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The Development of Peer Review on Low-Carbon Energy Policy (PRLCE) in APEC

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É Introduction

- É Mechanism for Peer Review of Low Carbon Energy Supply (PRLCE)
- É Progress of PRLCE Phase 1
- É Work Plan on PRLCE Phase 2
- É Option for future PRLCE
- É Conclusion



APERC's Cooperative Activities

- É APERC¢s Cooperative Activities can be defined as õAPERC¢s activities to directly cooperate with the APEC member economies in solving their energy problems or improving their energy situationö.
 - see APERCøs APEC Energy Demand and Supply Outlook
- É The major methods of APERCøs Cooperative Activities are peer reviews and workshops.
- Peer reviews: Experts, mainly from the APEC region, visit a host economy to review its energy situation and policies, and make recommendations for the host economy.
- Workshops: Experts from both within and outside of the APEC region give presentations to delegates from APEC member economies and work with them to share information necessary for policy planning.
- É APERCøs Cooperative Activities started in 2008; The first activity was the Peer review on Energy Efficiency (PREE) for New Zealand.



Declaration of PRLCE

APEC Energy Ministers' 2010 Fukui Declaration:

õWe commend the **Peer Review on Energy Efficiency** (**PREE**) which has been successfully carried out for four APEC economies and urge additional economies to participateö.

õWe instruct the EWG to explore *mechanisms* to encourage economies to set **individual goals** and **action plans** for introducing *low-emission power sources* - renewable, nuclear and fossil fuels with carbon capture and storage (CCS) - to make our energy supply cleaner. We will create *low-carbon communities* in the regionö.



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Objectives of PRLCE

- Assist volunteer APEC economies to promote low-emission power sources by providing recommendations from APEC peer review experts.
- Share experiences and knowledge on best practices for efficient and effective policies to promote **low emission supplies** (such as renewable energies) in developing APEC economies, and to determine how to adapt policies and measures which have been successful elsewhere to the unique conditions of each economy;
- Encourage developing APEC economies to set individual goals on power supply from low emission sources (such as renewable energies), and to formulate action plans to achieve the goals;



Process of PRLCE

Stage	Activity	Responsibility
1	EWG endorses the host economy volunteering for Peer Review	EWG
2	Economy prepares for and submits to APERC pre-briefing information within one month	Economy
3	APERC PRLCE Manager and economy representative plan Peer Review using Peer Review guidelines	Economy and APERC
4	Peer Review team proposed and contacted	Economy and APERC
5	Peer Review team confirmed	Economy and APERC
6	Economy plans visit in discussion with APERC	Economy and APERC
7	Economy and APERC confirm review team and visit program. APERC with Review team may submit specific questions / data requirement to host economies. APERC request for briefing information	Economy and APERC Review Team
8	Economy provides the answers for the specific questions and information to review team	Economy
9	Review visit to economy	Review Team, Economy and APERC
10	Draft Review Report finalized	Review Team and Economy
11	Final draft report signed off by economy	Economy
12	Economy provides Draft Peer Review Report to EWG	Economy
13	Economy and EWG Secretariat tables the final draft review report at EWG for its discussion and approval	Economy and EWG Secretariat



Main Roles and Responsibilities of Stakeholders

Host Economy

- Plan review process
- Prepare Documents for Review
- Arrange logistic needs
- Assess the preliminary and the draft final report

APERC

- Coordinate the review team formation with the host economy
- Coordinate the draft final report preparation with Host Economy
- Prepare the guidelines for PRLCE

Review Team

- Conduct the review
- Present findings and recommendations in the preliminary report
- Prepare the draft final report

EWG

- Discuss and Endorse the draft final report
- Report to APEC Senior Officials

cf. %Guideline on APEC Peer Review on Low-Carbon Energy Supply (PRLCE)+



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PRLCE Phase 1 PRLCE-1 Thailand PRLCE-2 Philippines Indonesia



PRLCE-1 in Thailand (Outline)

- ➤ Thailand hosted the first PRLCE-1 on 21~25 May 2012 with the focus on Alternative Energy Development Plan (2008-2022) (ADEP) on Solar, Wind, Biomass, Biogas and other renewable energy.
- ➤ The review team consisted of 7 experts (from China, Japan, Malaysia, Chinese Taipei, USA, Viet Nam, IRENA) and 3 APERC Researchers.
- The review team experts have provided 45 *policy* recommendations.



PRLCE-1 in Thailand (Framework of AEDP)



New Energy Type (Wave, Geothermal) 3MW Alternative Energy Development Plan (2008 – 2022) (AEDP)

Biofuel

Oil Substitution 44%

Alternative Energy Consumption by 25% within 2021

Solar Wind 3,200MW Hydro

1,608MW

Bio Energy

4,390MW



PRLCE-2 in the Philippines (Outline)

- ➤ The Philippines hosted the second PRLCE-2 on 19~23 November 2012 with the focus on National Renewable Energy Program (2011-2030) (including the Feed-in Tariff system for renewable energy).
- The review team consisted of 6 experts (from China, Japan, Malaysia, New Zealand, Thailand, IRENA) and 3 APERC Researchers. The review team experts have drafted policy recommendations.
- ➤ The first draft of Review Report for the 2nd PRLCE in the Philippines was compiled and reviewed by the Philippines Government.
- The final draft will be tabled for the endorsement of EWG46 at Da Nang, Viet Nam in November.



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PRLCE Phase 2

- ➤ Indonesia hosted the first PRLCE-3 on 13~17 May 2013 with the focus on Renewable Energy.
- The review team consisted of 5 experts (from China, Japan, Malaysia, Thailand, USA) and 3 APERC Researchers.
- The first draft of Review Report for the PRLCE-3 in Indonesia was compiled and now under review by the Indonesia Government.
- ➤ The Review Report will be presented at High Level Meeting on Renewable Energy at Bali, Indonesia in October for offering the endorsement of EWG through correspondence.
- ➤ One more economy (Malaysia) is currently invited to volunteer to host PRLCE-4.



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Possible Option for future PRLCE

É Compared with PREE (for all economies), given the resource constraints of APERC and recognizing the smaller number of potential host economies (only developing economies), it may be necessary to reduce the number of PRLCE peer reviews per year.

Example:

Two PRLCEs in 2012 and 2013

One PRLCE after 2014



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Conclusion (1/2)

- É Increase in energy consumption and fast economic growth in the APEC region needs a more aggressive approach and efforts for the development and application of low carbon energy.
- É Host economy and other APEC economies can share experiences and knowledge on best practices for efficient and effective policies to promote low carbon power supplies (such as renewable energy), including how to adapt policies and measures/technologies which have been successful elsewhere to the unique conditions of each economy.



Conclusion (2/2)

ÉValuable recommendations on how to improve low carbon energy policies can be gained for host economy.

ÉAPERC will always bring the system integration concept to act as the coordinator to push forward the sustainability development in APEC Region with the cooperation of each country in this region and instruction of APEC Leaders.



Thank you for your kind attention

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