The 46th APEC Expert Group on Energy Efficiency and Conservation Meeting
Cebu, Philippines, 31 August – 1 September 2015

PREE Update - Trial Energy Efficiency Policy Workshop and policy compendium

Martin Brown-Santirso
Researcher, Asia Pacific Energy Research Center

Asia-Pacific
Economic Cooperation

APERC Background

APERC was established in Tokyo in 1996 after the Osaka APEC leaders meeting in 1995

- **Primary Objectives:**
  - Understanding of APEC Supply and Demand trends
  - Energy infrastructure development
  - Energy regulatory reform
  - Advocates rational policy making
  - Enhance capacity building

APERC Background

EMM
(Energy Ministers Meeting)

EWG
(Energy Working Group)

APERC
(Asia Pacific Energy Research Centre)

- EGEEC
  (EG on Energy Efficiency & Conservation)
- EGNRET
  (EG on New Renewabl Energy Technology)
- EGCFE
  (EG on Clean Fossil Energy)
- EGEDA
  (EG on Energy Data & Analysis)
- TFETI
  (TF on Energy Trade & Investment)

APERC Background

APERCs key activities:

- APEC Energy Demand and Supply Outlook
- APEC energy overview
- Cooperative Energy Efficiency Design for Sustainability (CEEDS)(Discontinued)
- Peer Review on Energy Efficiency (PREE)
  - Energy Efficiency Policy Compendium
  - Energy Efficiency Policy Workshop
- Low Carbon Model Town (LCMT)
- Peer Review on Low-Carbon Energy Policy (PRLCE)
- Oil and Gas Security Initiative (OGSI)

CEEDS Background

- Initiated by the Energy Ministers in the 2010 Fukui declaration, the project aims to improve capacity on energy efficiency policy for developing economies
- Cooperative Energy Efficiency Design for Sustainability (CEEDS) project:
  - Two capacity building workshops concentrating on a single topic
  - Resource intensive
  - Inconvenient for attendees

➢ Energy Efficiency Policy Workshop as a part of PREE

- Focus on single topic
- Deliver concentrated learning
- Reduced burden for APERC and attendees

PREE

- From 2015 PREE includes three components:
  - Peer review or Follow-up peer review for travel eligible economies
  - Energy Efficiency Policy Workshop
  - Energy Efficiency Policy Compendium
- In 2015 Thailand had a Follow-up PREE – APERC website
- Energy Efficiency Policy Workshop in Singapore
- Compendium process nearly complete – delayed due to outlook.
- APERC has preliminary agreement from Mexico for PREE in 2016

Energy efficiency policies

Regulations
- MEPS
- energy audits & mana
- Utility obligations

Fiscal measures
- Grants, subsidies, tax incentives
- Direct procurement of EE

Promotional / market transform
- Info campaigns
- Labelling / certification

Financial remediation
- Revolving funds
- Contingent financing

Capacity building
- Creation of ESCOs
- Training programmes

Pricing mech.
- Tiered tariffs

Tech dev't
- Research, dev't & demonstration

Foundations for energy efficiency

Enabling frameworks	Institutional arrangements	Co-ordination mechanisms
Laws and decrees	Implementing agencies	Governmental co-ordination
Strategies and action plans	Resourcing requirements	Targets
	Role of energy providers	
Funding mechanisms	Stakeholder engagement	Monitoring & evaluation
	Public-private cooperation	
	International assistance	

Trial Energy Efficiency Policy Workshop

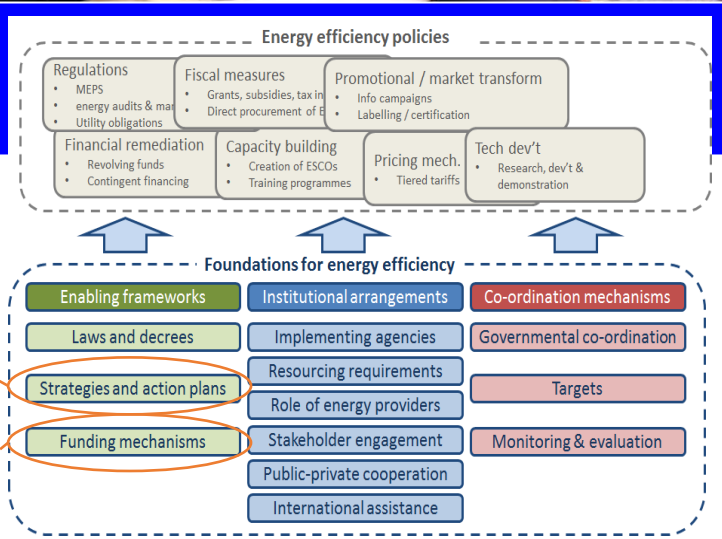
- Held in Singapore, 23 March 2015
- Self-funded by APERC
- Hosted in conjunction with EGEE&C 45
- Focusing on energy efficiency policy basics: EE Policy and Funding

Strategies and action plans

- Key elements
- Differences between strategies & action plans
- Learnings from overseas

- Best practice policy development

- EE barriers / policy justification
  - ‘Classical’ economics
  - Behavioural economics
  - Rebound / take-back

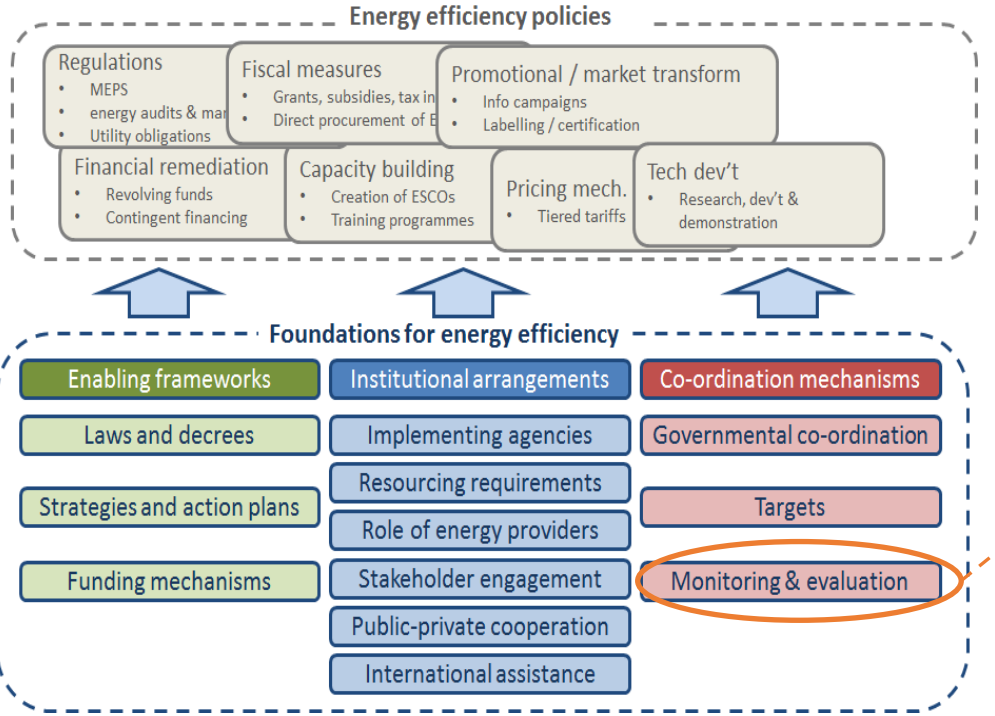


Funding mechanisms

- Description of options
- Advantages and disadvantages
- Learnings from overseas

Energy Efficiency Policy Workshop

- Held in Taichung, 12 April 2016
- As part of PREE
- Hosted in conjunction with EGEE&C 47
- Focusing on Energy Efficiency Policy Evaluation and Indicators



Evaluation

- Ex-ante/Ex-post
- Data collection and analysis
- Evaluation
- Attributability
- Indicator development

Energy Efficiency Policy Workshop: Evaluation

- XX attendees
- XX APEC economies :
  - China, Thailand, US, Mexico, Peru, Philippines, Russia, New Zealand, Indonesia, Singapore, Vietnam, and Korea
- Delivered by expert consultant
  - Energy Policy and Programme Evaluation Conferences Ltd (Not-for-Profit)
- Included 5 international speakers:
  - International Energy Agency (IEA)
  - International Partnership in Energy Efficiency Cooperation (IPEEC)
  - Lawrence Berkeley National Lab (US)

Energy Efficiency Policy Workshop: Evaluation

- Key Outcomes:
- Robust evaluation is essential to develop strong financial business cases for funding
- Evaluation is more complex than measuring trends
- Evaluation should be an integral part of policy/program development

Next steps

- Next Energy Efficiency Policy Workshop
  - Aligned with EGEE&C 49 on the first half of 2017
  - One day workshop – Topic still to be determined
  - Incorporate feedback from last workshop
  - APERC will continue to gather feedback to keep EEP relevant

Energy efficiency policies

Regulations
- MEPS
- energy audits & mar
- Utility obligations

Fiscal measures
- Grants, subsidies, tax incentives
- Direct procurement of EE

Promotional / market transform
- Info campaigns
- Labelling / certification

Financial remediation
- Revolving funds
- Contingent financing

Capacity building
- Creation of ESCOs
- Training programmes

Pricing mech.
- Tiered tariffs

Tech dev't
- Research, dev't & demonstration

Foundations for energy efficiency

Enabling frameworks	Institutional arrangements	Co-ordination mechanisms
Laws and decrees	Implementing agencies	Governmental co-ordination
Strategies and action plans	Resourcing requirements	Targets
	Role of energy providers	
Funding mechanisms	Stakeholder engagement	Monitoring & evaluation
	Public-private cooperation	
	International assistance	

Compendium 2015

- The Compendium was set up as part of PREE to
  - compile and maintain a compendium of energy efficiency policy measures and action plans of all APEC member economies under a common format:

http://aperc.ieej.or.jp/publications/reports/compendium.php

  - In 2014, PREE was not carried out as budget bid was unsuccessful
  - The 2015 was just completed
    - 18 Responses (Only missing US, Russia, and PNG)

Compendium 2016 Process

Information Request

(Sept 2015)

Data gathering

(4 – 6 Weeks)

Compilation and review

(4 Weeks)

Publication

(December 2016)

Compendium 2015 Process

- Information request sent to EWG and EGEEC delegates
- Two key items:
  - Update prior economy chapter
- Update table
- Example: Australia 20 pages

AUSTRALIA

1. GOALS FOR EFFICIENCY IMPROVEMENT

1.1. Overall Energy Efficiency Improvement Goals

Policies and measures to improve energy efficiency in Australia are undertaken at Australian Government and State level and are outlined below. Coordination of cross-jurisdictional policies and programs occurs through the National Strategy on Energy Efficiency (NSEE).

The Australian Government released the *Energy White Paper 2012, Australia's energy transformation,* on 8 November 2012. The Energy White Paper (EWP) sets out a strategic policy framework to address the challenges in Australia's energy sector and position the country for a long term transformation in the way it produces and uses energy.

Summary Table for Compendium of Energy Efficier

*While improvement of energy efficiency (EE) can be achieved through a number of means, such as goals to reduce CO_2 emissions, this table focuses on explicit EE goals.

Economy	Overall goals	Goal year	Base year	Sectoral goals	Goal year	Base year	
Australia	Overall 20% renewable energy	2020					Action plans The National Strategy for Energy Efficiency (NSEE) is the overarching program of work for promoting energy efficiency in Australia. The Clean Energy Furture Package, which includes a carbon price scheme and other support programs, came into effect in July 2012. Measures **Industry:** 1) Businesses using more than 0.5 PJ of energy a year are required to conduct an energy efficiency opportunities assessment and report the results publicly; 2) Increasing skills through training; 3) Assistance for energy intensive business. **Transport:** 1) Fuel consumption labelling standards; 2) Plans to develop standards to improve the fuel efficiency of the Australian vehicle fleet. **Residential:** 1) Establishment of the Greenhouse and Energy Minimum Standards Act 2012 to implement nationally Minimum Energy Performance Standards (MEPS) and Labelling for appliances and equipment; 2) Energy Star endorsement labelling; 3) Phasing out of inefficienct light bulbs and hot water systems to be replaced with high efficiency solar, gas or electric heat pump systems; 4) Introduction of higher house energy efficiency rating and higher building standards from 2011. **Commercial:** 1) Significantly increase over time the stringency of energy efficiency provisions for all commercial buildings starting in 2010; 2) Mandatory disclosure of up to date energy efficiency ratings of commercial buildings where most sellors or lessors have office space of 2000 squared meters or more. **Power:** Generator Efficiency Standards program (in partnership with the Australian Government). **Government:** Improving the operational performance of buildings leased by the government. **Other:** 1) National Energy Efficiency Skills Initiative (NEESI); 2) Plans to strengthen energy audit and assessment capabilities; 3) Tax measures-expenditure on capital equipment, which may improve energy efficiency, is generally deductible under capital allowance provisions; 4) Subsidies for Low Carbon Communities provided to support local councils and operators of community facilities to implement energy efficient upgrades to street and traffic lights, council buildings and community facilities.

Thank you for your kind attention

http://aperc.ieej.or.jp