



Energy Working Group

EWG45

Koh Samui, Thailand
18 – 22 March 2013

EWG45 Summary Record

The Energy Working Group's 45th Meeting was held in Koh Samui, Thailand on 18-22 of March 2013. The EWG's Lead Shepherd, Dr. Phyllis Yoshida of the U.S. Department of Energy, chaired the meeting.

The meeting included 21 APEC's member economies: Brunei Darussalam, Australia, Canada, Chile, People's Republic of China, Hong Kong China, Japan, Indonesia, the Republic of Korea, New Zealand, Malaysia, the Philippines, the Russian Federation, Chinese Taipei, Thailand, the United States, and Vietnam. In addition, representatives from the Asia Pacific Energy Research Centre (APEREC); APEC and EWG Secretariats; Expert Group chairs including the chairs of the Expert Group on Energy Data and Analysis (EGEDA), New and Renewable Energy Technologies (EGNRET); Energy Efficiency and Conservation (EGEEC) and chairs of the Energy Trade and Investment Task Force (ETITF) and the Low Carbon Model Towns Task Force (LCMTTF) participated in the meeting. A representative from Organization for Economic Co-operation and Development (OECD) also participated as a guest.

1. OPENING ADDRESSES AND ADOPTION OF THE AGENDA

Lead Shepherd Dr. Phyllis Yoshida welcomed the group to the EWG45, outlining the many accomplishment and goals for the year. The meeting agenda was endorsed by all members. The Co-Chair welcomed the group to Koh Samui, highlighting how energy is essential to all our member economies.

2. ENERGY WORKING GROUP MANAGEMENT AND DIRECTION

APEC Secretariat Report

The APEC Secretariat, Luis Enrique Vertiz, reviewed the 2013 APEC Priorities and tabled his full report. He highlighted the 2013 priorities for Indonesia's host year theme "Resilient Asia Pacific, Engine of Global Growth." The priority areas include: 1) attaining the Bogor Goals; 2) sustainable growth with equity; and 3) promoting connectivity.

Other related APEC goals mentioned include: mainstreaming ocean, environmental and food security issues. The report noted that energy security remains a top priority. EWG members submitted 8 concept notes that were approved for Session 1/2013. Speaking on behalf of expert group and task force chairs, the United States gave a short intervention on supervision of projects, noting that a more effective process for monitoring is needed.

Additional issues mentioned included: piloting a long term evaluation system for APEC Projects; and a strategic planning process to be implemented this year.

Luis Enrique Vertiz was recognized for his significant accomplishments during his tenure as the APEC Secretariat's representative to the EWG. Mr. Vertiz will take up in mid-April 2013 a new diplomatic post in Russia as a representative of the Government of Mexico.

APERC President's Report

The APERC President reported on: ongoing work on PREE, CEEDS, PRLCE, and the APEC Energy Demand and Supply Outlook 5th Edition published in February 2013. The report discusses APEC-wide energy projections and presents alternatives to business-as-usual projections for the first time. The report underlines the importance of seeking balance between cooperative activities and individual activities. Japan expressed its appreciation for APERC's important work, noting its government budget constraint for 2013 and asking members for continued support. The Lead Shepherd also expressed appreciation.

3. EWG PROJECT FUNDING 2012 - PROCEDURAL ISSUES

Expert Group and Task Force chairs submitted and reviewed new project proposals for consideration.

- **Russia:** Announced that it is in the process of finalizing a project concept note. A draft was provided.
- **China:** Announced a new proposal for a Low Carbon Town design contest. Proposal guidelines were circulated at the meeting and winners are invited to go to China and present. One of the goals for the proposal is to share best practices in sustainable urbanization and low carbon towns with other nations.
- **Japan:** Emphasized the importance of oil and natural gas security and currently challenges in the aftermath of the Fukushima crisis and increasing energy demand in the region. APEC leaders agreed to respond to oil and gas situation in the region. As

part of this commitment, APEC will hold an oil and gas security forum (April 18-19, 2013 in Tokyo).

- **United States:** Mentioned a self funded proposal for a conference in Jakarta in May titled “Changing Global Gas Markets.” A draft agenda was made available.
- **New Zealand:** Proposed a voluntary peer review of inefficient fossil fuel subsidies. Member economies suggested some amendments to be finalized as soon as possible after EWG45.

4. POLICY DIALOGUE

A Policy Dialogue was held on Major Natural Disasters and Energy Infrastructure. In accordance with EWG tradition, the discussion was off the record to ensure a frank exchange of views.

- **United States:** Discussed energy infrastructure outages and the U.S. Department of Energy’s response. DOE provided situational awareness of energy infrastructure outages and restoration activities for federal, state, and local stakeholders. DOE partnered with Google crisis mapping to see real time data on energy availability. Jones Act waiver allowed foreign vessels to ship petroleum products from Gulf to Northeast. The Lead Shepherd mentioned that the United States is more prepared for hurricane disasters in the Gulf region than the Northeast which does not often experience storms with this impact.
- **Thailand:** Discussed flooding challenges, which led to energy infrastructure outages, depressed energy demand, supply chain disruptions, and significant economic loss. Lessons learned include: The importance of emergency preparedness and the size selection of power plants are very crucial.
- **Chile:** Discussed similarities in lessons learned with Thailand and the U.S. experience, following an 8.8 earth quake followed by a tsunami in 2010.
- **Philippines:** Mentioned that it was 3rd in global environmental risk according to the United Nations, having earthquake, volcano, and tsunami risks. Mentioned they have a risk management plan that involves climate change mitigation by adding renewable energy, diversifying energy sources and developing public-private-partnerships.

- **Malaysia:** Gave an overview of their National Security Council Directive 20, which is a policy mechanism focused on flood response, national disaster and relief management.
- **Vietnam:** Mentioned it has a plan to increase hydropower and pumped storage and has taken additional precautions with the construction of an earthquake proof dam.
- **Indonesia:** Established a dialogue on emergency response and emphasized the importance of APEC in these discussions. Indonesia is working with APEC on a technical assistance study on how to work with customs and immigration during national disasters. This effort includes building a database.
- **South Korea:** Mentioned that they have a supply emergency strategy and is establishing comprehensive measures to guarantee energy supplies.

The Lead Shepherd mentioned that the EWG needs to revisit disaster and relief management standards as climate change increasingly threatens energy infrastructure.

5. STATEMENTS ON NOTABLE DEVELOPMENTS SINCE EWG43

APEC economies submitted statements on notable developments since the last EWG meeting.

- **Australia:** Highlighted that IEA published review of Australia's energy policy, which provides in depth view of energy policies.
- **Indonesia:** Noted new regulations in energy and mineral industry managing upstream oil and gas. Indonesia mentioned that they will publish a new energy outlook. Indonesia will host the Third Gas Data Transparency Conference on 4-5 June 2013 in Bali, Indonesia which will include an expert review of the final draft of the JODI-Gas Training Manual, and establishing a timeline towards the public launch the JODI-Gas database later this year.
- **Japan:** Working to a secure stable supply of energy and recently experienced a change in government. Key milestones announced, include: new efforts to introduce renewable energy and restart nuclear power plants once their safety is assured and establish the best mix of long term power. Japan is working to overcome energy challenges while reducing costs in procurement, distribution and consumption.

- **Malaysia:** Working on a national energy efficiency plan. Currently, they are looking into a national reserve strategy for energy and efforts to promote cross-border trade.
- **United States:** Mentioned a new effort proposed by President Obama to use oil and gas revenues to fund an energy security trust focused on a wide range of renewable and sustainable energy. The U.S. also announced the nomination of Ernest Moniz, Secretary of Energy at the U.S. Department of Energy.
- **Chile:** Working on a concentrated solar plant tender and wind energy tender to provide 600 MW of wind. A development report was circulated.
- **Brunei:** Opened a new Energy Institute in January 2013. Introduced a new progressive electricity tariff to encourage renewables that has been effective to-date.
- **Philippines:** Formulated renewable portfolio energy standards that include: Solar, Wind, Run of river hydropower, and ocean energy that are good out to 2015. Feed in tariff rates were also established to encourage investment in renewable energy.
- **Chinese Taipei:** Set up a demonstration project for off-shore wind that will reach 300 MW.
- **Thailand:** Reducing LPG subsidies while implementing a complementary strategic communications plan to establish how Thai society is a partner in this effort; tentative plan to make railway investment, which is awaiting parliament's approval—this will be major investment in Thailand in next couple of years; and, non-hydro renewables have reached 10 percent in energy mix largely biomass and biofuels.

6. PROGRESS ON APEC ENERGY SMART COMMUNITIES INITIATIVE (ESCI) INCLUDING KNOWLEDGE SHARING PLATFORM

Progress report including project highlights (Knowledge Sharing Platform)

The main objective of the Knowledge Sharing Platform (KSP) is to bring together the findings and best practices of energy efficiency projects in APEC economies. The KSP includes nearly 400 projects covering the five pillars of ESCI Smart buildings, smart transport, smart grid, smart jobs, and low carbon model towns.

China-Taipei announced competition guidelines and goals deadline for submission is June 15, 2013. Submission instructions are available on the ESCI website

Dr. Eugenie Birch, University of Pennsylvania, reported on progress in developing the ESCI Knowledge Sharing Platform (KSP). 18 of 21 APEC economies have shared information on the KSP. There are plans to connect with OECD green growth website among others. In the next year, they will be working to fill gaps in the KSP and asked for additional volunteers. The APEC Secretariat reiterated the importance of the KSP and offered to write a press release. EWG members were encouraged to visit the website and to send suggestions for additional content to the web developers at the University of Pennsylvania.

Progress Report on Low Carbon Model Town Task Force

As chair of the Low Carbon Model Town Task Force, Japan provided a brief progress report on the recent Task Force meeting. They discussed collaboration with OECD; announced outcomes of the LCMT project; and reviewed the three pillars and ongoing feasibility study. Study Group A is developing the overall concept of LCMT and Study Group B is conducting a policy review of proposed measures that are decided by a feasibility study.

In addition, it was mentioned that 9 proposals were submitted by 6 APEC economies and the UK. The concept of the Low Carbon Town in the APEC region will be tailored for brown-field redevelopment. The next site visit will be in Da Nang City, Vietnam in September-October (TBD). The final report was uploaded to website.

7. IMPLEMENTATION OF APEC ENERGY SECURITY INITIATIVE

Short – Term ESI Measures

Chinese Taipei provided a comprehensive update, which included an overview of the history of energy security at the EWG. They mentioned that it started around a discussion of oil and gas and suggested that energy efficiency and interconnection should be included in an updated document. Noted EWG members need to think about what should be in the EWG strategic plan – a sentiment echoed by the Lead Shepherd.

It was suggested the next EWG discuss what is the right content for an updated energy security initiative; e.g., add new work, delete old content and have one document. Past declarations should be gathered allowing members to add new things and discuss. The Lead Shepherd suggested that we should fold this into a strategic plan, working with expert chairs to establish an outline and form the basis for a good discussion.

Thailand discussed flooding challenges, echoing China-Taipei sentiment that we need a living document that is updated.

EGEDA's Activity including Joint Organization Data Initiative

(JODI Oil, JODI Gas) Report of Progress

The Chair of EGEDA provided a brief report on continued progress in implementing JODI, noting ongoing projects including energy data, oil and gas data, and capacity building and energy statistics. **EGEDA** requested member economies to submit JODI data on a timely basis. Thus far, 19 of 21 economies submit data.

Real Time Emergency Information Sharing System (RTEIS)

Japan gave a progress report that was circulated.

Energy Emergency Response

Thailand gave a report on their emergency response efforts and continues to do exercises, following a year of devastating floods. Recent Energy Emergence Response Exercises examined mitigation strategy needed to respond to supply side disruption from the blockage of Straights of Hormuz and or oil and gas from Myanmar.

Long Term ESI Measures

Energy Trade and Investment

The Energy Trade and Investment Task Force reported on its progress.

Energy Efficiency

The EGEE&C reported on its 40th meeting held in Taipei from 6-9 November 2012. It included a site visit to testing/R&D laboratories for energy using products (including heating ventilation and air conditioning (HVAC) technologies, lighting, and motors) and a workshop on *Energy Performance Evaluation Methodology Development and Promotion in APEC Economies*. EGEE&C lodged two concept notes for consideration for Session 1/2013 funding on the Assessment of Appliance Testing Capacity and Information Sharing in the APEC Region (Australia) and Building Code Harmonization in Energy Smart Community (China). EGEE&C also reported progress on nine ongoing or completed projects, and presented information on upcoming events.

APERC reported on Peer Review on Energy Efficiency (PREE) and Cooperative Energy Efficiency Design for Sustainability (CEEDS) activities. APERC also reported on progress towards APEC's Aspirational Energy Intensity Reduction Goal.

New and Renewable Energy

EGNRET reported on its 39th meeting, including an update to its Terms of Reference. It reported on a variety of projects underway to facilitate use of renewable energy technologies in the APEC region including three recently completed projects, and eleven ongoing projects including one self-funded project. In addition, 6 project Concept Notes have been submitted for funding in Session 1, 2013, and one self-funded project Concept Note is submitted to EWG 45 for endorsement. It noted that its 40th meeting will be in Hanoi, Vietnam on April 2 to 5, 2014, focusing on hydro and adding renewable energy to the grid. There are 11 ongoing projects and 3 completed projects.

The United States gave a progress report on APEC Smart Grid highlighting the Korean smart grid test bed.

APERC reported on the Peer Review on Low Carbon Energy Policies (PRLCE) on the Philippines. Indonesia will hold a PRLCE meeting in May 2013. The Philippines thanked the PEER review team that visited and are currently in the process of reviewing recommendations.

Thailand mentioned IRENA's effort to bring renewables into the main stream. They also mentioned that cooperation with IRENA would be an excellent way to leverage shared goals and synergies with APEC. Others briefly mentioned synergies with ASEAN's work plan.

Clean Fossil Energy

The United States reported on the activities of the EGCFE. A carbon capture and sequestration project was completed in 2012. Events held included a May workshop in Indonesia and a July 2012 Coal Symposium in Beijing. The report included information on eight ongoing or recently completed projects including major findings. Three projects were submitted, including: 1) Unconventional gas census; 2) CCS capacity building in Mexico; and, 3) an APEC initiative for clean coal. The next annual EGCFE seminar will be held in Kuala Lumpur, Malaysia, hosted by the Ministry of Energy, Green Technology and Water.

A discussion was held on progress in the reduction of inefficient fossil fuel subsidies. In terms of voluntary reports, the Lead Shepherd mentioned that maybe it is better to report

once a year because updates are not frequent. Encouraged members to include best practices as everyone can benefit from learning them. Lead Shepherd encouraged economies to report between sessions in writing in time to share information with leaders. A reminder will be sent out.

New Zealand gave a report out from the workshop held on this subject earlier in the week occurred, including a recap of presentations and the importance of strong internal and external communication and effective messaging. Suggested that reform programs need to be demand driven and tailored

9. OTHER LONG-TERM MEASURES

Members gave updates on new developments in other areas not covered earlier.

Hydrogen and Fuel Cells: The United States reported that DOE funding has led to over 300 patents in hydrogen and fuel cell technology. A large number will be commercialized in the next couple of years. The U.S. has worked closely with EU and Japan on fuel cell vehicles.

Methane Hydrates: Japan hopes to move closer to realizing their potential in this area and make a major announcement by the next EWG meeting.

Natural Gas Trade: Thailand mentioned that natural gas trade will quadruple in the region in the next decade. Gas trade from the Middle East makes market more mature and economies are planning aggressively on LNG expansion. U.S. received a large number of public comments on proposal to export LNG. The U.S. State Department (ENR) handed out brochures for USACEP and mentioned upcoming natural gas conference in Indonesia. Japan mentioned they planned to host the second natural gas producer/consumer conference in September.

APEC Leaders Meeting: Indonesia reported that it will hold a conference in Bali in September 30th-October 2nd on Clean Energy prior to the APEC Leaders Summit. A few economies noted that a Bali conference would be a good stage to highlight share clean energy goals with leaders. Indonesia also mentioned that the East Asia Summit (EAS) Energy Ministerial will be around the same time. The United States mentioned that the CEO event during Leaders Week might include energy as a topic.

There was a discussion of the possible content of the conference. One suggestion was to develop an aspirational goal on renewables as the EWG had for energy intensity/energy efficiency. Many felt that this would be very difficult given the differences in member economies. The Lead Shepherd requested that working groups and economies send comments on the proposed conference themes, deliverables, and high level messages back to EWG Secretariat who will forward them to the Indonesian APEC Secretariat.

10. CONCLUDING BUSINESS

The EWG 45 meeting will be held in Da Nang, Vietnam the week of 18 November 2013.

Thailand discussed setting up Koh Samui as a central node for a low carbon town and concluded that low carbon is not about being high tech – it is about being sustainable and demand driven from the people.

The Lead Shepherd inquired if anybody was interested in transitioning to the Lead Shepherd position and reiterated that valuable contributions made by Luis Enrique Vertiz, during his APEC tenure.

A list of future EWG is below. As usual, an economy is welcome to trade hosting if a particular meeting for which it is scheduled will not work or an economy wants to host earlier in the schedule.

EWG46	Second Semester 2013	Vietnam
EWG47	First Semester 2014	People's Republic of China
EWG48	Second Semester 2014	Papua New Guinea
EWG49	First Semester 2015	Republic of Korea
EWG50	Second Semester 2015	Mexico
EWG51	First Semester 2016	Australia
EWG52	Second Semester 2016	Russia Federation
EWG53	First Semester 2017	Singapore
EWG54	Second Semester 2017	New Zealand
EWG55	First Semester 2018	Hong Kong, China
EWG56	Second Semester 2018	Peru
EWG57	First Semester 2019	Philippines
EWG58	Second Semester 2019	Chile
EWG59	First Semester 2020	Indonesia
EWG60	Second Semester 2020	Japan

EWG61	First Semester 2021	Brunei Darussalam
EWG62	Second Semester 2021	Canada
EWG63	First Semester 2022	Chinese Taipei
EWG64	Second Semester 2022	Malaysia
EWG65	First Semester 2023	United States
EWG66	Second Semester 2023	Thailand
EWG67	First Semester 2024	Vietnam