



**Asia-Pacific
Economic Cooperation**

**Independent Assessment of the
ECOTECH Implementation of
APEC Working Groups and SOM Taskforces:
Energy Working Group**

**Report to the APEC SOM Steering Committee
on Economic and Technical Cooperation**

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Prepared by:
Dr David Crossley
Managing Director
Energy Futures Australia Pty Ltd
11 Binya Close
Hornsby Heights NSW 2077
Australia
Phone: + 61 2 9477 7885
Mobile: + 61 411 467 982
Fax: + 61 2 9477 7503
Email: efa@efa.com.au
Website: <http://www.efa.com.au>

Produced for
Asia Pacific Economic Cooperation Secretariat
35 Heng Mui Keng Terrace Singapore 119616
Tel: (65) 68919 600 Fax: (65) 68919 690
Email: info@apec.org Website: www.apec.org

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EXECUTIVE SUMMARY

This independent assessment is primarily a process evaluation, ie it focusses on the effectiveness of the methods of operation of the APEC Energy Working Group (EWG). Another study with a different focus would be required to assess the relevance and importance to APEC economies of the outcomes of the large number of individual activities undertaken by the EWG.

A range of activities within the APEC ECOTECH agenda are carried out under the auspices of the Energy Working Group. These activities can be classified into seven broad categories, comprising:

- providing input and support for meetings of APEC Energy Ministers;
- holding regular meetings of EWG members;
- holding meetings of EWG subfora and undertaking activities sponsored by EWG subfora;
- carrying out activities undertaken by the Asia Pacific Energy Research Centre (APERC);
- implementing projects approved and funded through the APEC project process;
- supporting activities undertaken by the APEC Energy Business Network (EBN);
- carrying out ongoing ECOTECH activities.

This report shows that EWG activities are closely linked to strategic priorities and direction set by a robust process using the standard APEC formula in which economy representatives propose new initiatives and priorities, these are discussed and agreed between economies and are then formulated into Ministers' and Economy Leaders' Declarations and directions.

While no robust performance measures are in place to assess the effectiveness of the EWG's activities, the generally high levels of scores in a questionnaire measuring APEC economies' levels of satisfaction with the EWG's work, suggest that EWG activities have generally been quite effective.

In concluding this independent assessment of the APEC Energy Working Group, it is recommended that the EWG should continue and should not be terminated or merged with any other APEC forum and that the EWG's Terms of Reference should remain as currently formulated.

RECOMMENDATIONS

SCE Recommendations

Recommendation SCE1 (page 5). As a matter of urgency, the SCE should initiate a project to carry out a review of the performance measures for ECOTECH activities currently used in APEC economies with the aim of identifying suitable principles for measuring the performance of APEC fora. SCE should then establish and publish guidelines for use by individual APEC fora in developing specific performance measures appropriate to their activities.

Recommendation SCE2 (page 8). To support the development of longer-term strategic plans by APEC fora, the SCE should provide longer-term guidance on priorities, rather than an announcement of annual priorities at the SCE February meeting.

Recommendation SCE3 (page 28). To remove a major barrier to collaboration with other international organisations, the SCE should recommend that the Senior Officers' Meeting eliminate or streamline the lengthy approval processes involved in APEC fora members attending meetings of other international organisations, and in APEC fora jointly sponsoring activities with other international organisations.

Recommendation SCE4 (page 32). The SCE should consider allowing exemptions from its recommendation that a two-year fixed term arrangement be put in place for all lead shepherds when it is clear that significant benefits in relation to the stability and reliability of support would result from one economy carrying out the Lead Shepherd and Secretariat role for an APEC forum over a lengthy period.

BMC Recommendations

Recommendation BMC1 (page 22). To provide greater transparency and opportunities for feedback, the BMC should consider whether the weightings of various components of project scores assigned by the Project Management Unit and BMC could be clearly stated at the start of each project proposal cycle and whether more time could be allowed for revision of project proposals between the initial evaluation by the PMU and the final decision whether to fund a project.

Recommendation BMC2 (page 22). The BMC should consider whether it would be possible for APEC fora to have a larger role in deciding which projects are funded each year.

Recommendation BMC3 (page 22). During its deliberations about focusing the project approval process on more strategic and longer-term projects, the BMC should consider developing more appropriate funding arrangements for APEC fora activities that are ongoing rather than discrete time-limited projects.

EBN Recommendation

Recommendation EBN1 (page 24). To attract larger numbers of industry representatives, the Energy Business Network should consider hosting more events focussed on information sharing, discussion of current issues and decision making.

EWG Recommendations

Recommendation EWG1 (page 5). The EWG should develop robust performance measures to assess the effectiveness and impact of its work. These performance measures should be compatible with any relevant guidelines published by the SCE.

Recommendation EWG2 (page 8). To ensure that the EWG proactively responds to both directives and instructions from APEC Leaders and Ministers and to new challenges facing the energy sector in the APEC region, the EWG Secretariat should work with APEC economies and EWG subfora to develop a new format and content for the EWG Work Plan that provides a specific, proactive and forward looking schedule of work to be carried out over rolling periods of a minimum of two years into the future.

Recommendation EWG3 (page 10). The EWG Secretariat should consult with APEC economies to determine whether it is necessary to establish a mechanism, additional to Energy Ministers' meetings, that will enable the rapid formulation of APEC-wide policy responses to urgent issues that arise in the APEC region energy sector.

Recommendation EWG4 (page 10). The EWG Secretariat should consult with APEC economies about the advisability of establishing a schedule of economies responsible for hosting Energy Ministers' meetings for up to 10 years in advance.

Recommendation EWG5 (page 12). The EWG Secretariat should consider alternative ways to organise the five-day EWG meeting period so as to maximise the time available for information sharing, for discussion and debate about relevant issues, and for economy representatives to work together making decisions to achieve specific results.

Recommendation EWG6 (page 16). The EWG Secretariat should consult with the Expert Group and Task Force Chairs to develop and propose to the next EWG meeting a mechanism to achieve closer interaction between the EWG and the activities of those EWG subfora with broadly-specified mandates, specifically EGCFE, EGEE&C and EGNRET.

Recommendation EWG7 (page 18). The EWG Secretariat should work with EGEDA and APERC to establish a mechanism whereby APEC economy representatives can provide increased input and oversight of the subject selection process for APERC research projects.

Recommendation EWG8 (page 18). The EWG should encourage the management of APERC to take action to retain locally appointed skilled research staff.

Recommendation EWG9 (page 18). APEC economies should work with the management of APERC to ensure that suitable skilled research staff are available for secondment to APERC.

Recommendation EWG10 (page 22). The EWG Secretariat should continue its efforts to improve the dissemination of the results of EWG projects.

Recommendation EWG11 (page 24). The EWG Secretariat should provide more specific information to the membership of the Energy Business Network about the lead times required in preparing material for tabling at Energy Ministers' meetings and about the role of the EBN at Energy Ministers' meetings.

Recommendation EWG12 (page 26). The EWG Secretariat should initiate a major review of the APEC Energy Security Initiative, particularly to determine whether the current structure for handling long-term energy security issues is still relevant and appropriate.

Recommendation EWG13 (page 28). The EWG Secretariat should consider allocating additional resources to assist in establishing collaborative activities between the EWG and international energy organisations and between the EWG and other APEC fora.

Recommendation EWG14 (page 29). The EWG Secretariat should consider whether modifications are required to the EWG's process for determining its strategic direction and priorities, particularly to enable the EWG to respond to the impact of the global financial crisis on the energy sector in the APEC region.

Recommendation EWG15 (page 31). The EWG Secretariat should increase its efforts to ensure that gender mainstreaming is achieved in all EWG activities.

Recommendation EWG16 (page 32). The EWG Secretariat, in conjunction with the APEC Secretariat and the APEC economies, should carry out a review to determine whether all the current EWG Secretariat functions should be carried out by Australia, or whether some functions could be transferred to other bodies, such as to the EWG Program Director in the APEC Secretariat, or to other APEC economies.

Recommendation EWG17 (page 33). In concluding this independent assessment of the APEC Energy Working Group, it is recommended that the EWG should continue and should not be terminated or merged with any other APEC forum and that the EWG's Terms of Reference should remain as currently formulated.

1. INTRODUCTION

1.1 Asia-Pacific Economic Cooperation (APEC)

Asia-Pacific Economic Cooperation (APEC) was established in 1989 to further enhance economic growth and prosperity for the region and to strengthen the Asia-Pacific community. APEC is the premier forum for facilitating economic growth, cooperation, trade and investment in the Asia-Pacific region.

APEC has 21 members - referred to as “member economies” - which account for approximately 40% of the world's population, approximately 56% of world GDP and about 48% of world trade. APEC economies undertake economic and technical cooperation in order to attain sustainable growth and equitable development in the Asia-Pacific region, while reducing economic disparities among APEC economies and improving economic and social well being.

1.2 APEC Fora

APEC's working level activities and projects are guided by APEC Senior Officials from the 21 APEC Member Economies through four high level committees:

- Committee on Trade and Investment (CTI);
- Senior Officials' Meeting Committee on Economic and Technical Cooperation (SCE);
- Economic Committee (EC); and
- Budget and Management Committee (BMC).

The activities and projects supervised by these four high level committees are carried out by Sub-Committees, Working Groups, Experts' Groups and Task Forces.

1.3 APEC Energy Working Group (EWG)

There are currently 11 APEC Working Groups. Working Groups carry out APEC's work in specific sectors as directed by APEC Economic Leaders, APEC Ministers, APEC Sectoral Ministers and Senior Officials.

The APEC Energy Working Group (EWG) was established in 1990 to develop a program of energy cooperation in the APEC region. All 21 APEC economies are EWG members. The EWG has a well established structure (see Figure 1, page 2) comprising representatives from APEC economy governments, research organisations and the business community, including four Expert Groups, a Task Force on Biofuels¹, the Asia Pacific Energy Research Centre (APEREC) and the Energy Business Network (EBN). The EWG Secretariat is responsible for providing administrative, policy and logistical advice and support to EWG members and host economies of EWG meetings and works closely with the EWG Program Director in the APEC Secretariat. EWG meetings are chaired by a Lead Shepherd, with the assistance of a Co-Chair from the economy hosting the meeting. Australia has served as EWG Secretariat and has also provided the Lead Shepherd since the inception of the EWG. EWG Expert Groups, Task Force and the EBN are chaired by representatives from a range of other APEC economies.

¹ A Task Force on Energy Efficiency and Renewable Energy Financing was established in 2004 but this Task Force was disbanded at the EWG35 meeting in March 2008.

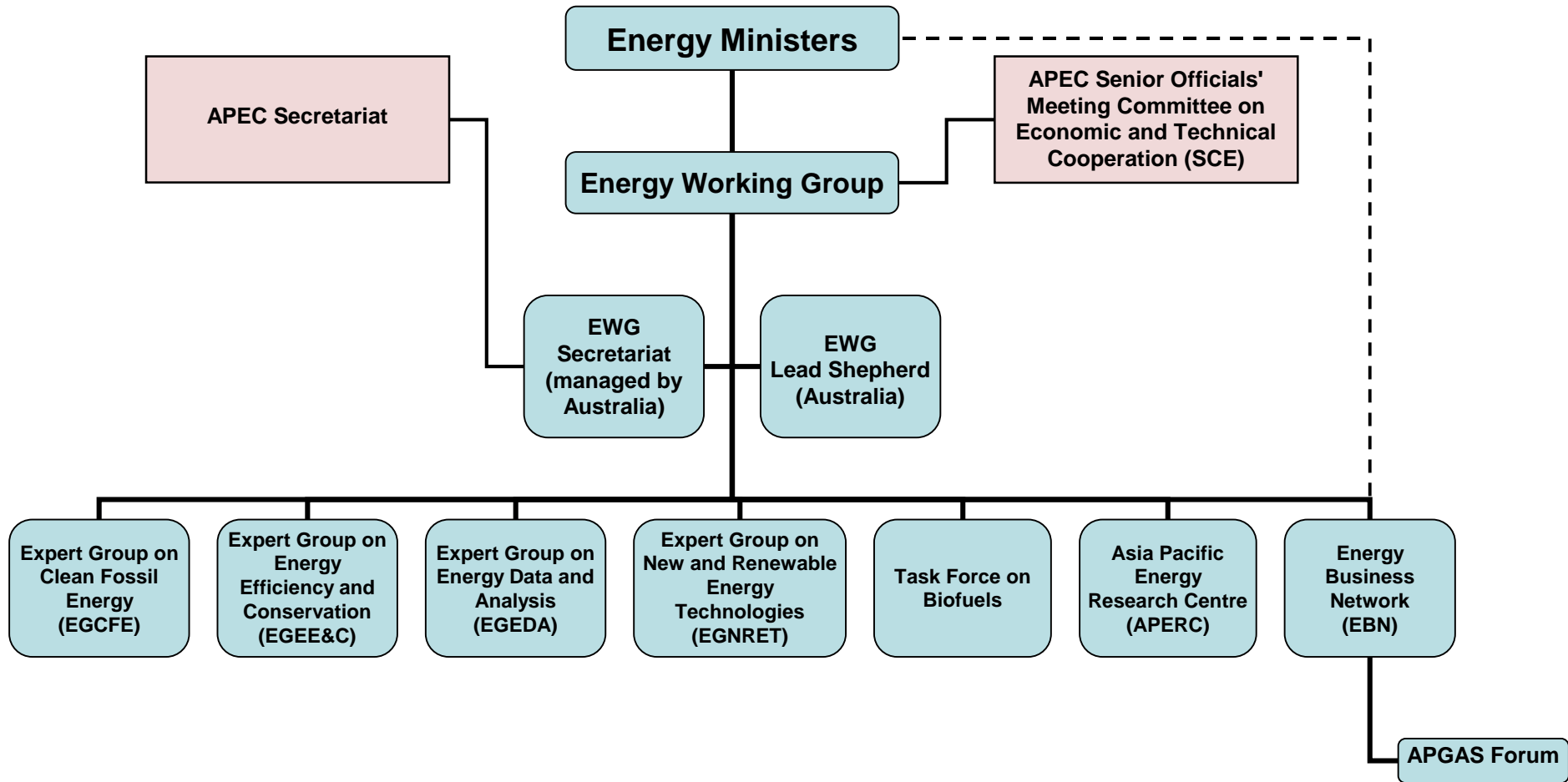


Figure 1. Structure of the APEC Energy Working Group

1.4 APEC's ECOTECH Agenda

Activities undertaken by the Energy Working Group are carried out in the context of APEC's Economic and Technical Cooperation (ECOTECH) agenda which was originally outlined in the 1995 Osaka Action Agenda. ECOTECH refers to the schedule of programs and activities within APEC designed to build capacity and skills in APEC member economies to enable them to participate more fully in the regional economy and the trade and investment liberalisation process. The aim of ECOTECH is to attain sustainable growth and equitable development in the Asia-Pacific region, while reducing economic disparities among APEC economies and improving economic and social well-being². The ultimate goal of these capacity building efforts is to assist all APEC members, particularly developing economies, to reach the APEC Bogor Goals of free and open trade and investment in the Asia-Pacific region.

The APEC Senior Officials Meeting Steering Committee on Economic and Technical Cooperation (SCE) is responsible for coordinating and managing APEC's ECOTECH agenda. In September 2006, the SCE endorsed an updated list of ECOTECH priorities as follows³:

- developing human capital;
- developing stable and efficient markets through structural reform;
- strengthening economic infrastructure;
- facilitating technology flows and harnessing technologies for the future;
- safeguarding the quality of life through environmentally sound growth;
- developing and strengthening the dynamism of small and medium enterprises (SMEs);
- integration into the global economy;
- human security and counter-terrorism capacity building;
- promoting the development of knowledge-based economies; and
- addressing social dimension of globalization.

During 2008, SCE gave priority to reforming and strengthening its policy role to ensure it is able to provide effective and relevant policy guidance and recommendations to Ministers, to the APEC Senior Officers Meeting, and to all APEC fora. The SCE Chair prepared a proposal on a strategic approach to ECOTECH with focus on the following three elements⁴:

1. APEC's ECOTECH activities should directly address the capacity-building needs of member economies and be guided by a top-down, goal-oriented framework;
2. APEC should explore the feasibility of multi-year ECOTECH projects and adopt a more strategic, longer-term approach toward capacity-building; and
3. APEC should enhance and leverage on APEC's partnerships with other multilateral organisations as well as with the private sector and the APEC Business Advisory Council (ABAC).

² SOM Committee on ECOTECH (2008). *2008 Senior Officials' Report on Economic and Technical Cooperation*. Singapore, APEC Secretariat.

³ APEC website accessed 12 December 2008:

http://www.apec.org/apec/apec_groups/som_committee_on_economic.html

⁴ SOM Committee on ECOTECH (2008). *Op. cit.*

2. THE INDEPENDENT ASSESSMENT

2.1 Background

Independent assessments of APEC fora commenced in 2004 with the support of APEC Ministers who encouraged fora to undertake reviews to ensure that they are responsive to APEC's current work priorities and contribute to the achievement of the Bogor goals. In 2007, Ministers recognised the importance of the ongoing program of independent assessments to ensure APEC fora are strategic and effective. To date, independent assessments of six APEC fora have been completed.

In April 2008, the APEC Budget and Management Committee approved a project proposal from the SCE to undertake independent assessments, during 2008, of a further three APEC fora, including the Energy Working Group. The APEC Secretariat engaged the consultancy company Energy Futures Australia Pty Ltd to carry out the independent assessment of the EWG. The assessment was undertaken by Dr David Crossley, Managing Director of Energy Futures Australia.

2.2 Methodology

Three methods were used in the independent assessment:

- participant observation at three EWG meetings and several subfora meetings;
- a questionnaire survey of representatives of APEC member economies who participate in EWG activities;
- a separate review of EWG projects.

Further details about the methodology are provided in Appendix A (page 34).

A copy of the questionnaire used in the independent assessment is provided in Appendix B (page 36). Following several reminders sent to economy representatives by email, 10 of the 21 APEC economies returned completed questionnaires.

2.3 Work Plan

The Request for Proposals for the independent assessment of the EWG identified 14 tasks to be carried out (see Appendix C, page 47). To provide a manageable structure for carrying out these tasks, and to ensure that all the tasks were completed, the assessment was carried out through three streams of work:

- review of the effectiveness and impact of EWG activities;
- analysis of collaboration and interaction between the EWG and other bodies; and
- identification of strategic priorities and future direction for the EWG.

Because of the limited budget and the restriction of this report to 30 pages, the independent assessment is primarily a process evaluation, ie it focusses on the effectiveness of the methods of operation of the EWG. Another study with a different focus would be required to assess the relevance and importance to APEC economies of the outcomes of the large number of individual activities undertaken by the EWG⁵.

⁵ Dr Crossley has previously completed such a study of EWG projects.

2.4 Measuring EWG's Effectiveness and Impact

Measuring the effectiveness and impact of EWG activities is not an easy task. As one APEC economy noted in their response to the questionnaire:

"[There are] no benchmarks available for evaluating relative levels of success. ...How does one measure the impacts of ongoing cooperative efforts to promote regional APEC goals such as freer trade and investment [and] cooperation in specific energy technologies such as biofuels?"

Probably the most important conclusion from this independent assessment is that the Energy Working Group currently has no methods in place to objectively, robustly and practically measure the effectiveness and impact of its work. Without robust performance measures, it is very difficult for EWG members, or third parties, to carry out a meaningful assessment of EWG's activities.

While this report is focussed on the Energy Working Group, it appears that other APEC fora may also not have performance measures in place. The development of performance measures across all APEC fora is an important issue that should be addressed by the APEC Senior Officials' Meeting Committee on Economic and Technical Cooperation (SCE). This is a substantial task to which the SCE should devote significant resources. Initially, the SCE could carry out a review of the performance measures for ECOTECH activities currently used in APEC economies with the aim of identifying suitable principles for measuring the performance of APEC fora. The SCE could then establish and publish guidelines for use by individual APEC fora in developing specific performance measures appropriate to their activities.

Recommendation SCE1. *As a matter of urgency, the SCE should initiate a project to carry out a review of the performance measures for ECOTECH activities currently used in APEC economies with the aim of identifying suitable principles for measuring the performance of APEC fora. SCE should then establish and publish guidelines for use by individual APEC fora in developing specific performance measures appropriate to their activities.*

Recommendation EWG1. *The EWG should develop robust performance measures to assess the effectiveness and impact of its work. These performance measures should be compatible with any relevant guidelines published by the SCE.*

2.5 Preliminary Performance Measures

Developing substantive performance measures for EWG activities is beyond the scope of this independent assessment. However, it was possible to use some available data to construct two preliminary measures of the effectiveness and impact of the EWG's work.

Two types of data were used to construct the two preliminary performance measures:

- responses from the questionnaire in which economy representatives were asked to provide scores on a scale from 1 to 5 for various aspects of EWG's work; and
- information from attendance lists about participation by representatives from APEC economies in various types of EWG activities.

The questionnaire responses comprised subjective assessments by individual economies of the effectiveness of various aspects of EWG's work. Means of the scores from the economies that responded were calculated to provide an overall subjective performance measure for each aspect. However, because only 10 economies completed and returned the questionnaire, the results of this performance measure cannot be regarded as representative of all 21 APEC economies.

The data from attendance lists⁶ were used to construct a preliminary performance measure to assess the impact of EWG activities on individual APEC economies. Attendances⁷ by men and women from individual APEC economies were calculated for various types of EWG-related events and project activities held over the past three years. However, participation in EWG activities is, at best, only a proxy measure of the actual impact of the EWG's work on individual economies and this preliminary performance measure should be treated with caution.

3. OPERATION OF THE EWG

3.1 Overview

The APEC Energy Working Group is a voluntary, regional-based forum that enables APEC member economies to facilitate energy trade and investment and strengthen the region's energy security so as to contribute to the economic growth, social wellbeing and sustainability of the APEC community. The EWG seeks to maximise the energy sector's contribution to the region's economic and social well being, while mitigating the environmental effects of energy supply and use.

The EWG's activities accord with the major statements of APEC policies and priorities, including the Seoul and Bogor Declarations, the Osaka Action Agenda and the Manila Action Plan. The EWG also responds to APEC Leaders' Declarations, APEC Ministerial Statements and directions from APEC Energy Ministers and ensures that its projects adhere to APEC priorities. APEC Energy Ministers normally meet every two years and provide the EWG with specific policy guidance for future activities. The EWG also receives guidance from the APEC Senior Officials' Meeting (SOM).

The overall framework for the operation of the EWG is established by the EWG's Terms of Reference which are revised from time to time. The most recent version (see Appendix D, page 48) was endorsed in February 2008. This document comprises a succinct statement of the policy and administrative principles under which the EWG operates.

⁶ Economy representatives were also asked to provide this information in the questionnaire. However, because only 10 economies returned completed questionnaires, lists of attendees from EWG, Expert Group, Task Force, APERC and EBN activities were used instead, as a more complete data source. Attendance lists and attendance data were provided by the EWG Secretariat, by the Expert Group and Task Force Chairs, and by APERC. Impact performance measures could not be constructed for activities where attendance lists or attendance data were not available.

⁷ The total number of attendances was calculated for each type of activity over the last three years. Multiple attendances by the same person were included, eg if Person A attended five separate events over the three year period, this was counted as five attendances, rather than one.

The EWG Secretariat also develops an annual Work Plan which is updated for each EWG meeting. The Work Plan is a fairly lengthy document that includes:

- a compilation of recent directives from APEC Leaders and instructions from Energy Ministers, together with summaries of EWG activities implemented in response to these directives and instructions;
- a statement about activities undertaken by APERC;
- a statement about activities undertaken by the Energy Business Network (EBN);
- a statement about the EWG's engagement with international energy organisations and other fora.

3.2 Activities Undertaken by the EWG

Activities carried out under the auspices of the Energy Working Group are based on the principles of mutual respect and equality, mutual benefit and assistance, constructive and genuine partnership and consensus building. EWG activities aim to promote the three E's (economic growth, energy security and the environment) and more broadly the contribution of energy to the economic, social and environmental enhancement of the APEC community.

A range of activities within the APEC ECOTECH agenda are carried out under the auspices of the Energy Working Group. These activities can be classified into seven broad categories, comprising:

- providing input and support for meetings of APEC Energy Ministers;
- holding regular meetings of EWG members;
- holding meetings of EWG subfora and undertaking activities sponsored by EWG subfora;
- carrying out activities undertaken by the Asia Pacific Energy Research Centre (APERC);
- implementing projects approved and funded through the APEC project process;
- supporting activities undertaken by the APEC Energy Business Network (EBN);
- carrying out ongoing ECOTECH activities.

3.3 Impact

In the questionnaire, economy representatives were asked to provide an assessment, on a scale of 1 to 5, of the level of impact that EWG's activities have had in their economies during the last three years. The average score across the 10 economies that returned completed questionnaires was **3.3**. This score shows that economy representatives were fairly neutral about the level of impact that EWG's activities achieved in their economies. This neutral result may have occurred because the focus of EWG activities has been on facilitating trade and investment in the energy sector across the whole of APEC, ie a collective good, rather than providing specific benefits to any particular APEC economy.

3.4 Assessment

This section of the report makes an assessment of the overall operation of the EWG. Later sections provide specific assessments of individual categories of EWG activities.

The EWG Terms of Reference provide an excellent overall framework for the operation of the EWG. This framework is intended to ensure that EWG activities are focussed on implementing directives from APEC Leaders and instructions from Energy Ministers.

However, the EWG Work Plan does not build on the Terms of Reference to provide a proactive and forward looking schedule of work to be carried out by the EWG over the subsequent 12 months. Rather, the Work Plan functions more as a listing of EWG activities that already have been, or are being, implemented and it also lists those projects funded for implementation in the next calendar year.

The APEC Budget and Management Committee is intending to encourage APEC fora to develop longer-term strategic plans for a minimum of two years into the future. This would require longer-term guidance on priorities from the SCE, rather than an announcement of annual priorities at the SCE February meeting. The EWG would then be able to develop a longer term Work Plan.

3.5 Recommendation

Recommendation SCE2. To support the development of longer-term strategic plans by APEC fora, the SCE should provide longer-term guidance on priorities, rather than an announcement of annual priorities at the SCE February meeting.

Recommendation EWG2. To ensure that the EWG proactively responds to both directives and instructions from APEC Leaders and Ministers and to new challenges facing the energy sector in the APEC region, the EWG Secretariat should work with APEC economies and EWG subfora to develop a new format and content for the EWG Work Plan that provides a specific, proactive and forward looking schedule of work to be carried out over rolling periods of a minimum of two years into the future.

4. ENERGY MINISTERS' MEETINGS

4.1 Overview

Energy Ministers from APEC economies meet approximately every two years and eight meetings have been held since the inception of the EWG in 1990. During the past three years, there has been one Energy Ministers' meeting – the eighth meeting was held in Darwin, Australia in May 2007.

APEC Energy Ministers' meetings provide guidance for the work of the EWG in implementing measures consistent with the goals established by APEC Economic Leaders. The Ministers' meetings consider the progress of EWG initiatives and provide directions regarding the EWG's future work program that are consistent with the APEC Leaders' priorities. Each Ministers' meeting produces a Declaration that summarises the Ministers' conclusions and directions to the EWG.

Energy Minister’s meetings are the primary mechanism whereby specific policy guidance for future activities is provided to the EWG. However, this guidance is not simply provided by the Ministers at the meeting. Rather there is a lengthy process lasting up to a year before the Minister’s meeting during which draft directions from the Ministers and the draft text of the Ministers’ Declaration are discussed and agreed by economy representatives.

Other events are held in association with Energy Ministers’ meetings, particularly a Business Forum to which industry representatives from all APEC economies are invited. The Forum provides an opportunity for business representative to present their views to the Energy Ministers, though these views are also canvassed well in advance.

4.2 Participation

The following table has been developed from the attendance list for the eighth Energy Ministers’ meeting supplied by the EWG Secretariat. This meeting, held in May 2007, was the only Energy Ministers’ meeting held over the last three years.

Attendances from APEC Economies at Energy Ministers’ Meetings Over the Last Three Years								
Economy Representatives			Industry Representatives			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total
161	59	220	14	6	20	13	4	17
Multiple attendances by the same person are included, eg if Person A attended five separate events over the three year period, this is counted as five attendances, rather than one.								

A large number of people from all 21 APEC economies attended the Energy Ministers’ meeting, including 15 Ministers. This indicates that most APEC economies regard Energy Ministers’ meetings as important. Very few industry representatives attended the Ministers’ meeting. However, the accompanying Business Forum was attended by a much larger number of industry representatives (see Section 9, page 22).

4.3 Assessment

There are both advantages and disadvantages in the process whereby Ministers’ directions to the EWG and the text of the Energy Ministers’ Declaration are agreed by economy representatives in advance of the Energy Ministers’ meeting.

The main advantage is that the lengthy process of consensus-seeking and agreement enables all APEC economies that wish to do so, to put forward their views about the issues that should be addressed by the Energy Minister’s meeting and how the Ministers’ directions and Declaration should deal with these issues.

The main disadvantage is that significant issues that arise shortly before an Energy Minister’s meeting may not be addressed by the meeting. Also, because the meetings are usually held only every two years, and with EMM9 tentatively scheduled to be held three

years after EMM8, Energy Ministers' meetings may not be an effective mechanism to respond to urgent issues in the APEC region energy sector that require rapid APEC-wide policy responses. For example, the major fluctuations in oil prices during the second half of 2008 is an urgent issue that may require a policy response from APEC that cannot be formulated quickly enough through Energy Ministers' meetings.

An additional mechanism may be required that enables the rapid formulation of APEC-wide policy responses to urgent issues that arise in the APEC region energy sector. One option could be a special meeting of EWG delegates called specifically to develop policy responses to urgent issues. Alternatively, part of each five-day EWG meeting could be focussed on responses to urgent issues, thereby providing a regular six-monthly forum for developing policy responses.

Another current concern is that, despite APEC economies regarding Energy Minister's meetings as being important, it has proven difficult to find economies that are prepared to host Ministers' meetings. Responsibility for hosting EWG meetings is resolved by publishing a schedule of the hosting economies for up to six years in advance and tabling this schedule at each EWG meeting. Establishing a similar advance schedule of hosting economies for Energy Ministers' meetings may resolve the difficulty of finding economies that are prepared to take on this responsibility.

4.4 Recommendations

Recommendation EWG3. The EWG Secretariat should consult with APEC economies to determine whether it is necessary to establish a mechanism, additional to Energy Ministers' meetings, that will enable the rapid formulation of APEC-wide policy responses to urgent issues that arise in the APEC region energy sector.

Recommendation EWG4. The EWG Secretariat should consult with APEC economies about the advisability of establishing a schedule of economies responsible for hosting Energy Ministers' meetings for up to 10 years in advance.

5. EWG MEETINGS

5.1 Overview

Meetings of APEC economy representatives who are members of the EWG take place about every six months. The purpose of EWG meetings is to discuss key energy issues affecting the APEC region, to share information on notable energy sector developments, and to consider progress on current projects and initiatives designed to achieve the EWG's objectives and future directions.

Typically, the plenary meeting of EWG members takes place on two days out of a five-day period of related meetings. Other meetings scheduled during the five-day period include:

- a meeting of the EWG Expert Group and Task Force Chairs and the President and Vice-President of APERC;
- a Workshop organised by APERC to discuss the results of its work;
- a meeting of the Energy Business Network;

- a Business Forum on an agreed topic organised by the EBN with industry representatives from the local economy where the EWG meeting is being held;
- a site visit.

The agenda for the plenary EWG meeting is fairly standard and changes only slightly between meetings. Typically, it includes:

- a report from the APEC Secretariat;
- a report from the Chair of the Energy Business Network;
- a policy dialogue during which economy representatives discuss an energy policy topic agreed at the previous EWG meeting;
- presentations by any guest organisations represented at the meeting;
- reports on implementation of the various components of the APEC Energy Security Initiative (including reports from EWG Expert Group and Task Force Chairs);
- a report on the meeting of EWG Expert Group and Task Force Chairs and APERC;
- the APERC President’s report;
- statements by economy representatives on notable energy developments since the last EWG meeting;
- a discussion on engagement with other fora;
- a discussion on the EWG Work Plan.

5.2 Participation

The following table has been developed from the attendance lists for the six meetings EWG31 to EWG36 supplied by the EWG Secretariat. Because the attendance lists do not indicate the gender of the attendees, it has not been possible to provide a gender breakdown.

Attendances from APEC Economies at EWG Meetings Over the Last Three Years								
Economy Representatives			Industry Representatives			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total
		267			64			66
Multiple attendances by the same person are included, eg if Person A attended five separate events over the three year period, this is counted as five attendances, rather than one.								

All 21 APEC economies attended one or more of the six EWG meetings, with an average of 16 economies attending per meeting. These figures suggest that economies regard EWG meetings as being important. The table shows that the EWG meetings attracted significant levels of attendance by individual representatives. Per meeting averages comprised 44.5 attendances by economy representatives, 10.7 attendances by industry representatives and 11.0 attendances by other participants (principally APERC staff plus representatives from organisations that have guest status with the EWG).

5.3 Assessment

Bringing together representatives from a maximum of 21 and an average of 16 APEC economies in one place every six months is an expensive exercise in terms of both time and money. Consequently, it is incumbent on the Energy Working Group to ensure that the time available during the five-day meeting period is used as productively as possible.

Face-to-face meetings uniquely provide opportunities:

- to share information about topics of mutual interest;
- to discuss current issues;
- to make decisions to achieve specific results, such as an agreement on future actions.

Participant observation at three EWG meetings showed that the two-day plenary meeting of EWG members is mainly concerned with proceeding through standard agenda items. The major purpose of the plenary sessions seemed to be to receive reports and presentations on standard agenda items. Some of these reports contributed to information sharing between EWG members. However, there was little discussion about current issues or decision making about future actions. Even when agenda items specifically called for discussion, the ensuing debate was fairly desultory.

The reason for the lack of discussion and decision making at the plenary EWG meeting is that working sessions on specific topics are held outside the plenary sessions. For example, during the week of the EWG36 meeting, a separate session was held to draft the APEC Energy Trade and Investment Action Plan.

Separating working sessions from procedural meetings may be effective in focussing economy representatives' attention on the specific task in hand. However, if working sessions are to be held outside the plenary EWG meeting, this raises the question as to whether procedural matters could be dealt with over a period shorter than two days, thereby freeing up more time for working sessions including further information sharing, and significant discussion and decision making.

One possible alternative way to organise an APEC Working Group meeting was described by a representative of the APEC Transportation Working Group (TPT-WG) who made a presentation at the EWG36 meeting. According to the representative, at its regular meetings, the TPT-WG brings together over 350 people associated with its work, including all the members of its various Expert Groups, not just the Chairs. The early sessions of the meeting period are concerned with identifying issues to be discussed and the result to be achieved during the remaining period. The Expert Groups then work on the various issues and bring their results and conclusions to the final plenary session which makes decisions on the future actions to be implemented.

5.4 Recommendation

Recommendation EWG5. The EWG Secretariat should consider alternative ways to organise the five-day EWG meeting period so as to maximise the time available for information sharing, for discussion and debate about relevant issues, and for economy representatives to work together making decisions to achieve specific results.

6. EWG SUBFORA ACTIVITIES

6.1 Overview

The EWG has five subfora: four Expert Groups and one Task Force.

Expert Group on Clean Fossil Energy (EGCFE). EGCFE was established in 1993 to encourage the use of clean fuels and energy technologies that will both contribute to sound economic performance and achieve high environmental standards. The EGCFE's primary role is to support the work of the EWG by gathering and sharing timely information regarding technical, economic and policy aspects of fossil energy production, transportation, and use within the APEC region.

The objectives of the EGCFE include:

- to undertake short- and longer-term actions to increase regional energy security through improved production, increased trade, and more efficient utilization of fossil fuels;
- to facilitate and encourage acceleration of the commercialization and use of appropriate clean fossil energy technologies and processes;
- to pursue and facilitate voluntary, cooperative, joint activities, including demonstration projects, between APEC members, particularly to address environmental concerns related to pollutant and greenhouse gas emissions from fossil fuel use.

Expert Group on Energy Data and Analysis (EGEDA). EGEDA was originally established in 1991 and is responsible for providing policy relevant energy information to APEC bodies and the wider community, through:

- collecting energy data in the APEC region;
- managing the operation of the APEC Energy Data Base;
- collecting policy relevant information from member economies; and
- examining and advising on the research activities of the Asia Pacific Energy Research Centre (APEREC).

EGEDA produces several series of annual statistical publications about energy use in the APEC region.

Expert Group on Energy Efficiency and Conservation (EGEE&C). EGEE&C was established in 1993 to advance economic and social well-being, and to realize environmental benefits in the Asia-Pacific region through energy conservation and the application of energy-efficiency practices and technologies. The Expert Group's objectives include:

- to advance the application of demonstrated energy-efficiency practices and technologies in appropriate regional end-use sectors;
- to assist in developing and enhancing trade between APEC member economies energy in products and services and energy-efficiency practices and technologies;
- to improve the analytical, technical, operational and policy capacity for energy efficiency and conservation within member economies.

Expert Group on New and Renewable Energy Technologies (EGNRET). EGNRET was established in 1993 to facilitate an increase in the use of new and renewable energy technologies in the APEC region. The Expert Group develops and implements projects that contribute to the EWG's objectives and strategic initiatives. Since 2000, these projects have been implemented primarily through the APEC 21st Century Renewable Energy Development Initiative which addresses the principal objectives of the EWG by:

- fostering a common understanding of regional renewable energy technology issues;
- facilitating trade and investment in new and renewable energy technologies and services; and
- reducing the environmental impact of the energy sector through applications of new and renewable energy technologies.

Task Force on Biofuels. The Task Force was established in 2005, following a direction to the EWG from the seventh APEC Energy Ministers Meeting to establish the Task Force. The main objective of the Task Force is to help APEC member economies better understand the potential for biofuels to displace oil in transport.

The development, implementation and management of projects is the most significant activity undertaken by EWG subfora and is discussed in more detail in Section 8 (page 18). EWG subfora also hold meetings, typically twice a year and usually at different times from other subfora, to discuss issues and to develop proposals for projects related to their subject areas. Occasionally some subfora hold joint meetings. The Chairs of EWG subfora present reports on their activities to each EWG meeting.

Each EWG subforum operates in a slightly different way. EGCFE concentrates on information sharing and organises regular workshops and seminars on various aspects of clean fossil energy. In addition, EGCFE has a very active program of projects on various aspects of clean fossil energy. EGEDA focuses all its activity into its one project which involves collecting and disseminating data on energy use in the APEC region. EGEDA also acts on behalf of the EWG to examine and advise on the research activities of APERC. EGEE&C and EGNRET concentrate on developing and implementing projects of two types: research projects that produce reports on particular topics; and workshops and seminars which disseminate information about particular issues and in some cases have served as training sessions, eg in developing energy indicators (EGEE&C) and in local bank financing of renewable energy projects (EGNRET). The Biofuels Task Force was established to provide specific policy advice to APEC economies and has produced a number of research reports on biofuels.

6.2 Participation

The table on the following page has been developed from data supplied by EWG Expert Group and Task Force Chairs.

Attendances from APEC Economies at EWG Subfora Meetings and Events Over the Last Three Years										
Subforum	Average No of Economies	Economy Representatives			Industry Representatives			Other		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
EGCFE	12-14	302	67	369	248	72	320	39	13	52
EGEDA	10	109	71	180	0	0	0	6	3	9
*EGEE&C	7-8	42	6	48	12	0	12	42	12	54
EGNRET	9-10	715	265	980	+	+	+	0	0	0
Biofuels Task Force	10	62	20	82	15	2	17	1	2	3
* EGEE&C figures are estimated for Expert Group meetings only; they do not include events. * EGNRET economy representative figures include industry representatives.										
Multiple attendances by the same person are included, eg if Person A attended five separate events over the three year period, this is counted as five attendances, rather than one.										

The table shows that less than half of the 21 APEC economies are represented at the meetings of most EWG subfora. APEC quorum rules do not apply to the subfora so no minimum number of APEC economies is required at subfora meetings. Also the various subfora attract significantly different numbers of people to their meetings. This variation in attendances is caused by the different methods of operation of the subfora and the different interests of APEC economies. The EWG subfora achieve results through their projects and workshops and it is by these that the effectiveness of the subfora should be judged, rather than by the attendances at subfora meetings.

6.3 Assessment

While EWG subfora sometimes operate collaboratively, eg by holding joint meetings, they each appear to operate relatively independently of the EWG itself. The reports presented by the subfora Chairs to each EWG meeting are the only mechanism whereby the EWG has any interaction with the activities of the subfora. However, participant observation at three EWG meetings shows that these reports are usually received with little comment or discussion.

The requirement for greater interaction between the EWG and subfora activities varies among the subfora. EGEDA has a straightforward mandate to collect and analyse energy statistics and any issues will be about technical matters which should be able to be resolved between EGEDA members. The Biofuels Task Force also has a clearly defined mandate and any issues are likely to be about the conclusions from its research rather than about the subjects that should be covered by the Task Force's work.

The mandates of the remaining three Expert Groups, EGCFE, EGEE&C and EGNRET, are much more broadly specified and it is largely up to the Expert Groups themselves to decide which subjects they will tackle and how they will go about it. This can lead to a concentration on one particular subject. For example, between 1997 and 2007,

EGEE&C implemented 20 projects on energy efficiency performance standards and labelling, three times more than on any other subject⁸. Proposals for these projects were assessed on strict selection criteria and secured funding over other proposals on merit, but the large number of projects on this one subject may have precluded adequate consideration of other subjects. More recently, EGEE&C has responded to the latest emphasis on energy efficiency by APEC Leaders and Energy Ministers and has received APEC funding for projects covering a range of subjects to be implemented in 2009. EGEE&C is also working to establish a two year action plan to direct its activities.

Because of the broad mandates of some EWG subfora, a mechanism may still be required to achieve closer interaction between the EWG and the activities of these particular subfora.

6.4 Recommendation

Recommendation EWG6. The EWG Secretariat should consult with the Expert Group and Task Force Chairs to develop and propose to the next EWG meeting a mechanism to achieve closer interaction between the EWG and the activities of those EWG subfora with broadly-specified mandates, specifically EGCFE, EGEE&C and EGNRET.

7. APERC ACTIVITIES

7.1 Overview

The Asia Pacific Energy Research Centre (APERC) was established in 1996 in Tokyo, as an affiliate of the Institute of Energy Economics, Japan (IEEJ), following the directive of APEC Economic Leaders in the *Osaka Action Agenda*. The Government of Japan agreed to host and finance the Centre.

The primary objective of APERC is to conduct research to foster understanding amongst APEC economies of global, regional and domestic energy demand and supply trends, energy infrastructure development, energy regulatory reform and related policy issues. APERC also maintains an energy database of the APEC region and seeks to enhance the energy research capability of APEC economies through information and knowledge transfer.

While organisationally APERC is affiliated to IEEJ, operationally it acts independently as a regional research centre with its own mandates and programs focusing on energy sector development in APEC member economies. The EWG Expert Group on Energy Data and Analysis (EGEDA) is the official body that oversees APERC research activities. APERC's overall research is guided by EGEDA, and the selection of research themes is subject to the EWG's official endorsement.

APERC advocates rational energy policy formulation and enhances capacity building in energy research in the region, following APEC's Non-binding Energy Policy Principles for furthering energy security, economic growth, and environmental quality (see Appendix E, page 51).

⁸ Energy Futures Australia Pty Ltd (2007). *Overview of APEC Energy Working Group Projects*. Canberra, Department of Industry, Tourism and Resources.

APERC’s main activities include:

- producing a detailed APEC energy demand and supply outlook every two years;
- preparing an annual APEC energy overview that contains updated energy demand/supply data as well as descriptions of energy policy and notable energy developments;
- conducting research on regional energy market developments, energy policies and related issues;
- promoting the transfer of energy research information and knowledge to APEC members;
- maintaining an energy database of the region through networking with APEC members;
- co-operating with APEC members in implementing the EWG’s energy policy initiatives.

In addition to producing the APEC energy demand and supply outlook every two years; APERC also carries out an average of four new research projects each year. Each project comprises an in-depth investigation of a subject relevant to the energy sector in the APEC region. Most of these projects extend over two years, with a draft report produced at the end of the first year and a final report published by APERC during the second year.

APERC research is undertaken by a mixture of locally appointed staff and staff members seconded for specified time periods from APEC member economies.

7.2 Participation

The following table has been developed from data supplied by APERC and includes attendances at seven workshops and advisory board meetings held in Tokyo by APERC and at six APERC workshops organised as part of EWG meetings over the last three years.

Attendances from APEC Economies at APERC Activities Over the Last Three Years									
Type of APERC Event	Economy Representatives			Industry Representatives			Other		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Tokyo events	63	13	76	11	1	12	158	61	219
EWG meetings	80	20	100	12	8	20	27	8	35
Multiple attendances by the same person are included, eg if Person A attended five separate events over the three year period, this is counted as five attendances, rather than one.									

The table suggests that APERC has been particularly successful in attracting attendances by ‘other’ representatives to its Tokyo events. However, further analysis of the figures supplied by APERC shows that about 70% of these attendances are by APERC staff. APERC has been most successful in attracting attendances by non-APERC people to the six workshops it organised as part of EWG meetings during the last three years. However, attendances by non-APERC people at all types of APERC events were relatively low.

7.3 Assessment

Since its formation in 1996, APERC has produced an impressive body of work relevant to the energy sector in the APEC region. The biannual energy demand and supply outlook is a valuable resource for energy planning by APEC economies. The APERC research projects provide additional detailed insights into various aspects of the APEC energy sector.

However, despite the oversight by EGEDA on behalf of the EWG, the selection of research projects to be carried out by APERC seems to be made fairly independently within APERC itself. While the selection of research themes is subject to the EWG's official endorsement, participant observation at three EWG meetings showed that there is little discussion or comment about APERC's selection of subjects for research projects. The relevance and topicality of the research projects may be improved by increased input and oversight of the subject selection process by APEC economy representatives. In addition, annual APERC draft work plans and strategic direction documents could be distributed to EWG members well in advance of meetings to enable members' comments and consideration, and to enable discussion during EWG meetings prior to agreement.

Since its establishment, APERC has been successful in building up and retaining a staff of highly skilled energy researchers, both locally appointed staff and secondees from other APEC economies. However, recently there has been some concern about a high turnover of skilled research staff at APERC, both locally appointed staff and staff seconded from APEC economies.

7.4 Recommendations

Recommendation EWG7. The EWG Secretariat should work with EGEDA and APERC to establish a mechanism whereby APEC economy representatives can provide increased input and oversight of the subject selection process for APERC research projects.

Recommendation EWG8. The EWG should encourage the management of APERC to take action to retain locally appointed skilled research staff.

Recommendation EWG9. APEC economies should work with the management of APERC to ensure that suitable skilled research staff are available for secondment to APERC.

8. EWG PROJECTS

8.1 Overview

Projects are a vital part of the APEC process. APEC projects respond to Leaders' and Ministers' calls for action in specific policy areas and help translate these calls into physical action. APEC projects cover a wide range of activities, such as seminars, publications and research, and are aimed at enhancing economic growth and prosperity for the region, including trade and investment liberalisation and economic and technical cooperation.

The development, implementation and management of projects is a major activity undertaken under the auspices of the EWG. Between 1992 and 2007, 250 EWG projects were implemented. Projects may be supported financially through the APEC Central Fund or member economies may propose self-funded projects, which they submit to the EWG for approval. For EWG projects funded by APEC between 2000 and 2007, the average amount received from the APEC Central Fund was about USD70,000 per project. The average additional amount leveraged by the APEC funding from other sources was about USD50,000 per project and the average total cost per project was USD120,000. In addition, a significant number of EWG projects were self-funded by APEC member economies with no contribution from the APEC Central Fund⁹.

The life cycle of an EWG project begins with a project proponent in a member economy proposing a project. With the support of the member economy, the project proponent puts forward the detailed project proposal (including a proposed budget) to one of the EWG subfora for consideration, assessment and approval by consensus. All proposals for EWG projects are ranked in a single priority list at the first EWG meeting in a calendar year. The project proposals are circulated to all economy representatives and the representatives assign scores to each project based on their economy priorities. The priority list is determined by summing the scores for each project.

The project proposals with their priority rankings are then submitted to the APEC Secretariat for consideration for APEC funding. All project proposals received by the APEC Secretariat are reviewed and assessed according to the requirements of the Budget and Management Committee (BMC) as set out in the *Guidebook on APEC Projects*. An established scoring methodology is used that includes consideration of the quality of the project proposal, gender issues, budgetary requirements, and the categorisation of the proposed project in relation to policy priorities established by the SCE. Final project proposals are then submitted electronically to the SCE and the BMC via the Project Database on the APEC Information Management System. The BMC examines and, if necessary, ranks the project proposals across all APEC fora with a view to recommending Ministers' final approval.

Once funding has been approved, the project proponent, with the assistance of the APEC Secretariat, implements the project. The life span of an APEC project is two years by which time all disbursement or payments must be completed. In exceptional cases, the project disbursement deadline may be extended. At the end of the project, it is evaluated and the results reported back to the EWG for their further consideration.

Recently, the SCE Chair has proposed a strategic approach to ECOTECH that includes exploring the feasibility of multi-year projects and adopting a more strategic, longer-term approach toward capacity-building. In addition, the BMC is currently considering various proposed reforms to the project funding process, including:

- holding four project approval sessions each year at fixed intervals, allocating 25% of the estimated budget at each session; and
- focusing the project approval process on more strategic and longer-term projects.

⁹ Energy Futures Australia Pty Ltd (2007). *Op. cit.*

The BMC has also commissioned a consultant to look at project management, including the funding arrangements for long-term strategic projects.

8.2 Participation

The following table has been developed from data supplied by EWG Expert Group Chairs.

Involvement by Representatives from APEC Economies in EWG Projects Over the Last Three Years										
Subforum	No of Projects	Economy Representatives			Industry Representatives			Other		
		Men	Women	Total	Men	Women	Total	Men	Women	Total
EGCFE	9	45	7	52	8	3	11	106	24	130
EGEDA	1	109	71	180	0	0	0	6	3	9
*EGEE&C	3	6	3	9	0	0	0	0	0	0
EGRNET	13	672	212	884	+	+	+	0	0	0
* EGEE&C data are only for projects implemented during the last 12 months.										
* EGRNET economy representative figures include industry representatives.										
Multiple attendances by the same person are included, eg if Person A attended five separate events over the three year period, this is counted as five attendances, rather than one.										

The table shows that EWG projects attracted significantly different levels of involvement in APEC economies, depending on the EWG subforum through which the projects were initiated. As with subfora meetings and events, the variation in involvement is the result of the different methods of operation of the subfora.

8.3 Assessment

A previous study concluded that the 250 EWG projects implemented between 1992 and 2007 had developed an extensive and comprehensive collection of policy-targeted information that has been, and will continue to be, invaluable in achieving the EWG's goal of maximising the energy sector's contribution to the region's economic and social well being while mitigating the environmental effects of energy supply and use¹⁰.

This previous study was initiated and funded by Australia to improve the dissemination of the results of EWG projects. The study confirmed that this dissemination required significant improvement. Strenuous efforts to locate the final reports from the 250 EWG projects concluded that about 25 per cent of the final reports could not be found. A project proposal by Australia has received APEC funding for further work during 2009 to improve the dissemination of the results of EWG projects.

Recently, there has been some concern within EWG subfora about the APEC Secretariat's assessment process for project proposals. This concern became particularly acute in November 2008 when several EWG project proposals received scores from the assessment process that were very slightly short of the overall cut-off

¹⁰ Energy Futures Australia Pty Ltd (2007). *Op. cit.*

score. The EWG subfora Chairs thought that, with minor modifications, these projects could have been approved for 2009 APEC funding. In addition, several project proposals assessed as high priority by the EWG were not approved for funding, while several lower priority proposals were approved.

At the EWG36 meeting, the subfora Chairs called for greater transparency and opportunities for feedback in the APEC Secretariat project assessment process. In particular, the Chairs suggested that:

- a portion of available funds in each project account could be assigned to each APEC forum on a presumptive basis and the fora could be allowed to set their own priorities and select the projects they consider most important within the presumptive assigned budgets, while also still allowing the remaining funds to be available for competition among all fora; and/or
- APEC fora with multiple project proposals could be allowed to examine the draft decisions of the PMU and BMC and suggest the substitution of projects they consider of greater priority for projects considered of lesser priority, within the approved budgets.

Allocating of a portion of project funds to each APEC forum was a standard APEC practice a few years ago. The effect of this practice was to limit the number of projects that could be approved for each forum and the practice was changed to enable the approval of high quality project proposals across all APEC fora. Since the EWG is currently the forum with the largest number of projects being implemented and seeking APEC funding, the EWG may be disadvantaged by returning to the former practice.

The Project Management Unit in the APEC Secretariat is aware of concerns about the project assessment process expressed by APEC fora and is continuing to investigate ways of improving the process in future project assessment sessions.

There has also been concern within the EWG Secretariat and subfora about the arrangements for funding activities that are ongoing rather than discrete time-limited projects.

The prime example of an ongoing activity is the work undertaken by EGEDA to manage the operation of the APEC Energy Data Base and produce several series of annual statistical publications. This work receives majority funding from the Government of Japan, but it also receives some funding on an annual basis from the APEC Central Fund. The EGEDA activity is always ranked first in the EWG project priority list and it has received APEC funding every year since 1993.

Another example of an ongoing activity is the work undertaken to manage the operation of the APEC Energy Standards Information System (APEC-ESIS). This is an interactive database containing details of economy-specific energy performance standards and labelling programs. The APEC ESIS database was initially established with APEC funding in 2001 and since then has been supported with self funding from several APEC economies. However, a project proposal for APEC funding to continue supporting the management of the database during 2009 was not approved. This places the ongoing maintenance and validity of the information at serious risk and both reduces the functionality of the resource and undermines the value of previous investments.

8.4 Recommendations

Recommendation EWG10. The EWG Secretariat should continue its efforts to improve the dissemination of the results of EWG projects.

Recommendation BMC1. To provide greater transparency and opportunities for feedback, the BMC should consider whether the weightings of various components of project scores assigned by the Project Management Unit and BMC could be clearly stated at the start of each project proposal cycle and whether more time could be allowed for revision of project proposals between the initial evaluation by the PMU and the final decision whether to fund a project.

Recommendation BMC2. The BMC should consider whether it would be possible for APEC fora to have a larger role in deciding which projects are funded each year.

Recommendation BMC3. During its deliberations about focusing the project approval process on more strategic and longer-term projects, the BMC should consider developing more appropriate funding arrangements for APEC fora activities that are ongoing rather than discrete time-limited projects.

9. EBN ACTIVITIES

9.1 Overview

APEC is unique in having an institutionally mandated framework that enables input from the private sector. Within this framework, the EWG has established a structure to facilitate private sector involvement in its work. In 1997, recognising the contribution that the APEC business community can make to the work of the EWG, APEC Energy Ministers directed the EWG to establish a Business Network. The Energy Business Network (EBN) held its first meeting in 1999.

The role of the EBN is to provide the EWG with a private sector perspective on key energy issues affecting the APEC region, and to contribute to the implementation of the EWG work program through a range of initiatives. The EBN participates directly in meetings of the EWG and in Energy Ministers' meetings.

Each APEC economy can nominate a maximum of two representatives to the EBN and currently 14 APEC economies have nominated representatives. The EBN Chair is undertaken on a rotational basis, with each Chair nominally serving a one-year term, though the current Chair has been in office for three years. The EWG Secretariat provides the EBN with secretariat support.

The EBN meets twice yearly during the five-day periods scheduled for meetings of the EWG and at the same venue. The EBN agenda is broad, and typically includes:

- an opportunity for EBN members to outline new and ongoing energy issues within their economy since the last EBN meeting;
- a discussion of recommendations presented by the EBN to Energy Ministers;
- a discussion of best practice principles developed by the EBN; and
- a review of the ongoing collaboration between the EBN and the APEC Business Advisory Council (ABAC).

Key outcomes from EBN meetings are reported directly to the EWG by the EBN Chair and may include suggestions for future EWG work programs. In accordance with APEC protocols, any recommendations by the EBN must be adopted by consensus within the EWG.

The EBN has developed a series of documents which outline best practice principles across a range of energy sector issues. At the eighth APEC Energy Ministers' meeting, Ministers asked the EBN to review, and if necessary update, these best practice principles. This updating was done by EBN sub-groups in Australia, New Zealand and the United States and circulated to all EBN members for comment and approval out-of-session.

The EBN has hosted several workshops and Business Forums addressing specific energy issues. These events are often held during the five-day EWG meeting period and industry representatives from the local economy where the EWG meeting is being held are invited. In May 2007, the EBN also organised a Business Forum at the eighth Energy Ministers' meeting.

The APGAS Forum was launched, as a subforum of the EBN, to respond to the APEC Energy Ministers' endorsement in 2004 of the creation of a competitive, open and transparent marketplace for gas. The first annual Forum was first held in August 2005. APGAS seeks to create consensus on the steps necessary to promote cross-border trade in natural gas by bringing together senior members from all stakeholders in the Asia-Pacific gas trade. Stakeholder representatives from governments, regulators, industry, financiers and communities critically examine the functioning and interaction of both regional and global gas markets to determine how the various players can contribute to the development of gas industry 'best practice' in the Asia-Pacific region. APGAS now operates relatively independently of the EBN.

9.2 Participation

The table on the following page has been developed from the attendance lists for the six meetings EBN14 to EBN19 and for the EBN Business Forum at the eighth Energy Ministers' meeting (EMM8). These lists were supplied by the EWG Secretariat. The attendance lists for EBN meetings only record attendances by industry representatives and do not record attendances by economy representatives. Also, no attendance lists are available for workshops hosted by the EBN.

The table shows that only small numbers of industry representatives attend each EBN meeting. In fact, there were more individual industry representatives attending the Business Forum at the Energy Ministers' meeting than the total number of attendances by industry representatives at the six meetings EBN14 to EBN19. While this is not shown in the table, many economy representatives also attend EBN meetings, and for the two recent meetings EBN18 and EBN19, economy representatives outnumbered industry representatives.

Attendances by Representatives from APEC Economies at EBN Events Over the Last Three Years									
Event	Economy Representatives			Industry Representatives			Other		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
EBN Meetings	+	+	+	53	7	60	+	+	+
Business Forum at EMM8	44	15	59	62	8	70	14	8	22
+ Data is available only for attendances by industry representatives at EBN meetings.									
Multiple attendances by the same person are included, eg if Person A attended five separate events over the three year period, this is counted as five attendances, rather than one.									

9.3 Assessment

Since the EBN has now been operating for nearly 10 years, it is somewhat surprising that only two-thirds of APEC member economies have actually nominated representatives to the EBN. However, the small numbers of industry representatives attending each EBN meeting may not indicate a lack of interest in the work of the EBN among the energy sector. Attending an EBN meeting and the associated EWG meeting is a major time commitment for private sector people, and it may not be seen as worthwhile, given that both meetings are mostly concerned with procedural matters rather than information sharing, discussion of current issues and decision making. The large number of attendances at the Business Forum held at the Energy Ministers' meeting and the involvement of industry representatives in developing the best practice principles suggests that industry is interested in becoming involved in the EBN and does see its work as worthwhile.

The EBN did experience some difficulty in making its views known to Ministers at the Energy Ministers' meeting in May 2007. This may have occurred because the current membership of the EBN were apparently unaware of the long lead times required in preparing material for tabling at the Ministers' meeting and were also apparently unclear about the role of the EBN at Energy Ministers' meetings.

9.4 Recommendations

Recommendation EBN1. *To attract larger numbers of industry representatives, the Energy Business Network should consider hosting more events focussed on information sharing, discussion of current issues and decision making.*

Recommendation EWG11. *The EWG Secretariat should provide more specific information to the membership of the Energy Business Network about the lead times required in preparing material for tabling at Energy Ministers' meetings and about the role of the EBN at Energy Ministers' meetings.*

10. ONGOING ECOTECH ACTIVITIES

10.1 Overview

There are currently three major ongoing ECOTECH activities being implemented under the auspices of the EWG.

APEC Energy Security Initiative (ESI). In November 2000, APEC Economic Leaders directed the EWG to implement an energy security initiative. Following a series of workshops, the EWG developed the APEC Energy Security Initiative which was endorsed by the EWG in September 2001 and by APEC Economic Leaders in October 2001. The ESI comprises a series of short-term measures to respond to temporary energy supply disruptions, and longer-term policy responses to address the broader challenges facing the region's energy supply that are practical in a policy context and politically acceptable. In October 2003, APEC Economic Leaders endorsed an Implementation Plan and an APEC Action Plan as mechanisms to accelerate implementation and further enhance the ESI. Since then, several enhancements and expansions of the ESI have been implemented.

APEC Energy Trade and Investment Action Plan (ETI Action Plan). In May 2007, APEC Energy Ministers endorsed an APEC Energy Trade and Investment Study and Roundtable to explore ways for APEC to improve the efficiency and flexibility of energy markets, including the twin challenges of energy security and combating environmental challenges. Australia commissioned a study on behalf of the EWG and hosted a Roundtable in late September/early October 2008 to consider the findings of the study. The Roundtable developed a draft Energy Trade and Investment Action Plan for consideration by Energy Ministers at their next meeting. The overall strategic objective of the ETI Action Plan is to improve the transparency, flexibility and efficient operation of APEC energy markets. The first step in implementing the Action Plan will be for the EWG to establish an ETI Task Force. The Task Force will assess the current state-of-play of work to build capacity and reduce energy trade and investment barriers across APEC, identify gaps in current work on energy related sectors, and progress energy trade and investment initiatives under the EWG. The Task Force will meet in conjunction with EWG meetings.

APEC Peer Review of Energy Efficiency (PREE). In May 2007, APEC Energy Ministers agreed that a voluntary APEC Energy Peer Review Mechanism (Peer Review of Energy Efficiency) should be established. The PREE was endorsed by APEC Economic Leaders in September 2007. The main objectives of the PREE are: to share information on energy efficiency performance and on policies and measures for improving energy efficiency; and to provide opportunities for learning from other APEC member economies' experiences and for broadening networks among energy efficiency policy experts. Two activities are to be undertaken as part of the PREE: peer reviews of energy efficiency policies in volunteer member economies; and the development of a compendium of energy efficiency policies implemented in APEC member economies. Work on the PREE commenced in late 2008, and Peer Reviews of three volunteer APEC economies are scheduled to take place in 2009.

10.2 Assessment

Implementation of both the Energy Trade and Investment Action Plan and the Peer Review of Energy Efficiency has only just commenced. Therefore, it is not yet possible to assess the effectiveness of these activities. In contrast, the Energy Security Initiative has been in place for seven years and it is appropriate to assess its effectiveness.

In the questionnaire, economy representatives were asked to provide an assessment, on a scale of 1 to 5, of the usefulness of the overall Energy Security Initiative. The average score across the 10 economies that returned completed questionnaires was **4.1**. This score shows that economy representatives consider that the ESI is quite useful.

Short-term measures within the ESI are focussed on maintaining security of oil supply and include:

- improving transparency of the global oil market through reporting timely and quality data under the Joint Oil Data Initiative;
- monitoring efforts to strengthen maritime security;
- participating in the Real-time Emergency Information Sharing system on oil supplies;
- encouraging APEC member economies to have emergency mechanisms and contingency plans in place, including the establishment and management of strategic oil stocks.

These measures are quite specific, are currently still relevant, and appear to be working well.

Long-term measures within the ESI are stated in more general terms and are dealt with more as a series of watching briefs rather than through the practical implementation of specific measures. This may not be the most effective structure for handling long-term energy security issues. In particular, receiving reports under the headings of the various ESI long-term measures occupies the majority of the time in EWG meetings but there are rarely any action items resulting from these reports. However, EWG projects are usually linked to ESI long-term measures in some degree.

10.3 Recommendation

Recommendation EWG12. The EWG Secretariat should initiate a major review of the Energy Security Initiative, particularly to determine whether the current structure for handling long-term energy security issues is still relevant and appropriate.

11. COLLABORATION BETWEEN THE EWG AND OTHER ORGANISATIONS

11.1 Overview

Collaboration between APEC fora and other organisations is currently a high priority within APEC. In May 2007, Energy Ministers gave several specific directions to the EWG about strengthening collaboration with other international energy fora. The SCE Chair has proposed a strategic approach to ECOTECH that includes enhancing and leveraging on APEC's partnerships with other multilateral organisations as well as with

the private sector and ABAC. The BMC is intending to direct all APEC fora to include 'collaboration with other APEC fora' as an agenda item at meetings to identify cross-cutting issues to ensure project collaboration between fora.

Recently, the EWG has been using the granting of Guest status to facilitate collaboration with other international energy organisations. Guest status provides a mechanism whereby non-members of APEC can participate in APEC activities, including meetings of APEC fora, workshops, seminars, symposiums and training courses.

The EWG has granted Guest status to three international organisations: the International Energy Agency (IEA), the Renewable Energy and Energy Efficiency Partnership (REEEP), and the Energy Charter Secretariat. Since being granted Guest status, these three organisations have been represented at most EWG meetings. The Executive Director of the IEA made a presentation to the eighth APEC Energy Ministers' meeting in May 2007 and the IEA has recently applied for renewal of its Guest status for a second three year term. In addition, EGEE&C has granted Guest status to the Buildings and Appliances Task Force of the Asia-Pacific Partnership on Clean Development and Climate.

The EWG is participating in two collaborative efforts with international organisations that have been granted Guest status. REEEP has provided co-funding to extend the APEC-ESIS database to certain non-APEC countries, and a joint EGEEC/IEA workshop on energy indicators training was held in Singapore in September 2007.

The EWG has canvassed several opportunities for collaboration with other APEC fora. The Biofuels Task Force collaborated on agricultural-related biofuel projects with the Agricultural Technical Cooperation Working Group. In September 2008, the Chair of EGNRET was invited to address a Ministers' Meeting organised by the Small and Medium Enterprise Working Group, with future collaboration to be discussed. An EWG representative made a presentation at a Transportation Working Group meeting in early 2008, and a representative from the Transportation Working Group attended the EWG36 meeting and made a presentation on possible collaboration between the two Working Groups on fuel efficiency and alternative fuels.

The Energy Trade and Investment Action Plan is intended as a sectoral complement to the APEC Investment Facilitation Action Plan 2008-2010 (IFAP). Implementation of the ETI Action Plan will involve the EWG consulting and sharing ideas with the APEC Committee on Trade and Investment (including the Investment Experts' Group which is expected to be chief driver of the IFAP) to maximise the contribution of the ETI Action Plan to APEC's Regional Economic Integration Initiative.

11.2 Assessment

Collaboration with other organisations can provide the EWG with additional information and resources to support its activities and collaboration can also disseminate the results of the EWG's work more widely. The EWG has made a commendable start to initiating collaboration with international energy organisations and with other APEC fora. However, only a small number of collaborative efforts have been implemented to date.

APEC approval processes are a major barrier to collaboration with other international organisations. A lengthy approval process is involved in EWG members attending meetings of other international organisations, requiring endorsement by all EWG members followed by approval from the APEC Senior Officials' Meeting. A similar approval process is involved in APEC fora jointly sponsoring activities with other international organisations.

Also, establishing joint activities between multilateral organisation is complicated and takes significant amounts of time to organise, particularly when the people likely to be involved in collaborative activities also have other responsibilities and calls on their time.

11.3 Recommendation

Recommendation SCE3. To remove a major barrier to collaboration with other international organisations, the SCE should recommend that the Senior Officers' Meeting eliminate or streamline the lengthy approval processes involved in APEC fora members attending meetings of other international organisations, and in APEC fora jointly sponsoring activities with other international organisations.

Recommendation EWG13. The EWG Secretariat should consider allocating additional resources to assist in establishing collaborative activities between the EWG and international energy organisations and between the EWG and other APEC fora.

12. EWG STRATEGIC PRIORITIES AND FUTURE DIRECTION

12.1 Overview

The EWG's strategic priorities and direction have evolved over the 18 years since the EWG was first established. In determining these strategic priorities and direction, the EWG has followed the standard APEC formula in which economy representatives propose new initiatives and priorities, these are discussed and agreed between economies and are then formulated into Ministers' and Economy Leaders' Declarations and directions.

The starting points for all of EWG's work are the 'Bogor Goals' of *free and open trade and investment in the Asia-Pacific by 2010 for industrialised economies and 2020 for developing economies*. These goals were adopted by APEC Leaders at their November 1994 meeting in Bogor, Indonesia.

At the eleventh meeting of the Energy Working Group held in Taipei in October 1995, agreement was reached on a full Action Program for the EWG which was to be incorporated into the Osaka Action Agenda. Also included in the EWG's Action Program were 14 non-binding policy principles for rational energy consumption which were endorsed by APEC Energy Ministers in August 1996 (see Appendix E, page 51). EWG members agreed to develop and build upon these principles, including applying them into additional areas where consensus can be reached, leading to the development of a range of shared energy policy goals.

In May 2001, the EWG approved a Future Directions Strategic Plan to operate over the five year period from 2001 to 2006; this was followed by an EWG Work Plan that covered the period 2007 to 2009. In early 2002, the EWG commenced implementing the Energy Security Initiative (see Section 10.1, page 25).

In the Declaration from their meeting in Darwin in May 2007, APEC Energy Ministers recognised the need to respond to the challenges of meeting rapidly growing energy demands while minimising environmental effects. As well as emphasising the need to strengthen emergency preparedness and participate in measures to manage the risks and consequences of short-term energy supply disruptions, Energy Ministers also recognised the importance of pursuing policies and technologies to promote the development of cleaner energy and the improvement of energy efficiency and conservation. The Darwin Declaration included several specific directions to the EWG.

The Darwin Declaration provided an important input into the Sydney APEC Leaders' meeting in September 2007. In the Sydney Declaration on Climate Change, Energy Security and Clean Development, APEC Leaders agreed on cooperative actions, including actions on energy efficiency, low emissions technology development, alternative and low carbon energy uses and open trade and investment. The Sydney Declaration also included statements directly relevant to the EWG, particularly in relation to energy efficiency and conservation.

12.2 Assessment

In the questionnaire, economy representatives were asked to indicate, on a scale of 1 to 5, how satisfied they were with the EWG's overall strategic direction. The average score across the 10 economies that returned completed questionnaires was **3.8**. This score shows that economy representatives were moderately satisfied with the EWG's overall strategic direction.

Establishing a strategic direction and priorities is not an easy task in multilateral organisations, particularly in an organisation like APEC where the member economies have reached widely varying stages of economic development. In these difficult circumstances, the EWG has established a robust process for determining its strategic direction and policies, including using the standard APEC formula for codifying strategy through Minister's Declarations and specific Ministerial directions. This process may be severely tested in the near future as the global financial crisis affects the energy sector in the APEC region.

12.3 Recommendation

Recommendation EWG14. The EWG Secretariat should consider whether modifications are required to the EWG's process for determining its strategic direction and priorities, particularly to enable the EWG to respond to the impact of the global financial crisis on the energy sector in the APEC region.

13. GENDER ISSUES AND THE EWG

13.1 Overview

APEC Leaders and Ministers have recognized that gender is a cross cutting theme in APEC and that women are critical to the achievement of sustainable economic development in the region. This recognition is based on an understanding that women's full participation in economic activity is often constrained by gender-related barriers in their access to resources, including education and training, financial institutions and decision-making mechanisms.

In 1999, Ministers endorsed the Framework for the Integration of Women into APEC. This is the key document setting out APEC's commitment to implementing gender analysis, collecting and using sex-disaggregated data, and increasing women's participation in APEC fora and activities.

In 2005, APEC Leaders again recognised the significant contributions that women have made to economic development across the region and made a commitment to ensuring the integration of gender in activities across all APEC fora.

In 2006 Ministers requested that APEC economies and fora allocate the necessary resources for gender mainstreaming activities in their work and encourage women to participate in decision-making process.

At the practical level, APEC fora are encouraged¹¹:

- to have gender expertise available to assist in the overall integration of gender perspectives and considerations in the forum's activities;
- to develop processes and materials conducive to gender mainstreaming;
- to ensure that work plans, activities and resource allocation are equitable for both women and men and consistent with the commitments made by Leaders and Ministers to eliminate the barriers to, and strengthen the role and economic contribution of, women in the APEC process;
- to make gender visible throughout meeting agendas and supporting background documents and reports;
- to provide information disaggregated by sex;
- to avoid the use of gender-neutral terms which inadvertently hide the contributions and realities of, and different impacts on, women and men; and
- to ensure that reports and recommendations focus on the longer-term outcomes for women and men.

The EWG has commenced the process of incorporating gender mainstreaming into its activities by appointing a woman from the EWG Secretariat as the Gender Focal Point for the EWG. This person works in collaboration with the Gender Focal Point Network to ensure that gender issues are routinely taken into account in the EWG's activities.

¹¹ APEC Secretariat (2002). *APEC Guidelines for Framework for Integration of Women in APEC*. Singapore, APEC Secretariat.

13.2 Assessment

Sex-disaggregated statistics on attendances at EWG activities have been presented in previous sections of this report. These statistics show that there is significant participation by women in EWG activities. The appointment of the Gender Focal Point is a necessary first step in achieving gender mainstreaming in the EWG's work. This first step should now be followed up with appropriate further actions.

13.3 Recommendation

Recommendation EWG15. The EWG Secretariat should increase its efforts to ensure that gender mainstreaming is achieved in all EWG activities.

14. EFFECTIVENESS AND ADMINISTRATION OF THE EWG

14.1 Overview

The broad range of activities carried out under the auspices of the EWG are directed towards achieving the APEC Bogor Goals of free and open trade and investment in the Asia-Pacific region.

The effectiveness of these activities is, in large part, dependent on the support provided by the EWG Secretariat. The Secretariat is responsible for providing administrative, policy and logistical advice and support to EWG members, to host economies of EWG meetings, and to the Energy Business Network. In practice, the Secretariat acts as a central administrative, logistical and policy unit that ensures that all of the EWG activities proceed as effectively as possible. In doing this, the EWG Secretariat carries out a broader range of functions than many other APEC forum secretariats.

For the past 18 years, since the EWG was founded, the EWG Secretariat and the EWG Lead Shepherd have been provided by Australia. However, general APEC practice is to rotate these two roles between APEC member economies on a two-yearly basis. The SCE, in its recent recommendations for improving working arrangements, has proposed that a two-year fixed term arrangement with no more than two consecutive two-year terms be put in place for all lead shepherds and Chairs¹². The main purpose of this recommendation is to discourage the practice of some Chairs being rotated on an annual basis.

At the EWG36 meeting, the EWG Lead Shepherd advised members of the result of an internal review of international activities in the Australian Government Department of Resources, Energy and Tourism resulting in the recommendation that Australia relinquish the role of EWG Lead Shepherd and Secretariat due to resource constraints. The Lead Shepherd asked EWG members to consider taking on this role and invited nominations from members for the role. In response, Chile, Canada, Chinese Taipei, Japan, Singapore and the United States expressed strong support for Australia to continue in the role. No nominations were received, and Australia will continue to provide the Lead Shepherd and EWG Secretariat for EWG37.

¹² SOM Committee on ECOTECH (2008). *Op. cit.*

14.2 Assessment

In the questionnaire, economy representatives were asked to indicate, on a scale of 1 to 5, how satisfied they are with the overall effectiveness of the EWG in contributing to achieving the APEC Bogor Goals of free and open trade and investment in the Asia-Pacific region. The average score across the 10 economies that returned completed questionnaires was **4.0**. This score shows that economy representatives were quite satisfied with the EWG's effectiveness.

Australia has provided the EWG Secretariat and the EWG Lead Shepherd for an extensive period in contravention of APEC practice. However, much of the satisfaction expressed by economy representatives, and the unwillingness of EWG members to nominate for the role may be due to the stability and reliability of support that results from one economy carrying out the Secretariat and Lead Shepherd role over a lengthy period.

Given the resource constraints currently being experienced by Australia, and the reluctance of other APEC economies to take on the role of EWG Secretariat, it may be appropriate to review the functions currently undertaken by the EWG Secretariat. The review could determine whether all the current EWG Secretariat functions should be carried out by Australia, or whether some functions could be transferred to other bodies, such as to the EWG Program Director in the APEC Secretariat, or to other APEC economies.

14.3 Recommendations

Recommendation SCE4. The SCE should consider allowing exemptions from its recommendation that a two-year fixed term arrangement be put in place for all lead shepherds when it is clear that significant benefits in relation to the stability and reliability of support would result from one economy carrying out the Lead Shepherd and Secretariat role for an APEC forum over a lengthy period.

Recommendation EWG16. The EWG Secretariat, in conjunction with the APEC Secretariat and the APEC economies, should carry out a review to determine whether all the current EWG Secretariat functions should be carried out by Australia, or whether some functions could be transferred to other bodies, such as to the EWG Program Director in the APEC Secretariat, or to other APEC economies.

15. CONCLUSION

The previous sections of this report have shown that a broad range of activities within the APEC ECOTECH agenda are carried out under the auspices of the Energy Working Group. These activities are closely linked to strategic priorities and direction set by a robust process using the standard APEC formula in which economy representatives propose new initiatives and priorities, these are discussed and agreed between economies and are then formulated into Ministers' and Economy Leaders' Declarations and directions.

In the questionnaire, economy representatives were asked to indicate, on a scale of 1 to 5, how satisfied they were with the EWG's work. The average score across the 10 economies that returned completed questionnaires was **4.1**. This score shows that economy representatives were generally quite satisfied with the EWG's work.

While no robust performance measures are in place to assess the effectiveness of the EWG's activities, the generally high levels of scores in the questionnaire measuring APEC economies' levels of satisfaction with the EWG's work, suggest that EWG activities have generally been quite effective.

Recommendation EWG17. In concluding this independent assessment of the APEC Energy Working Group, it is recommended that the EWG should continue and should not be terminated or merged with any other APEC forum and that the EWG's Terms of Reference should remain as currently formulated.

APPENDIX A

INDEPENDENT ASSESSMENT METHODOLOGY

Introduction

Three methods were used in the independent assessment:

- participant observation of EWG and subfora meetings;
- a questionnaire survey of representatives of APEC member economies who participate in EWG activities;
- a separate review of EWG projects.

Participant Observation

The consultant for the independent assessment, Dr David Crossley, attended three meetings of the Energy Working Group: EWG 33 (March 2007 in Auckland); EWG 34 (September 2007 in Hong Kong China); and EWG 36 (December 2008 in Manila). During EWG 33 and 34, Dr Crossley attended the associated meetings of the EWG Expert Group and Task Force Chairs and the President and Vice-President of the Asia Pacific Energy Research Centre (APERC). He also attended the APERC workshops held in association with the EWG33 and EWG34 meetings. During EWG36, Dr Crossley attended a meeting of the Energy Business Network (EBN). In addition, Dr Crossley attended separate meetings of the EWG Expert Group on New and Renewable Energy Technologies held in Tokyo in January 2007 and of the EWG Expert Group on Energy Efficiency and Conservation held in Washington DC in October 2007. Dr Crossley also attended, and made two presentations at, the APERC Mid-Year Workshop held in Tokyo in November 2007.

Questionnaire Survey

On 30 October 2008, Dr Crossley sent a questionnaire by email to representatives of APEC member economies who participate in EWG activities, with a request to return the questionnaire by 10 December (later extended to 17 December). The questionnaire (see Appendix B, page 36) was designed to obtain information about:

- the impact of EWG activities "on the ground" in APEC member economies;
- the level of satisfaction with EWG's work;
- the level of satisfaction with EWG's strategic direction;
- opportunities for collaboration between the EWG and other APEC fora and with non-APEC parties; and
- the effectiveness and administration of the EWG.

Dr Crossley was available during the EWG 36 meeting for discussions with individual economy representatives about the information requested in the questionnaire.

After several reminders were sent to economy representatives by email, 10 of the 21 APEC economies returned completed questionnaires.

Review of EWG Projects

During 2007 and 2008, Dr Crossley was engaged by the EWG Secretariat to carry out a review of EWG projects. This was separate from his engagement by the APEC Secretariat to carry out the independent assessment of the EWG. Dr Crossley reviewed all 250 projects carried out under the auspices of the EWG between its inception in 1990 and the end of 2006. The purpose of this review was to document the current and historical project activities of the EWG with the aim of demonstrating to APEC Ministers and delegates how the project activities of the EWG contribute to achieving energy security with a lower environmental impact. Dr Crossley's overview report was tabled at the 8th Meeting of APEC Energy Ministers in Darwin in May 2007.

APPENDIX B

QUESTIONNAIRE FOR APEC ECONOMIES

Background

Independent assessments of APEC fora commenced in 2004, when a review of the activities of the Fisheries Working Group (FWG) was undertaken. In November 2004, Ministers welcomed this exercise and encouraged the other working groups to undertake a similar review to ensure that they are responsive to APEC's current work priorities and contribute to the achievement of the Bogor goals. Independent assessments of two further APEC working groups were carried out in 2006.

In 2007, the APEC Senior Officials Meeting Steering Committee on Economic and Technical Cooperation (SCE) identified three groups and task forces to undergo independent assessments in 2007. Ministers instructed the SCE to undertake further fora reviews in recognition of the importance of the ongoing program of independent assessments to ensure that APEC fora are strategic and effective.

In April 2008, the APEC Budget and Management Committee approved an SCE project proposal to undertake independent assessments, during 2008, of a further three APEC fora, including the Energy Working Group (EWG). The recommendations of these assessments are expected to be presented to the SCE I meeting in Singapore in February 2009.

The Consultant

The APEC Secretariat has engaged the consultancy company Energy Futures Australia Pty Ltd to carry out the independent assessment of the EWG. The assessment is being undertaken by Dr David Crossley, Managing Director of Energy Futures Australia.

Dr Crossley is carrying out three streams of work during the independent assessment:

- review of the effectiveness and impact of EWG activities;
- analysis of collaboration and interaction between the EWG and other bodies; and
- identification of strategic priorities and future direction for the EWG.

The Questionnaire

This questionnaire is designed to obtain information about:

- the impact of EWG activities "on the ground" in APEC member economies;
- the level of satisfaction with EWG's work;
- the level of satisfaction with EWG's strategic direction;
- opportunities for collaboration between the EWG and other APEC fora and with non-APEC parties; and
- the effectiveness and administration of the EWG.

Dr Crossley will be attending the EWG 36 meeting in Manila on 3rd and 4th December 2008. He will be available during the meeting for discussions with individual economy representatives about the information requested in the questionnaire.

The completed questionnaire should be returned by email to Dr Crossley **no later than Wednesday 10 December 2008**: crossley@efa.com.au.

*Please note that individual economies
will not be separately identified
in reporting the results of this questionnaire.*

Economy:	
Person Completing this Questionnaire	
Name:	
Position title:	
Organisation:	
Email:	
Telephone:	
Fax:	

EWG'S ACTIVITIES

1. *In general, what is your assessment of the level of impact that EWG's activities have had in your economy **during the last three years**?*

Please type an X in one box

Low impact		Medium impact		High impact	
1	2	3	4	5	

2. *Please provide the following information about EWG activities **during the last three years**.*

2.1 Energy Ministers Meetings

Number of People from Your Economy Attending Energy Ministers Meetings								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.2 EWG Meetings

Meetings of the Energy Working Group itself, eg EWG36.

Number of People from Your Economy Attending EWG Meetings								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.3 EWG Associated Meetings

Meetings held at the same time and place as EWG meetings, eg Energy Business Network, Business Forums, etc

Number of People from Your Economy Attending EWG Associated Meetings								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.4 EWG Sponsored Meetings

Meetings sponsored by the Energy Working Group, eg APGAS Forum, APEC Energy Trade and Investment Roundtable, etc

Number of People from Your Economy Attending EWG Sponsored Meetings								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.5 EWG Expert Group and Task Force Meetings

Eg meetings of EGCFE, EGEDA, EGEEC, EGNRET, Biofuels Task Force, etc

Number of People from Your Economy Attending EWG Expert Group and Task Force Meetings								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.6 Conferences and Workshops Sponsored by EWG Expert Groups and Task Forces

Number of Conferences and Workshops Held in Your Economy

Number of People from Your Economy Attending Conferences and Workshops Sponsored by EWG Expert Groups and Task Forces								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.7 Conferences and Workshops Sponsored by APERC

The Asia Pacific Research Centre (APERC) sponsors conferences and workshops about its own work and on other relevant topics.

Number of Conferences and Workshops Held in Your Economy

Number of People from Your Economy Attending Conferences and Workshops Sponsored by APERC								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.8 EWG APEC Funded Projects

APEC funded projects receive funds from central APEC sources.

Number of EWG APEC Funded Projects Carried Out in Your Economy

Number of People from Your Economy Involved in EWG APEC Funded Projects								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.9 EWG Self Funded Projects

Self funded projects do not receive funds from central APEC sources but are funded by individual APEC economies.

Number of EWG Self Funded Projects Carried Out in Your Economy

Number of People from Your Economy Involved in EWG Self Funded Projects								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.10 Real Time Information Sharing System (RTEIS)

The Real-Time Emergency Information Sharing system (RTEIS) is designed to provide APEC Member Economies with a cooperative environment and tools to manage and coordinate their responses to oil supply disruptions.

Number of People from Your Economy Involved in the Real Time Information Sharing System								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.11 Joint Oil Data Initiative (JODI)

The Joint Oil Data Initiative provides a complete, timely and comprehensive database and a freely accessible reliable and accurate assessment of the global oil situation.

Number of People from Your Economy Involved in the Joint Oil Data Initiative								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

2.12 Other EWG Activities

Other EWG Activities Carried Out Your Economy (please list)

Number of People from Your Economy Involved in Other EWG Activities								
Representatives of Your Economy			Representatives of Industry			Other		
Men	Women	Total	Men	Women	Total	Men	Women	Total

EWG'S WORK

3. *In general, how satisfied are you with the EWG's work?*

Please type an X in one box

Not Satisfied		Neutral		Satisfied
1	2	3	4	5

4. *What aspects of the EWG's work are you **most satisfied** with?*

Type answer here.

5. *What aspects of the EWG's work are you **least satisfied** with?*

Type answer here.

6. *What could be done to increase your level of satisfaction with the EWG's work?*

Type answer here.

EWG'S STRATEGIC DIRECTION

7. *In general, how satisfied are you with the EWG's overall strategic direction?*

Please type an X in one box

Not Satisfied		Neutral		Satisfied
1	2	3	4	5

8. *Please suggest any ways in which the EWG's strategic direction could be improved to achieve the APEC Bogor Goals of free and open trade and investment in the Asia-Pacific region.*

Type answer here.

In 2001, the Energy Working Group developed the *APEC Energy Security Initiative*, (ESI) which was endorsed by APEC Economic Leaders in October 2001. The ESI comprises a series of short-term measures to respond to temporary energy supply disruptions, and longer-term policy responses to address the broader challenges facing the region's energy supply that are practical in a policy context and politically acceptable.

9. *In general, how would you rate the usefulness of the overall Energy Security Initiative?*

Please type an X in one box

Not Useful		Neutral		Useful
1	2	3	4	5

10. *Please suggest any ways in which the Energy Security Initiative **short term measures** could be improved.*

Type answer here.

11. *Please suggest any ways in which the Energy Security Initiative **long term measures** could be improved.*

Type answer here.

OPPORTUNITIES FOR COLLABORATION

- 12.** *Please suggest any ways in which collaboration between the EWG and other APEC fora could be enhanced.*

Type answer here.

-
- 13.** *Please suggest any ways in which collaboration between the EWG and non-APEC parties could be enhanced, including the private sector, civil society and other international organizations.*

Type answer here.

-
- 14.** *Please suggest any ways in which additional resources could be obtained for EWG activities, eg opportunities to share programs and/or projects.*

Type answer here.

EFFECTIVENESS AND ADMINISTRATION OF THE EWG

15. *In general, how would you rate the overall effectiveness of the Energy Working Group in contributing to achieving the APEC Bogor Goals of free and open trade and investment in the Asia-Pacific region?*

Please type an X in one box

Not Effective		Neutral		Effective	
1	2	3	4	5	

-
16. *Are there any ways in which the effectiveness of the Energy Working Group could be improved?*

Type answer here.

-
17. *Are there any ways in which the administration of the Energy Working Group could be improved?*

Type answer here.

-
18. *Are there any other comments you would like to make about the Energy Working Group?*

Type answer here.

APPENDIX C

TASKS TO BE CARRIED OUT DURING THE INDEPENDENT ASSESSMENT OF THE APEC ENERGY WORKING GROUP

The Request for Proposals identified the following tasks to be undertaken during the independent assessment of the Energy Working Group.

1. Review of activities and assessment of their outcomes.
2. Evaluate how fora's activities can support the objectives of the Working Group and APEC.
3. Explore how fora can better take into account the APEC commitment to give gender greater consideration.
4. Assess the impact of the work program "on the ground" in APEC member economies.
5. Identify ways to develop synergies among the work of various fora.
6. Identify opportunities for greater collaboration with non-APEC parties, including the private sector, civil society and other international organizations.
7. Identify ways to tap resources for programs; opportunities to profile and share programs or projects.
8. Identify ways to strengthen the fora's strategic priorities and direction for future works.
9. Evaluate whether these fora are operating effectively and whether they should be merged with other fora or whether the ToR of various fora should be changed.
10. Finalize an array of recommendations on the above-mentioned areas.
11. Provide a draft report on initial findings, of no more than 30 pages, written clearly and containing robust analysis to be conveyed to the Project Overseer and the APEC Secretariat; the SCE and EWG members.
12. Analyse member economies' responses to the draft report on initial findings.
13. Present the final report employing a clear and diplomatic style of presentation.
14. Produce, present and distribute a final report on the independent assessment in a CD-ROM format, after approval from the project overseer (the CD burning should be coordinated with the Project Overseer).

APPENDIX D

APEC ENERGY WORKING GROUP TERMS OF REFERENCE

endorsed February 2008

1. BACKGROUND

The Energy Working Group (EWG) is one of eleven APEC Working Groups and was established in 1990 to develop a program of energy cooperation in the APEC region.

2. OBJECTIVE

Energy is integral to sustainable economic development and essential to the economic growth of the APEC region. Efficient, reliable and environmentally sustainable energy supply and use underpins economic development, improve productivity and enhances living standards.

The EWG serves as a forum for member economies to facilitate energy trade and investment and to strengthen the region's energy security to contribute to the economic growth, social well being and sustainability in the region.

3. PRINCIPLES OF COOPERATION

The EWG's activities accord with the Seoul and Bogor Declarations, the Osaka Action Agenda, the Manila Action Plan, APEC Leaders' Declarations, APEC Ministerial Declarations and directions from APEC Energy Ministers.

The EWG responds to the directions of APEC Leaders and Ministers and ensures that its projects adhere to APEC priorities. APEC Energy Ministers normally meet every two years and provide the EWG with specific policy guidance for future activities. The EWG also receives guidance from APEC SOM.

The activities of the EWG are based on the principles of mutual respect and equality, mutual benefit and assistance, constructive and genuine partnership and consensus building.

EWG activities aim to promote the three E's (economic growth, energy security and the environment) and more broadly the contribution of energy to the economic, social and environmental enhancement of the APEC community.

4. STRUCTURE OF THE EWG

All 21 APEC economies are EWG members. The EWG is chaired by a Lead Shepherd, with the assistance of a Co-Chair from the host economy. The Lead Shepherd position is open for election every two years. The EWG Secretariat is responsible for providing administrative, policy and logistical advice and support to EWG Members and host economies of EWG meetings.

The EWG work program is delivered through:

- four Expert Groups (Energy Data & Analysis, Clean Fossil Energy, Energy Efficiency & Conservation, and New & Renewable Energy Technologies);
- the Asia-Pacific Energy Research Centre;
- ad-hoc Task Forces (currently, Energy Efficiency and Renewable Energy Financing Task Force and APEC Biofuels Task Force); and
- EWG Member and Energy Business Network projects and activities.

5. SCOPE OF EWG ACTIVITY

The EWG contributes to the facilitation of energy trade and investment and regional energy security through:

- considering regional energy policy implications and responding to wide-reaching energy related issues;
- open discussion of member economy energy policies and planning priorities, including consideration and pursuit of energy policies and technologies that; reduce or remove market distortions; diversify the energy mix; mitigate the adverse environmental impacts of energy production and use; result in efficient consumption and production; and enhance energy security within the APEC region;
- information exchange, including energy statistics and supply/demand outlook data, and the dissemination of that information to the wider APEC region;
- cooperative activities, including projects, conferences, seminars, workshops, training programs, and engagement with APEC and international energy fora, as relevant.

6. PRIORITY ACTIVITIES

The Energy Security Initiative (ESI) is the principal mechanism by which the EWG addresses the short and long term energy security challenges in APEC in a sustainable manner. The ESI comprises a series of short-term measures to respond to temporary energy supply disruptions and longer-term policy responses to address the broader challenges facing the region's energy supply that are practical and achievable.

Short term measures include the Joint Oil Data Initiative; Real-time Emergency Information Sharing System; maritime security; energy emergency responses, including oil stocks.

Longer term policy responses include promoting energy trade and investment and efficient energy markets; energy efficiency; natural gas trade; clean fossil energy; alternative transportation fuels; renewable energy; hydrogen and fuel cells; methane hydrate; nuclear energy; and petroleum infrastructure, crude oil and refined products.

7. COOPERATION/CONSULTATION WITH OTHER APEC FORA AND REGIONAL/INTERNATIONAL ORGANISATIONS

The EWG will conduct necessary cooperation/consultation with other APEC fora and relevant regional and international organizations to ensure that its work is relevant and to promote mutual benefits.

Current EWG Guests are the International Energy Agency (IEA), the Renewable Energy and Energy Efficiency Partnership (REEEP) and the Energy Charter Secretariat. Their guest status may be renewed upon EWG members' approval. .

Current EWG Observers are the Association of Southeast Asian Nations (ASEAN) Secretariat, the Pacific Islands Forum (PIF) Secretariat and the Pacific Economic Cooperation Council (PECC).

8. MEETING ARRANGEMENTS

The EWG will meet twice yearly (normally March and September), hosted by a member economy according to an agreed schedule. Meetings are attended by EWG Members, Expert Group and Task Force Chairs, the APERC President and Vice-President, the Chair of the Energy Business Network, Observers and Guests. In line with APEC protocol, decisions are adopted through consensus and implementation is voluntary.

9. REPORTING ARRANGEMENTS

The Expert Groups, Task Forces, APERC and EBN should submit reports on working progress to each EWG meeting. The EWG will submit an annual report through the SCE Fora Report or as requested by SOM.

10. REVIEW

The EWG will conduct a voluntary review on its mandate and operations if necessary or required by EWG members. The EWG will be independently assessed every four years according to the Independent Assessment Schedule endorsed by the SCE, with the first independent assessment of the EWG scheduled in 2008.

APPENDIX E

NON-BINDING ENERGY POLICY PRINCIPLES ENDORSED BY APEC ENERGY MINISTERS IN 1996

1. Emphasise the need to ensure energy issues are addressed in a manner which gives full consideration to harmonisation of economic development, security and environmental factors.
2. Pursue policies for enhancing the efficient production, distribution and consumption of energy.
3. Pursue open energy markets for achieving rational energy consumption, energy security and environmental objectives, recommending action in the appropriate forum of APEC to remove impediments to the achievement of these ends.
4. Recognise that measures to facilitate the rational consumption of energy might involve a mix of market based and regulatory policies, with the relative components of the mix being a matter for the judgement of individual economies.
5. Consider reducing energy subsidies progressively and promote implementation of pricing practices which reflect the economic cost of supplying and using energy across the full energy cycle, having regard to environmental costs.
6. The regular exchange of experience on the various policies being used by member economies to achieve a more rational energy consumption.
7. Ensure that a least cost approach to the provision of energy services is considered.
8. Promote the adoption of policies to facilitate the transfer of efficient and environmentally sound energy technologies on a commercial and non-discriminatory basis.
9. Encourage the establishment of arrangements for the development of human resource skills relevant to the application and operation of improved technology.
10. Enhance energy information and management programs to assist more rational energy decision making.
11. Encourage energy research, development and demonstration to pave the way for cost effective application of new, more efficient and environmentally sound energy technologies.
12. Promote capital flows through the progressive removal of impediments to the funding of the transfer and adoption of more energy efficient and environmentally sound technologies and infrastructure.
13. Promote cost effective measures which improve the efficiency with which energy is used but reduce greenhouse gases as part of a suggested regional response to greenhouse gas reductions.
14. Cooperate, to the extent consistent with each economy's development needs, in the joint implementation of projects to reduce greenhouse gas emissions consistent with the Climate Change Convention.

APPENDIX F

ACRONYMS AND ABBREVIATIONS

ABAC	APEC Business Advisory Council
APEC	Asia-Pacific Economic Cooperation
APERC	Asia Pacific Energy Research Centre
BMC	APEC Budget and Management Committee
CTI	APEC Committee on Trade and Investment
EBN	APEC Energy Business Network
EC	APEC Economic Committee
ECOTECH	Economic and technical cooperation
EGCFE	Expert Group on Clean Fossil Energy
EGEDA	Expert Group on Energy Data and Analysis
EGEE&C	Expert Group on Energy Efficiency and Conservation
EGNRET	Expert Group on New and Renewable Energy Technologies
EMM8	Eighth meeting of APEC Energy Ministers
ESI	APEC Energy Security Initiative
ETI	Energy trade and investment
EWG	Energy Working Group
Fora	APEC groups and committees
IEEJ	Institute of Energy Economics, Japan
IFAP	APEC Investment Facilitation Action Plan 2008-2010
IEA	International Energy Agency
PMU	APEC Project Management Unit
PREE	Peer Review on Energy Efficiency
REEEP	Renewable Energy and Energy Efficiency Partnership
SCE	APEC Senior Officials' Meeting Steering Committee on ECOTECH
SOM	APEC Senior Officials' Meeting
TPT-WG	Transportation Working Group