

AZEC: ASIA'S VARIOUS PATHWAYS TO NET ZERO

CO-CREATED BY JAPAN

The Asia Zero Emission Community (AZEC) was launched by 11 partner countries in 2023. The platform seeks to further advance decarbonization in Asia toward the goal of carbon neutrality while achieving economic growth and energy security, creating various pathways tailored to each country's circumstances.



Decarbonizing the Asian region is key to global-level carbon neutrality. Heightened by economic growth and increasing energy demand, carbon emissions in Asia now account for more than half of all the world's emissions. Yet, further economic growth and energy security are also key issues for Asian countries. It is therefore vital that these objectives can be achieved along with decarbonization. Additionally, industrial structures, social contexts, geographical factors, as well as the stage and rate of development, all vary from country to country, which is why various

pathways are required in order for each country and region to reach carbon neutrality.

The Asia Zero Emission Community (AZEC) was proposed by Prime Minister KISHIDA Fumio in 2022, and launched by 11 partner countries in 2023, as a platform to promote decarbonization in Asia. To date, Japan has reduced carbon emissions by approximately 20% compared to fiscal 2013 levels, and is making steady progress toward its goal of achieving net-zero emissions by 2050. Japan faces challenges similar to that of other Asian countries in terms of its

energy situation; for example, the country has an uneven distribution of renewable energy potential and poor connectivity between power grids owing to its numerous islands. The purpose of AZEC therefore is to support Asian countries in the fields of technology, with the aim of achieving an energy transition tailored to the particular situation of each country.

The AZEC Leaders Meeting was held in Tokyo on December

18, 2023, and was where the AZEC Leaders' Joint Statement was adopted. In this statement, the leaders shared the basic principles of AZEC and agreed to establish the Asia Zero Emission Center as a platform to support policy development and coordination, foster public-private partnerships, strengthen cooperation in the field of decarbonization technologies such as those involving hydrogen and ammonia, as well as carbon capture, utilization, and storage (CCUS), establish green industrial supply chains, and emphasize the importance of transition finance, among other commitments. The leaders of each nation expressed high expectations for the activities of AZEC.

Currently, more than 350 tangible projects are underway in collaboration with both the public and private sectors, including approximately 70 memoranda of understanding (MOU) signed in the run-up to the AZEC Leaders Meeting. For example, Mitsui O.S.K. Lines, Ltd. (MOL), a major Japanese shipping company, is developing a liquefied CO₂ carrier to create a global hub for carbon capture and storage (CCS). To build such a global CCS hub in Malaysia where carbon captured from Asian countries can be transported and stored, MOL will work together with Malaysian energy and shipping companies to develop liquefied CO₂ carriers and look at optimal business models with the aim of starting operation in 2028. "In order to meet the various future needs for liquefied CO₂ transportation, Malaysia



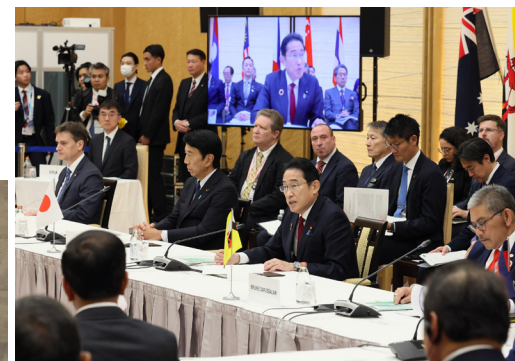
Top: A CG rendering of a liquefied CO₂ carrier (right) and a floating storage and offloading unit (left). MITSUI O.S.K. LINES, LTD.

Bottom: MOL has reached a fundamental agreement with Malaysia's companies to establish a joint venture for the development and ownership of liquefied CO₂ carriers. MITSUI O.S.K. LINES, LTD.

expects us to develop and provide the most efficient way of such transportation, including suitably sized ships with safe operation," said an MOL representative. "We are seeing the cooperation among countries being strengthened through AZEC's efforts, and we feel that it will become even stronger in the future. We look forward to AZEC working to establish a fair framework so that no one country or region benefits more than others or loses out." Under AZEC, the company is also working to build a value chain for clean hydrogen and ammonia in Thailand.

In his opening remarks at the

AZEC Leaders Meeting, Prime Minister Kishida emphasized the importance of "One Goal, Various Pathways" to achieving the common goal of net zero through a variety of pathways, and the "Triple Breakthrough" to achieving decarbonization, economic growth, and energy security simultaneously. Japan will leverage its advanced technological capabilities and wealth of experience to drive decarbonization throughout Asia.



Top: On December 18, 2023, Prime Minister KISHIDA Fumio held the Asia Zero Emission Community (AZEC) Leaders Meeting at the Prime Minister's Office.

Left: Representatives from the AZEC partner countries (in alphabetical order): Australia, Brunei Darussalam, Cambodia, Indonesia, Japan, Lao PDR, Malaysia, the Philippines, Singapore, Thailand, and Viet Nam.