

# **Progress on APEC PREE & CEEDS**

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> Bing-Chwen Yang Team Leader

**Asia Pacific Energy Research Centre** 





# **Outlines**

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  - 2. Overview of PREE
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### **APEC Peer Review Mechanisms**

#### **APEC Energy Ministers' 2007 Darwin Declaration:**

"We directed the APEC Energy Working Group (EWG) to develop a **Voluntary Energy Peer Review Mechanism**, with an initial focus on progress toward attaining **energy efficiency goals**"

#### **APEC Leaders' 2007 Sydney Declaration:**

"We agreed on the two specific initiatives: 1) to facilitate and review progress through voluntary APEC Energy Peer Review Mechanism, with a report back to APEC Leaders; and 2) to work towards achieving an APEC-wide goal of a reduction in energy intensity of at least 25 percent by 2030 (with 2005 as the base year)"



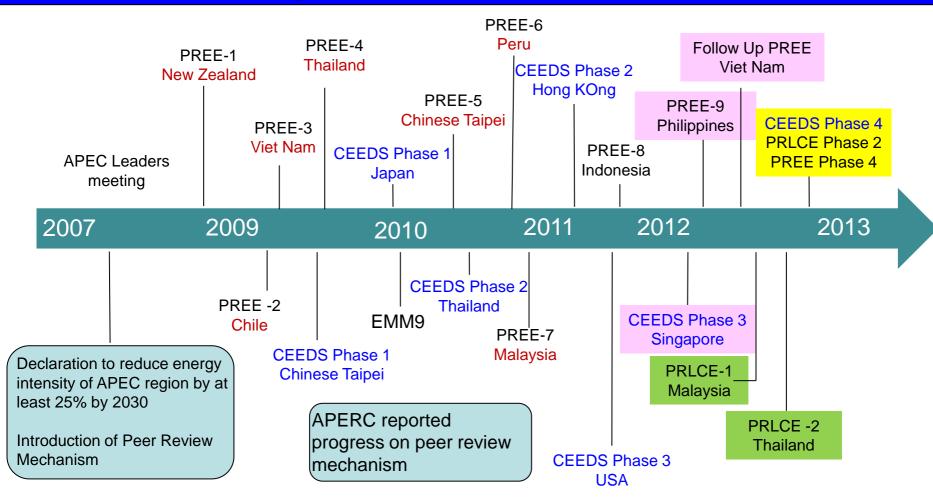
#### 1.1 APEC Peer Review Mechanisms for PREE and CEEDS

#### **APEC Energy Ministers' 2010 Fukui Declaration:**

"We commend the **Peer Review on Energy Efficiency (PREE)** which has been successfully carried out for four APEC economies and urge additional economies to participate".

"We Instruct the EWG and APERC to keep promoting energy efficiency through the Peer Review on Energy Efficiency (PREE) and the Cooperative Energy Efficiency Design for Sustainability (CEEDS), and to consider follow-up efforts including capacity building activities, policy research support and processes to gauge the success of member economies' efforts to implement the recommendations of these programs".

# **Summary of PRLCE, PREE & CEEDS**





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# Main Roles and Responsibilities of Stakeholders

#### **Host Economy**

- Plan review process
- Prepare Documents for Review
- Arrange logistic needs
- Assess the preliminary and the draft final report

#### **Review Team**

- Conduct the review
- Present findings and recommendations in the preliminary report
- Prepare the draft final report

#### **EWG**

- Discuss and Endorse the draft final report
- Report to APEC Senior Officials

#### **APERC**

- Coordinate the review team formation with the host economy
- Coordinate the draft final report preparation with Host Economy
- Prepare the guidelines for PRLC

# **Objectives of PREE**

#### "Value-added" to volunteer economies

- Provide a broad review of EE policies and measures for more effective EE policies.
- Provide recommendations on how implementation of action plans could be improved to achieve EE goals.
- Two activities are organized:
  - Compendium: To compile energy efficiency policies of all the APEC member economies under a common format which reflects the diversity of approaches that could be adopted by member economies.
  - ➤ Visit voluntary economy by interviewing people and relevant organizations by the experts from member economy. The findings and recommendations were provided.
- PREE considers the whole range of energy efficiency policies and measures for one economy at a time, CEEDS considers policies and practices for several developing economies in one sector at a time.



# **Progress of PREE**

- In 2009, the first four PREEs for *New Zealand, Chile, Viet Nam* and *Thailand* were conducted.
- In 2010, the PREEs for *Chinese Taipei*, Peru and Malaysia were undertaken.
- In 2011 PREE for *Indonesia* was conducted. Up to now, there are 8 PREEs.
- The PREE for *Philippine* is scheduled in February of 2012.
- The reports made a number of recommendations that have been welcomed by the participating economies, indentifying barriers —technical (e.g. end-use data, experts, standards, monitoring and evaluation, testing Lab, etc.), financial and political.



### Findings – PREE (NZ, Chile)

The review team expert has provided *policy recommendations* on:

 Energy Efficiency and Conservation Strategy (NZEECS) - 2009, energy labeling and MEPS with new products including vehicle fuel labeling in **New Zealand**;





 Implementation of EE policy and programs through the National EE Program (PPEE) including Action Plan on EE 2010-2020 and EE Standard Action Plan in Chile;





### Findings – PREE (Viet Nam, Thailand)

 Implementation of National EE Program 2006-2015 (under new EE&C Law in May 2010), EE improvement program in electricity supply infrastructure including DSM program and promotion of EE&C in SMEs in Viet Nam; and



Aggressive implementation of public awareness campaigns, creation of incentive programs, setting up of *standards and labeling* for energy-consuming equipment and material (HEPS, MEPS) and policy actions through existing Energy Conservation Promotion Law & Fund (Revolving Fund and ESCO Fund) under *ENCON Program* 



Phase 3 in **Thailand**.





# Findings – PREE (Chinese Taipei)

- Develop an electricity price adjustment mechanism that includes generation cost and rate of return, for the long-term power resource planning, new unit building costs and end-user efficiency improvement costs should be analysed using cost-benefit analysis in **Chinese Taipei**.
- Have a robust framework of policies, programs, laws and action plans for promoting EE&C that clearly align the objectives of improving EE&C with the broader economic and energy goals.







### Findings – PREE (Peru)

• Develop and implement a *National Action Plan for Energy Efficiency* using the current foundation of plans, policies, and programs to serve as a framework; Set up a process for *annual reviews* of the energy efficiency target in the *Energy Efficiency Use Referential Plan 2009-2018* and include *all sectors* as part of the plan to increase the target over time; More regulation in residential and transport sectors for mandatory standards in buildings and vehicles, respectively and; Increase the *Capacity Building* in several sectors in **Peru** 







# Findings – PREE (Malaysia)

• Enhancement of *legal framework* on energy efficiency improvement by enacting a law and institutional setup by developing a designated agency, the *Sustainable Energy Development Authority* (SEDA), is the key element taken by *Malaysia* to expedite and strengthen the efforts to promote energy efficiency.





### **Highlights of PREE**

- The review team found that transport sector policies stand out as having less substantial implementation – although, economies have realized the necessity of fuel economy standards policy imposed on vehicle manufacture or sale.
- This policy is still at a planning stage in Thailand, Viet Nam, Chile, Peru and Malaysia, while New Zealand and Chinese Taipei have standard for both new and used vehicles including a national program on vehicle fuel labeling.
- Overall, the survey found that all 8 economies (NZ, Chile, Viet Nam, Thailand, Chinese Taipei, Peru, Malaysia and Indonesia) have looked into the urgent need to expand their implementation of national EE policies as well as development of *incentives* to promote financial instruments to encourage EE investment.



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# **Objectives of CEEDS**

#### "Value-added" to volunteer economies

- To promote "high-performance" energy efficiency policy measures in developing economies in the APEC region.
- To assist developing economies who wish to design and implement measures for achieving energy efficiency improvements in a specified sector.
- Two workshops is organized:
  - One is an analysis of potential energy savings that might be obtained in the APEC region if each participating developing APEC economy were to adopt the high-performance measures.
  - ➤ The other is focusing on how these measures might be implemented in developing APEC economies.
- PREE considers the whole range of energy efficiency policies and measures for one economy at a time, CEEDS considers policies and practices for several developing economies in one sector at a time.

# **Progress of CEEDS**

- **CEEDS Phase 1** focused on Appliance EE Standards and Labeling with 6 economies: **Chile, China, Malaysia, Philippines, Thailand** and **Viet Nam** hosted by **Chinese Taipei** and **Japan** with analysis on saving potential
- CEEDS Phase 2 hosted by Thailand, focusing on Building Energy Efficiency Codes and Labeling with 5 economies: China, Indonesia, Malaysia, Mexico, and Vietnam and hosted by Hong Kong, China with 8 economies: China, Chile, Indonesia, Malaysia, Mexico, Philippines, Vietnam and Thailand with on-going saving potentoial analysis.
- CEEDS Phase 3 is dealing with "Energy Efficient for Urban Passenger Transportation" in APEC Economies and first workshop was hosted by USA with the presentation from 5 participating eligible economies: China, Mexico, Thailand, Philippine, Viet Nam, and invited speakers from Singapore, Japan and New Zealand. Singapore and USA .The other attendants from Hong Kong, Chinese Taipei, Canada and Indonesia.

# **Progress of CEEDS (cont.)**

- A more specific focus on "Livable Communities and Transit-Oriented Development (TOD)" and "Improving Road Vehicle Efficiency". Five economics make a presentation on the Current Economy Reports.
- The second workshop for CEEDS Phase 3 is scheduled in January 17~19 2012 and hosted by Singapore.

# Findings – CEEDS Phase 1

#### **Future Opportunities for Regional Cooperation and Action**

- ➤ Networking for advice & information-sharing
- > Test standard harmonization
- > Regional cooperation on energy testing facilities

#### **Possible Future Directions**

- > Reporting the results of CEEDS Phase 1 in EWG and EMM to share the achievement with other economy
- ➤ Rank the priorities for future capacity-building related to S&L
- ➤ Regional cooperation on test lab accreditation, round-robin testing, and Mutual Recognition Agreements
- > Regional Alignment on a Multi-tier Framework for Appliance Efficiency

# Findings – CEEDS Phase 2

#### Key findings on building codes and common objectives

- ➤ Big energy-saving potential with current building code in urban area
- ➤ Tightening energy code requirements and incorporating renewable energy and other advanced technologies
- ➤ Moving from voluntary to mandatory energy codes by developing a "Code Compliance Roadmap"
- > Stepping up code enforcement and compliance
- ➤ Broadening the application of energy codes to all buildings, to rural as well as urban areas and to cover modifications of existing buildings as well as new construction

#### Areas for future work

- ➤ Closer linkage between voluntary "market preparation" and the next update of the mandatory building energy code
- developing a policy of "re-certifying" energy code compliance on a regular basis
- ➤ Exploring the possibility of combining building energy labeling with thirdparty (outsourced) services for code inspection and enforcement



#### **Future Plan**

- PREE Phase 4 will include two parts:
  - ➢ provides recommendations for volunteer economies on how implementation of their energy efficiency action plans could be improved with a view to achieving their energy efficiency goals. (Brunei is interested in hosting the 10<sup>th</sup> PREE.)
  - Follow-up PREE, which is designed to assist former PREE host economies in implementing the recommendations of the PREE review teams. (Thailand is interested in hosting the second Follow-up PREE .)
- CEEDS Phase 4 will be focused on a specific EE policy in a selected sector (e.g. Energy Management System for Industry Sector, Freight Transportation System).

# **Conclusion Remarks**

- To facilitate APEC economies to develop EE goals and formulate action plans, through APEC Peer Review Mechanisms (e.g. PREE, Follow-up PREE, CEEDS, PRLCE) for the achievement of the APEC-wide aspirational goal of a reduction in energy intensity, as instructed by APEC Ministers and LEADERs.
- To serve the need of volunteer economies in identifying effective EE policies and best practices as well as barriers, and carefully providing policy recommendations on alternatives to overcome existing impediments in their current plan.

"APEC-wide EE Implementation" is urgently needed...



# **Participation Invitation**

Your Economy is invited to host Future PREE or

**CEEDS** to enable APEC economies to share experiences and knowledge, and learn "high-performance" strategies from their peers by setting goals, formulating action plans, and improving the effectiveness of current policies in promoting energy efficiency development, as well as providing useful recommendations for voluntary energy efficiency system design and implementations towards a more secure and sustainable energy future for APEC."

The participation by each economy is the important key to success of PREE and CEEDS.



# Thank you for your kind attention

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