

Overview of APERC Activities

Progress & 2011 Work Plan on PREE, CEEDS, PRLCE and LCMT

Kenji Kobayashi, President, APERC

EGNRET/EGEEC Joint Meeting

36th EGNRET Meeting

37th EGEEC Meeting

Washington D. C., USA, 28 February, 2011



Asia-Pacific
Economic Cooperation



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1-1 Background of “APEC Peer Review Mechanisms”

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**, ; 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)”

“We call for responsive actions to promote the deployment of **low-carbon energies** including renewables, CCS, nuclear and cleaner use of fossil energy”.



1-2 Background of PREE and CEEDS

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 and APERC to **keep promoting energy efficiency through** the Peer Review on Energy Efficiency (**PREE**) and the Cooperative Energy Efficiency Design for Sustainability (**CEEDS**), and to consider **follow up efforts** including capacity building activities, policy research support and processes to gauge the success of member economies' efforts to implement the recommendations of these programs”.



1-3 Background of PRLCE and LCMT

APEC Energy Ministers' 2010 Fukui Declaration:

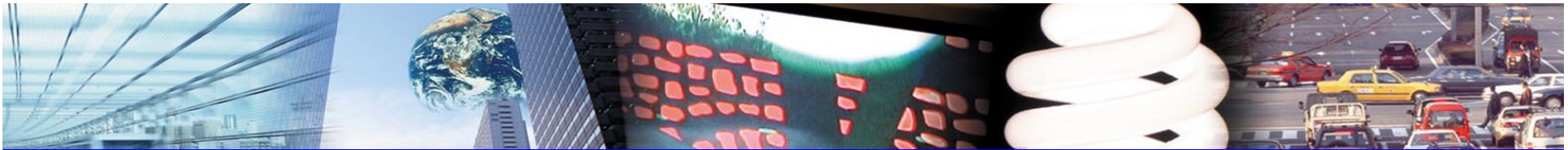
“We instruct the EWG to explore **mechanisms to encourage economies to set individual goals and action plans for introducing low-emission power sources**, with assistance from APERC and relevant technology expert groups”.

“We have therefore launched an **“APEC Low-Carbon Model Town (LCMT) Project”** to present successful models for coordinated usage of advanced low-carbon technologies.”

APEC Leaders' 2010 Yokohama Declaration:

“We will promote the deployment of **low-emission power sources – renewables, 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.”



2-1 Progress on PREE in Volunteer Economies

“Value-added” to volunteer economies PREE provides:

- A **broad review** of EE goals, strategies and policy measures **in one economy for multiple sectors.**
- **Recommendations on how effectively implement best practices** of EE strategies and policy measures to achieve EE goals.

Progress

- In 2009, the first four **PREEs for New Zealand, Chile, Viet Nam and Thailand** were conducted. In 2010, the **PREE for Chinese Taipei, Peru and Malaysia** were undertaken.
- The feedback our centre received from all the host economies is that **the Peer Reviews have provided very useful recommendations**



2-2 Progress on PREE in Volunteer Economies : PREE (NZ, Chile)

- Energy Efficiency and Conservation Strategy (NZEECS) - 2009, energy labeling and MEPS with new products including vehicle fuel labeling in New Zealand;



- Implementation of EE policy and programs through the National EE Program (PPEE) including Action Plan on EE 2010-2020 and EE Standard Action Plan in Chile;





2-3 Progress on PREE in Volunteer Economies : PREE (Viet Nam, Thailand)

- Implementation of National EE Program 2006-2015 (under EE&C Law enacted in January 2011), EE improvement program in electricity supply infrastructure including DSM program and promotion of EE&C in SMEs in Viet Nam; and



- Aggressive implementation of public awareness campaigns, creation of incentive programs, setting up of standards and labeling for energy-consuming equipment and material (HEPS, MEPS) and policy actions through existing Energy Conservation Promotion Law & Fund (Revolving Fund and ESCO Fund) under ENCON Program Phase 3 in Thailand.





2-4 Progress on PREE in Volunteer Economies : PREE (Chinese Taipei)

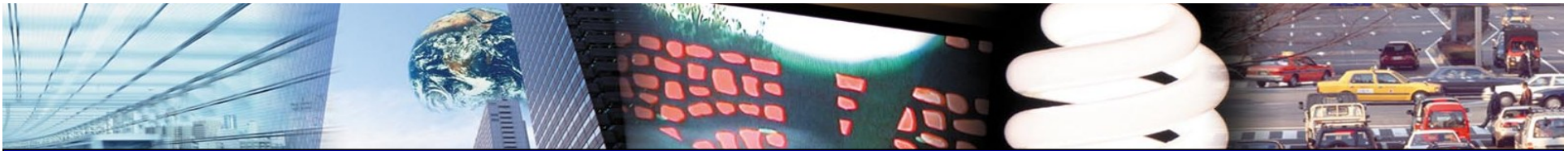
- Develop an electricity price adjustment mechanism that includes generation cost and rate of return, for the long-term power resource planning, new unit building costs and end-user efficiency improvement costs should be analysed using cost-benefit analysis in Chinese Taipei.





2-5 Progress on PREE in Volunteer Economies : PREE (Peru)

- The Review Team visited Peru in early November, 2010 to have an intensive series of meetings with government officials and experts in other relevant organizations as well as site visit to the textile plant .
- In consultation with the Government of Peru, the Review Team will prepare Draft Report on PREE in Peru for discussion and endorsement at the EWG 41 in May 2011 in Vancouver.



2-6 Progress on PREE in Volunteer Economies : PREE (Malaysia)

- The Review Team visited Malaysia in early December 2010 to have an intensive series of meetings with government officials and experts in other relevant organizations as well as site visit to the Diamond Building of the Energy Commission and the Green Energy Office (GEO).
- In consultation with Government of Malaysia, the Review Team will prepare Draft Report on PREE in Malaysia for discussion and endorsement at the EWG 41 in May 2011 in Vancouver.



2-7 Progress on PREE in Volunteer Economies : Challenges found in previous PREEs

Barriers identified in previous PREE

- **Lack of analytical capacity for monitoring and evaluating Energy Efficiency Promotion Policies and Programmes**
- **Lack of human resources / infrastructure for standard-setting and product-testing**
- **Financial barriers**
- **Energy Subsidies**

Challenging Sector identified in previous PREE

- The review team found that **transport sector policies** stand out as having less substantial implementation, although economies have realized some high performance EE policies , for example, fuel economy standards for vehicles.
- The EE policies in transport sector is still at a planning stage in Thailand, Viet Nam, Chile, Peru and Malaysia.



2-8 Future Work Plan on PREE in Volunteer Economies

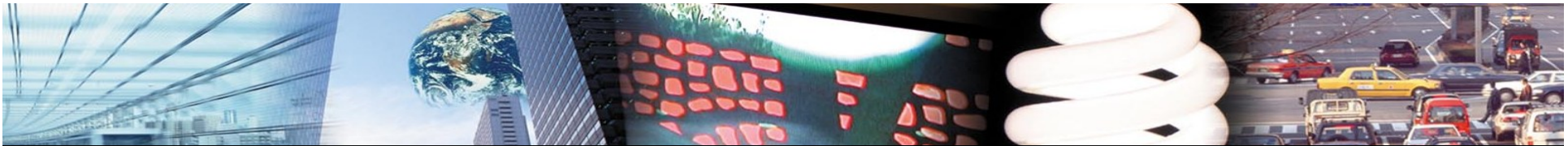
- PREE will be continued to cover **more economies** as instructed by EMM9 in Fukui. **The follow-up PREE** will start to assist a former PREE host economy in implementing best practice of EE Policies recommended by the PREE review team.

2011-2012 PREE

- The additional two PREEs will be conducted in the period between April in 2011 and March in 2012.
- **Indonesia** officially announced at the Brunei EWG40 meeting to host the next PREE later this year.
- **APEC Funding will be available for one more economy to host future Peer Review after Indonesia** by March 2012.

Follow-up PREE

- The follow-up PREE will start to assist a former PREE host economy in implementing best practice of EE Policies recommended by the PREE review team.
- **Nomination of EE review experts from EGEEC is welcome.**



2-9 Future Work Plan on Follow-up PREE

General objective

To assist a former PREE host economy in fully implementing the recommendations of the PREE review teams

Lessons learned from PREEs

Several APEC economies (e.g. Viet Nam) lack the analytical methods and human capacity to monitor and evaluate the implementation of their action plans.

Specific objective of the 1st follow-up PREE

- Viet Nam announced to voluntarily host the first Follow-up PREE training workshop on analytical methods for evaluation of implementation of EE policies in early 2012, considering its limited analytical capability to monitor and evaluate the implementation of its action programmes .
- To assist the APEC economies (e.g. **Viet Nam**) by **establishing the analytical methods for evaluating and monitoring the effective implementation** of their existing energy efficiency action programmes.



2-10 Future Work Plan on Follow-up PREE

Activities

- **Viet Nam** announced to voluntarily host the first Follow-up PREE training workshop on analytical methods for evaluation of implementation of EE policies in early 2012 at EWG40 meeting.
- **Viet Nam** (Host economy) and APERC will prepare a workshop program:

Subject of training : Decomposition method, Best practices for Evaluation & Monitoring as well as Reporting;

Trainees: 15-20 participants from host economy (policy makers, planners)

Trainers: Several knowledgeable scholars and experienced experts from other economies

Recommendations on right trainers will be highly appreciated.

Expected Output

- A report on a package of methods for the monitoring and evaluation
- Publication: This output will be published on APERC website with a link to APEC website



2-11 Progress on PREE- Compendium

OBJECTIVES of Compendium

- To serve as a basis for information sharing on energy efficiency policies and measures in the APEC region.
- To serve as a source of basic information for conducting peer review in volunteered economies.

PROGRESS

APEREC published “**2009 Compendium of Energy Efficiency Policies of APEC Economies** “(the first edition) **on APEREC website in April 2010.**



2-12 Work Plan on the 2nd & 3rd Edition of Compendium

2010 Compendium (2nd Edition)

-APERC requested EWG members to provide APERC with updated information for the 2nd Edition of Compendium in October 2010.

-APERC aims at publishing the 2nd Edition of **Compendium of Energy Efficiency Policies of APEC Economies on APERC website in March 2011.**

2011 Compendium (3rd Edition)

Please provide APERC with updated information for the 3rd Edition of Compendium, when APERC requests APEC members, through EWG members, to provide APERC with such updated information in October 2011.



3-1 Progress on CEEDS

“Value-added” to volunteer economies: CEEDS provides:

- an **in-depth peer review** of EE policies in **one single sector** for multiple economies through interactive workshops.
- recommendations on next steps to fully implement best practices of EE policies in a specific sector in achieving APEC-wide EE goals.

CEEDS Phase 1

Subject: Appliance EE Standards and Labelling

1st workshop : hosted by **Chinese Taipei** (Oct 2009)

2nd workshop : hosted by **Japan** (March 2010)

Participating economies: **Chile, China, Malaysia, Philippines, Thailand and Viet Nam**

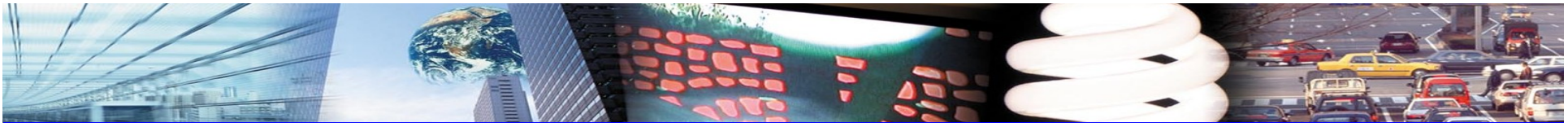
CEEDS Phase 2

Subject: Building Energy Efficiency Codes and Labeling

1st workshop : hosted by **Thailand** (Sept 2010)

2nd workshop : hosted by **Hong Kong, China** (Jan 2011)

Participating economies: **Chile, China, Indonesia, Malaysia, Mexico, Philippines, Thailand and Viet Nam**



3-2 Continuation of CEEDS: CEEDS Phase 3

CEEDS Phase 3

Theme of CEEDS Phase 3 will be on “**Energy Efficient Transport for Smart Communities** in APEC economies”

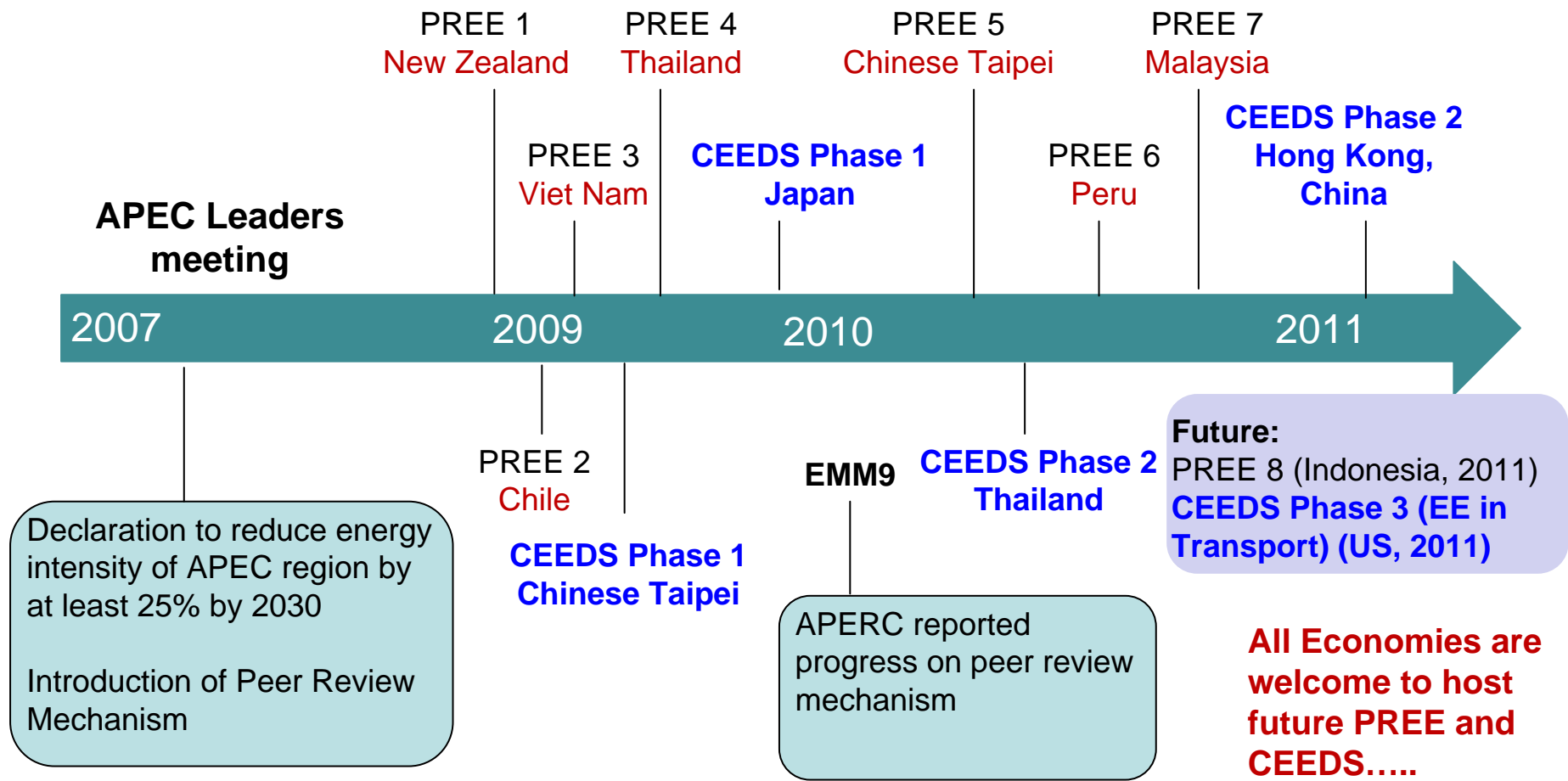
The first CEEDS Phase 3 workshop is scheduled in **September 2011** back to back to the 1st Joint Energy and Transport High Official Meeting during SOM1 in **San Francisco**, with the second workshop tentatively scheduled in early 2012.

Questions to be addressed may include

- How to develop required infrastructure for rapid introduction of Electric Vehicle?
- How to promote public transportation ?
- How to promote smart and green transportation in the context of APEC Low- Carbon Model Town Project and Smart Communities?



3-3 Summary of PREE and CEEDS





4-1 Peer Review on Low-Carbon Energy Supply (PRLCE) - Objectives-

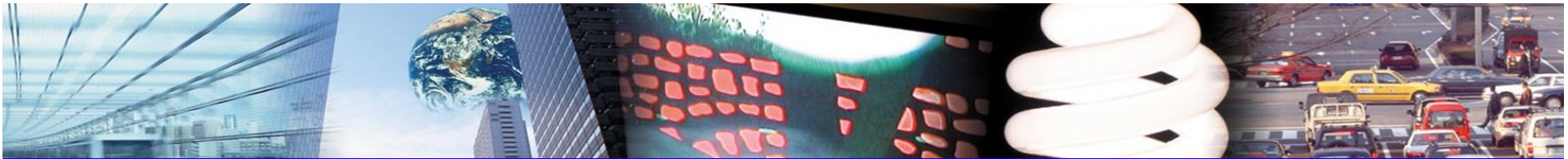
Objectives :

To assist volunteer APEC economies to voluntarily set individual goals to promote more energy and power supply from low-emission sources and to formulate actions to achieve the goals through peer review where experts provide, based on their experience and knowledge, recommendations which should be suitable for different circumstances in different economies



4-2 PRLCE - 2011 Work Plan -

- APERC will contribute to preparing good recommendations by carrying out analyses, in corporation with experts in APEC expert groups and member economies, on effective and efficient implementation of high performance policies to promote Low Carbon Energy Supply.
- APEC Funding is expected to be available for two economies to host Peer Review on Low-Carbon Energy Supply Phase 1 .
- **Malaysia** and **Thailand** are interested in hosting PRLCE Phase1 with focus on Renewable Energy.



4-3 Examples of High Performance Policies to promote RE

- (A) Appropriate policies on feed-in tariffs / RPS to promote RE.
- (B) RE financing (e.g. fiscal incentives such as tax exemptions or investment grants).
- (C) Well-designed policies/ regulatory framework to encourage entrepreneurial innovation in promoting RE.
- (D) Efficient policies to overcome non-economic barriers at various stages of RE development and deployment.
- (E) Effective RD&D policy to promote RE.
- (F) Carbon pricing policies (e.g. emission trading / carbon tax)
- (G) More comprehensive policy design to encourage low-carbon communities in APEC Low-Carbon Model Town Project.



4-4 Activities and Outcomes of PRLCE

Activities

- APEC economies announce to voluntarily host the PRLCE(Malaysia and Thailand already expressed their interest to host PRLCE in 2011).
- Define scope of review
- Review team establishment : Host economy requests EWG members to nominate right experts. Host economy decides review team members in consultation with APERC.
- Host economy will prepare Background Information on policies to promote Low-Carbon Energy Supply (e.g. RE)
- Review team visit
- In consultation with a host economy, the review team will prepare draft review report with recommendations

Expected Outcomes

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

Nomination of Right experts from EGNRET and relevant APEC task-forces is an important key of successful peer review.



5-1 APEC Low-Carbon Model Town (LCMT) Project

Background: Declaration at the 9th APEC Energy Ministers Meeting (EMM9), held in Japan in June 2010

“Introduction of low-carbon technologies in city planning to boost energy efficiency and reduce fossil energy use is vital to manage rapidly growing energy consumption in urban areas of APEC. We have therefore launched an **“APEC Low-Carbon Model Town (LCMT) Project”** to present successful models for coordinated usage of advanced low-carbon technologies.”



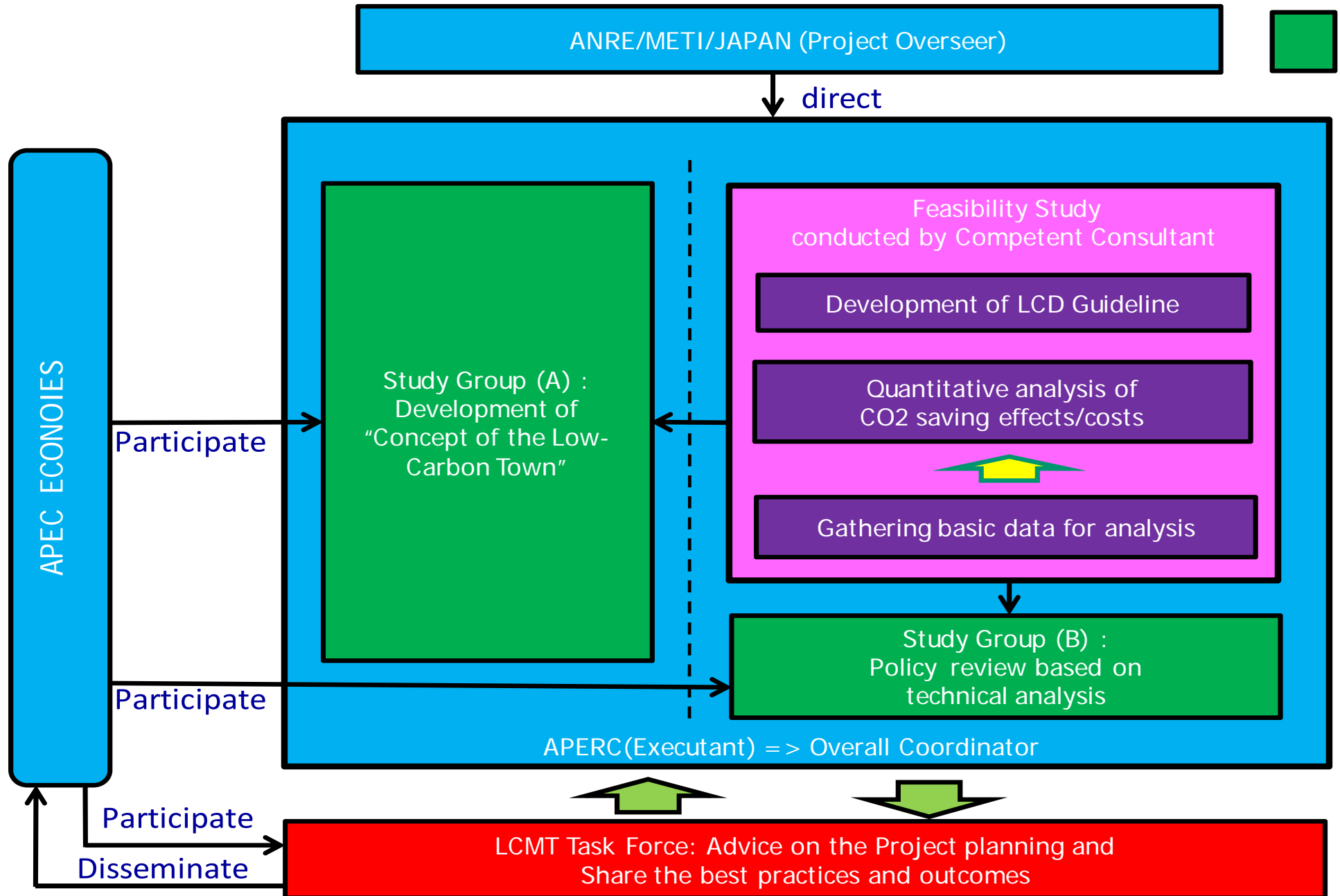
5-2 APEC Low-Carbon Model Town (LCMT) Project

Objectives: LCMT Project seeks to promote low-carbon technologies in city/community planning in order to manage rapidly growing energy consumption and GHG emissions in the APEC region.

Activities:

- Development of the "**Concept of the Low-Carbon Town**"
- **Feasibility studies** and **policy reviews** of planned development projects

5-3 APEC Low-Carbon Model Town (LCMT) Project





5-4 APEC Low-Carbon Model Town (LCMT)

- The LCMT is intended to be a **multi-year project**.
- In the LCMT Project Phase 1, the Yujiapu CBD (Central Business District) project in **Tianjin, China** was selected as **the first APEC Low Carbon Model Town**.
- Over the next several years, future phases of the LCMT project are expected to select **more planned urban/community development projects** which seek to be APEC Low Carbon Model Towns.



Thank you for your kind attention !

**FREE Peer Review Reports, Compendium and
CEEDS Phase 1 Report are available on APERC website
<http://www.ieej.or.jp/aperc/>**