



APEC Expert Group on
New and Renewable Energy Technologies

EGNRET 50

**Completed Project -
Chinese Taipei**

Chinese Taipei

21 March, 2018

Chinese TAIPEI

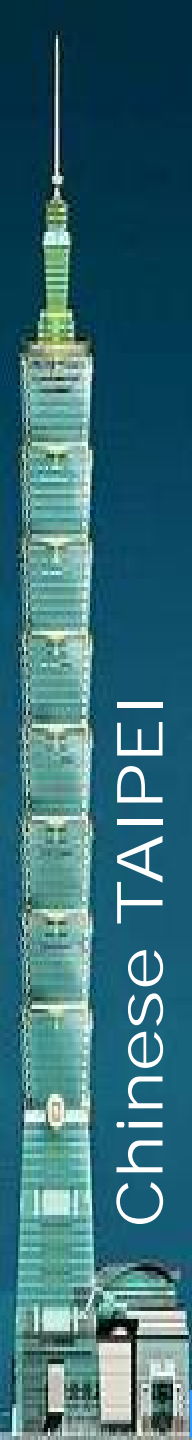
■ Completed Project

➤ 【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC Region

➤ 【EWG 18 2016A】

Heating Applications of Bio-pellet made from Ecological-Hazard Plant in Small and Medium Enterprises to Enhance Utilization of Renewable Energy in the APEC Region



Completed Project in Chinese Taipei

Chinese TAIPEI



【EWG 18 2016A】

Heating Applications of Bio-pellet made from Ecological-Hazard Plant in Small and Medium Enterprises to Enhance Utilization of Renewable Energy in the APEC Region

Project Outcome

- Reviewed recent advances in bio-pellets technologies.
- Demonstrated white-leadtree pellet fired in an existing SMEs boiler for green energy applications.
- Completed an economic feasibility study of utilizing white-leadtree pellet instead of fossil fuel for boiler application.
- Conducted a bio-pellet workshop and site visit.
- Completed final report and uploaded to APEC website.

【EWG 18 2016A】

Heating Applications of Bio-pellet made from Ecological-Hazard Plant in Small and Medium Enterprises to Enhance Utilization of Renewable Energy in the APEC Region

Demonstrated white-leadtree pellet for green energy applications



White leadtree the 100 worst invasive species in APEC



Eradicated white leadtree and planted native trees



Made white leadtree into bio-pellet



Replaced natural-gas-fired boiler by



Bio-pellet-fired boiler

Shared this study in workshop and APEC website

Demonstrated SMEs utilizing renewable energy (bio-pellet fuel)

Completed economic feasibility study for boiler application

【EWG 18 2016A】

Heating Applications of Bio-pellet made from Ecological-Hazard Plant in Small and Medium Enterprises to Enhance Utilization of Renewable Energy in the APEC Region

Bio-pellet Workshop

APEC Workshop on Bio-pellet Production, Handling and Energy Utilization
Oct 24-25, 2017 IEEJ, Tokyo, Japan

- 7 speakers (1 female) shared bio-pellet boiler applications in APEC and EU.
- 11 APEC economies and 69 attendees (21 females) attended the workshop.
- Recommendations and action plan for bio-pellet energy utilization were proposed.



【EWG 18 2016A】

Heating Applications of Bio-pellet made from Ecological-Hazard Plant in Small and Medium Enterprises to Enhance Utilization of Renewable Energy in the APEC Region

Site Visit

- Biomass Gasification Power Generation System, Minami Tama Water Reclamation Center, Tokyo, Japan
- Japan Blue Energy Co., Tokyo, Japan

Oct 25, 2017, Tokyo, Japan

- Discussed renewable energy in Japan Blue Energy Co., Tokyo, Japan.
- Visited biomass gasification power generation system, Minami Tama Water Reclamation Center, Tokyo, Japan.



Discussion in Japan Blue Energy Co.

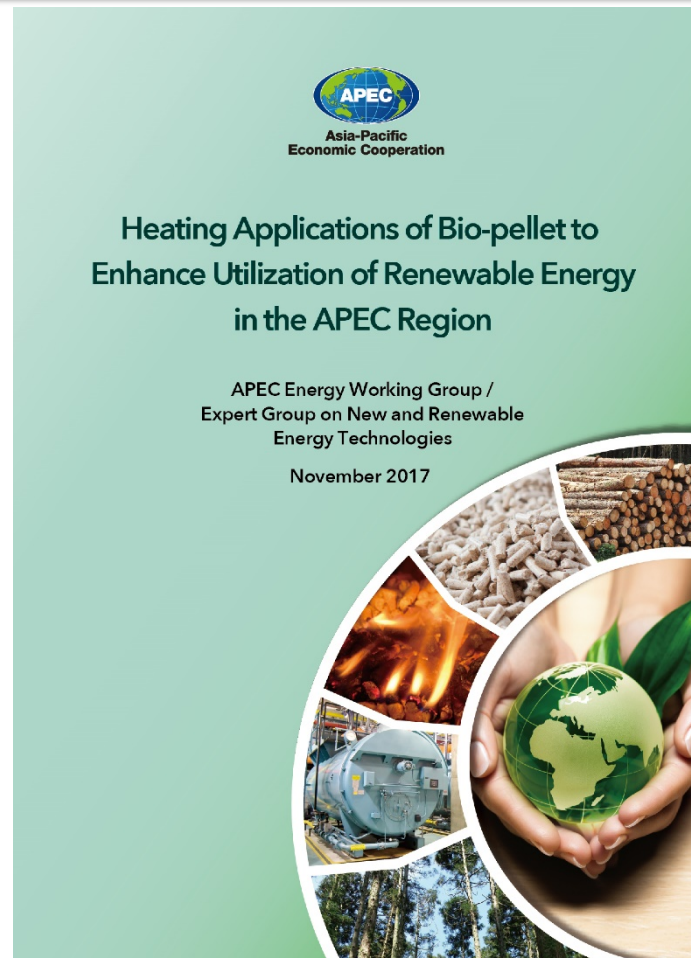
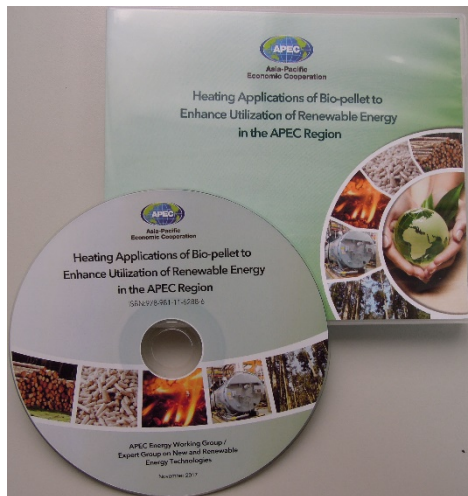


Visited Minami Tama Water Reclamation Center, Tokyo.

【EWG 18 2016A】

Heating Applications of Bio-pellet made from Ecological-Hazard Plant in Small and Medium Enterprises to Enhance Utilization of Renewable Energy in the APEC Region

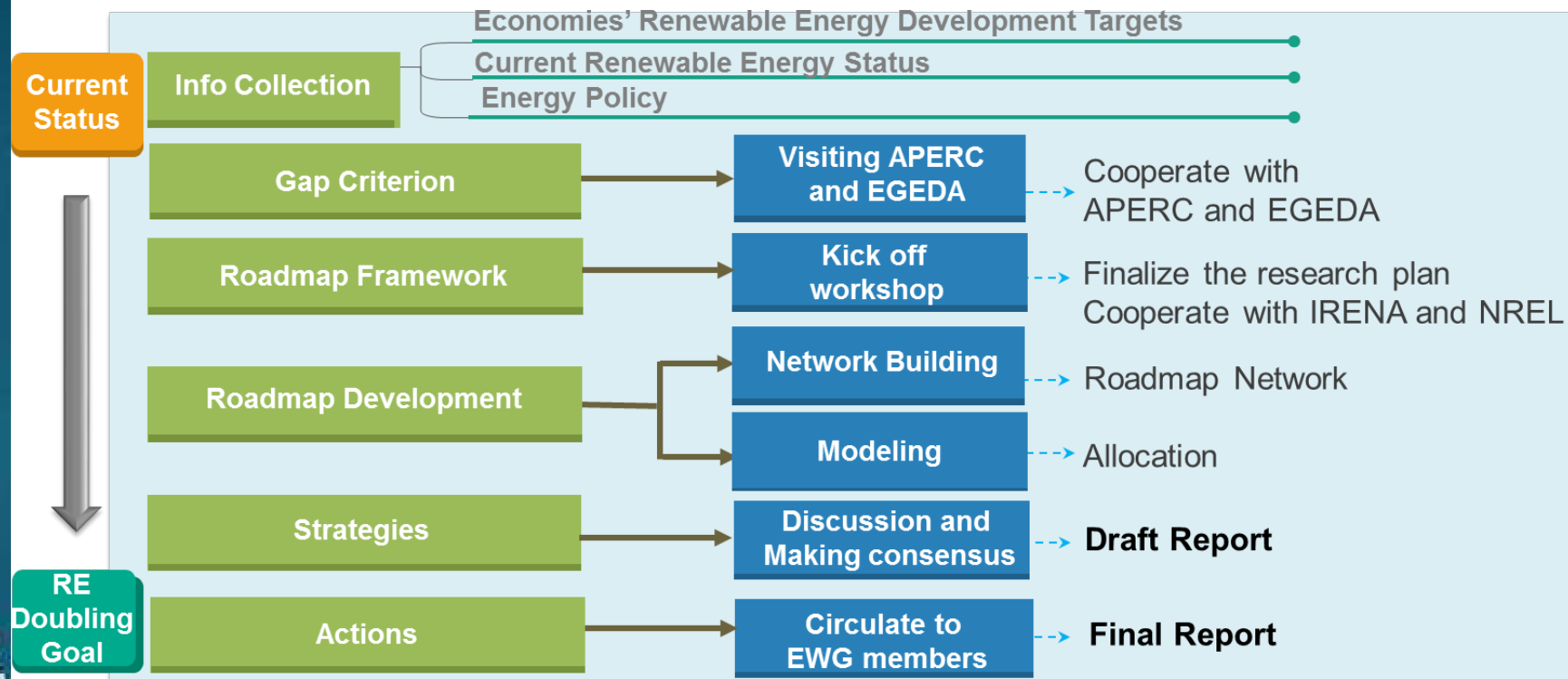
- Uploaded final report to APEC website for dissemination.
- Circulated 50 CD-ROM and 50 hard copies of final report to APEC member economies.



【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC Region

Project Outcome



【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC

Seminar 1: APERC, Tokyo, Japan, Mar 02-03, 2017

Meeting Outcome



APEC RE Doubling Roadmap:

Boundary definition scope, i.e. Roadmap scope,
Renewables definition (based on EGEDA definition) presented and
endorsed by EGNRET

Two-phased approach

- Roadmap baseline analysis
- Comprehensive Roadmap development
- * Nominate 1 (one) expert from each economy to be contact point

Analysis limited to electricity sector

- APERC assists in quantitative analysis
- Show workplan and timeline

【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC

Workshop : Jeju, Republic of Korea, Mar 27, 2017

- Learn about the resource, then attract investors to contribution
- Understanding the barrier and challenges when making strategies
- Taking APEC RE doubling goal into consideration when APEC economies make renewable energy targets and policies
- Try to maximize the potential in APEC region
- Strategies of government support could be divided into 6 approaches
- Initiating the network among technical experts, government officers



【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC

Seminar 2: APERC, Tokyo, Japan, Oct 23, 2017

Topic

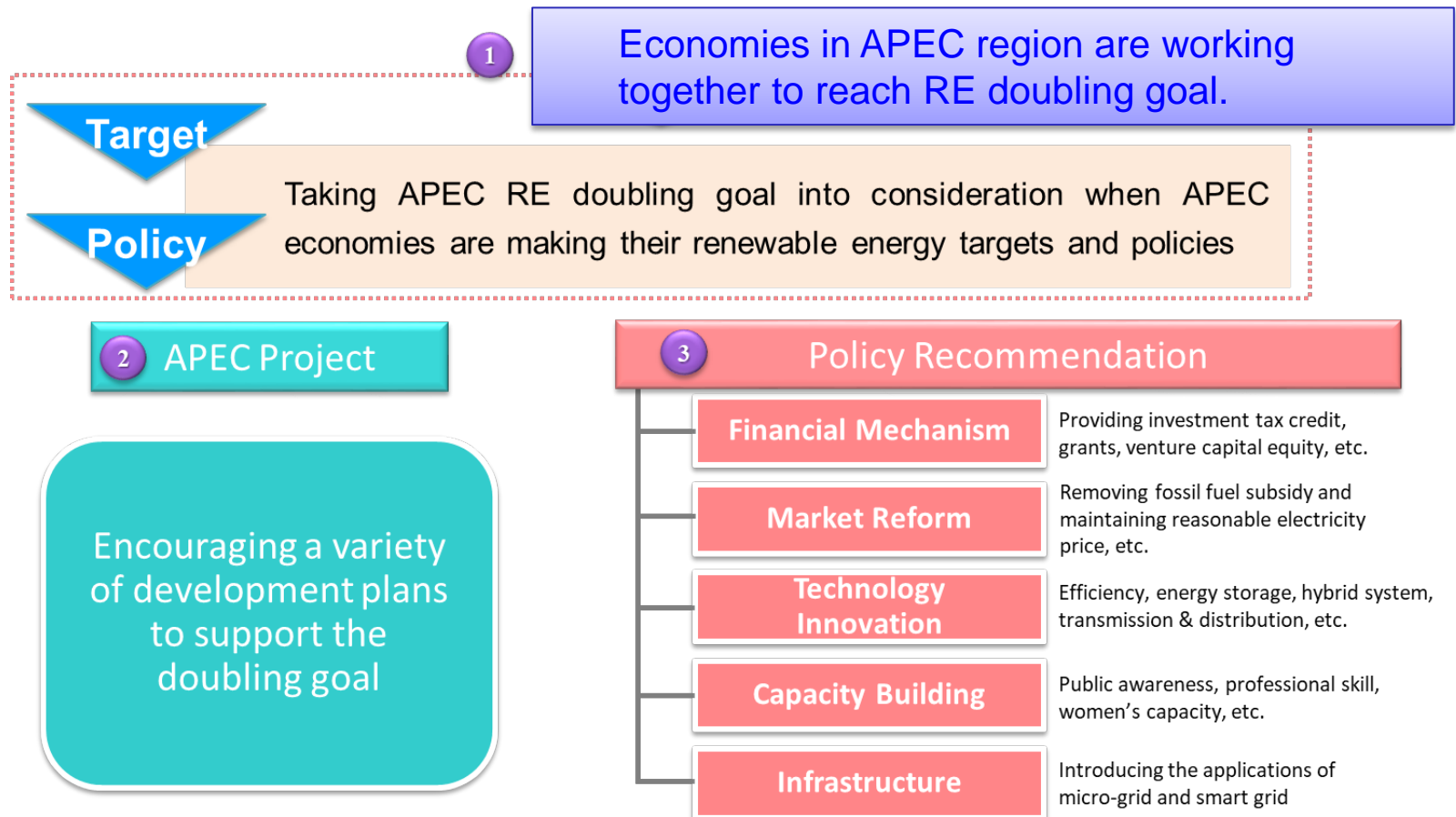
- Updates on APEC RE Roadmap
- Updates on RE modelling for the 7th Outlook
- APEC RE data description
- Discussion on the Doubling the share of RE in APEC by 2030
- ITRI and APERC Cooperation on data, policy and quantitative analysis



【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC

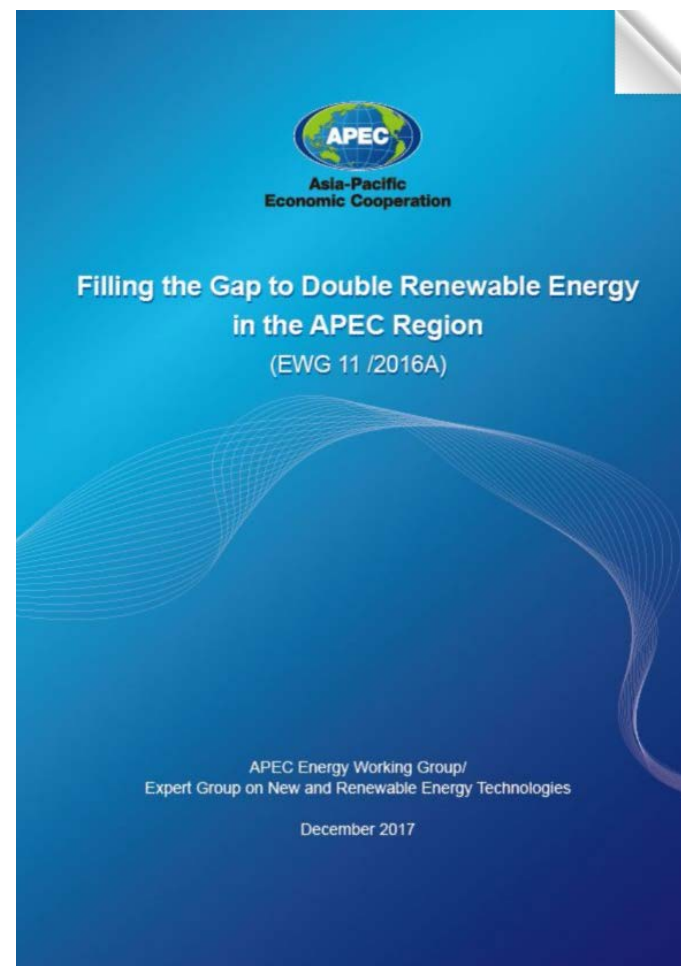
Project Outcome



【EWG 11 2016A】

Filling the Gap to Reach the Goal of Doubling Renewable Energy in the APEC

- Public one final report as the reference.



Thank you for your attention

Chinese TAIPEI

