INTRODUCTION

The twelfth meeting of the APEC Energy Working Group was held in Hong Kong on 7-8 May 1996. The meeting was co-chaired by Hong Kong and Australia. A record 75 delegates from Australia, Brunei Darussalam, Canada, Chile, the People's Republic of China, Hong Kong, Indonesia, Japan, the Republic of Korea, Mexico, New Zealand, the Philippines, Singapore, Chinese Taipei, Thailand, and the United States of America, together with representatives from the EWG and the APEC Secretariats, and observers from PECC/MEF and the Pacific Forum attended the meeting. Dr Suresh Hurry, an expert on rural electrification from the UNDP, attended as a consultant to the rural electrification project.

Mr Gordon Siu, Secretary for Economic Services, provided welcoming comments to the meeting and outlined a number of developments undertaken by Hong Kong aimed at increasing energy efficiency and improving environmental efficiency. Mr Siu comments were warmly appreciated by participants.

The Agenda as adopted is at Annex 1. A list of participants is at Annex 2.

1. OPENING ADDRESS

The Co-Chairmen, Mr Leung Cham-tim from Hong Kong, and Mr Russell Higgins, Australia presented opening statements commenting on issues of importance and relevance to discussions during the meeting.

2. ROUND TABLE STATEMENTS ON NOTABLE ENERGY DEVELOPMENTS AND ACTIVITIES

Each delegation presented a brief overview of main energy developments that had occurred in relation to their economy since the last meeting. Summaries of these presentations are at Annex 3. In addition, members submitted short written papers highlighting the initiatives undertaken by member economies to address greenhouse gas emissions and climate change. These papers will be collated and circulated by the EWG Secretariat to members out of session.
Members discussed a number of topics that could be the subject of short written papers for presentation at EWG 13. It was agreed that the special topic for papers to be submitted at EWG 13 would be "Measures to improve environmental performance in the transport fuels sector".

Action Arising/Next Step

- In addition to their reports on notable energy developments, at EWG 13 each member economy will table a brief written report on "Measures to improve environmental performance in the transport fuels sector".

3. ACTION PROGRAM IMPLEMENTATION

3.1 Asia Pacific Energy Research Centre

Mr Matsui presented the report of the Task Force on a Regional Energy Outlook and Energy Research Centre to be established to provide input to the EWG’s Action Program. In presenting his report, Mr Matsui emphasised the role of the EWG in guiding the work of APERC, and confirmed that the Centre would be formally established in August 1996. A special meeting of the Energy Data Expert Group will be held in September to discuss further details of APERC’s work.

Japan welcomed nominations from members for researchers to the Centre and asked members that in preparing nominations, they should indicate when nominees would be available and their particular area of expertise.

Furthermore, Japan welcomed any additional input from members on the activities which the Centre should pursue.

Members endorsed the report and congratulated the Task Force on bringing the concept of the Asia Pacific Energy Research Centre to fruition. Members noted the important contribution that APERC would make to improving business and Government understanding of regional energy markets, and endorsed its research priorities.

Members raised a number of practical questions and suggestions concerning APERC’s operations. Japan undertook to respond directly to members on these practical issues out of session.

Members noted that the establishment of the Centre would be on the agenda for consideration at the APEC Energy Ministers’ meeting, and agreed that the practical details concerning its establishment needed to be resolved quickly. Members agreed to forward their nominations for researchers to the Centre as soon as possible.
Action Arising/Next Steps

- Japan to respond directly to members out of session on the practical issues raised.
- Members to provide early advice to Japan of their nominations for researchers to the Centre.
- Members to provide any additional input to Japan on the future work program of the Centre.

3.2 Development of Framework to Facilitate Investment in Power Infrastructure in APEC Member Economies

In introducing this item, the Co-Chairman noted the considerable importance to many APEC economies, and the region as a whole, of facilitating investment in power infrastructure. Member economies fully recognised that economic growth is underpinned by energy, and noted the sentiments expressed by Leaders at Osaka when describing energy as a potential bottleneck to sustainable economic growth. Members accepted this issue as being of fundamental importance for the Group’s consideration.

Members considered the report of Mr Purcell, the Chairman of the Task Force on Investment in Power Sector Infrastructure.

Mr Purcell reported that nominations had been received for the Ad Hoc Business Forum on Regional Cooperation in Power Sector Infrastructure and the Electricity Regulators’ Forum, and welcomed any additional nominees from members to one or both fora. Mr Purcell noted that members of both fora were senior and experienced in power sector issues, which would enable them to make a valuable input to Energy Ministers at their meeting in August. He reported that the first meetings of the two fora would take place back-to-back on 4 and 5 June at the APEC Secretariat in Singapore, to allow interaction between the members of both fora.

Mr Purcell outlined the proposed process for preparing advice, and involving members in developing that advice, on a Framework for Cooperative Action to Facilitate Investment in Power Infrastructure. This advice would be considered by Energy Ministers at their meeting in August 1996. Mr Purcell noted it was envisaged that a representative of the Ad Hoc Business Forum on Regional Cooperation in Power Sector Infrastructure would make a presentation to Energy Ministers, with other Forum members present to facilitate a productive dialogue with Ministers during that agenda item.

Members welcomed the report of the Chairman of the Task Force and supported the approach outlined, noting the need for members to be kept fully informed of developments.
Action Arising/Next Steps

- The Ad Hoc Business Forum on Regional Cooperation in Power Sector Infrastructure and the Electricity Regulators' Forum to meet on 4 and 5 June in Singapore.

- The approach outlined by the Chairman of the Task Force on Investment in Power Infrastructure to guide the preparation of advice on the power infrastructure initiative for APEC Energy Ministers is to be applied.

3.3 Rural Electrification in the APEC Region

Members considered opportunities for action on rural electrification. Priorities were identified in a Report of the Workshop on the Facilitation of Rural Electrification in the APEC Region hosted by Japan.

In presenting the report, Japan noted that the viewpoint of member economies differed. Some identified the provision of lighting as a priority, while others emphasised the supply of power. For some economies rural electrification accompanied economic development, while for others it was not necessarily followed by industrial development.

Participants in the workshop had stressed, in particular, the importance of involving international organisations such as the World Bank and the Asian Development Bank in the development of suitable rural electrification programs.

The EWG thanked Japan for hosting the Workshop on Rural Electrification and agreed that Japan should liaise further with member economies on this issue. Members supported the areas for additional activity, including further workshops, with a view to identifying specific actions which might be taken to further rural electrification in the region. In addition, members supported Japan's proposal to prepare a report highlighting the range of issues which would need to be considered in identifying options for rural electrification.

Action Arising/Next Steps

- Japan to continue its work on rural electrification in consultation with interested members, including the formulation of plans for a further workshop in late 1996.

- Japan to prepare a report for the EWG identifying the diversity of issues which would need to be considered in identifying options for rural electrification.
3.4 Reducing Environmental Impacts in the Energy Sector

The Chairman of the Clean Coal Technologies Expert Group, Dr Miller, reported on revised program that the EWG had tasked the Expert Group to develop in relation to the component of the EWG's Action Program aimed at improving environmental performance in the energy sector. Dr Miller reported that, in view of the expanded work program of the Expert Group to cover technologies for all fossil fuels, the Group was seeking members' endorsement to change its name to "The Expert Group on Clean Fossil Energy", and to draw up revised Terms of Reference for the new Group.

Members endorsed the revised paper prepared by the Expert Group, and welcomed the Group's efforts in coordinating input from other Expert Groups to cover all environmentally related activity streams. Members agreed that this was an issue of major importance for the attention of APEC Energy Ministers.

Members endorsed the change of name for the Group and agreed that it revise its terms of reference. Members noted that in drawing up its terms of reference, the Expert Group should consult with other relevant Expert Groups established by the EWG to ensure there was no overlap of activities. Following input to be provided by Canada, and further consultation with other Expert Groups, the Group would review the document dealing with the EWG's overall approach to improving environmental performance in the energy sector, and note any fundamental gaps, with a view to articulating an overall energy-environment strategy.

Action Arising/Next Steps

- The Expert Group to be henceforth known as "The Expert Group on Clean Fossil Energy".

- The Expert Group to revise its Terms of Reference and report back to the next meeting of the EWG.

- Canada to advise the Expert Group Chairman through the EWG Secretariat of any omissions in the consolidated paper with a view to ensuring that the list covers all relevant initiatives within the work program of the EWG.

- The Clean Coal Technologies Expert Group, in consultation with other relevant Expert Groups, to finalise the proposed program to improve environmental performance in the energy sector for the consideration of APEC Energy Ministers.
3.5 Energy Standards and Labelling

Australia and the Republic of Korea jointly introduced this item, highlighting the potential of this item to reduce business costs, and in this way, assist in generating investment and facilitating trade. Given the complexity and highly technical nature of this issue, it was agreed that a step by step process was essential with the focus being on establishing:

- The basis for accreditation of product test facilities and protocols; and
- Firm bases on which product standards in member economies could be compared.

It was suggested that in this context a framework be established within which member economies could participate as satisfactory agreements are reached between the various members. The question of harmonisation of standards is not part of this component of the Group's work at this time.

The task involves confirming confidence in the relevant test laboratories of member economies to avoid duplication of testing in economies receiving appliances and equipment. In this regard, work was in progress to document the various approaches of members to standards setting. While some additional work needs to be undertaken, particularly in regard to gathering information on the arrangements in place in member economies, it was considered possible to complete this aspect at a relatively early stage.

The second task involved the establishment of a framework for the comparison of standard test data in member economies, with a view to establishing equivalence of standards for the purpose of mutual acceptance. It was anticipated that this latter task could be completed by the end of 1997.

Members supported the approach adopted and agreed this could be an issue for consideration by APEC Ministers, if work becomes sufficiently advanced and providing that Ministers are expected to consider the broad strategic policy framework rather than the technical detail. It would be inappropriate to seek Ministers' guidance in relation to the technical aspects of standards, and premature to consider any specific system.

Action Arising/Next Steps

- The Republic of Korea and Australia to further develop the proposal on energy standards and labelling, taking into account the various issues raised by members.
- The potential for bringing forward the policy dimensions of the issues involved for consideration by APEC Energy Ministers is to be determined by all members out of session and will depend on the progress made.
4. ENERGY MINISTERS' MEETING

Mr Purcell, the Chairman of the Steering Group established to develop the draft agenda for the APEC Energy Ministers meeting and other arrangements, presented the report of the Steering Group.

Mr Purcell reported that Steering Group had met on 6 May. He noted that the Australian Minister for Resources and Energy, Senator the Hon. Warwick Parer, had issued invitations to his counterparts to attend the meeting which will take place on 28 and 29 August 1996 at the Inter-Continental Hotel in Sydney, and will be preceded by a preparatory meeting of lead EWG delegates on 27 August.

An extensive program of associated events which to be held in conjunction with the Energy Ministers' meeting to promote interaction between visiting ministers, business executives and officials is being developed. Members would be kept informed as this program develops.

Members were invited to advise Australia of the particular interests of their Ministers in meeting Ministerial counterparts and business executives and in regard to site visits. Suitable arrangements will be established on receipt of advice.

Members agreed that the draft agenda for the Energy Ministers' meeting represented an appropriate base from which to work. However, members felt that the draft agenda should be presented around a major theme which captures the thoughts that energy is essential for economic growth, unparalleled investment will need to be mobilised to service this need, and cooperation between member economies, governments and business, will be essential to realising member economies' economic, social and environmental objectives.

Following suggestions by members, Ms Kerri Hartland, the Head of the Task Force established within Australia to oversight the arrangements for the Energy Ministers' meeting, will develop a theme drawing on the key concepts.

It was agreed that Ministerial discussion should cover the supply side of energy and not involve detailed technical considerations, for example in regard to standards. An opportunity for this could be provided by the opening item being a discussion on key energy issues relevant to the Asia Pacific region. Interaction with the business community (say through members of the Ad Hoc Business Forum making a presentation to Ministers and dealing with their questions) is important, and scope ought to be provided for Ministers to raise key issues of particular interest to them.
It was agreed that Australia, as host, should continue to consult closely with members on the arrangements for the meeting, including the drafting of agenda papers and the communique, and that decisions relating to the Energy Ministers' meeting should be taken out of session. If necessary, the Steering Group could meet again to consider additional matters concerned with the Energy Ministers' meeting, but expected that this may not be necessary.

A revised agenda based on comment received will be circulated to members.

In regard to agenda papers it was agreed that members would advise the EWG Secretariat of key issues they would wish to see within each agenda item so that a draft outline could be developed and circulated for consideration and agreement before detailed text is prepared for agreement. A similar process will apply to the development of a Ministerial communique. Following comment from members, a text covering some possible messages that could be contained in the communique was tabled to assist thinking on this matter.

**Action Arising/Next Steps**

- By 17 May the EWG Secretariat is to circulate a revised draft agenda.
- By 24 May member economies to advise the EWG Secretariat key issues they would wish to see included in each agenda item.
- By 31 May the EWG Secretariat to circulate a draft outline of agenda papers for comment and agreement.
- Australia to continue to develop the arrangements for the Energy Ministers' meeting and to keep members fully informed of arrangements for the meeting.
- Member economies to advise Australia of any particular arrangements required for their Ministers as soon as practicable.

5. **PROGRESS REPORTS ON PROGRAMS OF COOPERATION**

5.1 **Energy Data Expert Group**

**Report of the Energy Data Expert Group**

Mr Matsui presented the report of the Energy Data Expert Group. Mr Matsui reported that the Expert Group had published the 1980-1992 APEC Historical Energy Statistics and the 1993 APEC Energy Statistics and had also met in Manila in February 1996.

Mr Matsui reported that an area of concern to the Expert Group was to determine a pricing strategy for its major publication - the APEC Energy
Statistics, and how to disseminate the data base more widely taking into account that the data base would soon be available on the Internet.

Members welcomed Mr Matsui's report and agreed that copies of the APEC Energy Statistics should continue to be free to members. Members agreed that the EWG should establish a small Working Group to examine the pricing policies to apply to the APEC Energy Statistics. It was agreed that Japan would chair the Working Group and the APEC Secretariat and the EWG Secretariat would comprise the initial membership, while other members interested in membership of the Group would inform the EWG Secretariat by 31 May 1996.

Third APEC Coal Flow Seminar

Mr Matsui presented a report on the Second APEC Coal Flow Seminar which took place in Shanghai in December 1995. Mr Matsui reported the seminar examined the issues associated with coal in APEC economies, including current environment protection measures and issues associated with technology transfer. Mr Matsui also informed the EWG that the Third Coal Flow Seminar would take place in Australia in November 1996.

Members thanked Mr Matsui for his presentation and agreed the Third Coal Flow Seminar should examine the investment requirements and impediments for coal over the total fuel cycle for the APEC region. It was also noted that the theme for the Seminar would complement the work of the EWG was undertaking to address the investment needs of the power sector.

Ad Hoc Group of Coal Policy Makers

The Chairman of the EWG noted that the Ad Hoc Group of Coal Policy Makers, which met after the Second Coal Flow Seminar, had agreed that there was a need to complement the work of the EWG by developing an Action Plan for the coal energy sector.

An outline of a draft Action Plan was then presented to the EWG for consideration. It was noted that the draft outline aimed at developing a process for considering coal issues. Members sought clarification of the status of the Action Plan when compared with the EWG's Action Program which has previously agreed by APEC Ministers.

Members agreed that the issues raised by the draft outline were important, but sought clarification on the relationship between the proposed Coal Action Plan and the other work of the EWG on coal issues.

It was agreed that Australia would liaise with the Ad Hoc Group of Coal Policy Makers and the Clean Coal Technologies Expert Group to obtain clarification and report to members.
Action Arising/Next Steps

- Japan to chair a Working Group comprising the APEC and EWG Secretariats and other interested members to examine the pricing policies to apply to the APEC Energy Statistics and to develop an appropriate marketing strategy.

- Members interested in membership of the Working Group to inform the EWG Secretariat by 14 June 1996.

- The Third Coal Flow Seminar to examine the investment requirements and impediments for coal over the total fuel cycle for the APEC region.

- By 1 June Australia to provide clarification to members on the relationship between the proposed Coal Action Plan and the approved EWG Action Program and its activities set out in the context of the EWG's work on coal issues being managed in other Expert Groups.

5.2 Clean Coal Technologies Expert Group

Members considered the report by Dr Miller on the activities of the Clean Coal Expert Group. Dr Miller reported that the Steering Committee for the Experts' Group on Clean Coal Technology had met in Hawaii in February 1996. The Group had developed an expanded Action Program for Energy and had commenced planning for the fourth Technical Seminar to be held in Beijing from 7 to 11 October 1996. The theme for the Seminar will be “Clean Coal Technologies: Energy and Environmental Solutions for Today and Tomorrow”.

Dr Miller also reported that Australia had hosted a meeting on 2-3 May 1996 which considered the tasks involved in the work of the Joint Multilateral Demonstration Project for Coal Mine Gas Recovery and Utilisation, and that members of the Expert Group had agreed to undertake different aspects of the Project. Dr Miller drew to the attention of members that two proposals requiring substantial funding would be developed over 1997 and 1998 as the Demonstration Project progressed.

Dr Miller went on to report that a special meeting of the Experts' Group would be held on 21-22 August 1996 in Honolulu, Hawaii to review the draft publication on Atmospheric Emissions Regulations, and that a Technical Seminar would be held in Beijing in October 1996 on Reducing Environmental Impacts.

Members welcomed Dr Miller's and noted that funding for the Demonstration Project for Coal Mine Gas Recovery and Utilisation was an important issue which would need to be discussed in detail by the Expert Group.
Action Arising/Next Steps

- A special meeting of the Experts’ Group would be held on 21-22 August 1996 in Honolulu, Hawaii to review the draft publication on Atmospheric Emissions Regulations.

- The fourth Technical Seminar which will be held in Beijing from 7 to 11 October 1996.

5.3 Energy Efficiency and Conservation Expert Group

Members considered the report by Dr Jong Duck Kim, Chairman of the Energy Efficiency and Conservation Expert Group on the activities of the Expert Group and expressed their support for the Group’s activities.

Dr Kim reported that the Expert Group had held two very successful meetings. The first was held in Singapore on 16-17 November 1995 in conjunction with a Workshop on Waste Heat Recovery and Cogeneration. The second was held in New Zealand on 3-4 April 1996 in conjunction with the Urban Transportation Forum. Participants at the Forum considered there was considerable potential for further cooperation, including data sharing, harmonisation on vehicle fuel efficiency standards, and the development of appropriate pricing regimes.

Members noted that the next meeting of the Expert Group would be held on 29 to 30 August 1996 in conjunction with a Workshop on Sustainable Cities in Monterey, California, USA.

Action Arising/Next Step

- The next meeting of the Expert Group is scheduled to be held on 29 to 30 August 1996 in conjunction with a Workshop on Sustainable Cities in Monterey, California, USA.

5.4 Technology Cooperation Expert Group

Mr Alderson presented a report on the activities of the Expert Group on Technology Cooperation on behalf of the Indonesian Chairman.

Mr Alderson reported that the eighth meeting of the Expert Group had been held in the People’s Republic of China on 5 to 6 February 1996 and had been followed by the Energy Research and Development and Technology Transfer and Renewable Resource Assessment seminar. The Expert Group meeting discussed the further development of its strategic plan, progress to date in the group’s activities, and possible future activities. Mr Alderson also reported the next meeting of the Expert Group was tentatively planned to be held in the Republic of Korea to coincide with the holding of the International Energy Agency’s Green Tie Workshop in September 1996.
Mr Yoshihiro Echizenya from Japan then reported on the Energy Research and Development and Technology Transfer and Renewable Resource Assessment seminar held in Beijing in February 1996. The seminar had focused on renewable energy research and development and renewable energy resource assessment techniques with the objective of promoting technology transfer and foster human resources in the region.

Members considered the matters raised and endorsed the initiatives being undertaken. Members also noted the advantage to the work of the Expert Group regarding continuity of participation and encouraged member economies to send the same delegates to each meeting of the Expert Group.

The issue of the development of a common format for responding to greenhouse gas issues was raised in the context that this is primarily a matter for another forum. However, it was agreed that benefit can be derived from sharing experiences on this issue and could be considered in the broader context of the overall energy-environmental strategy which is being developed.

Action Arising/Next Step

- The next meeting of the Expert Group to be held in the Republic of Korea in September 1996.

5.5 Minerals and Energy Exploration and Development Expert Group

The Chairman of the Minerals and Energy Exploration and Development Expert Group, Mr Tomas Astorga from Chile, presented the first report of the Expert Group.

Mr Astorga reported that the first meeting of the Expert Group had been held in Santiago, Chile, on 25 to 28 March 1996 and was a most successful meeting. A draft terms of reference for the Group had been developed and Australia had agreed to hold a workshop in Canberra on 9 to 11 September 1996.

Mr Astorga pointed out to members that the basic role of the Group would be to facilitate and promote issues linking minerals and energy exploration and development, and emphasised that the Expert Group would liaise with relevant organisations within the region, including PECC/MEF and take into account the activities of the other Expert Group to ensure there is no duplication of effort. In this regard, a number of projects were being developed with PECC/MEF, including impediments to further processing in the region.

Mr Astorga explained that the workshop to be held in Australia would develop and design a comprehensive data base covering mining and energy resources related opportunities, other related data and venture capital financing sources. The objective of the data base would be to provide member economies with an up to date assessment of their mining and energy resource sectors to facilitate...
strategic planning, definition of new trends, and investment in resource development and infrastructure.

Members welcomed Mr Astorga's report and congratulated the Expert Group for moving so quickly to develop its Terms of Reference and work program. Some members noted the need for the Group to liaise with the business sector on priorities and activities and the need to concentrate on areas where strong linkages between minerals and energy exists. Members noted the linkages between minerals and energy and emphasised the need to coordinate with other APEC bodies, particularly the CTI, and with the existing Expert Groups, particularly the Energy Data Expert Group, to ensure there was no duplication of effort.

Members then noted there was a need to ensure that the work of each Expert Group contributed to the further development of the APEC Osaka Action Agenda. Members agreed that each Expert Group should examine its terms of reference and if necessary revise them, to ensure there were no areas of duplication. In a discussion relating to all Expert Groups, it was agreed that the EWG Secretariat would examine how the outcomes from the Expert Groups could be articulated so that they are strategically linked to the Osaka Action Agenda, and provide direction for the future. The Secretariat is to report out of session to members.

**Action Arising/Next Steps**

- The EWG approved the Terms of Reference of the Minerals and Energy Exploration and Development Expert Group.

- Australia would hold a Workshop in Canberra in September 1996 to develop a data base covering mining and energy resources related opportunities.

- The EWG Secretariat to examine how the outcomes of all of the Expert Groups could be articulated so that they are strategically linked to the Osaka Action Agenda, and provide direction for the future, and will report out of session to members.

6. **EWG PROJECTS FOR 1997**

Members noted that 18 project proposals had been submitted for the consideration of the EWG. Of these, 4 were self funded projects that did not require APEC central funding. The Chairman observed that a number of the EWG's key activities arising from the Group's Action Program were also self funded.

Following discussion of the projects members agreed that 9 projects be submitted to the APEC Secretariat in priority order as the Group's top priority projects.
Members noted that the EWG Secretariat would prepare the cover sheet to indicate how the selected projects will contribute to achieving the Working Groups goals.

It was noted that those project proposals proceeding need to be submitted to the APEC Secretariat by 30 June 1996.

The 9 highest priority projects selected for APEC central funding of US$352,000 are listed in priority order below:

Table 1 (top priority projects)

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Cost $</th>
<th>Central Fund $</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Benchmark System Development and Implementation</td>
<td>80,000</td>
<td>40,000</td>
<td>1</td>
</tr>
<tr>
<td>Establishing and Operating the Energy Data Base</td>
<td>20,000</td>
<td>20,000</td>
<td>2</td>
</tr>
<tr>
<td>Joint Regional Action on Appliance Efficiency Improvements and Harmonisation of Standards</td>
<td>400,000</td>
<td>49,000</td>
<td>3</td>
</tr>
<tr>
<td>APEC Clean Fossil Fuels Technology Technical Seminar</td>
<td>48,000</td>
<td>33,000</td>
<td>4</td>
</tr>
<tr>
<td>Analysis of renewable energy retrofit options to offset existing diesel mini-grids</td>
<td>100,000</td>
<td>50,000</td>
<td>5</td>
</tr>
<tr>
<td>Phase II Pre-Feasibility/Preliminary Engineering Study; APEC Joint Multilateral Demonstration Project for Recovery and Utilisation of Coal Mine Gas</td>
<td>175,000</td>
<td>50,000</td>
<td>6</td>
</tr>
<tr>
<td>Comprehensive database on mining related opportunities and regional legal framework</td>
<td>193,360</td>
<td>20,000</td>
<td>7</td>
</tr>
<tr>
<td>Database on Cogeneration and Waste Heat Recovery Projects</td>
<td>80,000</td>
<td>40,000</td>
<td>8</td>
</tr>
<tr>
<td>APEC End Use Energy Efficiency (EUEE) Certification Course and Training Institute</td>
<td>200,000</td>
<td>50,000</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total Costs</strong></td>
<td><strong>1,296,360</strong></td>
<td><strong>352,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
Important projects, but of a lower priority, listed in Table 2 are also to proceed if APEC Central Funds are available.

Table 2

<table>
<thead>
<tr>
<th>Project</th>
<th>Total Cost $</th>
<th>Central Fund $</th>
<th>Priority</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lessons learnt from renewable energy initiatives undertaken in APEC member economies</td>
<td>69,000</td>
<td>50,000</td>
<td>10</td>
</tr>
<tr>
<td>Benefits of Retrofitting Power Plants in the APEC Economies</td>
<td>98,000</td>
<td>49,000</td>
<td>11</td>
</tr>
<tr>
<td>Load Research Capability Building and Advanced Data Collection Schemes for Load Research and other Customer Data</td>
<td>80,000</td>
<td>40,000</td>
<td>12</td>
</tr>
<tr>
<td>Identify opportunities for renewable energy within a grid connected system</td>
<td>100,000</td>
<td>50,000</td>
<td>13</td>
</tr>
<tr>
<td>Rural energy supply analysis</td>
<td>49,000</td>
<td>30,000</td>
<td>14</td>
</tr>
<tr>
<td>Total Costs</td>
<td>396,000</td>
<td>219,000</td>
<td></td>
</tr>
</tbody>
</table>

EWG projects which are entirely self funded are listed in Table 3.

Table 3

<table>
<thead>
<tr>
<th>Project</th>
<th>Self Funding Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying/Designing Funding Schemes for Demand-Side Management</td>
<td>80,000</td>
</tr>
<tr>
<td>Workshop on comprehensive database on mining and energy exploration resource related opportunities, and other related data</td>
<td>18,000</td>
</tr>
<tr>
<td>Synthesised DSM/Renewable Strategies for Distributed Utility Systems</td>
<td>80,000</td>
</tr>
<tr>
<td>Demand Side Management Manual</td>
<td>TBA</td>
</tr>
<tr>
<td>Asia Pacific Energy Research Centre</td>
<td>5,400,000 (1)</td>
</tr>
</tbody>
</table>
Development of Guidance Framework for Regional Power Sector Infrastructure

(1) Annual Budget
(2) Total Expenditure to Date in 1995 and 1996

Action Arising/Next Steps

- Where relevant the Expert Group Chairmen will finalise documents associated with 1997 projects in the new format and forward these to the Energy Working Group Secretariat by no later than 14 June 1995.

- The cover sheet to indicate how the projects will contribute to achieving the Working Group’s goals will be prepared by the EWG Secretariat based on input provided by the Expert Group Chairmen.

- The Energy Working Group Secretariat will forward the complete list of projects, with the coversheet, to the APEC Secretariat by 30 June 1996, with priority ranking as agreed at the meeting.

7. PROPOSAL TO CONSIDER ISSUES ASSOCIATED WITH MANAGING NUCLEAR SAFETY

The Republic of Korea presented its paper on “Safety in the Nuclear Industry”. Members agreed that nuclear energy is an important source of energy and that nuclear safety is important to the region. However, some concerns were expressed as to whether the paper was sufficiently focused and what value added the EWG might provide given the other international fora specifically dealing with this issue. It was agreed that interested economies should give further thought to this issue and to specific matters that should be undertaken within the EWG.

Members agreed that a small group of interested member economies, coordinated by the Republic of Korea, should be formed to investigate the issues raised. Canada, the Philippines, the People’s Republic of China, Japan and the USA indicated an interest in participating in such a group.

Action Arising/Next Steps

- The Republic of Korea to inform the EWG Secretariat by 10 June of member economies participating in the group.

- The group to prepare a paper for consideration at EWG 13 containing specific proposals and activities where the EWG could play a valuable role.
8. "GUEST" PARTICIPATION IN THE EWG BY NON MEMBER ECONOMIES

The Co-Chairman outlined developments that had occurred since additional guidelines in relation to guest participation were agreed by APEC Ministers at their meeting in Osaka in November 1995, referring in particular to the applications for guest participation received from the Russian Federation, Mongolia and India.

The Co-Chairman noted that these applications were being held in abeyance as it had not as yet been possible to determine whether consensus existed in support of each of the three applications. In addition, comments made by members had pointed to the need for more discussion on guest participation prior to the group taking decisions concerning individual applications for guest participation.

The EWG Secretariat presented a paper setting out possible procedures that could be followed by members in considering applications by non-members for guest participation in EWG activities, noting the helpful additional suggestions made by New Zealand that had been previously circulated to members.

Members supported the procedure developed by the EWG Secretariat, and agreed with New Zealand’s suggestion that the EWG Secretariat provide applicants with information on the Group’s activities and request the applicant to indicate the areas of interest and the expertise they would be able to contribute. It was considered important the applicants indicate which activities (eg which Expert Groups) they are interested in and can contribute to.

Members felt that an open approach is warranted once the issues of interest and contribution are settled, but the EWG ought to be conscious of overall numbers and that certain sessions of the EWG may need to be closed to guests.

It was agreed that the EWG Secretariat would revise its proposed procedures in light of the comments made by members and then request members to apply the procedures when considering the applications received from the Russian Federation, Mongolia and India. The procedures would be completed in time to enable any successful applicant to participate in the Group’s next meeting.

The Co-Chairman indicated that members would be asked to make two decisions concerning the applications received: one for the 1996 calendar year and one for the 1997 calendar year.

In response to matters raised by Canada concerning the actual meeting procedures that would be followed when guests were present, the Co-Chairman undertook to consult with the APEC and EWG Secretariats and advise members out of session.
Action Arising/Next Steps

- The EWG Secretariat to revise the procedures to incorporate the suggestions made by members and to circulate them to members by 28 May.

- Members to apply the procedures in considering the applications received from the Russian Federation, Mongolia and India in time to enable any successful applicant to participate at EWG 13.

- Members to make two decisions concerning the applications received for both the 1996 and 1997 calendar years.

- The Co-Chairman to consult with the APEC and EWG Secretariats and advise members on meeting procedures to be followed when guests are present.

9. Secretariat Reports.

Members noted the presentations by the representatives from the Energy Working Group Secretariat and the APEC Secretariat on operational arrangements relevant to Energy Working Group’s activities.

Expert Groups agreed to consider and revise where necessary their Terms of Reference and submit them to EWG 13. The EWG Secretariat asked that the members provide contributions for the next edition of the EWG newsletter.

The APEC Secretariat provided information and documents on a large range of issues relevant to the EWG. Members noted the key developments in APEC in the last six months and the impact these developments will have on the EWG.

Action Arising/Next Steps

- Members to advise the EWG Secretariat by 14 June of contributions to the next edition of the EWG newsletter.

- The Chairs of Expert Groups to consider and revise where necessary their Terms of Reference, in consultation with each other, and submit them to EWG 13.
10. OTHER BUSINESS

Canada informed members of particular difficulties that had been experienced concerning clearance of publications. After discussion with members and the Chairs of Expert Groups present at the meeting, members reconfirmed the need to ensure that members were fully consulted and consensus achieved in relation to material published by the Group.

The Co-Chairman reminded members of the need to be vigilant in adhering to APEC language and protocols in all written and oral communication.

11. DATE AND VENUE FOR NEXT MEETINGS

Members noted that the next meeting of the Energy Working Group (EWG 13) will be held in the Philippines at the Puerto Azul Resort, near Manila on 14-17 October 1996. Registration will be on 14 October. The meeting will take place on 15-16 October, with site visits on 17 October.

Chile’s offer to host EWG 14 was warmly welcomed and its intention to host a symposium on rational energy consumption noted. Chile was requested to advise the EWG Secretariat of tentative dates for the meeting as soon as practicable to assist in the scheduling of EWG activities. Details of the venue and timing for EWG 14 will be advised at EWG 13. The Co-Chairman asked members to give consideration to hosting EWG 15 in the second half of 1997. A decision on the host for EWG 15 will be taken at EWG 13.

12. SUMMARY RECORD OF TWELFTH MEETING

This Summary Record of the meeting was agreed.

13. REPORT TO APEC SENIOR OFFICIALS' MEETING

The report to Senior Officials was agreed.

Members recorded their appreciation for the work of the two Co-Chairman in making the meeting such as success, and thanked Hong Kong for its hospitality and the excellent arrangements for the meeting.