

PREE Project Update (Phase 13)

EGEEC 63 Meeting

8 November 2024 – Tianjin, China

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Today's agenda

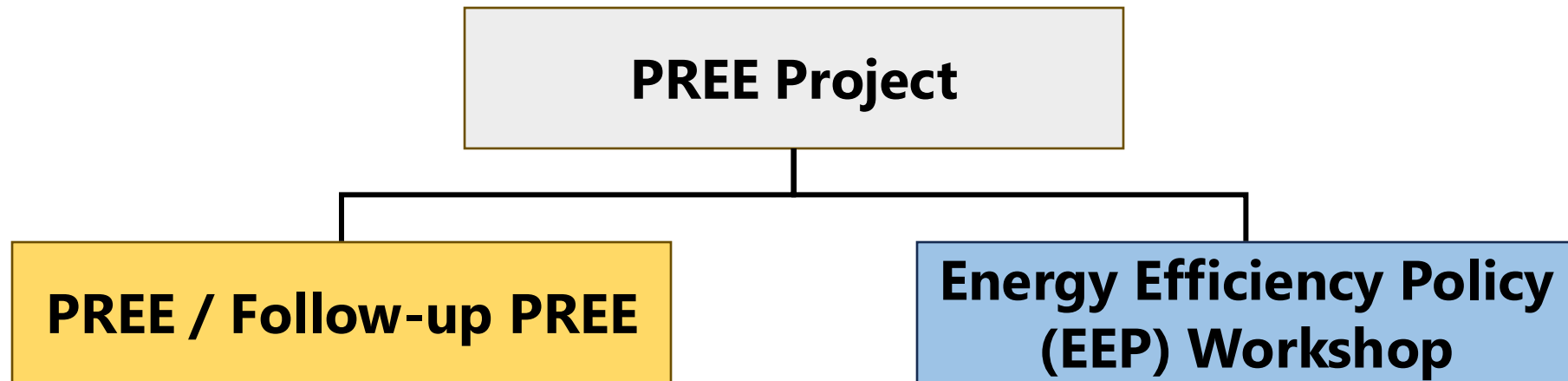
- **Project purpose**
- **Progress of Follow-up PREE in Chile**
- **Progress of the 8th APEC Energy Efficiency Policy Workshop**

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What is the PREE (Peer Review on Energy Efficiency) project ?

- Initiated by APEC leaders in Sydney, Australia, [2007 Darin Declaration](#), September 2007
- Contributes towards achieving the shared APEC [energy intensity reduction](#) goal of [45%](#) from [2005](#) levels by [2035](#)



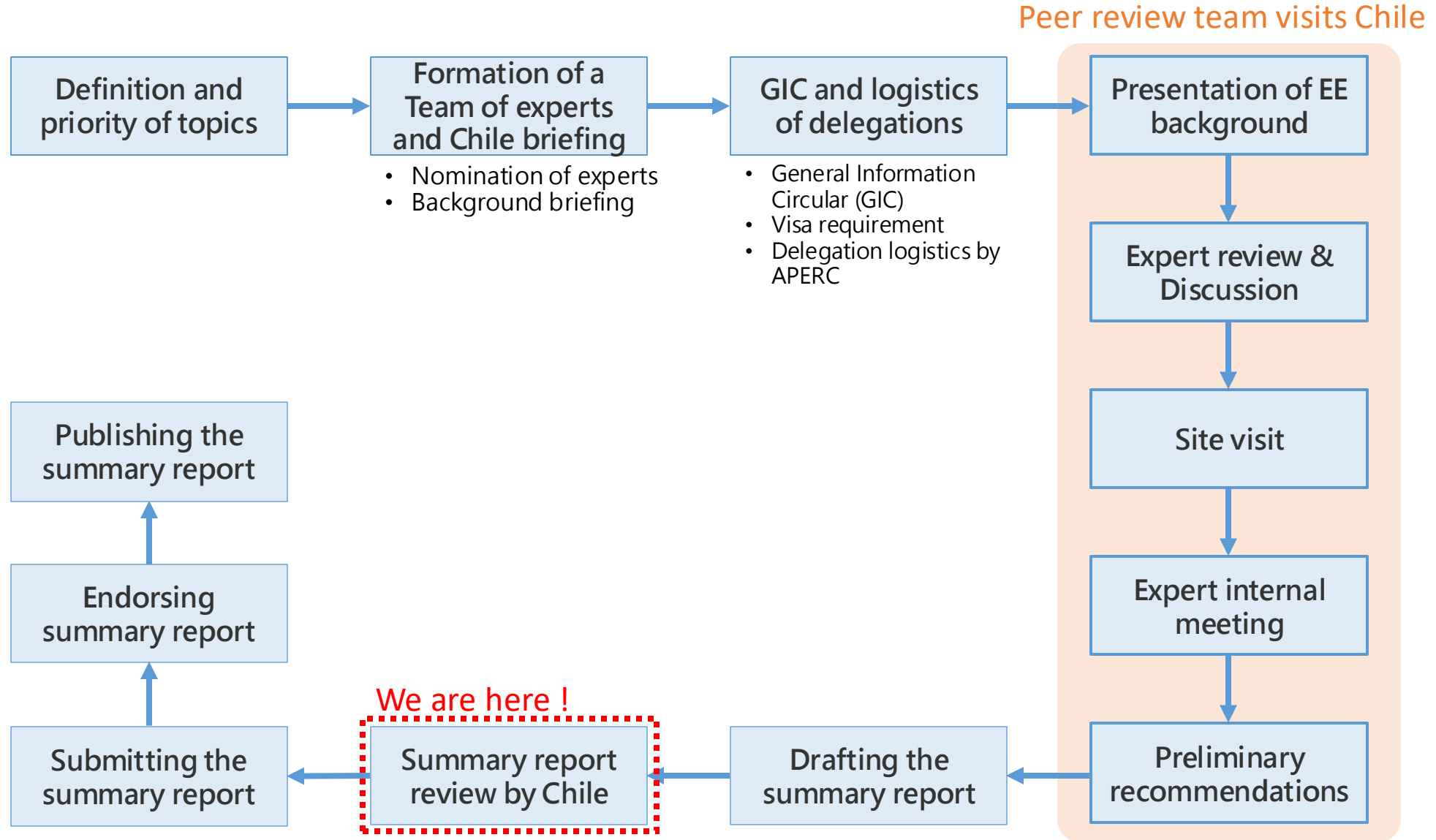
Provide broad review and recommendations for a [volunteer host economy](#) on implementing their energy efficiency policies and measures.

Discuss critical issues in [policy development](#), [implementation](#), and [evaluation](#) for higher energy efficiency.

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The workflow of Follow-up PREE in Chile



Background of Follow-up PREE in Chile

- Chile completed the PREE in 2009, and **21 drafted recommendations** were developed.
- Follow-up PREE in Chile was held on **6-10 May, 2024** in Santiago.
- Chile prepared **12 presentation sessions** for the PREE expert team.



Outcome of Follow-up PREE in Chile

Priority of topics

- **8 priority fields** have been identified by Chile, including energy efficiency, policy development, institutional and legal framework, data collection and monitoring, industry, building, transport, district energy, and energy systems.

Establishing the expert team

- The PREE expert team consisted of **5 experts** (AUS; PRC; CT: US and UNEP) and **4 APERC members**.

Follow-up PREE workshop in Chile

- Chile held a **5-day workshop** in Santiago, including a **one-day** site visit.
- Ministry of Energy (MEN), Sustainable Energy Agency (ASE), Superintendence of Electricity and Fuels (SEC) made the presentations in the workshop.

Preliminary recommendations

- Chile and PREE expert team had an in-depth discussion on each preliminary recommendation.

Notable energy efficiency policy from Chile

Energy Efficiency Law 21.305, Article 2, Energy Management of Large Consumers

Designated parties

CEMC (Consumers with energy management capacity), consume over 50 tera-calories.

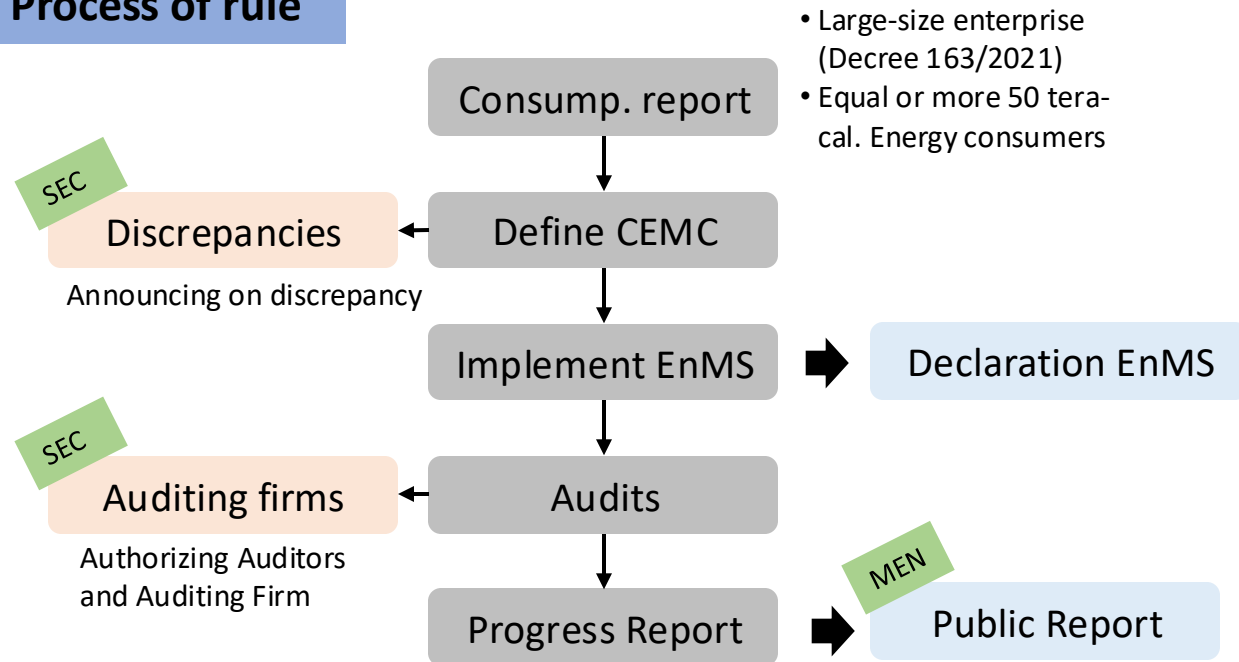
Requirements

1. Must implement an **Energy Management System**.
2. Must report their EnMS **annually**.
3. EnMS must cover **at least 80%** of energy consumption.
4. EnMS **minimum requirements** are:
 - 1) Energy policy
 - 2) Energy objectives and targets
 - 3) Energy Action Plan updated
 - 4) EnPI (Energy Performance indicators) and EnB
 - 5) An Energy Manager (not exclusive)
 - 6) Operational control
 - 7) M&V Plan for defined improvements

Type of EnMS

- **Certified:** Certification submission (around **68%**)
- **Not certified:** Compliance in verification auditing (every 3 yrs)

Process of rule



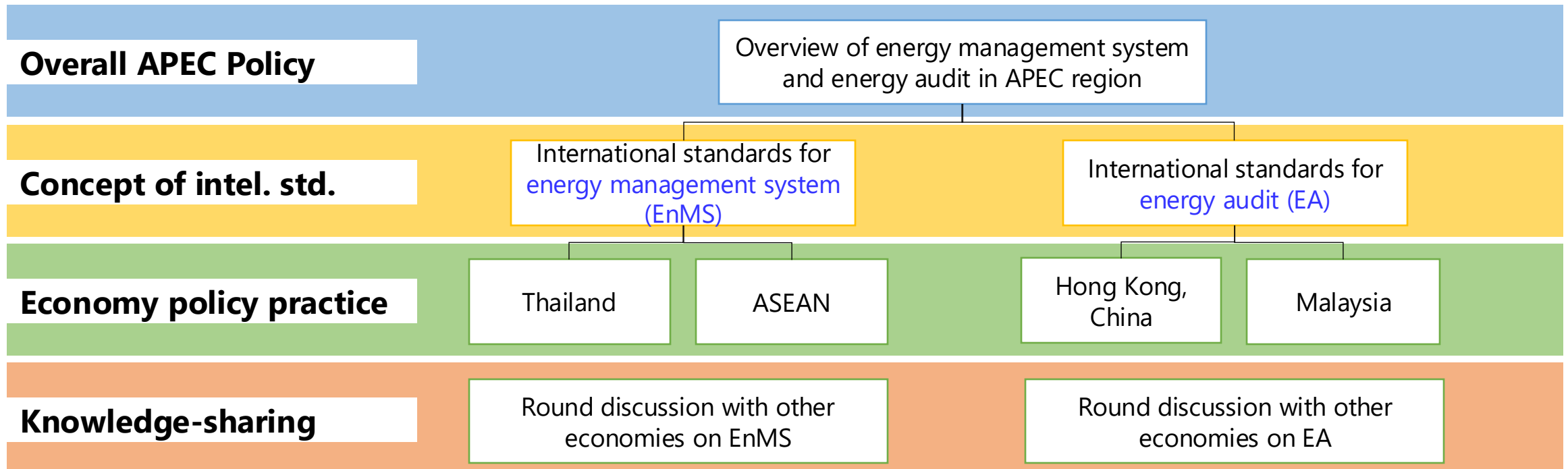
Today's agenda

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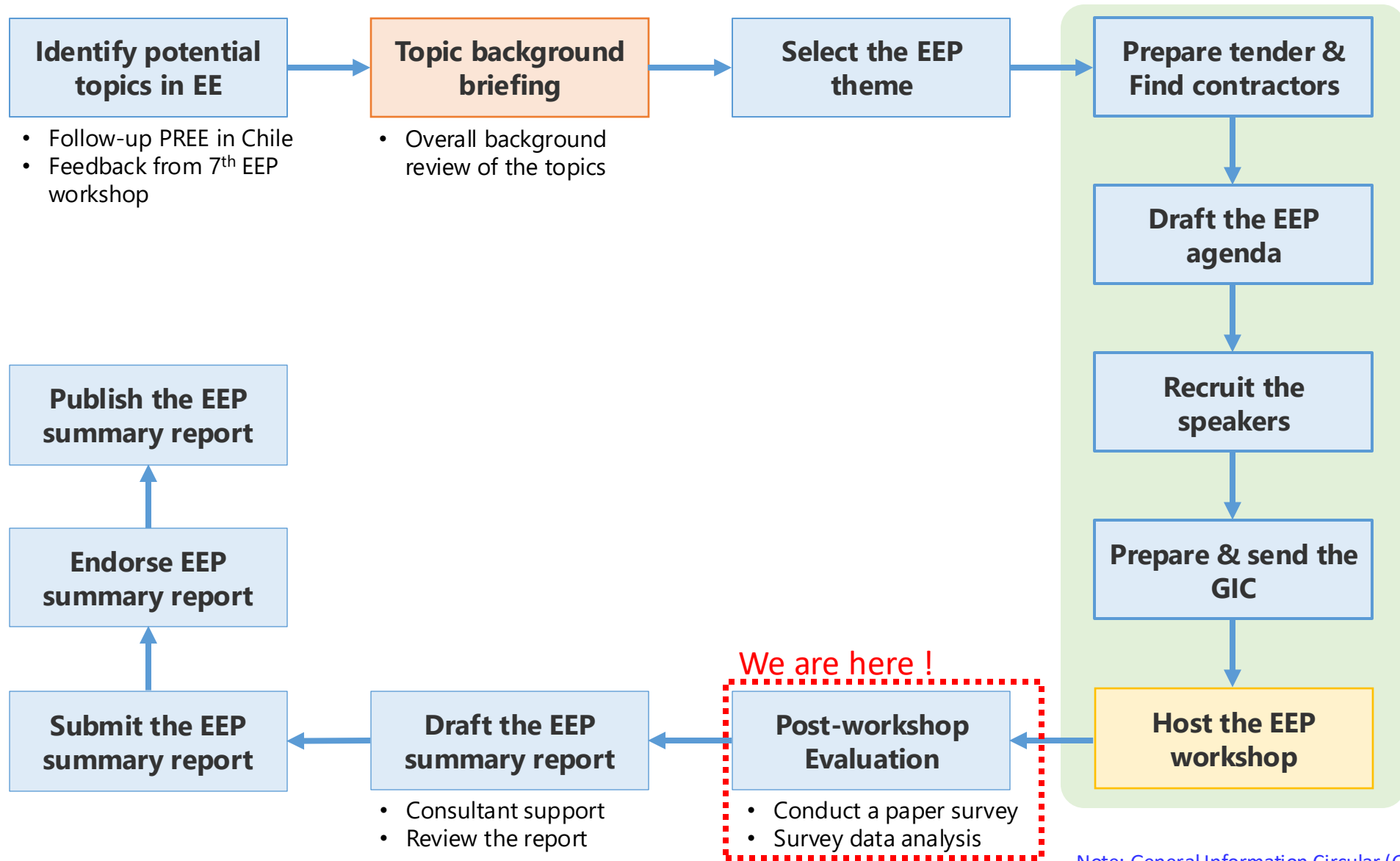
8th EEP workshop: Energy Management: Standards, Policies and Best Practices

Main goals:

- 1) Introduction to [energy management](#) and [energy audit standards](#) application policies in APEC economies;
- 2) Concepts and application of [international standards](#) in energy management system and energy audits;
- 3) Exploring the [best practices](#) in energy management systems (EnMS) and energy audit [policies and initiatives](#) in APEC economies.



The workflow of EEP workshop



What knowledge can participants gain?

- Fundamental understanding of **international standards** in Energy Management and Audits
- General status of the **Energy Management and Audit implementation** in APEC economies
- **Policies, regulations, and initiatives** in Energy Management and Audits implemented by APEC economies
- **Lessons learned** and **best practices** in Energy Management Systems and Energy Audits
- **Economic and environmental benefits** of effective Energy Management and Audits

The EEP WS Agenda

Morning session (Part 1)

Energy Management, Standards, and Policy Practices

Time	Content
09:30~09:35	Opening remarks
09:35~09:40	Group photo & Intro. of the Agenda Part 1
09:40~11:25	1.1 Energy Management System in the APEC Region
	1.2 International standards on energy management: concepts and application
	Coffee Break
	1.3 Thailand's Energy Management, Standards, and Policy Practices
	1.4 Policies on energy management system (EnMS) in ASEAN
11:25~12:15	Knowledge-sharing by economies
12:15~12:20	Summary by Moderator

Afternoon session (Part 2)

Energy Audit, Standards, and Policy Practices

Time	Content
14:00~14:05	Intro. of the Agenda of Part 2
14:05~15:30	2.1 Energy Audits in the APEC region
	2.2 International standards on energy audit: concepts and application
	Coffee Break
	2.3 Policies and Practices for Optimizing Building Energy Efficiency in HKC
	2.4 Policies on energy audit in Malaysia
15:30~16:40	Knowledge-sharing by economies
16:40~16:55	Post-evaluation survey & signature collection
16:55~17:00	Closing remarks & Summary

36 attendees from 12 economies and 4 APEC fora

12 economies

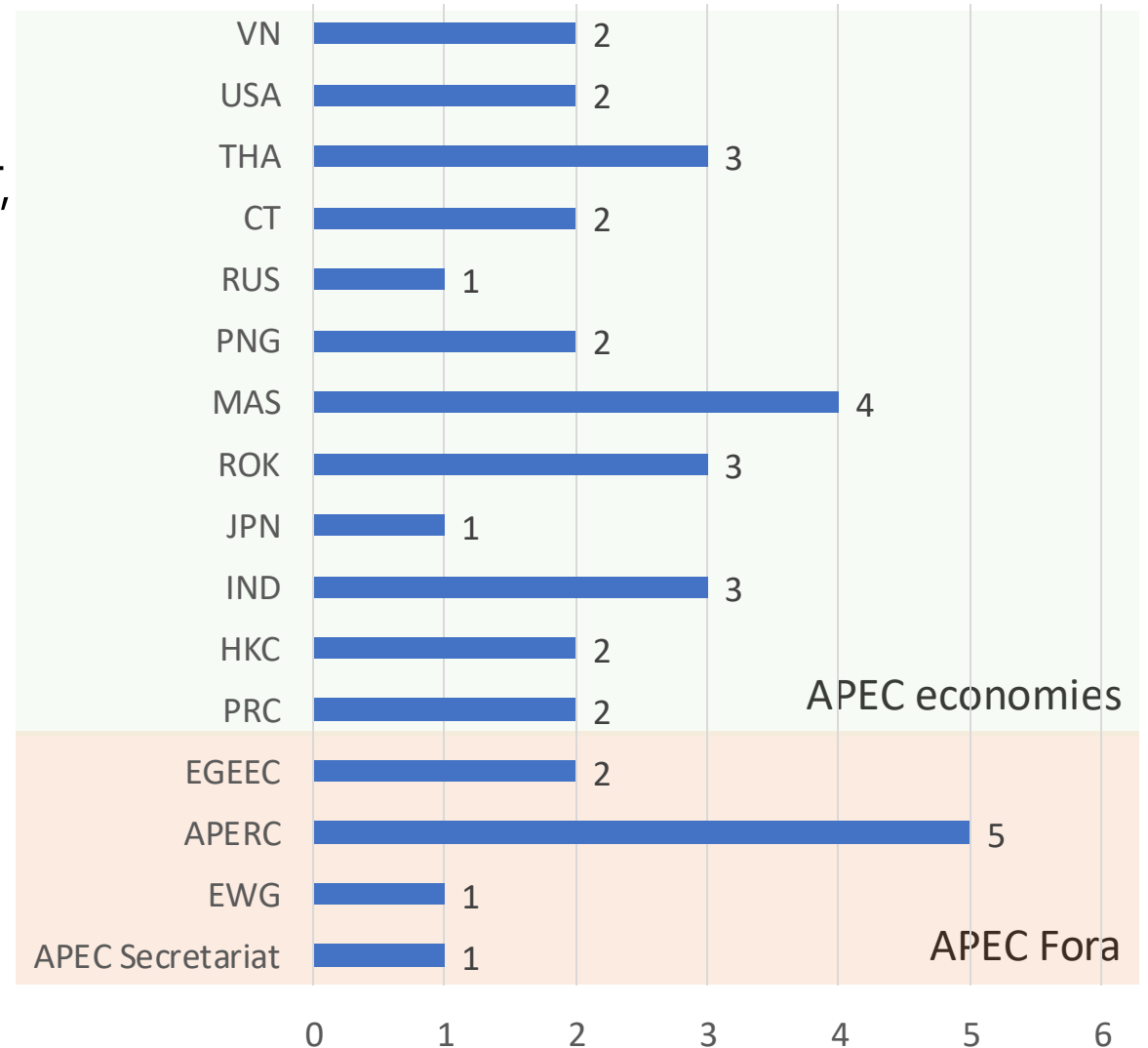
- PRC, HKC, IND, JPN, ROK, MAS, PNG, RUS, CT, THA, USA, VN

4 APEC fora

- EWG, APEC Secretariat, EGEEC, APERC,

33.3% female participation

- 12/36 (F/M)



14 experts from 6 economies and 2 APEC fora

Including all speakers, moderators, consultants and EMCEE

6 economies

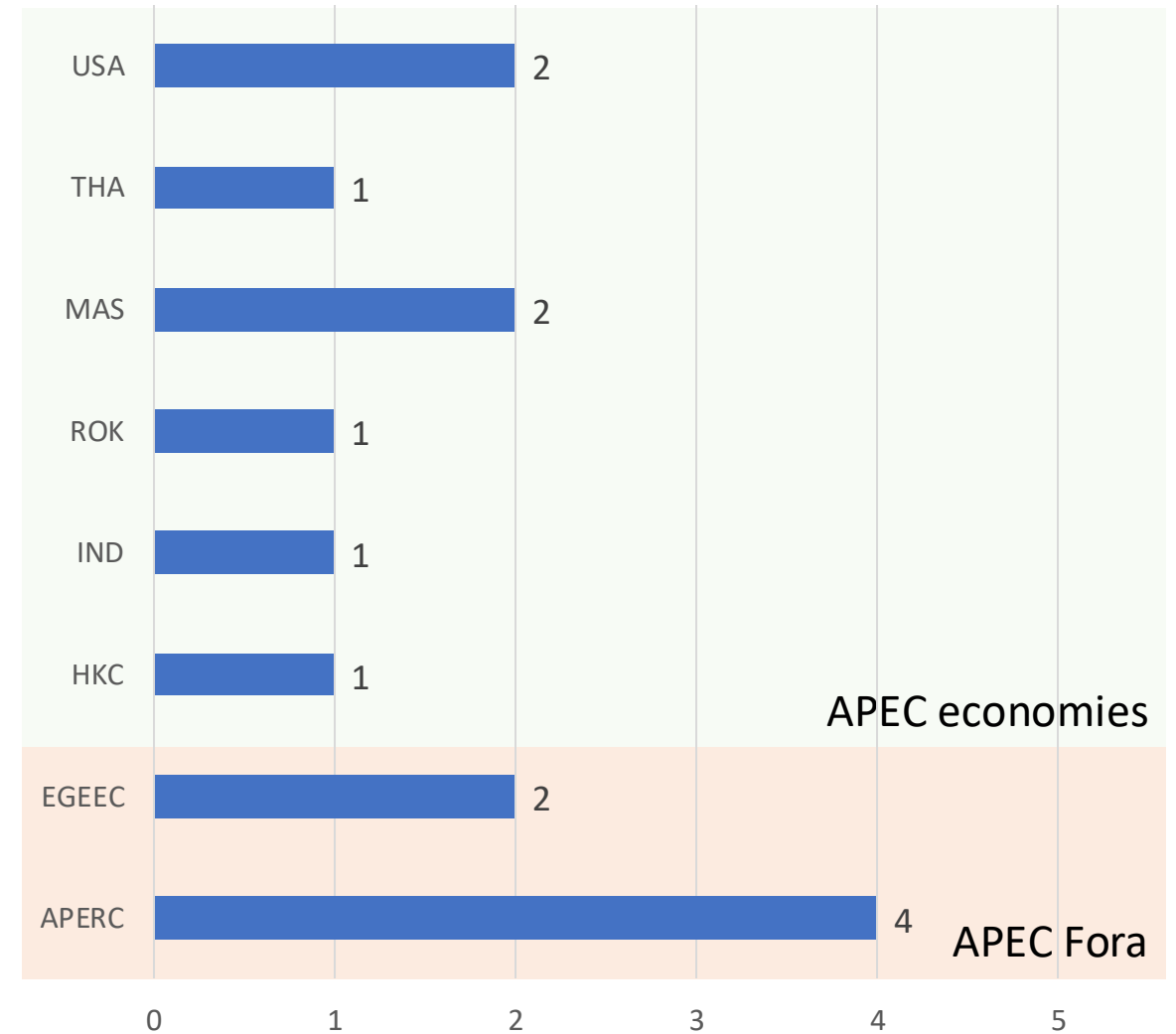
- HKC, IND, ROK, MAS, THA, USA

2 APEC fora

- EGEEC, APERC

35.7% female participation

- 5/14 (F/M)



22 participants from 11 economies and 3 APEC fora

36.4% of participants applied for APEC support fund for TU, **2 participants** from **2 economies** (IND and RUS) extended to attend the 63rd EGEEC meeting.

11 economies

- PRC*, HKC*, IND*, JPN*, ROK*, MAS*, PNG*, RUS*, CT*, THA*, VN

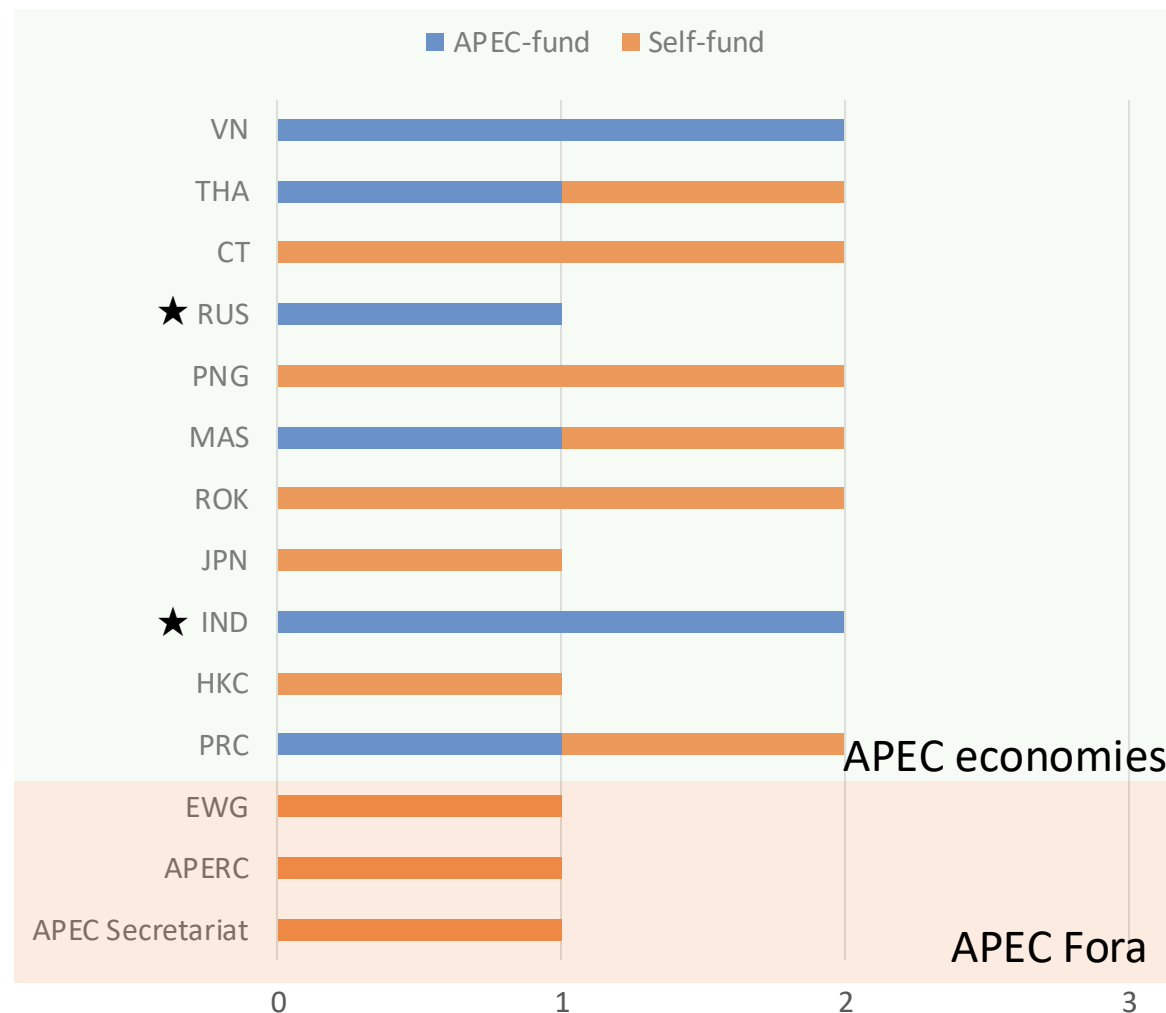
*10 economies attended the 8th EEP WS & EGEEC 63
7 economies completed pre-survey

3 APEC fora

- APEC Secretariat, EWG, APERC

36.4% female participation

- 8/14 (F/M)



Attendees' Comparison Between the 8th EEP WS and the EGEEC 63

12 economies attended the 8th EEP WS

- PRC, HKC, IND, JPN, ROK, MAS, PNG, RUS, CT, THA, **USA, VN**

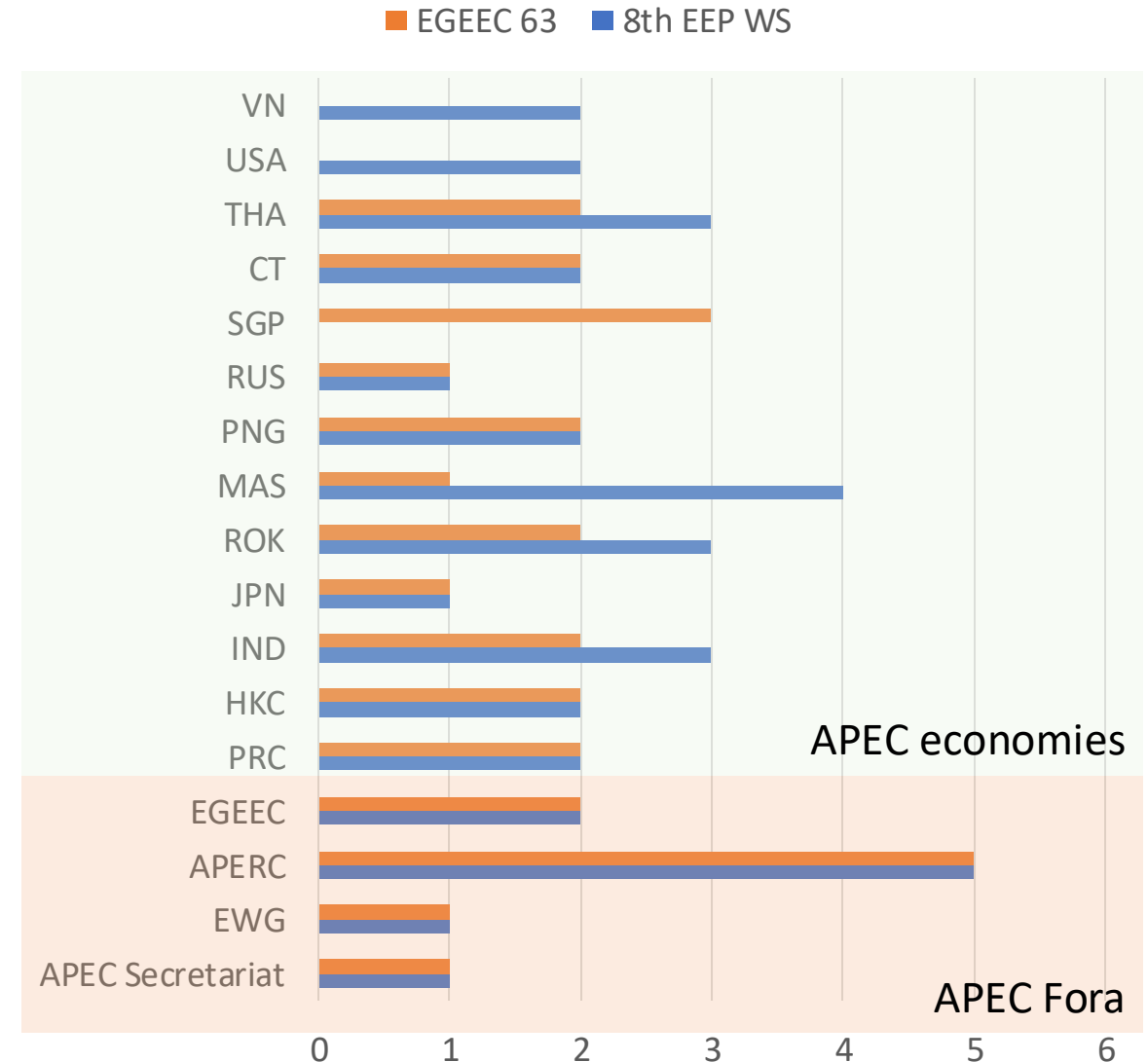
*USA attendees are experts

*VN attendees only attended 8th EEP WS

11 economies attended the 63rd EGEEC Meeting

- PRC, HKC, IND, JPN, ROK, MAS, PNG, RUS, **SGP**, CT, THA

*SGP only attended the EGEEC 63



Summary

- APERC is dedicated to promoting energy efficiency in the APEC region. It has implemented **13 rounds of PREE projects** and held **eight APEC Energy Efficiency Policy (EEP) Workshops**.
 - 21 drafted recommendations were developed
 - 36 attendees from 12 economies and 4 APEC fora in 8th EEP workshop
- **Energy management** is a key focus of Chile's energy efficiency policy. The 8th APEC EEP Workshop invited **international organizations (ISO)** to introduce concepts and applications of international standards and economies to share **policy practices** in adopting international standards.
- A primary goal of the APEC EEP workshop is to **support member economies' participation** in the EGEEC meeting. The 8th EEP workshop, funded by APEC, enabled **8 participants** from **6 economies** to attend and facilitated **2 economies' participation** in the EGEEC meeting.

Thank you.

<https://aperc.or.jp>

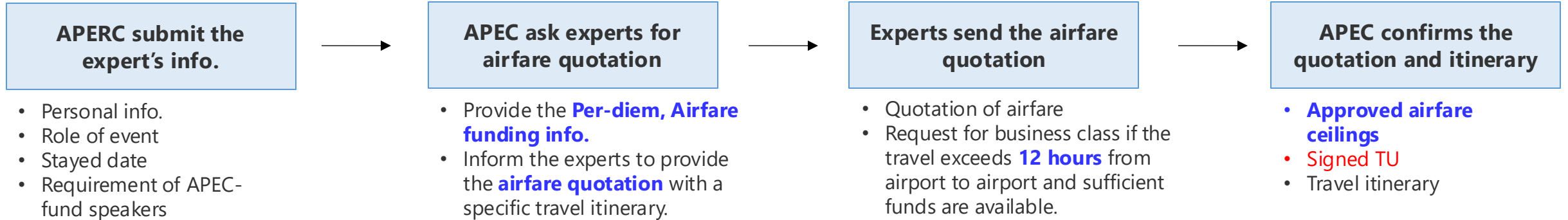


Appendix: the Historical EEP Workshops Summary

	Date	Place	Theme	Conjunction with	No of Participants (APEC fund)	No. of Economies
Trial	2015.03.23	Singapore	Fundamentals of energy efficiency policy	EGEEC 45	40(5)	12
1st	2016.04.12	Taichung, Chinese Taipei	Policy and Program Evaluation	EGEEC 47	30(3)	11
2nd	2017.03.27	Jeju Island, Korea	Policy and Program Evaluation II	EGEEC 49	32(5)	15
3rd	2018.04.10	Washington DC, USA	Conformity Assessment Approaches	EGEEC 51	29(6)	11
4th	2019.03.18	Hong Kong, China	Developing Fuel Economy Regulation	EGEEC 53	41(1)	19
5th	2020.11.18	Hong Kong, China (Online)	Economic Recovery through Energy Efficiency	EGEEC 55	86	13
6th	2022.03.29	China (Online)	Energy Efficiency Project Financing	EGEEC 58	47	13
7th	2023.10.16	Makati, Metro Manila, the Philippines	Electrification and Energy Efficiency	EGEEC 61	28(3)	11
8th	2024.11.05	Tianjin, China	Energy Management: Standards, Policies and Best Practices	EGEEC 63	36(8)	12

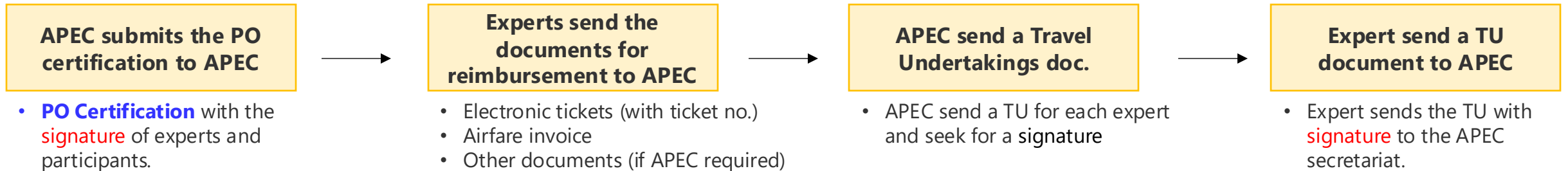
Appendix: APEC Travel Undertaking process

Before the workshop



Please do not purchase the ticket before you receive our approval for funding ceiling to ensure that the airfare is fully reimbursable.

After the workshop



- The APEC Secretariat will notify the remittance advice experts if the disbursement is completed.
- Previous cases in the PREE project may take **at least three months**.

Appendix: Pre-Survey Questionnaire

1. **Your economy?**
2. **What is the [current government institutional framework](#) of energy efficiency?**
3. **Are the [government and related organizations](#) required to implement the [EnMS and EA regularly](#)?**
4. **Is the EnMS or EA a [mandatory requirement](#) for the [private sector](#) in the energy efficiency law?**
5. **If an EnMS and EA are mandatory in the private sector,**
 - What is the [threshold](#) by energy unit/economy unit/floor area unit?
 - What kind of [requirements and obligations](#) of EnMS and EA ?
 - What [share of total final energy consumption](#) (excluding non-energy uses) in your economy is [covered by Energy Management Systems and Energy Audits](#)?
 - How does the government [ensure the effectiveness](#) of the requirements?
 - What is the [compliance rate](#) of requirements of EnMS and EA?
6. **Is there any [voluntary and/or financial support program](#) available for EnMS and EA ?**

Appendix: Discussion topics in the “Knowledge-sharing by Economies “

AM session (Part 1: Energy Management, Standards, and Policies Practices) (50 mins)

- ❖ Round 1 (5 mins for three economies): 15 mins
- ❖ Expert’s feedback: 10 mins
- ❖ Round 2 (5 mins for three economies): 15 mins
- ❖ Expert’s feedback: 10 mins

PM session (Part 2: Energy Audits, Standards and Policy Practices) (50 mins)

- ❖ Round 1 (5 mins for three economies): 15 mins
- ❖ Expert’s feedback: 10 mins
- ❖ Round 2 (5 mins for three economies): 15 mins
- ❖ Expert’s feedback: 10 mins

Appendix: Energy audit and energy management system

- **Energy audit (EA):** means a systematic procedure with the purpose of obtaining adequate knowledge of the energy consumption profile of a building or group of buildings, an industrial or commercial operation or installation or a private or public service, identifying and quantifying opportunities for cost-effective energy savings, identifying the potential for cost-effective use or production of renewable energy and reporting the findings
- **Energy Management System (EnMS):** means a set of interrelated or interacting elements of a strategy which sets an energy efficiency objective and a plan to achieve that objective, including the monitoring of actual energy consumption, actions taken to increase energy efficiency and the measurement of progress;

Source: EU (2023) Recast Energy Efficiency Directive 2023