

# **PREE Project update**

## ***Phases 7, 8 and 9***

The 54<sup>th</sup> Meeting of the Expert Group on Energy Efficiency and Conservation (EGEE&C)

Cebu, Philippines, 23<sup>th</sup> September

Hugh MARSHALL-TATE, Researcher



1. Background of Peer Review on Energy Efficiency (PREE)
2. APEC PREE Phase 7 (EWG 08 2017A)
3. APEC PREE Phase 8 (EWG 02 2018A)
4. APEC PREE Phase 9 (EWG 08 2018A)
5. Energy Efficiency Policy Workshop in Hong Kong

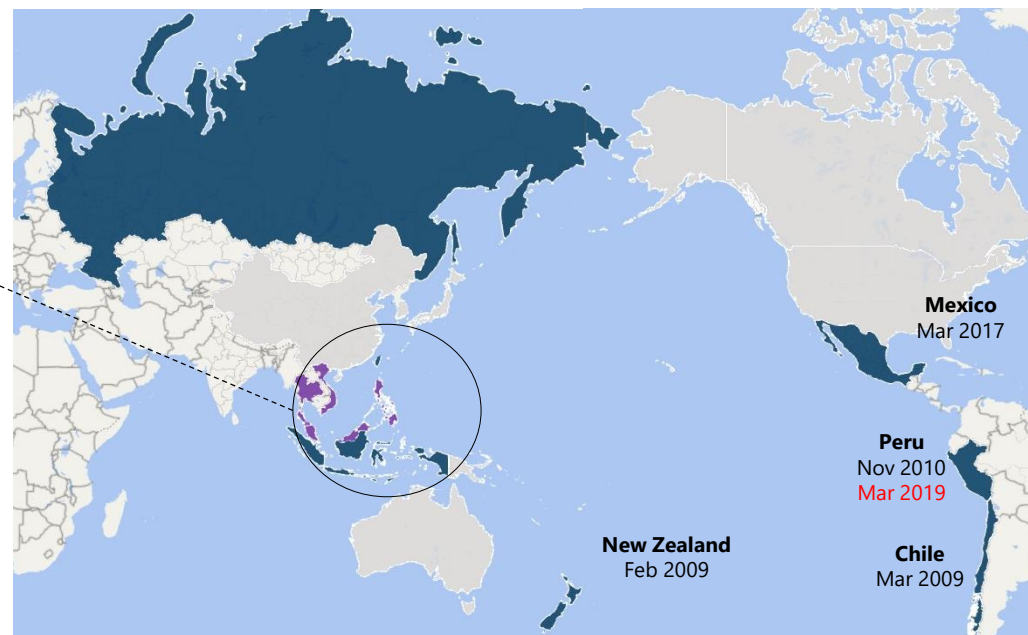
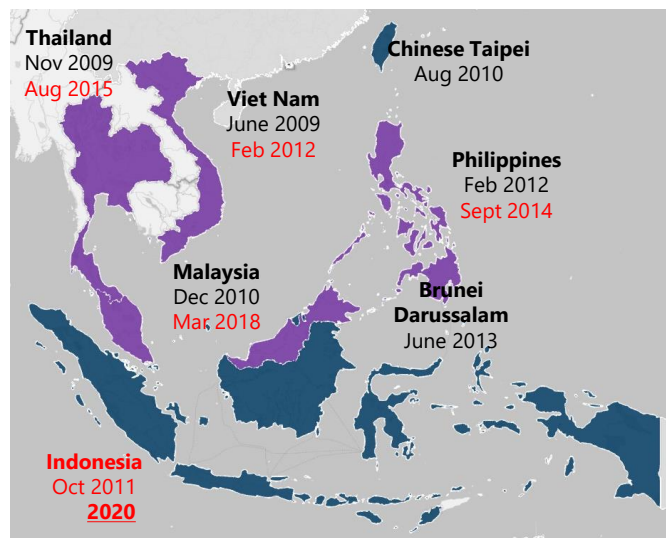
# PREE introduction and background

- Initiated by APEC Energy Ministers' 2007 Darwin Declaration.
- Broad review of energy efficiency policies of a volunteer APEC economy carried out by a Review Team of experts to provide recommendations on potential improvements.
- PREE has been hosted by 11 economies:
  - Chile, New Zealand, Viet Nam, Thailand, Chinese Taipei, Peru, Malaysia, Indonesia, The Philippines, Brunei Darussalam and Mexico.
- Follow-up PREE hosted by five economies:
  - Viet Nam, The Philippines, Thailand, Malaysia and Peru.

<http://aperc.ieej.or.jp/publications/reports/pree.php>

# PREE Background

## ■ Past PREE and Follow-Up PREE



- \*Red indicates economies that have undergone a Follow-Up PREE

- PREE is currently in its 10<sup>th</sup> phase. So far, four Follow-Up PREE have been conducted, in Southeast Asia and one in Peru. The next PREE will be conducted in Indonesia [TBC].

# Objectives of PREE

- **Share information** on energy efficiency energy performance as well as on **policies and measures** for improving and promoting energy efficiency in APEC economies;
- Provide opportunities for **learning from the experiences of other economies** and for broadening the network among energy efficiency policy experts;
- Explore how **energy efficiency goals** on an overall and/or sectoral basis and action plans could be **effectively formulated** in each economy under review...
- **Monitor progress** on attaining energy efficiency goals on an overall and/or sectoral basis and implementing action plans...
- **Provide recommendations** for voluntary implementation on how implementation of action plans could be improved with a view to achieving energy efficiency goals.

# PREE Phase 7 and 8 updates

1. PREE Phase 7 in Malaysia (EWG 08 2017A)
  - Reported to EWG 55 and EGEEC 52
  - Final completion report submitted in April 2019
  - The report is available on APEC website
2. APEC PREE Phase 8 in Russia (EWG 02 2018A)
  - Canceled due to the restructuring in the Russian Government
  - Energy Efficiency Policy Workshop in Hong Kong



# PREE Phase 9

# Basic information about Peru

- **Capital City:** Lima
- **Area:** 1,285,220 km<sup>2</sup> (19th)
- **Population:** 28,674,000 (43)
- Net gas exporter.
- Net crude oil and oil products importer.



Male: **49 %**  
Female: **51%**



Urban: **79%**  
Rural: **21%**



Natural Gas Access:  
**30% (Lima)**



GDP  
**US\$ 215 billion**



GDP Percapita  
**US\$ 6,599**



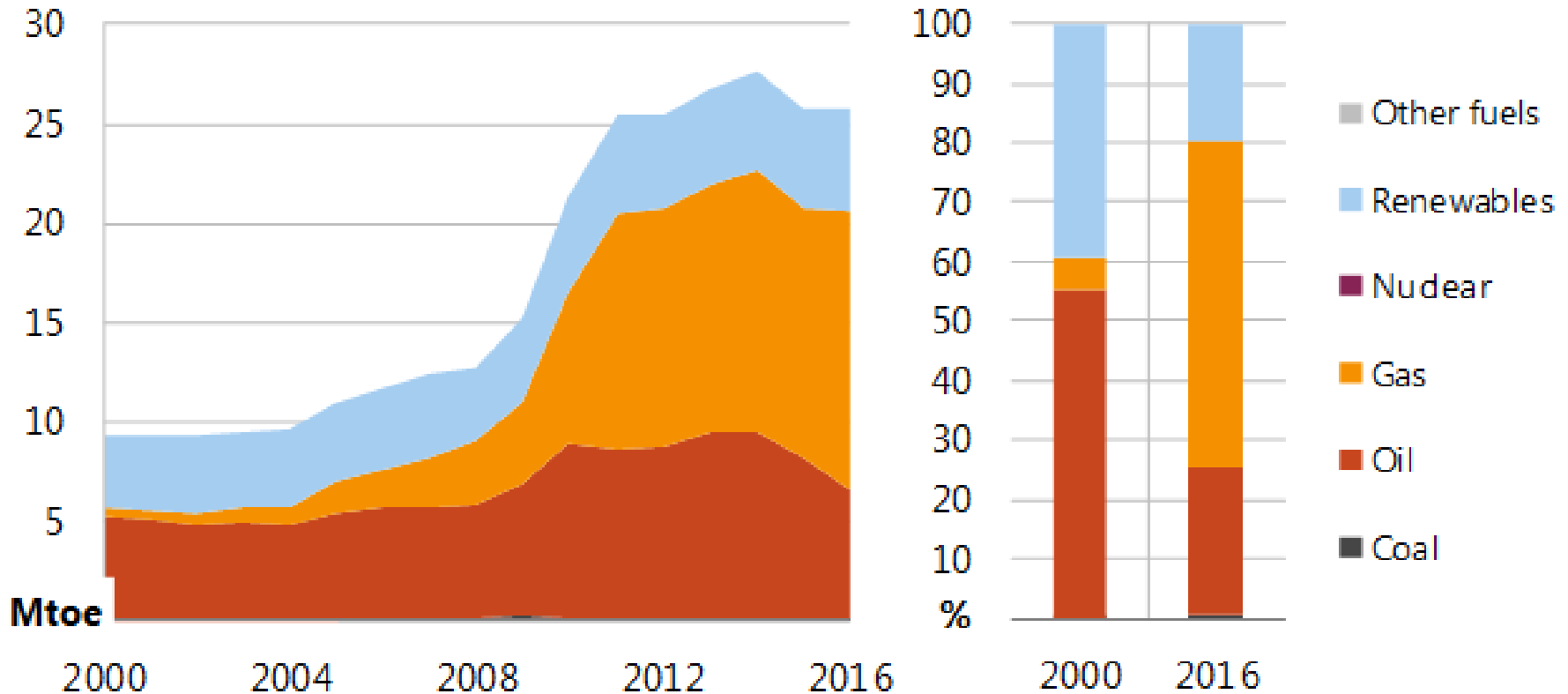
Buy: **3.25**  
Sell: **3.25**



Electricity Access:  
**95 % (National)**



# Primary energy production more than doubled from 2005 to 2016 owing to the development of the Camisea field



*Peru is a net gas exporter (all of it via LNG). Rapidly growing transport demand has driven oil products imports up, growing more than five-fold from 2005 to 2016.*

# Follow-Up PREE in Peru

- The Review Expert Team and 4 APERC research staff visited Peru on March 18-22, 2019.
- 3 days of workshop, 1 day of site visit and 1 day of recommendations, preparation and presentation to the Peruvian government.
- Around 40 participants and 26 presentations from the 12 of the most relevant stakeholders in energy efficiency in Peru.



# The Review Expert Team was composed by 6 experts from 5 APEC economies

## **Dr. Terry Surles**

*California Institute for energy and environment at Berkeley University, USA  
Senior advisor*

- *Energy efficiency goals, targets and strategies*
- *Data collection and monitoring*

## **Tali Trigg**

*German Corporation for International Development (GIZ)  
Consultant*

- *Transport*

## **Dr. Viritphol Vacharapanich**

*Professional Engineer  
Ministry of Energy, Thailand*

- *Electricity*

## **Pramesh Maharaj**

*Energy Efficiency and Conservation Authority (EECA), New Zealand  
Programme Manager-Industrial*

- *Industry*



## **Santiago Creuheras Diaz**

*Former Director General for Energy Efficiency at the Ministry of Energy, Mexico  
Independent consultant*

- *Institutional and regulatory framework*

## **Dr. William Chung**

*City University of Hong Kong,  
Hong Kong, China  
Associate professor*

- *Labelling and standards*

# Follow-Up PREE in Peru

- The Review Expert Team gave **47 recommendations** on 6 subsectors.
- APERC drafted the Follow-up PREE report and submitted it to the APEC Secretariat in September 2019.



# Conclusion

- While Peru has made significant efforts in developing energy efficiency policies for the past 20 years, global and domestic trends in this field demand an acute and strategic modernisation.
- Some of the key policy recommendations include:
  - Revising the institutional framework on EE policy
  - Allocating more budgetary funds and finding alternative source of financing for EE projects.
  - Strengthening data collection, analysis and EE indicators.
  - Introduce labelling for vehicles, further integrating public transport systems in Lima and promoting electro-mobility.
  - Engaging industrial energy consumers, promoting energy management awards and recognition awards.
  - Develop performance certification standards for labelling.



# Energy Efficiency Policy workshop (PREE 8)

# APEC Energy Efficiency Policy Workshop

- Part of the PREE program and designed to complement PREE by focusing on one key aspect of Energy Efficiency policy.
- Run in conjunction with one of the biannual EGEEC meetings
- Lead by an external expert consultancy, with input from other domain experts
- Policy experiences and perspective from energy efficiency policy makers.
- Funding for participants from 6 travel-eligible economies
- Outcomes are published on the APEC website in a workshop report

# Past EEP Workshops

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- Current format started in 2014
- **Previous topics have included**
  - 2018-Conformity Assessment
  - 2017-Policy and Program Evaluation II
  - 2016- An introduction to Policy and Program Evaluation
  - 2015- Government and donor funding mechanisms



# EEP Workshop on Fuel Economy Regulations

Held in conjunction with EGEE&C 53 in Hong Kong, China

There were 41 participants in the Workshop from nine APEC economies and 19 Organisations

Delivered by Elizabeth Yeaman of Retyna

Key themes:

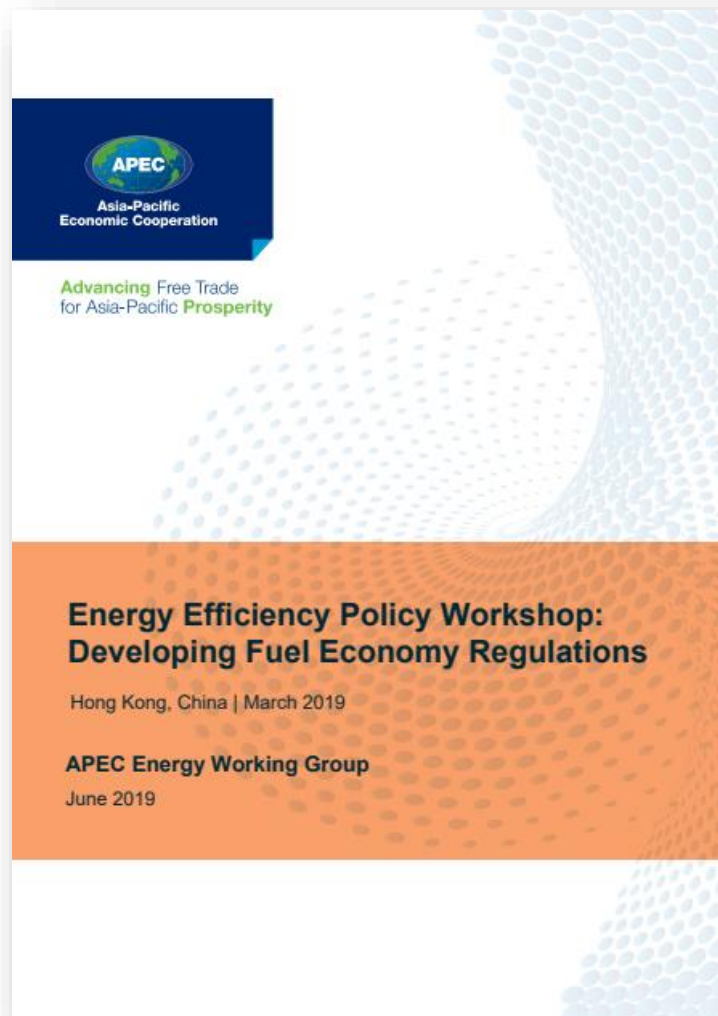
- » APEC Transport energy demand and GHG emissions
- » Vehicle fuel economy policy
- » Testing protocols
- » Policy drivers
- » Policies in APEC economies
- » Advanced Vehicles

## Workshop Agenda

Welcoming remarks from host	Mr. Vy Ek Chin ,Hong Kong, China
Opening remarks EGEEC Chair	Mr. Pengcheng Li, China
Workshop introduction and agenda	Hugh Marshall-Tate
<b>Session 1: Context for vehicle fuel economy regulations</b>	
Transport contribution to GHG emissions in APEC economies	Alexey Kabalinskiy
Overview of the suite of policy measures to improve vehicle fuel economy	Elizabeth Yeaman
<b>Session 2: Vehicle fuel economy policies in APEC economies</b>	
Chile's proposed fuel economy standards	Luz Ubilla, Ministerio de Energía, Chile
Test protocols underpinning fuel economy regulations	Andrew Campbell
Panel with Session 1 and 2 speakers	
<b>Session 3: Facilitating low emission vehicles in APEC economies</b>	
Wide scale promotion of low emission vehicles for HK	Ir. Raymond CHOI, Hong Kong Power
Facilitating locally designed and manufactured electric vehicles in the Philippines	Andrew Campbell
Growth of electric vehicles in New Zealand	Elizabeth Yeaman
<b>Session 4: Facilitating EVs and other very low carbon vehicles</b>	
Participants will break into smaller groups to discuss	
<b>Summary of the workshop</b>	

# EEP Workshop Reports

A full summary of the Workshop is available in the workshop report published on the APEC website



# Economy feedback is being sought for topic selection.

To be held alongside EGEE&C 55 in the first half of 2020.

- Some topics proposed in the past include:
  - Policy roadmap development
  - EE in Industry – implementation of BATs (Best Available Technologies)
  - Behavioural economics – influencing responses.
- Any suggestions?
- If not, please consult with your economy representative and send feedback (as soon as possible) to:  
[hugh.marshalltate@aperc.ieej.or.jp](mailto:hugh.marshalltate@aperc.ieej.or.jp)



# Thank You

<https://aperc.ieej.or.jp/>