APERC)**

Masaharu Fujitomi  
Yonghun Jung  
Naoko Doi

Shohei Okano  
Thi Lien Phuong Tran

**Energy Working Group Business Network (EBN)**

Andrew Lloyd, Chair	Rio Tinto Ltd, Australia
John Philp	Woodside Energy Ltd, Australia
Hiroshi Urano	Tokyo Gas Company, Japan
Mohd Farid Mohd Amin	PETRONAS, Malaysia
David Natusch	Resource Development, New Zealand
Morgan Clark	Unocal, United States
David Soo Ho	Chevron Texaco, United States

**Observers**

Laura Hudson	Unocal, United States
Julie Garcia	Chevron Texaco, United States