46th Meeting of APEC Expert Group on Energy Efficiency &Conservation (EGEEC 46)

Agenda (Draft v1.0)

31 August to 02 September 2015

Marco Polo Hotel, Cebu City, Philippines

**Day One: EGEEC 46 Meeting**

**31 August 2015**

# Session 1

Welcoming Remarks from the meeting hosts

Mr. Donato D. Marcos, Under Secretary of the Philippines Department of Energy welcomed participants to the meeting. He noted the importance of strengthening close cooperation among APEC member economies on promoting and applying energy efficiency technologies and practices. He also gave an outline of the Philippines’ energy efficiency and conservation road map and action plan to be implemented from 2016 to 2020 and reaffirmed the country’s commitment to build strong partnerships for economic development. He expressed the hope that sustainable mechanisms on information sharing and capacity building can be established, thus supporting the APEC community in pushing for energy efficiency and conservation.

Opening Remarks from the Chair

In his opening remarks, the Chair greeted all the participants and expressed his gratitude to the hospitality from the Philippines hosts. He mentioned that the leadership of the EGEEC is currently in transition from New Zealand to China, who is now in the process of handover from the former EGEEC Secretariat. Noting the Philippines already has its energy conservation action plan by 2020, he hoped the country can share their experiences with the rest of the Group. Members were also asked to consider how they could improve the terms of reference of the EGEEC as a lot of changes have taken place since its last formulation. He also mentioned that more groups related to energy efficiency and conservation were formed in the APEC area, which the EGEEC may collaborate with.

Adoption of agenda and previous minutes

The Chair asked the participants if they have comments or suggestions on the agenda. Dr. Cary Bloyd added that he will present two new U.S. energy efficiency projects, which are the EWG 06 on lighting design centers and the EWG 04 2015 on ISO 50001 standards. Ms. Elvira Gelindon requested to reflect EGEDA’s presentation in the agenda after APERC’s presentation. The Chair requested to add both in the agenda.

**Session 2: Update on APEC cross-cutting issues, Energy Working Group, and other fora**

APEC Secretariat Program Director responsible for the Energy Working Group

Ms. Penelope Howarth, Program Director at the APEC Secretariat, shared that the Philippines’ priority areas for 2015 include investing in human capital development, fostering small and medium enterprises’ participation in regional and global markets, building sustainable and resilient communities, as well as enhancing the regional economic integration agenda. She also highlighted the changes of the Guidebook on APEC projects and advised everyone to become familiar with its contents, especially the Project Overseers.

The Operational Account (OA), which is funded through the mandatory annual member contributions, is now called the General Project Account (GPA). There are funding caps for the GPA and the Trade Investment Liberalisation Fund (TILF), which is another fund source that can be applied for. An updated Concept Note template should now be used for submissions, which is annexed in the new Guidebook and available in the APEC website, and the link to the template can also be found in related emails. Multi-year projects are still suspended in the APEC; however, member economies can still apply for succeeding phases of a particular project and get funds in tranches. The Capacity Building guidelines are also incorporated into the Guidebook as an annex. The summary of the highlighted changes is available in the first page of the Guidebook. The guide on Gender Criteria can help answer the question of how can gender be incorporated into this technical energy project.

Green Growth and energy security issues have been consistently raised by the APEC Business Advisory Council (ABAC), which highlights the need to familiarize with the issues.

She also talked about the Senior Officials’ Meeting (SOM) Friends of the Chair (FoTC) on Urbanisation, which aims to coordinate and develop a work program and strategies to help achieve sustainable development and urbanisation. Their work intersects quite strongly with some of what the APEC EWG does, which can help establish a cooperative network of sustainable cities in the APEC region.

In terms of how the urbanization process can help achieve sustainable development, she summarized that sustainable cities incorporate sustainability, communictions, health, transport, and infrastructure, with equal consideration to energy as important pieces of sustainability and noted the importance of sharing experience on building sustainable and healthy cities, adopting friendly technologies and creating sustainable and friendly environment.

Regarding the question of what kind of group would be formed for energy resiliency, a task force or an expert group, she clarified that the term for the formation on energy resiliency was not exactly an expert group. Instead, it was one of the things taken up in the meeting and the idea of forming a group for energy resiliency was floated. It is still for further discussion, including the type of formation it will be.

Questions about the reason why expert group papers cannot be seen in the APEC website are also raised. At the moment, expert group meetings are done outside of the APEC and the SOM, and documents from the meetings are not reflected in the website. There are also difficulties in doing so, as the APEC Secretariat does not usually attend APEC expert group meetings. To solve this, sharing these documents through social media may be explored.

Energy Working Group update

The EWG meetings are held twice a year and a good chance for each expert groups to report into. The documents of the EWG meetings that have been tabled can be found in the APEC website under the tabs ‘Meeting Papers’ and ‘Meeting Document Database’.

The last EWG meeting has reached consensus on approving the proposal of a new project process and making greater efforts in disseminating information about its projects and achievements publicly. For this, overseas projects and expert group Chairs were requested to provide inputs to publicity materials upon conclusion of major projects. APEC Secretariat has a communications unit that can help promote the work of the energy expert group. Sponsoring economies are also encouraged to work with Project Overseers (POs) to put out press releases on their accomplishments.

Requests for additional research needs could be communicated to APEC Sustainable Energy Center (APSEC) or Public Sector Governance (PSG). Members encourage APSEC to link up with EWG and its expert groups and to avoid duplication of existing EWG initiatives.

There was also a call for additional funding to come to Asia Pacific Energy Research Center (APERC) if members wanted more research. And noting that energy resiliency has become one of the discussion topics in APEC, the EWG is also considering to establish a energy resilience expert group.

In terms of the EWG project documents, these can be found on the EWG website under the project publication database if the projects went through the APEC publication process and have the APEC project number.

Energy Smart Communities Initiative (ESCI) and APEC Smart Grids Initiative (ASGI)

The US representative Mr. Cary Bloyd gave an update on activities under APEC’s ESCI and ASGI frameworks. He explained that the ESCI was launched in November 2010 by the U.S. President Obama and Japanese Prime Minister Kan to coordinate APEC-wide activities that contribute to the goal of reducing energy intensity in the region by 45% in 2030 (against 2005 levels). It features two cross-cutting initiatives - the Knowledge Sharing Platform, which is supported by Chinese Taipei and provides information on past and current projects, and Low Carbon Model Towns (LCMT), which is supported by Japan and under which San-Borgea, Peru has been selected as the next town. The ESCI activities are also linked to four pillars, which are smart transportation, smart buildings, smart grids, and smart jobs and consumers.

He then talked about the ASGI, which is led by the US, Korea, and Chinese Taipei and established by the EWG at the instruction of APEC Energy Ministers under the Fukui Declaration in 2010. With the aim of evaluating the potential of smart grids to support the integration of intermittent renewable energies and energy management approaches in buildings and industry, it is closely linked to the ESCI ‘Smart Grids’ pillar. According to the presentation, activities under the ASGI are related to four elements, which are Survey of Smart Grid Status and Potential, Smart Grid Roadmap, Smart Grid Test Beds, and Development of Smart Grid Interoperability Standards.

He also shared the projects implemented and completed under the ESCI and ASGI.

One of the challenges that Mr. Bloyd presented was how to synthesize information from these projects, considering the large amount of information that these projects have generated. He suggested to conduct a gap assessment on an annual basis, which looks at the summary of what the Group has accomplished and the key lessons from each project. Ms. Howarth also suggested to establish clear messaging about the projects, highlighting three parts of what we are aiming to do, how we are going to do it, and all the different streams of work contributing to that.

Subcommittee on Standards & Conformance (SCSC) update

The US representative provided an update on the multi-year project, M CTI 02 12A, The Role of Standards and Conformity Assessment Measures in Enhancing the Performance of the Commercial Building Sector. The objectives of the project are to encourage consistent, transparent, and appropriate green building standards-related measures, avoid unnecessary obstacles to trade in building products, and identify best practices in standards, code development, and testing and rating of building products that support a more environmentally sound and energy efficient commercial building sector. With the objectives in mind, they conducted workshops in Peru, Indonesia, China and the U.S. to discuss and share experiences and practices on implementing building standards. Four publications that highlight studies, guides, and best practices on green buildings were also completed.

He also shared results of the initiative CTI 27 2013, Aligning Energy Efficiency for ICT Products - Implementing a Strategic Approach, focusing on standardizing energy efficiency requirements of ICT products at a global level. The upcoming activities involve reaching out to APEC economies to conduct product testing using their national testing forms and to compare results across all economies and establish reliability of the test results through the commonly-used international standard IEC 62623.

The Chair added that they are currently preparing to test personal computers and related products using the IEC 62623, which would be completed by the end of the year. They are also implementing another SCSC project on harmonizing measurement and verification standards, details of which would be presented later. Ms. Nicole Kearney from the Collaborative Labeling and Standards Program (CLASP) mentioned that the Super-Efficient Equipment and Appliance Deployment (SEAD) Initiative has a database on computer energy efficiency policies and test results that they can share with the other participants.

Asia Pacific Energy Research Center (APERC)

Mr. Martin Brown first introduced APERC, which was established in 1996 to focus on understanding the APEC supply and demand trends, promoting energy infrastructure development and energy regulatory reform, advocating for rational policy making, and enhancing capacity building. It is currently involved in the Cooperative Energy Efficiency Design for Sustainability (CEEDS) Project and APEC’s Peer Review on Energy Efficiency (PREE). The APERC is keen to conduct a PREE for the remaining economies that have not done so. One of APERC’s recent activities was the Trial Energy Efficiency Policy Workshop, which focused on energy efficiency policy and funding. He also shared that the Compendium was set up as part of PREE, which is a venue to compile and maintain a collection of energy efficiency policy measures and action plans of all APEC member economies under a common format.

Mr. Atit Tippichai shared that a follow-up PREE is a venue for former PREE host economies to review progress and implement recommendations generated from PREE. For Thailand, it focused on the transport sector. He then highlighted their accomplishments and challenges in terms of sustainable transport investment and financing, urban land use and transport integration, low carbon transport systems, travel demand management, vehicle fuel labelling and standards, and high efficient vehicle technology.

Expert Group on Energy Data and Analysis (EGEDA)

Ms. Elvira Torres-Gelindon presented EGEDA’s accomplishments, including regular data collection of energy demand and supply, the Joint Oil Data Initiative (JODI) activity, and the Energy Statistics Training that they are conducting. She also highlighted that one of the important accomplishments in terms of regular data collection is the release of the Energy Statistics and Handbook, which will take place on the latter part of 2015. She also shared highlights of the meetings that the Group participated in and presented the system of assessing economies’ submissions on oil data in terms of sustainability, timeliness, and completeness.

Session 3: Project Updates

APEC EWG project process for 2016

Ms. Penelope Howarth presented on the new project approval timeline, Concept Note Development, Expert Group and Task Force review, Concept Note submission to EWG and the APEC Secretariat, EWG technical review, self-funded projects, and guidelines on the final proposal and Quality Assessment Framework (QAF). She highlighted that economies should ensure Concept Notes have at least two co-sponsors, which should be declared in writing, and should be distributed to Expert Group and Task Force at least four weeks before the EWG meeting.

She also added some reminders with regards to the Concept Note submission. If the Concept Note is not endorsed by the EWG, the EWG Secretariat will inform the PO and the sponsoring economy representative. The scoring process has a total of 60 points. The EWG provides scoring for the first 20 points, and then results are submitted to the SOM Steering Committee on ECOTEC [Economic Technical Cooperation] (SCE) that will provide the remaining 40 points. This new schedule is a hard deadline, and if the EWG does not have enough time to provide inputs or feedback to submitted Concept Notes, it will have to wait for the next round. The Concept Note should have a clear link to the EWG Strategic Plan. If a project does not fit a specific Expert Group or is crosscutting, it may be submitted directly to the EWG Secretariat four weeks in advance of the EWG meeting. Members will review the Concept Notes and score the projects at the EWG meeting. Once the budget is set in the Concept Note and it is approved, it is fixed. Proponents can no longer request for budget changes when the Concept Note is already approved.

In terms of co-sponsoring, it is possible if the project was tabled at an Expert Group meeting and the approved minutes of the meeting is attached to the Concept Notes. However, economies that are not included in the meeting are not eligible to be co-sponsors.

With regards to the template for the written declaration of co-sponsoring economies when submitting Concept Notes, an email from the economy representative to the EWG Secretariat is sufficient.

Questions about criteria on the scoring are also raised. There is a scoring template that has been approved by the Budget Management Committee that lists several criteria and highlights the following areas： how well does this project align with your working group’s priorities? How well does this concept note align with host economies’ priorities? How well does this concept note align well your own economy’s priorities? What do you assess the quality of this project to be? At the SOM SCE level, they will score the project based on how well it aligns with APEC’s goals of trade and investment and regional economic integration. If the proposals do not mention these, it is possible that the project may not get a very high score.

Ongoing and recently completed projects

**EWG-02-2015A - APEC Nearly (Net) Zero Building (NZEB) Best Practices (China)**

Sponsored by China and Co-sponsored by Hong Kong-China, Singapore, Canada, Japan, Thailand, New Zealand, and the U.S., this project was started on July 2013 and recently completed on December 2014. Its main objective is to identify NZEB definitions, policies, pathways, professional networks, and pilot projects and create a comprehensive source of information regarding best practices on NZEB, showcasing how significant energy savings could be achieved by integrated design, use of advanced technology, and NZEB-oriented management and commissioning in buildings. The project’s output during the first phase was a publication describing how best practices and existing experiences on NZEB could be shared with other economies in the APEC region. Workshops to share expertise and NZEB best practices were also conducted.

**EWG-04-2014A – Technical Reference on Harmonisation of Energy Efficiency Test Methods of Refrigerators toward the New IEC 62552 among APEC Region (China)**

Launched on September 2014 and sponsored by China, this project aims to promote harmonization of refrigerator energy efficiency test methods in the APEC region in line with the new international standard IEC 62552 and to encourage energy saving technology innovation for refrigerators and free trade in the region. This can be achieved through comparing different test methods against the new IEC standard, identifying pathways to align existing methods with the new standard, and building capacity among economies to test to the new standard.

The project has completed establishing the technical working group and its target existing situation investigation and is currently conducting laboratory testing on refrigerators on different energy efficient test methods using the new IEC 62552, which is expected to complete by September 2015.

**CTI-13A-2014 – Harmonizing Standards and Enhancing Technical Capacity in Measurement and Verification of Energy Savings of Projects or Organization (China)**

Sponsored by China and co-sponsored by Canada, Indonesia, New Zealand, U.S., and Vietnam, this project aims to promote regional adoption of international measurement and verification (M&V) standards and increase the reliability of energy savings of projects or organizations among participating APEC economies. It has completed data collection and preliminary analysis on investigating M&V market, methodologies, standards, stakeholders, personnel capacity, certification program, and technical and policy barriers to harmonization and capacity-building from APEC economies. A workshop to discuss collected data and gather feedback from participating economies is scheduled to take place in China on October 2015.

**EWG-05-2014A – Review of the Design and Effectiveness of Vehicle Fuel Efficiency Labelling (VFEL) and Consumer Information Schemes (New Zealand)**

The New Zealand representative gave a short update on this project and discussed the best practices and common gaps. The project aims to review 18 schemes from both APEC and non-APEC economies to identify the most effective VFEL features and strategies and the key outputs are expected to come out by October 2015. The best practice components of the project include a program that covers all new and used light-duty vehicles with all fuel types, information comparing conventional vehicles and alternative fuel vehicles, and user-friendly VFEL website providing additional services beyond the fixed information on the label. The common gaps identified in the project consist of lack of a worldwide standard test and monitoring and periodical assessments after establishing the programs. The vehicles with advanced technologies are also not covered in the project.

Mr. Bloyd suggested that a follow-up project should be created in 2016. New Zealand can also tap into the Knowledge Sharing Platform and explore how this could be tagged along to it. Ms. Howarth also added that New Zealand could package project outcomes into language at the ministerial level that can acknowledge the importance of the work and translate it into an action plan.

**EWG-xx-2015x Lighting Design Centres (U.S.)**

Mr. Bloyd presented that this project was launched to identify best practices on relighting efforts in each APEC economy that contribute to deep energy savings and a common and unified education program for dissemination in several APEC member economies. He also shared that lighting research centers and organizations in China, Japan, U.S., Chinese Taipei, Thailand, Vietnam, Malaysia, Philippines, Singapore, Indonesia, Australia, and New Zealand would be contributing to the workshops that would be implemented through this project.

**EWG 04 2015A Enhancing Regional Conformity Assessment to Ensure Successful ISO 50001 Standard Outcomes**

Mr. Cary Bloyd presented an update on the initiative. Sponsored by the U.S. and co-sponsored by Canada, Chile, and Mexico, it is a recently approved project aiming to develop a series of regional workshops for APEC member economies, with particular focus on developing countries, in order to build capacity to ensure successful implementation of the ISO 50001 standard through improved conformity assessment and improve APEC economies’ trade and competitiveness, energy efficiency, and greehouse gas (GHG) emissions mitigation. The workshops are designed to involve government representatives and other stakeholders leading domestic energy efficiency efforts. Participants would undergo a pre-workshop planning meeting, then a training workshop to develop a regional action plan, and follow-up webinars to solidify next steps for regional action plan implementation.

**Updates on APEC Energy Standards Information System (ESIS) and Collaborative Assessment of Standards and Testing (CAST) (Collaborative Labeling and Appliance Standards Program [CLASP])**

Ms. Nicole Kearney presented that the CLASP is an organization focused on improving the environmental and energy performance of appliances and equipment through providing free resources and tools for policy makers, such as the Energy Efficiency Policy Toolkit, Standards and Labeling Guidebook, and the Monitoring, Verification, and Enforcement (MVE) Guidebook. It is also responsible for implementing the SEAD Initiative, a collaboration among governments to save energy and accelerate the pace of market transformation for energy efficient through awards, incentives, procurement, standards and labels (S&L), technical analysis, and providing technical assistance.

CLASP works as the Secretariat of APEC-ESIS, which provides up-to-date information about energy efficiency standards and labeling that apply to products in the APEC region. This is directly linked to CLASP’s global S&L database, which is an online resource that allows policy makers and S&L practitioners to compare policies and regulation across countries and according to product. Currently, there are 49 economies and two regional association (APEC and SEAD) included in the database and five new economies will be added to the database - Algeria, Costa Rica, Sri Landa, Ukraine, and Venezuela. It also features 17 product categories of appliances, equipment, and lighting for residential, commercial, and industrial sectors. All project updates would be completed by October 2015.

CLASP also serves as Administrator of CAST, a program examining energy efficiency and test methods of televisions, electric motors, and heat pump water heaters and promoting harmonized test procedures and supporting development of aligned energy efficiency S&L in APEC economies. At present, CAST is near conclusion of the project focusing on international alignment of test methods and performance requirements for televisions.

Questions about the Policy Exchange Forum, the APEC-CAST, the CLASP, and the APEC-ESIS website are raised. The Policy Exchange Forum is a confidential venue for government policy makers to exchange information, to share the lessons learned, the problems they have been facing and a change for them to be frank and honest with each other. Information/summaries/presentations before and after the meeting/call are made available in the website and newsletters to facilitate the participation of the private sector.

The APEC-CAST is not an APEC branded as there was so much trouble in the procedures in getting the logo and committed to look into ways on how to make it easier.

The CLASP has a very powerful database that includes information on all or most APEC proponents and economies, which can be extracted and exported into an Excel spreadsheet. The historical data can help analyze how labeling standards and policies have evolved over the years. It is easy to extract baseline data from the database on key indicators for energy efficiency or related policy and set a baseline and track the progress towards the goals.

There is the need to explore an information sharing platform on the APEC-ESIS website. The CLASP would have to look if the SEAD Initiative could fund that or alternatively seek resources from APEC. Meanwhile, Ms. Howarth clarified that the APEC Secretariat website was designed more for providing information to the public than serving as an interactive platform. And there is a ‘Contact Us’ field where APEC could be reached.

Session 4 Economy Updates

Japan

Japan’s preconditions for its current energy policy are safety enhancement, supply stability, economic efficiency, and environmental protection. Based on this, they set targets to increase self-sufficiency from six percent to 25 percent, to decrease electricity price and GHG emissions matching levels in the European Union or the U.S. through sweeping energy savings, introducing renewables maximally at minimum consumer’s burden, and improving thermal efficiency at power generation to reduce nuclear dependence.

Japan would use a lot of sensors to promote energy management and the cost of the investment to meet the energy savings is JPY 37 trillion. Ms. Naoko DOI also clarified that the building regulation is for new construction project, but the old one applied to existing buildings are encouraged to comply with the new one.

New Zealand

In 2014, renewable sources make up 80 percent of New Zealand’s electricity generation and produce 40 percent of its primary energy supply. The Energy Efficiency and Conservation Authority (EECA) focuses on the industrial, transport, and residential sectors to advance energy efficiency and renewable energy, as these sectors account for the highest energy consumption rates, 38%, 36%, and 11% respectively, in the country. At the residential level the EECA’s campaigns have attracted 65 percent television audiences aged 18 and above, while 38 percent of them were inspired to take action towards EE&C. Initiatives to increase alternative fuel within the transport sector are also being implemented, alongside improving business productivity while decreasing carbon dioxide (CO2) emissions within the business sector.

Mr. Justin Allen added that they did some research around energy efficient driving on trucks and concerns on tires in the hybrid transport sector.

Chinese Taipei

In Chinese Taipei, 97.7% of total energy was imported in 2013. To address the situation, Chinese Taipei’s Sustainable Energy Policy implemented both the mandatory and voluntary energy efficiency management programs based on the principles of cleanliness, efficiency, and stability. The main regulatory tool used for energy efficiency is the mandatory minimum energy performance standards (MEPS), which requires manufacturers and importers to apply in advance for compliance certification. Chinese Taipei has increased dramatically the market shares of products with energy efficiency ratings one and two (e.g., air conditioning, gas stove, dehumidifier) and also promoted LED lighting. With the economy’s initiatives to audit energy within the industrial sector, they now have an annual energy savings rate of 1.35 percent.

The Philippines

The Philippines is currently working on its Energy Efficiency Roadmap from 2014 to 2030, which intends to work on the transport, industry, residential and commercial sectors, with components on crosscutting sectors. In the transport sector, the DoE has already started its e-vehicle program, where 3,000 units of the e-tricycle is already being procured. They are also working on the reintegration of urban planning and transport energy use in collaboration with relevant government agencies. Awareness raising and capacity building on applying EE&C in each sector are necessary to increase sustainability of the programs. The Philippines is also hosting a workshop on improving energy resiliency in off-grid areas among APEC member economies. Guidelines on how to improve climate change resilience of these facilities in off-grid areas would be published after discussing common challenges, lesson learned, and best practices in improving energy infrastructure resiliency.

In terms of the effects of the awareness raising campaign program, Mr. Donato D. Marcos explained that according to a survey conducted by an agency, 80 percent of the surveyed households are fully aware of the meaning of energy efficiency in terms of technology and energy conservation. He added that the achievements of the energy efficiency awareness campaign can be significantly seen during the summer, including the deductible load program or voluntary use of generators of big industrial plants and commercial buildings. 190 megawatts worth of those who volunteered for this program have been recorded.

Mr. Bloyd then recommended that the Philippines should document its practices and share this experience with other economies.

Close of Day One

**Day Two: EGEEC 46 Meeting**

**1 September 2015**

Session 1. Economy Updates (Continued)

Thailand

Thailand’s energy consumption in 2014 totals to 75,804 kiloton of oil equivalent (ktoe). Thailand is implementing its Integrated Energy Blueprint (TIEB), which focuses on securing the economy’s energy supply, institutionalizing fair enegrgy pricing, and conserving energy, as well as its building energy code, MEPS and High Energy Performance Standards (HEPS), labeling program, direct subsidy, eco-stickers, and the follow-up PREE. It also has a 20-year energy efficiency development plan aiming to reduce energy intensity by 30 percent in 2036, compared to that in 2010.

In terms of the relationship between the Energy Development Plan and the Energy Efficiency Development Plan, Mr. Pongpan Vorasayan said that the former is the old plan and the latter is the new one. When asked if incentives are provided to utilities that meet the targets for energy efficiency, he said that it will start by the third or fifth year of the plan and currently the process on how to undertake the measure is under consideration. He also introduced the Energy Efficiency Resources Standard, which is the target the government sets for energy conservation for utilities, ones obliged to push consumers to practice energy conservation measures.

US

With the aim of reducing CO2 emissions by 32 percent from 2005 levels by 2030, America’s Clean Power Plan is the biggest step that the U.S. has ever taken to combat climate change, which was finalized on 3 August and incorporated the President’s Better Buildings Challenge. The Plan has enlisted more than 250 partners, coming from cities, states, utilities, manufacturers, school districts, and businesses, to improve energy efficiency. Since it was launched in 2011, partners have saved 94 trillion units of energy and $840 million. The U.S. DoE issued 9 proposed and 10 final energy conservation standards for appliances and equipment, which would help cut consumers’ electricity bills by hundreds of billions of dollars. Mr. Derek Greenauer also shared the U.S. State Energy Efficiency Score Card, which shows that Massachusetts and California are two of the most energy efficient states in the country.

In terms of how the scorecard can benefit the states, Mr. Derek Greenauer introduced that it can create a little bit of competition and put pressure on state policy makers to motivate them to meet the national EE&C programs and targets. He also talked about the level of enforcement of policies in terms of MEPS for appliances. It is enforced at the federal level through market surveillance by buying a product and checking if the product complies with the standards. They also collect information from the competitive companies that conduct comparative studies and make reports to the Department of Energy to check product standard compliance, as well as look into sales volumes and check which products are popular and make sure that these products meet the standards.

China

Mr. Li presented that the General Office of the State Council shared its opinions on strengthening the standardization of energy conservation in China, which aims to establish comprehensive standards on energy consumption limits for all major energy-intensive industries to ensure that 80 percent of the country’s energy efficiency standards are at par with international standards. Development of these mandatory national standards is conducive to driving rapid transformation of new energy-saving technologies, products, and services. China is also conducting the assessment of the impact of relevant activities to maximize the effectiveness through a dialogue between Asian policy makers and evaluators in Europe and the U.S. to share experiences and identify best practices that Asia can eventually adopt.

In terms of the energy efficiency policy and program evaluation, Mr. Li added that technical details are not available yet in China. The workshop will share how other countries evaluate policies, such as how many samples are usually needed, or where to collect data, and about how to evaluate the MEPS or related program.

Recap and Summary of Discussion Results

Mr. Ren highlighted the EWG Strategic Plan 2014-2018 and the EGEEC actions contributing to APEC and its energy intensity goals, including projects, key performance indicators and baselines, partnerships, and outputs. He also talked about the instructions to the 12th APEC Energy Ministerial Meeting (EMM).

SESSION 2. APEC Activities in Support of EE and RE Goals

Conducting Gaps Assessment for Energy Intensity Reduction

In light of the 2014 Energy Ministers Declaration in Beijing, Mr. Cary Bloyd presented a proposal to conduct a gap assessment that can facilitate the EWG and Expert Groups’ identification of new proposals to help fill the gaps in the initiatives to reduce APEC’s aggregate energy intensity by 45 percent from 2005 levels by 2035. The proposal includes having the ESCI Knowledge Sharing Platform (KSP) team to develop a concept note to work together with the EGEEC and Low Carbon Model Towns (LCMT) Task Force (TF) and other groups to review projects to date, assess areas covered, and identify where gaps remain on addressing intensity challenges. Results of this assessment could become basis of upcoming project proposals or activities every year that moves directly towards the 2035 goal and facilitate the tracking of the collective progress of member economies.

Japan highlighted the need to provide more details on how to implement this project, especially on the quantitative analysis. Ms. Naoko raised that the definition of the energy intensity target is not clear and there is no allocation by economy to meet the target. It may also be necessary to ensure consistency between the proposed gaps assessment and PREE, which has made a significant contribution to the energy efficiency intiatives. Mr. Li added that the 45 percent energy intensity reduction is not something only their group can accomplish considering their limited resources. He hoped to have a focal project to support the target. Ms. Howarth mentioned that there was an APEC-funded gap analysis on EWG in 2007 with a similar approach. She urged the members, especially those with long institutional memory, to recall what has been done with the gap analysis and look into how the results could be integrated into the strategic plan. She also added that it would be good to look at how energy efficiency is measured in the economies and examine if there are metrics - how many economies have MEPS? How many economies have efficiency labelling? - and have a databank that they can keep track of. Mr. Brown from APERC added that they have a compendium of all energy efficiency related policies in APEC that could be used in the gap analysis. Ms. Kearney from CLASP also mentioned that the APEC-ESIS has available information and could contribute to the gap assessment. The representative from Chinese Taipei commented that currently there are about 100 projects being implemented by economies to meet the energy intensity goal. If efforts of economies were not focused, there would be the danger that all economies could stall at phase 1 of each of all their initiatives. For example, all of them could focus on moving forward from China’s accomplishments on the IEC 62552, which is about harmonizing the test measures of refrigerators. They can have more discussions on the results and may develop more options to harmonize the test options. 

In terms of the next steps after defining the challenges, a series of areas will be asked to identify particular project work areas that do not have developed projects or experiences and a series of projects are expected to move towards the 2035 goal and help develop the economies towards making substantial changes.

Sharing of Discussion Results

The EGEEC can contribute to the APEC energy efficiency improvement through regulation, incentive, technology innovation, and testing of products. Regulation and incentives could be conventional approaches, but continuous comparative policy analysis can be done, based on which technology innovation can be conducted. Other projects, such as harmonization of air conditioning energy efficiency standards, can provide a good basis for regulation and consideration for incentives. Workshops could also be held for the policy making and comparative policy analysis.

The gap analysis is expected to consider the following points: Previous EGEEC projects would be analyzed on how they contributed to the EE&C policymaking; Quantitative analysis is done to estimate energy savings generated from such EE&C policy; Previous projects are analyzed to categorize them into groups by sector and to identify missing sector for future project implementation, which would help reduce duplication for work; Comparative analysis of MEPS/HEPS/top-runner products is done to identify missing appliances/technologies for future consideration; All existing information is collected together in a database that has an easy-to-find format.

Ms. Howarth will demonstrate how the APEC project database could be used. She added that currently there are efforts to come up with ways to evaluate the impact of APEC projects. The Policy Partnership on Science and Technology and Innovation (PPSTI), where chief scientists of all APEC economies are working in, could be tapped for collaboration on relevant projects.

A knowledge-sharing platform is expected to establish. The EWG was instructed to evaluate the cost-effectiveness of technology and participating economies can focus more on the cutting-edge technology that can help economies reduce energy use. The APEC Secretariat has a presentation that will help understand the energy efficiency goal and information on how close the group is to meet its target (as individual economy and as a group) is hopefully included. Energy storage is another highlighted issue in terms of technology, as Singapore does not have many renewable energy sources and can only use solar energy, thus energy storage would be a highly useful technology for the country. For the Philippines, a database on experts would be helpful in tapping knowledge resource for the nearly zero energy building, which they are interested in showcasing one of their own. They also appealed to other economies to help fund their initiatives and other economies in need of support.

Ms. Howarth mentioned that the Co-Chair of the Expert Group on New and Renewable Energy Technologies (EGNRET) meeting is present. The Co-Chair introduced that they are working on energy storage and the smart grid system, which can be used in harmony with the variable renewable energies. He also mentioned that he could see how these initiatives could work together with energy efficiency, such as applying use of variable renewable energies in off-grid areas instead of using diesel for generating energy.

From the U.S. perspective, the EGEEC could contribute through sharing information on what works on the national level for a range of economies. Most economies can start with low-cost to no-cost initiatives, such as establishing MEPS and annually updating. On the more non-technical side, Thailand added that economies could share on how they are communicating energy efficiency in their own countries.

Ms. Allen from New Zealand commented that information sharing should not be limited to what worked well and also cover what did not work well. Mr. Bloyd added that the EWG has requested for a two-page report highlighting key results and lessons from the projects they were implementing or have completed and economy representatives have distributed the reports to each member. The EGEEC was recommended to put this into practice and the reports should not just be uploaded to the database online and also be highlighted in the website.

Discussion Summary

Mr. Ren highlighted the projects that have been discussed on the first day and earlier today. These projects are currently contributing to APEC’s energy intensity reduction goal. Mr. Li added more points raised during the afternoon session: Economies are encouraged to have a more streamlined project line-up in some key areas in the future, such as nearly zero energy buildings, product energy efficiency standards, and to conduct more studies on these initiatives; There was also high demand on information sharing on the impact of programs, policies, and the lessons from the projects implemented through a two-page report; Considering the fact that member economies are diverse, should they replicate initiatives done by other economies, customization based on different needs could be provided; The importance of monitoring the impact of current initiatives in the future was also highlighted. Ms. Bloyd added that they would confirm in the discussion to prepare the concept note on the gap assessment project. Ms. Howarth suggested sharing a two-page report sample from the U.S. to the Chair so the secretariat could make and circulate a template.

New Project Proposals

Energy Efficiency Sub-fund Outcomes: Concept Notes

There were seven concept notes submitted to the EWG for approval and all of them were approved and none of them were from the EGEEC. Ms. Howarth shared that the PPSTI is working on projects about small medium enterprises’ (SMEs) competitiveness through low-carbon economy and GHG measurement challenges in renewable energy and climate change, which the EGEEC could collaborate with PPSTI on. The SCSC is also working on the capacity building and awareness raising project on enhancement of total environmental efficiency. She also presented how the APEC website could be navigated to access the concept note templates, guidelines for self-funded proposals, the QAF, the Concept Note, and Project Proposal Development. This section of the website gives an idea on how the process looks like.

Presentation of New Project Proposals

1. A comprehensive analysis between the national standards regarding the test methods for distribution transformers to evaluate the energy losses for transformers and improve energy efficiency

Proposing Economy: China

Co-sponsoring Economies: Philippines, Thailand, U.S., Chinese Taipei, New Zealand; to be confirmed – Singapore and Japan

2. Workshop to develop qualified product list of high-quality, high-efficiency commercial, industrial lighting products and control systems in the APEC region

Proposing Economy: U.S.

Co-sponsoring Economies: Thailand, China, Chinese Taipei; to be confirmed – Singapore, Philippines, and Japan

In the Q&A section, the following points are clarified: The lead for the project would be EWG and the LED lighting would cover all sectors; The mechanism for verifying the lighting products would be determined in the workshop, including the testing and verification; It can help develop the APEC-qualified criteria that can be applied among APEC members; The criteria of the updated products would be ramped up as the technology evolves; There is a collection of utilities and the private sector initiatives involved, but the prospects of this project are not certain yet.

These two proposals have potentially ambitious outcomes. Past projects that had similar ambitious outcomes did not create the targeted APEC-wide adoption of initiatives. The POs are encouraged to think about how the outcomes could be achieved further.

3. Continuation of Japan’s initiative for harmonization of energy efficiency standards of air conditioners

1. Electrical safety – an initiative with the International Federation of Public Safety of Electrical Users

It needs to have a clear link to energy efficiency.

5. Increasing collaboration in monitoring, verification, and enforcement

The APEC has already too many working groups and forming a network within the sub-group is a difficult thing to do. The CLASP is encouraged to talk to the EWG Secretariat prior to proceeding with formulating the concept note.

EGEEC Governance Issues, Upcoming Events, and Other Issues

Mr. Li proposed to postpone the discussion on Terms of Reference, as this would need more time to consider. The plenary approved the Chair’s proposal.

Chinese Taipei volunteered to host the next EGEEC meeting to be held between late March and early April next year, which would also include two workshops. Ms. Howarth reminded the group to reach out to the hosts early if they wanted to meet on the margins of SOM.

Mr. Ren requested for assistance on how to clean up the EGEEC mailing list. It is recommended to approach EWG representatives and request for assistance in cleaning up and update the mailing list. The Secretary should have a document that highlights the EGEEC roles and functions to introduce to many new members of the EWG, which should be done per economy tenaciously, and not as a group email to ensure responses are solicited. If emails get bounced back, which indicates that the email address is no longer existing, it should be deleted from the list. He can also consult other EGEEC members who have been regularly attending meetings about the list.

Mr. Ren also solicited suggestions on how they can share meeting documents through the website. He also had some concerns in maintaining and administering the Group’s website. New Zealand agreed to keep hosting the EGEEC website, but is open to transfer hosting responsibilities to the APEC Secretariat in the future. Ms. Howarth will keep Mr. Allen in the loop for the correspondence. Administrative information, including username and password would be provided to Mr. Ren so he can update and administer the EGEEC website.

Summary Session

Closing Remarks

Usec. Marcos expressed his gratitude to the APEC member economy delegates and affiliate organizations for their active participation during the meeting and hopes that each one learned a lot from the discussions. The Philippines is affirming the EGEEC and APEC goals and hopes that the country could significantly contribute to reducing the energy intensity in the APEC region with its Energy Efficiency Roadmap. He emphasized that the initiatives that have been completed should be further studied and replicated among APEC member economies. He also acknowledged the hard work and cooperation of other government agencies and institutions that have contributed to the success of this meeting. Mr. Li, likewise, thanked the delegates and the hosts from the Philippines for their hard work and making the EGEEC 46 a successful event.