

Policy towards Low-carbon Energy in Early 2024 (



Decarbonisation Initiatives



ASEAN set course for a carbon-neutral future while ensuring its competitiveness for global clean transition

Emerging Technologies



Some **clean energy technologies** tackled in early 2024 include carbon capture, hydrogen, and ocean energy



Financing Scheme



Financing scheme to make energy transition projects **economically viable** and attract more private investments

Energy Diplomacy



The strategic importance of fostering bilateral and multilateral energy diplomacy for **energy security** and **sustainable environment**



Decarbonisation Initiatives in the Region



The region has endorsed ASEAN Strategy for Carbon Neutrality that could open doors to an economic opportunity worth USD 5.3 trillion. ASEAN has initiated massive projects to reduce carbon footprint in early 2024



Decarbonisation Pathways



Thailand transformed the aviation landscape to drastically reduce its annual <u>carbon footprint by 50%</u>, currently standing at 300,000 tons

Thailand' state-run energy firms seek on alternative fuels, aiming to replace coal with wood pellets to fuel its power plant



Viet Nam promoted greener production and reduce costs for energy efficiency technology in <u>Binh</u> <u>Durong</u> Province



Singapore Tourism Board to lay the foundation for a more <u>sustainable</u>

<u>Grand Prix</u>, and build lasting positive change in line with Fl's overarching Net Zero 2030 goals



Embarking Project



Philippines inaugurated 1,056 MW rooftop solar power project to reduce carbon footprint and transition towards clean energy



Thailand introduced a '<u>low-carbon</u> <u>cement</u>' to meet its net-zero ambitions, while considering costemer' needs in all scenarios

Thailand launched an <u>innovative farm</u> program to reduce emissions within the shrimp supply chain



Viet Nam installed the largest onshore wind turbine, generating 40 MW capacity, as part of the energy transition goals



Policy Framework



Viet Nam' progress on the implementation of the Power Development (PDP) VIII was excessively slow due to <u>multiple revisions</u> as the renewable energy projects proposed by localities that exceeded the plan



Investing in Emerging Low-Carbon Technologies



In ASEAN, new technologies and innovations play a crucial role in pursuing energy transition, including carbon capture and utilization storage (CCUS), cofiring, fuel cells, and hybrid ocean thermal energy conversion



Policy Framework



Thailand amendement the <u>Petroleum Act</u> to regulate carbon storage business



Indonesia issued a Presidential Regulation on Carbon Capture and Storage (CCS) outside of upstream oil and gas which regulates the cross-border projects



Cambodia nearly completed the 'National Policy on the Development of Electric Vehicles 2024-2030'



Low-carbon Technology



Thailand conducted study on <u>carbon</u>
<u>storage potential</u> in the Northern Gulf of Thailand



Indonesia developed <u>CO2-to-X</u>
<u>technology</u> to transform captured CO2
into valuable materials

Indonesia used <u>biomass cofiring</u> in coal-powered power plants, reducing 555,000 tons of CO2 emissions





Indonesia and Singapore agreed on the <u>cross-border</u> CCS project



Singapore signed <u>an agreement</u> with Norway for the exchange of policies and regulatory frameworks necessary to support the use of hydrogen



Malaysia collagorated with Japan to pursue the creation of <u>CCS value chain</u>

Malaysia launched its first hybrid ocean
thermal energy conversion (H-OTEC)
plant in Southeast Asia, which has
readied for testing and commissioning





Financing Schemes to Scale Up Clean Energy



Although ASEAN still dependence on fossil fuels, countries taken several measures, such as carbon markets and investment, to make energy transition projects economically viable



Policy Framework



Thailand concluded first Article 6.2 of the Paris Agreement for <u>carbon markets</u>



Malaysia planned to develop policy framework for the given green investment hub, as a continuation of initiatives under NETR



Indonesia launched a green investment rule book that categorise coal-fired power plant used in the nickel facilities as part of the global transition

Indonesia still allocated a large amount of fossil fuel subsidies, approximately <u>USD 11</u> <u>billion</u>, for the Budget 2024



Viet Nam received <u>US 2.1 billion</u> to assist for Viet Nam's climate chage adaptation per the coutnry's NDC commitment and energy transition



Financing Scheme



Viet Nam received <u>USD 51.5 million</u> for verified emissions reductions and enhancing carbon stored in forests



ASEAN experienced a a significant increased on green investment by 20% year-on-year to USD 6.3 billion

ASEAN received <u>USD 25 million</u> from New Zealand for Energy Transition Mechanism to support the shift toward clean energy





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Malaysia Sabah poised to sell <u>carbon</u> <u>credits</u> through the Kuamut Rainforest Conservation Progect (KRCP) involving the protection and restoration of 83,381 ha of tropical forest



Philippines largest distribution utility set to invest USD <u>1.7 million</u>



Energy Diplomacy as a Key Foreign Policy Tool



ASEAN enhanced several bilateral and multilateral diplomatic relations to ensure the energy security while also promoting a global transition of the energy sector



Ensure Energy Security



Singapore collaborated with Japan on LNG procurement and supply chains to scale up lower carbon sources in a long run



Indonesia seek <u>closer cooperation</u> with Saudi Arabia for energy trade, including renewable energy

Indonesia shared cooperation interest with Australia on the development of EV battery ecosystem and <u>critical minerals supply</u> <u>chain</u>



Cambodia requested **Lao PDR** to find appropriate ways for supplying sustainable and timely <u>electricity</u> to the country during bilateral meeting



Environmental Sustainability





Viet Nam and Singapore discussed on expanding cooperation to embrace emerging trends in energy transition, digital economy, and green economy



Philippines urged Australia to collaborate on the <u>clean energy industry</u>, specifically on renewable energy and energy conservation measures

Philippines forged <u>alliance with Japan</u> under AZEC for green energy solutions, which include the utilisation of LNG as transitional fuel, renewable energy, and the adoption of low-carbon technologies



Indonesia seek <u>closer cooperation</u> with the UK on strategic initiatives for renewable energy and emerging technologies, such as carbon capture



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