



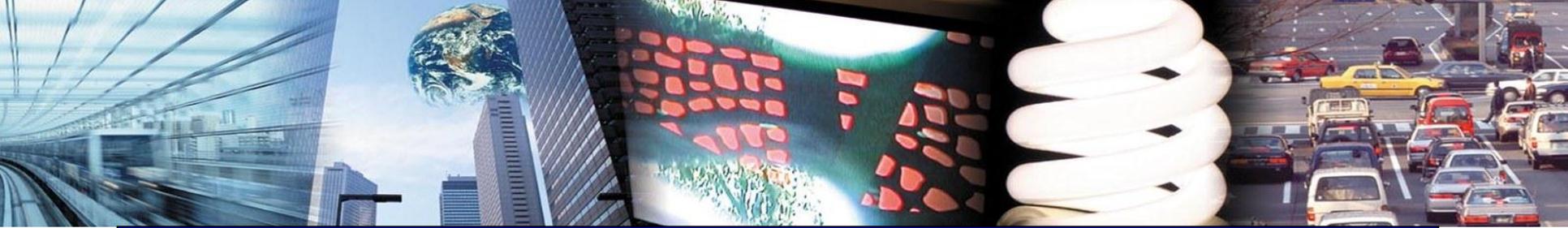
Session 4: APERC Research Activities

B. APERC Cooperative Activities

Accomplishments of Past Year and Plan for Next Year -

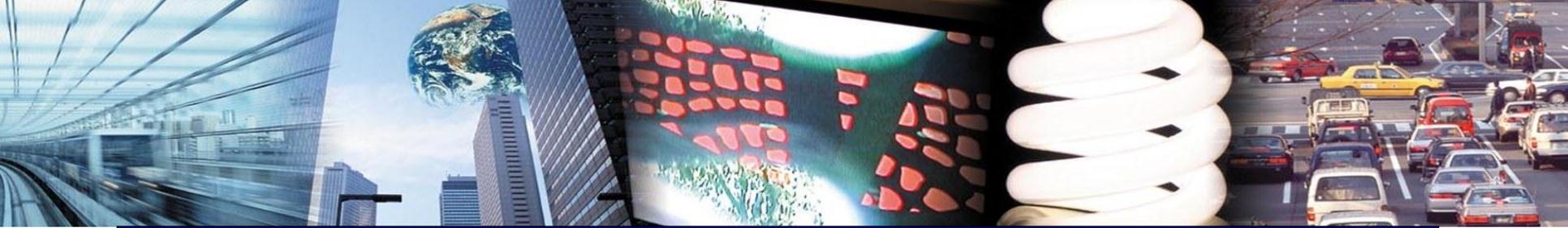
Goichi Komori (APERC)

**The 25th Meeting of the Expert Group on Energy Data Analysis (EGEDA)
Bangkok, Thailand, 11-13 November, 2013**



Outline

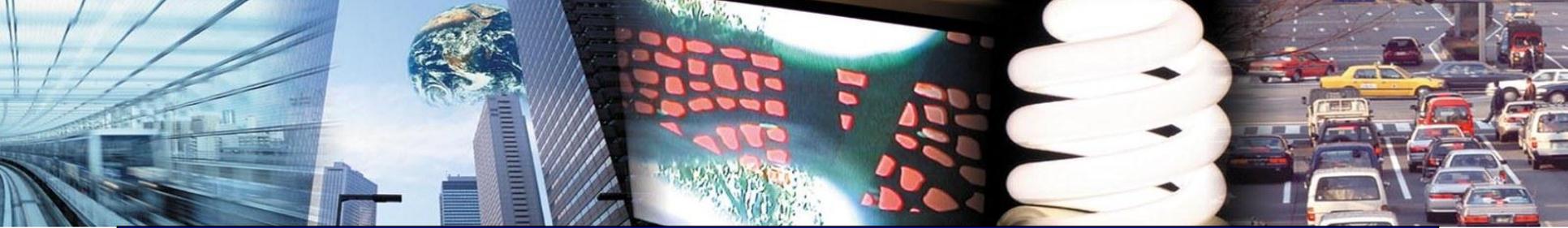
- 1. Introduction**
- 2. Peer Review on Energy Efficiency (PREE)**
- 3. Peer Review on Low-Carbon Energy Policies (PRLCE)**
- 4. Cooperative Energy Efficiency Design for Sustainability (CEEDS)**
- 5. Low Carbon Model Town (LCMT)**
- 6. Oil and Gas Security Exercises (OGSE)**



1. Introduction

What are APERC's Cooperative Activities?

- APERC's Cooperative Activities can be defined as “Activities which directly cooperate with APEC member economies in solving their energy problems or improving their energy situation”.
- The major features of APERC's Cooperative Activities are expert **peer reviews** and **workshops**.
 - **Peer reviews:** Experts, mainly from the APEC region, visit a host economy to review its energy situation and policies, and make recommendations for the host economy.
 - **Workshops:** Experts from both within and outside of the APEC region give presentations to delegates from APEC member economies and work with them to share information necessary for policy planning.
- APERC's Cooperative Activities started in 2009; The first activity was the Peer Review on Energy Efficiency (PREE) for New Zealand.



2-1. Peer Review of Energy Efficiency (PREE)

Two activities are organized in PREE: “Peer Review” and “Compendium”

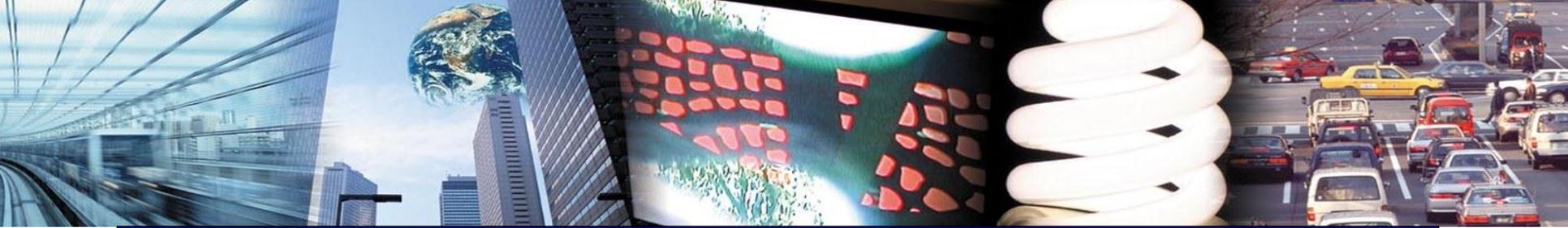
Objectives of PREE

(Peer Review)

- To assess energy efficiency plans of a volunteer economy, taking into account the diversity of the strategies and circumstances of individual economies.
- To provide expert-level evaluation of energy efficiency policies and measures and to provide recommendations for energy efficiency improvements.
- To monitor progress toward attaining energy efficiency goals and the implementation of action plans.

(Compendium)

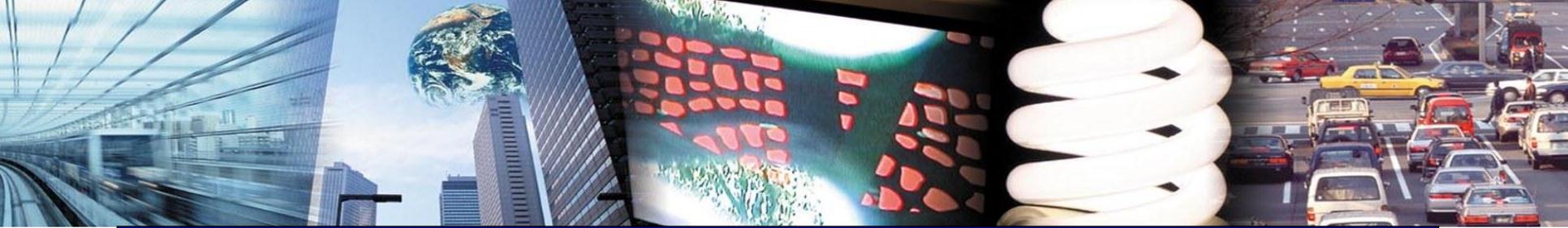
- APERC annually publishes “The Compendium of Energy Efficiency Policies of APEC Economies” in order to promote information sharing in the field of energy efficiency and energy conservation across the APEC economies under a common format.



2-2. Follow-Up PREE

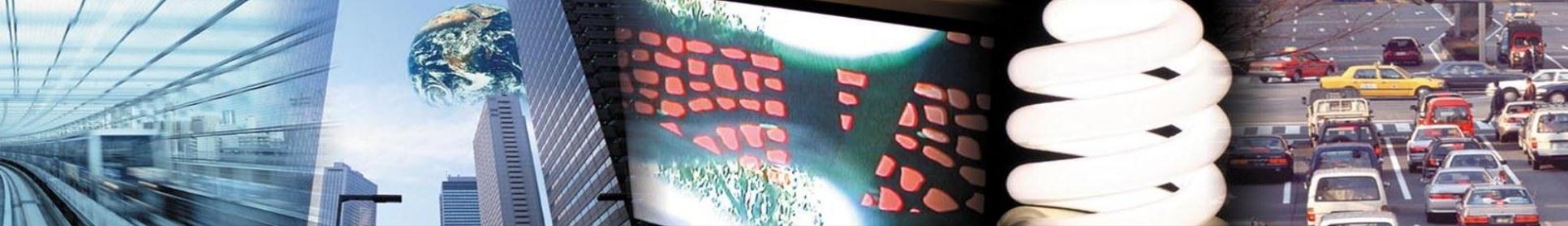
Objectives of **Follow-up PREE**

- The Follow-up PREE is designed to assist former PREE host economies in implementing the earlier recommendations of the PREE review teams.
- The objective is to fill the gap between the implementation of energy efficiency action plans and the monitoring and evaluation of those plans.



2-3. PREE Phase 4 Progress Report

- (1) We conducted PREE in **Brunei Darussalam** on 11 – 15 June 2013. The Draft Final Report will be submitted to EWG46 in Da Nang, Viet Nam for discussion and endorsement.
- (2) We completed “Compendium of Energy Efficiency Policies of APEC Economies 2012” on October 2013.
- (3) We plan to carry out a Follow-up PREE in **Thailand** focusing on the **transportation sector** in late January 2014.



2-4. PREE Next Steps

- Will all 21 APEC Economies be reviewed in PREE?

Australia*

Canada*

China

Hong Kong, China

Japan*

Korea*

Mexico

Papua New Guinea

Russia

Singapore

United States*

Brunei (PREE-10)

Chile (PREE-2)

Indonesia (PREE-8)

Malaysia (PREE-7)

New Zealand (PREE-1)*

Peru (PREE-6)

The Philippines (PREE-9)

Chinese Taipei (PREE-5)

Thailand (PREE-4, Fu-PREE-2)

Viet Nam (PREE-3, Fu-PREE-1)

*IEA member economy which is eligible for IEA peer reviews

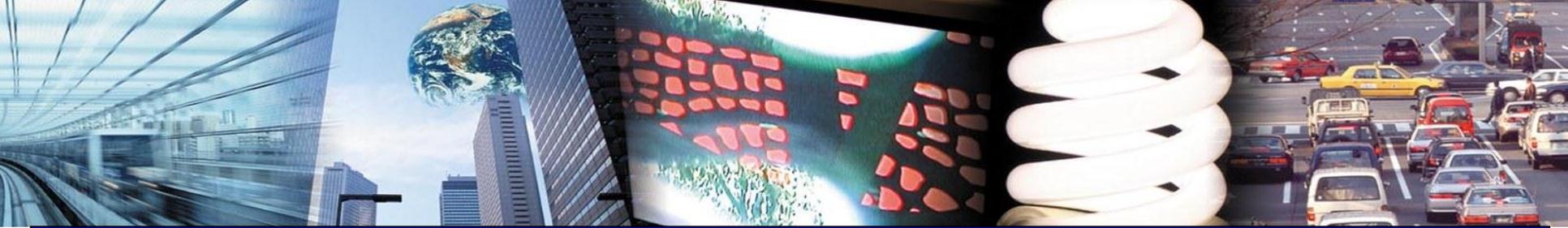


2-5 PREE Future Plan

Given the resource constraints of APERC, it may be necessary to reduce the number of PREE peer reviews per year.

One PREE **and** one Follow-up PREE (in total **two**) in 2012
and 2013

↓
One PREE **or** one Follow-up PREE (in total **one**) after 2014



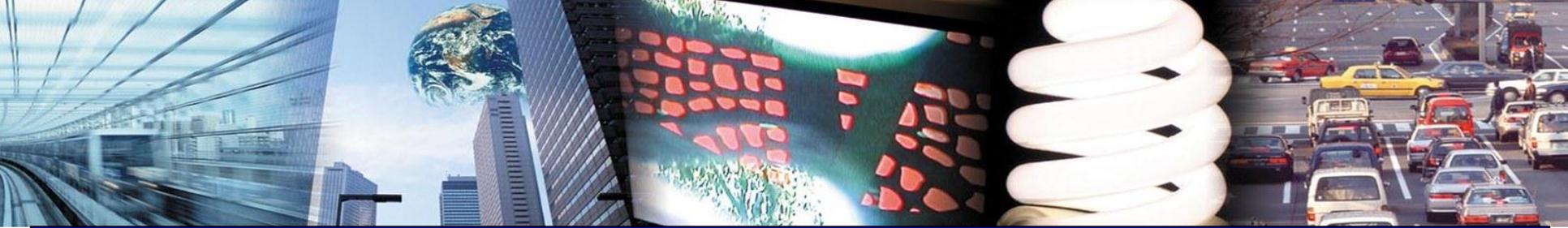
3-1. Peer Review of Low Carbon Energy (PRLCE)

Initiated by the APEC Energy Ministers' 2010 Fukui Declaration

To assist volunteer APEC economies to promote **low-emission energy sources** by providing recommendations from APEC peer review experts.

Share experiences and knowledge on best practices for efficient and effective policies to promote **low emission energy supplies** (such as renewable energies) in developing APEC economies, and to determine how to adapt policies and measures which have been successful elsewhere to the unique conditions of each economy.

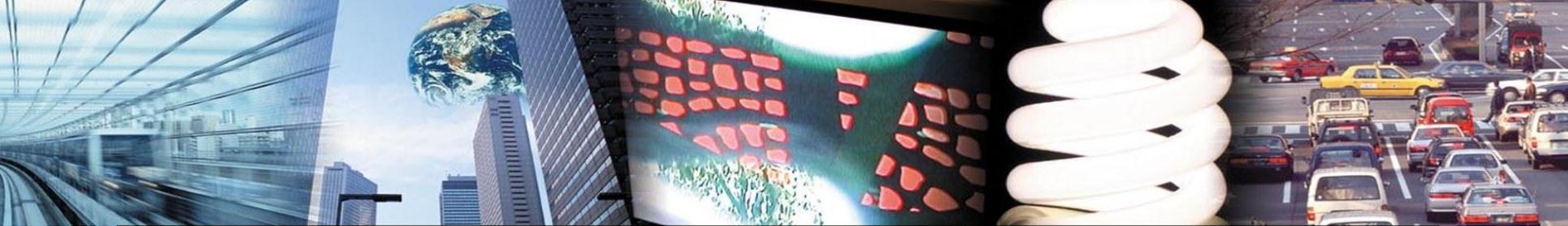
Encourage developing APEC economies to **set individual goals** on power supply from low emission sources (such as renewable energies), and to formulate action plans to achieve the goals;



3-2. PRLCE Phase 2

- (1) We conducted PRLCE in **Indonesia** on 13 – 17 May 2013. The Draft Final Report will be submitted to EWG 46 in Da Nang, Viet Nam for discussion and endorsement.

- (2) We will carry out PRLCE in **Malaysia** on 9 – 13 December 2013.



3-3. PRLCE Future Plan

Given the resource constraints of APERC, and recognizing the smaller number of potential host economies (compared to PREE), it is necessary to reduce the number of PRLCE peer reviews per year.

Two PRLCEs in 2012 and 2013



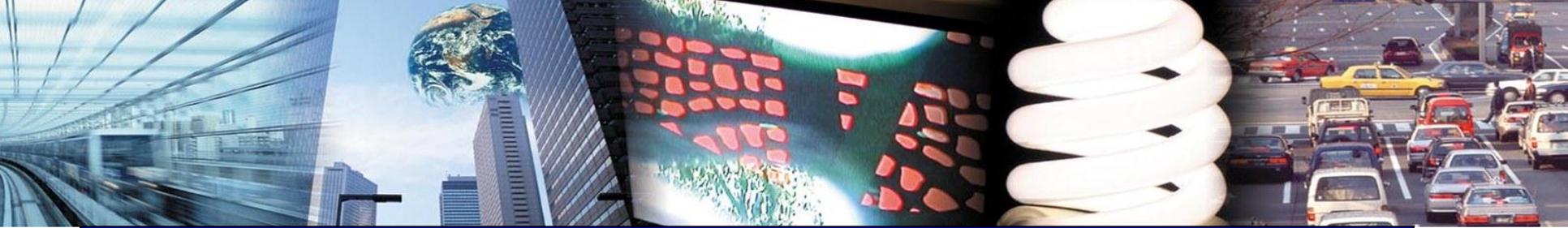
One PRLCE **after 2014**



4-1. Cooperative Energy Efficiency Design for Sustainability (CEEDS)

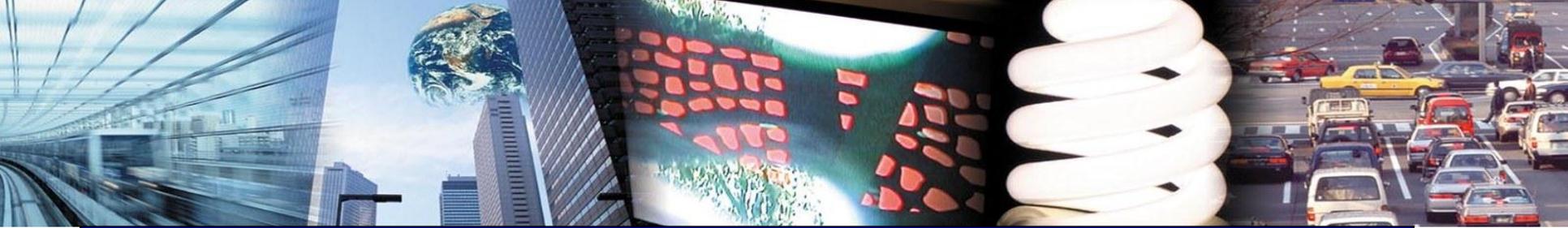
Initiated by the APEC Energy Ministers' 2010 Fukui Declaration

- 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.
- CEEDS considers policies and practices for several developing economies on one topic at a time.
- Two workshops are organized for each topic:
 - One consists mainly of presentations by experts on opportunities for energy savings in participating developing APEC economies.
 - The other focuses on how these measures might be implemented in developing APEC economies, with economy delegates being the main presenters.



4-2. CEEDS Phase 4

- **CEEDS Phase 4 : “Promotion of Energy Service Companies (ESCOs)”**
- **The first workshop** of CEEDS Phase 4 was hosted by **Thailand** on **21-23 January 2013** in Bangkok with the participation of 4 economies: **Chile, China, Malaysia, Thailand**, and invited speakers from Canada, China, Chinese Taipei, and USA. Representatives from Japan, Chinese Taipei, and Thailand also attended.
- **The second workshop** for CEEDS Phase 4 was hosted by **Chinese Taipei** on **March 26-28 in Taipei**. There were 2 participating economies: **Malaysia and Thailand**. The invited speakers were mostly the same as in the first workshop.



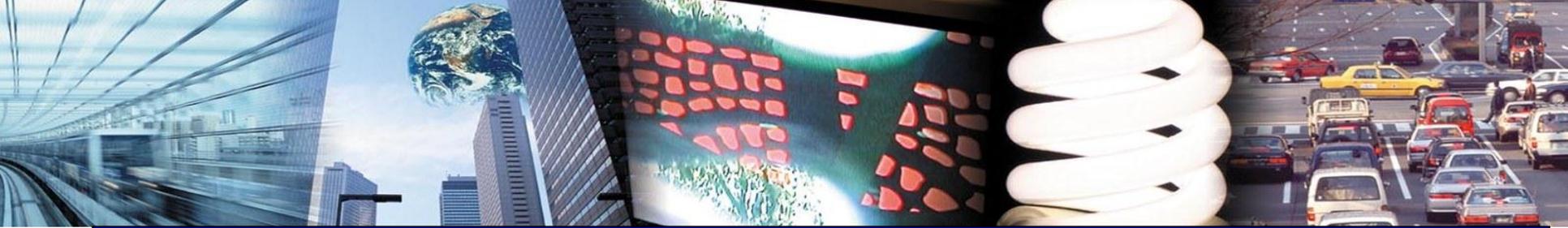
4-3. CEEDS Future Plan

- CEEDS is a very complicated project to coordinate as it requires arranging two workshops in two different economies with the same participating delegates and the same expert speakers for both workshops.
- Given the resource constraints of APERC, it is necessary to simplify the scope of the project.
- The new approach will involve a single workshop open to the all APEC economies, with fewer invited experts.



4-4. CEEDS Proposed Changes

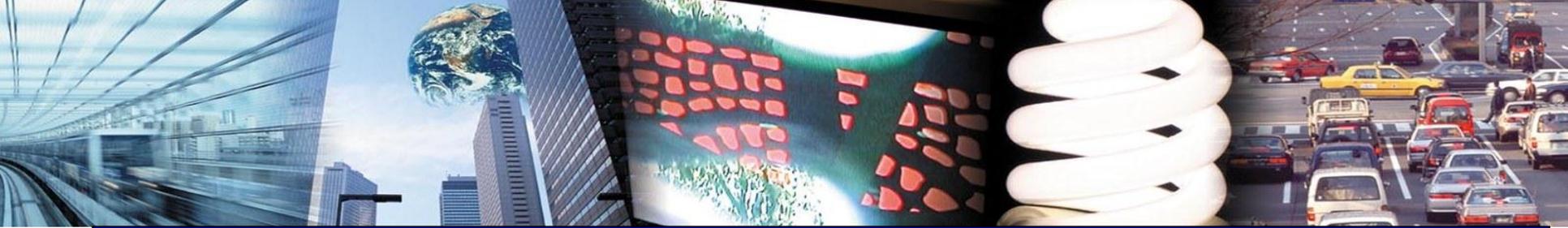
- The topics of the workshop would be selected from the key issues highlighted in previous PREEs. The workshop would be integrated into **PREE project** (i.e. no longer an independent project) and be called a “**PREE Policy Workshop**”.
- The PREE Policy Workshop may be held in conjunction with one of the two bi-annual meetings of **EGEE&C** (Expert Group of Energy Efficiency and Conservation).
- The PREE Policy Workshop would be a **half day** event led and chaired by an APERC researcher.



5-1. Low-Carbon Model Town (LCMT)

Initiated by the APEC Energy Ministers' 2010 Fukui Declaration

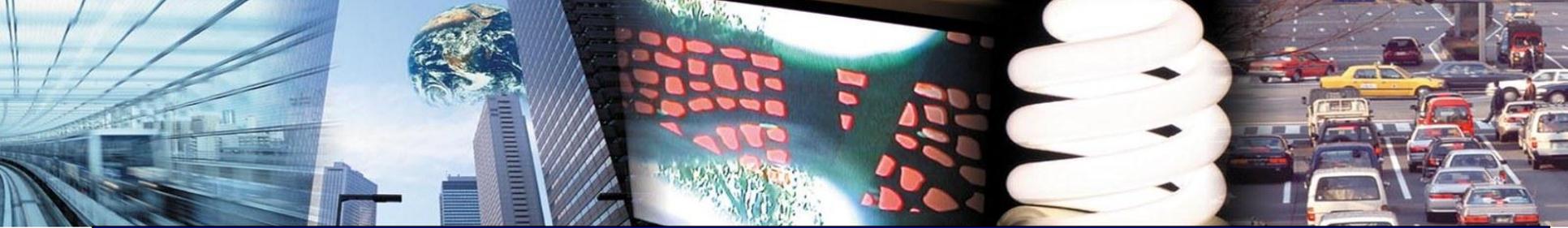
- To promote low-carbon town development in order to manage rapidly growing energy consumption in urban areas of the APEC region.
- The key activities are:
 - **Feasibility study** to be conducted by qualified **urban design consultants** to encourage creation of low-carbon communities in urban development plans.
 - **“Concept of the Low-Carbon Town in the APEC”**; to be conducted by **Study Group A assisted by APERC**
 - **Policy review** to assess actual low carbon town development projects from both technical and policy perspectives; to be conducted by **Study Group B assisted by APERC**



5-2. LCMT Progress Report

LCMT Phase 3 : **Da Nang, Viet Nam** as the case

- (1) **Feasibility study** has been carried out by a selected urban design consulting firm. A Draft Final Report will be completed soon.
- (2) Refinement of **“The Concept of the Low-Carbon Town in the APEC Region”** has been carried out by Study Group A, focusing on the study of Low Carbon Town Indicators. A Draft Final Report will be completed by the end of 2013.
- (3) We plan to carry out a **Policy Review** on 4 – 6 December 2013 in Da Nang, Viet Nam. A Draft Final Report will be submitted to EWG47 for discussion and endorsement.



5-3. LCMT Future Plan

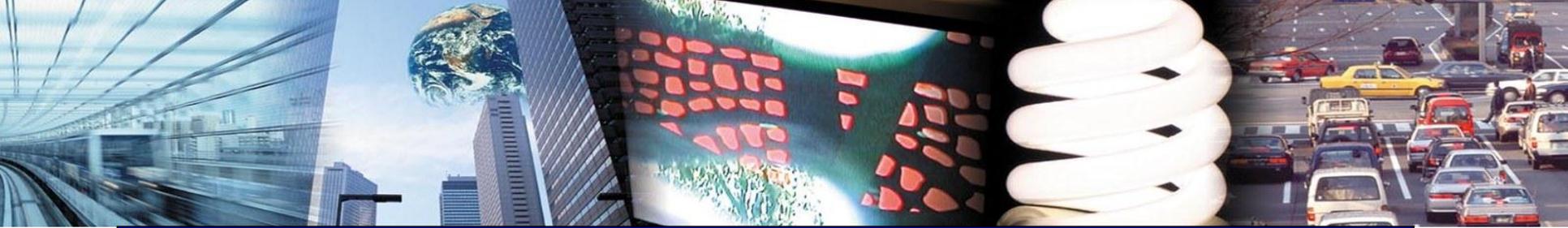
- We are preparing for LCMT Phase 4
- The case study town for LCMT Phase 4 will be decided at EWG46 in Da Nang, Viet Nam.
The candidate is **San Borja, Lima, Peru**.



6-1. Oil and Gas Security Exercise (OGSE)

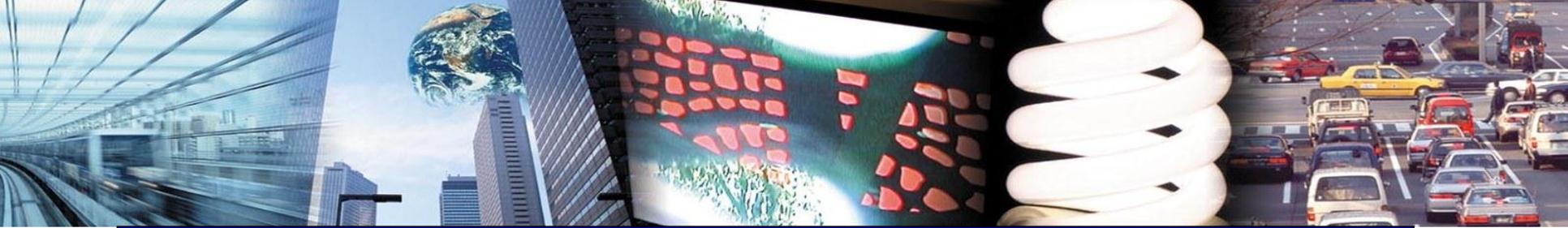
Initiated by the APEC Energy Ministers' 2012 St. Petersburg Declaration

- “We encourage the *EWG* and *APEREC* to work in collaboration with the International Energy Agency (IEA) and the Association of Southeast Asian Nations (ASEAN) on *activities to improve the response to oil and gas emergency situations in the APEC region*, including emergency response workshops and exercises.”
- This instruction by energy ministers was confirmed by the 2012 APEC Leaders' Declaration Annex B – *Strengthening APEC Energy Security* (Vladivostok, Russia, 8-9 September 2012)



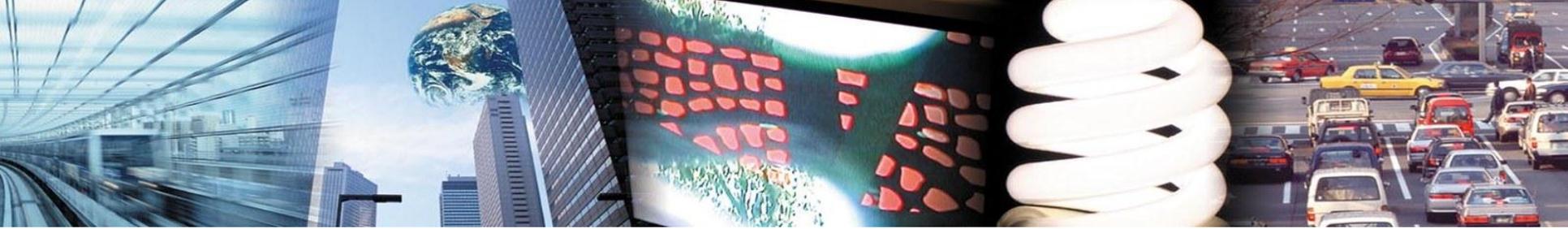
6-2. OGSE Objectives

- Energy security has been a serious concern in sustaining economic and social development in the APEC region. Without doubt, it will continue to be an important concern for APEC throughout the 21st century.
- Since the oil crises in the 1970s, energy security has mainly involved securing the supply of oil. Though oil supply security will continue to be an important part of energy security, the increasing demand for imported natural gas in the APEC region poses us a new kind of energy security issue: the supply security of natural gas.
- It should also be pointed out that oil supply security and gas supply security are in fact inseparable. On the supply side, oil and natural gas are often produced in the same economies or regions, sometimes concurrently. On the demand side, a shortage of gas supply will increase the demand for oil and may invite a shortage of oil supply. And perhaps vice versa.



6-3. OGSE Progress Report

- **The 1st Security Forum**, a kick-off meeting, was held on 18~19 April 2013 in Tokyo.
- **Scenarios** for the security exercises were developed by APERC with the cooperation of outside experts.
- The 1st case study was **the joint exercise by Southeast Asian APEC economies** on 17~19 September 2013 in Bangkok, Thailand.
- The 2nd case study was an exercise in **Indonesia** on 22~24 October 2013 in Jakarta.
- **The 2nd Security Forum**, a wrap-up meeting, will be held in Spring 2014 in Tokyo.
- **A Final Report will be submitted to the APEC Energy Ministers' Meeting to be held in September 2014.**



Thank You

**APERC looks forward to cooperating with
you in the future**

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