


UPDATE OF APEC EGEE&C

Co-Chair of EGEE&C: Li Pengcheng
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BACKGROUND OF EGEE&C

The Expert Group on Energy Efficiency and Conservation (EGEE&C) was established in 1993.

The mission of the Expert Group is to advance economic and social well-being, and to realize environmental benefits in the Asia-Pacific region through energy conservation and the application of energy-efficiency practices and technologies.



OBJECTIVES OF EGEE&C

- Assist in achieving energy security and securing adequate and affordable energy services in support of basic human needs and continued economic growth;
- Advance the application of demonstrated energy-efficiency practices and technologies in appropriate regional end-use sectors (residential, commercial, industrial, agricultural, transportation, etc);
- Assist in developing and enhancing trade between APEC member economies energy in products and services and energy-efficiency practices and technologies;
- Contribute to the international effort to reduce the adverse impacts of energy production and consumption upon our global environment; and
- Improve the analytical, technical, operational and policy capacity for energy efficiency and conservation within member economies.



STRATEGIES

○ APEC activities in support of EE & RE goals

- The group noted that the EWG Lead Shepherd has invited the EGEE&C 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.
- EGEE&C are going to undertake a gap assessment and identify potential projects, so that they are linked as clearly as possible to APEC goals and priorities.





MAPPING ANALYSIS OF EGEE&C PROJECTS

Appliances and equipment

- S&L, MV&E, testing methods

Industry

- ISO 50001, M&V

Building

- Lighting Center, Nearly Zero Building

Transportation

- Label of vehicles

Cross-cutting

- Capacity building
- Financing, ESCos
- Policy evaluation
- Cost-benefit of energy efficient technologies

Efficiency of energy supply system



MEETINGS AND EVENTS

- The 45th Meeting of the APEC Expert Group on Energy Efficiency & Conservation (EGEE&C 45) was held on 25-26 March 2015 in Singapore
 - An APERC-sponsored Energy Efficiency Policy Workshop on 23 March focusing on financing policy
 - An APEC-sponsored workshop on 24 March related to EWG 05 2014A – Review of the Design and Effectiveness of Vehicle Fuel Efficiency Labelling and Consumer Information Schemes
- The 46th Meeting of the APEC Expert Group on Energy Efficiency & Conservation (EGEE&C 45) was held on 31 August-2 September 2015 in Cebu, Philippines



LEADERSHIP

- Mr. Li Pengcheng (PRC) from China National Institute of Standardization has been announced as the new EGEE&C Co-Chair at EGEEEC 45 in Singapore
- Mr. Ren Wei (PRC) from China National Institute of Standardization provides secretariat support to the EGEEEC
- Mr. Terry Collins (Chair) and Ms. Laura Christen (Secretary) from New Zealand had an outstanding leadership of EGEE&C for 7 years





Asia-Pacific
Economic Cooperation

APEC Expert Group on Energy Efficiency and Conservation (EGEE&C)
Under the APEC Energy Working Group

PROJECTS - *ONGOING AND RECENTLY COMPLETED (1)*

- **EWG-03-2013A – Nearly (Net) Zero Energy Building (China)**
 - The completed project 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.
- **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 aims 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. Research to date identifies that standards across the region apply a range of different test parameters, product categories, and energy performance indices.





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PROJECTS - *ONGOING AND RECENTLY COMPLETED (2)*

- **EWG 05 2014A – Review of the Design and Effectiveness of Vehicle Fuel Efficiency Labelling and Consumer Information Schemes (New Zealand)**
 - Survey had been done on vehicle fuel efficiency labelling schemes across APEC economies. A 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
- **EWG-12-2013A – Catalysing Monitoring, Verification & Enforcement Best Practices Exchange and Building Compliance Capacity in the APEC Region (CLASP)**
 - 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 culminated in an APEC Best Practice Compliance Workshop which recommended regional cooperation as a cost-effective and strategic way to raise compliance with standards and labelling programmes in APEC economies. A set of draft principles to guide regional collaboration on monitoring, verification and enforcement were tabled at the workshop.



RELEVANT PROJECTS (1)

○ **Lighting Design Centres (US) under EWG**

- US presented the proposal “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”.
- The proposed project would run from May 2015 to December 2016 and would comprise two workshops to promote best practices in efficient lighting and the establishment of unified lighting education programmes across APEC economies.

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

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



RELEVANT PROJECTS (2)

- **Harmonizing Standards and Enhancing Technical Capacity in Measurement and Verification of Energy Savings of projects or organizations (CTI 13 2014A) under SCSC**
 - To share experiences of harmonizing M&V methodologies for increasing the reliability of energy savings of projects or organizations to promote investment in energy efficiency and contribute to a reduction in energy intensity.
 - To improve the capacity to use international M&V standards through exchanging expertise between developed economies and developing economies.
 - To enhance understanding of importance of M&V for ensuring credible energy performance improvement of systems or organizations through the public-private dialogue.



PROJECTS - *NEW PROPOSALS (1)*

- **Follow-up project to EWG-03-2013A-Nearly (Net) Zero Energy Building (China)**
 - The aim of this project is to share the 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.
- **Reducing losses in power distribution through improved efficiency of distribution transformers (China)**
 - The project aims at supporting the improvement of DTs' energy efficiency in APEC economies by building the capacity of standard making bodies and policy makers for the adoption of the upcoming IEC standard for DTs (IEC 60076-20).



PROJECTS - *NEW PROPOSALS* (2)

- **Eco hogares: eco-efficiency program to promote environmental citizenship and the development of small and medium enterprises (Peru)**
 - To create a digital platform that allows systematize, recognize and promote the efficient use of energy resources and the sustainable trade of goods in order to reduce carbon emissions and improve the development of small and medium enterprises.



PARTNERS - APERC

- APERC 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).
- 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 prior to the 45th EGEE&C meeting and looked at funding approaches and key design principles for energy efficiency policies.
- 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).



PARTNERS - *CLASP*

- 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. 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 an online resource that allows policy makers and S&L practitioners to compare policies and regulation across countries and according to product.
- 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.



PARTNERS - ICA

- In 1989, 24 of the world's leading copper producers united to form ICA with the recognition of a need to coordinate and integrate efforts in copper promotion worldwide. ICA supports policymakers with the accelerated adoption of sustainable energy solutions and standards. ICA focuses on the areas of equipment and appliance energy efficiency, electricity infrastructure efficiency, renewable energy and energy access for disadvantaged populations.
- Recently, ICA help EGEE&C to conduct project on distribution transformers to help APEC economies fully capture potential energy savings from distribution transformers. There is potential to save up to 32 TWh of electricity per year by 2030 through requiring distribution transformers to meet MEPS.



UPCOMING EVENTS

- The 47th EGEE&C meeting is planned to be held during late March and early April, 2016 in Chinese Taipei
- 3 Workshops related to APEC-sponsored projects will be held alongside the 47th EGEE&C meeting
 - APERC Energy Efficiency Policy Training Workshop
 - Nearly (Net) Zero Energy Building
 - Harmonisation of Energy Efficiency Test Methods of Refrigerators



**THANK YOU FOR YOUR
ATTENTION!**

