

# Session 2: AIM as a Policy Support Tool

Expectations from climate policy making process

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[Case study 3] Prof. Chin Siong Ho (UTM, Malaysia)

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[Discussants] Dr. Vong Sok (ASEAN Secretariat),  
Mr. BounEua Khamphilavanh (MONRE, Lao) and  
Ms. Tomoko Ishikawa (IGES, Japan)

*AIM is expected to play a role as a policy tool by providing quantitative information to support the development of climate mitigation policies including long-term strategies, and to assist local areas in their decarbonization policies.*

# Introduction

Yosuke Arino: Researcher & Project Leader (Mitigation and Adaptation Integration), Strategic Management Office, Institute for Global Environmental Strategies (IGES), Hayama, Japan



## Recent works

- Programme manager for the **ASEAN Climate Change Strategic Action Plan 2023-2030 (ACCSAP)**, ongoing
- Principle investigator for the “**Research on Developing a Roadmap and Supporting Implementation of Transition Strategies for Mitigation and Adaptation towards Realizing Climate-neutral and Resilient Societies** in Developing Countries and Sub-regions in Asia (1CN-2206)” (2022-2025), ongoing
- Programme manager for the **ASEAN State of Climate Change Report** (October 2021)

## Expertise

- Experiences of the **Integrated Assessment Model (IAM)** analysis on long-term mitigation, adaptation, and geoengineering
- Analyses of solar PV diffusions and estimation of capacities to adapt to climate-related hydrological hazards
- Transdisciplinary research on the development of climate change roadmap
- PhD in Economics, Keio University.

# ASEAN's GHG emission pathways

The global 1.5 °C target calls for ASEAN to achieve a **net-zero CO<sub>2</sub> emission in 2050** while ASEAN needs to achieve **net zero GHG emissions in 2065** on average across models.

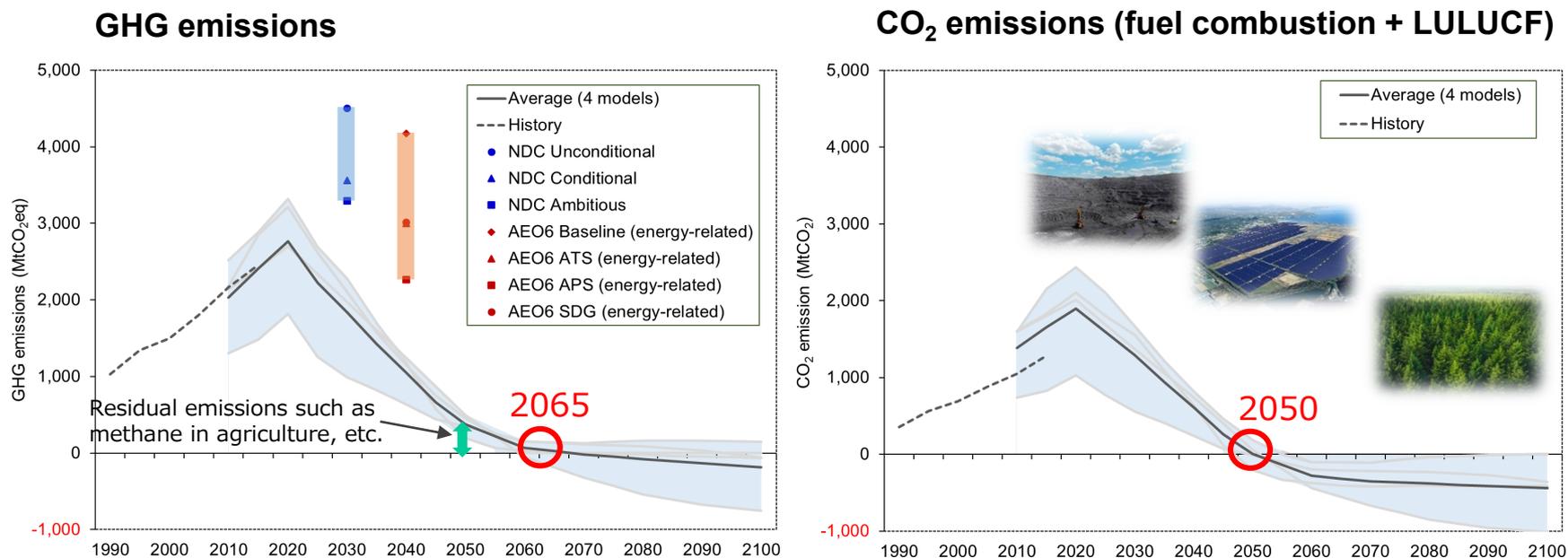


Figure 16. Historical and future GHG and CO<sub>2</sub> emissions pathways in ASEAN to meet the 1.5°C target on a global scale. CO<sub>2</sub> emissions include emissions from fuel combustion, industrial processes, and LULUCF. Four models whose simulation results shown are AIM/CGE 2.1, MESSAGEix-GLOBIOM 1.0, REMIND-MAGPIE 1.7-3.0, and WITCH-GLOBIOM 4.4.

Note: Photos are added on the original Figure 16 by presenter

# ASEAN's long-term climate goals shown in ASCCR

## Goal for synergizing adaptation and mitigation

Wherever possible, adaptation interventions should aim for synergy with mitigation synergies in order to drive the ASEAN transformative pathway toward net-zero emissions. For this purpose, climate change adaptation and mitigation need to be integrated using cost-effective solutions that maximise well-being.

### Adaptation goal

- Process-oriented and/or outcome-based goals for sectors commonly impacted across AMS such as sea-level rise and urban heat island effects
- **Ensure adaptation transition's synergy with the mitigation transition toward net-zero emissions**

### Mitigation goal

- Realise **net-zero GHG emissions as early as possible in the latter half of the 21st century.**
- Realise **peak GHG emissions as soon as possible after 2030** to ensure the net-zero GHG emission goal is met on schedule.

### Development goal

Realise the AMS developmental goals, recognising the extent of multi-dimensional trade-offs and synergies among the sustainable development goals (SDGs) related to energy security, resources, food, water, safety and climate.

Source: Arino, Y. and Prabhakar, S.V.R.K. (2022) ASEAN's Transition Pathway to Realise a Resilient and Net-zero Community: Core Findings from the ASEAN State of Climate Change Report, Policy Brief, No. 02 / January 2022, ACEAN Centre for Energy

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### Outline of Session 2

- **Presentations (two)** by the researchers in Thailand and Malaysia, showing how the simulation results from the AIM have been used in the climate mitigation policies

### Panel discussion

- **Expectations (three short presentations)** for the integrated assessment model will be introduced by discussants, from the viewpoint of climate policy making process

- **Discussion** on the contribution of the AIM and its new direction to support decarbonization policies
- **Q&A session** (if possible)



minutes

30

25

30