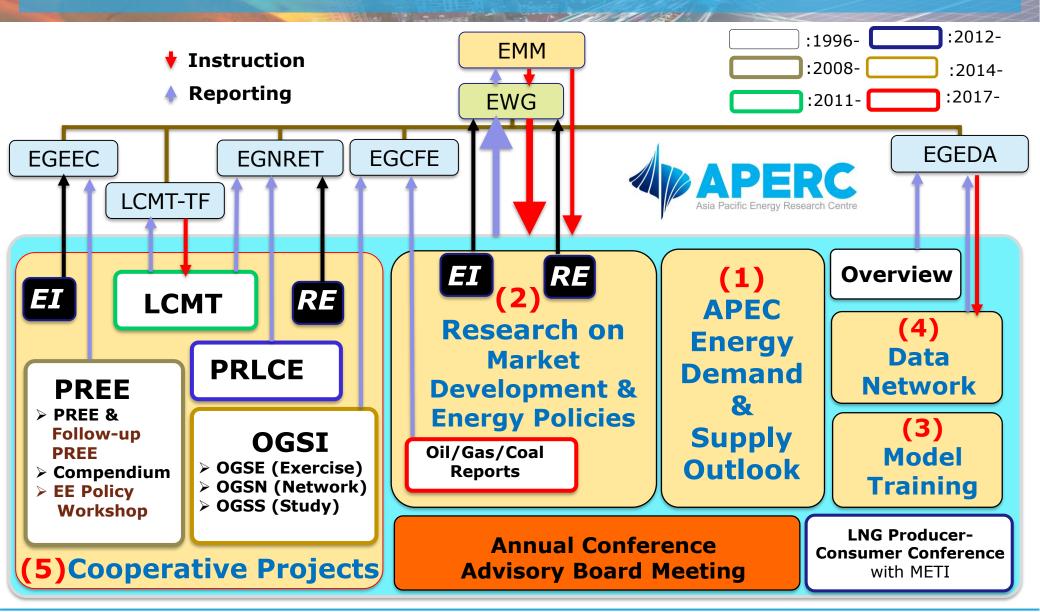






#### 6.a. (1) APERC Activities Overview





#### 6.a. (2) APERC Tasks and Activities in 2017

- Continue to meet the current acute needs of APEC member economies by choosing appropriate research themes including preparation for the 7<sup>th</sup> Edition of APEC Demand and Supply (D/S) Outlook <TOR (1)(2)>
- Explore win-win collaboration between APEC D/S Outlook exercise and APEC energy data network <TOR(4)>
- Accept trainees and dispatch experts through listening to real needs of each economy <TOR(3)>
- Directly assist APEC member economies with Cooperative Activities to achieve APEC's aggregate energy intensity reduction goal of 45% by 2035 and goal of doubling the share of renewables by 2030 <TOR(5)>
- Strengthen efforts into oil and gas security and continue to promote dissemination of low-carbon town development <TOR(5)>



## 6.a. (3) APEC Energy Demand & Supply Outlook

- The 'APEC Energy Demand and Supply Outlook' project is a priority task for APERC under the APEC Energy Action Programme adopted by leaders in 1995.
- The 7th edition is underway and builds on enhanced engagement with energy experts in economies initiated during 6<sup>th</sup> edition Outlook roadshow.
- Economy input: Valuable feedback received during assumptions review helped to improve APERC assumptions. Further feedback on preliminary results and text will be needed this year and next year.
- 3 Scenarios are planned: Business as Usual (current policies);
   APEC Target (combines Intensity Goal with Doubling RE Goal);
   Low Carbon Scenario (consistent with 2°C increase)
- Timeline: Nov 2017 Scenario results for economy review; Aug-Oct 2018 EWG and expert review of publication; April 2019 publication release at EWG 57



#### 6.a. (4) APEC Energy Overview

- The 'APEC Energy Overview' series started in 2000 with the approval of EWG19, in order to help policymakers to share useful information and deepen understanding on energy issues in the APEC region.
- The Overview is an annual publication, which contains updated energy demand/supply data as well as descriptions of energy policy and 'Notable Energy Developments'.
- In 2014, "Energy Intensity Analysis" on year-on-year progress for each economy was included as agreed by EGEDA.
- The 2016 Edition was published in May 2017 and is available at: <a href="http://aperc.ieej.or.jp/publications/reports/energy\_overview.php">http://aperc.ieej.or.jp/publications/reports/energy\_overview.php</a>
- In response to the EGNRET request to monitor RE share development, "RE Share Analysis" may also be included in the Overview 2017 edition.
- \* APERC appreciates the contributions and assistance by EWG and EGEDA members.



## 6.a. (5) Trainees and Experts



 APERC accepts energy modelling trainees from developing economies.
 A seminar in Tokyo was held

on 24-28 July 2017

- APERC also dispatches experts to help develop energy data and prepare energy demand and supply outlooks while enhancing 'energy literacy' of future leaders in the APEC region.
  - 4 workshops were held in Mexico, Papua New Guinea, Peru and Indonesia in 2017
  - A cooperation course on 'Energy Issues in the Asia-Pacific Region' at Waseda University, Japan is now in the second year.





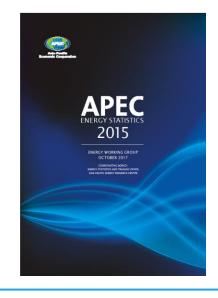
### 6.a. (6) APEC Energy Data Management Networks [ ⇒ 10.a.]

- EGEDA Training Program on Energy Statistics is now on its fourth year.
  - Short-term training was held on 12-23 June 2017.
  - Middle-term training was held from
     4 September to 27 October 2017.



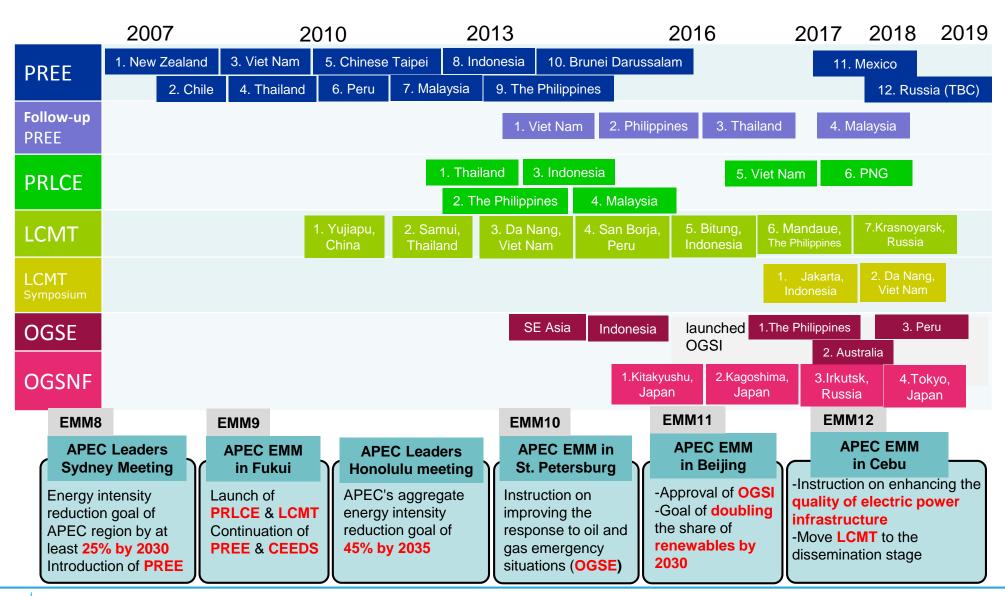


- The 29<sup>th</sup> EGEDA Meeting was held in Canberra, Australia, on 7-9
   November 2017.
- APEC Energy Statistics 2015 and APEC Energy Handbook 2015 were published in October 2017.





#### 6.a. (7) Cooperative Activities





#### (1) Peer Review on Energy Efficiency (PREE) [⇒11.b.]

- ✓PREE: Phase-6
- ✓ Economy: Mexico
- √Venue: Holiday Inn Mexico City
- ✓ Schedule: 6-10 May 2017
- √Focus: Energy Efficiency Policies in general
- ✓ Mexico Participants: 31, Ministry of Energy, CONUE, FIDE, CENACE
- ✓ Recommendations:46
- ✓ Experts: 6
- -Mr. Borwornpong Sunipasa (THA)
- -Dr. Zhang Shicong (China)
- -Mr. Pramesh Maharaj (NZ)
- -Ms. Elizabeth Yeaman (NZ)
- -Mr. Graham Parker (USA)
- -Dr. Ming-Shan Jeng (CT)
- ✓ Secretariat: 4
- Mr. Takato Ojimi
- Dr. Kazutomo Irie
- Ms. Elvira Torres Gelindon
- Mr. Diego Rivera Rivota



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#### Recommendations made in PREE 11 in Mexico in March 2017

Institutional Context	<b>Recommendation 1</b> : SENER and CONUEE should continue keeping communication and coordination among them, not only for the successful implementation by CONUEE of SENER-designed energy efficiency policies, but also for getting feedback from CONUEE's experience to SENER's policy designing.
Energy Efficiency Goals, Targets, and Strategy	<b>Recommendation 5</b> : The government should continue to have energy efficiency as a priority in its energy policy and make sure that the committed targets are achieved.
Energy Data Collection and Monitoring	<b>Recommendation 11</b> : Enhance cooperation with relevant actors in conducting household energy consumption surveys.
Policy Measure – Government and Buildings Sectors	<b>Recommendation 17</b> : Consider a stronger energy demand growth in the buildings sector due to a rise on people's living standards.
Policy Measure – Industrial Sector	<b>Recommendation 22</b> : The government should continue expanding the Learning Network approach for large energy users.
Policy Measure – Transport Sector	<b>Recommendation 29</b> : Push for greater coordination around transport planning and energy efficiency between all levels of government.
Policy Measure – Electricity Sector	Recommendation 34: Establish energy efficiency Public Benefits funds program.
Policy Measure – Appliances and Equipment	Recommendation 40: Benchmark energy efficiency standards with other APEC economies.



# (2) Peer Review on Low Carbon Energy Policies (PRLCE) [⇒12.b.]

- ✓ PRLCE: Phase-4
- ✓ Economy: Papua New Guinea
- ✓ Venue: Crowne Plaza Port Moresby
- ✓ Schedule: 1-4 August 2017
- ✓ Focus: Hydro Power Resources
- ✓ PNG Participants: 23, Dept. of petroleum and Energy, Climate Change Dev. Authority, PNG Power Ltd. etc.
- ✓ Recommendations:44
- ✓ Experts: 7
- Dr. Dennis Y.C. Leung (HKC)
- Mr. Faisal Rahadian (INA)
- Mr. David Rohan (NZ)
- Mr. Andresito Ulgado (RP)
- Dr. Fu-Ming Lin (CT)
- Dr. Nuwong Chollacoop(THA)
- Mr. Stephen C. Walls (US)

- ✓ Secretariat(APERC): 4
- Mr. Takato Ojimi
- Dr. Kazutomo Irie
- Ms. Elvira Torres Gelindon
- Ms. Lay Hui Teo



#### **Recommendations made in PRLCE for Papua New Guinea**

Overarching Findings	Recommendation 1: Conduct survey.								
Institutional Context	Recommendation 8: Ensure sufficient human resources to drive energy policies.								
Renewable Energy Goals, Targets and Strategy	<b>Recommendation 14</b> : PNG should focus attention and resources on a near-term action plan to develop the lowest cost renewable resource available near load centres.								
Regulation and Infrastructure	<b>Recommendation 17</b> : PNG should rely on internationally-recognised standards when establishing new regulations covering the performance of technology.								
Bioenergy - Biofuels, Biomass	<b>Recommendation 21</b> : Take best practices from other APEC economies regarding biofuel implementation.								
Hydropower and Ocean Energy	<b>Recommendation 22</b> : Enact a law that provides policy direction and incentives on developing hydropower and ocean resources.								
Solar PV	<b>Recommendation 23</b> : Establish solar energy demonstration projects at school campuses.								
Geothermal Energy	<b>Recommendation 25</b> : Enact a law that provides policy direction and incentives on developing geothermal energy resources.								
Wind Energy	Recommendation 26: Early planning of wind turbines installation								
Power Supply System, Smart Grid, Private Participation	<b>Recommendation 32</b> : The investment focus should move from individual 'least-cost generation projects' to a 'least-cost generation portfolio' approach.								
Greenhouse Gas Management	<b>Recommendation 37</b> : Expedite the implementation of National Climate Change Policy, and formulation of National Energy Policy (NEP).								



#### **Low-Carbon Model Town (LCMT)** [⇒7.b.]

- ✓ Phase 7:
- > LCMT 7 in Krasnoyarsk, Russia in 2017
  - -Feasibility Study for Krasnoyarsk is underway
  - -Policy Review for Krasnoyarsk will be conducted on 5-7 December 2017.
- The 1<sup>st</sup> LCMT Symposium was held on 14-15 September in Jakarta, Indonesia
- ✓ Dissemination Phase 1
  - -The 2<sup>nd</sup> LCMT Symposium is planned to be held in September 2018 in Da Nang, Viet Nam (case town of the LCMT Phase 3)



✓ Dissemination Phase 2 (Concept Note was submitted to Session 1, 2018)



### 4.a. (8) Oil and Gas Security Initiative [ ⇒ 13.c.]

#### Oil and Gas Security Exercise (OGSE)

- ✓ OGSI:2017
- ✓ Economy: Australia (Indonesia, the Philippines, Thailand)
- ✓ Venue: Novotel Melbourne
- ✓ Schedule: 29-31 March 2017
- ✓ Focus: A regional Capacity Building
- ✓ Participants: Australia;8 Dept. of Environment and Eenrgy, etc.

Indonesa; 3 National Energy council, Ministry of Energy

and Minerl rsouces

the Philippines; 2 Department of Energy

Thailand: 2 Ministry of Enrgy, etc.

- ✓ Recommendations:65
- ✓ Experts: 7
- Ms. Dagmar Graczyk (IEA)
- Dr. Phoumin Han (ERIA)
- Mr. Christopher Zamora (ACE) Mr. Michael Sinocruz
- Mr. Jun Okunishi (METI, Japan) •
- Mr. Doug MacIntyre (DOE, US)
- Dr. Ken Koyama (IEEJ)
- Ms. Robyn Casey (DOEE, Australia)

✓ Secretariat(APERC): 4

- Mr. Takato Ojimi
- Dr. Kazutomo Irie
- - Ms. Fang Chia Lee





## 4.a. (8) Oil and Gas Security Initiative [ ⇒ 13.c.]

#### Oil and Gas Security Exercise in Australia

- One common oil emergency scenario and three gas emergency scenarios one each for participating economies based on individual domestic gas situation were provided
- The team made some common observations and/or recommendations, such as:
  - ➤ Continue testing existing emergency policies, instruments and institutional setups, and revise them (if necessary) to reflect national, regional and global developments
  - ➤ Consider a policy on floating price mechanism for "business-as-usual" and supply emergency situation to support faster market response and resolution of the supply shortfall
  - ➤ Build capacities of all the agencies involved by sharing and reviewing actual fuel and gas supplyrelated emergency responses
  - > Undertake studies by Indonesia, the Philippines and Thailand on maritime oil supply routes and shipping arrangements in the event of supply emergency scenario
  - > Develop better-integrated domestic and international gas markets through government policies that support market transparency and supply flexibility
  - > Develop a more accurate modelling on gas infrastructure and surge capability since disruption in gas market has an impact on electricity supply
  - ➤ Ensure adequate infrastructure and the need to finance such to meet future demand. This should be linked to medium- to long-term planning exercises
  - > Assess demand elasticity and the economic and financial cost of an emergency



#### 6.a. (9) APERC Research Staff

### APERC has 29 research staff, 6 of whom joined APERC since EWG53

- Takato Ojimi (President)
- James Michael Kendell (Vice President)\*
- Kazutomo Irie (General Manager)
- Melissa Christenberry Lott (Assistant Vice President)\*
- Kaoru Yamaguchi
- Edito Barcelona
- Cho Yee IP\*
- Ruengsak Thitiratsakul\*
- Goichi Komori
- Elvira Torres Gelindon
- Michael Ochoada Sinocruz\*
- Choong Jong Oh\*
- Yusuke Kimura
- Martin M. Brown-Santirso\*

- Takashi Otsuki
- Muhamad Izham ABD. Shukor\*
  - Alexey Kabalinskiy\*
  - Atikah Ismail\*
  - Fang-Chia Lee\*
  - Kirsten Nicole Smith\*
  - Yuko Tanaka
  - Nguyen Linh Dan\*
  - Diego Rivera Rivota\*
  - Thomas Willcock\*
  - Lay Hui Teo\*
  - Gigih Udi Atmo\*
  - Yilin Wang\*
  - Juan Ignacio Alarcon\*
  - Takako Hannon
  - \*19 visiting researchers



## 6.a. (10) APERC Budget

Unit million ven

Fiscal Year	1996 9mns	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017 (plan)
Revenue from: Japanese Government Australian Government	374	626	681	729	619	634	594	547	525 8	528 8	498	446	447	418	409	425	494	580	657	653	689	665
Total of Revenue	374	626	681	729	619	634	594	547	533	536	506	446	447	418	409	425	494	580	657	653	689	665
Expenses:  Energy Efficiency / APEC Energy  Demand & Supply Outlook /  Related Research Programmes	227	443	494	550	455	469	434	390	379	377	377	338	339	318	315	308	325	325	432	501	522	470
Oil & Gas Security  Know-How Transfer Programmes  Energy Data Network Service	54 93	65 118	65 122	58 121	58 106	60 105	53 107	59 98	53 101	46 113	41 88	31 77	28 79	20 80	17 77	14 80	24 62	107 21 47	68 32 68	183 27 70	124 27 64	137 10 87
Total of Expenses	374	626	681	729	619	634	594	547	533	536	506	446	447	418	409	402	411	500	600	781	737	704





## Thank you for your kind attention

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

