

**2017/EWG54/014** Agenda Item: 11a

#### Report of EGEE&C

Purpose: Information Submitted by: EGEE&C



54<sup>th</sup> Energy Working Group Meeting Wellington, New Zealand 22-23 November 2017

# REPORT OF APEC EGEE&C FOR APEC EWG 54

Chair of EGEE&C: Li Pengcheng China National Institute of Standardization 2017-11-22

# MANDATES OF APEC EGEE&C

- Enhance cooperation to achieve APEC's aspirational goal of reducing energy intensity of the APEC economies by at least 45% by 2035, using 2005 as a base year;
- 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 in energyefficiency products and services between APEC member economies;
- Contribute to international efforts 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.

# GOVERNANCE AND MEETINGS

- Mr. Li Pengcheng (PRC) from China National Institute of Standardization is the Chair of EGEEC
- Mr. Liu Ren (PRC) from China National Institute of Standardization provides secretariat support to the EGEEC
- 6 economies participated in the 50th Meeting of the APEC Expert Group on Energy Efficiency & Conservation (EGEE&C 50) held on October 6–7, 2017 in Moscow, Russia.

#### **PARTNERS**

 APERC is currently involved in the APEC's Peer Review on Energy Efficiency (<u>PREE</u>) and <u>Compendium</u> to share information on EE policies and performance of APEC economies.



• CLASP works as the Secretariat of <u>APEC-ESIS</u>, which provides up-to-date information about energy efficiency standards and labeling that apply to products in the APEC region.

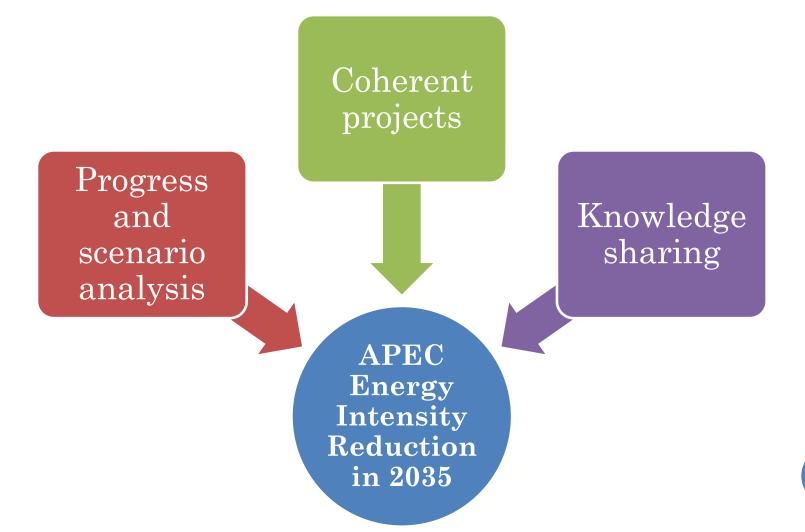


 ICA focuses on the areas of equipment and appliance energy efficiency, electricity infrastructure efficiency.
 ICA proposes an <u>APEC-ICA Energy Facility</u> for structured cooperation in the field of energy efficiency and renewable energy





# **STRATEGIES**



# TREND OF APEC ENERGY INTENSITY

- Monitored by APERC continuously
  - Final energy consumption intensity (ex. non-energy) has been improving reasonably consistently with the largest reduction from 2014 to 2015.
  - Final energy consumption intensity (ex. non-energy) fell 17.6% between 2005 and 2015 (only 15.1% to 2014, at the last update in November 2016).
  - If the current trend continues, final energy consumption intensity (ex. non-energy) reduction would fall just short of the APEC goal, reaching 44% in 2035 (the APEC goal would be reached the following year).

# Mapping Analysis of Projects related to Energy Efficiency and Conservation

Appliances and equipment

Harmonization of S&L

Enforcement of S&L (MV&E, testing capacity)

Market transformation of EE products Industry

Energy management system (ISO 50001+M&V) Building

Commercial building (lighting)

Nearly Zero Energy Building Transportation

Label of vehicles

Low-Emission Development Strategies (LEDS)

# Cross-cutting issues

Policy and program evaluation (PREE)

Financing (Private and public funding, ESCos)

District energy system (Supply + demand)

Capacity building

# 9 Ongoing Projects (1)

- EWG-04- 2015A Enhancing Regional Capacity to Ensure Successful ISO 50001 Outcomes (US)
- EWG-01- 2016A <u>Gaps Assessment</u> on APEC Energy Efficiency and Conservation Work Toward Fulfilling the Leaders' Energy Intensity Reduction Goal (US)
- EWG-05- 2016A Reducing Losses in Power Distribution through Improved Efficiency of Distribution <u>Transformers</u> (China)
- EWG-08-2016A Workshop to Develop Qualified Product Lists for High-Quality and High-Efficiency Commercial, Industrial, and Outdoor <u>Lighting Products</u> and Control Systems in the APEC Region (US)

# 9 Ongoing Projects (2)

- EWG-10-2016A APEC Peer Review on Energy Efficiency (PREE) Phase 6 (Japan)
- EWG-15-2016A APEC <u>Nearly (Net) Zero Energy</u> <u>Building Roadmap Study responding to COP21 (China)</u>
- EWG-14-2016A Incubator for Enhancing <u>Commercial</u> <u>Buildings</u> Energy Performance (Australia)
- EWG-19-2016A APEC Workshop on Promoting the Development of an <u>Evaluation Community</u> (US)
- EWG-07-2017A <u>Refrigerator/Freezer</u> Energy Efficiency Improvement in APEC Region: Review of Experience and Best Practices (Chinese Taipei)



# Relevant Projects in other fora

- Best Practices Sharing and Technical Capacity Building for Measurement and Verification Standards of Energy Savings (CTI 17 2016A) under <u>SCSC</u>
- Capacity-Building and Awareness Project on Enhancement of Total Environmental Efficiency (Energy/Carbon and Material Efficiency) through MFCA, ISO 14051 (CTI-18-2015A) under <u>SCSC</u>
- APEC Workshop on Enhancing Policy Environment to Promote SMEs' Participation in Energy Efficiency Products Market14051 (SME 04 2016A) under <u>SMEWG</u>
- Textbook Development for Energy Efficiency, Energy Security and Energy Resiliency: A Cross-border Education Cooperation through Lesson Study (HRD 03 2015A) under <u>HRDWG</u>

# NEW PROJECTS – 5 CNS

- Appliances and equipment
  - Aligning Conformity Assessment Efforts for Energy Efficiency Regulations of Motors in the APEC and ASEAN Regions (US)
  - APEC <u>Distribution Transformers</u> Losses Reduction Project (Thailand)
- Building
  - Coordinating Standards for <u>Cool Roof</u> Testing and Performance (US)
- Cross-cutting issues
  - APEC Peer Review on Energy Efficiency (<u>PREE</u>) Phase 8 (Japan)
  - Creation of Atlas of remote areas and islands of APEC economies for <u>sustainable energy development</u> (Russia) not only covering energy efficiency issue

# COORDINATION WITH IPEEC

- A series of teleconference calls were organized between APEC EGEE&C Chair and IPEEC contact person for exchanging information and collaborative activities
  - IPEEC Energy Efficiency Finance Task Group (EEFTG) and APEC Green Energy Finance Initiative
  - IPEEC District Energy System taskforce and possible APEC workshop

# APEC ENERGY INTENSITY GOAL

"If the current trend continues, final energy consumption intensity would reach 44% in 2035"

- APEC should take action for <u>1%</u> more energy intensity reduction before 2035
  - Coherent programs/projects
  - Joint efforts of economies
  - Public-private collaboration

# GOVERNANCE ISSUES

- We are seeking the successive chair of APEC EGEE&C before the end of 2018. The arrangement of Co-Chair and Co-Secretary to work with China is helpful for a smooth transition.
- The 51<sup>th</sup> EGEE&C meeting is expected to be held in March/April, 2018. The good option is joint meeting with EGNRET
- Workshops alongside the 51<sup>th</sup> EGEE&C meeting
  - PREE EEP workshop
  - Refrigerator/Freezer Energy Efficiency Improvement workshop
  - Improved Efficiency of Distribution Transformers workshop

# THANK YOU FOR YOUR ATTENTION!