



# Updated development of APEC Energy Working Group

EWG Secretariat



March, 2019

# Outline

- Recent EWG decision on Project Management
- Outreach within and beyond APEC
- EWG Strategic Plan (2019-2023)
- 2019 EWG Workplan
- APEC Energy Vision Post 2020
- APEC EWG Website
- Key Conclusion of EWG56 (partial)

# Recent EWG decision on Project Management

- Expert groups and task forces are requested to assist POs with familiarizing with APEC project procedures and to provide POs with technical advices for the sake of project quality.
- Members/EG Chairs are requested to present in the EWG meeting a 2 page summary of each EWG project completed since the last EWG meeting, including policy recommendations/suggestions for further APEC consideration or action.
- All projects should closely follow the rules of submission including the co-sponsorship and deadline.
- Members are requested to submit the completion report of APEC projects on time.

# Outreach within and beyond APEC

- All projects are encouraged to provide **high-level policy recommendations** upon completion and seek greater visibility.
- Expert groups are requested to be supportive in providing detailed and sound information to demonstrate work achievements which are to be submitted to APEC senior officials, such as **fora report** or other surveys.
- Expert groups are encouraged to conduct **cross-fora cooperation** and should report to EWG for endorsement.

Fora report submitted to  
APEC SCE

→ Section II: Progress on Projects and Other Initiatives

Title	Progress made	Mandate	ECOTECH Priorities	Cross-fora collaboration
<b>APEC-funded Projects</b>				
Water-Energy Nexus: Coal-Based Power Generation and Conversion - Saving Water. (EWG-08-2014A)	Final report submitted, which has been distributed to the EGCFE members and posted to the EGCFE and EWG websites for broader distribution.	Cognizant that the energy-water nexus is an important aspect of our collective energy resilience. As we define the appropriate fuel and power generation technology mix that would support the twin goals of economic prosperity and environmental sustainability, we will endeavor ways to understand the complex relationship between energy and water, address challenges, and utilize both resources more efficiently. (2015-EMM Declaration)	Sustainable Growth, Human Security	The International Energy Agency's Clean Coal Centre (IEA/C3C) prepared a similar report, but less technical, than the completed EGCFE study. The EGCFE study was referenced in the IEA's report.
APEC Peer Review on Low-Carbon Energy Policies (PRLCE), Phase 3. (EWG-01-2014A)	The PRLCE in Viet Nam was successfully conducted on 18-22 January 2016. The results were presented to the EGNRET members during the EGNRET 44 Meeting in April 2016 and the final report was endorsed by EWG members and published in August 2016.	We reaffirm the importance of low carbon development to achieve our individual and regional economic aspirations and goals. (2015-EMM Declaration)	Sustainable Growth, Human Security	
APEC Low-Carbon Model Town (LCMT) Project, Phase 6. (EWG-01-2015A)	The Sixth Edition of the "Concept", including the First Edition of the LCT-1 System Guideline, was drafted and reported at the LCMT Task Force Meeting held in conjunction with the EWG52 meeting in Russia in October 2016. They were endorsed by EWG Members in November 2016 and published on APEC's and APERC's websites. The APEC liaison officer will continue exchanging information with International Organization for Standardization (ISO). ALMEC Corporation, a contracted consultant, also reported the final results of the feasibility study in Mandaue City, the Philippines at the LCMT Task Force Meeting. The policy review of a low-carbon development project for Mandaue City, the Philippines was conducted on 7-9 December 2016. The final draft policy review report was endorsed by EWG members in June 2017.	We encourage ongoing efforts in this direction toward energy efficient and low-carbon development in urban settings, including the implementation of the APEC Low-Carbon Model Town Project, use of green codes and standards for buildings, and the Energy Smart Communities Initiative. (2015 Leaders' Statement) We instruct the LCMT TF to move the current LCMT Project into the next stage in order to disseminate Low-Carbon Towns in the Asia-Pacific region. (2015-EMM Declaration)	Sustainable Growth, Human Security	The APEC liaison officer will continue exchanging information with International Organization for Standardization (ISO). An expert from OECD participated in the policy review.
APEC Nearly (Net) Zero Energy Building Best Practices and Energy Reduction Results Comparative Study. (EWG-02-2016A)	2015 APEC APEC-CZEBIS-ISBE Workshop NZEB Case Studies, Best Practices, Policies Education Issues & Enabling Technologies was held very successfully. More than 30 speakers and 20 APEC members.	We encourage Member Economies to explore strategies to drive the shift towards green buildings including zero energy buildings.	Sustainable Growth, Human Security	The PO contacted with Prof Usha of UN IOYFP on Sustainable Buildings and Construction to find

# EWG Strategic Plan 2019-2023 (1/6)

## Mission

*Our mission is to build the capacity of APEC members to strengthen domestic and regional energy security and lower the carbon intensity of energy supply and use across the region, facilitated by information and data exchanges, joint research and development, and open trade and investment.*

## Objectives

1. Strengthen Energy Security
2. Advance Clean Energy
3. Promote Energy Efficiency and Low-carbon Communities
4. Enhance Energy Resiliency and Energy Access
5. Facilitate Energy Trade and Investment

The EWG Strategic Plan 2019-2023 has been endorsed by SOM.

# EWG Strategic Plan 2019-2023 (2/6)

## Objectives 1: Strengthen Energy Security

- Conduct oil and gas security exercises that can help capacity building of emergency response mechanisms in short-term disruptions in energy supply.
- Develop oil and gas security studies to address regional energy security challenges and threats.
- Enhance the network of energy security stakeholders in the APEC region.
- Continuously assess fossil fuel resources in the APEC region and assist economies in effectively bringing those resources sustainably to market.
- Continuously enhance the quality of APEC energy statistics to ensure more accurate analysis of APEC energy security.
- Preparation of a document titled "APEC Energy Vision Post 2020 - Discussion Paper".
- Explore the potential of hydrogen and nuclear energy for interested economies, adhering to nuclear safety, security, safeguards, and peaceful use.

# EWG Strategic Plan 2019-2023 (3/6)

## Objectives 2: Advance Clean Energy

- Develop the roadmap to double the share of renewables from 2010 levels in the APEC energy mix, including in power generation, by 2030.
- Undertake research to understand the systematic impact of fast deployment of variable renewable energy (VRE) on power systems and analyze the benefits and cost of enhancing power system flexibility and strengthening power grid connectivity.
- Engage in clean energy technology assessment and related activities to demonstrate the cost-effectiveness of clean energy applications.
- Facilitate the exchange of policies and best practices that seek to enable energy systems to become more sustainable through the adoption of new technologies, innovative regulatory frameworks and sustainable transport, as well as other initiatives to modernize the energy sector.
- Undertake analysis and research on clean fossil fuels, share best practices and address associated challenges.
- Facilitate development and deployment of clean fossil energy technologies that are adapted to the needs of APEC member economies, for example high-efficiency, low-emission (HELE) coal-fired power generation, green and intelligent refinery upgrading; carbon capture, utilization, and storage (CCUS) in fossil energy utilization for both power generation and industrial uses; and regional synergy on transportation fuel standards.
- Exchange best practices on enhancing the efficiency of and lowering emissions from coal-fired power plants.
- Facilitate the exchange of best policies, practices and tools in the area of clean energy financing.

# EWG Strategic Plan 2019-2023 (4/6)

## **Objectives 3: Promote Energy Efficiency and Low-carbon Communities**

- Facilitate the exchange of energy smart and low carbon policies, practices and tools among APEC member economies to promote the development of energy smart and low carbon communities across the region and to achieve progress towards the goal of reducing APEC's aggregate energy intensity by 45 percent from 2005 levels by 2035.
- Support the development and commercialization of energy efficient technologies in the areas of power generation and distribution, industry, transport, buildings and appliances.
- Strengthen the reliability, adaptability and interoperability of electric grids in the APEC region, as well as international interconnections.
- Develop the inclusion of human resource base and energy consumers within APEC member economies to improve their analytical, technical, operational, and policy capacity in the area of energy efficiency and overall energy literacy.



# EWG Strategic Plan 2019-2023 (5/6)

## Objectives 4: Enhance Energy Resiliency and Energy Access

- Encourage the removal of inefficient fossil fuel subsidies that promote wasteful consumption while recognizing the importance of providing those in need with essential energy services.
- Exchange best practices on integrated resource and resilience planning to prepare for natural or man-made disasters.
- Undertake research and demonstration on energy infrastructure resilience to withstand extreme weather or man-made disasters.
- Support development and, as applicable, the adoption of technologies to enable flexible operation and improve reliability of coal-fired power plants to strengthen electrical grids with greater intermittent generation.
- Undertake research and demonstration to understand the water-energy nexus, share best practices and address associated challenges.
- Accelerate best practice sharing and capacity building on the improvement of affordable, reliable and resilient energy access, as well as the quality of supply.
- Capacity building on a gender-inclusive energy workforce resilience that are capable of responding to emergency situations and swift changes in the energy market.
- Encourage the exploration of diversified and clean energy access solutions through capacity building, technical exchanges and project cooperation.

# EWG Strategic Plan 2019-2023 (6/6)

## Objectives 5: Facilitate Energy Trade and Investment

- Identify significant barriers to energy trade and investment in the APEC region by seeking the business community's input on priority trade and investment barriers in the energy sector.
- Conduct research to address challenges and opportunities to intra-APEC energy trade and investment.
- Promote accessibility and transparency in the formulation and administration of energy sector investment-related policies.
- Enhance consistency of policies affecting energy trade and investment across the APEC region, including supporting a diversified, flexible and integrated natural gas market in the Asia Pacific region.

# 2019 EWG Workplan

2019 Theme: Connecting People, Building the Future

## Expected Outcomes/Deliverables for 2019

- Energy Security
  - Renewable Energy
  - Energy Efficiency
  - Clean Fossil Fuels
  - Low-Carbon Towns
  - Sustainable Energy technology
  - Energy Resilience
  - Cross-cutting Issues
- ◆ Oil and Gas Security Initiative (OGSI)
  - ◆ Peer Review on Low Carbon Energy Policies (PRLCE)
  - ◆ Energy Smart Communities Initiative (ESCI) and Knowledge Sharing Platform (KSP)
  - ◆ Low Carbon Model Towns (LCMT)
  - ◆ Peer Reviews of Inefficient Fossil Fuel Subsidies
  - ◆ Clean Coal Technologies
  - ◆ Green Energy Finance
  - ◆ Peer Reviews on Energy Efficiency (PREE)
  - ◆ Grid Integration of Renewable Energy
  - ◆ Improved Efficiency and Quality of Electric Grids
  - ◆ Collaboration to the EPWG, PPSTI, AD, TPTWG,

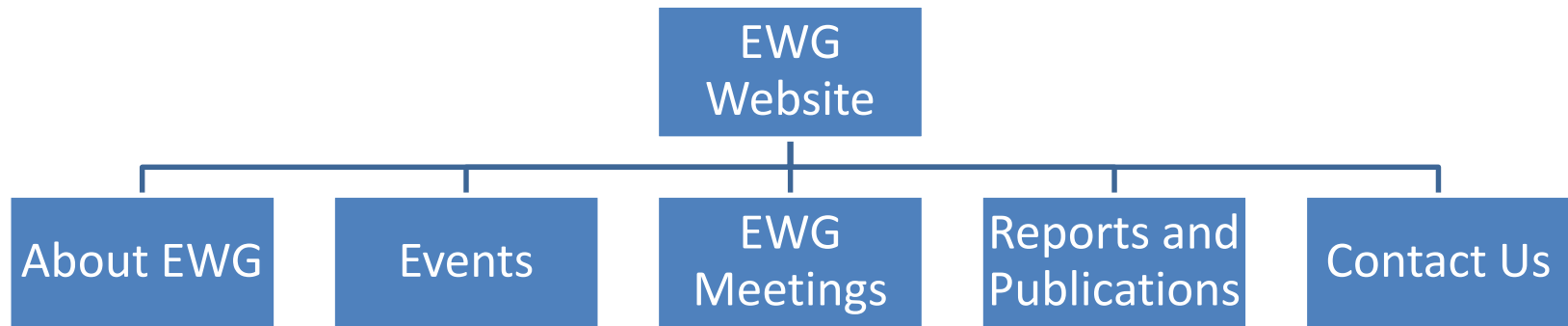
The 2019 EWG Workplan has been endorsed by SOM.

## APEC Energy Vision Post 2020

- The Bogor Goals are drawing to a conclusion in 2020. APEC Senior officials turning their attention to consideration of a new APEC Vision Post 2020.
- The issue was raised in EWG51 by Australia.
- APEC Energy Vision Post 2020 Discussion Paper
  - developed in cooperation with APERC, APSEC, EGCFE, EGEDA, EGEE&C, EGNRET
  - Challenges and New Opportunities from the views of each Centers/EGs
  - The scope including: Energy Security, Energy Resiliency, Energy Access, Energy System Transition

The exchange and discussion on APEC Energy Vision Post 2020 through emails should be continued **by EWG57.**

# APEC EWG Website



2-page  
summary

**Events**

Below is a calendar of upcoming EWG related events, including meetings, conferences, workshops and seminars. More information can be obtained from the contact provided.

**2018**

- 23-25 January 2018: Workshop: Value of ISO 50001 Policies and Supportive Infrastructure Training Workshop. **Atlanta, Indiana**. Ms. Elena Thomas-Karr: [elena.thomas-karr@hq.doe.gov](mailto:elena.thomas-karr@hq.doe.gov)
- 1-2 February 2018: APEC Workshop on Electromobility: Infrastructure and Workforce Development. **Santiago, Chile**. Ms. Cortesa Petro: [cpetro@minenergia.cl](mailto:cpetro@minenergia.cl)
- 13-16 February 2018: Workshop on Measuring and Verifying Energy Performance in ISO 50001. **Atlanta, Georgia, United States**

**EWG Meetings**

The EWG seeks to further APEC goals of facilitating energy trade and investment within the APEC region and ensuring that energy contributes to the economic, social and environmental enhancement of the APEC community. The EWG meets twice a year to hold a dialogue on key energy issues affecting the APEC region, share information on notable energy sector developments, and to review progress on current projects and initiatives designed to achieve the EWG's goals and objectives.

**Future Meeting Plan**

EWG Programmed Next Meetings

**Meeting Venues and Dates**

Summary Records for recent EWG meetings are accessible below:

Meeting	Venue & Date
EWG04	Wellington, New Zealand, 20-24 November 2017
EWG03	Singapore, 24-28 April 2017
EWG02	Moscow, Russia, 17-21 October 2016
EWG01	Canberra, Australia, 9-13 May 2016
EWG00	Honolulu, Hawaii, 14-18 December 2015

**Completion Reports of EWG Projects**

Project Number	Project Name	Deliverables	Proposing Economies
<b>2017</b>			
EWG 02 2017A	Trainings in Renewable Energy Best Practices: Procurement, Contracts, Lifecycle Cost Analyses, and Risk Mitigation to Mobilize Private Investment		United States
<b>2016</b>			
EWG 01 2016S	Oil and Gas Security Initiative: 2016		Japan
EWG 02 2016S	APEC Workshop on Energy Statistics		Japan
EWG 03 2016S	Conference on APEC Green Energy Finance		Chinese Taipei
EWG 04 2016S	2017 Energy Smart Communities Initiative (ESCI) Best Practices Awards Program		Chinese Taipei, United States
EWG 01 2016A	Gaps Assessment on APEC Energy Efficiency and Conservation Work Toward Fulfilling the Leaders' Energy Intensity Reduction Goal		United States
EWG 03 2016A	Study on the Cost-Effective Renewable Energy-Supply Solutions based on Innovative Solar Technologies to Promote Green Buildings in APEC Region		China

<https://www.ewg.apec.org/>

## Key Conclusion of EWG56 (partial)

- Expert groups are requested to discuss the **Energy Modernization paper** provided by Chile within EGs meeting and to report their discussion and conclusion in EWG57.
- EGEE&C
  - report **APEC Zero Energy Building Initiative** in the appropriate EWG meeting, and if member endorse, this initiative could report to higher level
  - study **reasons of different performances within APEC region** and to disseminate the knowledge
- EGNRET
  - seek opportunities of cooperation with **IRENA** for seeking synergy in the aspect of the Renewable Energy Doubling Goal
  - collect the **renewable data** of all the members and report to EWG to see if there is any difficulty on data collection

***Your comments are welcome!***

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