

## **EXPERT GROUP ON CLEAN FOSSIL ENERGY (EGCFE) PROGRESS REPORT TO THE 56<sup>th</sup> MEETING OF THE APEC ENERGY WORKING GROUP (EWG 56)**

A summary of administrative and project activities undertaken by the EGCFE since the 55<sup>th</sup> EWG Meeting is provided by the EGCFE Chair, Mr. Scott Smouse (USA).

### **ADMINISTRATIVE**

#### **EGCFE Meeting**

No EGCFE meeting was held since EWG 55.

### **APEC MINISTERS-CEO LNG DIALOGUE**

The United States funded and hosted an APEC Ministers-CEO Dialogue on liquefied natural gas (LNG) development and trade on June 26, 2018 on the margins of the World Gas Conference in Washington, DC. Formally endorsed by APEC PNG Host Economy Chairman of the APEC Senior Officials' Meeting (SOM), Ambassador Ivan Pomaleu, and the EWG, the event brought together senior government representatives from 15 APEC economies and business executives from 16 companies around the APEC region to discuss challenges to and opportunities for trade and investment in LNG across the Asia-Pacific region.

This dialogue helped advance the APEC Leaders' goals to strengthen energy security and foster sustainable growth for APEC economies. U.S. Energy Secretary Rick Perry stressed the U.S. Government's interest in working with APEC partners to address mutual energy and environmental challenges. Papua New Guinea's Petroleum Minister Fabian Pok spoke to the importance of LNG to meeting APEC's growing energy demand and welcomed collaboration with APEC partners on LNG. Other economy representatives reported on domestic project developments and plans, and shared their observations and perspectives on challenges to and opportunities for LNG development and trade in the Asia-Pacific region.

### **PROJECT STATUS**

#### **COMPLETED PROJECTS (3)**

##### **International Seminar for the development of the natural gas market (EWG 03 2018A)**

With USD70,000 provided by APEC, the Mexican Ministry of Energy held a workshop, *International Seminar for the Development of the Natural Gas Market*, in México City, Mexico, on 16-17 October 2018. The event had the attendance of 1) representatives from four economies (Chile, Malaysia, Peru, and Vietnam), in addition to Mexico as the organizing economy; 2) more than 40 different institutions and companies associated with the natural gas value chain; and, 3) the participation of four international experts in natural gas matters.

Through the dynamics organized on both days, the seminar allowed a rapprochement between government representatives, companies associated with natural gas, consultants and researchers. This approach achieved an exchange of ideas that will allow evaluating the necessary actions to strengthen the international natural gas market.

The organizing economy (Mexico) works with the inputs obtained from the seminar (feedback, suggestions, integrations and presentations, among others) to complete various outputs that are part of the project: The natural gas catalog for the APEC region, the natural gas dashboard and the comprehensive analysis of results. These outputs will be delivered to the APEC Secretariat and will be published on the webpage of the seminar.

##### **Oil and Gas Security Initiative: 2017 (EWG 05 2016S)**

The Japan self-funded project has generated two reports, both endorsed by the EWG and published at APEC's website in September 2018: *Energy security of APEC economies and changing downstream oil environment* and *Oil and Gas Security Indexation – 2017 Update*

### **International Workshop on Best Practice Guidance of Effective Coalbed Methane Recovery Technologies for APEC Developing Economies (EWG 17 2016A)**

With USD99,969 provided by APEC, China Coal Information Institute (CCII) held a workshop, Best Practice Guidance of Effective Coalbed Methane Recovery Technologies for APEC Developing Economies, in Beijing on May 30-31 2018. The project Completion Report was approved by EWG members on 17 September 2018.

## **ONGOING PROJECTS (2)**

### **APEC Workshop on LNG Trade Facilitation (EWG 07 2018S)**

Chinese Taipei and the United States lead this self-funded project and will hold a workshop in Taipei, Chinese Taipei on 6-7 December 2018. The workshop aims to provide a platform for deeper dialogues on policies, regulatory frameworks and market mechanisms related to the region's LNG development and trade facilitation among current and future LNG suppliers and consumers of the region. Experts of member economies, international organizations, and regional LNG trading hub will be invited to share their views on the challenges and prospect of LNG trade in the region.

With a project budget of USD80,000, Chinese Taipei has been in the process to circulate the invitations to experts of member economies, international organizations, and regional LNG trading hub to share their views on the challenges and prospect of LNG trade at the workshop. The agenda of the workshop with the compiled list of speakers will be soon released.

### **PREP – Peer Review on Efficient Power (EWG 12 2017A)**

This APEC-funded project has been extended until end of 2019. The United States proposed this project to facilitate expert reviews of current coal power generation practices in APEC developing economies. The project was originally scheduled to start in December 2017 and be completed in December 2018. Owing to a significant delay in securing a third reviewer for the four proposals that were received in response to the RFP, implementation of the project has been delayed. The first two reviews (Japan and China) submitted their evaluation in late May, 2018; however, the third reviewing economy (Australia) submitted their evaluations in mid-August. Consequently, the Project Overseer has requested to extend the project by 12 months.

At the time of this report, the selection of contractor has been finalized. The Project Overseer has received confirmation from the selected contractor, WorleyParsons, that they will perform the project as proposed in their proposal without changing the outputs and activities. The contractor has also agreed to reduce their bid by \$300 to match approved project funds, USD 150,000. Once the contract is awarded, the Project Overseer plans to actively seek out commitments from two developing APEC economies and work closely with the contractor, the Japanese experts who will contribute to this project, as well as the peer review hosting economies to establish a schedule that ensures successful completion of the project by December 2019, as newly requested.

## **PROPOSED PROJECTS (4)**

### **APEC Study on Small-Scale Shallow Draft LNG Carriers and Floating Storage Regasification Units**

The United States proposed to assess the practicality of small-scale shallow draft LNG carriers and Floating Storage Regasification Units (FSRUs) in the APEC region and demonstrate their efficiency for regional island-to-island, shallow coastal, and river LNG transport. It will develop recommendations, build capacity and provide guidance on the optimal use of small-scale shallow draft LNG carriers and FSRUs to enhance LNG imports.

The requested project, with a budget of USD100,000, was approved on October 25, 2018 and the project aims to begin in November 2018, with RFP issuance and selection of consultant in December-January.

Work on developing a full LNG value chain analysis, with the primary focus being the optimal use of small-scale shallow draft LNG carriers and FSRUs in the APEC region, is scheduled to take place during February-August 2019. The report should be completed during September 2019, reviewed by the EWG during October, and submitted to the Secretariat for publication in November.

### **Best Coal Power and Cogeneration Plant Case Studies**

The United States proposed a self-funded case-study project on existing, under-construction, and planned high-efficiency, low-emission (HELE) coal-fired power generating units worldwide to highlight recent global advances towards the overall efficiency goals of 50% for electricity generation and even higher for cogeneration. Building on a review of earlier EGCFE work in this area, the case studies will investigate plant design, coal types, and emissions control technologies and identify management best practices that assure optimum and reliable performance. The state-of-the-art technologies and best practices for coal-fired power generation and cogeneration will be explained to decision makers in the APEC region to aid them in making informed decisions for new plants.

The project is planned to start in November 2018 and be completed by the end of 2019 at a cost of USD230,000.

### **APEC Regional Workshop on Coal Plant Efficiency**

The United States proposed to organize a self-funded workshop on increasing efficiency for coal-fired electricity generation and cogeneration units and promoting carbon capture, utilization, and storage (CCUS). The workshop aims to share information on technologies and best practices that increase existing power plants' efficiency and reduce their emissions, including the possibility to retrofit with CCUS. Governments, utilities, and other interested stakeholders from APEC economies will be updated on existing and planned HELE coal-fired power generation and cogeneration units in APEC economies and around the world, including operating coal-fired plants with CCUS, as well as insights from the first phase of the APEC-funded Peer Review in Efficient Power project. A workshop summary will make recommendations for follow-on work on coal plant efficiency, including technologies and best practices.

The project is planned to start in November 2018 and be completed by the end of 2019 at a cost of USD150,000.

### **Exchange and Training on Clean Coal Technology and Clean Energy Policy**

China proposed this self-funded project to promote the application of clean coal technology (CCT) and renewable technologies and to facilitate capacity-building of energy policy management for 21 APEC economies. APSEC's Clean Coal Technology Transfer Program Joint Operation Center will hold a one-week high-level exchange and training program in Ningbo, Zhejiang, China in May 2019, where Chinese and foreign experts will be invited to give speeches on technology, policy and case analysis, and experience sharing among economies and site visits to advanced power plants will be scheduled. Subsequent specific sessions for high-demand economies will be held between June and November 2019 and a project report will summarize the outcomes of the project.

The project is planned to start in December 2018 and be completed by November 2019 at a cost of USD 150,000.