Progress on APEC Peer Review on Low-Carbon Energy Supply (PRLCE)

APEC EWG42 and related meetings – 17-21 October 2011
Chinese Taipei

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Asia Pacific Energy Research Centre
1. Introduction
   - Message from APEC Leaders & Energy Ministers

2. Overview of PRLCE
   - Purpose of PRLCE & PREE
   - Possible Scope for PRLCE
   - Principles/ Criteria of PRLCE
   - Current Status of PRLCE

3. Conclusion Remarks
   - Future plans
   - Participation invitation
APEC Energy Ministers’ 2007 Darwin Declaration:

“We directed the APEC Energy Working Group (EWG) to develop a Voluntary Energy Peer Review Mechanism, with an initial focus on progress toward attaining energy efficiency goals”

APEC Leaders’ 2007 Sydney Declaration:

“We agreed on the two specific initiatives: 1) to facilitate and review progress through voluntary APEC Energy Peer Review Mechanism, with a report back to APEC Leaders; and 2) to work towards achieving an APEC-wide goal of a reduction in energy intensity of at least 25 percent by 2030 (with 2005 as the base year)”
Peer Review Mechanisms for Low-Carbon Energy Supply

APEC Energy Ministers’ 2010 Fukui Declaration:

“We commend the Peer Review on Energy Efficiency (PREE) which has been successfully carried out for four APEC economies and urge additional economies to participate”.

“We 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 region”.

Summary of PRLCE, PREE & CEEDS

- **APEC Leaders meeting**
  - **2007**: Declaration to reduce energy intensity of APEC region by at least 25% by 2030
  - Introduction of Peer Review Mechanism

- **PREE**
  - **2009**: PREE-1 New Zealand
  - **2010**: PREE-2 Chile, PREE-3 Viet Nam, PREE-4 Thailand, PREE-5 Chinese Taipei
  - **2011**: PREE-6 Peru, PREE-7 Malaysia, PREE-8 Indonesia
  - **2012**: PREE-9 Philippines
  - **2013**: PREE-6 Peru

- **CEEDS**
  - **2010**: CEEDS Phase 1 Japan, CEEDS Phase 2 Hong Kong
  - **2011**: CEEDS Phase 2 Thailand
  - **2012**: CEEDS Phase 3 Singapore
  - **2013**: CEEDS Phase 3 USA

- **PRLCE**
  - **2010**: PRLCE-1 Malaysia, PRLCE-2 Chile
  - **2011**: PRLCE-2 Chile, PRLCE-3 Viet Nam, PRLCE-4 Thailand
  - **2012**: PRLCE-5 Chinese Taipei
  - **2013**: PRLCE-6 Peru, PRLCE-7 Malaysia, PRLCE-8 Indonesia, PRLCE-9 Philippines

- **EMM9**
  - **2007**: APERC reported progress on peer review mechanism

- **Follow Up PREE**
  - **2013**: Follow Up PREE Viet Nam
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Purpose and Main Objectives

Purpose:
To assist volunteer APEC economy to promote low-emission power sources by providing recommendations from APEC peer review experts.

Main Objectives:
- Share experiences and knowledge on best practices for efficient and effective policies to promote low carbon power supplies (such as renewable energy) in developing APEC economies, and 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 carbon sources (such as renewable energy), and to formulate action plans to achieve the goals;
Other Objectives..

- Explore how government can create effective and efficient low-carbon/low-emission energy policies and can accelerate their implementations.
- Identify effective policies to encourage technological innovations and promote large-scale commercialization.
- Provide recommendations on how implementation of action plans could be improved with a view to achieving the goals and to overcome impediments in the current plan.
- Explore ways that cooperative efforts among the APEC economies could assist in achieving these objectives.
Possible Scope for PRLCE

(1) Appropriate/effective goal-setting and action plans on low-carbon, low-emission power sources e.g. renewable energy.
(2) Appropriate policies on feed-in tariffs / RPS to promote RE.
(3) RE financing (e.g. fiscal incentives such as tax exemptions or investment grants).
(4) Well-designed policies/ regulatory framework to encourage entrepreneurial innovation in promoting RE.
(5) Efficient policies to overcome non-economic barriers at various stages of RE development and deployment.
(6) Effective RD&D policy to promote RE.
(7) Carbon pricing policies (e.g. emission trading / carbon tax)
(8) More comprehensive policy design to encourage low-carbon communities in APEC Low-Carbon Model Town Project.

Depend upon condition and circumstance of individual economy
Principles of PRLCE

- Recognize and be responsive to the context for Low-Carbon Energy Supply in the host economy;
- Review the host economy's Low-Carbon Energy Supply policy framework;
- Review strategic Low-Carbon Energy Supply programs;
- Review the effectiveness of delivery activity strategy;
- Review the analytical processes used to evaluate options and monitor progress; and
- Highlight and acknowledge progress
- Highlight areas for development and make practical suggestions;
- Seek to identify effective policies, best practices and high performance programs e.g. for RE promotion in volunteer economy.
Criteria of PRLCE

- Does APEC member economy have individual goals on power supply from low-emission power sources? Are they measurable and verifiable?
- If measurable and verifiable individual goals on power supply from low-emission power sources have been set, is the APEC member economy envisaging reasonable efforts for exploring the potential for future improvement in Low-Carbon Energy Supply?
- Does APEC member economy have Low-Carbon Energy Supply action plans? If so, do they contain concrete policies and measures for achieving their objectives?
- Does APEC Member economy have a broader suite of regulatory and/or market-based responses (e.g., domestic emissions trading) which could encourage Low-Carbon Energy Supply improvement?
- Are the action plans being appropriately implemented and backed by sufficient financial and human resources?
Are there any inconsistencies among policies and measures, for example, spending a lot of government resources for improving Low-Carbon Energy Supply while subsidizing energy prices?

What are the roles of the government and the private sector for pursuing Low-Carbon Energy Supply? What kind of public-private partnership (or cooperation) is occurring?

Is the government monitoring the effectiveness of its Low-Carbon Energy Supply policies and measures?

Is the APEC member economy on the right track towards achieving its own Low-Carbon Energy Supply goals?

If not, what options for implementation are available that are relevant to the chosen Low-Carbon Energy Supply strategy and that reflect the individual circumstances of the member economy being reviewed?
Activities of PRLCE

Activities
1) Invite APEC economy to voluntarily host the Peer Review
2) Define scope of review
3) Review team establishment – set up APEC expert team
4) Prepare background information on RE policies of the host economy
5) Review team visit
6) Draft review report with recommendations

Expected Outcomes
1) Discussion on review report and endorsement of the report with recommendations at EWG meeting
2) Publication
   - APERC website (http://www.ieej.or.jp/aperc) with link to APEC website

The participation by experts from each economy and APEC expert groups is the great key of success.
## Process of PRLCE

<table>
<thead>
<tr>
<th>Stage</th>
<th>Activity</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>1</td>
<td>EWG endorses the host economy volunteering for Peer Review</td>
<td>EWG</td>
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<tr>
<td>2</td>
<td>Economy prepares for and submits to APERC pre-briefing information within one month</td>
<td>Economy</td>
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<tr>
<td>3</td>
<td>APERC PRLCE Manager and economy representative plan Peer Review using Peer Review guidelines</td>
<td>Economy and APERC</td>
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<tr>
<td>4</td>
<td>Peer Review team proposed and contacted</td>
<td>Economy and APERC</td>
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<td>5</td>
<td>Peer Review team confirmed</td>
<td>Economy and APERC</td>
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<tr>
<td>6</td>
<td>Economy plans visit in discussion with APERC</td>
<td>Economy and APERC</td>
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<tr>
<td>7</td>
<td>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</td>
<td>Economy and APERC Review Team</td>
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<tr>
<td>8</td>
<td>Economy provides the answers for the specific questions and information to review team</td>
<td>Economy</td>
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<tr>
<td>9</td>
<td>Review visit to economy</td>
<td>Review Team, Economy and APERC</td>
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<td>10</td>
<td>Draft Review Report finalized</td>
<td>Review Team and Economy</td>
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<td>11</td>
<td>Final draft report signed off by economy</td>
<td>Economy</td>
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<tr>
<td>12</td>
<td>Economy provides Draft Peer Review Report to EWG</td>
<td>Economy</td>
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<tr>
<td>13</td>
<td>Economy and EWG Secretariat tables the final draft review report at EWG for its discussion and approval</td>
<td>Economy and EWG Secretariat</td>
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# Main Roles and Responsibilities of Stakeholders

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<tr>
<th><strong>Host Economy</strong></th>
<th><strong>Review Team</strong></th>
<th><strong>EWG</strong></th>
<th><strong>APERC</strong></th>
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<tbody>
<tr>
<td>• Plan review process</td>
<td>• Conduct the review</td>
<td>• Discuss and Endorse the draft final report</td>
<td>• Coordinate the review team formation with the host economy</td>
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<tr>
<td>• Prepare Documents for Review</td>
<td>• Present findings and recommendations in the preliminary report</td>
<td>• Report to APEC Senior Officials</td>
<td>• Coordinate the draft final report preparation with Host Economy</td>
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<tr>
<td>• Arrange logistic needs</td>
<td>• Prepare the draft final report</td>
<td></td>
<td>• Prepare the guidelines for PRLC</td>
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<tr>
<td>• Assess the preliminary and the draft final report</td>
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Value for Host Economy & APEC

• 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.
• Gain valuable recommendations on how to improve low carbon energy policies for host economy.
• Encourage developing APEC economies to set individual goals on power supply from low carbon energy resources and to formulate action plans to support the sustainability of APEC Region.
• Contribute to the increasing of power production by low carbon energy and reduction of CO₂ emissions in APEC Region.
Current Status of PRLCE Phase I

The proposal was approved and get the fund from APEC Support Fund

The guideline for “APEC Peer Review on Low-Carbon Energy Supply” was approved

Two economies has expressed their interesting to host the event.

• Malaysia expect to host PRLCE in the March of 2012 with the focus on “National Renewable Energy Policy and Action Plan” (tentative);

• Thailand expect to host PRLCE in May or June of 2012 with the focus “Alternative Energy Development Plan (2008 – 2022) on Solar, Wind, Biomass and Biogas” (tentative)
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Future Plans

PRLCE Phase 1 and 2

• The PRLCE Phase 1 will put its initial focus on renewable energy power supply.
• Two economies, Malaysia and Thailand, have already expressed their interesting in host PRLCEs with focus on Renewable Energy in the first half of 2012.
• The PRLCE Phase 2 will try to expand the scope to cover the application of low-carbon technology.
• **APEC Funding is expected to be available for two additional economies to host Peer Review on Low-Carbon Energy Supply Phase 2 in late 2012-early 2013.**
Your Economy is invited to host Future PRLCE to enable APEC economies to share experiences and knowledge, and learn “high–performance” strategies from their peers by setting goals, formulating action plans, and improving the effectiveness of current policies in promoting LCES (e.g. RE) development, as well as providing useful recommendations for voluntary LCES (e.g. RE) implementations towards a more secure and sustainable energy future for APEC.”

The participation by experts from each economy and APEC expert groups is the important key to success.
Thank you for your kind attention

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