### EGEE&C 49<sup>th</sup> Meeting Outcomes

### EGEE&C 49<sup>th</sup> Meeting

- 3 cross-fora updates
  - ASGI, APERC, CLASP
- 14 projects update (all are on schedule)
- 2 Workshops held in conjunction
  - APERC Workshop for Energy Efficiency Policy Evaluation
  - Workshop on Reducing Losses in Power Distribution through Improved Efficiency of Distribution Transformers
- 3 new projects concept note discussion
  - All members of economy agreed to submit to EWG
    - Chile: Electro-mobility: Infrastructure and Workforce Development
    - Japan: APEC Peer Review on Energy Efficiency (PREE) Phase 7 (Follow-up PREE)
    - China: Policy implications of promoting networked and demand response-enabling household devices in the APEC region
- Economy update
  - Energy Intensity goal

### Direction from EWG Lead Shepherd

#### **Excerpt from the EWG 52 meeting record:**

Member economies had discussion over methodology. The Lead Shepherd echoed the difficulty of measurement of energy efficiency improvement, and invited IEA's comments on it. EGEEC stated that the methodology, scope of energy intensity and linkage between energy efficiency and energy intensity will be covered in the Expert group's discussion and it will report back to EWG53 for member economies' consideration.

The Lead Shepherd suggested APERC, EGEDA, EGEEC worked with assistance from IEA to seek collaboration with each other on data and methodology issues, and requested Member Economies to provide an up-to-date data to APERC and EGEDA, including NDC/INDC commitments. The Lead Shepherd also suggested APERC and EGEDA to jointly work on definition of energy efficiency and scenario analysis.

#### Action point arising from EWG 52:

EGEEC is working to investigate and study in detail for the improvement, including scenarios, on deepening energy intensity reduction. APERC and EGEDA are requested to provide assistance.

### Responding to the issues

- □ Single measure (definition) of intensity should be adopted:
  - ☐ Final energy demand (FED) required to produce USD PPP 1 million of PPP GDP.
  - □ Non-energy use should be excluded as it is not a measure of energy consumption.
- ☐ Single source of data should be used
  - APEC data for APEC targets.

## Energy efficiency/energy intensity reduction goal in your economy before 2035 (1)

- China: 60%-65% GHG intensity reduction by 2035 [40%-45% reduction by 2020 (43% energy intensity reduction)]
- Japan: 35% reduction by 2030
- HK, China: energy intensity reduction by 40 % by 2025, using 2005 as the base; absolute carbon emission reduction 26% to 36% by 2030, using 2005 as base year
- Korea: final energy savings 13% reduction and energy intensity 30% by 2035
- Malaysia: 40% by 2020 and 45% GHG emission intensity reduction of GDP by 2030, compared to 2005
- Mexico: 1.9% per year between 2016-2030 (final energy intensity)

## Energy efficiency/energy intensity reduction goal in your economy before 2035 (2)

- New Zealand: emissions target to reduce emissions to 30% below 2005 levels by 2030
- Philippines: 40% Intensity reduction by 2035 in reference to 2005 base year
- Singapore: 36% reduction of emission intensity by 2030 compared to 2005 level
- Chinese Taipei: 20% renewable energy 2025, 2% energy efficiency improvement annually, 2025;
- Thailand: Energy intensity reduction 2015 by 30% with in 2036 base year 2010
- USA: no economy-wide goal
- Indonesia: reduction of energy intensity 1% per year up to 2025, 17% reduction of energy consumption to 2025 [15%-20% energy saving potential by sectors]
- Russia: 40% energy intensity reduction by 2020 compare to 2007

# Policy/programs in economy to achieve this goal (1)

- Regulation (ETS, etc)
- Standard and label (Top runner standard)
- Incentives
- Human resources
- Professionals
- Energy management system
- Benchmark system
- Voluntary action plan
- Regulatory environment to finance

- Energy efficiency obligation for commercial and residential sectors
- Nearly zero energy building
- Adoption of ICT technology
- Communication of EE information
- Phasing out/replace inefficient product
- Efficient design
- Data collection
- System optimization

# Policy/programs in economy to achieve this goal (2)

- Award/competition
- Education program
- learning network
- Energy efficiency technology/BAT information
- Demand side management
- Energy audit
- Business
- Financing

- Accreditation of ESCOs
- Electrical vehicles
- Productivity
- Evaluation
- Mandatory report
- Subsidies
- Local/community
- Public awareness
- Energy monitoring system

### Revised of ToR

#### Objective

• Ensure the achievement of energy efficiency targets in APEC region by reducing the energy intensity of the APEC economies by at least 45% by 2035, using 2005 as a base year

#### Strategy

 Review, analysis, track progress and report of energy intensity reduction to APEC EWG

## Key areas for APEC collaboration to improve energy efficiency/reduce energy intensity (1)

- Capacity building
  - ESCOSs
  - EE Finance projects
  - Certification of ISO50001
  - Losses in energy using system
  - Energy audit
- Harmonization
  - Qualified product list
  - Test protocol
  - Round Robin test
  - Lab network ILAC

## Key areas for APEC collaboration to improve energy efficiency/reduce energy intensity (2)

- Collaboration
  - CLASP
  - ASEAN
- Knowledge/best practices sharing
  - EE legislation framework
  - Technology development tendency
- Initiative
  - Targeted group collaboration/economy learning network
- Sustainable city energy management
- Remote areas energy development
- Public awareness of EE

### Upcoming events

- Workshop
  - Nearly (Net) Zero Energy Building Roadmap (Sep. 2017, Honolulu)
  - QBL workshop (Sep. 2017)
  - Reducing Losses in Power Distribution through Improved Efficiency of Distribution Transformers (alongside with 50<sup>th</sup> EGEEC meeting)
- EGEEC 50<sup>th</sup> meeting
  - Option 1: Sep 2017, Honolulu
  - Option 2: Oct 5<sup>th</sup>-7<sup>th</sup> 2017, Moscow

Thank you