

## **Minutes of**

### **APEC Expert Group on Energy Efficiency and Conservation Meeting 25**

**4 – 5 August 2004, Kunming, China**

#### *Opening and Welcome Address*

The EGEE&C Chair, Dr Fanghei Tsau, introduced the meeting co-chair, Mr Li Tienan of China Certification Center for Energy Conservation Products (CECP). Mr Li welcomed the meeting participants to China. He said that, in common with other economies, China faces problems with energy consumption. Therefore the EGEE&C, through sharing of information, can identify ways of overcoming energy problems by improving energy efficiency. APEC also provides a platform for harmonization with benefits for all Member Economies.

#### *Introductions*

The meeting was attended by representatives from Australia; China; Hong Kong, China; Japan; Korea; Mexico; New Zealand; Russia; Singapore; Chinese Taipei and USA, plus observers from Member Economies. A full list is appended.

#### *Adoption of the Agenda*

The agenda as proposed by the Chair was adopted without change.

#### *Report on completed projects*

##### ❖ Alignment of Testing Procedures for Air-Conditioners and Heat Pumps

Dr Marker reported on the event held in Sydney, Australia in June, which was attended by around 100 participants from 9 APEC member economies and other international participants. It covered MEPS, peak load contribution from air-conditioners and testing standards, and elicited a positive reaction from participants.

Main findings included that a common test procedure is important, and that the ISO standard is used by most APEC member economies. ISO would welcome increased participation of Asia Pacific Economies in the development of air-conditioner test standards. Wider use of computer modelling was advocated as being cheaper than physical testing. A benchmarking study (on conventional, non-inverter models) showed that sales-weighted efficiencies varied between economies; of those studied, the order (from lower to higher efficiency) was China, Australia, Malaysia, Thailand and Korea. This result had led to an accelerated introduction of more stringent MEPS in Australia.

There is a challenge relating to the testing of inverter models. A proposal arising from the

project will be for “round-robin” testing of inverter units. Chinese Taipei expressed interest in taking part in this exercise. It was suggested that manufacturers may be interested in funding such a project. A second proposal would be for the coordination of development of computer simulation. This would need to take into account the results of previous APEC investigations into this subject.

APEC project evaluation is being finalised to complete this project.

#### ❖ Symposium on the Implementation of Government Energy Efficiency Programs

Dr Liu reported on the symposium that had been held on 2~3 August. It had been attended by around 40 participants from 12 APEC Member Economies, and had covered a wide range of programs that had resulted in major benefits.

A draft communiqué contains details of the symposium. One finding is that there is clear opportunity for cooperation and sharing of information. Certain information on documented efficiency requirements will be collected and included in the APEC-ESIS database, which will also indicate where additional information may be available. The Symposium also provided concrete evidence that government-sector programs have achieved significant energy reductions in many economies. In addition, participants stressed that the benefits were not merely energy cost savings, but also include additional benefits such as pollution reduction, greenhouse gas reductions, and a showcase of government leadership.

#### ❖ Energy Efficiency Financing Workshop

Mr Storer circulated the summary of this EWG workshop along with the recommendations it produced, which have subsequently been endorsed by the APEC Energy Ministers. The report is available from [www.apecenergy.org.au/welcome/publications/report.doc](http://www.apecenergy.org.au/welcome/publications/report.doc). APEC Energy Ministers see the financing of energy infrastructure, renewable energy and energy efficiency as a key issue for the Energy Working Group. Expert Group members noted that some of these recommendations are consistent with its activities, and agreed to take these recommendations into consideration in the course of its activities.

#### *Report on Current Projects*

#### ❖ Sustainable Financing System for Energy Efficiency Projects

Dr Hill noted that this project sets out to provide practical examples of carrying out energy efficiency projects in two APEC Member Economies, and in the process identifying and overcoming financing problems. The project would also produce a standardized procedure for developing a contract for the financing of energy efficiency projects.

The key is to aggregate small projects to attract funding from large financial institutions but the resulting financial relationship among participants in the project is often complicated.

The project is on track for completion in October 2004.

❖ Workshop on Improving Energy Efficiency in APEC Mining Industry

Dr Tsau outlined this joint GEMEED/EGEE&C project. In response to representation from EGEE&C, the project will cover the energy efficiency issues associated with energy exploration and production, in addition to exploration, extraction, processing and refining of minerals. The workshop is scheduled for 21<sup>st</sup> to 22<sup>nd</sup> October 2004 in Santiago, Chile.

❖ Energy Standards and Labelling Information Network

Dr du Pont reported on this project on behalf of the project team. He outlined the project structure and funding for the current year and what the project covers. The website is now on a dedicated server in Chinese Taipei. It is set up to provide the standards notification procedure, expert contacts, news updates and to encourage energy standards alignment. The project team is active now in benchmarking exercises and in fostering international collaboration as well. Maintaining the website up-to-date is an ongoing process, and includes a regular review of the data contained.

Later this year the website will be modified to make it more robust and portable. The enhancement will also make available other databases, in particular the Collaborative Labeling and Appliance Standards Program (CLASP) database for non-APEC Economies.

❖ CLASP Energy Standards and Labelling Information Sponsorship

Dr Steve Wiel reported on the progress towards enabling CLASP and APEC-ESIS to share information under the terms of the sponsorship agreement between CLASP and APEC. The CLASP website has been revised and will be compatible with the APEC ESIS website, after the APEC ESIS website has also been revised to employ the Linux platform. In November both websites will be on the APEC ESIS server located at ITRI in Chinese Taipei.

*Key outcomes of EWG27 and EMM6*

Mr Storer highlighted points of relevance to the EGEE&C from EWG27.

❖ Expert Group Chairs (or their deputies) are to have formal representation at EWG meetings, and will thus be able to have effective dialogue with the Working Group.

❖ Three of the EGEE&C project proposals have been submitted by EWG to BMC. These are:

Project 2: Energy efficiency indicators workshop – capacity building and technical cooperation in monitoring energy efficiency progress within APEC economies through disaggregated indicators

Project 3: Best practice principles and processes for integrated building design

Project 3T: Standby power – promoting improved co-operation among APEC economies in programs to reduce standby power losses

In addition the self-funded project “A vision for cooperation on energy standards and labelling programs” was endorsed.

- ❖ The “Pledge and Review” activity has been revised. This will henceforth consist of two actions (the second action is yet to be endorsed by the EWG).

1. All economies will report to the second meeting of a year on a topic to be selected for that year. EGEE&C was asked to recommend a topic for EWG28 within the theme of “policy and financial measures to facilitate energy efficiency improvements.” After discussion, the topics to be suggested by EGEE&C are:

- Financial measures to encourage the uptake of energy efficient technologies/equipment in the industrial and commercial sectors
- Incentives to facilitate improved household energy efficiency

Suggestions for future topics are:

- Benchmarking progress in government energy management programmes
- Promoting public awareness of energy efficiency and its benefits
- Using energy audits to design sectoral energy efficiency programmes

2. Each economy will report to the second meeting of each year on its nominated energy efficiency policies and programs; a new feature is that progress is to be reported based on specific indicators to be identified by the EWG in consultation with EGEE&C.

Mr Storer distributed the statement from EMM6. It includes the need to facilitate energy investment and the need to use energy more efficiently. Particular mention is made of the energy standards information system and the work of the EGEE&C is recognised as being valuable. The Expert Group is also encouraged to adopt a broader approach, in scope and technology, to energy efficiency.

### *Open Forum*

#### ❖ Australia

Mr Storer and Dr Marker gave information about Australia’s white paper “Securing Australia’s Energy Future” – full details at [www.pmc.gov.au/energy\\_future](http://www.pmc.gov.au/energy_future) – that was released in June 2004. The white paper provides a long-term framework for the development and implementation of energy policies & approaches and Chapter 6 is devoted to energy efficiency.

One measure will be to transfer experience gained from the use of solar energy in remote areas to urban environments under a “Solar Cities” programme. There will also be expansion and strengthening of MEPS – a measure that has the highest support.

#### ❖ China

Dr Liu presented an update on National Policy. In April 2004, it was announced that resource conservation should be highlighted. This represents an opportunity to promote energy efficient products. CECP is involved in providing guidelines on how this announcement may be implemented. CECP has developed a water conservation certification

scheme as part of the energy efficiency certification programme.

❖ Hong Kong, China

Mr Leung outlined the energy efficiency programmes in Hong Kong, China. These are all voluntary. There are five main measures, including: labelling of electrical appliances; implementing a scheme for the adoption of evaporative cooling for air-conditioning; building energy codes for new and retrofitted buildings; energy audits and energy management programmes for government facilities; and a target of saving 6% of government energy use within four years.

❖ Japan

As a result of further review and revision made by the Advisory Committee of the Ministry of Economy, Trade and Industry (METI) in June 2004, it was proposed that the projected effects of energy conservation measures would be 65 million kL of crude oil equivalent to attain the GHG emission reduction target committed at COP3, including the projected effects of 21.1 million kL in the industrial sector, 21.5 million kL in the civil sector, 20.3 million kL in the transport sector and 2.1 million kL in the cross-sector.

❖ Korea

Korea launched “Standby Korea 2010” to reduce standby power consumption to 1 watt or less by 2010. A detailed road map is scheduled to be produced by the end of 2004. KEMCO intends to arrange an “Executive Order” next year.

❖ Mexico

The energy efficiency programme pioneered by PEMEX is being adopted by the private sector, in particular the steel and chemical industries. The government is assisting with the training aspects.

In the residential sector, a programme that was pioneered in Mexicali is being expanded to other cities. The programme includes improved building insulation and the replacement of low efficiency air-conditioners, refrigerating appliances and lamps. Due to the Mexican retail electricity pricing structure, payback periods in some cases are very short.

❖ New Zealand

Mr Coffey outlined New Zealand’s national energy efficiency and conservation strategy and the measures being taken to implement it and to achieve the targets of a 20% improvement in energy efficiency plus a 20PJ increase in renewable energy.

Transport accounts for 38% of New Zealand’s energy use, and a major effort is being undertaken to change travel behaviour. This employs education and marketing approaches with leverage from local authorities, health groups, transport safety interests and sports and recreation groups.

❖ Russia

The Russian government has started a large-scale programme on hydrogen energy with USD 100 million support from the private sector. They are interested in sharing information with other economies working on the development of hydrogen as a major fuel, and in developing a project on the subject.

❖ Singapore

In Singapore energy efficiency is undertaken on a voluntary basis. The exception is the requirement in building regulations for thermal efficiency of office buildings.

ESCOs are being developed in line with the policy of requiring the private sector to take the lead in energy efficiency. Experience will be gained with energy audits of government buildings.

Hydrogen fuelled hybrid vehicles are being tried out.

❖ Chinese Taipei

In an organisational change, the Energy Commission has from 1 July 2004 been re-organised as the Bureau of Energy, a formal government agency under the Ministry of Economic Affairs.

Energy efficiency measures being taken recently include energy efficient retrofits of air-conditioning and lighting systems in government offices, and an increase in the scope of labeling. In the future, the “Nuclear Free Homeland” policy will include efforts to help industry to produce energy efficient products with lower production costs and to promote the establishment of renewable energy.

Cars have had minimum energy performance requirements for a long time, and an energy conservation label for fuel efficiency will be considered.

❖ USA

Dr Hill reported that the Energy Policy Bill that was expected in late 2003 has not eventuated due to decreasing support in Congress. It may be revived in a changed form. In the meantime, individual measures are being introduced via regular appropriations.

Ms Wickwire mentioned the recent Energy Star publicity campaign that includes television and other advertising linking house energy use with pollution.

*Discussion and approval of APEC EWG EGEE&C Terms of Reference and Mission Statement*

The matrix of the EGEE&C priority collaboration areas was circulated. Representatives were encouraged to consider increasing activity in all the priority areas identified in the previous Expert Group meetings.

Dr Tsau circulated the EGEE&C Terms of Reference and Mission Statement. Minor additions and revisions were made and the revised document will be sent for endorsement by the EWG.

## *2006 New Project Proposals Submission Scheduling*

China suggested three projects:

- Government sector energy management: Best-practices inventory and comparative analysis
- Harmonization feasibility study on labelling program for lighting products in APEC Economies
- Low-cost or no-cost energy efficiency improvement guide development for existing hotels in APEC economies

These met with general support and offers to assist with the development of the full proposals.

More project proposals from other member economies will be welcome. Completed project proposals are to be submitted to the EGEE&C Chair by the first Friday in February 2005 (Chinese Taipei time). Evaluation and prioritisation will be carried out electronically.

### *Next Meetings*

Australia tentatively offered to host the first meeting of 2005 in Melbourne, in conjunction with the City of Melbourne's proposed workshop on integrated building design.

Korea offered to host the second meeting of 2005 in conjunction with the seminar on standby power and the APEC leaders' meeting in November. Russia also offered to host the second meeting of 2005 in conjunction with an APEC energy efficiency indicators workshop in September in Moscow. It was felt that November may be too late, and so Russia and Korea will discuss and provide an agreed proposal.

USA tentatively offered to host the first meeting of 2006 in Hawaii if it can be arranged to be in conjunction with a meeting of EGNRET.

China tentatively offered to host the second meeting of 2006, probably in Beijing, depending on what other offers are received and other factors.

### *APEC Energy Standards and Labelling Information Network Sponsorship, Running the Standards Notification System and Future Implications*

APEC-ESIS is presently funded mostly by voluntary contributions from a few Member Economies, plus an amount from the sponsorship agreement with CLASP. The idea of trying to obtain private sector sponsorship was floated, and met with no objections. There is a concern, however, on the size of a private sponsorship and the influence it could have on APEC processes. The APEC-ESIS team will therefore produce a work plan and budget for 2005, and set a target for sponsorship funding. Appropriate potential sponsors, such as industry associations, will be approached for sponsorship contributions. The APEC and EWG Secretariats will be consulted during the process. Should by any chance the target for sponsorship funding be exceeded, the issue of how to use surplus funding shall be referred back to the EGEE&C.

Australia stated it will positively consider continuing appropriate support during 2005.

The APEC Secretariat has reserved a website name for the Expert Group. The Expert Group website will be developed and used initially for the Expert Group's meeting agendas and minutes, project proceedings and similar documents. It will be hosted on the same server as the APEC-ESIS website.

#### *Review and Acceptance of Minutes*

The minutes were reviewed and accepted

#### *Adjourn*

The session ended at approximately 5:20 pm, August 5. The Chair thanked the representatives and observers for coming to Kunming, China for the EGE&C 25 meeting and declared the meeting closed. Subsequently, some meeting participants departed for site visits to study the integration of solar energy and farm biomass in the overall energy efficiency and conservation programs in Dali and Lijiang cities.



## Appendix — List of Participants at EGEE&C 25 Meeting

|                         |                           |                                 |
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