45th Meeting of the APEC Expert Group on Energy Efficiency & Conservation (EGEE&C 45)

Meeting Record (Draft V3.0)

25-26 March 2015

Concorde Hotel, Singapore

# Day One: EGEE&C 45 Meeting

# 25 March 2015

# Session 1

Welcoming Remarks from the meeting hosts

Mr. Bernard Nee, Assistant Chief Executive, Energy Planning and Development Division, Energy Market Authority welcomed participants to the meeting. He acknowledged the importance of APEC targets to reduce energy intensity and increase the proportion energy supplied from renewable sources in the region. He also gave an outline of Singapore’s key policies to reduce energy intensity under the Sustainable Singapore Blueprint 2015, including through more energy efficient buildings, increased reliance on public transport, increased consumer awareness of energy consumption, and promoting energy management in the business sector. He noted that, given its limited energy resources, Singapore’s motto is to ‘do more with less’.

Opening Remarks from the Chair

In his opening remarks, the Chair noted that 2015 marked the 25th anniversary of APEC’s Energy Working Group (EWG) and that, by his count, around 50 projects supporting reduced energy intensity have been completed during this time (under EWG and its sub-fora).

The Chair highlighted a range of current activities occurring through EGEEC (and in connection with other fora) to reduce energy and carbon intensity in the transport sector (for example an APEC-wide review of vehicle fuel efficiency labelling schemes) and building sector ( for example through projects promoting ‘green building’ practices, ‘net zero energy’ building design, and centres of expertise in lighting design), and to reduce technical barriers to trade in environmental goods (for example through a project to harmonise refrigeration test standards in APEC economies).

The Chair noted that it has been fruitful for EGEEC to engage with other fora and to hold its meetings adjacent to relevant workshops, such as the Energy Efficiency Policy (EEP) Workshop held by the Asia-Pacific Energy Research Center (APERC) that had taken place earlier in the week.

Adoption of agenda and previous minutes

The Chair noted the minutes from EGEEC 44 had been circulated and posted on the Expert Group website and that comments received had been incorporated. The minutes were accepted.

Changes to the sequence in Session 2 were adopted and the agenda was accepted.

Round-the-table introductions were made, including by observers taking part in the meeting (which included the Underwriters Laboratory (UL), The International Copper Association (ICA), the Collaborative Labelling and Appliance Standards Program (CLASP), and the European Consumer Organisation (BEUC)).

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

The Chair announced he would be standing down following the meeting. He welcomed Mr. Li Pengcheng of China as the newly confirmed Co-Chair and invited him to assist in chairing the meeting.

APEC Secretariat Program Director responsible for the Energy Working Group

Mr. Park Jonghan, EWG Program Director at the APEC Secretariat, provided an update on Round 1, 2015 of the project funding approval process and advice on preparing for Round 2, 2015.

Concept notes submissions Round 1 closed on 27 February and outcomes will be shared by mid-May. Concept notes with in-principle funding approval will need to be developed into full proposals by June. Round 2, 2015 will open in July. For exact dates, meeting participants were advised to refer to the Projects section of the APEC website.

The Expert Group was reminded that the EWG is the originating forum for concept notes developed under EGEEC, and that concept notes should be formally endorsed by EWG before the final is submitted to the APEC Secretariat.

The Program Director informed participants that around USD $700,000 was available under the Energy Efficiency Sub-Fund of the APEC Support Fund. Applying to this fund will strengthen chances of gaining funding for energy efficiency-related proposals, as other funds are limited and heavily subscribed.

Project proponents were reminded that proposals need to be supported by at least two co-sponsors.

Project overseers were advised to follow the APEC procurement guidelines during the tendering process, including allowing 3 weeks minimum to respond to an RfP, running a transparent contract selection process and disclosing conflicts of interest.

The Program Director also encouraged the use of the APEC collaboration system, which allows users to access all documents relating to projects. A user ID is required to access the system.

The Expert Group was informed that the Secretariat is maintaining a database of contacts for EWG, including sub-fora, and asked for an updated list of EGEEC contacts.

**ACTION: Secretariat to provide contact list – COMPLETED.**

Energy Working Group update

The Chair informed the Expert Group that EWG’s 25th anniversary is coming up at the end of the month. The EWG Lead Shepherd is collating a list of EWG’s achievements to mark the occasion and has asked the Chair to contribute key EGEEC achievements to the list by 31 March.

Noting the tight timeframe, the Chair said he would endeavour to circulate the list to the Expert Group for comment out-of-session He also invited Expert Group members to highlight key achievements either to him or to their EWG economy representative.

The Chair also noted that he had been asked to report to the Lead Shepherd, together with the Chair of the Expert Group on New and Renewable Energy Technologies (EGNRET), with ideas on what projects EWG should target to support APEC’s energy intensity and increase renewable energy goals. He noted that this topic would be discussed under a later agenda item (“APEC activities in support of EE & RE goals”).

The Chair informed the Expert Group that the **49th EWG Meeting will be held in** **Gyeongju, Korea, 22-26 June 2015**. He noted that the EWG Secretariat had just distributed a draft Meeting Record for EWG 48 for comment. The final meeting record will be shared via the Expert Group contact list. **ACTION**: Secretariat to share final copy of the 48th EWG Meeting Record via the Expert Group contact list.

APEC activities in support of EE & RE goals

This item was deferred to the end of Session 3.

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

The US representative gave an update on activities under APEC’s ESCI and ASGI frameworks. He noted that projects in his presentation were listed according to their project code (indicating their originating forum, identification number, year, and funding source), sponsoring economy, and relevant sub-fora (where applicable).

He explained that the **Energy Smart Communities Initiative (ESCI)** was launched in November 2010 by U.S. President Obama and Japan’s 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 includes two cross-cutting initiatives – the **ESCI Knowledge Sharing Platform** ([http://esci-ksp.org](http://esci-ksp.org/)) which is supported by Chinese Taipei and which provides information on past and current projects, and **Low Carbon Model Towns (LCMT)** (<http://apec.org/Groups/SOM-Steering-Committee-on-Economic-and-Technical-Cooperation/Working-Groups/Energy.aspx>) which is supported by Japan and under which San -Borgea, Peru has been selected as the next town.

ESCI activities are also linked to four ‘pillars’: Smart transport, Smart buildings, Smart grids (an area of collaboration with the Clean Energy Ministerial’s International Smart Grid Action Network (ISGAN) and which ties in with the APEC Smart Grids Initiative (ASGI)), and Smart jobs and consumers.

The US representative then highlighted current and recent APEC-funded projects being carried out under ESCI by EWG and other fora. He noted few projects have been carried out under the ‘Smart jobs and consumers’ pillar, although several potential topics have been identified, including energy efficiency training curricula, energy efficiency school curricula, and sister schools.

The US representative then explained that the **APEC Smart Grids Initiative (ASGI)**, led by the US, Korea, and Chinese Taipei, was established by the EWG at the instruction of APEC Energy Ministers, under the Fukui Declaration in 2010, and is linked to the ESCI ‘Smart Grids’ pillar. Its aim is “to evaluate the potential of smart grids to support the integration of intermittent renewable energies and energy management approaches in buildings and industry”. Activities under ASGI relate to four elements: Element 1 – Survey of Smart Grid Status and Potential, Element 2 – Smart Grid Roadmap, Element 3 – Smart Grid Test Beds, and Element 4 – Development of Smart Grid Interoperability Standards. The presentation highlighted recent and current projects being carried out under each of these elements by the EWG and other fora.

*Subcommittee on Standards & Conformance (SCSC) update*

The US representative provided an update on behalf the SCSC of their activities to support harmonisation of standards for environmental goods, including energy efficient and energy conserving products.

Key activities include a multi-year project promoting green building standards: ***The Role of Standards and Conformity Assessment Measures in Enhancing the Performance of the Commercial Building Sector (M CTI 02 12A)*** to 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.

Project deliverables to date have included:

* four workshops held in 2013-14 on green building codes and building performance modelling;
* a publication: APEC Building Codes, Regulations and Standards - Minimum, Mandatory and Green (available at:[**http://publications.apec.org/publication-detail.php?pub\_id=1442**](http://publications.apec.org/publication-detail.php?pub_id=1442)
* A Start-Up Guide on Building Information Modelling, published on the APEC website in 2014.

Upcoming project milestones in 2015 include:

* The release (in mid-2015) of a Building Information Modelling (BIM) Metrics Guide
* The release (sometime around September) of a Green Code Infrastructure Guide (self-funded by the US) to provide guidance on the supporting measures necessary to successfully implement a green building code, such as effective enforcement.

Another key project underway (in collaboration with EGEEC) is: ***Aligning Energy Efficiency for ICT Products – Implementing a Strategic Approach (CTI 27 2013)***. Three workshops were held for this project in 2014 (including one on the margins of EGEEC 44 in Beijing). Objectives and outputs include comparison of test methods for ICT products in the APEC region, promoting the use of a common standard (international standard IEC 62623) throughout the APEC region, and assessing testing capacity (laboratories that can test ICT products) in the region. The project has been granted an extension until December 2015.

The US representative also noted that a further common interest for SCSC and EGEEC has been promoting the use of Energy Management System standard (ISO 50001) in APEC economies.

*Asia Pacific Energy Research Center (APERC)*

An APERC representative presented an update on APERC activities.

APERC is keen to conduct a **Peer Review on Energy Efficiency** (**PREE)** for the remaining economies that have not done so , especially the six (China, Hong Kong, Mexico, Papua New Guinea, Russia, Singapore) that are not IEA members, and are therefore not eligible to undertake an equivalent peer review exercise through the IEA.

In 2012, APERC launched the **Follow-Up PREE**, to review progress made by economies that have undergone a PREE. To date, Vietnam and the Philippines have completed a Follow-Up PREE and Thailand will follow in August 2015. APERC is keen to schedule a Follow-Up PREE for further economies.

APERC’s new **Energy Efficiency Policy** **EEP Workshop** replaces the former **Cooperative Energy Efficiency Design for Sustainability (CEEDS)** initiative. The first EEP workshop was held two days prior to the 45th EGEEC meeting and looked at funding approaches and key design principles for energy efficiency policies. APERC welcomes feedback and suggestions for future workshops. The first of these workshops was Self-funded but in future funding will be sought through the APEC Support Fund (as part of the package of measures funded under PREE).

APERC clarified its position within the APEC reporting structure: it now reports directly to the Energy Working Group, whereas it formerly reported to the Expert Group on Energy Data and Analysis (EGEDA).

In addition to the PREE and EEP initiatives, APERC currently works on APEC’s Energy Demand and Supply Outlook, the Low Carbon Model Town initiative, the Peer Review on Low-Carbon Energy Technologies (PRLCE), and Oil and Gas Security Exercises (OGSE).

*International Copper Association (ICA)*

This item was deferred to Session 4.

# Session 3: Project Updates

APEC project funding approval process overview

The Program Director of the APEC Project Management Unit (Andrew Lloyd) gave the expert group an overview of the APEC funding approval process and guidance and resources available to project proponents (funding applicants) and project overseers (implementers).

He advised that the **Guidebook on APEC Projects (Tenth Edition)** is the primary resource for proponents and overseers. The Guidebook sets out the requirements that concept notes and proposals must satisfy to be eligible for funding. Additional development materials are available to guide the preparation of APEC concept notes and project proposals.

The expert group was advised that **concept notes** need to be well-aligned to **APEC Funding Criteria** in order to be successful, especially since funding has been heavily contested in recent years. Energy efficiency falls under ‘*Rank 2’* in the funding criteria (as one of the factors that support sustainable growth under the *APEC Leaders' Growth Strategy*).

The expert group was also advised that funding decisions are ultimately made by the Budget Management Committee (BMC) so proposals should be prepared with this audience in mind (ensuring that energy efficiency objectives are well linked to broader APEC goals).

It was recommended that energy efficiency-related proposals stand a stronger chance of getting funded through the **APEC Support Fund**, as this includes a generous sub-fund for energy efficiency and is also less contested than other funds.

Project proponents were advised to engage their economy representatives in the Energy Working Group (or whichever forum is submitting the proposal) and the Budget Management Committee, to inform these representatives of concept notes and proposals in advance so that they can support the proposals as they are elevated for approval.

A **project proposal** needs to be developed after concept notes are approved in-principle. Project proposals need to meet **APEC Quality Criteria**, which apply to the budget, evaluation framework, long-term relevance, and how the project builds on previous work under APEC.

**Project monitoring and evaluation**: In late 2013 BMC endorsed a new framework to collect quantitative data on projects and help evaluate their long-term impacts. Under this framework, project proponents should identify the indicators they will use to evaluate their projects (for example workshop attendance rates) and seek to establish a baseline against which impacts can be measured (such as increased adoption of a standard).

For further guidance, the expert group was advised to refer to the APEC website’s Projects section <http://www.apec.org/Projects/Forms-and-Resources.aspx> and to the Program Director for the Energy Working Group (or relevant forum), who can then put project proponents in touch with PMU staff.

A US representative enquired about the scope to for project funding to support websites. The PMU Project Director explained that APEC can help fund the establishment of a website but funding is contingent on assurance that there is a plan in place to support the ongoing maintenance of that website.

The US representative also advised fellow expert group members that the new concept note template allows project proponents to nominate a sub-fund under the APEC Support Fund.

Ongoing and recently completed projects

**EWG-03-2013A – Nearly (Net) Zero Energy Building (China)**

The Project Overseer reported on the completion of this project, which looked at advances in net zero energy buildings (NZEB) in Korea, Japan, Canada, China and the US. The project identified NZEB definitions, policies, pathways, professional networks, and pilot projects (including a demonstration building in Beijing, China). It included two well-attended workshops to share expertise and promote NZEB practices. The final report is available on the APEC website.

The Project Overseer discussed the increased adoption of NZEB practices in China, including plans for further demonstration projects in other provinces to suit different climate zones; the development of ultra low energy design guidelines; and subsidies to promote public projects in China (as used in Korea).

He concluded by noting that a concept note has been developed for a follow-up NZEB project and is being considered for APEC funding under Round 1, 2015. The follow up project was discussed further under Day One, Session 3.

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

The Project Overseer for this project (launched in September 2014 and scheduled to conclude in 2015) explained that its aim is to promote harmonisation of energy efficiency test methods in the APEC region in line with the new international standard IEC62552, in order to encourage technical innovation and increased trade in energy efficient refrigerators. This will 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. CLASP, ICA, and the APEC CTI SCSC are partners in the project.

Milestones to date include establishment of a technical working group, desktop research on different standards currently used in the region, and laboratory testing (in progress) to compare results across different standards and the new IEC standard. Next steps include holding training workshops, compiling recommendations, and sharing final research outcomes.

Research to date identifies that standards across the region apply a range of different test parameters (for example temperature requirements), product categories (depending on the types of product sold in each market), and energy performance indices. Consequently, test results for energy consumption can vary considerably for the same refrigerator, which imposes significant cost on manufacturers.

**ACTION**: Meeting participants were asked to complete a draft survey distributed with their meeting papers, and were invited to read and comment on a draft report. The contact point for the project is An Min ([anmin@csc.org.cn](mailto:anmin@csc.org.cn)).

A representative of Thailand mentioned a project led by Japan to develop a modified version of the IEC test method for ASEAN economies. This was noted by the Project Overseer.

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

This project (co-sponsored by Canada, Indonesia, New Zealand, US, and Viet Nam) aims to promote regional adoption of international measurement and verification (M&V) standards, and raise awareness of the role they play in enhancing the credibility of energy savings attributed to projects or organisations.

Project outputs include comparison of M&V practices across participating economies, a workshop on M&V standards harmonisation, and a set of recommendations to address barriers to harmonisation and capacity-building.

To date, 20 respondents across ten economies have responded to the project survey and preliminary analysis of results has been carried out. Remaining economies (Australia, Brunei Darussalam, Canada, Chile, Japan, Korea, Malaysia, Papua New Guinea, Philippines, Russia, and United States) are asked to complete the survey.

**ACTION**: Representatives whose economies have not completed the survey to follow up with the relevant experts in their economy.

The workshop is tentatively scheduled to take place in China, October 2015. Economies are requested to take part in the workshop and to nominate expert speakers. The contact point is Dr. Li Pengcheng ([lipch@cnis.gov.cn](mailto:lipch@cnis.gov.cn), or [lipch78@gmail.com](mailto:lipch78@gmail.com)).

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

The New Zealand representative gave a short update on this project, noting that survey had been done on vehicle fuel efficiency labelling schemes across APEC economies, and a workshop had been held the day prior to the meeting to present and discuss the preliminary survey results.

The workshop concluded with a discussion of common priorities and challenges among the participating economies and recommendations on actions APEC could take to promote closer regional alignment and adoption of best practices.

A draft report has been distributed to survey and workshop participants via email for comment.

**ACTION**: Economy representatives to review the report and provide or comments (or follow up with the relevant contacts in their economy).

The project overseers are aiming to complete the project by October 2015 and are aiming to report back with final recommendations at the next EGEEC meeting.

**EWG-12-2013A – Catalysing Monitoring, Verification & Enforcement Best Practices Exchange and Building Compliance Capacity in the APEC Region (CLASP)**

This item was deferred to Session 4.

New proposals in progress

**Lighting Design Centres (US)**

A US representative presented this proposal under its full title, “*Establishing Lighting Best Practices and Education Programs to Achieve Deep Energy Savings – An Asia-Pacific Economic Cooperation (APEC) regional collaboration with university lighting centers and research institutions*”.

He noted the role that efficient lighting can play in reducing the energy footprint of buildings and lowering GHG emissions, considering that lighting accounts for around 25% of electricity use globally (and more in some developing economies) and makes up a substantial proportion of the energy demand in buildings.

The proposed project would run from May 2015 to December 2016 and would comprise two workshops to be held alongside Expert Group meetings, bringing together representatives from university lighting design centres with lighting experts from APEC economies. The workshop would promote best practices in efficient lighting and the establishment of unified lighting education programmes across APEC economies.

At the time of the meeting, a concept note had been submitted under Session 1, 2015 and was awaiting a final decision from BMC. Canada, China, Japan, Thailand, New Zealand, Chinese Taipei, The Philippines, Brunei Darussalam had agreed to co-sponsor the proposal. [Update: the concept note was subsequently approved in-principle for funding, subject to a full proposal being submitted and approved.]

**Enhancing Regional Capacity to Ensure Successful ISO 50001 Outcomes (US)**

The US representative presented a further US proposal, which seeks to build regional capacity to implement, and assess conformity with, the international energy management system standard ISO 50001 standard.

The project would run May 2015 to December 2016 and would include two or more workshops, several preparatory webinars, and other forums to help technical experts design and implement regionally consistent (but nationally appropriate) action plans for training auditors to ISO 50001 and ensuring a consistent approach to assessing conformity against ISO 50001. It would culminate in a set of principles for implementing ISO 50001 and in participating economies adopting action plans to implement ISO 50001 certification schemes for energy management personnel.

At the time of the meeting, a concept note had been submitted under Session 1, 2015 and was awaiting a final decision from BMC. Canada, China, Chile, Mexico, Indonesia had been confirmed as project co-sponsors.

The project would be undertaken in partnership with the APEC CTI SCSC and a Clean Energy Ministerial project team.

The representative noted that webinars had been used successfully as a channel for participation in Clean Energy Ministerial projects.

ICA stated support for the proposal and offered to be a partner in the project delivery.

**Follow-up project to EWG-03-2013A-NEARLY (NET) ZERO ENERGY BUILDING (China)**

The project proponent presented this proposal to meeting participants under the title, ‘*EWG-03-2013A- APEC NEARLY (NET) ZERO ENERGY BUILDING Best practices and energy reduction results comparative study’*. At the time of the meeting, a concept note had been submitted under Session 1, 2015 and was awaiting a final decision by BMC. [**Update**: this proposal has now successfully passed through the project approvals process and been approved for funding.]

The aim of this project is to sharethe latest findings from NZEB research and demonstration projects. It will focus on flagship projects spread across several climate zones in the APEC region, including in Canada, Korea, Japan, the US, and China.

Planned outputs include two workshops to be held in 2015 and 2016. Potential events/venues where the workshops could take place include the upcoming Smart NZEB Symposium in Canada, an upcoming Expert Group meeting, at the Berkeley Laboratories in the US, and in China.

**APEC Self-funded project endorsed at EWG in 2014 being undertaken by the US Trade in partnership with China**

A US representative advised that it is undertaking a Self-funded project in partnership with China to promote best practices in green data centres (endorsed by the Energy Working Group in 2014). He noted that data centres now account for more than 5 percent of China’s energy demand.

Key outputs for this project include a feasibility study and demonstration project for green data centres, production of a Best Practices Handbook, and a training workshop planned for 2016.

More information can be shared with interested economies on request.

Update on ESIS and CAST (CLASP)

This item was deferred to the next session

International Copper Association (ICA) (project updates)

This item was deferred to the next session.

APEC activities in support of EE & RE goals

This item was carried across from Session 2.

The Chair noted that the EWG Lead Shepherd has invited the EGEEC and EGNRET to put forward ideas for new projects that can contribute to APEC’s energy intensity and renewable energy goals, and has expressed a preference for proposals that link energy efficiency and renewable energy.

It was suggested that a working group could be set up under EGEEC to undertake a gap assessment and identify potential projects. The working group could also help refine concept notes that are put up through EWG via the EGEEC, so that they are linked as clearly as possible to APEC goals and priorities.

It was noted that EGNRET plans to undertake this exercise when it next meets (in three weeks in the Philippines).

**ACTION**: The Secretariat will invite expressions of interest in taking part in a working group to develop further project concepts.

Discussion/wrap-up

The Chair and Co-chair invited submission of concept notes out-of-session and urged economies to make good use of the available funding.

**ACTION**: Project proponents are asked to submit new concept notes to the EGEE&C Secretariat for consideration under Session 2, 2015 to the Secretariat in time to discuss at EWG in June.

**ACTION**: The Chair will report back to the EWG Lead Shepherd by 31 March with initial ideas on future EE & RE projects, to inform discussion at the first Senior Officials Meeting for 2015 (SOM 1).

**Session 4: Establishing an APEC MVE Network (CLASP)**

ESIS and CAST update (CLASP)

(This item was carried over from Session 3)

**Introduction to CLASP and the SEAD initiative**

The CLASP representative provided a brief background to CLASP and its key activities. These include the Global Lighting Energy Access Partnership Awards Scheme, the Clean Energy Ministerial ‘Super Efficient Appliance Deployment’ (SEAD) initiative (for which CLASP acts as the implementing agent), maintaining a global energy efficiency standards and labelling database (of which the APEC ESIS database is a sub-set), and providing free online resources on standards and labelling and monitoring, verification and enforcement.

SEAD policy exchange forum webinars: The expert group was advised that a series of ‘policy exchange forum webinars’are being launched under the SEAD initiative and APEC economies will be welcome to take part. The webinars will provide a forum for government-to-government information sharing on topics such as prioritisation of products, maintaining databases, and measuring programme impacts.

**ESIS Secretariat update**

An update was provided on the APEC Energy Standards Information System (ESIS). This is an online tool for comparing standards and labelling policies and regulations across APEC (by economy and product). It is currently funded by the US and maintained by CLASP (as a subset of its global standards and labelling database, which covers 49 economies and 17 product categories in total) with the support of key economy contacts.

A number of upgrades are scheduled for completion in 2015, including refreshing data with assistance from key economy contacts, adding data for China, Russia and Canada, improving data on test methods, and surveying users about potential upgrades to tools and functionality.

A New Zealand representative asked whether vehicle standards could be added to the database.

**CAST update**

An update was provided on the Collaborative Assessment of Standards and Testing (CAST) initiative, which was established to promote harmonisation of test procedures (for product energy efficiency) in the APEC region. CAST is currently funded by the US and implemented by CLASP. It draws on SEAD funding and expertise to & expertise to carry out one or more projects a year. To date, projects on heat pump water heaters and electric motors have been completed and a project on televisions is near completion (a draft final report is available).

A summary of television project was tabled at the meeting (this project was also the subject of a presentation at the 44th EGEEC meeting). The final report can be shared on request prior to its publication and will be presented via a webinar and at the upcoming ‘european council for an energy efficiency economy’ (eceee) summer school. The European Commission is considered adopting recommendations from the report.

A US representative asked whether project reports for CAST are published on APEC website.

International Copper Association (ICA) (project updates)

(This item was carried over from Session 3.)

**UNEP-ICA EE Global Partnership (GEF-funded) proposal**

An ICA representative informed the expert group about opportunities for developing APEC economies to take part in the [UNEP Efficient Appliances and Equipment Partnership](http://www.unep.org/newscentre/Default.aspx?DocumentID=2796&ArticleID=10999&l=en) launched in 2014 (for which the ICA is a partner organisation).

This is a public-private partnership that provides assistance to governments to support the transition to energy efficient products (in support of the energy efficiency goal of the UN Secretary-General's Sustainable Energy for All (SE4LL) initiative). It is modelled on the UNEP's ‘en.lighten’ initiative to phase out inefficient incandescent lamps.

Through this Partnership, funding from the UN Global Environmental Facility and co-funding/in-kind support from private sector organisations is available for governments to implement national and regional projects (known as ‘child projects’).

Governments can join by signing a letter stating their intention to promote the transition to efficient products and equipment (this is non-binding and can be signed by a senior representative of the participating government agency). They then work with the UNEP to develop their project concept and with their local GEF Operating Focal Point to get funding allocated to the project, and explore opportunities for regional cooperation on projects.

The ICA representative suggested that APEC economies developing child projects through this initiative could potentially circulate project proposals through EGEEC to gain regional support.

Interested economies were encouraged to get in touch with the UNEP contact point or the ICA representative for more information and for examples of the types of ‘child projects’ being undertaken (see presentation for contact details).

**Proposed concept note for discussion**

The ICA representative presented a proposed concept note on distribution transformers for the expert group’s consideration.

The objective of the proposal is to help APEC economies fully capture potential energy savings from distribution transformers. The Lawrence Berkeley National Laboratory estimates that distribution transformers account for a third of transmission and distribution losses in electricity networks and that network losses account for up to 15% of energy losses; however there is potential to save up to 32 TWh of electricity per year by 2030 through requiring distribution transformers to meet MEPS for distribution transformers.

The proposed project would involve a comparative study of results from testing to two different test methodologies — testing at 50% load versus testing at load and no load — to support the development of an international standard under the IEC which will support better differentiation of performance between transformers.

Most existing standards test transformers at 50% load, which does not reflect their actual performance. Actual load losses are thought to be at least 23% higher and as much as 73% higher than the losses captured during testing at 50% load. The EU and China test at losses at load and no load which is thought to provide a much more accurate picture of their energy consumption.

The project proposal seeks 160k in APEC funding towards a total cost of 225k

An APEC economy would need to sponsor this proposal in order for it to progress further. Both China and Chinese Taipei indicated their support for this proposal.

Establishing an APEC MVE Network (CLASP)

The CLASP representative began by providing an overview of the recently completed project ‘*EWG-12-2013A – Catalysing Monitoring, Verification & Enforcement Best Practices Exchange and Building Compliance Capacity in the APEC Region (Australia)’ (*originally scheduled for Session 3).

CLASP was a partner in this project (sponsored by Australia). The objectives were to identify best practices for verification testing and to create a monitoring, verification and enforcement (MV&E) network in the Asia-Pacific region.

The project produced a report ‘*Assessment of verification testing capacity in the APEC region and identification of cost effective options for collaboration*’ that was informed by a survey of 18 APEC economies. It identified around 250 laboratories (mainly in economies with manufacturing capacity).

project culminated in an APEC Best Practice Compliance Workshop (held alongside the 44th expert group meeting in Beijing, China, November 2015) which recommended regional cooperation as a cost-effective and strategic way to raise compliance with standards and labelling programmes in APEC economies (comparable to the EU’s approach). A staged approach to cooperation was suggested, starting with information-sharing and potentially building towards regional coordination of market surveillance activities (for example a shared testing programme). A set of draft principles to guide regional collaboration on monitoring, verification and enforcement were tabled at the workshop.

A discussion followed on how this concept of regional cooperation could be progressed. It was suggested that compliance practitioners could meet regularly alongside the expert group, with economies participating on a voluntary basis. There could be opportunities to seek APEC or CAST funding as well as contributions (funding or in-kind) from partner/observer organisations (such as CLASP) to support activities linked to these meetings (such as joint projects).

The Chair suggested that to make the case for establishing the proposed forum, it would be useful to quantify how much economies are collectively spending on their compliance programme and how much could be saved through information-sharing and coordination. He suggested that an initial meeting could be organised at which economies could share information on their testing activities and costs. He also suggested that the proposed forum could be seen as an extension of the APEC ESIS initiative. He indicated New Zealand’s interest in participating.

The APEC Program Director asked whether the forum was being proposed as a formal APEC initiative. He advised that such a forum would be expected to include wide participation from APEC economies and comply with APEC Guidelines and Principles. It would also require endorsement by Ministers or Leaders and the APEC Secretariat would need to sanction the use of the term ‘APEC’. He suggested that an initial meeting or workshop could be used to frame up the proposed network as an initiative (under, or along similar lines to, ESIS) and develop a terms of reference.

The Program Director further recommended that APEC’s Subcommittee on Standards and Conformance (SCSC) should be approached to support and participate in the proposed forum given their interest and expertise in compliance. He also advised that any proposals for project funding to support the work of the forum would need to be submitted through an originating forum such as the EWG or SCSC (as EGEEC cannot apply directly for funding).

The Chair and Co-chair thanked the Program Director for his comments.

The US representative indicated he would promote the concept to the relevant decision-makers to gauge US support.

**Session 5: Economy updates**

Brief updates were provided on key developments in energy efficiency policies and programmes by economy, by participating economy representatives. These commenced on Day One and were concluded on Day Two. For details, please refer to the presentations available on the EGEEC website at: <http://www.egeec.apec.org/event-holder/45th-meeting-of-apec-egeec/>.

Presentations were made by Brunei, China, Hong Kong, Indonesia, Mexico, New Zealand, The Philippines, Singapore, Chinese Taipei, Thailand and the United States.

**Close of Day One**

**Day Two: EGEE&C 45 Meeting**

**26 March 2015**

**Session 1: Opening Remarks (Chair)**

The Chair opened Day Two of the meeting.

**Session 2: Economy updates (continued from Day One)**

Continued as per notes under Day One, Session 5.

**Session 3: EGEE&C Chair and Co-chair roles**

The Co-chair said he looked forward to working for the Expert Group in his new role and thanked the Chair for his leadership over the past seven years.

The Chair thanked everyone for their contribution to the Expert Group over his seven years in the role, including stakeholders from the industry and NGO sectors, the secretariat, and the US representative, who had provided support and institutional knowledge during his tenure. He encouraged the Expert Group to think strategically moving forward about how to support the goals and priorities of the Energy Working Group.

**Future chairing arrangements**:

The Co-chair discussed potential operating models for the Expert Group in future.

He promoted the idea of a co-chairing arrangement, noting that having two economies to share chairing duties provides would good back-up and capacity building opportunities.

Various approaches to chairing were discussed, for example linking the chairing role to the host economy and rotating it annually, with the next year’s host economy co-chairing, or members electing a chair for a designated term and then either extending their term or electing a new chair.

The Co-chair also proposed setting a two-year work plan including an advance schedule of upcoming meetings and venues.

The Chair supported the Co-chair’s idea of a two-year work plan and the call for a co-chairing arrangement, noting this would enable sharing of the costs and resources required to attend EWG meetings, lead strategic planning and provide effective secretariat support.

The Co-chair made a call for suggestions and nominations for an economy to step up to share the chairing responsibilities.

The US noted its support for co-chairing arrangements, not as an honorary role but as an active role serving the interests of the group. The US also indicated it is considering options to support China as Co-chair.

The US suggested there are advantages in extending the chairing role out to more than one year, given the learning curve involved. He also suggested that the Co-chair may wish to seek the views of Expert Group members out-of-session.

The APEC Program Director said there was no standard approach deployed across APEC forums and it was up to the Expert Group to decide on the best option. He asked if the Expert Group has a Terms of Reference (ToR) and if so, what direction it provides.

The US representative recalled having a ToR for the Expert Group.

**ACTION**: Economies to consider putting themselves forward to co-chair the Expert Group.

**ACTION**: **Secretariat** to locate the Expert Group’s Terms of Reference; **Co-chair** to review it and propose revisions.

**Session 4: Upcoming Events & other issues**

Date and venue for 46th EGEE&C meeting in 2015

The representative for the Philippines confirmed the next meeting would take place there in September. He said he would be able to confirm more detail on the date and venue in the near future.

Expressions of interest were invited in hosting a meeting or workshop alongside the Expert Group meeting.

Future meetings – potential hosts

APERC stated its interest in holding another EEP workshop alongside the following meeting (the first meeting in 2016).

The US noted that two workshops are planned under its proposed projects. The outcomes for these proposals will be known over the next month or so.

The Chair sought nominations for economies to host first meeting in 2016.

The Co-chair restated his intention to develop a longer-term plan for meeting hosts/venues into the future.

**ACTION**: Economies to consider the option to host the 47th Expert Group meeting in 2016, and future meetings.

Matters arising

None

**Session 5: Summary session**

The Chair and Co-chair thanked the hosts for their hospitality and thanked participants for their contributions and fruitful discussion. It was noted that the site visit is a good feature of meetings. The APEC and EGEEC Secretariats were thanked for their guidance and support.

**ACTION**: Meeting outcomes to be distributed out-of-session

**Close of EGEE&C 45**