

Asia-Pacific Economic Cooperation

Independent Assessment of the Energy Working Group

Report to SOM Steering Committee on Economic and Technical Cooperation

May 2013

APEC Project SCE 01/2012

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Executive Summary

- 1. The APEC Energy Working Group (EWG) is a successful APEC working group reporting to the Senior Officials Steering Committee on ECOTECH (SCE).
- 2. It has been active since 1990, and in accordance with its terms of reference "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 wellbeing and sustainability in the region".
- 3. The main findings of this independent assessment of the EWG are as follows:
 - a) the EWG's outputs have been in line with APEC Leaders' and Ministerial Statements, Declarations and instructions;
 - b) all current projects can be mapped back to APEC Leaders' and Ministerial Statements, Declarations and instructions;
 - c) the EWG undertakes a large number of projects in comparison to other SCE subfora and these projects are funded proportionately. It also undertakes a high number of self-funded projects – while this is to be applauded in one sense and shows a strong commitment, some APEC member economies are concerned that they do not have access to sufficient resources to participate in all projects of interest;
 - d) EWG work is adequately planned on a medium term and annual basis in accordance with APEC polices and procedures, and also benefits from an internal vetting process through the EWG's subordinate Expert Groups;
 - e) the work culture of the EWG is collaborative, supportive and professional;
 - f) the work of the EWG is well supported by the Asia Pacific Energy Research Centre (APERC) in Tokyo that is funded principally by the Japanese Government, and the EWG Expert Groups and Task Forces which include:
 - Energy Trade and Investment Task Force (ETITF);
 - Expert Group on New and Renewable Energy Technologies (EGNRET);
 - Expert Group on Clean Fossil Energy (EGCFE);
 - Expert Group on Energy Data and Analysis (EGEDA);
 - Expert Group on Energy Efficiency and Conservation (EGEE&C); and
 - Low Carbon Model Towns Task Force (LCMTTF);
 - g) the current structure of the EWG and its subfora is satisfactory and logical in relations to the work that it has been asked to undertake by APEC Leaders and Ministers, and it should not be considered for streamlining or amalgamation at this time;

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- h) the use of voluntary peer assessment and regional workshops as ways to consider member economy responses to energy issues, and to share knowledge and experiences, is strongly supported and should be continued;
- the development of the EWG Strategic Plan should address issues of prioritisation and enable the sequencing of linked projects over several years;
- j) cooperation takes place, either directly or through APEC member economy delegations, with the International Energy Agency (IEA), International Energy Forum (IEF), ASEAN Centre for Energy (ACE), Economic Research Institute for ASEAN and East Asia (ERIA), and the International Renewable Energy Agency (IRENA) and is satisfactory;
- k) in response to APEC Leaders' and Ministerial Statements, Declarations and instructions APEC member economies are seeking ways to cooperate on nuclear safety with the International Atomic Energy Agency (IAEA), including its Asian Nuclear Safety Network (ANSN), and the Nuclear Energy Agency (NEA) within the Organization for Economic Co-operation and Development (OECD); and
- more resources should be provided to assist the EWG secretariat function, especially in terms of improving the use of electronic documentation management and linkages between information on the APEC, APEC EWG and Expert Group websites.
- 4. There are 12 recommendations arising from this independent review which are detailed in Section 3 of the report. In summary the main recommendations are:
 - a) the EWG should continue to develop their Strategic Plan, and once approved revise and update their Terms of Reference which were last adopted in 2008;
 - b) the current process of reviewing concept notes and project proposals by the EWG Expert Groups should continue and be enhanced through providing more explicit linkages with APEC Leaders' and Ministerial Statements, Declarations and instructions; ensuring benefits to APEC as a whole; ensuring recipient APEC member acceptance for capacity building projects; and identifying linkages with the work of other APEC groups and external bodies;
 - c) the EWG should seek observer status in other APEC fora that work on energy related topics and undertake joint discussions and projects were appropriate;
 - d) EWG members should support the revitalisation of the Energy Trade and Investment Task Force, especially in terms of considering facilitation of trade in energy sources and technologies, investment in the diversification of energy sources, and engagement with the private sector; and
 - e) the EWG should seek to proactively communicate externally on its projects to interested parties and the media.

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Section 1 Methodology

- 1. On 5 March 2013, the APEC Secretariat commissioned GED Advisory to undertake an independent assessment of the APEC Energy Working Group (EWG) (SCE 01/2012).
- 2. The Senior Officials Steering Committee on ECOTECH (SCE) has a requirement for a periodic independent review of the operations and structure of APEC working groups to ensure economic and technical cooperation (ECOTECH) activities are targeted, effective, efficient, and make the best use of scarce resources. Independent assessments have taken place since 2006 with all SCE working groups having been reviewed by the end of 2012.
- The output of the independent assessments is a report providing recommendations designed to ensure that the working group is responsive to APEC's current priorities and contributes to the achievement of APEC's overall vision and objectives.
- 4. The specific subject for this independent assessment is the APEC Energy Working Group (EWG). The Terms of Reference for the EWG is included in Annex 1. In accordance with the contracted Scope of Work, the following items have been considered in preparing this report:
 - f) the key APEC policy documents, including Leaders' and Ministers statements, EWG records of meetings, key project documentation and activities;
 - g) evaluation of whether EWG is operating effectively and efficiently; whether the group's Terms of Reference or operation could be modified to better respond to APEC ECOTECH priorities and contribute to the achievement of APEC goals;
 - h) identify ways to strengthen EWG's strategic priorities and direction for future work;
 - provide recommendations on how the forum can better focus and more efficiently and effectively manage its tasks and assure that its capacity building activities are providing benefits according to Leaders' and Ministers' priorities;
 - j) identify ways to develop synergies among the work of the forum and other relevant APEC groups;
 - k) identify opportunities and provide recommendations for greater collaboration with non-APEC parties, including the private sector, civil society and other international organizations; identify ways for EWG to tap resources for programs;

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- explore how EWG can better take into account the APEC commitment to give gender greater consideration in accordance with directions outlined by the Policy Partnership on Women and the Economy;
- m) finalize an array of recommendations on the above-mentioned areas.
- 5. In addition to a comprehensive literature research to address the above items, GED Advisory held a series of interviews with APEC EWG delegations in the margins of the APEC EWG 45 meeting held in Koh Samui, Thailand from 18 to 22 March 2013. Most delegations from APEC member economies in attendance were covered at this time. For those delegations not interviewed at that time a questionnaire was sent for their response.

Section 2 Alignment with APEC Priorities

A. Alignment of EWG Outputs with APEC priorities

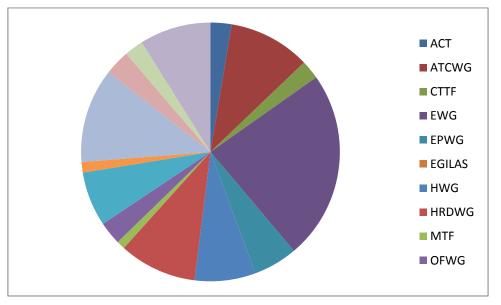
- 6. APEC's priorities in relation to energy are derived from a series of declarations, statements and instructions provided through:
 - a) Bogor Goals (1994), Osaka Action Agenda (1995) and Manila Action Plan (1996);
 - b) APEC Leaders' Statements and Declarations, including the APEC Leaders Growth Strategy (2010);
 - c) APEC Ministers and Energy Ministers Ministerial Statements;
 - d) Medium Terms Priorities from the 2010 SOM Report on ECOTECH; and
 - e) annual APEC objectives as set by the host.
- 7. There is a high degree of alignment between EWG outputs and APEC priorities. In particular the EWG contribute to three of the five medium term priority areas identified in the 2010 Framework to Guide ECOTECH as follows:
 - a) regional economic integration in which the EWG works on removing barriers to energy trade and investment;
 - b) human security in which the EWG focus on energy security; and
 - c) safeguarding of life through environmentally sound growth in which the EWG have achieved outputs for energy smart communities, low carbon model towns and energy efficiency.
- 8. The EWG has complied with SOM's expectation in terms of undertaking strategic, medium term and annual planning activities to ensure alignment with APEC priorities.
- 9. Further clarity is expected in this years' strategic plan, especially in terms of:
 - a) providing a comprehensive and all-encompassing framework for EWG's areas of focus;
 - b) identifying objectives and critical success factors to measure success over time; and
 - c) a prioritized implementation schedule, including an annual work plan, who will take the lead, and when will projects be expected to start and finish. This is important to ensure work is allocated efficiently between EWG subfora and coordinated with the work of other groups within APEC and externally.

B. Alignment of Forum Projects with APEC Priorities

10. As identified in Figure 2.1 the EWG is the most active APEC SCE subfora in terms of number of projects undertaken. It also has the highest number of internal publications (19 as compared to the next highest number which is 7 internal publications from the Human Resources Development Working group (HRDWG).

Figure 2.1 Number of Projects from 2008 Undertaken by APEC SCE subfora

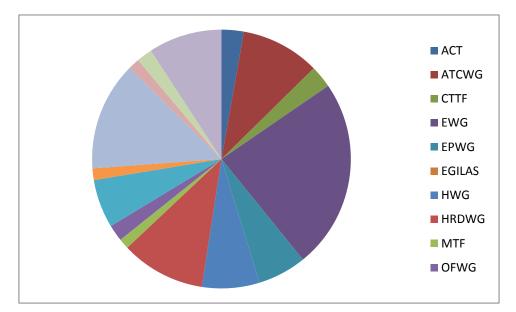
n = 381



Source: 2013/SOM1/SCE/003 Report of the APEC Secretariat Executive Director on the Alignment of Fora Work Plans with APEC's Overall Vision and Objectives

11. Figure 2.2 shows that EWG features proportionately in terms of the total USD value of projects undertake by APEC SCE subfora since 2008.





Source: 2013/SOM1/SCE/003 Report of the APEC Secretariat Executive Director on the Alignment of Fora Work Plans with APEC's Overall Vision and Objectives

- 12. Based on reported attendances¹, on average 80 persons attend EWG meetings. This average is in line the with average attendance rate for all SCE working groups. Higher numbers of attendees are experienced by other subfora such as the HRDWG, Telecommunications and Information Technology Working Group (TELWG) and the Transportation Working Group (TPTWG).
- 13. Annex 2 contains the results of a mapping exercise between APEC Leaders and Ministers statements over the past three years and subsequent project work by the EWG. All projects were found to have an origin in one or more APEC Leaders' or Ministerial statements.
- 14. However, in some cases there are gaps between what the APEC Leaders and Ministers have asked for and the projects undertaken. These gaps are in the areas of:
 - a) biofuels;
 - b) Energy Smart Communities Initiative Smart jobs;
 - c) Energy Trade and Investment Public/private partnerships;
 - d) Nuclear Safety; and

¹ See 2013/SOM1/SCE/003.

- e) Nuclear Power Emissions Reduction Potential Study (NUPERPS).
- 15. Any gaps must be reviewed in the context of the extensive workload already being achieved by the EWG using its existing limited resources.
- 16. Comments received back from a majority of EWG members point to resource limitations which mean they cannot be involved in all EWG projects. Given this it may be appropriate to encourage Energy Ministers to be more critical before adding tasks and instructions to the EWG agenda, and ensuring that their own member economies do have sufficient resources to effectively participate and undertake relevant work.

C. Forum Operations

Structure of the forum

- 17. 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. Normally the member economy of the Lead Shepherd provides the EWG Secretariat, which is responsible for providing administrative, policy and logistical advice and support to EWG Members and host economies of EWG meetings.
- Currently the Lead Shepherd is Dr Phyllis Yoshida, Deputy Assistant Secretary for Asia, Europe and the Americas, Office of Policy and International Affairs, U.S. Department of Energy.
- 19. The EWG work program is delivered through several subfora. These subfora include:
 - Asia Pacific Energy Research Centre (APERC);
 - Energy Trade and Investment Task Force (ETITF);
 - Expert Group on New and Renewable Energy Technologies (EGNRET);
 - Expert Group on Clean Fossil Energy (EGCFE);
 - Expert Group on Energy Data and Analysis (EGEDA);
 - Expert Group on Energy Efficiency and Conservation (EGEE&C); and
 - Low Carbon Model Towns Task Force (LCMTTF).
- 20. Each subfora has a Chairperson, and the secretariat functions are provided independently of the EWG Secretariat by APEC member economies.

21. The gender mix is appropriate across the EWG. It is noted that the Lead Shepard and EWG Secretary are both women.

Terms of reference

- 22. The Energy Working Group (EWG), launched in 1990, seeks to maximize the energy sector's contribution to the region's economic and social well-being, while mitigating the environmental effects of energy supply and use.
- 23. The Terms of Reference of the EWG as supplied by the APEC Secretariat are included in Annex 1. It is noted these terms of reference are difficult to locate on the APEC and APEC EWG websites.
- 24. While the current Terms of Reference remains valid, in light of more recent APEC Leaders' and Ministerial Statements, Declarations and instructions, it does require an update to remove some redundant references to structures and work that has now been superseded. This update should be undertaken after the EWG Strategic Plan has been confirmed during 2013.
- 25. Once updated, the Terms of Reference should be made readily accessible on the public pages of the APEC website.

Compliance with APEC policies

26. The work of the EWG is undertaken in accordance with APEC Revised Guidelines for Lead Shepherd/Chair and Deputy Lead Shepherd/Chair of APEC Working Groups and SOM Task Forces (2012/SOM1/SCE-COW/004) and the Policy on Scheduling of Subfora Operations to Enhance Effectiveness (2012/SOM1/SCE-COW/005). With regard to the Policy it is noted that given the size and duration of EWG and Expert Groups meetings it is difficult to effectively arrange for these meetings to be held in conjunction with the SOM.

Candidate for streamlining / merger with other APEC fora

27. Having reviewed the Terms of Reference, and the work required to meet the various APEC Leaders and Ministerial Statements, Declaration and instructions, the APEC EWG is current working effectively with its current structure, including Expert Groups and Task Forces. It plans its work well and has a critical mass of projects which are complementary and should remain under the management of the EWG. As such it is not

recommended that the EWG be a candidate for streamlining or merger with other APEC fora.

Comments from EWG members on EWG operation

- 28. During the course of this independent assessment a series of interviews took place with EWG members in the margins of 45th EWG meeting held from 18-22 March 2013 in Koh Samui, Thailand. A questionnaire was also sent out to those EWG members that were not interviewed.
- 29. EWG feedback on the operation of the EWG is included in Annex 3. The feedback can grouped under the following headings and is summarised below:
 - a) EWG projects;
 - b) duplication;
 - c) collaboration;
 - d) tools;
 - e) agenda setting; and
 - f) EWG Secretariat.

EWG projects

- 30. EWG members support the current process of project proposals and concept notes being vetted by the relevant Expert Group prior to formal submission. This allows time for input from all member economies and sharing of past experiences that can then contribute to better and more coordinated proposals.
- 31. Some projects would benefit from being multi-year projects.
- 32. APERC is well support for the project work it carries out on energy research and peer evaluations.

Duplication

- 33. It is acknowledged that there is a potential for duplication in the work of the EWG and the work of other APEC subfora. Energy is recognised as being a cross sectorial issue, affected by matters such as standards and conformance, transport, small and medium sized enterprises, etc.
- 34. To date duplication has been minimised through the active participation of APEC member economies in other APEC fora and in other regional or international energy forums.

35. Sometimes duplication is productive because APEC's informal nature allows members to discuss policy and technical matters outside of the context of formal treaty organisations. Once some level of consensus is achieved within APEC these collective positions can then help in negotiations in the other multilateral organisations.

Collaboration

- 36. Collaboration is generally considered satisfactory at the technical level amongst APEC member economies, but views have been expressed that policy is not given an equal weight in discussions.
- 37. Collaboration with other government-to-government energy agencies deemed satisfactory.
- 38. APEC EWG collaboration with civil society organisations is considered to be more appropriately a domestic issue, with the APEC EWG being able to request information from relevant non-governmental organisations as required.
- 39. Industry has reduced their level interaction with EWG at the high level but do remain active at the Expert Group level in various technologies.

Tools

- 40. EWG members fully support the concept note process and drafts being moderated by Expert Groups.
- 41. Concept notes could be improved especially in terms of:
 - a) linkages with APEC Leaders' and Ministerial Statements, Declarations and instructions;
 - b) benefit to the APEC region (as opposed to national or local benefits);
 - c) confirmation in capacity building projects that the recipient countries find the project useful and meets their own national priorities; and
 - d) more analysis is provided of the with the work of other non-EWG fora, including other APEC groups, and international G2G and nongovernment organisations (e.g. ISO and IEC);
- 42. Support for the continued application and use of the voluntary peer assessment tool, and applying this to new energy topic areas.

43. Difficulty experienced by some member economies in maintaining an oversight and accessing information and progress reporting on the various APEC, EWG and Expert group websites.

Agenda setting

- 44. There is a confirmed need to prepare a strategic plan for the EWG that covers itself and the Expert Groups, especially in light of increasing energy related projects being undertaken by other regional and international agencies.
- 45. There is a perceived imbalance in the agenda and type of projects to issues that are of interests to developed member economies. However when challenged it was acknowledged that there are ample opportunities to raise agenda items, and propose project under the current APEC arrangements.
- 46. EWG members expressed a wish to undertake more discussion on barriers to trade in energy resources and technologies (especially in terms of traditional energy production and natural gas), promoting investment, and renewing engagement with the private sector.
- 47. Support expressed for APERC's future areas of focus in terms of energy security, natural disaster preparedness and recovery, and geothermal energy.

EWG Secretariat

- 48. All EWG members support and acknowledge the hard work of the Lead Shepherd, EWG Secretariat and APEC Project Director, given the limited time and resources they have available for EWG work.
- 49. It was noted that it may be appropriate for the responsibility of being Lead Shepherd and providing the EWG Secretariat should revolve amongst APEC member economies on a more regular (e.g. 2 year) basis. This would share the effort more evenly amongst EWG members. To date, it is understood only Australia and the United States have taken on the role.
- 50. EWG members consider more resources should be made available to improve information access and website operation, and to dispense with paper at meetings assuming papers will be prepared and be made available electronically in advance.

- 51. It was considered appropriate that on at least an annual basis a formal briefing to the EWG from a SOM official should be provided to help contextualise the work of the EWG in the broader APEC agenda.
- 52. A concern was expressed by some smaller developed and developing economies that the breath of work is proving very difficult to monitor and effectively participate in. More prioritisation is hoped for in the development of the EWG strategic plan, and for the APEC Ministers to moderate and proritise their instructions to the EWG to ensure human resources within economies are not spread to thinly.
- 53. In considering the above feedback the following aspects must be kept in mind.
 - a) APEC is not a treaty based organisation;
 - b) any commitments are voluntary and non-binding;
 - c) APEC have a consensus based approach to decision making;
 - d) there is a wide variation in economic size, level of development and the type of energy issues that are of importance to APEC member economies;
 - e) APEC member economies are both energy exporters and energy importers;
 - economies vary in terms of government or private ownership, investment, and service delivery in the energy sector;
 - g) that the EWG is collegial and supportive in nature it has a good operational culture; and
 - APEC provides an important forum for informal discussions at regional, multi-plural and bi-lateral levels, which is sometimes more productive that discussions in the more formal treaty based organisations.

D. Cooperation

- 54. The EWG has extensive and effective linkages with other APEC groups, and regional and international agencies related to energy.
- 55. 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.
- 56. 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).

- 57. Links within APEC include interactions with the Committee on Trade and Investment (CTI) and its sub-fora such as the Sub-Committee on Standards and Conformance (SCSC), and the APEC Transport Working Group following on from the APEC Transportation and Energy Ministerial Conference Action Agenda in 2011. This could be enhanced by establishing joint projects and mutual observer status at each other's meetings.
- 58. EWG members continue to implement studies and initiatives with the International Energy Agency (IEA), International Energy Forum (IEF), ASEAN Centre for Energy (ACE), Economic Research Institute for ASEAN and East Asia (ERIA), and the International Renewable Energy Agency (IRENA).
- 59. Further engagement is desirable with ABAC through the Energy Trade and Investment Task Force to encourage private sector involvement in energy diversification and to facilitate more open markets and transparent investment regimes.
- 60. Interested EWG members will seek ways to cooperate on nuclear safety with the International Atomic Energy Agency (IAEA), including its Asian Nuclear Safety Network (ANSN), and the Nuclear Energy Agency (NEA) within the Organization for Economic Co-operation and Development (OECD).

Section 3 Recommendations and Implementation Advice

#	Recommended action	Implementation Advice
1	The EWG should continue to develop its Strategic Plan and ensure it covers the scope and activities of all the EWG subfora (including the Expert Groups and Task Forces) and identifies priorities for future work.	Complete the Strategic Plan and ensure it, or a subordinate document, provides a road map for future work streams and sequential projects covering several years.
2	The EWG should revise its terms of reference once the Strategic Plan is approved.	The EWG should establish a small temporary task group to revise and propose the revised Terms of Reference.
3	 The current process of using Expert Groups to review project proposals and concept notes is supported and should continue. This process could be enhanced by: a) ensuring that concept notes are explicit in terms of definitions and the coverage of the project, including explicit linkages to overarching statements and directions and the EWG Strategic Plan; b) confirming there is a benefit to APEC as a whole, in addition to national and local benefits; c) confirmation in capacity building projects that there is an acceptance of the need and priority for capacity building from the recipient economies; and d) providing an analysis of linkages with similar projects of other organisations (including international and regional energy forums, international standards development agencies, UN agencies, WTO and EU projects). 	 Revise the concept note template to include specific mention and a space for commentary on: Definition of principal terms Linkage with the EWG Strategic Plan Benefits arising for the APEC region If the project is for capacity building, confirmation from recipient countries that the project meets and contributes to their national priorities Other work with a similar scope by other APEC fora and external organisations (e.g. international and regional energy forums, international standards development agencies (e.g. IEC and ISO), UN agencies, WTO etc.)).
4	EWG delegations should ensure there are aware of the APEC project proposal process, including the multi-year funding facility for APEC projects and the project proposal training activities provided by the APEC Secretariat.	All EWG delegations should familiarise themselves with the materials on the APEC Forms and Resources page (<u>http://www.apec.org/Projects/Forms-and-Resources.aspx</u>).

#	Recommended action	Implementation Advice
		The APEC Secretariat should provide a training session on project proposals in the margins of the next EWG.
5	The EWG support the APEC Secretariat proposal to the BMC to extend project completion dates to two years after the date of approval.	The Lead Shepherd of the EWG should signal EWG's support for the APEC Secretariat proposal to the SCE.
6	The EWG should seek to have mutual observer/correspondence membership status with other relevant APEC subfora that are working on energy matters, and appoint a representative that can report on developments of interest to the EWG. Also it would be appropriate for the EWG to occasionally schedule their meetings in the margins of the Senior Officials Meetings.	The EWG Secretariat should identify other relevant APEC fora working on energy and report to the EWG. The EWG should consider which work efforts should be monitored by the EWG and seek to have participants from the EWG if considered necessary. The EWG should also plan to have at least one of their meetings every two years in the margins of a Senior Officials Meeting.
7	The APEC EWG and relevant APEC subfora should establish joint projects where the subject interfaces between both groups. This will avoid duplication and concentrate expertise on the subject.	The EWG Secretariat should identify other relevant APEC fora working on energy and report to the EWG. The EWG should consider which work efforts should be monitored by the EWG and offer to undertake the work jointly.
8	The use of the peer assessment tool should be maintained as an efficient method for information exchange and knowledge sharing on energy related topics.	Maintain the opportunity for EWG delegations to participate in peer assessment activities.
9	The use of regional workshops and symposiums to explore energy topics should be maintained as an efficient method for information exchange and knowledge sharing on energy related topics.	Maintain the opportunity for regional workshops and symposiums.
10	All EWG delegations are encouraged to activity participate in the agenda setting of the EWG and subfora, and in preparing concept notes and project proposals. This is important to ensure a balanced set of policy and technical discussions within the APEC EWG, and meeting the interests of both developed and developing members.	All EWG delegations should familiarise themselves with the materials on the APEC Forms and Resources page (<u>http://www.apec.org/Projects/Forms-and-Resources.aspx</u>).

#	Recommended action	Implementation Advice
fo te	economies; facilitate investment in developing both traditional and new energy sources; and	EWG delegations should suggest agenda items and topics for the Energy Trade and Investment Task Force.
se	 including enforcement of deadlines for submission of meeting material and making all documents electronically available prior to the meeting to allow for home-based consultations; moving to a paperless system for meeting documents; improving the consistency and linkages between the APEC, APEC EWG and Expert Group websites to allow for easier understanding and navigation of the information; and 	 EWG delegations should collectively discuss and confirm its expectations and performance measures in terms of EWG and Expert Group secretariat services. Once expectations and performance measures are confirmed resource estimations may be made and secretariats seek sufficient resources. Assuming high quality internet connections, a pilot exercise should be established at the next EWG meeting to trial the following: a) set and maintain a due date for the receipt and circulation of meeting papers; b) the posting of the meeting papers on the APEC website prior to the meeting; c) no provision of printed meeting papers during the meeting – electronic copies only available via the website. The EWG should establish a small task group to review communication actions about the EWG and its work. This should include: a) confirmation of APEC's requirements for external communications from APEC fora;

#	Recommended action	Implementation Advice
		 b) identifying important audiences that should be informed about EWG work and projects, the communication channels that should be used and the main messages that should be conveyed; c) identifying a standardised process for undertaking external communications about EWG work and projects; d) reviewing; standardising; updating; and rationalising, as necessary, the EWG and Expert group websites; and e) establishment of an orientation presentation. The EWG should establish a schedule for APEC member economies to on the Lead Shepherd and Secretariat functions every 2-3 years.
13	APEC EWG to consider how it might better communicate the details of its projects and the outcomes achieved, especially to external policy, technical, professional and media organisations.	 The EWG should establish a small task group to review communication actions about the EWG and its work. This should include: a) confirmation of APEC's requirements for external communications from APEC fora; b) identifying important audiences that should be informed about EWG work and projects, the communication channels that should be used and the main messages that should be conveyed; c) identifying a standardised process for undertaking external communications about EWG work and projects; and reviewing; standardising; updating; and rationalising, as necessary, the EWG and Expert group websites; and e) establishment of an orientation presentation.

Acronyms

The ony my	
ACT	Anti-corruption and Transparency Experts Working Group
APEC	Asia Pacific Economic Cooperation
APERC	Asia Pacific Energy Research Centre
ATCWG	Agricultural Technology Cooperation Working Group
BTF	Biofuels Task Force
CTTF	Counter Terrorism Task Force
ECOTECH	APEC's economic and technical cooperation agenda
EEREFTF	Energy Efficiency and Renewable Energy Financing Task Force
EGCFE	Expert Group on Clean Fossil Energy
EGEDA	Expert Group on Energy Data and Analysis
EGEE&C	Expert Group on Energy Efficiency and Conservation
EGILAT	Experts Group on Illegal Logging and Associated Trade
EGNRET	Expert Group on New and Renewable Energy Technologies
EPWG	Emergency Preparedness Working Group
ETITF	Energy Trade and Investment Task Force
EWG	Energy Working Group
G2G	government-to-government
HRDWG	Human Resources Development Working Group
HWG	Health Working Group
LCMTTF	Low Carbon Model Towns Task Force
MTF	Mining Task Force
OAA	Osaka Action Agenda
OFWG	Ocean and Fisheries Working Group
PPSTI	Policy Partnership on Science, Technology and Innovation
PPWE	Policy Partnership on Women and the Economy
SCE	SOM Steering Committee on Economic and Technical Cooperation
SMEWG	Small and Medium Enterprises Working Group
SOM	Senior Officials Meeting
TELWG	Telecommunications and Information Technology Working Group
TPTWG	Transportation Working Group
TWG	Tourism Working Group

References

APEC documents

2008/SOM1/SCE/011 Energy Working Group (EWG) Terms of Reference

2012/SOM1/SCE-COW/004 Revised Guidelines for Lead Shepherd/Chair and Deputy Lead Shepherd/Chair of APEC Working Groups and SOM Task Forces

2012/SOM1/SCE-COW/005 Policy on Scheduling of Sub-fora Operations to Enhance Effectiveness

2013/SOM1/SCE/003 Report of the APEC Secretariat Executive Director on the Alignment of Fora Work Plans with APEC's Overall Vision and Objectives

2013/SOM1/SCE-COW/010 Energy Working Group Proposed Workplan for 2013

2013/SOM2/SCE/012 Report on the Progress of the Implementation of SOM Steering Committee on Economic and Technical Cooperation (SCE) Fora Work Plans

2013/SOM2/SCE/SUM Summary Report - Second SOM Steering Committee on Economic and Technical Cooperation Meeting 2013

APEC Energy Ministers Declarations

Fukui Declaration on Low Carbon Paths To Energy Security: Cooperative Energy Solutions for a Sustainable APEC, 19 June 2010, Fukui, Japan

Action Agenda to Move APEC Toward an Energy Efficient, Sustainable, Low-Carbon Transport Future, Joint APEC Ministerial Conference On Transportation And Energy, 13 September 2011, San Francisco, California, United States of America

St Petersburg Declaration on Energy Security: Challenges and Strategic Choices, 24-25 June 2012, Saint Petersburg, Russian Federation

Annex 1 EWG Terms of Reference (2008/SOM1/SCE/011)

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 wellbeing 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.

<u>Short term measures</u> 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 ORGANIZATIONS

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.

Annex 2 Mapping of APEC EWG projects with APEC Leaders' and Ministerial Statements, Declarations and Instructions

Торіс	Declarations, Statements and Instructions ²	EWG for a responsible	Commentary	Current Projects
Alternative transport fuels – Bio fuels	Fukui 2010 San Francisco 2011	APERC EGEDA		Biomass and biofuels measurement
Barriers to trade		EWG, EGEE&C		 Efforts to relax regulations for importation of non-commercial experimental vehicles Market compliance mechanism for Energy Efficiency Programmes 2012 Building Code Harmonization in Energy Smart Community 2013
Carbon capture and storage	EMM Fukui 2010 EMM St Petersburg 2012	EGCFE		 Increasing the Knowledge and Awareness of Carbon Capture and Storage: CCS Capacity Building in the APEC Region (Phase V) (EWG 05/2010A) Permitting issues related to carbon capture and storage for coal-based power plant projects in developing APEC Economies (EWG 04/2010) Feasibility of accelerating the deployment of carbon capture, utilization and storage (CCUS) in developing APEC economies (EWG 24/2011) Promoting Technologies of Carbon Capture, Utilization and Storage in APEC developing economies (2013)

² of APEC Economic Leaders, Ministers and Energy Ministers

Торіс	Declarations, Statements and Instructions ²	EWG for a responsible	Commentary	Current Projects
Cleaner energy production from coal and combined cycle generation	EMM Fukui 2010 EMM St Petersburg 2012	EGCFE		 Maximizing the Energy efficiency and Clean Utilization of Low Rank Coals through Innovative Technologies in APEC Economic – Symposium, 2012 Comprehensive Integration and Optimization of Coal-based Clean Power and Chemical Multi-generation (CBMG) 2013 APEC Initiative for Deploying Advanced Clean Coal Technologies 2013
Energy efficiency Peer Review on Energy Efficiency (PREE) and the Cooperative Energy Efficiency Design for Sustainability (CEEDS)	Fukui 2010	APERC	We commend the Peer Review on Energy Efficiency (PREE) which has been successfully carried out for four APEC economies and urge additional economies to participate. We also welcome the contributions made by Japan, Chinese Taipei and the United States to the APEC Support Fund to promote energy efficiency activities in the region.	 Initial and follow-up PREEs for APEC member economies CEEDs Phase 4 now underway
Energy intensity	Fukui 2010 San Francisco 2011 APEC Leaders 2011 St Petersburg 2012	EGNRET	APEC economies share results of research and analysis to support meeting the aspirational goal to reduce aggregate energy intensity of APEC economies by 45% from 2005 levels by 2035.	Study on Measures to Reduce Energy Intensity in APEC low Carbon Town (EWG 23/2012A)
Energy Security Initiate	APEC Leaders in 2001 EMM St Petersburg 2012	EWG and all subfora	The ESI comprises a series of short- term measures to respond to temporary energy supply disruptions and longer- term policy responses that are practical and achievable to address the broader challenges facing the region's energy supply.	 APERC – APEC Energy Supply and Demand Outlook (5th Edition) Oil and Gas Security Exercises 2013-2014 approved in principle Energy Security Forum 2013 Policy dialogue on emergency preparedness for natural disasters and the energy infrastructure

Торіс	Declarations, Statements and Instructions ²	EWG for a responsible	Commentary	Current Projects
Energy Security Initiative – Long Term			The Long Term measures include natural gas trade, energy investment, energy efficiency, renewable energy, clean fossil energy, alternative transportation fuels, nuclear energy, hydrogen and fuel cells, methane hydrates, and petroleum infrastructure and crude and refined products.	 Policy options for energy resource diversification in the Asia-Pacific region project proposal from Russia Prospects for Marine Current Energy Generation in APEC Region (S EWG 23 11A) 2013 APEC Workshop on Geothermal Technology (SF EWG 01/2013)
Energy Security Initiative – Short Term - Energy emergency response	EMM Fukui 2010 EMM St Petersburg 2012	EWG in joint programs with the IEA and ASEAN EGEDA	The Short Term measures include the Joint Oil Data Initiative (JODI), maritime security, real-time emergency information sharing system, and energy emergency responses (including oil stocks).	We instruct the EWG and EGEDA to continue collecting complete, accurate and timely oil and gas data for contribution to the Joint Oil Data Initiative (JODI) in cooperation with other relevant bodies where necessary, to extend their capacity building in energy statistics to interested economies, and to support multilateral initiatives for more transparent and less volatile energy commodity markets.
Energy Smart Communities – Smart buildings and appliances	San Francisco 2011 Leaders 2011 EMM St Petersburg 2012	EWG, EGEE&C	An ESCI Knowledge Sharing Platform (KSP) event was held in Koh Samui covering latest developments in each focus area by selected EWG member economies.	 Energy Saving Window Thermal Performance Simulation Training (2013) Workshop to support the development of national design lighting centres APEC distribution transformer survey Engagement by APEC economies in smart appliance standards Building Code Harmonization in Energy Smart Community 2013
Energy Smart Communities – Smart grids	EMM Fukui 2010 San Francisco 2011 Leaders 2011 EMM St Petersburg 2012	EWG, EGEE&C, EGNRET	An ESCI Knowledge Sharing Platform (KSP) event was held in Koh Samui covering latest developments in each focus area by selected EWG member economies.	 Addressing Challenges of Advanced Metering infrastructure (AMI) Deployment in APEC (EWG 07/2011A) Piloting Smart/Micro Grid Projects for Insular and Remote Localities in APEC

Торіс	Declarations, Statements and Instructions ²	EWG for a responsible	Commentary	Current Projects
				 Economies (S EWG 11 11A) Urban development smart grid roadmaps: Christchurch recovery project (EWG 08/2012) Promote APEC LCMT Development with District Energy System 2013 APEC Smart DC Community Power Opportunity Assessment 2013
Energy Smart Communities – Smart jobs and education	San Francisco 2011 Leaders 2011 EMM St Petersburg 2012	EWG	An ESCI Knowledge Sharing Platform (KSP) event was held in Koh Samui covering latest developments in each focus area by selected EWG member economies.	•
Energy Smart Communities – Smart transport	San Francisco 2011 Leaders 2011 EMM St Petersburg 2012	EWG, EGNRET	An ESCI Knowledge Sharing Platform (KSP) event was held in Koh Samui covering latest developments in each focus area by selected EWG member economies.	Stock-take of Electrical Vehicle Interface with Electricity and Smart Grids Across APEC Economies and Potential for Harmonization (EWG 11/2011)
Energy Trade and Investment	Fukui 2010	Energy Trade and Investment Task Force (ETITF)		APEC Workshop on Best Practices on Financing Renewable Energy (EWG 21/2012A)
Fossil Fuel Subsidies	Fukui 2010 San Francisco 2011 APEC Leaders 2011 St Petersburg 2012	ECCFE APERC, in collaboration with IEA	A non-paper summarising progress on this initiative was tabled at the 45 th APEC EWG meeting in Koh Samui, which included a Voluntary Report mechanism Template.	 Phasing out inefficient fossil fuel subsidies to reduce waste and limit CO₂ emissions while protecting the poor (EWG 11/2010) A capacity building workshop on fossil fuel subsidy reform was held on 18 March 2013 in Koh Samui.
Freight transportation	San Francisco 2011	TPTWG	Energy Working Group and Transportation Working Group to work with the APEC Business Advisory Council (ABAC) to establish a network	Transportation and Low emissions Development Strategies Workshop (2013)

Торіс	Declarations, Statements and Instructions ²	EWG for a responsible	Commentary	Current Projects
Improving energy efficiency – energy efficient buildings and appliances	Fukui 2010		of freight transporters who will work to develop best practices for reducing their energy use. Energy-efficient buildings and appliances are key to a sustainable future since the building sector accounts for two-fifths of energy use in the region. Net Zero Energy Buildings are being developed using energy-efficient appliances, components and systems. Trade and investment in energy efficient appliances can be encouraged through more harmonized standards and testing methods. We are therefore launching a Collaborative Assessment of Standards and Testing (CAST) for such appliances.	 As encouraging measures to improve energy efficiency that can cut the APEC region's dependence on oil and gas as well as reduce greenhouse gas emissions from fossil fuels
International cooperation	St Petersburg Declaration 2012	EWG	To work with IEA, International Energy Forum (IEF), ASEAN Centre for Energy (ACE), Economic Research Institute for ASEAN and East Asia (ERIA), and the International Renewable Energy Agency (IRENA).	 Achieved through the interaction with APERC and EGEDA.
Low-Carbon Model Towns (LCMT)	EMM Fukui 2010 San Francisco 2011	Low-Carbon Model Town Task Force (LCMTTF) APERC	Draft Plan of Action 2013 discussed at 5 th meeting of the LCMTTF in Koh Samui on 18 March 2013.	 Research on the Application of Physical Energy Storage Technology to Enhance the Deployment of Renewable Energy in an Low Carbon Town (EWG 16/2012A) LCMT projects in Koh Samui (2012) and Da Nang City (2013) LCMT Capacity Building Development (CBD) 2013
Natural gas	EMM St Petersburg 2012	EWG	Review the current state and prospects of the energy markets of the APEC region, with emphasis on the role of natural gas in the total energy balance.	 Future workshop on the Changing Global Gas Market and Unconventional Gas Regional Workshop (Proposed)
Nuclear safety	EMM Fukui 2010	EWG	EWG, APERC EGCFE, EGEDA	•

Торіс	Declarations, Statements and Instructions ²	EWG for a responsible	Commentary	Current Projects
Nuclear Power Emissions Reduction Potential Study (NUPERPS)	EMM St Petersburg 2012 EMM St Petersburg 2012	EWG	International Atomic Energy Agency (IAEA), including its Asian Nuclear Safety Network (ANSN), and the Nuclear Energy Agency (NEA) within the Organization for Economic Co-operation and Development (OECD). International Atomic Energy Agency (IAEA) through its Action Plan on Nuclear Safety.	•
Public-Private	St Petersburg Declaration 2012		We instruct EWG to take into consideration the discussions and main outcomes of APEC Public-Private Roundtable on energy Security which was held on the eve of this meeting.	•
Sustainable Growth	Fukui 2010	LCMTTF, EGNRET, EGEE&C,	Task Force should develop the concept of a Low Carbon Town, conduct feasibility studies to encourage creation of low-carbon communities in urban development plans, and share best practices for making such communities a reality.	 Best Practices in Energy Efficiency and Renewable Energy Technologies in the Industrial Sector in APEC Region (S EWG 19 11A) APEC Peer Review on Low-carbon Energy Policies (PRLCE) Phase 2 (EWG 18/2012A) Promoting Stable and Consistent Renewable Energy Supply by Utilizing Suitable Energy Storage Systems (EWG 22/2012A) Operational Technology of Solar Photovoltaic Power Station Roof and Policy Framework (EWG 24/2012A)
Unconventional gas development	EMM Fukui 2010 EMM St Petersburg 2012	APERC, EGCFE and EGEDA		 APEC Unconventional Gas Census: Evaluating the potential for unconventional gas resources to increase gas production and contribute to reduced CO₂ emissions (EWG 12/2011) APEC Unconventional Gas Expert Workshop (EWG 16/2011)

2013/SOM3/SCE/028

Annex 3 APEC EWG comments

The following comments have been provided by APEC EWG members during interviews in the margins of 45th EWG meeting held from 18-22 March 2013 in Koh Samui, Thailand and in responses to a subsequent questionnaire.

EWG projects

- There are a lot of projects most of which get finished well.
- All projects can be mapped to Bogor goals and other Leaders' Declarations and Ministerial statements no work being undertaken that is out of scope.
- Process of raising concept notes and gaining Expert Group consideration is supported, but this process should not prevent the promulgation of novel or innovative projects.
- APERC well supported good rational research.
- Projects, especially those approved at the third round, would benefit from a 2-year delivery time frame. This is a proposal that APEC Secretariat is submitting for BMC approval this year.
- Some projects could be seen as component parts of the same multi-year programme but the funding cycle makes such comprehensive planning difficult. It is possible to submit Multi Year Project as the Project Proponents would have the benefit to secure the funding for three-four years the facility does exist for this within the APEC framework.
- Formative stages of projects should better define the concepts being covered (e.g. definition of conventional versus unconventional types of energy; 'inefficient' fossil fuels subsidies, and does it cover consumer, producer and renewable energy subsidies? (note that in the case of fossil fuels subsidies the definition was deliberately left undefined to allow for member economies to explore the subject now more concrete actions are being proposed more definition has become necessary).
- The best contributions made by APEC EWG projects are:
 - o concept discussion and definition;
 - facilitating information exchange, databases and website (but on-going maintenance a problem);
 - o peer reviews; and
 - example implementations and the learning that follows.

Duplication

- There is a <u>potential</u> for duplication of work undertaken by the EWG and similar work of other forums. This is inherent to this kind of work and it is very difficult to avoid. Energy is linked to many areas and issues like standards and conformance, telecommunications or SMEs.
- This potential for duplication has increased in recent years with the establishment of further government-to-government (G2G) forums that now involve themselves with energy matters.
- To date <u>actual</u> duplication of effort has been minimised through:
 - the dual memberships in the APEC EWG and the other bodies by some APEC member economies;
 - recognition of the 'lead agency' status on topics amongst the organisations (e.g. emergency management by the IEA);
 - initiation of projects by EWG only when there is a clear APEC specific application for the topic and in line with Leaders and Ministers directions;
 - o management of the EWG agenda by the Lead Shepherd;

- the fact that APEC can operate at a more technical level that some of the other organisations, especially through its expert working groups , and hence get things done in more tangible form, and the voluntary nature of any subsequent commitments actually reduced risk of the countries to participate; and
- the fact that some topics can actually be moderated and progressed by discussion and trial within APEC given the collaborative and voluntary nature of the APEC organisation, as opposed to mandatory commitments that are a feature of other organisations – several APEC projects have resulted in action in other forums.
- Duplication is OK each group has different focus but projects must have truly regional APEC focus and not be captured by national or local interest. This is moderated by the Chairs of Energy Expert Groups to ensure the main concept and project results can be implemented both in developing and developed economies considering, of course, the project specific characteristics.
- Duplication OK as APEC project often have capacity building element lacking in other bodies.
- Duplication OK as long as it is not resource intensive and does not require multiple reporting of more or less the same information.

Collaboration

- Generally considered sufficient at technical (Expert Group) level or through workshops with
 major international government-to-government bodies, e.g. IEA, OECD etc. however policy
 linkages and engagement considered weak but it is recognised that this might reflect the
 nature of the APEC fora. It is acknowledged that there is a 'chicken and egg' situation technical
 collaboration can sometime lead to policy outcomes for member economies, and vice versa.
- Engagement of other fora also should be considered by those organizations that might want to link to APEC EWG. Those fora should consider becoming guest/invited members within the APEC rules, but the interest should come first from the organizations.
- Engagement satisfactory because of duel membership of some EWG members.
- It is appropriate for EWG to request information, presentations and speakers from other bodies, but this needs to be at the initiative of the EWG.
- Current levels of involvement and interaction is appropriate and does not need to be formalised any further.
- Reluctance to have a more formalisation regarding 'civil society' at APEC level as this should be the duty of each EWG member to gain these views domestically in preparation for attending EWG meetings. Civil society engagement is a matter of domestic policy.
- Absence of industry is noted. ABAC is visible at Ministerial level but do not contribute to the EWG. ABAC/industry does attend some events especially at technical level but do not value for attendance at the EWG level. The participation of industry/business would increase the opportunity to really implement the energy projects in the APEC Economies. This initiative could be raise by members at any time.
- International linkages are often considered indirectly through discussions within delegations with relevant government officials at home.
- Further engagement is requested with the newer energy related forums such as IRENA and the UN-ESCAP Asia Pacific Energy Forum.

- Further engagement is requested with APEC Transport WG and the renovated Policy Partnership for Science, Technology and Innovation, and also other groups.
- Time to revise EWG's strategic plan and develop a comprehensive Road Map required to keep track and monitor the work of APEC and other bodies e.g. UN-ESCAP APEF, ASEAN Energy Meetings, East Asian Energy summit.

Tools

- Full support for the concept note approval process that must go through expert working groups for moderation and validation.
- Concept papers are a great tool but could benefit from greater precision in some cases, such as:
 - link to overarching statements and directions;
 - o benefit to APEC as a whole in addition to national and local benefits;
 - confirmation in capacity building projects there is the endorsement and are of a high priority for recipient economies; and
 - analysis of linkages with similar projects of other organisations (international and regional energy forums, international standards development agencies, UN agencies, WTO and EU projects).
- Voluntary peer review tool found to be very beneficial for all parties and should remain, especially because it provides for a great learning curve and knowledge transfer in safe environment – needs to continue to be voluntary and capacity building focus, and not become 'scrutinising' in nature like some other peer assessment tools e.g. G20.
- Questions raised over downstream actions from peer reviews and pilot projects is there any lasting change or benefit?
- EWG has provided a good platform to share information but it is difficult to maintain databases and website because of the annual funding limitations need to allow for programme funding.
- Healthy degree of expert interaction especially at workshops.

Agenda setting

- Major need for a revised strategic plan/blueprint for the future for EWG because energy forums are multiplying and the agendas are increasingly overlapping and fragmenting. That is why APEC Secretariat is encouraging that working groups and task forces have a strategic plan in order to streamline the process and try to avoid the overlapping, though this will continue as mentioned before due to cross-cutting issues.
- Many projects are self-funded and in the national interest and not necessarily regional interest this inappropriately influences the EWG agenda and advice to Ministers.
- Perceived imbalance in the work agenda of the EWG in favour of issues associated with developed economies. This may be only a perception as most of the projects are funded in the ASF fund which has a main characteristic to fund projects for capacity building in developing economies. Energy Efficiency is a sub-fund within ASF, for instance. Also other fora such as ASEAN/EAS have strong capacity building orientation.
- Any imbalance in the EWG agenda is not the fault of specific economies everyone is equal and can take an initiative if they wish. There is papers and workshops (these ones held normally in SOM meetings) developed by APEC Secretariat to prepare project proponents and project overseers to submit successful Concept Notes and Full Project Proposals.

- More focus is needed on facilitating energy trade and infrastructure investment e.g. EEPF-EU nominated fund for specific infrastructure projects – soft loan projects – not just capacity building but facilitate commercial investment – public/private partnerships complementary to CTI.
- Need more on topics of interest to energy exporters, especially conventional fossil fuels and clean fossil fuels.
- Support for APERCs next topics energy security and natural disaster recovery.
- Concern the lack of formality in approval of changes to Expert Group Terms of Reference.
- Generally more comfortable to focus on technical issues other fora should deal with policy issues e.g. pluri-lateral free trade agreements balanced is needed. Probably the EWG's success is because the issues are more technical and less political.

EWG Secretariat

- All EWG members support and acknowledge the hard work of the Lead Shepherd, EWG Secretary and APEC program director, and the limited resources available to do the secretariat work all consider more resources should be made available.
- If more resources could be made available EWG would like to improvements in terms of more timely information provision, meeting logistics, papers, website, etc. It is noted that from the APEC funds the only resources available are those for develop the projects –which are aimed to research, set up workshops, travel undertaking, edition of papers, etc., but not to EWG website or technical support. This issue should be considered by SOMs in the future as the particular websites are funded by the economies with their own resources –that is the example of EWG website.
- Most Expert Group websites are considered to have better interface and are more regularly updated than the EWG website.
- Centralise websites and make them standardise their structure and content.
- The document and information system of APEC, APEC EWG and Expert Groups remains confusing and difficult to use, especially for new people an orientation tutorial should be established for EWG.
- More use of modern technology should be used, for example allow for web conference attendance and webinars. All these technical resources imply funding.
- Dispense with paper and ensure release of working documents well in advance of the meeting so they can be circulated and discussed back at home.
- Meeting agenda hasn't changes for a long time perhaps better to have it restructured to have proper policy debates, and move reporting to the back. It is noted the meeting agenda is circulated well before the meeting is held in order Economies submit their inputs, comments, suggestions to be included. This issue is more a duty of the Economies and Contact Points to raise their own issues of interest.
- Formal annual briefing from SOM official on the role that EWG is playing in the broader APEC agenda.
- Smaller less resourced economies finding it information overload.
- Other APEC fora have the meeting record and resolutions confirmed before leaving the meeting.