



APEC EGEE&C 53 and EGNRET 52

Hong Kong, China

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Overview of APERC Activities

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**Asia-Pacific
Economic Cooperation**

APERC establishment

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

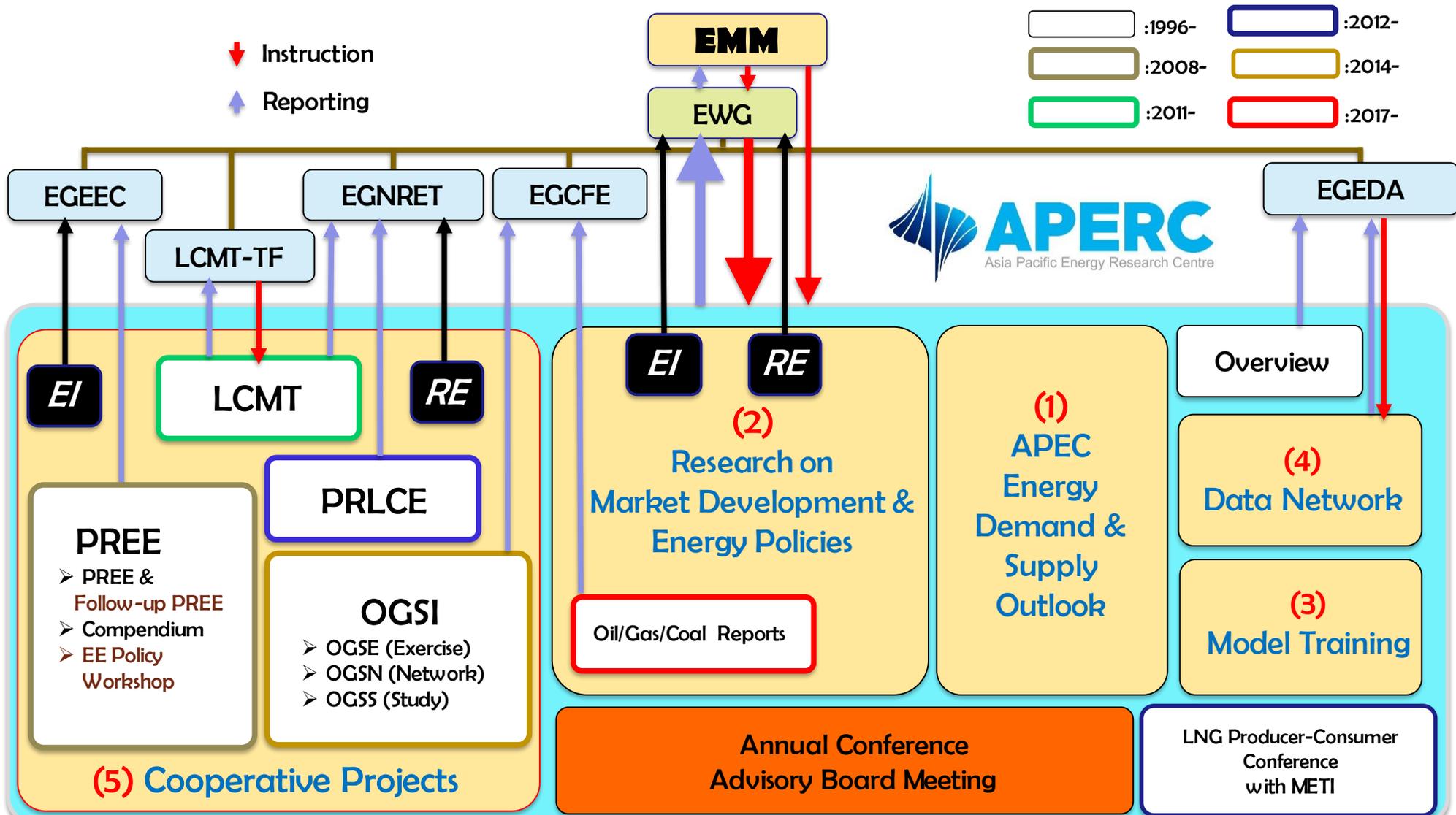
Primary objective is to foster a common understanding of energy challenges facing APEC member economies.

- Through analysis of the supply and demand outlook.
- The development of energy markets.
- Discussion of policy responses.



Image: Google Street View

APERC's functions and tasks



○ **Research activities**

- APEC Energy Demand and Supply Outlook (EDSO)
- Yearly APEC Energy Overview
- APERC Oil/Gas/Coal Market Reports
- Topical studies

○ **Cooperative Projects**

- Peer Review on Energy Efficiency (PREE)
- Renewable Energy Projects (PRLCE, LCMT)
- Energy Security Projects (OGSI)

○ **Training and Data Collection**

○ **Annual Conference and Advisory Board meeting**

○ **Other activities/missions**

Cooperative activities

2007

2018

2019

PREE	1.NZ	2.CHL	3.VN	4.THA	5.CT	6.PE	7.MAS	8.INA	9.RP	10.BD		11.MEX	12.RUS (TBC)
FU PREE							1.VN		2.RP	3.THA	4.MAS	5.PE	
PRLCE					1.THA	2.RP	3.INA	4.MAS	5.VN	6.PNG			
LCMT		1.Yujiapu PRC	2.Samui THA	3.Da Nang, VN	4.San Borja PE	5.Bitung INA	6.Mandaue RP	7.Krasnoyarsk RUS					
LCMT Symposium								1.Jakarta, INA	2.Da Nang, VN	3.San Borja, PE (TBC)			
LCMT Dissemination								INA: Band Aceh MAS: Hang Tuah Jaya, Shah Alam	RP: Davao VN: Dalat				
OGSE					SE Asia	INA	launched OGSI	1.RP	2.AUS	3.PE			4.CHL
OGSNF								1.Kitakyushu JPN	2.Kagoshima JPN	3.Irkutsk RUS	4.Tokyo JPN	5.Sendai JPN	

EMM8

**APEC Leaders
Sydney Meeting**

Energy intensity
reduction goal of
APEC region by at
least **25% by 2030**
Introduction of **PREE**

EMM9

**APEC EMM
in Fukui**

Launch of
PRLCE & LCMT
Continuation of
PREE & CEEDS

**APEC Leaders
Honolulu meeting**

APEC's aggregate
energy intensity
reduction goal of
45% by 2035

EMM10

**APEC EMM in
St. Petersburg**

Instruction on
improving the
response to oil and
gas emergency
situations (**OGSE**)

EMM11

**APEC EMM
in Beijing**

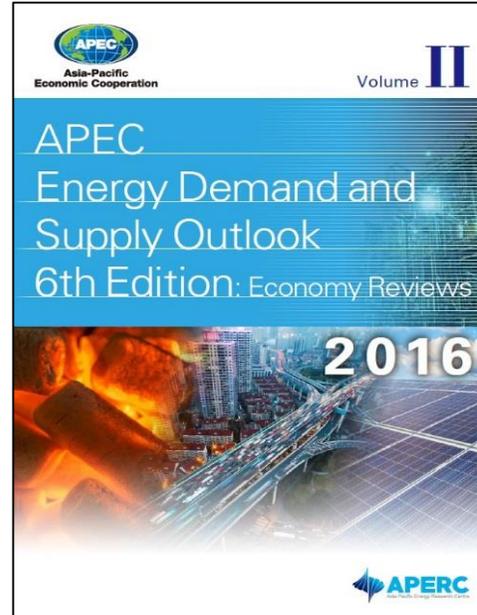
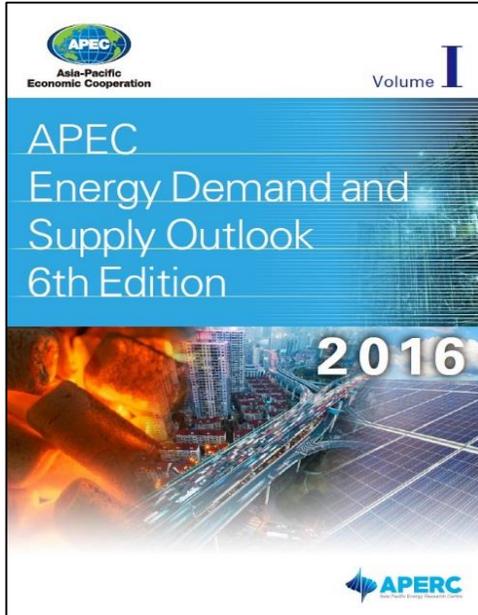
- Approval of **OGSI**
- Goal of **doubling**
the share of
renewables by 2030

EMM12

**APEC EMM
in Cebu**

- Instruction on enhancing
the **quality of electric
power infrastructure**
- Move **LCMT** to the
dissemination stage

The APEC Energy Demand and Supply Outlook



- The 'APEC Energy Demand and Supply Outlook' project is a priority task, published every 3-4 years.
- Two volumes: APEC as a region and individual economy reviews.
- The 6th edition was released in May 2016.

The 7th edition will be presented to EWG in May. Similar in structure to the 6th, but with expanded modelling and new scenarios.

APEC Energy Overview 2018



APEC ENERGY OVERVIEW

2017

Energy Overview focuses on supply, demand and policy

- Introduction
- Energy Supply and Demand
 - Primary Energy Supply
 - Final Energy Consumption
- Energy Intensity Analysis
- Policy Overview
 - Energy Policy Framework
 - Energy Markets
 - Energy Efficiency
 - Renewable Energy
 - Climate Change
- Notable Energy Developments
- References
- Useful Links

For more information visit: http://aperc.ieej.or.jp/publications/reports/energy_overview.php

APEC Peer Review on Energy Efficiency (PREE)

- focuses on the energy efficiency policies of a single economy
- the work is carried out by Review Team, which visits the economy and interviews a range of people knowledgeable on energy efficiency issues

Sections of a Report

- Overall / Institutional Context
- Energy Efficiency Goals, Targets and Strategy
- Energy Data Collection and monitoring
- Government and Buildings Sector
- Industrial Sector
- Transport Sector
- Electricity Sector
- Appliances and Equipment

No.	Economy	Publ'd	Recom-s
1	New Zealand	Apr 2009	22
2	Chile	Apr 2009	21
3	Viet Nam	Dec 2009	40
4	Thailand	Mar 2010	34
5	Chinese Taipei	Nov 2010	35
6	Peru	May 2011	51
7	Malaysia	May 2011	41
8	Indonesia	Jun 2012	49
9	Viet Nam (*)	Nov 2012	13+15
10	The Philippines	Nov 2012	54
11	Brunei Darussalam	Nov 2013	47
12	The Philippines (*)	Feb 2015	34
13	Thailand (*)	Feb 2016	48
14	Mexico	Oct 2017	46
15	Malaysia (*)	Nov 2018	56
16	Peru (*) (Mar '19)		
17	Russia (TBC)		

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

Note: (*) – Follow-Up PREE
Source: APERC website

APEC Low-Carbon Model Town (LCMT)

- ✓ combines energy-efficient buildings, transport and power systems to affordably reduce energy use and carbon emissions while creating pleasant living conditions of APEC communities;
- ✓ a part of APEC's Energy Smart Communities Initiative (ESCI);
- ✓ The new stage is LCMT Symposium

No.	Economy	Publ'd	Recom-s
1	Yujiapu CBD, Tianjin, China	Sep 2011	32
2	Koh Samui, Thailand	Jun 2013	82
3	Da Nang, Viet Nam	May 2014	75
4	San Borja, Lima, Peru	Jan 2016	50
5	Bitung, North Sulawesi, Indonesia	Jun 2016	64
6	Mandaue, Cebu, The Philippines	May 2017	52
7	Krasnoyarsk, Russia	Oct 2018	67

Sections of the 7th Report

- ✓ Town Structure
- ✓ Buildings
- ✓ Transportation
- ✓ Area Energy Systems & Multi-Energy Systems
- ✓ Untapped Energy
- ✓ Renewable Energy
- ✓ Building and Area Energy Management
- ✓ Greenery
- ✓ Water and Waste Management
- ✓ Pollution
- ✓ Policy Framework
- ✓ Education and Management

<https://aperc.ieej.or.jp/publications/reports/lcmt.html>

Source: APERC website

Peer Review on Low Carbon Energy Policies (PRLCE)

- ✓ Built on information-sharing concept,
- ✓ Focuses on low carbon energy supply,
- ✓ Work is carried out by a Review Team, which:
 - ❖ visits the host economy and
 - ❖ interviews representatives of government ministries, research institutes, industry associations, energy companies, electricity and gas market regulators, consumer associations, local government, and other relevant stakeholders

No.	Economy	Published	Recom-s
1	Thailand	Nov 2012	45
2	Indonesia	Nov 2013	49
3	The Philippines	Nov 2013	45
4	Malaysia	May 2014	52
5	Viet Nam	Aug 2016	66
6	PNG	Nov 2017	44

Sections of the 6th Report

- ✓ Overarching Findings
- ✓ Institutional context
- ✓ Renewable Energy Goals, targets and Strategy
- ✓ Regulation and Infrastructure
- ✓ Bioenergy – Biofuels, Biomass
- ✓ Hydropower and Ocean Energy
- ✓ Solar and PV
- ✓ Geothermal Energy
- ✓ Wind Energy
- ✓ Power Supply System, Smart Grid, Private Participation
- ✓ Greenhouse Gas Management

Source: APERC website

<https://aperc.iej.or.jp/publications/reports/prlce.php>

Training activities

APERC accepts energy modelling trainees from developing economies.

- Seminar in Tokyo on 5-13 November 2018.

Also dispatch experts to develop energy data and modelling capacities around the region.

- Workshops in FY 2017-19: Mexico, PNG, Peru, Indonesia (twice), Chinese Taipei and the Philippines.

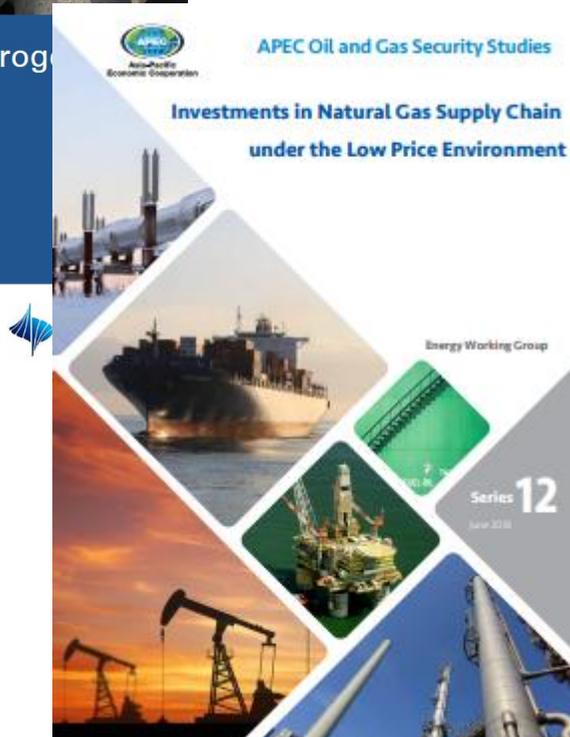
A course on 'Energy Issues in the Asia-Pacific Region' at Waseda University (Tokyo) was conducted from April 2016 to 2019. Recently, extended for three more years.

Topical research in 2017/8



Perspectives on Hydrogen in the APEC Region

June 2018
Asia Pacific Energy Research Centre



1. Perspectives on Hydrogen in the APEC Region
2. Oil and Gas Security Indexation 2017 Update
3. Energy Security of APEC Economies and Changing Downstream Oil Environment
4. APEC Oil and Gas Security Exercise in Peru
5. APERC Gas Report 2018
6. APERC Oil Report 2018
7. Investments in Natural Gas Supply Chain under the Low Price Environment



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

