

2017/EWG54/020 Agenda Item: 12b

#### Peer Review on Low-Carbon Energy Policies

Purpose: Information Submitted by: APERC



54<sup>th</sup> Energy Working Group Meeting Wellington, New Zealand 22-23 November 2017

# The 54th Meeting of APEC Energy Working Group (EWG) Wellington, New Zealand, 22-23 November, 2017 **12.b. Peer Review on Low-Carbon Energy Policies (PRLCE)**

Takato OJIMI President, APERC





#### **12.b. (1) Introduction of PRLCE**

## **PRLCE** is designed to:

- > promote low-carbon energy policies on supply side like PREE on demand side;
- Promote low-emission power sources such as renewable energy, nuclear and fossil fuel with CCS; and
- > provide recommendations for the host economy.



#### **12.b. (2) Progress of PRLCE**

- Phase 1 (2012-2013): Thailand, the Philippines
- Phase 2 (2013-2014): Indonesia, Malaysia
- Phase 3 (2014-2016): Viet Nam
- Phase 4 (2017-2018): Papua New Guinea



The Peer Review Report is available at:

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



### 12.b. (3) PRLCE in PNG

- Conducted on 1-4 August 2017 with focus on hydropower resources
- 23 participants from PNG (Dept. of Petroleum and Energy, Climate Change Development Authority, New Britain Palm Oil Ltd., PNG Power Ltd., World Bank, etc.) and 7 experts attended.
- Some of the highlights include:
  - PNG has set an ambitious renewable energy goal of 100% by 2050; an intermediary target of serving all new load with renewable energy by 2030 and to enable 70% of its population access to electricity by 2030;
  - > PNG faces several challenges to achieve the goals; and
  - > Reach in RE sources but mostly are still not developed.
- Final draft report is still undergoing the usual EWG process of approval



#### 12.b. (3) PRLCE in PNG (cont'd)

- The peer review team came up with 44 recommendations (TBC).
- The draft report was sent to the host for endorsement in October 2017.

	Peer-review Contents	Leading Review Expert	Number of Recommendations
Review Team Leader		Mr. Takato Ojimi (APERC)	
1	Overarching Findings	Ms. Elvira Torres Gelindon (APERC)	7
2	Institutional Context	Dr. Kazutomo Irie (APERC) Ms. Lay Hui Teo (APERC)	6
3	Renewable Energy Goals, Targets and Strategy	Mr. Stephen C. Walls (USA)	3
4	Regulation and Infrastructure		4
5	Bioenergy - Biofuels, Biomass	Dr. Nuwong Chollacoop (THA)	1
6	Hydropower and Ocean Energy	Mr. Faisal Rahadian (INA) Mr. Andresito Ulgado (RP)	1
7	Solar PV	Dr. Fu-Ming Lin (CT)	2
8	Geothermal Energy	Mr. Andresito Ulgado (RP)	1
9	Wind Energy	Dr. Dennis Y.C. Leung (HKC)	6
10	Power Supply System, Smart Grid, Private Participation	Mr. David Rohan (NZ)	5
11	Greenhouse Gas Management	Dr. Dennis Y.C. Leung (HKC)	8
	Total		44



### 12.b. (3) PRLCE in PNG (cont'd)

#### Recommendations made by the peer review team are (TBC):

<b>Overarching Findings</b>	Recommendation 1: Conduct survey.		
Institutional Context	<b>Recommendation 8</b> : 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).		



### 12.b. (4) Future Plan of PRLCE

- The importance of PRLCE is increasing in relation to the APEC's aspirational goal of doubling the share of renewables in the APEC energy mix.
- APERC welcomes all eligible economies to volunteer hosting future PRLCE. If interested, please contact: <u>master@aperc.ieej.or.jp</u>.





# Thank you for your kind attention

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