APEC EXPERT GROUP ON
ENERGY EFFICIENCY AND CONSERVATION MEETING 21
Chinese Taipei, November 1-2, 2002

The twenty-first meeting of the Expert Group on Energy Efficiency and Conservation (EGEE&C 21) was held in Chinese Taipei, from the 1st to the 2nd of November 2002. Representatives from Chile, the People's Republic of China, Japan, Korea, Russia, Chinese Taipei and the USA attended the meeting, as well as a representative from APERC and observers from Thailand and New Zealand.

Friday, November 1

Opening & Welcome Address

Dr. Fanghei Tsau, the Chair of the Expert Group, welcomed the delegates to the meeting at 2:00 pm and introduced Dr. Liang-jyi Fang, the Secretary General of the Energy Commission to welcome the delegates. Dr. Fang outlined the goals of the meeting and pledged Chinese Taipei's willingness to cooperate with the Expert Group.

Introduction and Review of the EGEEC 21 Meeting Agenda

The Chair of the Expert Groupasked the delegates and observers to introduce themselves. Representatives then approved the meeting agenda.

Report on Completed Projects

1. Study of Algorithm Development for Energy Performance Testing

Since New Zealand was not able to send official delegates to this meeting, the Chair summarized the report for the delegates.

The purpose of the project was to investigate and report on the scope for development of algorithms for converting energy performance test results from one energy performance test standard to another, thereby avoiding expensive repeated testing. The project made an important advance in the understanding of the product classes to which algorithms may be applicable, i.e. domestic refrigerating appliances and air-conditioners, and the degree to which these algorithms would be useful to and accepted by regulators and industry.

Russia endorsed the project and stressed the importance of such work to avoid the costly duplication of testing laboratories. The Chair mentioned that this project will be followed by another that will only define the criteria for the targeted algorithms, because APEC may not fund any project to develop algorithms. Proposals to APEC are still encouraged, however. An observer from Thailand mentioned that some scientists have done work on an algorithm for converting from IEC to IEEE electric motor standards and asked if there

were any other organizations working with algorithms that could collaborate with APEC. An observer from New Zealand cautioned that, while some testing standards were converging on their own, test standards for refrigerators appear to be the exception. He suggested using models for testing, although that might be far off to the future.

2. **Symposium on the Development and Coordination of Energy Efficiency Programs and Standards during Energy Market Restructuring**

The Chair distributed draft conclusions/recommendations from the symposium.

After reviewing the conclusions/recommendations, Japan said that it has a need for unique testing standards. The environmental factors and the patterns of usage make the convergence of test procedures in Japan with those of other APEC economies difficult. However, Japan agreed to the issues in the symposium summary, but insisted there are practical difficulties in realizing the targets. Moreover, Japan also noted, in most developing economies, industrialization is a higher priority than saving energy and, therefore, the prices of energy are kept at an artificially low level. With the market restructuring, the distortion is removed and you could see a price increase in such cases.

Russia said the opposite was true in some situations. The US said that the reference in the document applies only to economies where the prices become lower after the market restructuring.

The Chair suggested that standardization should reduce the cost of trade. Japan agreed on the trend towards harmonization, but said that some practical difficulties remain. An observer from New Zealand said that the document should reflect a general movement towards a goal rather than demanding definite results. PRC said that more discussion and research are needed. Following discussions, all members at the meeting agreed that the present wording in the conclusions/recommendations was satisfactory.

On standards and labelling, Japan pointed out that, due to differences in the environment, different test procedures are used in Japan and other APEC economies. For example, refrigerators in Japan are tested with dynamic methods in addition to static test methods, whereas other economies use maybe only static test methods. For better understanding, Japan explained that refrigerators in Japan are more sensitive to temperature changes from air circulation when the door is opened, because a high amount of frosting occurs inside the appliances due to the high humidity in Japan in the summers. Dynamic tests are thus required to accurately test the machine’s performance because Japan’s refrigerators are all equipped with cooled air circulating systems instead of direct cooling systems. Some units are equipped with small doors or multiple doors to mitigate this effect. Conventional static tests cannot identify these improvements. Only dynamic tests can identify such delicate differences and are much more realistic than static tests in this respect, because dynamic testing involves opening and closing the refrigerator doors repeatedly, especially in the summer months.

Report on Current Projects

Development of Algorithm Criteria

The purpose of this project is to develop criteria for determining the acceptability of algorithms to be used for converting energy performance test results from one energy performance test method to another, thereby avoiding expensive repeated testing. The project builds on APEC Project EWG 03/2000T, 'Study on Algorithm Development for Energy Performance Testing', which was completed later than expected, and reached conclusions different from those expected. As a result, the work and timing of this project were affected. The application for an extension of time is currently being reviewed by the BMC out of session and had not been approved at the time of this meeting.

Energy Standards Information System (ESIS) Development and Coordination

The project consultant made a powerpoint presentation on the Energy Standards Information System (ESIS). The goal of ESIS is to present standards and related information on the internet, helping to align the appliance standards of APEC member economies in the long-term, reducing barriers to trade and promoting energy efficiency. Performance testing is most critical in this, and algorithms are considered an important tool for coverting test results. ESIS is about linking people in different economies, and, therefore, it should contain as much information as possible. Long-term funding to continue the web site could be a problem.

The project consultant then introduced the project team from Thailand and New Zealand. The delegates were shown a demonstration website (www.apec-esis.org), containing subscription information, news, links to information and etc.. The information on the website will be updated by experts in individual APEC economies. The list of those experts would also be available for individual contacts. Within the database one can find listings for various product standards across economies, detailed reports with contact information, and standards under consideration by APEC economies. Periodic updates will be available to those who subscribe at no cost. A discussion forum is also available on the site.

The Chair suggested sending copies of the questionnaire for fielding expert responses about the web site by e-mail, in addition to having an online version to fill out. The project consultant suggested using Acrobat to download documents and forms to fill in. The website should be finalized by December under the current contract arrangement and the project will be followed by a maintenance and expansion phase that Chinese Taipei has proposed as a self-funded project. The self-funded project was endorsed by the EWG at its last meeting in Taipei in October 2002.

The US asked about the Energy Working Group's reaction to the prospective expansion of the database to economies outside of APEC and additional funds needed to expand and maintain the data base. The Chair replied that no formal decision has been taken by the EWG. The informal response is that maintenance of websites among subgroups needs to be addressed, and that the APEC secretariat is developing guidelines for this issue. However, there is currently no timeline for establishing such guidelines. APEC Secretariate informed that Telecommunications Working Group has internal guidelines for websites maintenance and EWG has asked for a copy of the guidelines for reference. The Chair suggested waiting until a clearer answer from EWG/APEC is received before expanding the database to non-APEC economies. In terms of funding for the data base, the project consultant said that the biggest obstacle would be keeping the site updated. CLASP has a good website that can be linked with ESIS. In fact, CLASP is already collaborating with ESIS in the collection of data. The Chair further explained that, while the long-term maintenance options still to be explored, Chinese Taipei and the US have pledged US$35,000 and $5,000, respectively, for the maintenance of the web site through 2003.

An observer from New Zealand mentioned that APEC might be concerned about the burden of funding website maintenance. The US asked if a non-APEC economy might be able to provide funding and support. The project consultant from New Zealand suggested that formal funding from non-APEC economies should wait until clarification has been received from the APEC secretariat. The Chair said that the ESIS website is proceeding under the mandate of the APEC Energy Ministers. Each economy should have its own designated official contact. That individual will be responsible for making sure the standards updates are made known and reported on ESIS. This standards notification procedure needs to be implemented as soon as possible, because APEC Secretariat is asked to review what has actually been accomplished in the series of Energy Ministers' Declarations. This is a good opportunity to show concrete progress on EWG projects to the Energy Ministers.

Energy for Sustainable Communities Program (ESCP)

Because there were several new delegates at this EGEE&C meeting, the US repeated a presentation made at the last EGEE&C meeting in Mexico City in April 2002 on the history of the program. It started in 1996 with 43 participants from 15 APEC economies attending an organizational meeting on sustainable development in the US. As a result of that meeting, a liaison group was formed under the auspices of EGEE&C. The objectives of the group are to (1) exchange information, (2) improve access to emerging technologies, (3) assist participating communities in finding financial resources for sustainable projects and practices, and (4) help members monitor and evaluate progress of communities. The group met six times (Bangkok, Honolulu, Beijing, Melbourne, Canberra and Taipei) before it was reorganized as a program in 2001. Participating economies include Australia, PRC, Indonesia, Mexico, Philippines, Thailand, USA, and Vietnam. New Zealand also participated in the past.

The U.S. then discussed some of the accomplishments of the program. ESCP created a website, which is self-funded by the US. They held training courses for energy managers and completed community profiles for cities in PRC. They held workshops in Indonesia and China on sustainable energy development and designed a sustainable village in rural China. The village design will be used as a model for other sustainable villages in China. In a demonstration experiment, compressed earth brick technology will be introduced in Guanghan, China, to replace conventional fired brick technology. Strawboards will also be introduced. The program is also developing a large-scale anaerobic digester for Guanghan. The US also explained that a proposal must be submitted to the EWG every year for the program's activities. Also, an annual self-evaluation reviewed by two other economies must be submitted to the EWG. The latest self-evaluation, from 2001, was presented, informing APEC what the program accomplished on each objective. The US suggested that, if any other member economies were interested, they could participate in ESCP's activities.

Korea asked about evaluating sustainability. The US replied that there are cities in the US that have indicators for sustainability, monitored over time, to see whether progress is made. The community decides what it wants to accomplish in certain areas, such as crime reduction, education attainment, and energy production, and monitors their performance over time. An observer from Thailand wanted to know who works on projects in the program, and the extent of US involvement in the program's activities. The US replied they have a local contact in every economy serving as a liaison. A team from the program goes to a participating community to identify needs and potential projects. Appropriate expertise from the APEC region is then called on to implement projects as needs dictate. The observer from Thailand then asked whether this project was cooperating with the International Council for Local Environmental Initiatives (ICLEI), which is working on energy management and climate change with cities in Thailand and the Philippines. The US said that the ESCP works with ICLEI, but emphases of the two activities are different. ICLEI works on identifying and prioritizing climate-change opportunities, while ESCP implements sustainable projects to a greater degree.

The Chair mentioned that China is emphasizing the water sector together with energy efficiency. The US responded that many cities in the APEC region spend as much as 50% of their electric bills on water pumping. Therefore, city water provision is a good target for energy efficiency projects in the APEC region. The chair then inquired about similar projects in Melbourne, Australia, in relation to ESCP. The US said that there was an initiative for the city government to provide all of its energy requirements via renewable energy by 2020.

Approved 2003 projects

The Chair listed all of the projects approved for funding in 2003. There are two types of APEC funding, the Trade and Investment Liberalization Fund (TILF) and the Central Fund. For the former, Japan is the only donor and the latter with contributions from all APEC member economies. Overall, seven EWG projects have been approved for the

Central Fund, while six have been approved for the TILF. Of the thirteen approved projects, three are from this Expert Group, EWG 03/2003, "Cooperation on Energy Labelling", EWG 05/2003, "Energy Audit Training Program for the Industrial Sector" and EWG 05/2003T, "Sustainable Financing System for Energy-Efficiency Projects". Project proposals made by the Expert Group members would be discussed in an expert group meeting; out of session discussion is carried out via e-mails as well. All project proposals will, after incorporating comments from member economies, be sent up to the EWG for endorsement consideration.

Russia inquired about the process and procedure of project proposal approval and the Chair reviewed the approval process for the Group. Project proposals endorsed by EWG are sent to the APEC Budget & Management Committee (BMC) for financing considerations. Afterwards, the proposals with BMC's recommendations are then sent to Senior Officials, and the formal acceptance of project proposals is given at the Ministerial level. Approved projects are usually to be completed in one or two years term, depending on the projects.

The first day of the meeting concluded at 5:04 p.m.

Saturday, November 2

The Chair opened the meeting at 9:10am.

Open Forum

USA

The US discussed an energy bill under consideration by the US Congress. Because the bill has not passed the Congress, it is premature to discuss details of the legislation at the present time. If the legislation is enacted, a full report will be made at the next EGEE&C meeting.

Japan

Japan made a presentation on three topics:

1. The effect of labelling systems for appliances. Included were a list of types of appliances based on efficiency and power consumption, in order to see what appliances consume the most energy within a household. The findings indicated that most of a household's power is consumed by major energy-intensive appliances. Therefore voluntary energy labelling should concentrate on air conditioners, refrigerators/freezers, fluorescent lights and TVs. The percentage of savings was detailed for each case.
2. The effect of the Energy-saving Navigation System (ESN). This system allows consumers to accurately measure their energy savings in easy-to-understand monetary terms. This results in changes in behavior that brings about significant savings in energy for those using this system.

3. Promoting “Energy Conservation Republics”. This program uses various kinds of communities including schools and professional soccer teams as hubs to spread energy conservation policies throughout Japan. It elects leaders, sets goals and implements actions to meet said goals. These republics now number 69, having increased rapidly recently, and Japan hopes to have 100 republics by the end of this year.

The US inquirred how a near 100% compliance rate within a voluntary system could be achieved, and Japan responded that Japanese citizens are very conscious about energy conservation. Korea asked why a manufacturer would willingly put labels on a low-efficiency product, and Japan responded that consumers are in general cooperative with public energy conservation measures. An observer from Thailand requested clarification that the current top-level product with a “green e” mark would be a goal for other products. Japan clarified that it does not have a plan to make the labeling mandatory. Chinese Taipei noted its awareness of the Japanese catalogue-making and how manufacturers eager to adopt labels due to a high rate of consumer acceptance. The Chair asked for clarification on the presentation vis-à-vis models vs. manufacturers. The observer from Thailand wanted to know whether the numbers were a result of actions taken by manufacturers. Japan explained the numbers and ratios involved.

Korea

Korea made a presentation on Energy Efficiency Programs in Korea. Topics include standards and labeling and office equipment/home electronics.

The standards and labelling program aims to eliminate inefficient products from the market via legislation. This should also induce manufacturers to introduce more efficient products as well as attract more efficient imports to the market. The label itself was shown and explained. KEMCO is in charge of checking the accuracy of the labels and inspecting via random sample tests whether the products actually meet the standards. The targeted appliances were discussed and the efficiency mark was displayed for the delegates. Results so far of the program and a flowchart of the procedure, including product inspection and penalties involved for failing to meet the requirements, were also introduced. Concurrently, a high energy efficiency guarantee system, to promote the penetration of high energy efficiency appliances, covers 23 items.

A program for promoting energy-efficient office equipment and home electronics is a partnership between the Korean government and manufacturers. It started in April 1999 and currently monitors 15 types of home electronic appliances and office equipment. Public institutions are obligated to use these high-efficiency products. New buildings are also obligated to use high-efficiency equipment, including central heating for apartments, hospitals and office buildings. Moreover, energy efficient products are given preference in public procurement services. Funding of 5 billion wons is provided for manufacturers who produce the certified products, and test fees are subsidized for small enterprises.

Russia wanted to know more details about the Korean program. Korea discussed its 20-year history of development in this area, including government policy and corporate cooperation. About one million households are covered by the program so far and the program is subsidized by the government. The Chair noted the Korean program for its extensive standards and labeling requirements, and the simple design.He then asked the consumer awareness of the programin Korea. Korea said that the crux of the matter was a general preference for the label rather than a differentiation between levels of efficiency. An observer from Thailand inquired about MEPS in relation to the Korean "Energy Boy" label. Korea responded that the standards were similar but not necessarily related. A comparison with the US Energy Star system was made. The PRC mentioned that China uses the same label for water and electricity conservation, with different Chinese characters to differentiate the two, and wanted to know the basic principle/requirements of the Korean labels. Korea replied that its label is obtained through market studies. Companies applying for the label send products to test, but there is no definite number or percentage as it is based on a detailed product-by-product testing. The US said that this resembled the system it uses.

The observer from Thailand asked about PRC's plan to implement comparative labels in China, and China responded that it plans to combine its labels after doing more research on how to do so accurately and effectively. The US stressed that it doesn't have just one label, although the Energy Star logo is the primary marketing tool. The Chair then asked if Korea is considering a partnership with the Energy Star Program, as Chinese Taipei, Canada, Australia, Japan and other economies already do. Korea said that Energy Star products are already sold in its markets, but this apparently does not cause any confusion. More information on Korea's energy efficiency policies in multiple languages is available at the website http://www.kemco.or.kr/effiency.

APERC Report: Energy Efficiency Indicators and Potential energy Savings in APEC Economies

A representative from the Asia-Pacific Energy Research Center(APERC) made a presentation on energy efficiency indicators and potential energy savings in APEC economies. APERC currently has 18 researchers and runs five projects in parallel . One project aims to update the energy efficiency indicators covering whole economy levels, including industry, transport, residential and commercial sectors, to assess energy saving potentials. APERC's database includes information from 1980 to 2000 and the energy efficiency indicators monitor energy use as a productive factor for economic activities. Economic assessments play a crucial role in such indicators and decomposition methods have been implemented to analyze the trends of energy intensity.

Energy savings are comprised of structural changes and energy efficiency improvements. Assessment takes place through economy-wide, technology-specific surveys as well as energy audits, with absolute values and the penetration rates of new technologies re-aggregated to the sectorial levels. The presentation included a graph of energy saving potentials separated into market, economic, technical and theoretical aspects and a US steel industry study from 1994 was quoted as an example of economic/non-economic

factors in the study. Economy energy savings figures, including the industry, transport, residential and commercial sectors from Korea, Russia and Thailand, were presented and analyzed as examples. The Chair asked about the status of the business-as-usual practice aspect of the figures. Russia questioned the numbers for Russia in the study and produced further information with technical potential figures and a graph of the energy conservation supply curve with respect to other economic factors.

In conclusion, energy efficiency represents a viable alternative to additional energy supply. Efficiency is necessary for security and is also a protection measure. The next stage of research will be "Energy Efficiency Policy Evaluation", which will seek to identify policies/measures in all APEC economies with quantitative evaluation, in co-ordination with the WEC project on Energy Efficiency Policies for 2002-2004.

Outcomes of EWG 24 Relevant to EGEE&C

The Chair presented a paper and explained the details of the document, including EWG's response to the progress of the Energy Standards Information Development project and endorsement of a self-funded project — Energy Standards and Labelling Information Network — proposed by Chinese Taipei, and instructed the delegates to read through the document at their convenience. In addition, although Vietnam will be the host of EWG 25, the exact date of the next EWG meeting has not been set; PRC has offered to host EWG 27.

Future Collaboration on Longer Term Development and Co-ordination of Energy Efficiency Programs and Standards

Future Collaboration Areas & Lead Economy Selection

The Chair presented a matrix chart from the last meeting in Mexico. There are 28 elements in the matrix, representing potential subject areas for further cooperation, and varying degrees of interest were expressed for different subject areas by EGEE&C members. Some subject areas did not attract any interest at all. The Chair then proposed to finalize the matrix with lead economies for different subject areas to encourage active participation at this meeting. The US asked what the chart was designed to indicate. The Chair explained the options available and potential actions based on the interests expressed. An observer from Thailand asked if the chart was a guide to considering funding proposals.The Chair responded that this was not the case, as all project proposals would be accepted by this group. A consultant from New Zealand pointed out that project sponsoring economies could be easily identified in this way.

The chair then asked the delegates if they would like to add additional subject areas for their economies. The responses were recorded and included in the final matrix in Attachment 1.

The Chair further asked if the subject areas should be prioritized. The US indicated ranking might not be appropriate because priorities do not stay the same all the time and the creation of the collaboration matrix itself is an indication of prioritization. There was

a consensus that further prioritization of the subject areas were not necessary at this point.

The Chair then pointed out that the lead economies of subject areas would not be financially responsible for cooperative activities. Rather, they are responsible for interaction with those interested in the subject areas and economies can work collaboratively to come up with project proposals as they see fit. The Chair stressed again that the matrix is subject to change, although the template will serve as a guide for the Expert Group in the next few years. In addition, other economies that participate in future meetings can also join in the matrix.

Future Strategy, Planning and Coordination on Standards and Labeling Development and Notification

The consultant from New Zealand went through the APEC-ESIS Future Development Strategy. US$40K has been pledged by Chinese Taipei and the US for continuation in 2003. A presentation on APEC ESIS has been made to IEA DSM EcCo 20 in Grax, Austria, and interest was expressed for a more detailed proposal. A presentation is also being made for the IEA Building and Community Systems ExCo, Nov 6-8 in Florence, Italy. Other promising leads include ADB, CEC, and the UK but ADB is mostly interested in large-scale funding requests only. A meeting is being pursued with CEC in Brussels. The UK is the host to a market transformation forum and, therefore, may be interested in the topic.The IEA is a promising vehicle for establishing APEC and EU, as two key world regions, collaboration. Implementing agreements of IEA are well established, with suitable administration and accountability structures, and the initial aim is to establish a new joint task in Building and Community Systems, allowing broad comparisons between economies, including non-APEC economies, via APEC ESIS. Regular updates of APEC ESIS should include Mutual Recognition Arrangements—Test Once, Sell Everywhere—as well that can reduce the cost of trade for all economies.

Chinese Taipei made a report on its draft work program for the Energy Standards and Labelling Cooperation Initiative, which involves maintaining and expanding the APEC ESIS website and other standards and labelling related activities. The US asked if the previous project team would be included in the work, and Chinese Taipei replied it will be responsible for the website maintenance and expansion and that the original project team for APEC ESIS will be involved in the newly endorsed self-funded project. The US also asked if Chinese Taipei would host the Standards and Labelling workshops, and Chinese Taipei responded that such workshops could be held in any economy. Phases two and three of the work program are planned, but the funding has not yet been identified; Chinese Taipei may consider funding for the maintenance of the expanded website in 2004. The PRC indicated that it is looking forward to utilizing the website, and the consultant from Thailand confirmed that he would be happy to see more participation from China. The location of the “Seminar on Energy Standards & Labeling in the APEC Region” has not yet been set, but it would most likely be held back-to-back with an Expert Group Meeting.

Review of Draft Minutes

The Chair asked delegates to go over the first draft of the meeting minutes and send any revisions needed to the Secretariat.

Discussion on 2004 APEC Project Proposals & Submission Arrangement

The US is submitting four proposals for consideration by the EWG. The US thinks that the PRC and the US might collaborate on the US's proposal on "Promoting Energy Efficiency in the Government Sector", as China's proposal is very similar and is the same in scope as the US proposal. Discussion of this will take place between the two economies. Chinese Taipei would like to be a co-sponsor for this project proposal.This proposal is to survey APEC economies on the status of government procurement and energy efficiency programs. A report will be written on the status of government programs in APEC economies and, finally, the US will coordinate and organize a workshop on the subject. The total cost of the proposal is US$100K, of which the proposal asks $50K from APEC.

Russia and China asked for clarification of the proposal. The US replied that the focus is very broad, on any aspect of public sector/government participation in energy efficiency. APEC would be interested to find out how far each economy has gone in this respect to establish a basis for mutual cooperation. Standards and labels and procurement policies are certainly two very important factors to consider in this study. Russia commented that the US has enjoyed success in this area, so why restrict this to developing economies as is stated on the cover sheet? Russia then asked about the time frame of executing this project proposal. The US responded the project overseer has two years to complete the project and, thus, the project should end by December 2005 if endorsed by the EWG. Russia is also interested in co-sponsoring this project proposal.

The US reviewed its second proposal on the Energy for Sustainable Communities Program. It is a US self-financed project and a proposal must be submitted to and approved by the EWG every year. The US proposed to continue its current activities of the program. PRC and Korea are interested in co-sponsoring this effort.

The US also proposed two workshops to be held in 2004. The first one is on promoting energy sustainable development in APEC economies. The proposal requests US$50K from the APEC Certral Fund for conducting the workshop. This proposal will also be submitted through the Expert Group on New and Renewable Energy Technologies. The proposal focuses on waste treatment and disposal, which actually affects all sectors. Russia asked about the linkage between the solid waste disposal and sustainability. The US mentioned the option of bio-digestion and methane capturing, depending on the environment and economy in question. Russia noted an error in the face sheet, and the US said it would correct the oversight. An observer from Thailand asked whether the target of the workshop is similar to that of the ESCP. The US responded that both the workshop and the ESCP focus on communities.

The second workshop proposal on sustainable transport is motivated by this Expert Group's work program. The workshop addresses surface transportation and sustainable

transport infrastructrure. It only deals with surface vehicles used in cities. In 1996, this Expert Group held a workshop on transportation in Auckland, New Zealand. This proposed workshop is a follow-up. Russia asked why different sustainability proposals aren't combined, rather than singling out transportation, and the US replied that it was due to the scope of the two-day workshop. It also serves to gauge interest in the topic of transportation sustainability. A consultant from New Zealand pointed out that such a workshop could be very useful in raising public awareness and making it easier for communities to save energy by implementing appropriate changes in the transport sector. Russia raised the issue that sustainable transport is more related to the economic structure than sustainable energy efforts. The US responded that while some problems aren't easily solvable, others can be dealt with quickly and that the workshop is to bring both to the attention within APEC.

PRC has almost completed a survey of public sector energy consumption. There is a large potential to save more energy in China, and the government could set a good example to the public. China is also pursuing market reform, will survey the experiences of various economies and hold a symposium to take advantage of the great potential for improvement in energy conservation. The observer from Thailand asked if the proposal involved sharing information on the broad range of tools the government uses as well as the impact of third-party energy services and the links of both with the market. China agreed with this assessment. Russia questioned the project start date, which should be 2004 rather than 2003. China responded it would really like to implement the project earlier, but can only officially start in 2004. The chair clarified it's a proposal for 2004. Russia suggested to define "government" clearly in the proposal and would agree to co-sponsor the project. The US commented the proposal is broader than just the building sector as suggested and would also like to co-sponsor this project.

Russia proposed a workshop on disaggregated indicators for monitoring energy efficiency progress as a basis for cross-economy comparison. Chinese Taipei agreed to co-sponsor this proposal, which is scheduled for implementation by September 2004. This was a specific recommendation from an APEC Indicators Workshop held in Manila earlier this year. The US asked if Russia was limiting the workshop to specific areas of energy efficiency, and Russia replied it would be residential, industry and transportation, basically everything except the supply side.

Russia's second proposal concerns energy efficiency & conservation of heating, a major issue for Russia. PRC and Korea are also interested in this. The study is entitled "Enhancing Energy Performance of Heating Systems" and will involve a survey of water heating efficiency, efficient equipment, standards & labelling, and market reforms in the face of privatization. The project cost is estimated at US$50K.

The third proposal, possibly titled "Researching Eliminating Barriers to Cross-border Trade of Energy-efficient Products", is concerned with an evaluation on reducing trade for low-efficiency equipment among APEC economies. The problem is that the price seems to be more influential to consumers than the intrinsic benefits of energy efficiency, and a survey is needed to understand how this issue may be resolved. The consultant

from New Zealand mentioned several issues are involved in the trade of apparently low-efficiency products. The observer from Thailand said he would be willing to share information on technology dumping practices. This proposal intended to request TILF funding and the project cost is US$70K. The US cautioned that APEC needs a convincing argument that work under the proposal would increase trade. Japan, as the single donor to the TIFL account, suggested that Russia gives a more detailed description of the project proposal as it is finalized. The US suggested an option of cutting down the budget to US$50K to make the proposal for the Central Fund. The observer from Thailand said that one route to increasing the presence of energy-efficient products is promotion of high-quality products.

Other Motions & the Next Meeting

The City of Melbourne, Australia wrote to the Expert Group in June 2002 offering to host the next Expert Group meeting in conjunction with a workshop there in March 2003. More details were requested and received in September 2002. Copies of the letters were distributed in this meeting. The Chair further informed the delegates that the Australian EWG representative has been made aware of this offer from the City of Melbourne and welcomed the development. An observer from Sustainable Energy Authority of Victoria, Australia, sent a proposal via the chair, offering to host a one-day workshop on building energy standards and labeling in collaboration/conjunction with the workshop proposed by Melbourne. The Chair then opened the topic for discussion. No objections were raised to either proposal. The Chair will pursue the City of Melbourne's and SEAV's offers.

The Chair asked if any economies were interested in hosting the second Expert Group meeting next year. The US mentioned that there is a large renewable energy forum to be held in Baltimore in September 2003 that might serve as a proper forum for this meeting. The Chair will consult with members out of session and notify all members once the dates and venues are confirmed for both meetings.

Consideration and Acceptance of Minutes

The meeting minutes was reviewed and accepted by the representatives. The Chair will email an electronic copy of the approved minutes to all members of the Expert Group.

Adjournment

The meeting closed for formal business at 5: 20 p.m.

Attachment 1: Focused Areas of Collaboration for EGEE&C Activities

	Built Environment	Energy Transformation/ Transmission	Industry	Transport
Standards/Label	S. Korea, Mexico, US, Russia, Chile, PRC, Japan, NZ, Australia, Canada, CT(11)	NZ, Russia(2)	S. Korea, CT, NZ, Russia, Australia, PRC, Chile(7)	NZ, Australia(2)
Performance Measurements	Canada, S. Korea, NZ, Australia, CT, PRC, US, Russia, Chile, SG(10)	NZ, CT, Australia(3)	Canada, NZ, CT, Japan, Australia, MA SG, Russia, Chile(9)	Canada, NZ, Australia(3)
Sustainability	Australia, NZ, US, SG, Russia, S. Korea(6)	US, NZ, Russia(3)	US, SG, Russia(3)	NZ, US, Australia, Russia(4)
Financing/ Funding	US, Russia(2)	US, S. Korea, Russia(3)	US, S. Korea, Russia(3)	US, Russia(2)
Government Leadership	Canada, Mexico, US CT, Australia, PRC, Japan, S. Korea(8)		Japan, S. Korea, Russia(3)	Canada, Australia, Japan(3)
Information/ Awareness/ Promotion	Japan, SG, CT, Russia(4)		Japan, SG, Russia(3)	
Training and capacity building	Japan, Canada, SG, Russia, PRC(5)	NZ(1)	CT, Japan, MA, SG, Russia(5)	
	(12 Economies)	**(7 Economies)**	**(12 Economies)**	**(6 Economies)**

Note: Listing of member economies in the matrix simply denotes interest in the topic and does not necessarily imply sponsorship or funding of potential projects.

Lead member economies for focused areas of collaboration are indicated by shading and all member economies are encouraged to make APEC project proposals in the focused areas of collaboration.