

# Overview of APERC Activities

**35<sup>th</sup> APEC New and Renewable Energy Technologies Expert Group Meeting (EGNRET)**

13-14 October 2010, Tokyo, Japan

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**Asia-Pacific Energy Research Centre (APERC)**



Asia-Pacific  
Economic Cooperation



# Outlines

## **1. Overview of Current APERC Activities.**

- *4<sup>th</sup> Edition of APEC Energy Demand and Supply Outlook*
- Progress on PREE
- Progress on CEEDS

## **2. Overview of Future APERC Activities.**

- *5<sup>th</sup> Edition of APEC Energy Demand and Supply Outlook*
- Continuation of PREE and Follow-up PREE
- Continuation of CEEDS
- Mechanisms for introducing Low-Carbon Energy Supply/Low-emission Power Sources, *building upon the success of PREE*

## **3. Peer Review on policies to promote Low-Carbon Energy Supply.**

- Objectives
- Methodology
- Expected Output



## 1-1 Overview of Current APERC Activities.

### **4<sup>th</sup> Edition of APEC Energy Demand and Supply Outlook**

- Released November 2009
- Concluded that
  - 25% minimum 2005-2030 APEC intensity reduction goal will be met under business-as-usual; however
  - *Business-as-usual* is unsustainable
    - Growing oil imports
    - Growing greenhouse gas emissions
- Follow-up report, *Pathways to Energy Sustainability*, concluded that
  - Greenhouse gas emissions could be held to a level consistent with a 2 degree C temperature rise assuming
    - 50% 2005-2030 APEC intensity reduction
    - 30% non-fossil primary energy by 2030
    - 59% non-fossil electricity generation by 2030
  - Even in this scenario, oil imports still problematic

# 1-2 Overview of Current APERC Activities

## Progress on PREE

- ❑ In 2009, the first four PREEs for **New Zealand, Chile, Viet Nam** and **Thailand** were undertaken with reports published on the APERC website (<http://www.iece.or.jp/aperc>)
- ❑ In early 2010, the PREEs for **Chinese, Taipei** was conducted, then followed by **Peru** and **Malaysia** by early December 2010.
- ❑ The reports made a number of *recommendations* that have been welcomed by the participating economies, indentifying *barriers* – *financial, technical* (e.g. end-use data, experts, standards, monitoring and evaluation, product testing) and *political*.



New Zealand



Chile



Viet Nam

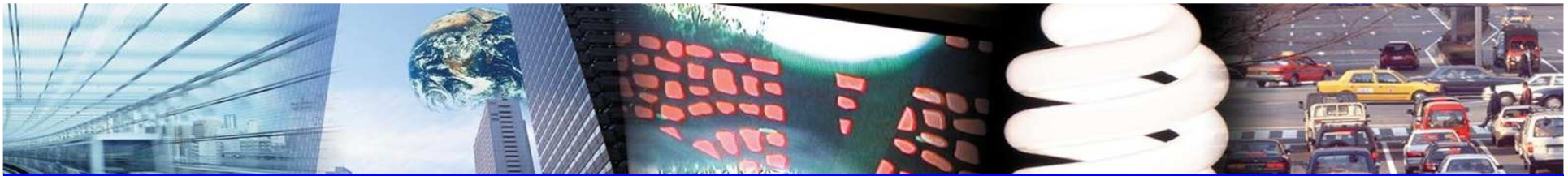


Thailand



Chinese Taipei





## 1-3 Overview of Current APERC Activities

### Progress on CEEDS

□ **The CEEDS Phase 1** (2009/2010) on “*Appliance EE Standards and Labeling (AEES&L)*” for 6 participating economies: **Chile, China, Malaysia, The Philippines, Thailand** and **Viet Nam**.

- The 1<sup>st</sup> Workshop hosted by **Chinese, Taipei** in October 2009.
- The 2<sup>nd</sup> Workshop hosted by **Japan** in March 2010.

□ **The CEEDS Phase 2** (2010/2011) on “*Building Energy Codes & Labeling*)”

- The 1<sup>st</sup> Workshop hosted by **Thailand** in September 2010
- The 2<sup>nd</sup> Workshop hosted by **Hong Kong, China** in January 2011



## 2-1 Overview of Future APERC Activities.

### ***5<sup>th</sup> Edition of APEC Energy Demand and Supply Outlook***

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

***“We instruct the EWG to assess the potential for reducing the energy intensity of economic output in APEC economies between 2005 and 2030, beyond the 25 percent aspirational goal already agreed by the APEC Leaders, with assistance from APERC, EGEDA and EGEEC.”***

***APERC will assess an alternative scenario focusing on sustainable energy future***



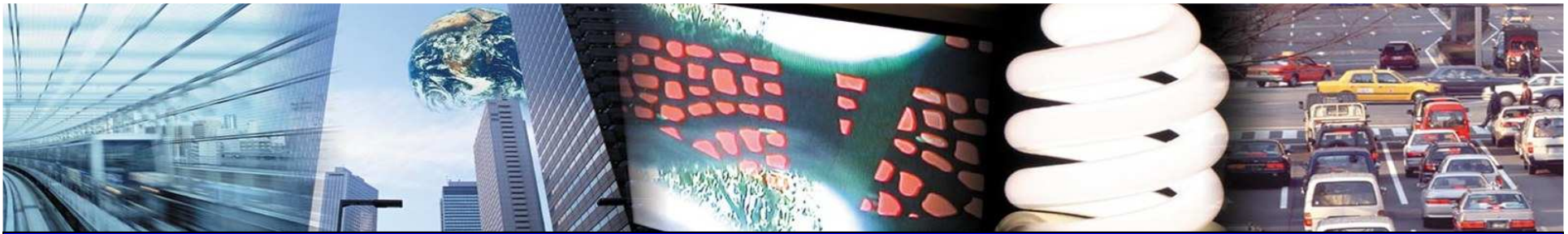
## 2-2 Overview of Future APERC Activities

**Continuation of PREE, *Follow-up* PREE and CEEDS**

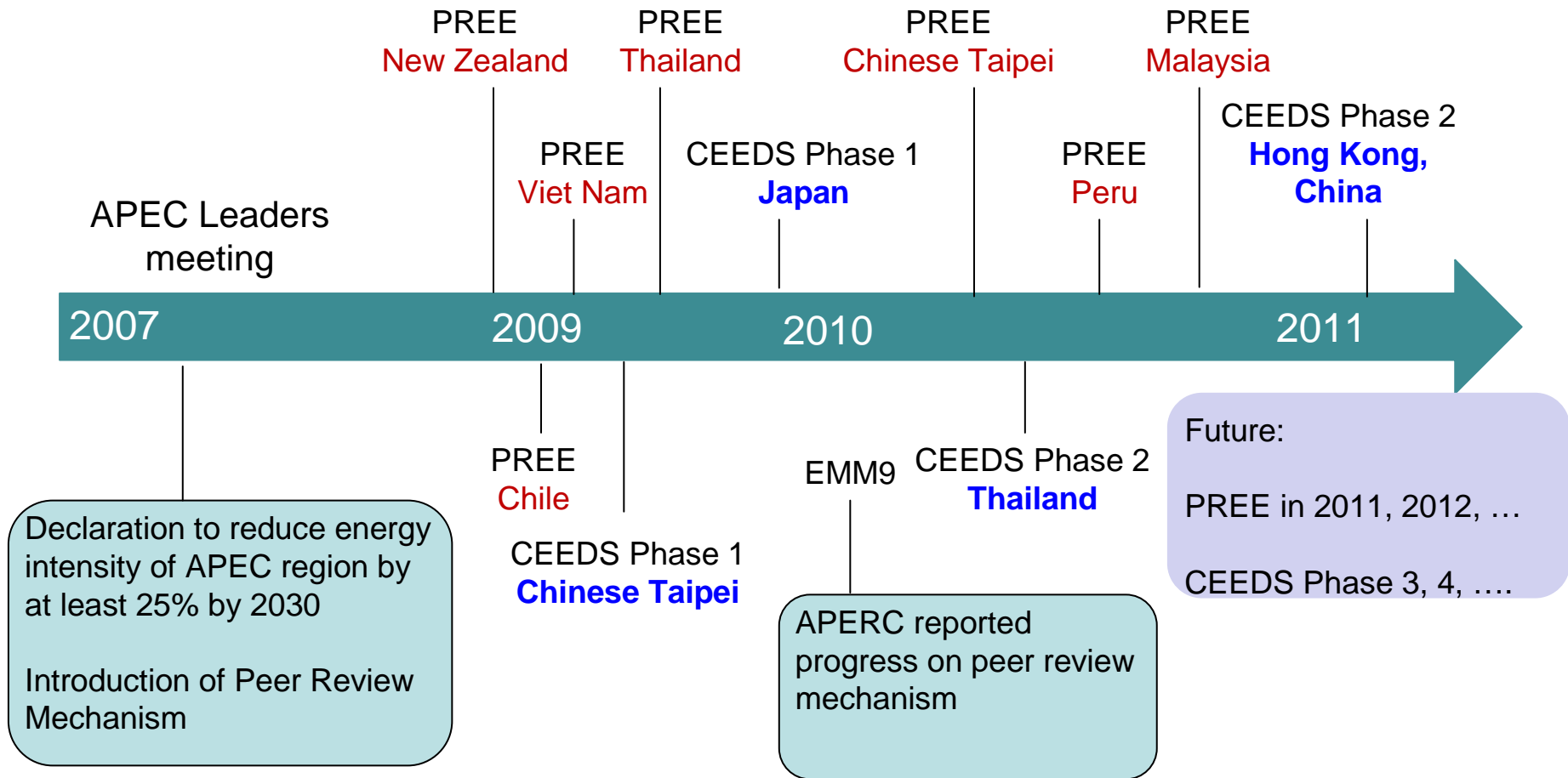
### **APEC Energy Ministers' Fukui Declaration:**

**“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”.***



## 2-3 Summary: PREE and CEEDS







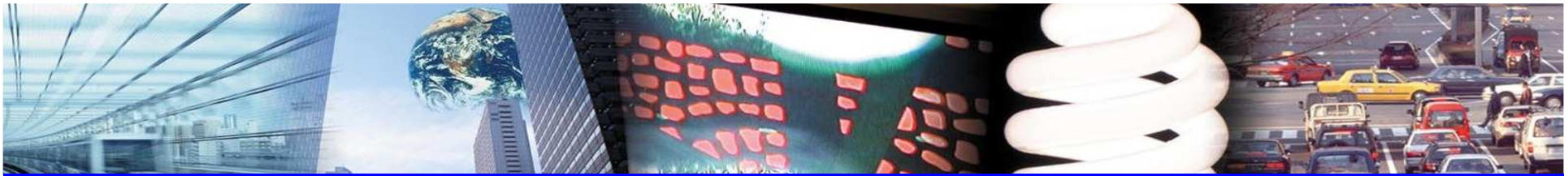
## 2-4 Overview of Future APERC Activities

**Mechanisms for introducing Low-Carbon Energy Supply /  
Low-Emission Power Sources, *building on the PREE success***

**APEC Energy Ministers' Fukui Declaration:**

### **CLEAN ENERGY SUPPLY**

*“We instruct the EWG to explore mechanisms to encourage economies to set **individual goals and action plans for introducing low-emission power sources, building upon the success of the PREE, with assistance from APERC and relevant technology expert groups**”.*



## 3-1 Peer Review on policies to promote Low-Carbon Energy Supply.

### Rationale

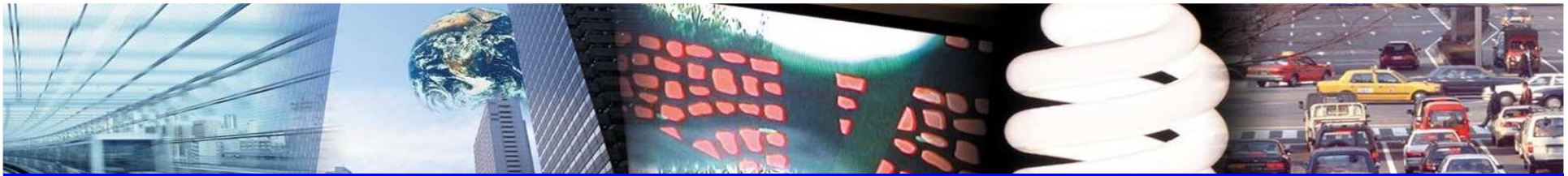
- ❑ The *Sydney 2007 to Singapore 2009 Leaders' Declarations* call for responsive actions to promote the deployment of **low-carbon energies** including renewables, CCS, nuclear and cleaner use of fossil energy.
- ❑ APEC Energy Ministers at their 9<sup>th</sup> Meeting in Fukui, Japan in 2010 instructed EWG to explore *mechanisms* to encourage APEC economies to set individual goals and action plans for introducing low-emission power sources. In the instruction note, the Ministers also wanted EWG with assistance from APERC and relevant technology expert groups to use the success of Peer Review on Energy Efficiency (PREE) as the guidance.



## 3-2 Peer Review on policies to promote Low-Carbon Energy Supply.

### Objectives

- ❑ Enable APEC economies to improve the effectiveness of their **policies, goals and action plans** in promoting low-carbon energy (e.g. Renewables) through a Peer Review Mechanism.
- ❑ Encourage APEC economies in setting RE **goals** and formulating **action plans** to achieve the goals.
- ❑ **Share experience** on RE performance, policy measures and actions in promoting RE and broadening the network among member economies.
- ❑ Explore how **government policies** can accelerate the development and implementation of potential low-carbon energy supplies e.g. *Renewables Investments*.



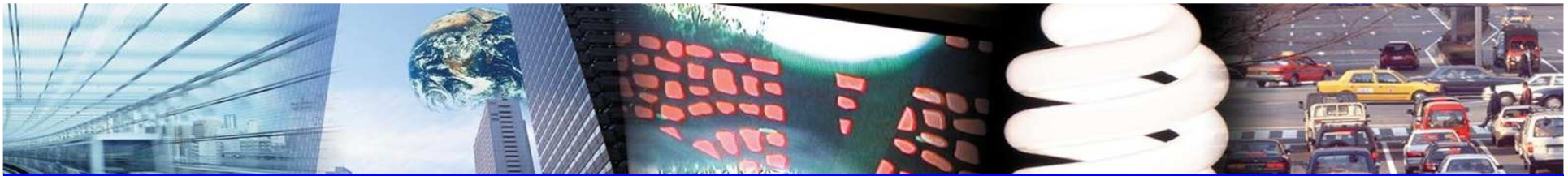
## 3-3 Peer Review on policies to promote Low-Carbon Energy Supply.

### Objectives (cont.)

- ❑ Identify **effective policies and best practices** for RE promotion to encourage technological innovations and promote large-scale commercialization.
- ❑ Provide **recommendations** for voluntary implementation on how implementation of action plans could be improved with a view to achieving the goals as well as **alternatives** to overcome the existing impediments in the current plan.

To explore ways that **cooperative efforts** through APEC could assist APEC member economies in formulating **more effective and efficient policies** in RE promotion.





## 3-4 Peer Review on policies to promote Low-Carbon Energy Supply.

### Policy Focus

- ❑ Regulatory Policy
    - Feed-in-tariff (FIT) / Adder
    - RPS
  - ❑ Economic Policy
    - Financial / Incentive
    - Price
- 
- To ensure **goals and action plans** are fully achieved
  - To carefully consider different circumstances, based on host economy's *priorities*



## 3-5 Peer Review on policies to promote Low-Carbon Energy Supply.

### Examples of Policy Areas for Peer Review

- 1) Policies to encourage entrepreneurial innovation and investment in promoting RE
- 2) Appropriate policies on FIT (feed-in tariffs) and RPS to promote RE.
- 3) Policies to overcome *non-economic / administrative* barriers at various stages of RE development and deployment
- 4) RE *financing & fund* (e.g. fiscal incentives such as tax exemptions or investment grants).
- 5) Carbon *pricing policies* (e.g. emission trading / carbon tax)
- 6) More effective policies to make RE competitive against conventional energy sources.
- 7) More effective RD&D policy to promote RE.
- 8) More comprehensive policy design to encourage low-carbon communities.



## 3-6 Peer Review on policies to promote Low-Carbon Energy Supply

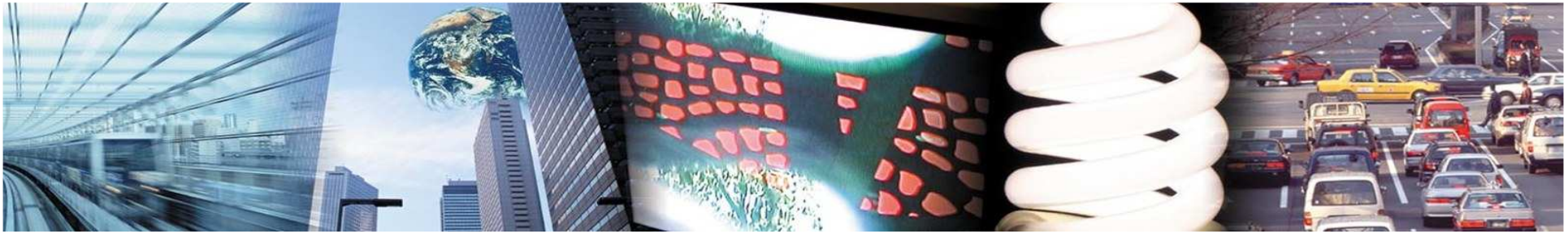
### Activities

- 1) Invite APEC economy to voluntarily host the Peer Review
- 2) Define scope of review
- 3) Review team establishment – set up APEC expert team
- 4) Prepare background information on RE policies of the host economy
- 5) Review team visit
- 6) Draft review report with recommendations

### Expected Outcomes

- 1) Discussion on review report and endorsement of the report with recommendations at EWG meeting
- 2) Publication
  - APERC website (<http://www.ieej.or.jp/aperc>) with link to APEC website

The assistance from APEC expert groups e.g. EGNRET and relevant APEC task-forces is the great key of success.



# Thank You

**PREE Peer Review Reports, Compendium and  
CEEDS Phase 1 Report are available in APERC website**

**<http://www.ieej.or.jp/aperc/>**