Asia Zero Emission Community (AZEC) Leaders' Joint Statement Action Plan for the Next Decade October 11, 2024, Vientiane

We, the leaders of Australia, Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam met in Vientiane, Lao People's Democratic Republic on October 11, 2024, to hold the 2nd Asia Zero Emission Community (AZEC) Leaders Meeting.

We recall and welcome the outcome of the 2nd AZEC Ministerial Meeting in Indonesia, including the Joint Statement, AZEC Sectoral Initiatives to foster cooperation in power, transport and industry sectors and the launch of Asia Zero Emission Center in the Economic Research Institute for ASEAN and East Asia (ERIA) as well as the outcome of the 2nd AZEC International Conference to Promote the Joint Crediting Mechanism (JCM) and Develop Carbon Markets in August 2024.

1 AZEC Partner Countries Supporting Global Decarbonization

We welcome the outcomes of the 28th United Nations Climate Change Conference (COP28) held in the United Arab Emirates (UAE) and are committed to accelerating efforts, in line with Decision 1/CMA.5 on the Global Stocktake (GST)¹. We recognize the urgent need for deep, rapid, and sustained reductions in greenhouse gas (GHG) emissions in line with 1.5°C pathways. We reiterate the commitment of AZEC partner countries to accelerate the global energy transition and follow through on the collective commitments of the GST on global efforts including tripling renewable energy capacity globally, doubling the global average annual rate of energy efficiency improvements by 2030, accelerating efforts towards the phasedown of unabated coal power, accelerating zero- and low-emission technologies and transitioning away from fossil fuels in energy systems, in a nationally determined manner, taking into account the Paris Agreement and their different national circumstances, pathways and approaches.

¹ https://unfccc.int/sites/default/files/resource/cma5_auv_4_gst.pdf

2 Accelerating the Operationalization of AZEC Platform and Implementation of AZEC Partner countries' Regional Strategies

We will pursue our common goal, reflected in the ASEAN Outlook on the Indo-Pacific (AOIP) and Japan's Free and Open Indo-Pacific (FOIP), of just, affordable and inclusive energy transition and decarbonization towards carbon neutrality/net-zero emissions through various and practical pathways in the region and beyond. To that end, we will redouble our efforts to operationalize the AZEC platform by aligning it with our policy directions laid out collectively and respectively, including in the Joint Vision Statement on ASEAN-Japan Friendship and Cooperation and its Implementation Plan, the Melbourne Declaration² on A Partnership for the Future and the ASEAN Strategy for Carbon Neutrality.

3 Reaffirming AZEC principles

We underscore the significance of the "AZEC principles", which emphasize the importance of achieving a "triple breakthrough", namely addressing climate change, promoting inclusive economic growth and achieving energy security simultaneously. We also embrace the concept of "one goal, various pathways", acknowledging that there are various and practical pathways towards carbon neutrality/net-zero emissions, taking into account each country's unique circumstances, existing targets or policies and developmental challenges including, but not limited to, geographic, economic, technological, institutional, social and equity factors.

4 Collaboration with related meetings and initiatives

We will collaborate with various meetings and initiatives such as Asia Energy Transition Initiative (AETI), Cleaner Energy Future Initiative for ASEAN (CEFIA), the Asia GX Consortium, Strategic Program for ASEAN Climate and Environment (SPACE), ASEAN-Japan Transport Partnership (AJTP), the ASEAN-Japan Smart Cities Network High Level Meeting, and ASEAN-Japan MIDORI Cooperation Plan.

5 Action Plan for the Next Decade

Recognizing the need to accelerate actions in this critical decade, we will promote clean energy transformation in line with Decision 1/CMA.5 on the

² https://www.pm.gov.au/media/melbourne-declaration-partnership-future

Global Stocktake and announce an "Action Plan for the Next Decade" composed of actions plans, initiatives and projects outlined in the Attachment. Our collective focus will be on fostering a favorable business environment through policy development and coordination as appropriate, aligning decarbonization efforts with sustainable economic growth in Asia, while promoting tangible projects to support the energy transitions, in line with AZEC partner countries' respective transition pathways.

To this end, we will collaborate through the Asia Zero Emission Center, which was established in ERIA and launched during the 2nd AZEC Ministerial Meeting to share information, conduct studies on policies and projects to help AZEC partner countries develop vision, roadmaps, or policies towards decarbonization. Furthermore, we will support decarbonization and emission reductions across sectors by leveraging relevant technologies. We will explore cooperation, depending on national circumstances, in projects aimed at achieving these objectives, including introduction of renewable energy including the acceleration of next-generation technologies such as perovskite solar cells, enhanced/advanced geothermal technologies; offshore wind; grid reinforcement; initiatives which catalyze cross-border electricity power trading projects to realize the broader ASEAN Power Grid (APG) vision; deployment and uptake of energy efficiency technologies including but not limited to heat pumps; acknowledging energy efficiency as "the first fuel"; promotion of zero emission thermal power generation using hydrogen, ammonia and CCUS; decarbonization of the transport sector through electrification, infrastructure development, and enhanced use of sustainable fuels; emission reductions and carbon removals in agriculture and forestry sectors through technologies which help increasing productivity including energy efficiency while reducing environmental loads; and aiming for carbon neutrality/net-zero emissions in industrial parks. In this context, we acknowledge, depending on national circumstances, the important role that natural gas and LNG will play as transition fuels, as part of wider efforts to deliver the goals of the Paris Agreement. We acknowledge that some AZEC partner countries, depending on national circumstances, such as the diversification of their energy mix, the existence of nuclear science and technologies, industries, or programs, as well as their limited renewable energy resource potential, may choose to cooperate on the safe and peaceful uses of nuclear energy. In addition, we

will develop a short- to medium-term action plan in order to explore "AZEC solutions" as referred to in Paragraph 1 of the attached "Action Plan for Next Decade."

6 Fostering Cooperation beyond AZEC Partner Countries

We welcome collaboration with all countries within and beyond Asia that wish to support our region's energy transitions and energy security. We further recognize the importance to reach out to countries, including through existing bilateral and regional frameworks, with a view to cooperating on energy transitions, and establishing mutually beneficial clean energy trade markets and diversified, resilient and reliable supply chains in the future. We also welcome and further look forward to cooperation with related international institutions and organizations such as ASEAN Center for Energy (ACE), ASEAN Center for Climate Change (ACCC), and International Energy Agency (IEA) including through the Asia Zero Emission Center in ERIA.

7 Way forward

We express our sincere gratitude to Lao PDR for accommodating the 2nd AZEC Leaders Meeting. We affirmed that the outcome of the AZEC Leaders Meeting will be duly followed by the relevant Ministers of AZEC partner countries.

Action Plan for Next Decadei

*Attached document to the 2nd AZEC Leaders' Joint Statement in 2024

1 Develop a short- to medium-term action plan to facilitate AZEC solutions:

1-1. Enhancing the competitiveness of industries through visualization of GHG emissions throughout the supply chain

To create and expand markets where emission reduction efforts are valued, we will work together to advance visualization of GHG emissions throughout the entire supply chain, depending on national circumstances. This may include facilitating GHG measurement and reporting practice for business activities, developing indicators and approaches to evaluate GHG emission reductions achieved through advanced decarbonization technologies, exchanging information and opinions on mutual recognition of certification and reporting systems where appropriate, leveraging existing method guidance such as that published by the IPCC where possible, and sharing our knowledge and existing practices in carbon pricing, which, among various policy instruments and if appropriate, can be effective not only in reducing emissions but also driving economic growth in Asia and the entire world. We will also work together to reduce emission in industrial sector by using renewable energy and implement energy management.

1-2. Promoting transition finance

To draw in private sector investments, we stress the importance of collaboration with stakeholders such as relevant industries and MDBs to enhance bankability of projects such as energy infrastructure, and channel capital into new growth areas such as clean and transition technologies, products and services, as well as transform business strategies to unlock financing into worthy sustainable projects, which are necessary for decarbonization and energy transitions in Asia. To this end, we will collaborate to emphasize the importance of just and affordable financing for transitions as well as collaboration between public and private for innovative financing such as blended finance, and other financial method. In this context, we welcome the recently publicized Asia Transition Finance

Study Group (ATF SG) Activity Report and the Technology List and Perspectives for Transition Finance in Asia (TLP), and their continuous expansion.

1-3. <u>Promoting emission reductions and carbon removals through dissemination of technologies and innovations in the agriculture and forestry sectors</u>

We will collaborate to establish and promote the Asia Monsoon region's model for emission reductions and carbon removals in the agriculture and forestry sectors through dissemination of technologies and innovations among AZEC partner countries, based on initiatives such as the ASEAN-Japan MIDORI Cooperation Plan. Specifically, we will accelerate efforts to establish technologies tailored to each AZEC partner country, facilitate GHG calculation and reporting practice, and establish rules to promote JCM projects in the agriculture sector among JCM partner countries within AZEC.

1-4. <u>Decarbonization of the transport sector</u>

We will accelerate emission reductions from road transport through a range of pathways. In this context, we welcome the support from ERIA in developing the Master Plan for Next-Generation Automobile Industry Strategy which is targeted to be finalized by 2025. Additionally, we will collaborate to establish sustainable fuel and raw material manufacturing and supply systems that adhere to international standards. Furthermore, we will collaborate in multilateral fora for decarbonization in the maritime sector and we will encourage the development of advanced technologies for Sustainable Aviation Fuel (SAF). Moreover, we will cooperate in implementing projects to realize decarbonized and sustainable transport through multilateral frameworks such as the ASEAN-Japan Transport Partnership (AJTP).

1-5. <u>Promotion of Carbon Neutral Ports (CNPs) and lowering emission of road infrastructure</u>

We will collaborate to promote the development of Carbon Neutral Ports (CNPs) in Asia. This will involve various initiatives such as developing CNP guidelines for Asian countries through the ASEAN-Japan Port Technology Group Meeting under the AJTP. We will also conduct studies on the establishment of the enabling environment at port facilities for handling and utilizing sustainable fuels. Furthermore, we will actively promote the lower emission of road infrastructure and collaborate to facilitate introduction of relevant systems, rules, and regulations, which will be accompanied by visualization of the reduction of GHG emissions and improvement of resource efficiency achieved through technologies including asphalt reclamation.

1-6. <u>Promotion of high-integrity carbon markets</u>

We will collaborate on high-integrity carbon markets, including to expand carbon credit markets, where applicable, in a way that contribute to the emission reductions of AZEC partner countries. This may include expanding JCM partner countries within AZEC, promoting project formation through public-private partnerships, city-to-city collaboration, promoting the preparation of long-term low-emissions development strategies and ambitious NDCs, and institutional arrangements to enable credit transactions. In this context, we welcome progress to promote cooperative mitigation activities within AZEC, including under the JCM.

2. Sectoral initiatives

We will promote initiatives to promote the decarbonization and emission reductions of sectors with high GHG emissions in AZEC partner countries.

2-1. <u>Sector-specific collaboration initiatives towards carbon neutrality/net-zero emissions</u>

We welcome the launch of AZEC Sectoral Initiatives at the 2nd AZEC Ministerial Meeting in August 2024. In the AZEC Zero Emission Power Initiative, collaboration will be conducted, depending on national circumstances, on promotion of zero-emission thermal power generation through using hydrogen, ammonia, bioenergy and CCUS, maximizing renewable energy, implementation of energy efficiency, and ensuring grid reinforcement and flexibility. AZEC partner countries will explore collaboration in multilateral power trade in ASEAN that is mutually beneficial in order to realize the ASEAN Power Grid, including by

strengthening grid infrastructure through investment and facilitating the development and transit of cross-border subsea power cables in ASEAN. In the AZEC Sustainable Fuel Initiative, efforts will be made to establish supply chains for sustainable fuels such as SAF, e-fuels, biofuels, hydrogen, and ammonia in the aviation, automotive, and maritime sectors, with a focus on Asia. The AZEC Next-Generation Industry Initiative will provide support for carbon neutrality in industrial parks and next generation automobile industry among other activities.

2-2. The Asia Zero Emission Center

As a leading institution supporting efforts under AZEC including the AZEC Sectoral Initiatives, the Asia Zero Emission Center in ERIA will conduct activities such as updating decarbonization roadmaps which align with reality of each country, conducting surveys and policy recommendations to advance the ASEAN Power Grid, formulating the Master Plan for Japan-ASEAN Next-Generation Automobile Industry Strategy, conducting surveys on energy-saving potential including heat pumps, knowledge sharing and institutional building support for CCUS/Carbon Recycling in collaboration with the Asia CCUS Network, and conducting surveys on the supply and demand potential of hydrogen and ammonia. Additionally, the Center will provide insights on market enablers such as green and transition finance and carbon market through operating the Asia Transition Finance Study Group (ATF SG), publishing Technology List and Perspectives for Transition Finance in Asia (TLP), and conducting research on high integrity carbon market scheme and effective frameworks for promoting public-private financial collaboration.

3. Promoting tangible projects

We will promote tangible projects to contribute to decarbonization and emission reductions that benefit AZEC partner countries. Below are leading examples of projects led by AZEC partner countries.

3-1. Japan-led projects

Under the AZEC platform, Japan has been making efforts to support energy transitions in AZEC partner countries through various technologies, such as renewable energy, energy efficiency, hydrogen and its derivatives such as ammonia, e-fuels and e-methane, and CCUS, in line with their respective transition pathways, leading to over 350 cooperation projects currently under way in AZEC partner countries. Japan will further contribute to energy transitions towards carbon neutrality/net-zero emissions in AZEC partner countries through tangible projects, including in broader areas related to energy transitions.

3-1-1. <u>Creation of specific projects through ODA (particularly Co-Creation for Common Agenda Initiative)</u>

Japan utilizes ODA to support energy efficiency measures, renewable energy generation projects, transmission and distribution network development, and provide technical cooperation such as training and master plan development for energy transitions. Through offer-type cooperation, Japan collaborates with various stakeholders, including private companies, to support decarbonization efforts.

3-1-2. Creation of specific projects through support from JBIC

JBIC, jointly with the Japanese government, establishes frameworks for dialogue with AZEC partner countries' government agencies, conducts high-level dialogues, and presents proposals for institutional improvements, and promote individual projects with a focus on new clean power development. JBIC promotes transmission and distribution network development, and carbon neutrality/net-zero emissions in building and industrial park development, considering the dissemination and penetration of decarbonization technologies of procurement sources of Japanese companies.

3-1-3. <u>Creation of specific projects for emission reductions and carbon removals in the agriculture and forestry sectors</u>

Japan promotes cooperation projects based on the "ASEAN-Japan MIDORI Cooperation Plan" to simultaneously enhance productivity and achieve emission reductions and carbon removals in the agriculture and forestry sectors in AZEC partner countries through utilizing technology and innovation, including, but not limited to: increasing efficiency through automatic steering technology, improving water management in paddy fields using ICT to reduce GHG emissions and establishing the basic

Measurement, Reporting and Verification (MRV) environments to scale up GHG reduction.

3-1-4. <u>Creation of specific projects through support from Japanese</u> Institutions

Japanese institutions including JETRO, JOGMEC, NEDO and NEXI aim to develop projects through collaboration with AZEC partner countries' companies, institutions, and governments in energy development such as CCUS, hydrogen, ammonia, renewable energy including geothermal and bioenergy, and promotion of energy efficiency measures.

3-1-5. <u>Promotion of GX through cooperation in the smart city sector and creation of specific projects</u>

Japan promotes cooperation in the smart city sector to contribute to the realization of a decarbonized society in AZEC partner countries. This includes collaboration with the ASEAN Smart Cities Network to provide opportunities for sharing expertise and technology tailored to local needs, as well as facilitating partnerships between the public and private sectors through project formation support and hosting international conferences. Additionally, Japan promotes discussions on project formation for hybrid technologies, such as improving the operation and efficiency of existing dams for flood control and hydropower generation, which can simultaneously reduce flood damage (adaptation measures) and GHG emissions (mitigation measures).

3-1-6. <u>Promotion of waste-to-energy projects to prevent pollution and achieve clean and decarbonized waste treatment</u>

Japan promotes pollution prevention, improvement of public health, and decarbonization in the waste and resource circulation sectors with AZEC partner countries in Asia through the deployment of advanced waste-to-energy technologies that contribute to environmentally sound waste management and reduction of GHG emissions, including methane.

3-2. <u>Australia-led projects</u>

Australia was pleased to announce its support for the Asia Zero Emission Center in September 2024. Other recent support by Australia that contributes to decarbonization cooperation in the region includes: the A\$2 billion Southeast Asia Investment Financing Facility announced at the 2024 ASEAN-Australia Special Summit; an additional A\$6.9 million for energy cooperation through the Aus4ASEAN Futures Initiative with a focus on support for the ASEAN Centre for Energy; a A\$10 million climate and energy window under the Southeast Asia and Australia Government-to-Government Partnerships Program; an additional A\$140 million for Australia's support for Partnerships for Infrastructure (P4I) which will enable continued support for partner countries on energy system regulation and management, grid integration of renewables, transport decarbonization and the development of energy infrastructure; and cooperation through the Quad Clean Energy Supply Chain Diversification Program and the IPEF Hydrogen Supply Chain Initiative.

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ⁱ This list of the Action Plan for Next Decade will be updated in accordance with the progress of AZEC solutions, initiatives and projects of each country.