



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

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

Chinese Taipei
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27 March, 2017
Jeju, Republic of Korea

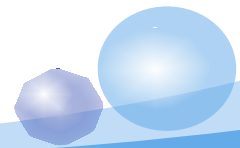


工業技術研究院
Industrial Technology
Research Institute



Outline

1. Summary of the Project
2. Background of RE Doubling Goal
3. Objective and Research Framework
4. Roadmap Development
5. Progress on APEC Project of RE Doubling Goal

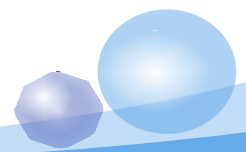


1. Summary of the Project

EWG 11 2016A-

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

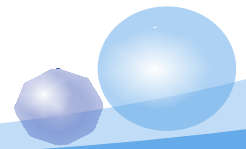
- **Proposing Economy:** Chinese Taipei
- **Co-sponsoring Economies:** The Philippines, Thailand, USA
- **Project start and completion date:**
 - 1st December, 2016 ~ 31st December, 2017
- **Project Objectives :**
 - Developing a strategic roadmap toward doubling renewable energy goal.
- **Expected Output :**
 - Providing research outcomes and policy recommendations toward the doubling renewable energy goal in the APEC region as a reference for APEC economies to follow in revising nations' goals to reach the doubling of renewable energy application



2. Background of RE Doubling Goal

- ◆ The United Nations Secretary-General launched a pioneering new initiative, “Sustainable Energy for All” (SE4ALL), on 1 Nov 2011, to mobilize urgent global action: Double the share of renewable energy in the global energy mix by 2030.
- ◆ The International Renewable Energy Agency (IRENA) is the renewable energy hub of the SE4ALL initiative and supports SE4ALL partners, and thus can be a strategic partner.

A doubling of the share of renewables worldwide does not mean a doubling in every economy. (IRENA)



2. Background of RE Doubling Goal

EWG 47 2014

- The United States presented the proposed APEC aspirational **goal of doubling renewable energy by 2030.**
- The EWG expressed broad support for the goal, but noted that the goal is a collective target and requires refinements in the definition.
- The EWG will revisit the goal every five years up to 2035, and the goal would need to work with other international agencies .

EMM 11 2014

- Energy Ministers aspired to the goal of “doubling the share of renewables in the APEC energy mix, including in power generation, from 2010 levels by 2030.”
- Energy Ministers instructed the EWG through the EGNRET to develop the road map .

Leaders' Meeting 2014

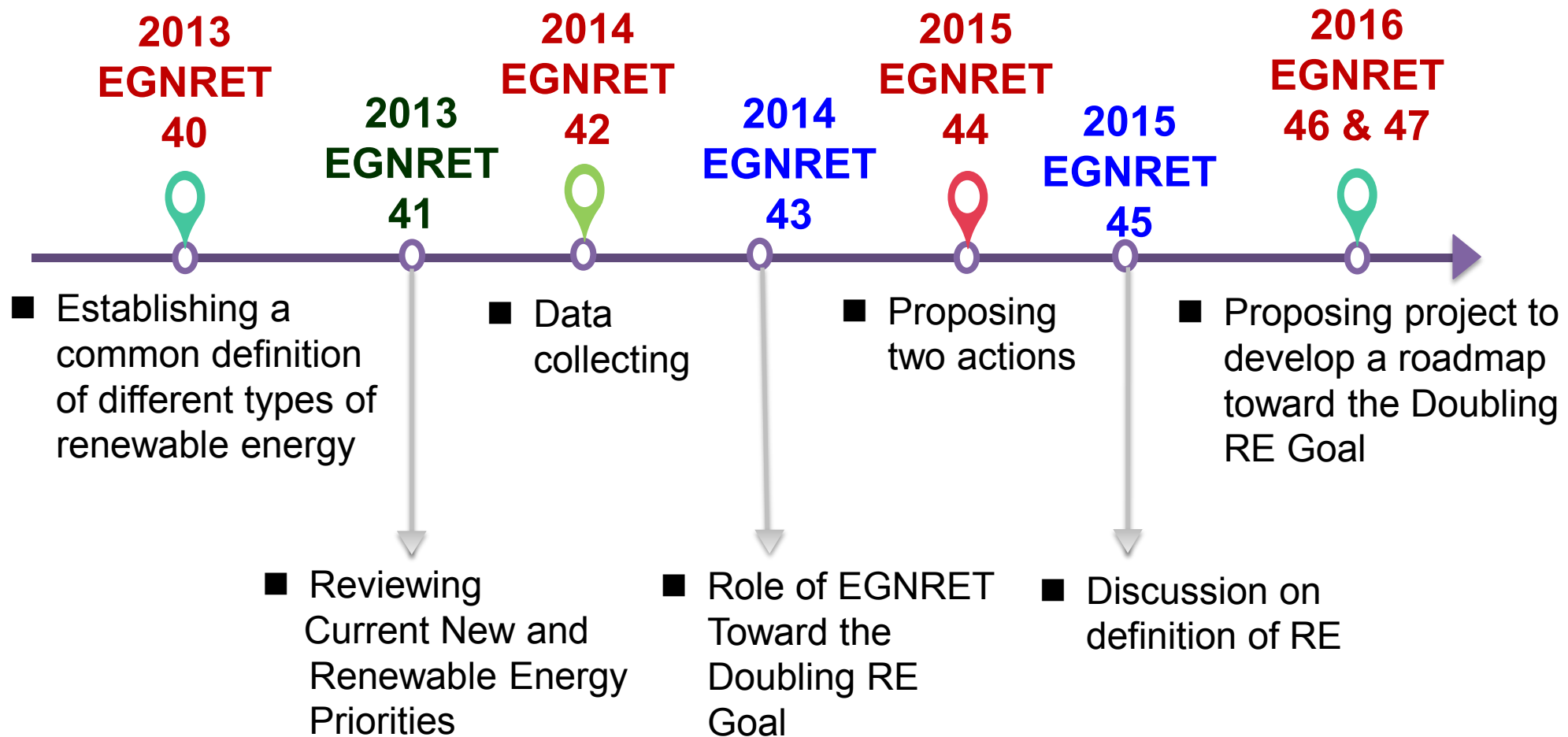
- “We endorse the Energy Ministers’ aspirational **goal to double the share of renewables including in power generation by 2030 in APEC’s energy mix.**” (Declaration)

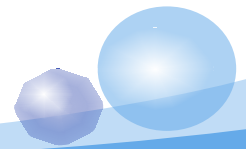
Leaders' Meeting 2015

- “We therefore reaffirm our aspirational goals to reduce aggregate energy intensity by 45 percent by 2035 and double renewable energy in the regional energy mix by 2030 to achieve sustainable and resilient energy development within the Asia-Pacific. “(Declaration)

2. Background of RE Doubling Goal

◆ EGNRET Activities for RE Doubling Goal





2. Background of RE Doubling Goal

◆ EGNRET Meeting Summary

EGNRET 46

Taichung, Chinese Taipei

- Discussion on How to Achieve Sustainable and Resilient Energy Development in APEC Region in Line with COP21.
- It is important to develop the roadmap for achieving the Leaders' aspirational goal of doubling the share of renewables in APEC's energy mix.
- It is supported to have an new initiative to approach the roadmap to the doubling goal.

EGNRET 47

Jakarta, Indonesia

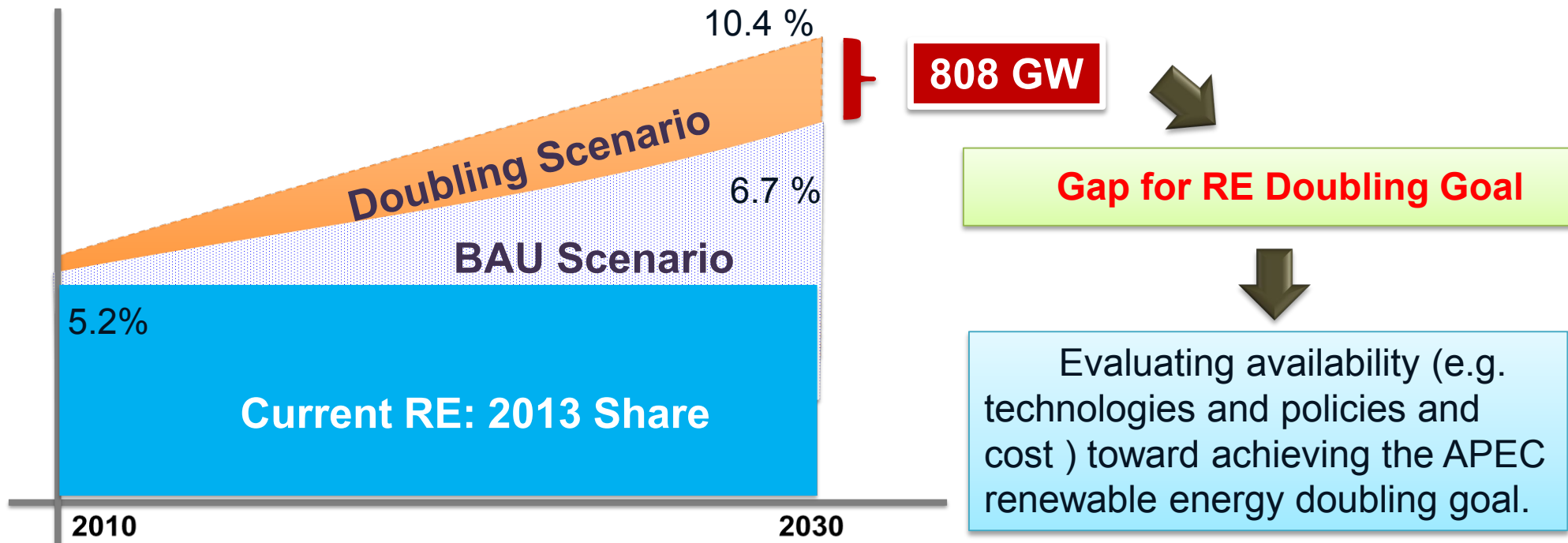
- Delegates have consensus that the renewable energy doubling goal would be reached by aggregate renewable energy development among the APEC economies.
- The roadmap is suggested to measure the cost of developing renewable energy, and underline by different sectors and technologies.
- Cooperating with EGEDA and APERC, and integrating APEC's energy data to draw the roadmap are proposed.

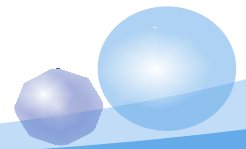
3. Objective and Research Formwork

➤ Objective

- ◆ Investigating the potential of renewable energy development in the APEC economies.
- ◆ Analyzing the gap to reach the goal of doubling renewable energy and evaluating how much capacities and renewable energy development potentials could fill this gap.
- ◆ Developing a strategic roadmap toward doubling renewable energy goal.

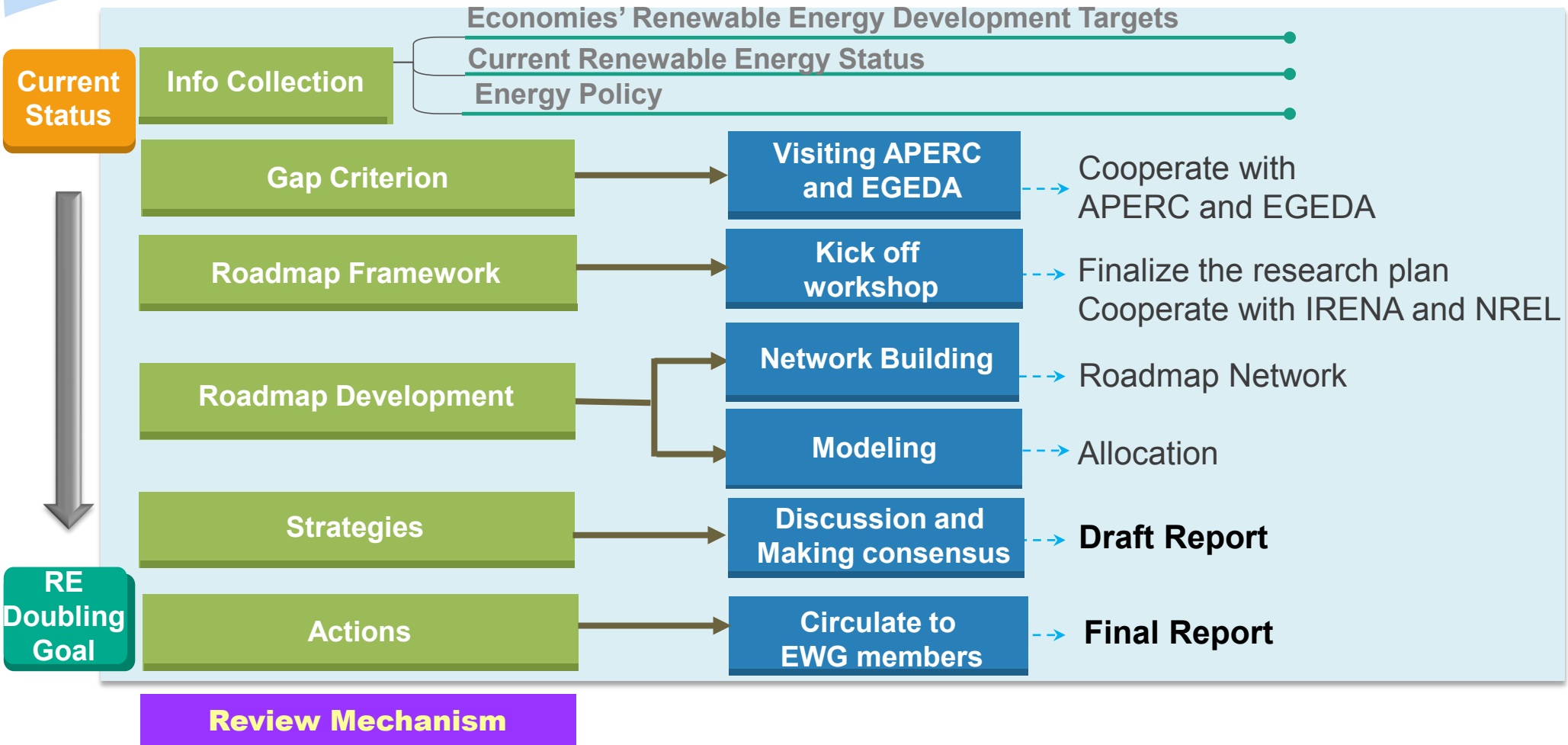
• Gap Criterion





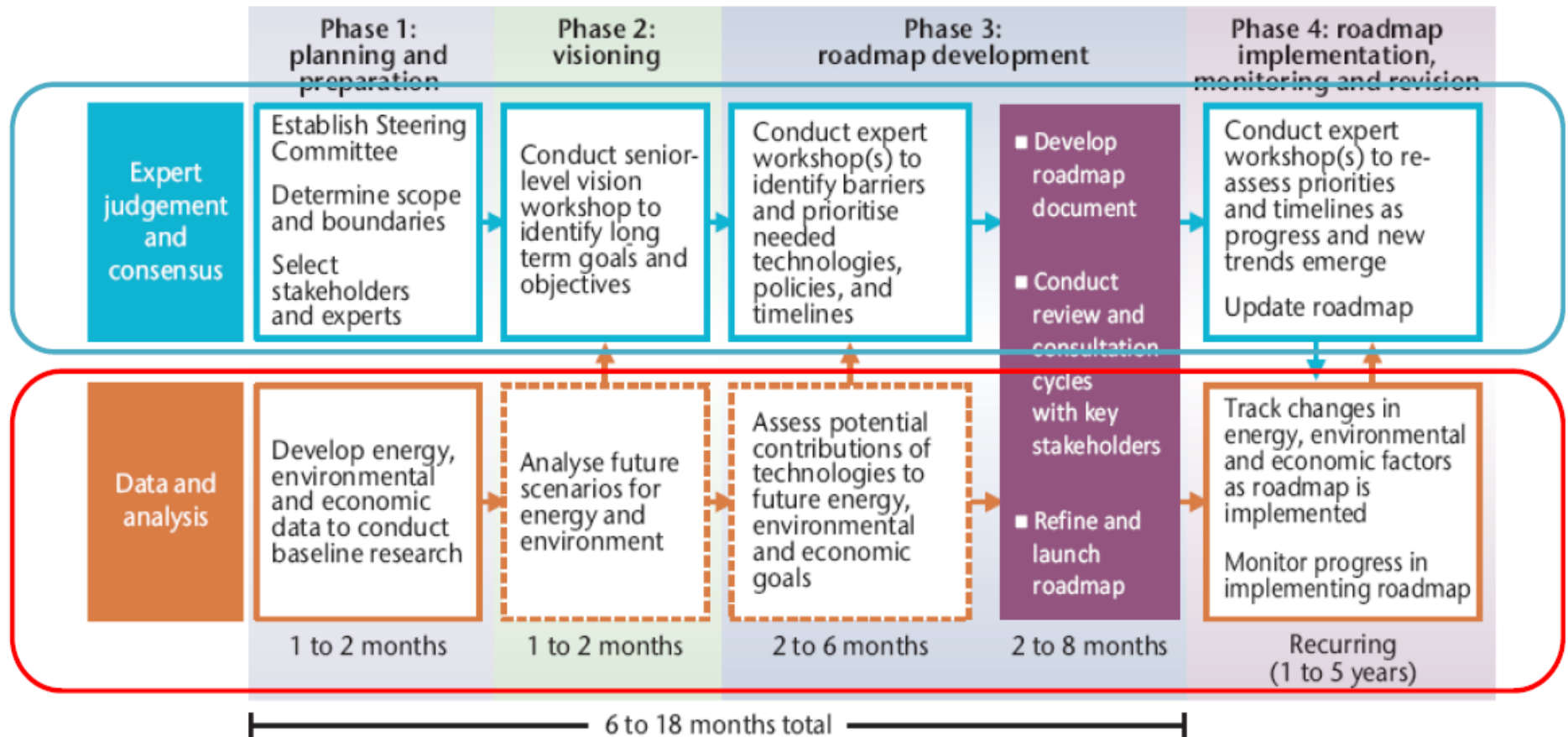
3. Objective and Research Framework

➤ Research Framework



4. Roadmap Development

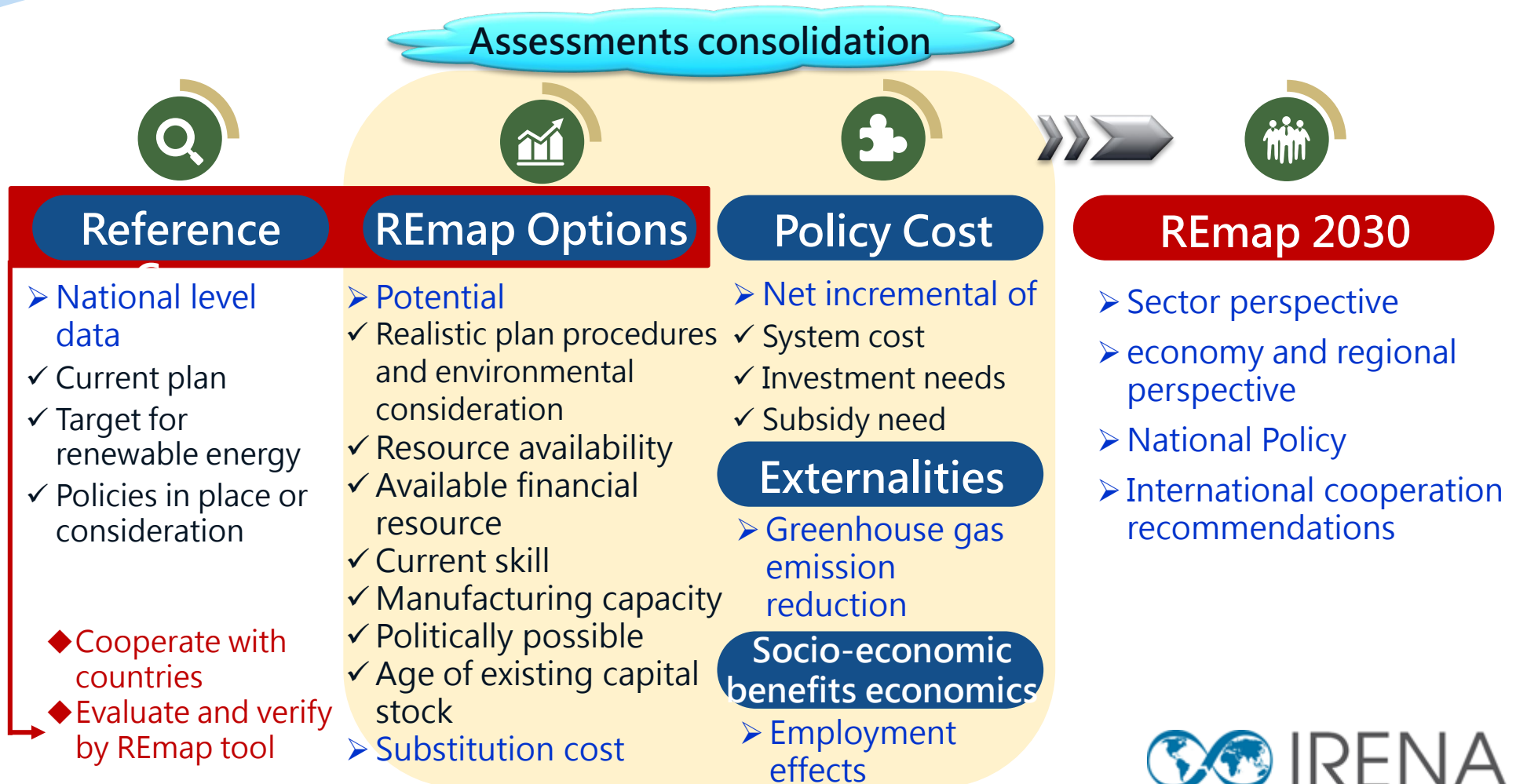
➤ Strategy of IEA (Energy Technology Roadmaps)



Note: dotted lines indicate optional steps, based on analysis capabilities and resources.

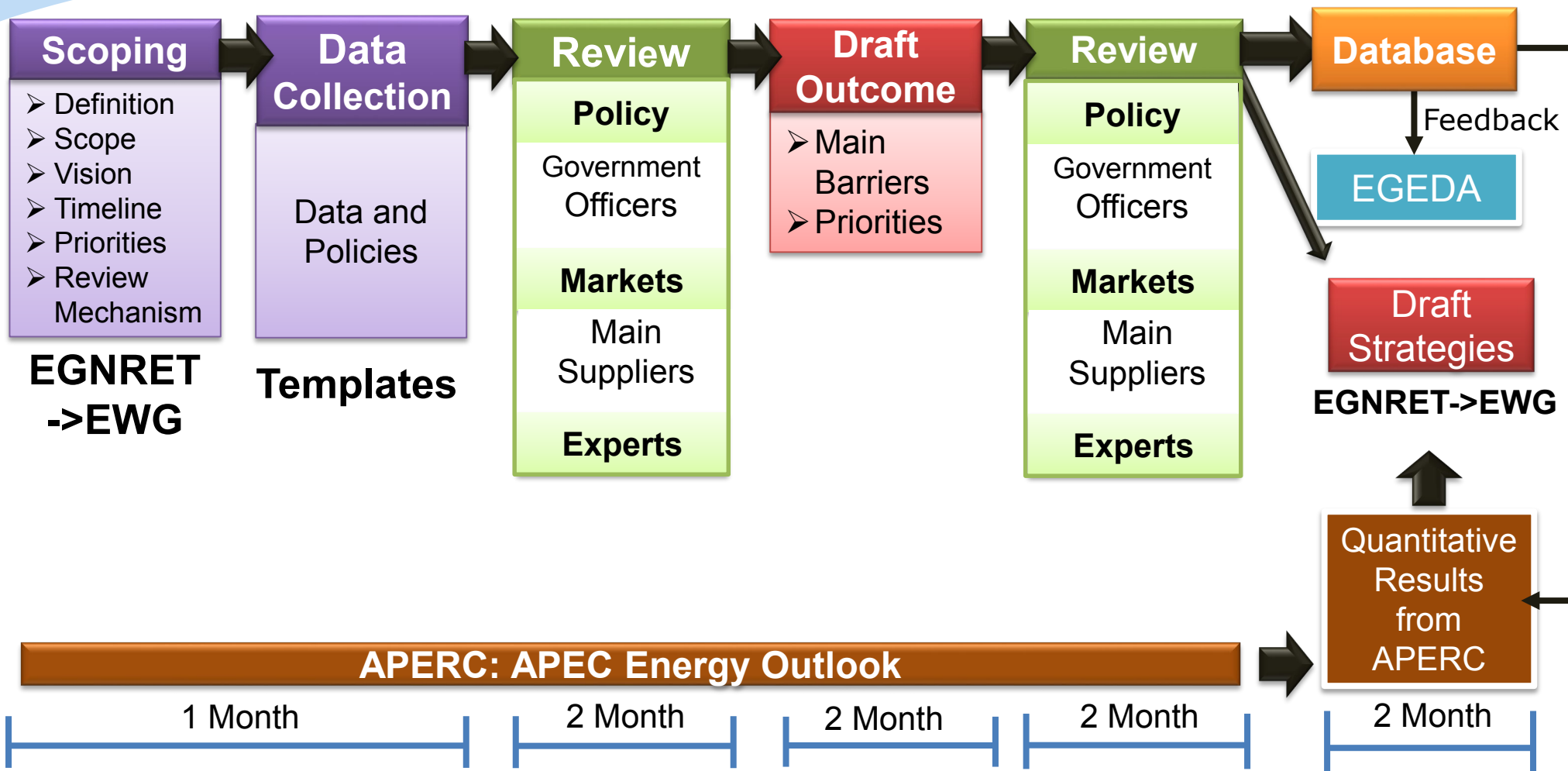
4. Roadmap Development

➤ Strategy of IRENA (REmap 2030)



4. Roadmap Development

➤ Phase 1 of the Project



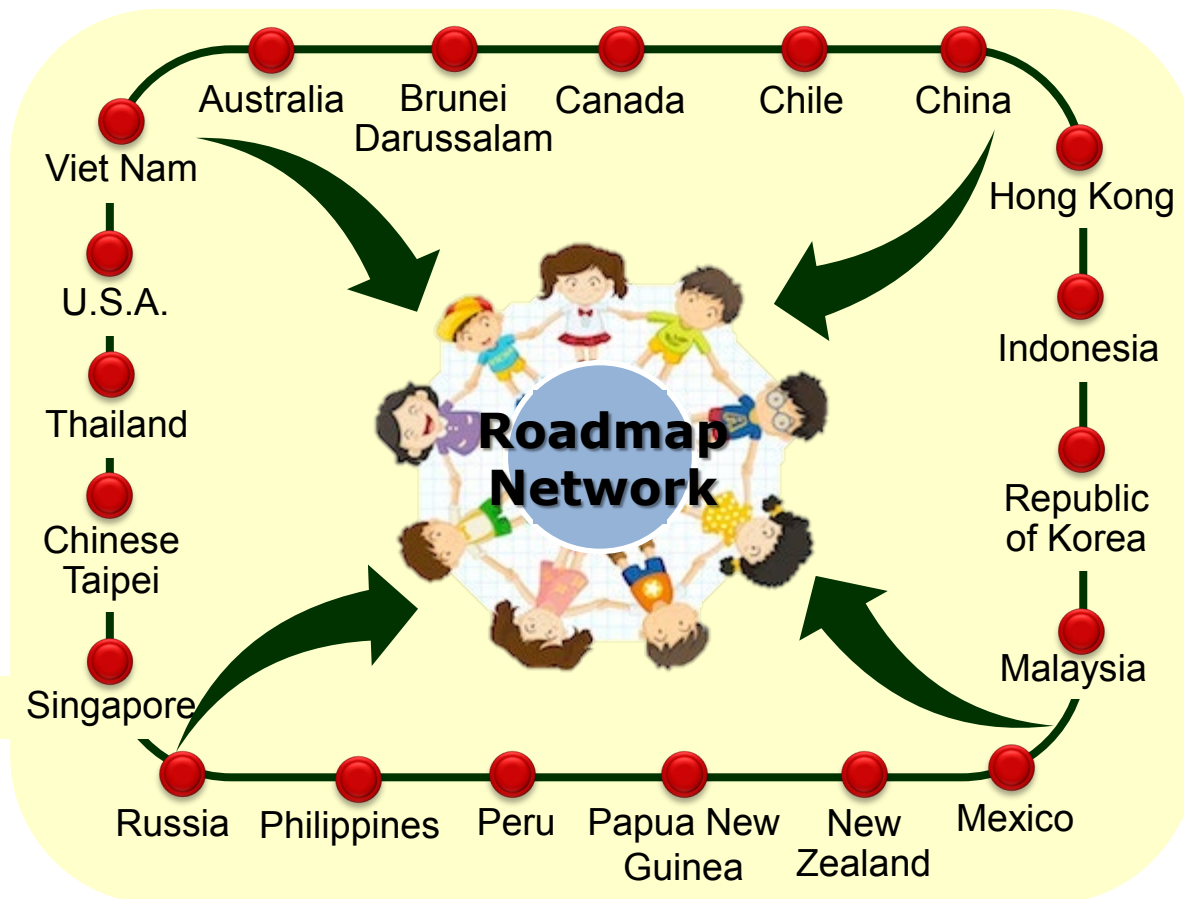
Phase 2 of the Project



4. Roadmap Development

➤ Net Work Building

~Assign 1 or 2 Roadmap Experts as Contact Person~

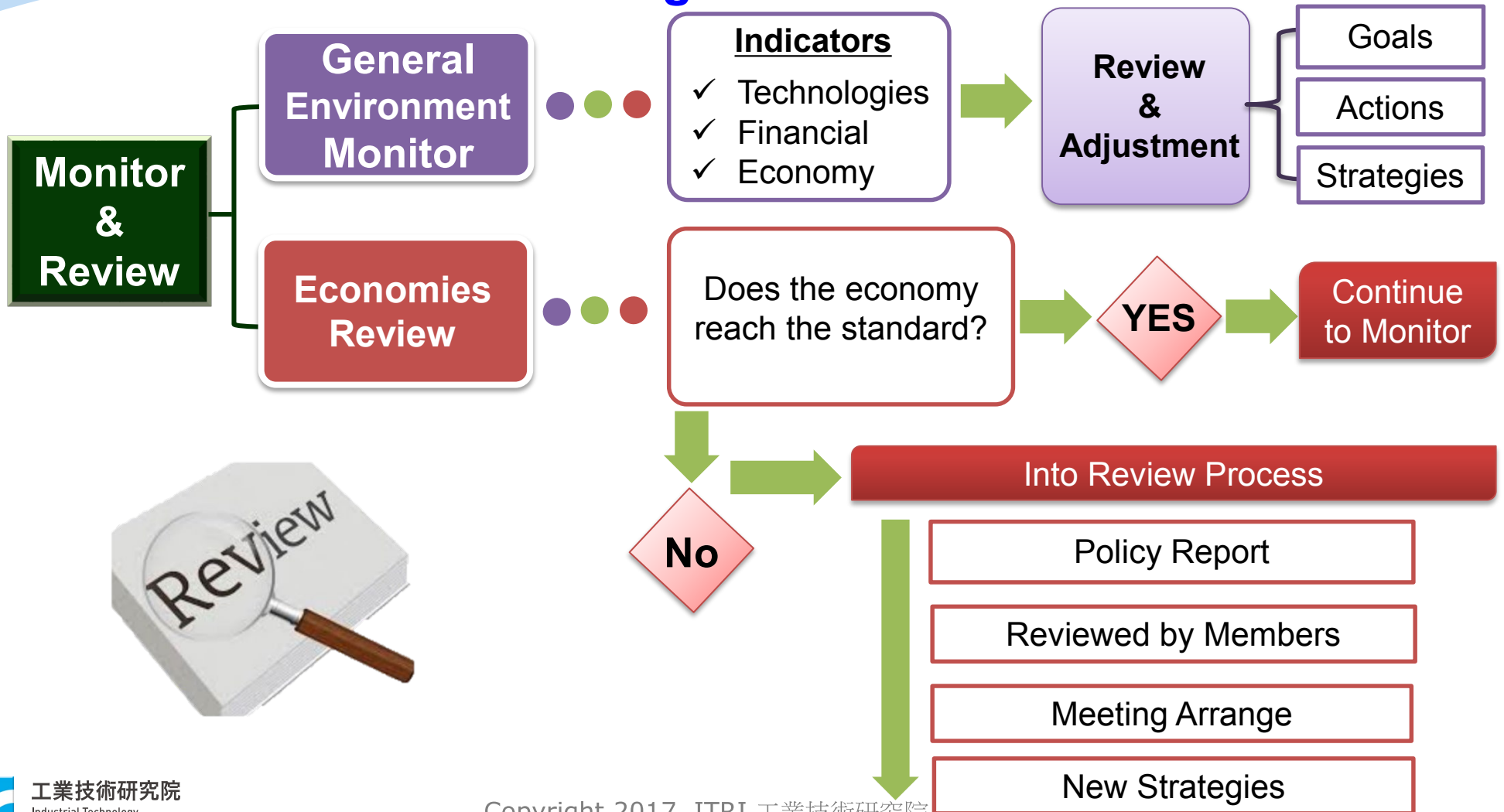


Information for Contact Person

- ✓ Name: _____
- ✓ Organization: _____
- ✓ Position: _____
- ✓ Email: _____
- ✓ Telephone: _____

4. Roadmap Development

► Review Mechanism Building



5. Progress on APEC Project of RE Doubling Goal

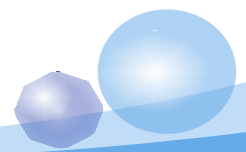
➤ Seminar on Conducting APEC Renewable Energy Roadmap

~ March 02-03, 2017, Tokyo, Japan~

Major Discuss Topics

- ✓ Progress on APEC Filling the Gap to Reach the goal of doubling RE in APEC
- ✓ Model Assumptions, Data & Methodologies for APEC Energy Outlook
- ✓ IEA's experience of Roadmap Development
- ✓ Strategy for Achieving APEC RE Target





5. Progress on APEC Project of RE Doubling Goal

➤ Meeting Outcome

The list of items to be included in the 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: (1) Roadmap Baseline analysis (technology status & detailed potential assessment, if possible), and (2) comprehensive Roadmap development (vision, incl. milestones and action items),
- Analysis limited to electricity sector,
- Nominate 1 (one) expert from each economy to be contact point for the Roadmap,
- APERC assists with quantitative analysis,
- Show workplan and timeline

Thank you for your attention

