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***Cooperative Energy Efficiency Design
for Sustainability (CEEDS) Phase 4***

**Kazutomo IRIE
General Manager, APERC**



Asia-Pacific
Economic Cooperation



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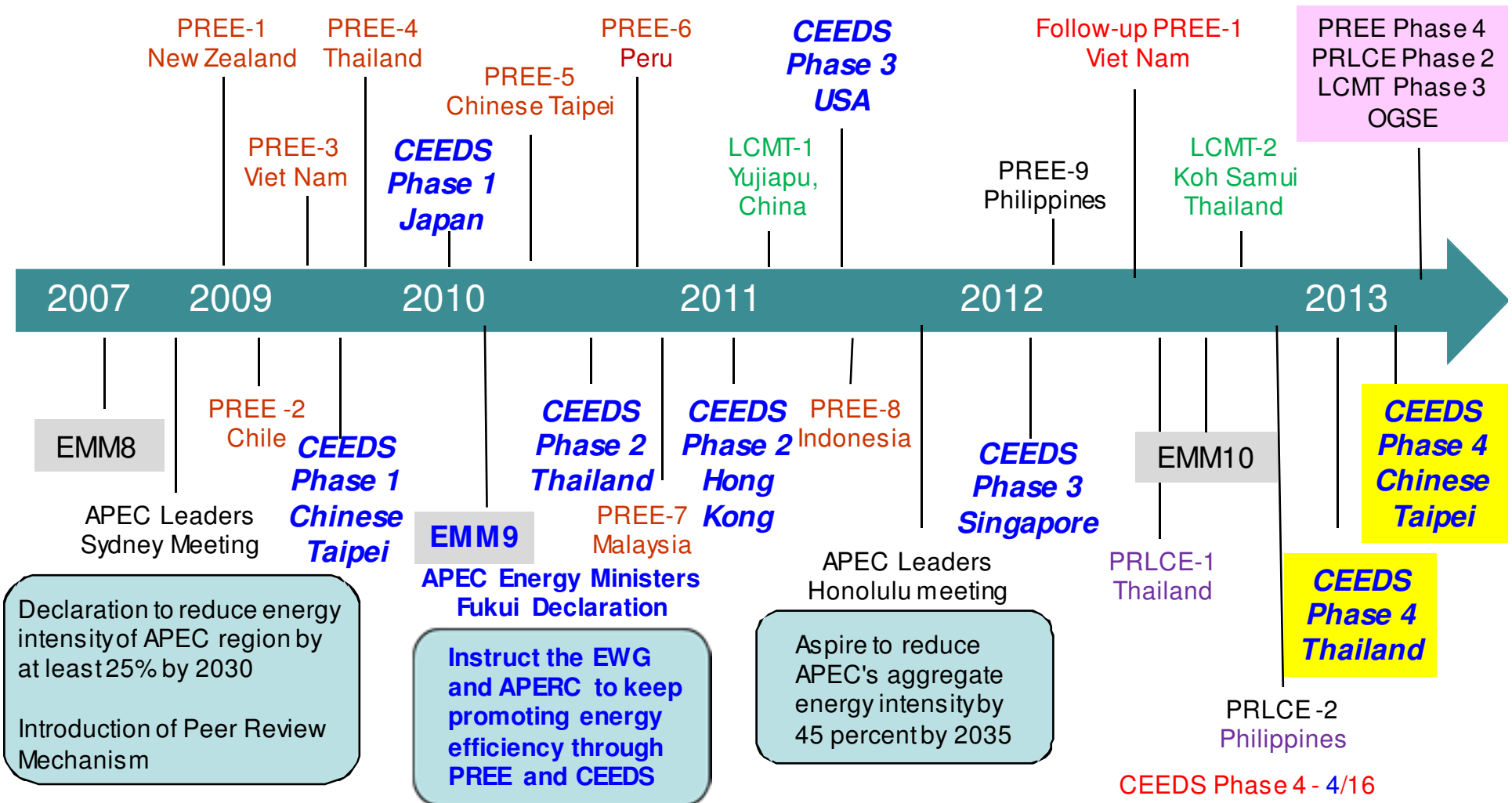
1. Objectives of CEEDS

Referred in 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.
- 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.
- CEEDS considers policies and practices for several developing economies in one sector at a time. ⇔ PREE: One economy, all sector



2. History of CEEDS





2. History of CEEDS

- **Phase 1: Appliance Energy Efficiency Standards and Labeling**
 - 1st Workshop: 19-21 October 2009, Taipei City, Chinese Taipei
 - 2nd Workshop: 1-2 March 2010, Tokyo, Japan
- **Phase 2: Building Energy Codes and Labeling**
 - 1st Workshop: 8-10 September 2010, Bangkok, Thailand
 - 2nd Workshop: 26-28 January 2011, Hong Kong, China
- **Phase 3: Energy Efficient Urban Passenger Transportation**
 - 1st Workshop: 14-16 September 2011, San Francisco, USA
 - 2nd Workshop: 17-19 January 2012, Singapore



3. CEEDS Phase 4: 1st Workshop in Bangkok

- CEEDS Phase 4 deals with **“Promotion of Energy Service Company (ESCO)”**.
- **The first workshop** of CEEDS Phase 4 was hosted by **Thailand** on **21-23 January 2013** in Bangkok.
- 5 participating eligible economies: **Chile, China, Malaysia,** and **Thailand** made presentations, while **the Philippines,** which could not send delegates, submitted the presentation material.
- Speakers were invited from **Canada, China, Chinese Taipei,** and **USA**. Representatives from **Chinese Taipei** and **Thailand** also attended.



3. CEEDS Phase 4: 1st Workshop in Bangkok

- **Tentative Findings at 1st Workshop**
 - Economies and agencies invited to the 1st Workshop presented the current status of the ESCO industry in each of their respective economies.
 - The ESCO industry in various economies were in different development stages.
 - **Thailand** and **China** were making great strides in developing and promoting their ESCO industry and were thus classed as in a more advanced stage of development.
 - The ESCO industry in **the Philippines, Chile** and **Malaysia** were seen to be in an infancy stage, whilst interest was strong for development, promotion policies seem to still be at a discussion and preliminary stage.



4. CEEDS Phase 4: 2nd Workshop in Taipei

- **The second workshop** for CEEDS Phase 4 was hosted by **Chinese Taipei** on **March 26-28** in Taipei.
- The 2 economies, **Malaysia** and **Thailand**, participated again (**Chile, China** and **the Philippines** were absent).
- Speakers were invited from **Canada, Chinese Taipei, Japan,** and **European Commission (EC)**. Representatives from **Chinese Taipei** and **Thailand** also attended.



4. CEEDS Phase 4: 2nd Workshop in Taipei

- **Tentative Findings at 2nd Workshop**
 - The ESCO industry is growing rapidly in economies with attractive commercial potential in energy efficiency.
 - Energy prices and industry barriers are key uncertainties to the ESCO market potential.
 - The focus of the 2nd workshop was to provide detailed plans on how to support the development of the ESCO industry and also to provide a strategic appraisal of best practices and policies.
 - Specific areas discussed during the expert review included measurement and verification, market framework and capacity building, financing and contract negotiation and finally policy support.



4. CEEDS Phase 4: 2nd Workshop in Taipei

- **Tentative Findings at 2nd Workshop (Continued)**
 - Following on from the 1st workshop in Bangkok, Malaysia and Thailand presented their refined proposal on the next steps to developing their ESCO industry.
 - **Malaysia** is in the process of establishing an ESCO industry but faces the immediate barrier of subsidized natural gas prices.
 - However, it is expected that natural gas subsidies will be slowly removed in the near future with surging consumption and diminishing production.
 - While Malaysia has established a framework and received a directive to establish a viable ESCO market, there is little scope for direct government support in the form of subsidies or low interest financing.
 - Therefore, much focus was placed on developing a market framework and on capacity building of the industry.



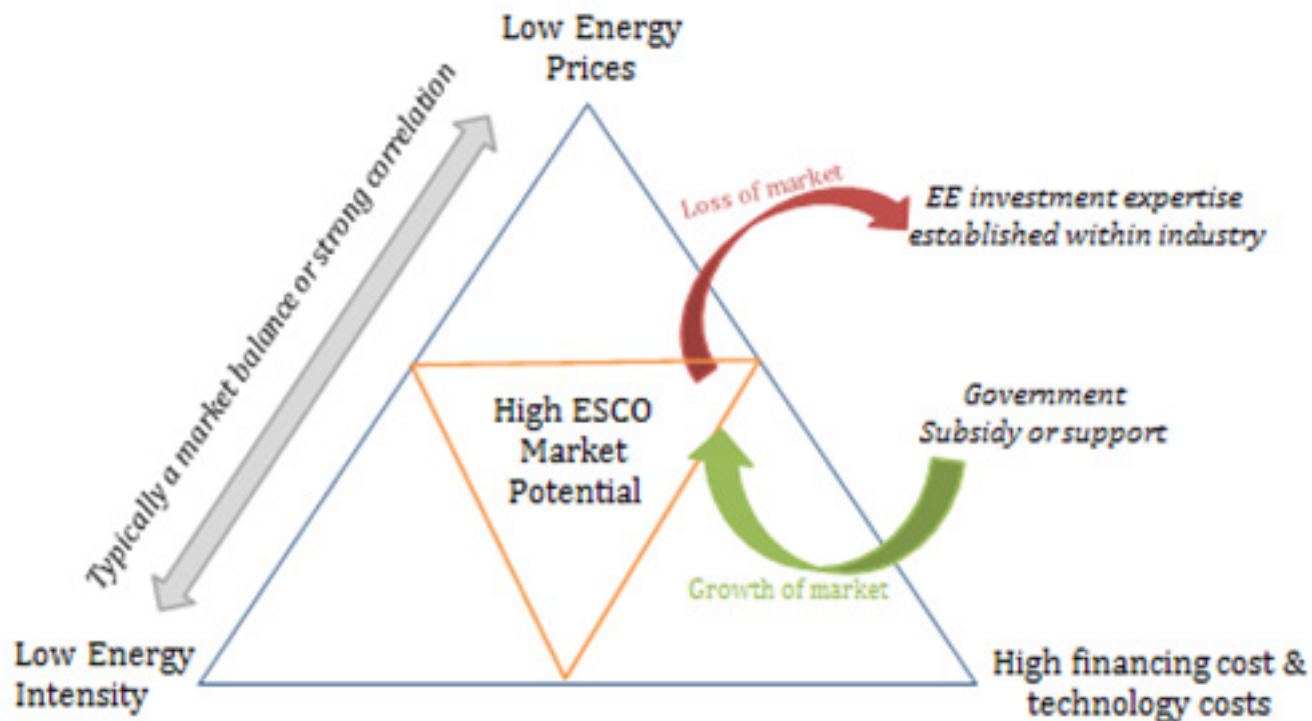
4. CEEDS Phase 4: 2nd Workshop in Taipei

- **Tentative Findings at 2nd Workshop (Continued)**
 - In the case of **Thailand**, the ESCO market is well established with a large market already in operation.
 - The next step for Thailand is to further develop and refine policies which support the market stability and sustainability by continuing to improve technical capability and industry participation.
 - This includes strengthening policy support measures such as through government pilot projects.



4. CEEDS Phase 4: 2nd Workshop in Taipei

ESCO Market Potential Balances



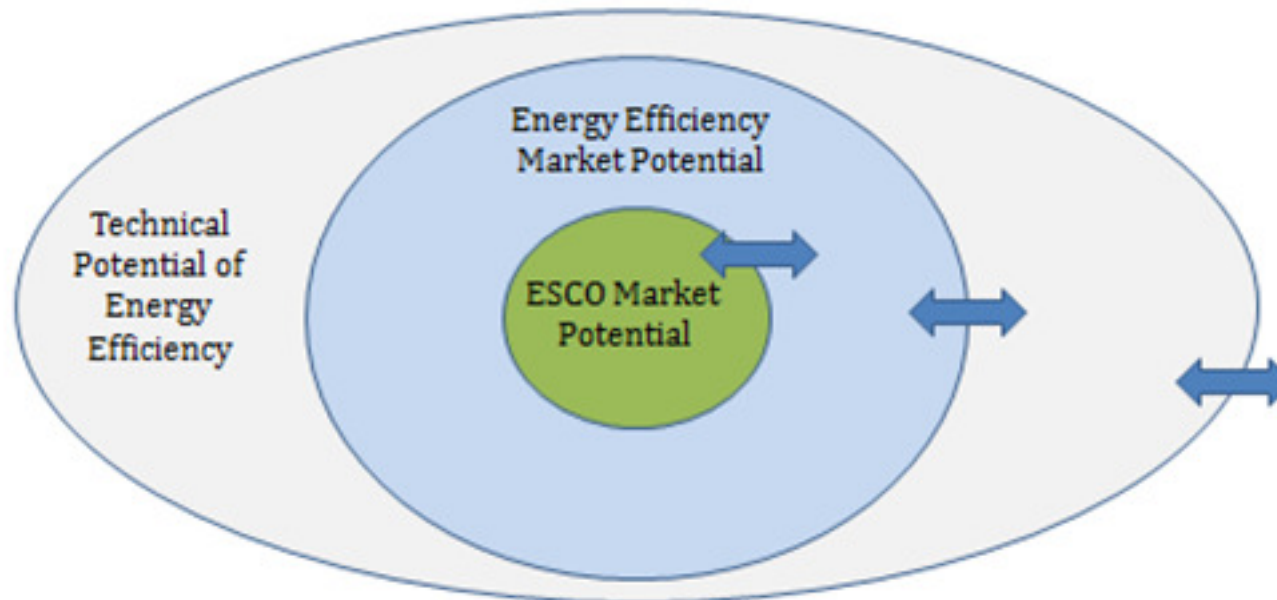
Source: APERC Analysis (2013)

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4. CEEDS Phase 4: 2nd Workshop in Taipei

ESCO's a Small but Essential Piece of the Eye-Ball

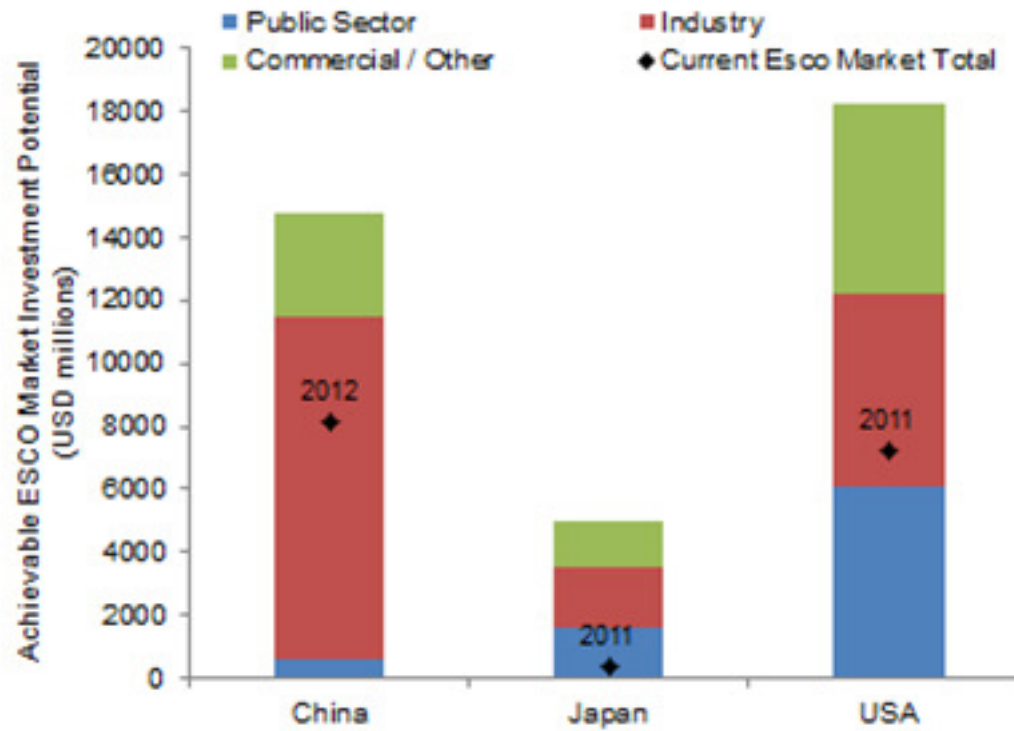


Source: APERC Analysis (2013)



4. CEEDS Phase 4: 2nd Workshop in Taipei

ESCO Market Potential Today

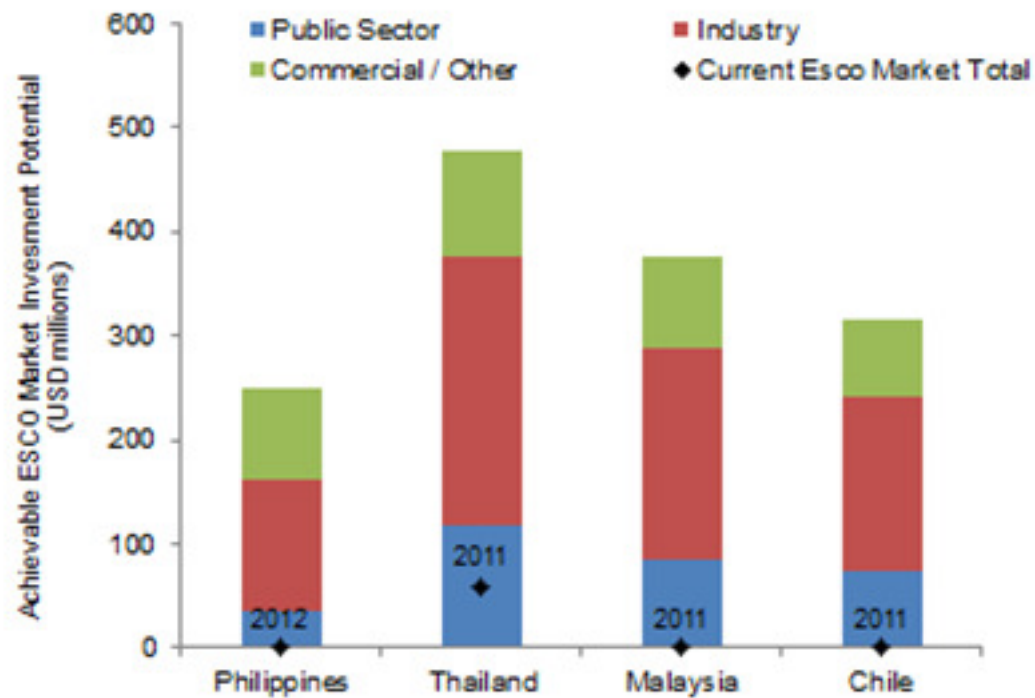


Source: APERC Analysis (2013)

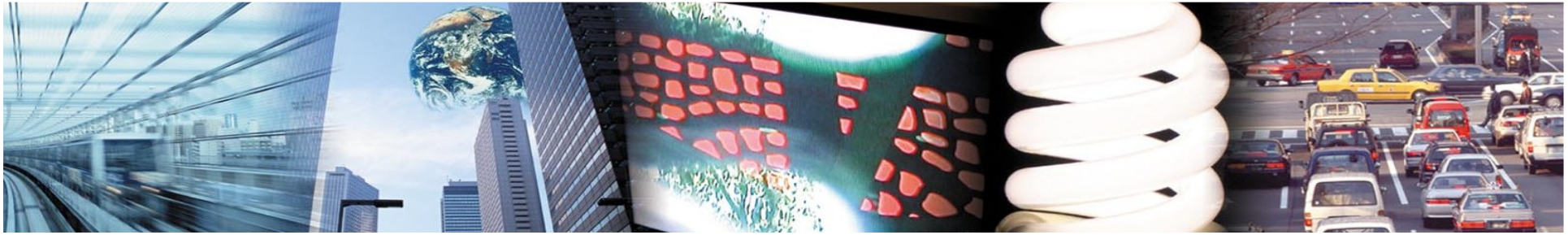


4. CEEDS Phase 4: 2nd Workshop in Taipei

ESCO Market Potential Today



Source: APERC Analysis (2013)



Thank you for your kind attention

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