

UPDATE OF APEC EGEE&C

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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;

Advance the application of demonstrated energy-efficiency practices and technologies in end-use sectors;

Assist in developing and enhancing trade in products and services with energy-efficiency practices and technologies;

Contribute to the international effort to reduce the adverse impacts of energy production and consumption;

Improve the analytical, technical, operational and policy capacity for energy efficiency and conservation.

STRATEGIES

○ APEC activities in support of EE & RE goals

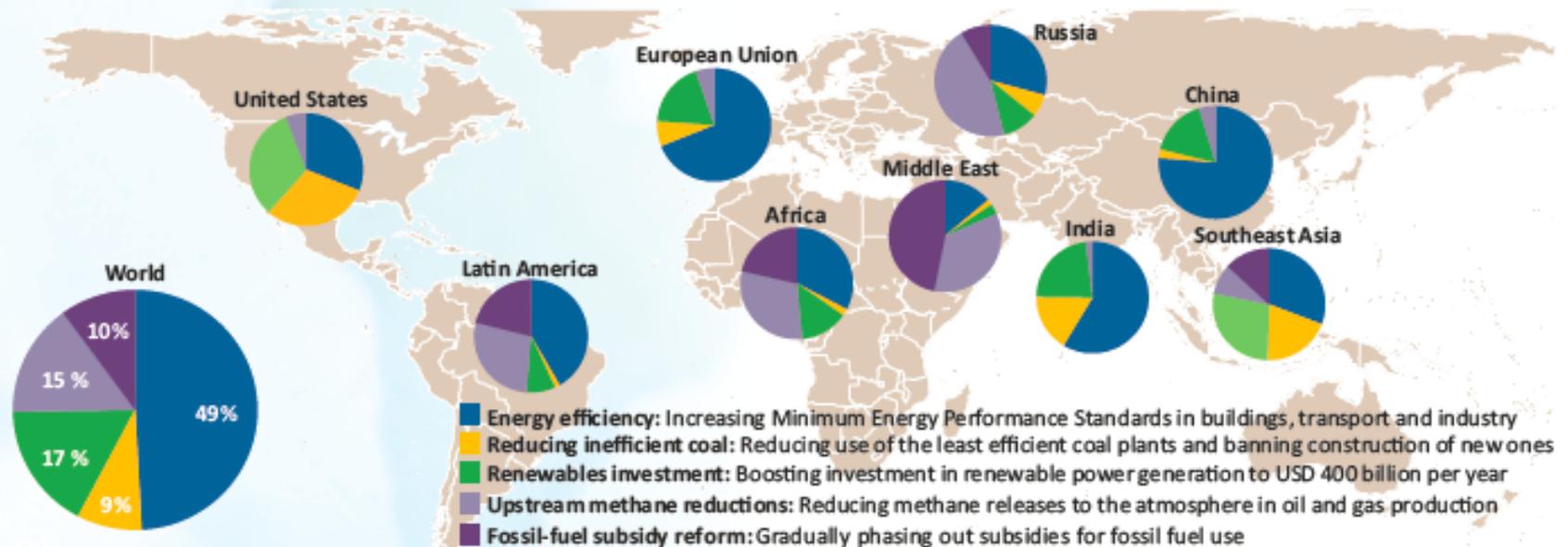
- The group noted that the EWG Lead Shepherd has invited the EGEE&C and EGNRET to put forward ideas for new projects that can contribute to APEC's energy intensity and renewable energy goals, and has expressed a preference for proposals that link energy efficiency and renewable energy.
- EGEE&C are going to undertake a gap assessment and identify potential projects, so that they are linked as clearly as possible to APEC goals and priorities.
- Energy efficiency and energy conservation will play a key role in sustainable and resilient energy development in APEC region in line with COP21.



The bridge to a low-carbon world

A package of five measures using proven technologies, the IEA Bridge Strategy, can help countries to over-achieve on their INDCs and keep the below-2°C goal within reach while maintaining the same level of gross domestic product (GDP) growth as the current INDCs regionally and worldwide.

GHG emissions reduction by measure in the Bridge Scenario, relative to the INDC Scenario, 2030



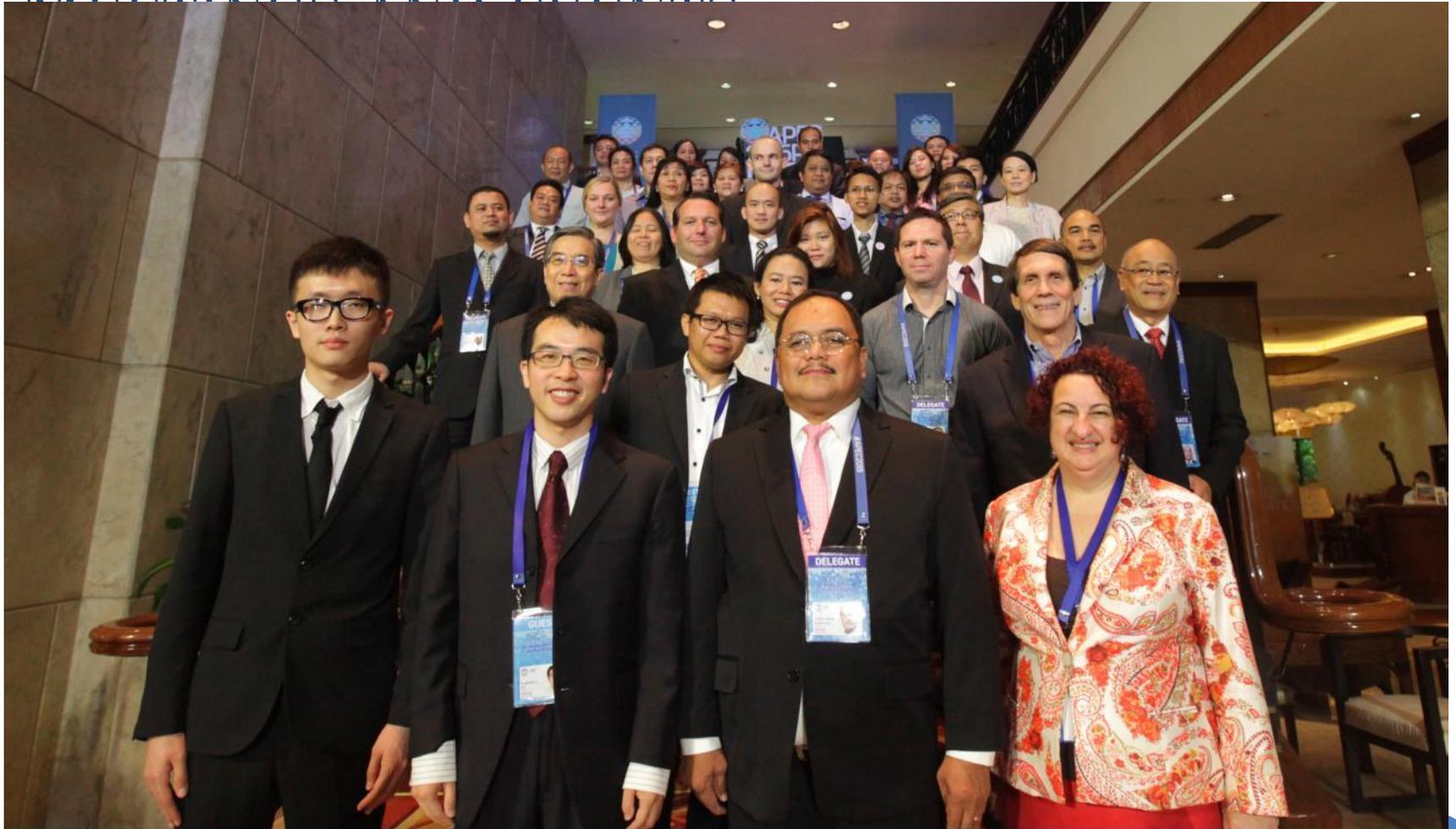
Source: World Energy Outlook Special Report: Energy and Climate Change (2015)



Asia-Pacific
Economic Cooperation

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

MEETINGS AND EVENTS



46th Meeting of Experts Group on Energy Efficiency and Conservation (EGEEC)
August 31, 2015 | Cebu City, Philippines



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PARTNERS - *APERC*



- APERC is currently involved in the Cooperative Energy Efficiency Design for Sustainability (CEEDS) and APEC's Peer Review on Energy Efficiency (PREE).
- APERC's first Energy Efficiency Policy (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 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



- 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.

PARTNERS



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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.



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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 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.
- **Aligning Energy Efficiency Regulations for ICT Products – Implementing A Strategic Approach (CTI-27-2013A) under SCSC**
 - To establish a forum to align energy efficiency regulations such as MEPS and labeling program to enhance the trade of efficient ICT product

PROJECTS - *NEW PROPOSALS* (1)

○ Session 1, 2016

- Distribution transformers, China
- Gap assessment of energy efficiency and conservation work, US
- Qualified Product Lists for lighting, US
- Development of an Evaluation Community, US
- Green financing mechanisms, China
- Asia-Pacific Urbanization Partnership, China
- Eco hogares, Peru

PROJECTS - *NEW PROPOSALS* (2)

○ **Session 2, 2016**

- Harmonization of energy efficiency test methods of electric motor, Chinese Taipei
- Standardized Interface Specifications of LED Luminaries, Chinese Taipei
- Domestic Appliances Design Platform for Energy Efficiency, Chinese Taipei
- Low-Emission Development Strategies (LEDS) in Transport Sector, US
- Roadmap to Enhance Urban Development towards A Low Carbon and Energy Efficient Future, China
- Nearly (Net) Zero Energy Building Roadmap Study, China
- Commercial Buildings Energy Performance, Australia
- Peer Review on Energy Efficiency (PREE) Phase 6, Japan





MAPPING ANALYSIS OF EGEE&C PROJECTS

Appliances and equipment

- Harmonization of S&L
- MV&E
- Testing capacity

Industry

- Energy management (ISO 50001)
- M&V

Building

- Lighting
- Nearly Zero Energy Building

Transportation

- Label of vehicles

Cross-cutting

- PREE
- Financing, ESCos



FUTURE

New areas to be considered

- Policy and Program Evaluation
- Investment: green financing, green bonds
- Efficiency of energy supply system
- Cost-benefit of energy efficient technologies

Factors of success

- Coherent topics
- Streamlined projects
- Collaboration with groups/organizations/programs
- Full participation of the members

**THANK YOU FOR YOUR
ATTENTION!**

