



Session 1-2

APEC Cooperative Energy Efficiency Design for Sustainability (APEC CEEDS)

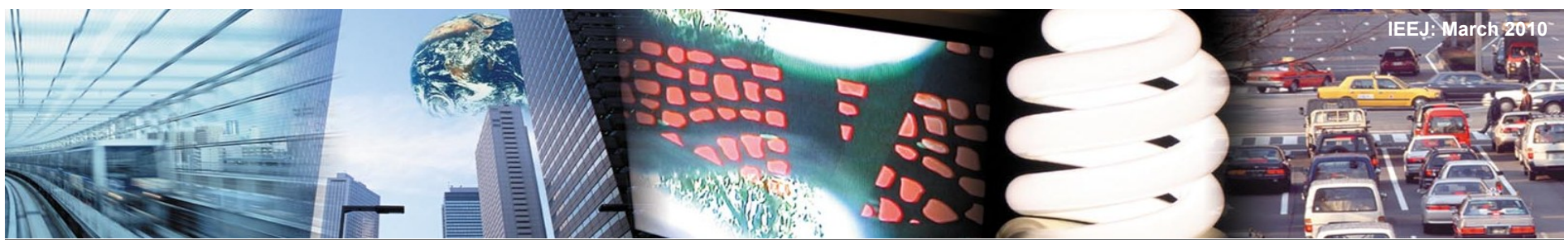
Symposium on Energy Efficiency Policy Development Assistance

Tokyo, Japan, 5 March, 2010

Satoshi Nakanishi (General Manager, APERC)

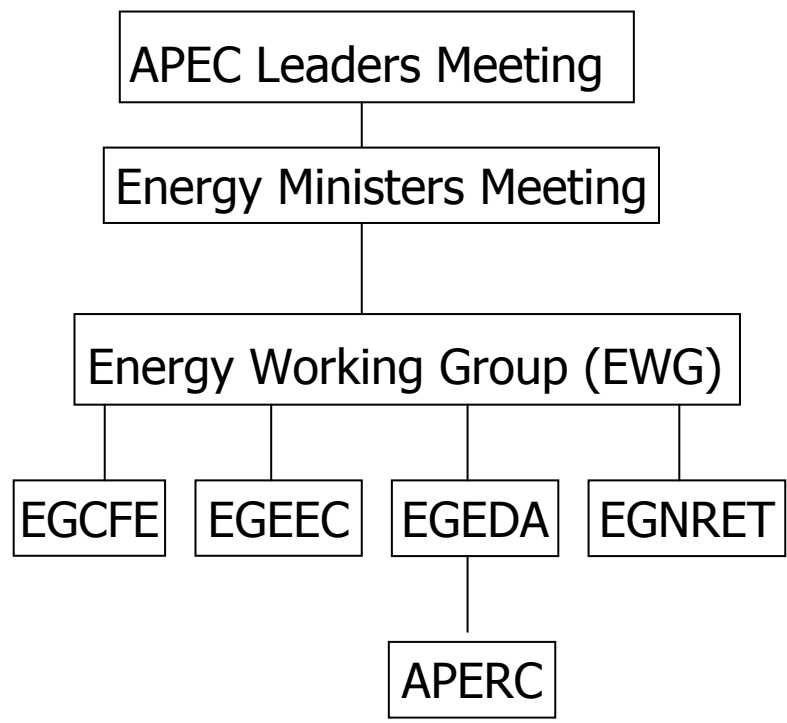


Asia-Pacific
Economic Cooperation

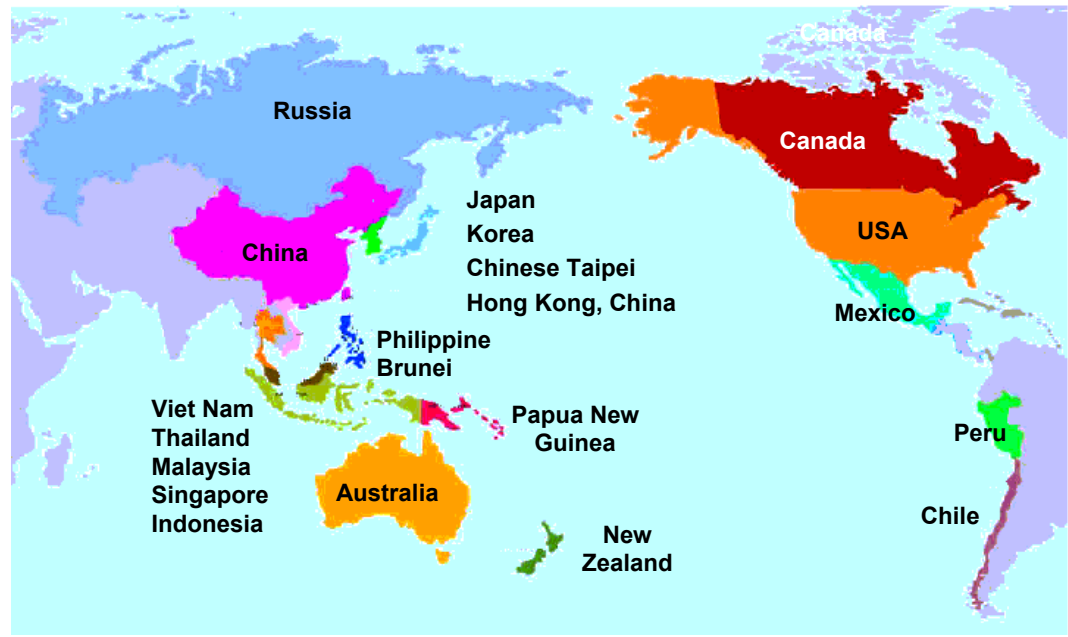


Introduction - APEC / APERC

APEC started as an informal Ministerial-level dialogue group with 12 members in 1989.



EGCFE: Expert Group on Clean Fossil Energy
 EGEEC: Expert Group on EE & Conservation
 EGEDA: Expert Group on Energy Data & Analysis
 EGNRET: Expert Group on NRE Technology



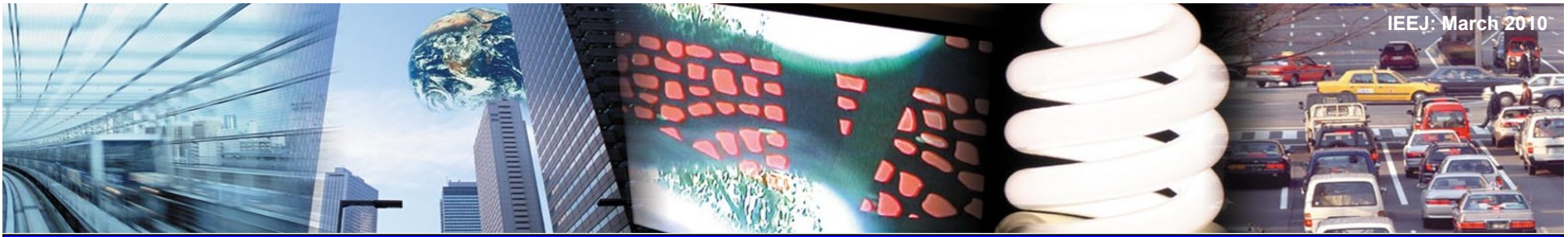
APERC

History: Established as a energy research centre for the APEC region in 1996.
Objective: To conduct study on Energy Demand & Supply Outlook, Energy Market Development, Energy Policies in the APEC.
Researchers: Seconded from Energy Ministries, Government Research Institute, State enterprises, Universities in member economies.
 Current researchers:13, Former researchers:70



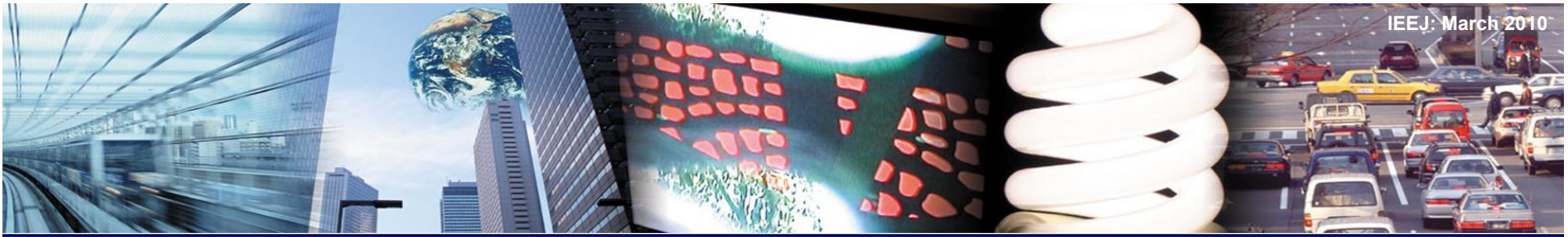
Introduction - APEC's Approach to Energy Efficiency Improvement (Cont'd)

- ❑ **APEC Energy Peer Review Mechanism** was agreed with initial focus on energy efficiency through at Energy Ministers Meeting in Darwin in 2007.
- ❑ APEC Leaders agreed to work towards achieving an **APEC-wide regional aspirational goal of a reduction in energy intensity of at least 25 per cent by 2030** (2005 the base year) in Sydney in 2007.
- ❑ All APEC economies were encouraged to set **individual goals and action plans for improving energy efficiency**, reflecting the individual circumstances of different economies.
- ❑ **APEC Peer Review on Energy Efficiency (PREE)** project started in Jan 2009, i.e., Peer Review of volunteer member economies on the progress towards their targets in energy efficiency improvement. **APERC is in charge of organizing peer review team and making review report.**
- ❑ **APEC CEEDS project** started in Oct 2009, aiming at promoting “high-performance” energy efficiency policy measures in economies in the APEC region. **APERC is project executant as well as workshop organizer.**



Today's Presentation

- What is CEEDS?
- What methodology is taken in CEEDS?
- How was CEEDS Phase 1 implemented?
- What was discussed at CEEDS Phase 1 ?
- What is the outcome of CEEDS Phase 1?
- What is the next steps?



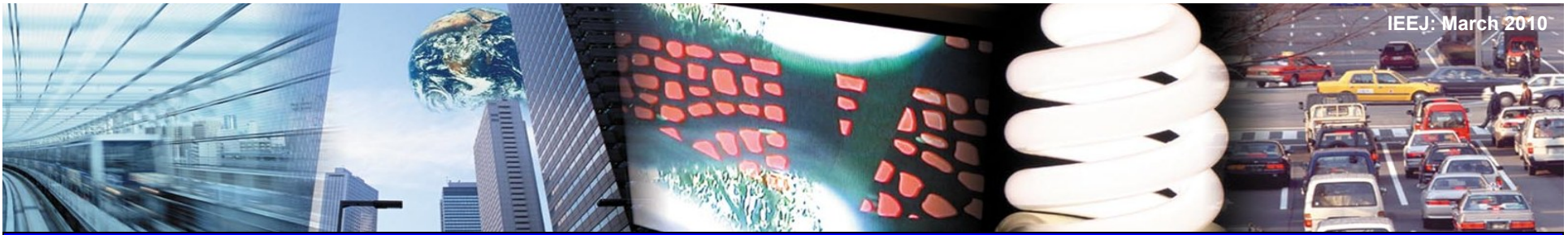
What is CEEDS?

- CEEDS is the project which assists developing economies who wish to design and implement measures for achieving energy efficiency improvements in a specified sector.
- CEEDS consists of a set of two workshops organized by a host economy, focusing on how these measure might be implemented in developing APEC economies.
- The delegates at the workshop will be taking the lead, with other participants assisting them to improve these measures in their economies.



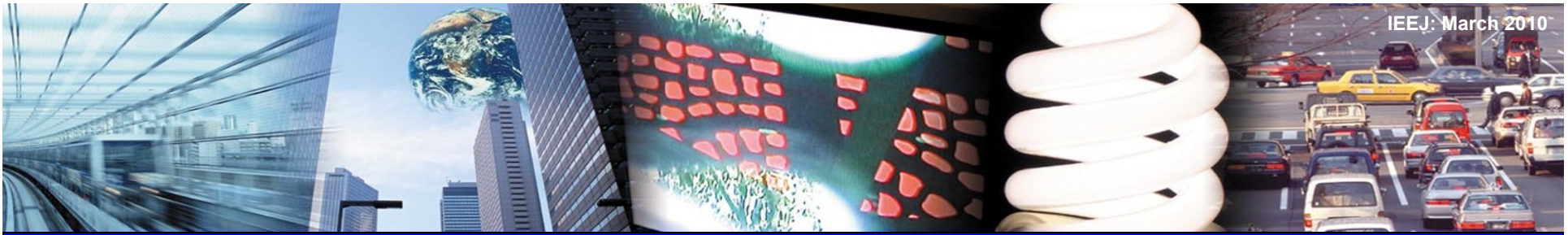
Methodology of CEEDS

- Step 1 - APERC, developing economy participants, host economies decide the high performance energy efficiency policy measures to be examined at the workshops.
- Step 2 - The host economy arranges for several speakers including those of central government, state/provincial/local government (if relevant), business/private sector, and affected consumers..
- Step 3 - APERC invites APEC developing economies to send delegates to the workshop who are key players in designing and implementing the selected energy efficiency measures in their economies.
- Step 4 - APERC organizes the first workshop in cooperation with the host economy. The purpose of this workshop is for participating economies to gain knowledge from experts on the design and implementation of the selected measures.
- Step 5 - After the first workshop, the delegates consult with their colleagues and superiors at home and formulate a short presentation on how their economy might implement the selected measures, taking into account the unique circumstances in their economies.

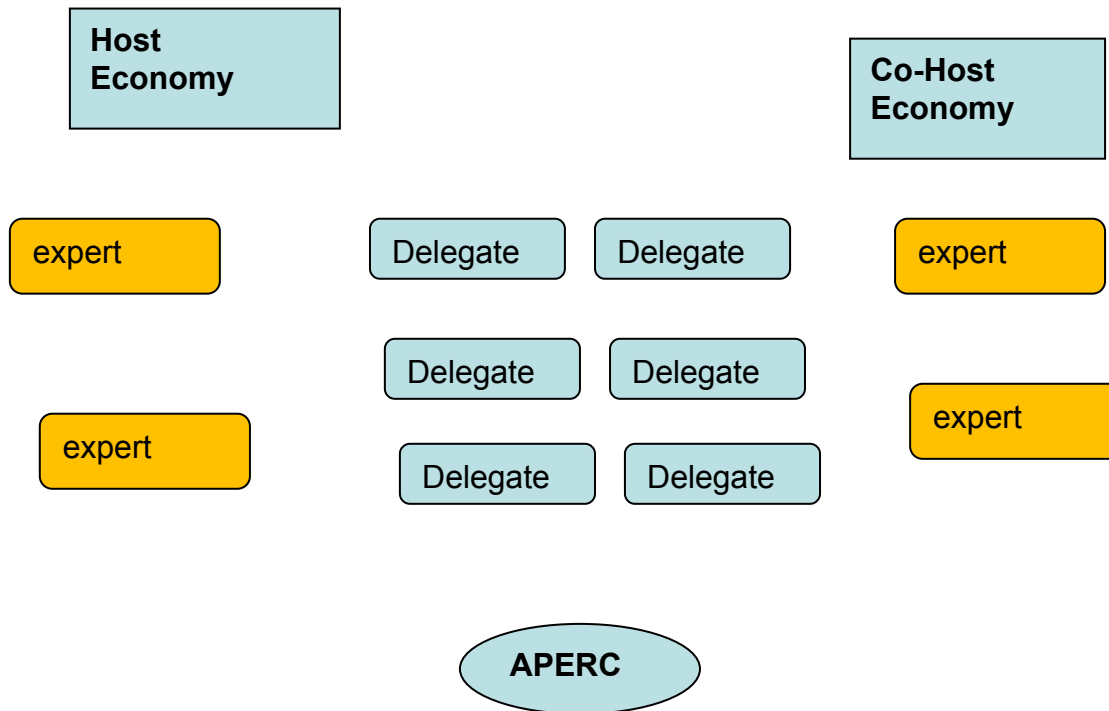


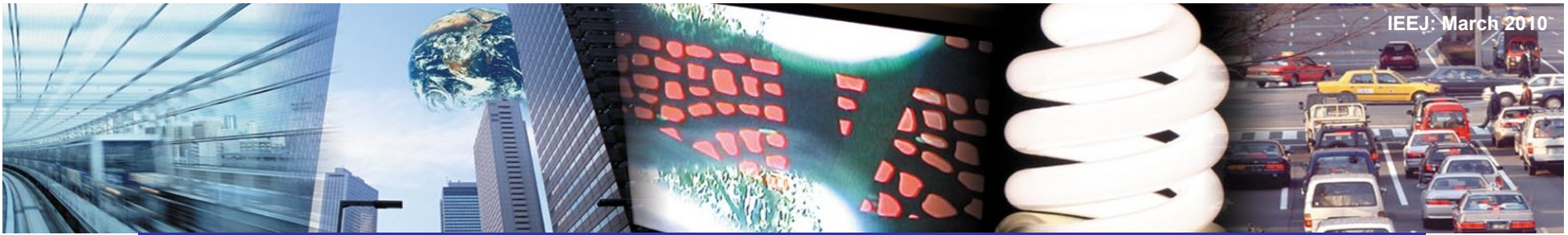
Methodology of CEEDS (Continued)

- Step 6 - At the second workshop, each delegate makes their presentation, which is followed by questions and comments from other workshop participants.
- Step 7 - APERC takes careful notes and formulates a workshop report on the experts' suggestions and the delegates' findings on how high performance energy efficiency policies/practices could be implemented in each participating economy.
- Step 8 - The host economy and APERC present the workshop report to EWG for discussion.
- Step 9 - The workshop report is published online on APERC website.
- Step 10 – APERC will follow up with the participating economies by asking them to report their progress in implementing the recommended high–performance energy efficiency policies/measures.
- Step 11 - Step 1 – 10 will be repeated for a different set of measures in different sectors, taking into the consideration the results of follow-up from the prior cycles.



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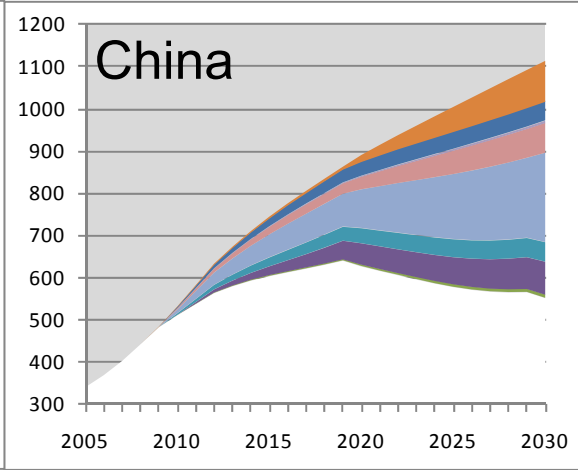
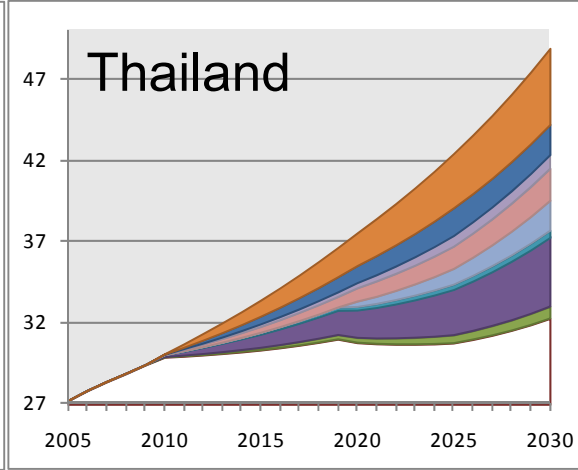
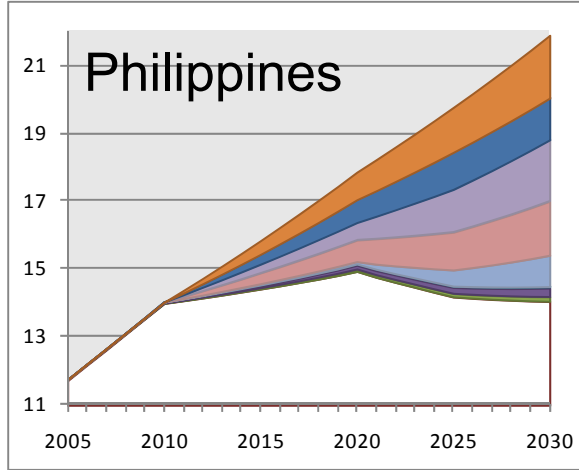
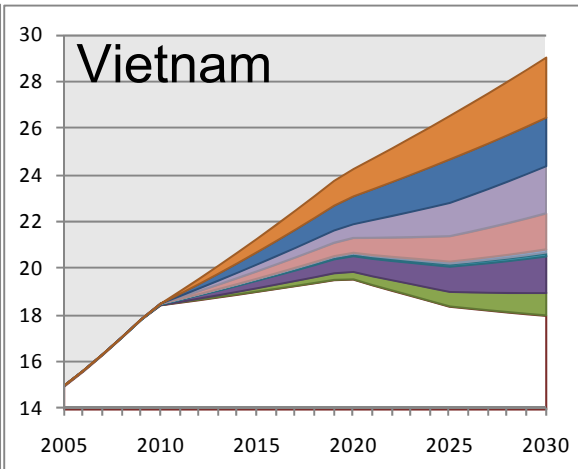
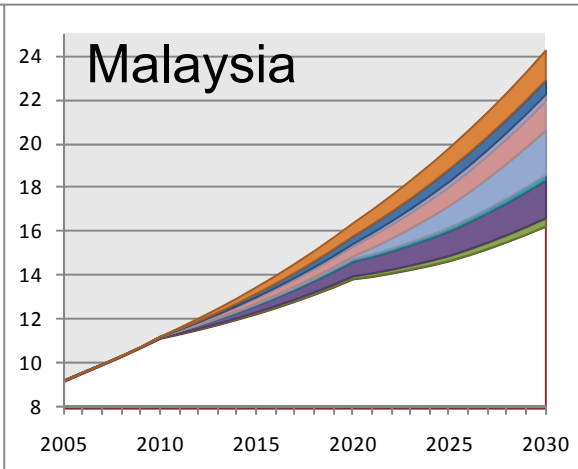
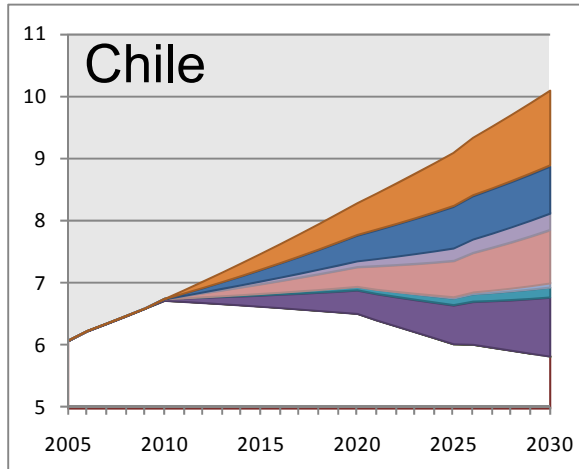


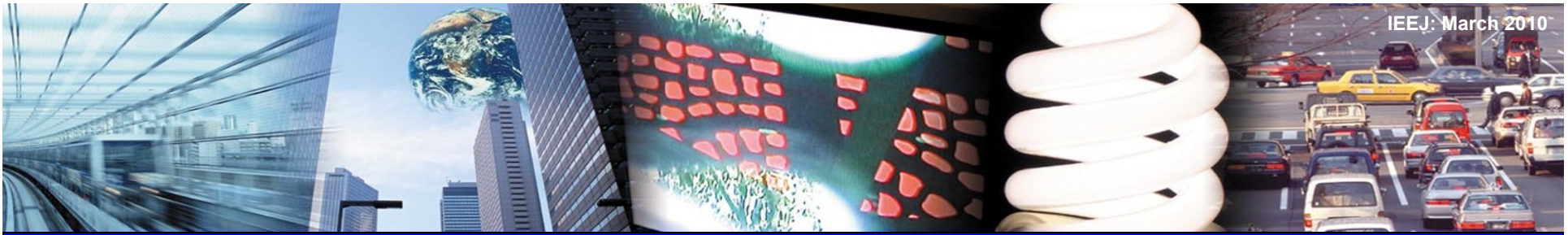
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Preliminary Savings Potential Results

■ Refrigeration
 ■ TV
 ■ Fan
 ■ Standby
 ■ SpaceCooling
 ■ Laundry
 ■ IncandescentLamps
 ■ FluorescentLamps
 ■ Efficiency Case Demand

TWh Energy Demand





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CEEDS Phase 1 Program

Policy measures selected:
Appliance EE Standards and Labeling” programs

Workshop #1 held at :

Taipei (co-host economy being Japan)

Workshop #2 held at:

Tokyo (co-host economy being Chinese Taipei)

Participating economies:

Chile, People’s Republic of China, Malaysia,

Philippines, Thailand, and Vietnam

Other participants:

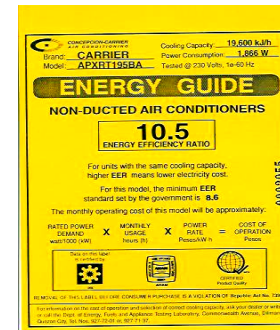
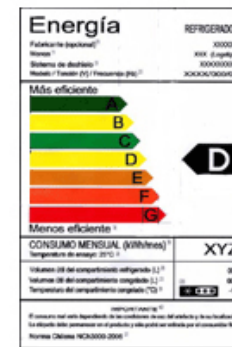
Experts from Alliance to Save Energy (ASE), CLASP,

LBNL,

IEEJ, government officials from host and

co host

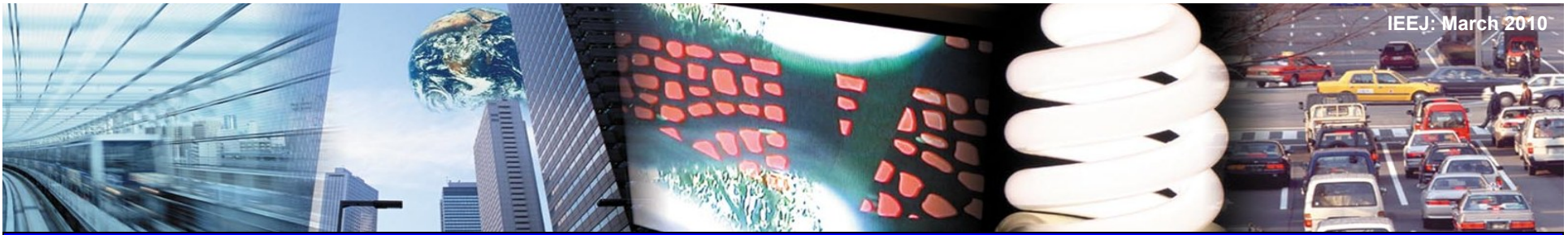
economies and APERC researchers





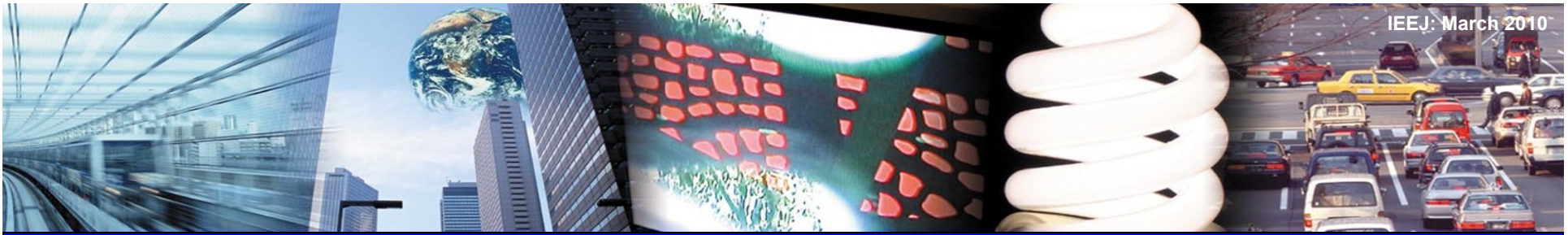
Topics Discussed at CEEDS Phase 1

- Legal authority - The institution responsible for setting criteria for S&L must have the legal authority, which guarantee the participation of stakeholders and compel compliance.
- Which products to include - All products with significant, cost-effective energy savings would be considered for inclusion in an S&L program, although some participants argued that it is more important to emphasize “quality over quantity,” i.e., meaningful strong efficiency levels for Minimum Energy Performance Standards (MEPS).
- Testing and product certification - These activities are the essential foundation for all S&L programs. Some economies are developing or expanding their own economy-specific networks of independent, government operated, or in some cases manufacturer-based test labs. Others are interested in the development of regional networks of test labs.
- *Compliance monitoring and enforcement* - Monitoring and enforcement of MEPS and labeling requirements are fundamental, but also pose challenges to economies with limited program budgets or technical resources. Partnering with retailers, contractors/installers, and individual manufacturers or industry associations can be ways of improving compliance with S&L requirements.



Topics Discussed at CEEDS Phase 1 (Cont'd)

- *Regular review & updates* - Both the efficiency levels used for MEPS standards and the levels used to define comparison label categories need to be regularly reviewed, and updated as needed to reflect technology advances and changing market.
- *Stakeholder involvement* - This is another important element of a successful program, and may include a wide range of organizations and individuals, including but not limited to manufacturers, retailers, consumer groups, and academia.
- *Economy-specific label designs* - The design of an appliance energy label often needs to be customized to the cultural and market traditions of each economy, in order to communicate clearly and effectively to consumers. A proposed label design should always be carefully pre-tested with consumers before being introduced on a large scale.
- *Consumer information and education* - labeling programs generally must be accompanied by an initial information campaign to raise customers' awareness of the energy label, explain how to read and interpret the label, and why this information benefits consumers. Information campaigns should also be periodically repeated, to remind consumers about the label and educate each new generation of buyers.



Topics discussed at CEEDS Phase 1 (Cont'd)

Key Challenges in Implementing S&L

- Need for policy-maker support for MEPS and mandatory labels
- Inadequate program (including market inspection) staff and budgets
- Limited availability of high quality, economy-specific data on appliance sales, efficiencies, market channels, etc.
- Need to strengthen test-lab capabilities and certification procedures
- Need for more staff training (including repeat training to help deal with staff turnover)



Topics discussed at CEEDS Phase 1 (Cont'd)

Areas for Regional Cooperation and Action

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



Outcome of CEEDS Phase 1

- Next Steps to develop Appliance Energy Efficiency Standards & Labeling for 6 participating economies, i.e., Chile, People's Republic of China, Malaysia, Philippines, Thailand, and Vietnam
- Workshop report on how high Energy Efficiency S&L programs could be implemented in each participating economy addressing key points and barriers
- Energy saving potential of Energy Efficiency S&L for residential appliances



Next Steps

- CEEDS Phase 2 workshop is planned to be held in Thailand and Hong Kong, China, in the second half of 2010, focusing on Building Code and Labeling.
- From 2011 onwards, CEEDS will be carried out along with the progress of PREE.



Your questions and comments invited!

Thank You !

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