

**APEC EXPERT GROUP ON  
ENERGY EFFICIENCY AND CONSERVATION MEETING 18  
Portland, Oregon, USA, 30<sup>th</sup> and 31<sup>st</sup> March 2001**

Seventeen representatives from eleven economies attended the meeting.

**Friday 30<sup>th</sup> March**

*Introduction and review of the EGEE&C 17 Meeting Agenda*

The chair of the expert group, Mr Frank Pool of New Zealand, was unable to attend. In his absence, the representative from New Zealand Mr Bill Brander chaired the meeting. The chair welcomed the delegates to the meeting, and the delegates introduced themselves. The expert group then approved the meeting agenda.

*Future Co-ordinated Activities With APEC Expert Group on New and Renewable Energy Technologies (EGNRET)*

Mr Andre van Rest summarised the extensive linkages and overlap of interests between the two expert groups that has been recognised through back-to-back meetings and some economies having the same representative on both groups. At the EGNRET meeting there was considerable support for a suggestion that the two expert groups consider combining. Mr van Rest summarised the nine areas identified by EGNRET for collaboration by member economies many of which overlap with EGEE&C interests.

The expert group reiterated the value of close collaboration with EGNRET particularly with the first meeting of each year being back to back to allow joint consideration of proposals relevant to both groups. There was some qualified support in principle for combining the groups but Japan noted some possible budgetary constraints that would need investigation. The expert group supported the preparation of an issues paper for consideration at the next expert group meeting.

*Report on completed EGEE&C projects*

**Green buildings**

Australia reported on the 16-18 October Green Buildings Investing in Our Future – a Showcase Workshop in Taipei (EWG 06/2000). The major outcome being training and educational material for students, consultants and the public in green building design. A multimedia CDROM of the proceedings is being developed and material will be uploaded to the website by end of April.

### *Report on current projects*

#### **Standards**

New Zealand tabled an update report (attached) covering recent standards development activities in Australia and New Zealand and the following projects:

- Study on algorithm development for energy performance testing (EWG3-2000T)
- Energy standards information development (EWG1-2001T)
- Supporting high quality energy efficiency indicators development (EWG3-2001)
- Development of algorithm criteria (EWG6-2001T)

#### **Shanghai Symposium**

A renewable energy and energy efficiency technology symposium during the APEC leaders meeting in Shanghai is proposed by the US. A joint EGEE&C and EGNRET event would demonstrate state-of-the-art technologies relevant to APEC members. It has the potential to attract political, press, and private sector attention. A number of workshops planned at the same time would link to the symposium. The expert group supported the proposal.

### *Update on Energy for Sustainable Communities Project*

Dr Larry Hill summarised the work advising on infrastructure, economic and social aspects of the design of a 100 building sustainable rural village in China. The design employed local resources, recycling and sustainable energy systems (including passive solar design, biogas, PV, fuel cells, and geothermal heat pumps). The goal is to maximise agricultural land and retain the population in the rural community. State of the art communication technology is incorporated to support creation of micro-enterprises. The project fits with the Greenstar initiative. Other similar projects are being considered in Indonesia, Thailand and the Philipines.

Mr van Rest suggested this project become a collaborative area rather than a project put forward for EWG approval each year.

### *“Sustainable Electric Services” proposals from former Inter Utility DSM Expert Sub-Group*

Dr Larry Hill gave a resume of the history of the former Sub-Group and an overview of the four proposed projects developed after the planning meeting in Bangkok last year (see minutes of meeting 17). An umbrella project was proposed as another collaborative area for ongoing cooperation between economies.

*Proposal for collaboration with World Bank on identification of energy efficiency and renewable energy opportunities in APEC economies*

Mr Jerome Weingart of Alternative Energy Development described his work with the World Bank's Asia Alternative Energy Program (ASTAE). ASTAE's purpose is to mainstream energy efficiency and renewable energy opportunities in World Bank lending in Asia. ASTAE's alternative energy portfolio is nearly \$2.5 billion. The funding available to ASTAE for project identification and scoping is limited and Mr Weingart saw an opportunity for collaboration between the ASTAE group and EGEE&C to identify possible projects. Assuming mutual agreement proposed a briefing by ASTAE at the next expert group meeting (attachment).

The expert group resolved to seek approval from EWG to begin a dialogue with the World Bank on areas of potential collaboration.

*Update on APERC Industrial Indicators Project*

A paper forwarded by Dr Oleg Sinyugin was tabled for information.

*Update on APEC EWG 02/99 Energy Efficiency Database Construction*

Mr Takeshi Sekiyama reported on the status of this project and noted that while eight economies had provided some information eleven economies had not provided any of the company-based data being requested. The purpose and outcome of the project was discussed and despite the limited data available it was agreed that an analysis of what had been obtained would be valuable to member economies.

Mr Sekiyama asked those economies that were unable to provide information or further updates to advise ECCJ by the end of August. In response the US indicated that it had explored several approaches to collect the data but it was not legally possible for it to provide the company-based data requested. Canada, Malaysia and Australia indicated that they would not be able to devote resources to the data collection. Korea, Singapore and Chinese Taipei advised that they had provided all the data available from their economies.

*Consideration of Year 2002 Projects*

Seven project proposals were considered by the expert group. These included the two "umbrella" self-funded projects proposed by the US: Energy for sustainable communities and sustainable electric services. The rationale for putting forward the two "umbrella" projects was discussed and the US indicated these should be seen as collaborative areas. In general the expert group supported the two umbrella projects with the qualification that the links to specific project proposals be made more explicit. The other projects proposed for APEC funding were:

	Title of Project	APEC	Proposing	Co-sponsors
--	------------------	------	-----------	-------------

		funding	economy	
1.	Symposium on the development and coordination of energy efficiency programs and standards during energy market restructuring	\$60,000	Chinese Taipei	Australia Malaysia New Zealand US
2.	Guide to market transformation programs	\$50,000	US	Chinese Taipei New Zealand
3.	Business guide to the formation of ESCOs	\$50,000	US	Australia Malaysia
4.	Emergency demand side management (DSM) measures	\$50,000	US	Chinese Taipei New Zealand
5.	Impediments to the adoption of distributed resources in APEC economies	\$90,000	US	Chinese Taipei New Zealand

After some discussion the expert group decided not to rank the projects and agreed to **forward them to the EWG for further consideration.**

#### *Open Forum – Economy updates*

A summary of economy updates is included in Appendix 1.

#### **Saturday, 31<sup>st</sup> March**

#### *Open Forum – Economy updates (cont)*

Mr van Rest described a group of collaborative areas identified by EGNRET as a framework for project development. Each collaborative area would be developed by a lead economy that would facilitate identification and specification of projects but not necessarily finance them. A similar approach was proposed for EGEE&C. The proposed collaborative areas for each group need refinement but indicate the overlap of interests between the two expert groups:

<b>EGNRET</b>	<b>EGEE&amp;C</b>
Stakeholder Dialogue	Energy for sustainable communities
Micro Business Development	Green Buildings
RE Training and Certification Network	EE Training and Certification
RE Standards	EE Standards
Distributed Resources	Sustainable Electric Services
Web Based RE Information Dissemination	Web Based EE Information Dissemination
RE Technology Application	EE Technology Application
Financing	Financing

The expert group agreed that the identification of collaborative areas was a useful framework for future activities within and between the two expert groups and should be refined and adopted at the next meeting.

### *Future Enhanced Co-operation & Enhanced Support for Pledge and Review Contributions*

The value of the current Pledge and Review process was discussed. It was observed that the meaning of the term "Pledge" was unclear to a number of delegates. Many economies treated the process as a mechanism for reporting activities that formed part of their existing programmes. More emphasis on review and evaluation of outcomes would be beneficial to other economies but appeared to receive little attention in previous reporting. There was general agreement that the current process needs to be improved to be useful to member economies. The following suggestions for improved collaboration received support in principle:

- establish the needs of member economies as part of any enhancement of Pledge and Review
- pledge voluntary input to policies and program design of member economies when requested. This would operate in a less formal way to the existing Implementation Facilitation Advisory Teams (IFATs) that assist with market reforms. It was stressed, however, that input into energy efficiency program design must be kept separate from the existing IFAT arrangements
- linking the Pledge and Review process to the proposed development of collaborative areas.

The expert group agreed the proposed enhancement of Pledge and Review should be part of the overall review of the group's activities at the next meeting.

### *Chair of EGEE&C*

Bill Brander advised that Frank Pool would not be available to continue chairing the expert group because of the demands on his time in New Zealand. In response to a request that New Zealand continue to provide a chair Mr Brander indicated that EECA was having difficulty resourcing its current APEC and New Zealand responsibilities but would arrange a chair for the next meeting.

### *Next meeting*

It was agreed that the next meeting should be before the EWG meeting and scheduled close to the EGNRET meeting on 10-14 September in Manila. Malaysia has offered to host the meeting in Kuala Lumpur and the preferred dates are 17-19 September 2001. New Zealand and Malaysia would investigate the possibility of bringing forward the course Supporting High Quality Energy Efficiency Indicator Development to run back to back with the meeting.

### *Consideration and acceptance of minutes*

The draft minutes for the first day were circulated and the completed minutes would be e-mailed to delegates for agreement.

*Close of meeting*

The meeting closed at 2:15pm.

## *Delegates and Observers*

Geoff Stone	Dept of Industry, Science Resources, Australia <a href="mailto:geoff.stone@isr.gov.au">geoff.stone@isr.gov.au</a>
Takeshi Sekiyama	The Energy Conservation Centre, Japan <a href="mailto:sekiyama@eccj.or.jp">sekiyama@eccj.or.jp</a>
Tim McIntosh	Natural Resources, Canada <a href="mailto:tmcintosh@nrcan.gc.ca">tmcintosh@nrcan.gc.ca</a>
Takeo Ijuin	Energy Conservation and Renewable Energy Department, Ministry of Economy, Trade and Industry <a href="mailto:ijuin-takeo@meti.go.jp">ijuin-takeo@meti.go.jp</a>
Ratna Ariati	Ministry of Energy and Mineral Resources, Jakarta <a href="mailto:diren@djpe.go.id">diren@djpe.go.id</a>
Michihiko Mochida	New Energy and Industrial Technology Development Organisation (NEDO) <a href="mailto:mochidamch@nedo.go.jp">mochidamch@nedo.go.jp</a>
Chayun Budiono	PT Gerbang Multindo Nusantara, Indonesia <a href="mailto:chayun@indo.net.id">chayun@indo.net.id</a>
Lyu Eun-Kyoung	Energy Technology Division Ministry of Commerce, Industry and Energy - <a href="mailto:Dispara@hitel.net">Dispara@hitel.net</a>
Oh Dae-Gyun	Korea Energy Management Corporation, Korea <a href="mailto:dgoh@kemco.or.kr">dgoh@kemco.or.kr</a>
Bill Brander	Energy Efficiency and Conservation Authority, New Zealand - <a href="mailto:bill.brandner@eeca.govt.nz">bill.brandner@eeca.govt.nz</a>
Byun Chun-Suk	The Korea Energy Management Corporation, Republic of Korea - <a href="mailto:csbyun@kemco.or.kr">csbyun@kemco.or.kr</a>
Dr Iain Sanders	Industrial Research Limited, New Zealand <a href="mailto:i.sanders@irl.cri.nz">i.sanders@irl.cri.nz</a>
Dr Salim Sairan	Tenag Spl Sdn Bhd (TSPL) Malaysia <a href="mailto:salim-tspl@tnb.com.my">salim-tspl@tnb.com.my</a>
Abdul Rashid Bin Ibrahim	Energy Conservation and Consumer Affairs, Public Utilities Board, Singapore <a href="mailto:Abdul_Rashid_Ibrahim@ema.gov.sa">Abdul_Rashid_Ibrahim@ema.gov.sa</a>
Ing. Carlos Chavez Baeza	Comision Nacional (CONE), Mexico <a href="mailto:inm@conae.gob.mx">inm@conae.gob.mx</a>

Fanghei Tsau	Industrial Technology Research Institute, Taiwan <a href="mailto:800521@itri.org.tw">800521@itri.org.tw</a>
Andre W Van Rest	Office of Technology Access, US Department of Energy - <a href="mailto:andre.vanrest@hq.doe.gov">andre.vanrest@hq.doe.gov</a>
Jerome Weingart	Alternative Energy Development (AED), USA <a href="mailto:solarjerom@aol.com">solarjerom@aol.com</a>
Cary N Bloyd	APEC Sustainable Development Network, USA <a href="mailto:bloyd@ani.gov">bloyd@ani.gov</a>
Rory C Schmick	International Sustainable Development Foundation, USA - <a href="mailto:rschmick@apecnetwork.org">rschmick@apecnetwork.org</a>
Lawrence J Hill	East-West Centre, Hawaii, USA <a href="mailto:hilllj@orni.gov">hilllj@orni.gov</a>



## Appendix 1: Economy updates

### Australia

- National energy policy review underway to bring various policies under one umbrella.
- Other initiatives include the Energy Efficiency Best Practice Program, and development of energy performance contracting guidelines for government, and measures to improve energy efficiency in government operations. A 19% reduction in green house gas (GHG) emissions occurred across 11 targeted departments between 1990-1998.

### Canada

- Climate change programs have been allocated \$500 million over the next 5 years, effectively doubling funding to this area. A target has been set to reduce GHG levels in federal government buildings by 31% of 1990 levels by 2010.

### Japan

- Energy policy review underway with a major focus on meeting the Kyoto Protocol. MITI is now focussing on reducing oil consumption and GHG emissions in the transport sector.
- ECCJ reported on the first-ever Energy Conservation Republic Summit held as part of the ENEX2001 exhibition and a "Joint Declaration" pledging the achievement of energy efficiency targets. Information on other ECCJ activities including grass-roots energy conservation activities with local NGOs and establishing Energy Conservation Republics is on the ECCJ website (attachment)

### Korea

- provided updates on programs covering standards and labelling, certification of appliances and standby losses. An exhibition on energy efficient products and standards is to be held 31 August – 3 September. Information is available at [www.kemco.or.kr/efficiency](http://www.kemco.or.kr/efficiency)

### Malaysia

- Five-year industrial energy efficiency improvement program (<http://www.mieeip.com.my>); the establishment of a Centre for Education and Training in Renewable Energy and energy efficiency; establishment of building guidelines, and utility activities

### New Zealand

- Energy Efficiency and Conservation Act 2000 in force and the release of the Draft National Energy Efficiency and Conservation Strategy. The Strategy covered supply-side energy efficiency and renewable energy issues and also identified areas of focus on the demand side including transport, performance standards and labelling, and negotiated greenhouse agreements with industry. ([www.eeca.govt.nz](http://www.eeca.govt.nz))

### Mexico

- – recent initiatives included training building managers; energy efficiency accreditation for consultants; addressing legal and administrative barriers to ESCOs; and development of government purchase guidelines for equipment

#### Singapore

- Developing building performance codes, continuation of training workshops, low cost audits for industry, education of school children through home energy audits

#### Chinese Taipei

- R&D activities covering buildings (design and materials, HVAC design guide, consumption benchmarking, best available technology demonstrations, energy star building program); industry (total factory concept, process and facility upgrades, water conservation and waste reduction, chilling requirements for supermarkets); and products (VSD scroll compressor and **air-conditioner**, desiccant dehumidifier and total heat exchanger, high efficiency fan-filter unit, sterling engine).
- Energy efficiency standards to be introduced for chillers and improved standards for refrigerators and **air-conditioners**.
- Energy Bill contemplated to make the Energy Commission responsible for all energy planning and to set vision for energy efficiency.

#### United States

- National Energy Strategy being prepared by the new administration. Details not yet revealed but emphasis expected on the supply side including nuclear energy.
- The California Energy Crisis has resulted in utilities going bankrupt because of negative margins and introduction of emergency DSM. As a result industry restructuring across the US has slowed. A fund set up for renewables and energy efficiency has been extended a further 10 years (<http://www.cpuc.ca.gov>)