
International Research Collaboration for Development of National Actions toward Decarbonized Society in Asia

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National Institute for Environmental Studies

6th International Forum on Sustainable Future in Asia

6th NIES International Forum

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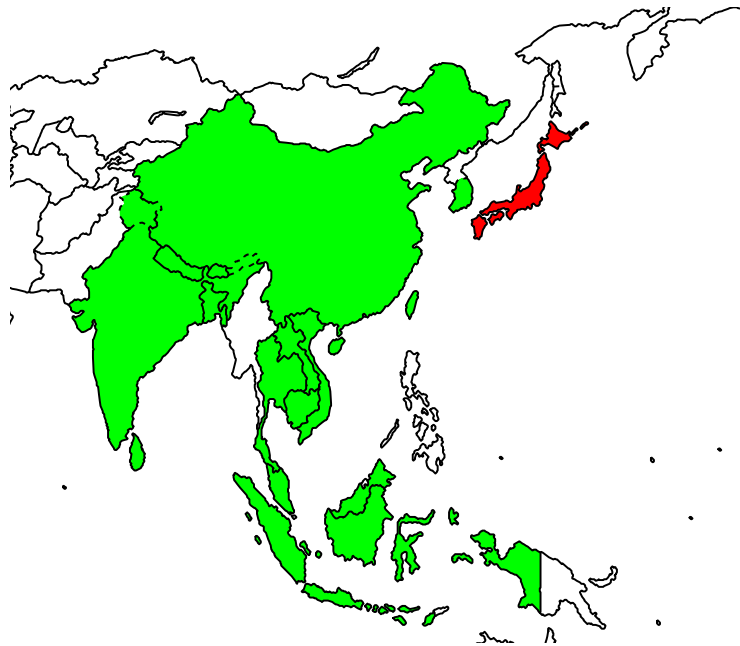


Asia-Pacific Integrated Model

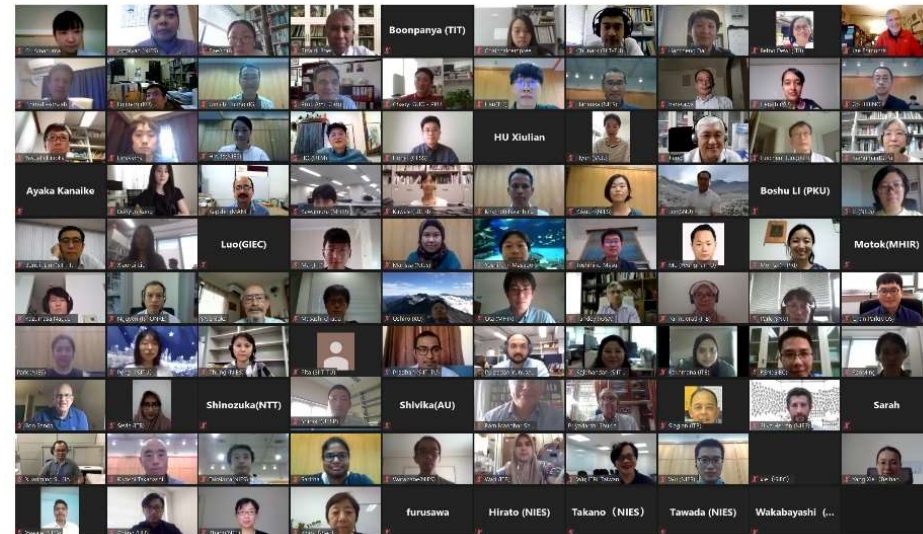
<http://www-iam.nies.go.jp/aim/index.html>



International Network of AIM (Asia-Pacific Integrated Model)



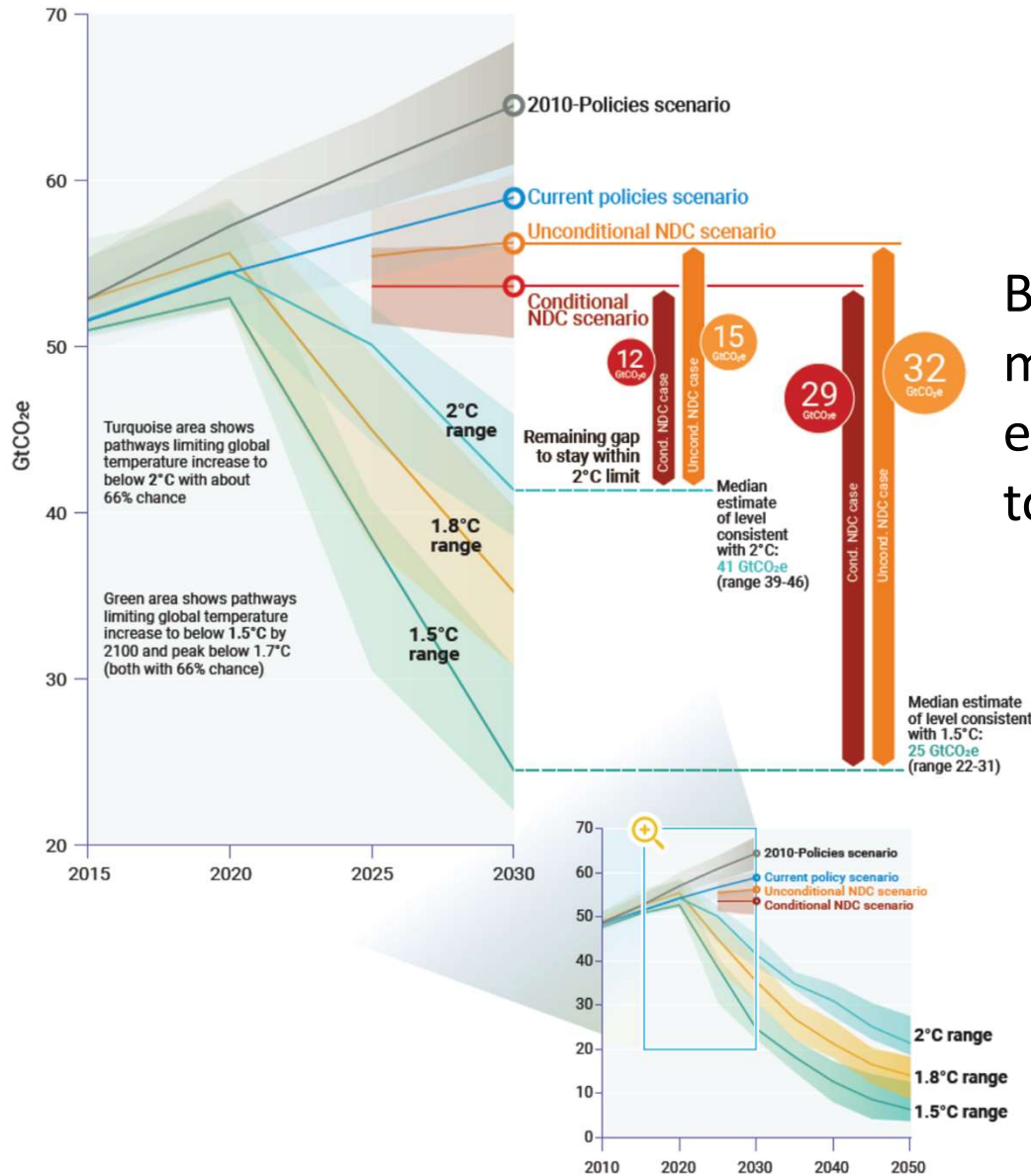
AIM International Workshop 26th



The 26th AIM International Workshop in 2020 (Online)

- Asian countries will update their mitigation target and roadmap to achieve the 2/1.5 degree target reflecting their issues to be solved and the resources to be endowed.
- Model can be a collaboration tool between science and decision making process. From the long-term viewpoint, each country will need the capacities to develop model and scenarios by itself.
- AIM (Asia-Pacific Integrated Model) has supported Asian countries to develop the integrated assessment model and their long-term low carbon scenarios.
- <https://www-iam.nies.go.jp/aim/index.html>

Present NDC can achieve the 2/1.5 degree target?

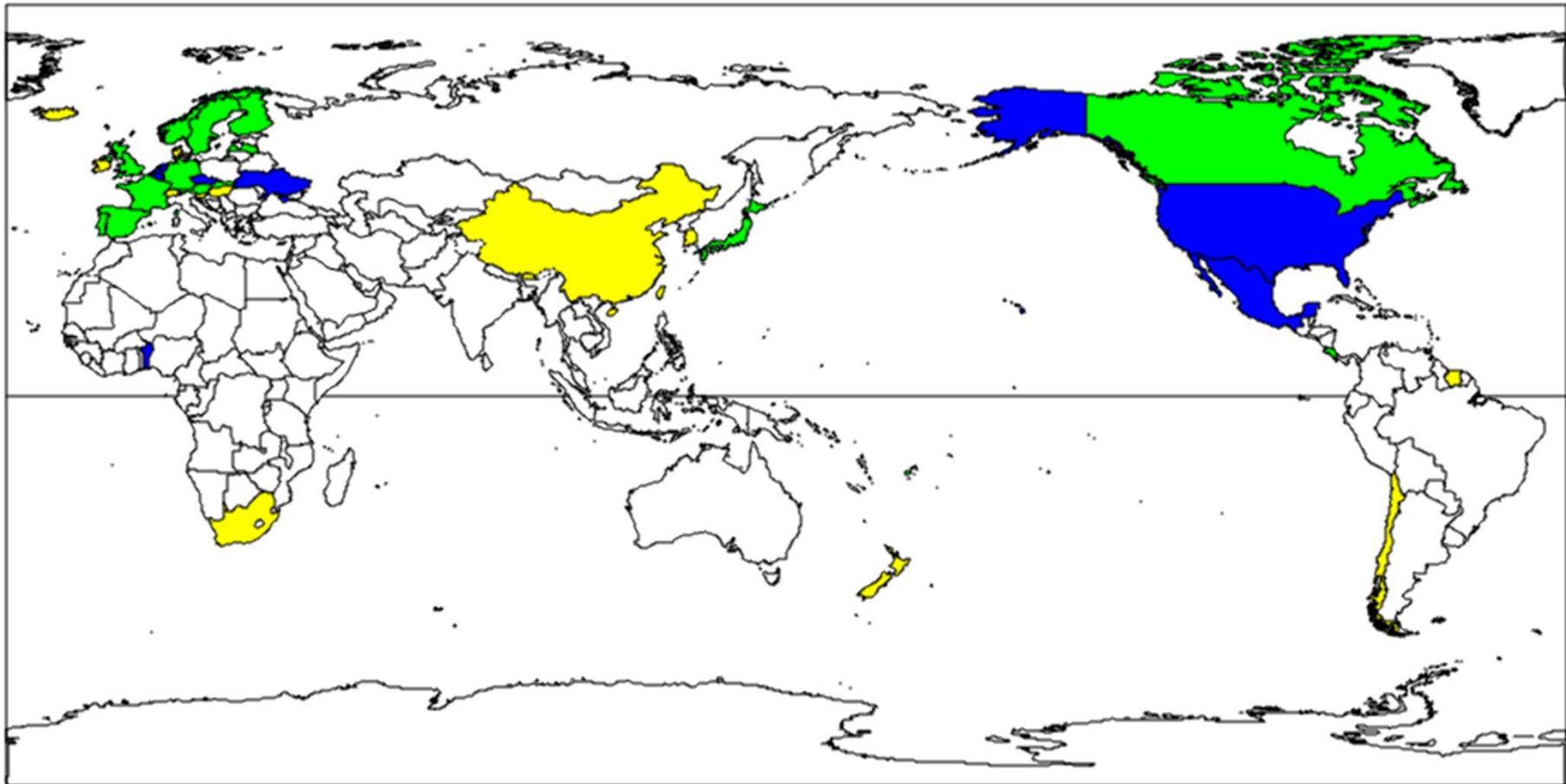


Big gap between present GHG mitigation target and estimated emission pathways to achieve 2/1.5 degree target.

Source :
 UNEP (2020)
 Emission Gap Report 2020, Fig. ES.5
<https://www.unenvironment.org/emissions-gap-report-2020>

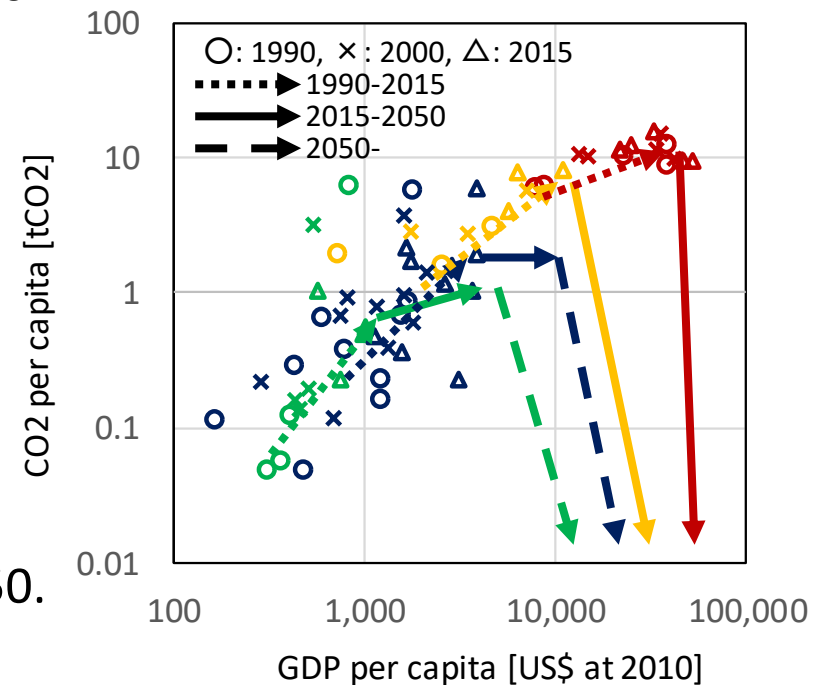
Long-term low GHG emission development strategy

- As of December 31, 2020, total 25 countries and EU have already submitted LTS to UNFCCC.
 - Countries which have submitted LTS and committed net zero emissions
 - Countries which have submitted LTS
 - Countries which have not yet submitted LTS but committed net zero emissions

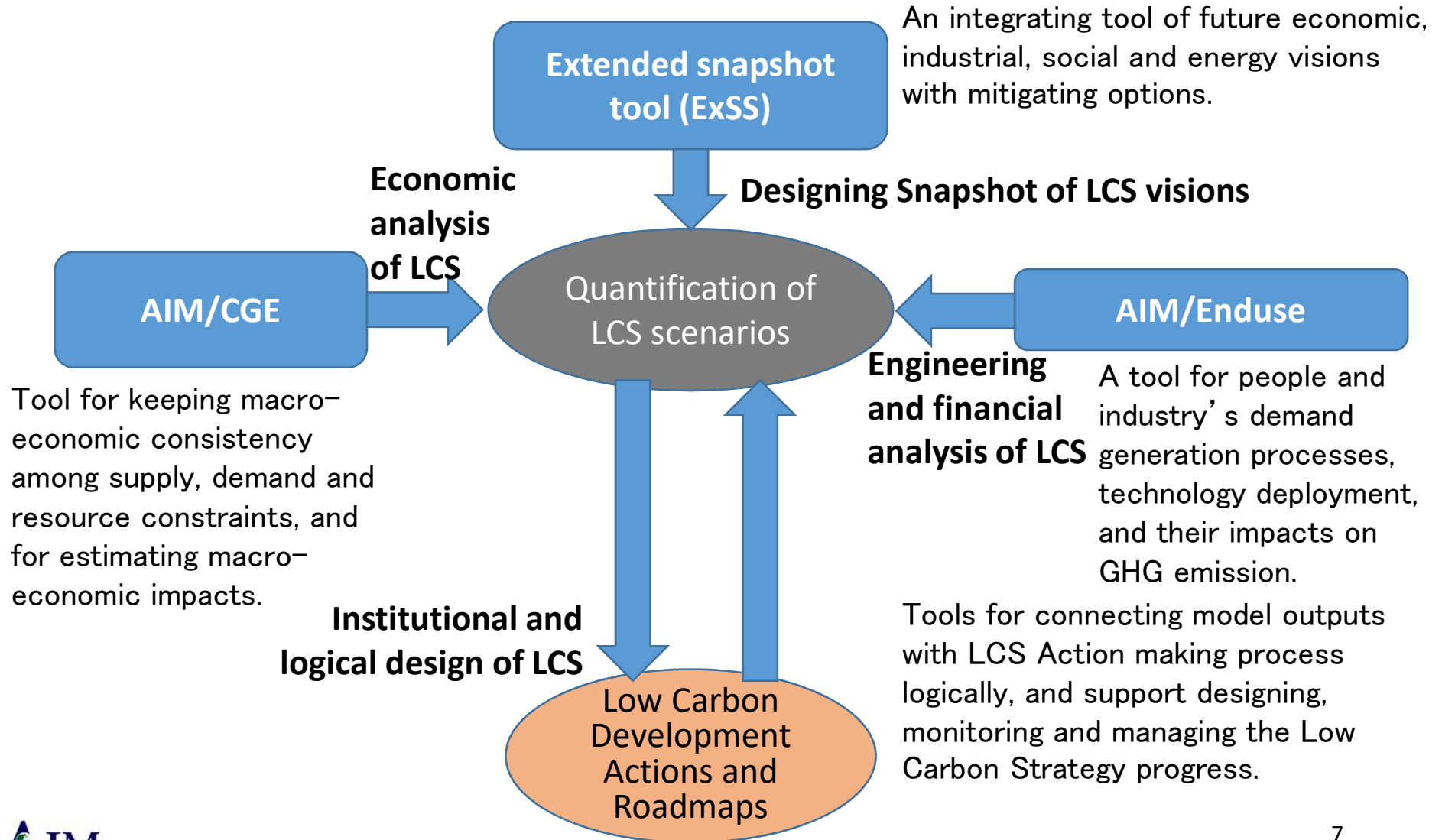


Toward sustainable decarbonized Asia

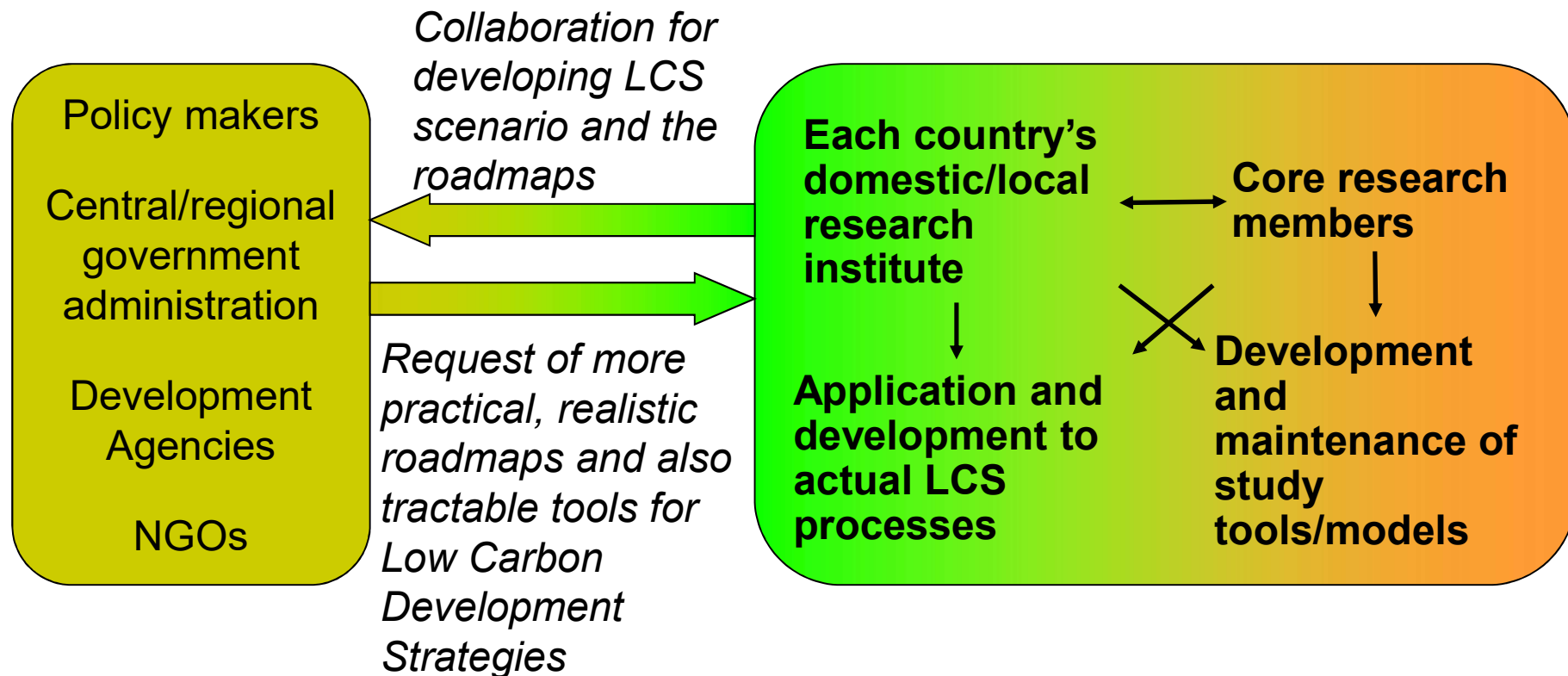
- Final goal is common among countries;
 - ✓ SDGs (economy, society, environment)
 - ✓ GHG mitigation target (NDCs, long-term strategy, zero emission)
- But process/strategy may be different among countries;
 - ✓ Viewpoint of economy and CO2
 - **Japan, Korea, Taiwan**: steady state economy with drastic CO2 reduction?
 - **China, Thailand, Malaysia**: strong decoupling between economic growth and CO2 reduction
 - **Bhutan, India, Indonesia, Lao, Vietnam**: economic growth with maintaining CO2 emissions
 - **Cambodia, Nepal**: economic growth
 - In developing countries: correction of disparities between urban and rural
 - ✓ Other viewpoints
 - Endowed resources
 - Social conditions such as aging, available technology, etc
- At this moment, targets of most Asian countries are peak-out of emissions by 2050.



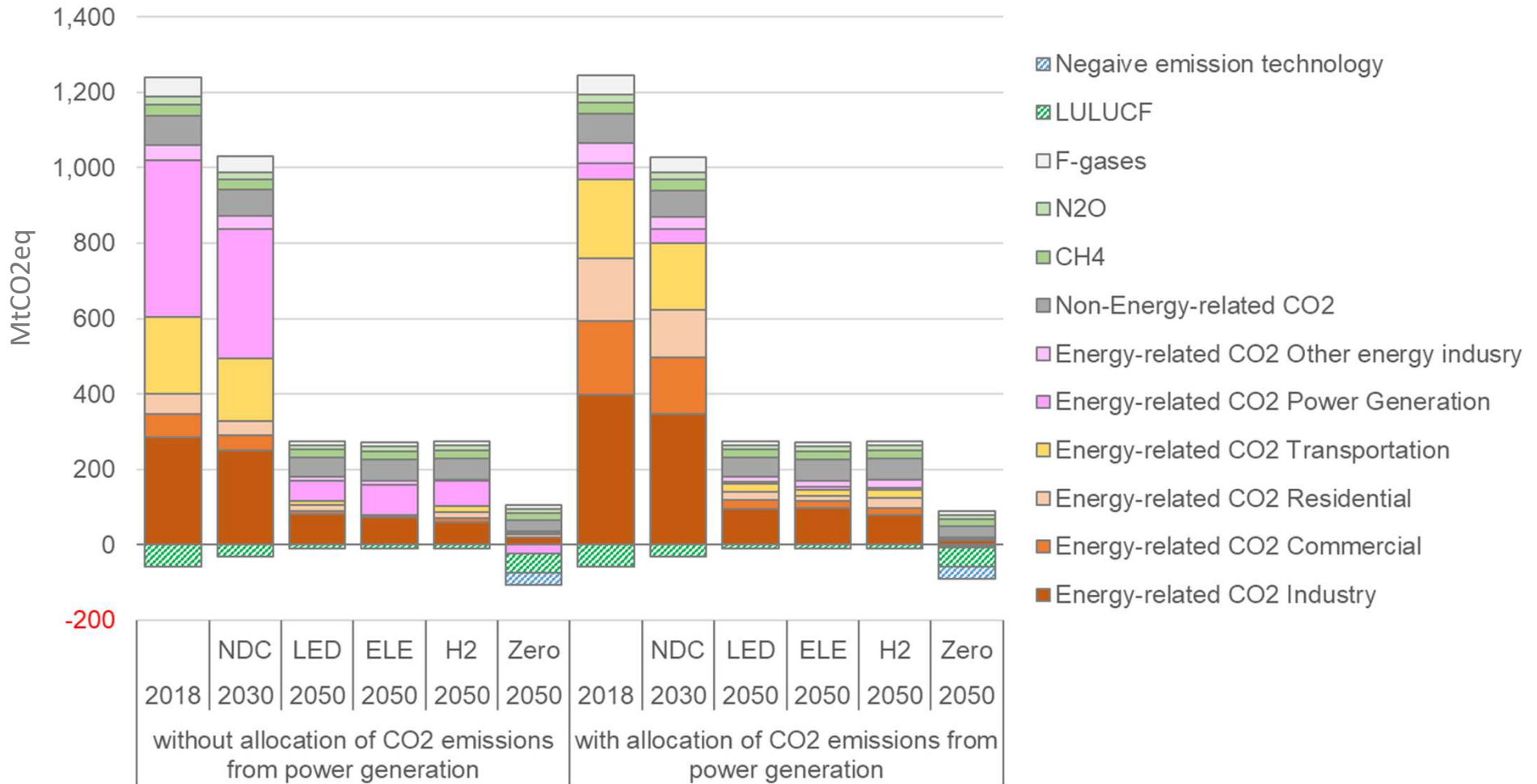
How to combine the tools in order to keep consistency and unity among Socio-Economic policies and LCS actions



Collaboration with Asian countries; Scenario approach towards Low Carbon Society in Asia



Example of GHG in Japan in 2050 using ExSS (tentative results)



In addition to AIM International Workshop, activities on capacity building in Asia are our important works.



Provision of AIM/CGE at Workshop on carbon neutral development in Bhutan on May 17 & 18, 2018



Training workshop on AIM/Enduse at SIIT, Thammasat Univ. from June 11 to 15, 2018 (10 Participants from 2 economies)



Training workshop on AIM/CGE at SIIT, Thammasat Univ. from June 26 to July 5, 2018 (7 participants from 3 economies)

Vietnam

Joint Ministerial Statement: 6th Viet Nam - Japan Environmental Policy Dialogue

Joint Ministerial Statement
6th Viet Nam - Japan Environmental Policy Dialogue

The 6th Viet Nam - Japan Environmental Policy Dialogue between the Ministry of Natural Resources of Viet Nam and the Ministry of the Environment of Japan was organized virtually on 24th and 25th August 2020. Following is the summary of discussions of the meeting:

Session 1: Review on Progress of the Cooperation

1. Both sides welcomed the outcome of the cooperation between the two Ministries since the 5th Policy Dialogue and shared the progress of the cooperation in various areas within the framework of the dialogue, including in the Joint Credit Mechanism (JCM), Partnership to Strengthen Transparency for co-innovation (PaSTI), supporting climate adaptation plans for three provinces in Viet Nam, revision of Environmental Protection Law 2014, amongst others.

Session 2: Climate Change

2. Both sides shared the review of climate change measures after the adoption of Paris Agreement and confirmed commitment for continuous and enhanced cooperation in the areas of mitigation, transparency and adaptation.
3. Regarding mitigation, both sides agreed on comprehensive cooperation for advancing transition towards decarbonization in Viet Nam through introducing and/or updating policies, instruments, capacity building and diffusion of low-carbon and decarbonized technologies, including developing the long-term strategy and mainstreaming renewable energy by for instance utilizing AIM model.
4. Both sides welcomed the progress of renewing the bilateral document on the JCM and confirmed that the JCM continues to be an important mechanism in contributing to mitigation activities. Both sides also recognized the potential in utilizing the JCM for the achievement of SDGs and facilitating multilateral partnerships among the JCM partner countries and relevant stakeholders through the JCM Global Partnership.
5. Regarding transparency, both sides agreed to promote identification of specific activities in the Partnership to Strengthen Transparency for co-Innovation (PaSTI) and to cooperate in Long-term Strategy towards reducing emissions, and confirmed to discuss detailed activities.
6. Both sides also agreed on accelerating efforts to advance lifecycle management of fluorocarbon including continued engagement to global actions, such as the Initiative on Fluorocarbons Life Cycle Management, amongst others.
7. Recognizing the strategic importance of engaging cities in advancing decarbonization, both

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<https://www.env.go.jp/press/files/jp/114598.pdf>

Thailand

Third National Communication



<https://unfccc.int/documents/181765>

CHAPTER 3: MITIGATION MEASURES

3.2.1 NAMAs roadmap

Thailand's NAMAs aims at voluntarily reducing greenhouse gas emissions in the energy and transportation sectors by 7% by 2020 from the Business as Usual (BAU) levels. With sufficient international support, Thailand's NAMAs aims to lower the carbon trajectory up to 20% below the BAU level by 2020. The key mitigation actions committed and implemented in the Thailand's NAMA roadmap include:

- Development of renewable energy and alternative energy sources;
- Energy efficiency improvements in power generation, industries, buildings, and transportation;
- Substitution of bio-fuels for fossil fuels in the transport sector; and
- Thailand's Transport Infrastructure Development Plan.

3.2.2 Thailand's NDC

Thailand submitted its INDC and relevant information to the UNFCCC in 2015 to restate that GHG emissions can be reduced by 20% from the BAU levels by 2030, and up to 25% if the required support is received from international organizations. In addition to this progress, the NCCC established the Subcommittee on Climate Change Policy and Planning Integration, which is tasked with preparing and proposing mitigation mechanisms and measures that encompass the legal, economic, fiscal and social instruments that are required to translate the measures into the policies, strategies, and work plans to meet the medium-term and long-term mitigation targets. Since the submission of its first Biennial Update Report and ratification of the Paris Agreement in 2015, several climate change mitigation policies and measures have been put in place at the national level to fulfil Thailand's drive toward a low carbon and resilient society. In 2017, Thailand launched its NDC Roadmap to reduce 115.6 MtCO₂e, which will account for a 20.8% reduction by 2030 when compared to the BAU level.

As mentioned, both Thailand's NAMAs and Thailand's NDC were developed on the basis of BAU (Figure 3-1). The BAU scenario was created by using the Asia-Pacific Integrated Assessment Model (AIM). The AIM model was developed in collaboration between the National Institute for Environmental Studies (NIES) Japan, Kyoto University, the Mizuho Information & Research Institute, and other Asian researchers including Thailand. The AIM model focuses on relevant policies to support low-carbon pathways.

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