

**NEAT Working Group on
“Toward 2050 Carbon Neutrality in East Asia”¹**

Final Report

Tokyo

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¹ Recognizing APT countries have multiple timeline targets to achieve carbon neutrality, this Working Group will consider how to achieve carbon neutrality while respecting them.

1. Background

Under the Paris Agreement, all the Parties agreed to a long-term temperature goal of limiting global warming to well below 2°C and pursuing efforts to limit it to 1.5°C above the pre-industrial levels. After the Paris Agreement agreed, the Intergovernmental Panel on Climate Change (IPCC)'s Special Report “Global Warming of 1.5°C” (hereafter, the 1.5°C Special Report), published in 2018, highlighted robust differences in regional climate characteristics between global warming of 1.5°C and 2°C, and indicated that it is necessary to achieve global net-zero CO₂ emissions around 2050 to limit the global temperature rise to 1.5°C above pre-industrial levels.

To keep a limit of 1.5°C temperature rise within reach, there is a growing momentum for making commitments to achieve carbon neutrality or net-zero emissions by 2050. Reflecting the IPCC 1.5°C Special Report, in 2019 UN Secretary-General António Guterres called on all world leaders to make concrete and realistic plans to achieve carbon neutrality by 2050. At the Carbis Bay G7 Summit of 2021, leaders of G7 member countries made a commitment to 2050 carbon neutrality² and called upon all countries, in particular major emissions economies, to join their efforts in realising carbon neutrality by 2050. Around 100 countries have already committed to 2050 carbon neutrality.³

As of July 2021, among APT countries, three countries (Japan, Republic of Korea, and Lao PDR⁴) committed to achieving carbon neutrality by 2050, two countries (China and Indonesia) by 2060, and one country (Singapore) as soon as possible in the second half of this century. Moreover, one country (Cambodia) showed an ambitious GHG emission reduction target (a scenario) for achieving a negative emission in 2030 based on a larger carbon sinks in the forest sector. The rest of the countries in the region have not made carbon neutrality commitments yet. There are, however, at least two reasons for East Asian countries to consider their commitments to 2050 carbon neutrality.

² The G7 commitment on 2050 carbon neutrality refers to a net-zero GHG emissions target. However, in this concept paper, a carbon neutrality refers to a net-zero CO₂ emission target unless specifically mentioned.

³ 27 member countries of the European Union are counted individually.

⁴ Lao PDR is a member of the Climate Ambition Alliance which pursues net-zero emissions by 2050. Cambodia and Myanmar are also the members of this alliance.

First, East Asia is vulnerable to various climate-related risks and can get better off by limiting global warming to 1.5°C, rather than 2°C, above preindustrial levels. The IPCC 1.5°C Special Report highlighted “[l]imiting warming to 1.5°C compared with 2°C is projected to result in smaller net reductions in yields of maize, rice, wheat, and potentially other cereal crops, particularly in...Southeast Asia.” Eastern Asia is also one of the regions where risks from heavy precipitation events are projected to be higher at 2°C compared to 1.5°C of global warming. Therefore, it is important for East Asia to join the global effort to strive for 2050 carbon neutrality with an aim to achieving the 1.5°C goal.

Second, as momentum towards decarbonisation grows globally, APT countries are also exposed to transition risks, and it is important to ensure that they are able to respond to these risks. For example, the EU is introducing carbon border adjustment measures, and there are similar discussions in the US. At the corporate level, there is also a growing movement to decarbonise supply chains as a whole, and companies in East Asian in the global supply chains are likely to be required to take response measures in the future. National efforts to move towards 2050 carbon neutrality in 2050 will help mitigate these risks.

Despite these reasons for striving to achieve 2050 carbon neutrality, there are still several challenges and concerns for making such commitments. They include, for example, technological capacity and its uncertainty, the scale of investment, the scale and speed of socio-economic and energy/land transformation, and concerns over equity. Many public figures pointed out that stimulus recovery packages are expected to spearhead structural transformation towards carbon neutrality, but their positive outcomes have yet to be seen.

2. Objective

This Working Group will examine what can be done to achieve carbon neutrality by 2050 in East Asia and explores opportunities for regional cooperation among ASEAN+3 (APT) countries to facilitate near- to long-term national and subnational actions.

Furthermore, Japan is preparing a report on the climate change situation in the ASEAN region through the framework of the Japan-ASEAN Integration Fund. While referring to such existing efforts, we will compile policy recommendations.

3. Challenges

Against these backgrounds, this Working Group will examine what can be done to achieve carbon neutrality by 2050 in East Asia, by discussing the followings questions: (1) How can stimulus recovery packages for COVID-19 disaster contribute to socio-economic and energy structural changes toward decarbonisation? If not, what are the challenges and how can they be overcome?; and, (2) How can APT countries collaborate together at the regional level to commit and achieve carbon neutrality, including mutual learning for developing strategies and roadmaps for achieving it, development and transfer of decarbonising technologies, and innovation/harmonisation of policy schemes such as mobilising finance for green recovery (i.e. for clean energy investments) and transition management (or a “just transition”) involving the private and public sectors? How can increasing geopolitical tension in the region be mitigated through such regional collaboration toward 2050 carbon neutrality?

4. Discussions at the Working Group meeting

22 experts from APT member think tanks and the sponsoring organization, the Japan Forum on International Relations (JFIR), took part in a working group meeting online on 17 August 2021 which was organized in a keynote address and two sessions.

The theme of Session I was "How can stimulus recovery packages for COVID-19 pandemic contribute to socio-economic and energy structural changes toward decarbonisation?". Specifically, the Working Group discussed the following two points: "How can a country mobilise finance for green recovery, including national fiscal policy reforms, private financing, and utilisation of regional/international funds?"; and, "What are the challenges and how can they be overcome?"

Participants pointed out the importance of combining green recovery and just transition, phasing out coal power and transforming the energy sector to avoid carbon lock-in, co-innovation of decarbonizing technologies, and climate budget tagging. The role of central banks to promoting climate-friendly investment was also discussed.

The theme of Session II was "How can APT countries collaborate together at the regional level to commit and achieve carbon neutrality?". Specifically, the Working Group

discussed the following four points: “How can APT countries mutually learn ways to develop strategies and roadmaps for achieving carbon neutrality?”; “How can APT countries collaborate for development and transfer of decarbonising technologies within the region?”; “How can APT countries promote together long-term policy schemes for transition management (or just transition”) involving the private and public sectors?”; and, “How can increasing geopolitical tension in the region be mitigated through such regional collaboration toward 2050 carbon neutrality?”

Participants discussed the importance of making political commitment on 2050 carbon neutrality, taking into account developmental concerns, socio-economic situation, and geographical situation, and multiple benefits of adaptation. Several participants mentioned the potential of regional collaboration for fostering EV industry in the region. Huge potential of regional cooperation, in particular between Northeast Asia and Southeast Asia was also pointed out. Several participants pointed out that collaboration for carbon neutrality can be built upon existing framework such as APT dialogue.

5. Policy Recommendations

Based on the discussions above, the Working Group on “Toward 2050 Carbon Neutrality in East Asia” summarized the following policy recommendations:

- While considering developmental concerns, social-economic situation and geographical situation, APT governments should make political commitments to accelerating efforts to achieve carbon neutrality by 2050, or 2060 at latest, as well as to set and achieve the aligned 2030 emissions reduction targets, thereby sending strong signals to the market and society.
- In order to strengthen policy-making capacity for carbon neutrality, APT countries should enhance mutual learning on scenarios and roadmap development and strengthen the modelling capacity for long-term projections.
- APT governments should deliver green stimulus packages to recover from the COVID-19 pandemic with an aim to both facilitating transformation of economic, energy and social systems toward decarbonisation and ensuring just transition which allows such transformation to be made in a smooth and “no-one-left-behind” manner,

including reskilling of workers, green job creation, and financial support for them.

- APT governments should exercise climate budget tagging in designing green recovery stimulus package, and general budget in general, which can significantly increase the transparency in the financial system and pave the way for multifaceted transformation in climate-friendly technology and market expansion
- APT governments should take advantage of diversity in the region in order to promote regional cooperation in the pursuit of raising climate ambition toward carbon neutrality. In particular, cooperation between Northeast Asia and Southeast Asia has huge potential in terms of technology and industrial development such as renewable energy, hydrogen and EV, as well as finance for clean energy transition.

[END]

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