



## Driving ASEAN Towards a Sustainable Future: Investments, Collaboration and Carbon Pricing Policy Progress

### ASEAN Climate and Energy Insight Q1/2024 by ACCEPT II

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April 2024

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As Earth Day approaches, individuals and communities worldwide are reminded of the urgent need to address climate change. It inspires us to unite in the fight against climate change and reaffirm our commitments to safeguarding our planet for future generations.

In our Climate Insight of [Q4/2023](#), we highlighted ASEAN's perspectives on the goals of the Conference of the Parties 28 (COP 28) in 2023 towards net zero. The ASEAN Joint Statement calls for ambitious climate actions aligned with the Paris Agreement, emphasising the need for robust measures, increased financial support and strengthened Nationally Determined Contribution (NDC) targets. The ASEAN Member States (AMS) are progressing towards carbon neutrality and net zero, with commitments that include renewable energy targets, legislative measures and collaborative initiatives. Their pledges reflect a collective dedication to sustainability, spanning renewable energy expansion, coal transition accelerators and declarations on climate and health. The AMS must now focus on investing in innovation, enhancing regional cooperation, building capacity and ensuring an inclusive transition to a low-carbon economy. The ASEAN Climate Change and Energy Project (ACCEPT) is supporting [ASEAN Energy in 2024](#) which delves deeper and provides insights and predictions about the ASEAN energy landscape in 2024. ACCEPT also analyses the progress of the energy-climate nexus in the region.

In this issue of Climate Insight, we explore ASEAN's latest efforts towards becoming a low-carbon economy region. We feature the AMS' mobilisation of large investments that are geared to achieving a carbon neutral future. From significant advancements in renewable energy projects to innovative green financing mechanisms, the AMS are advancing towards reducing carbon emissions and fostering sustainable development. This issue also highlights the international and regional collaboration that is imperative to tackle the global climate crisis effectively.

The AMS must continue its leveraging of collective expertise and resources through partnerships, knowledge-sharing and joint initiatives. Lastly, we update the development of carbon pricing policies in this region. As governments implement carbon pricing mechanisms and policies to internalise the social cost of carbon, progress is being made.

towards incentivising emission reductions and promoting clean energy transitions. These initiatives will play a crucial role in shaping a resilient and sustainable future for ASEAN, driving forward the transition to a low-carbon economy while addressing the challenges posed by climate change.

## Mobilising Investment for Achieving Carbon Neutrality in ASEAN

The development of climate finance is steadily taking place across the region. In 2023, [the Asian Development Bank \(ADB\) committed a record USD 9.8 billion in climate finance to help Asia-Pacific countries](#) cut greenhouse gas (GHG) emissions and adapt to climate change. This represents a 46% increase from 2022, with USD 5.5 billion for mitigation and USD 4.3 billion for adaptation. The ADB surpassed its 2024 adaptation financing target of USD 9 billion per year ahead of schedule, demonstrating its commitment to supporting the region's transition to sustainability amid growing climate threats.

This January, [the ADB approved a USD 200 million loan to aid the Philippines](#) in constructing climate-resilient public infrastructure and support economic growth and access to essential services. This funding for the Infrastructure Preparation and Innovation Facility (IPIF) will assist in preparing critical projects such as roads and bridges. The ADB's support will accelerate project implementation, strengthen public investment management and enhance capacity-building for implementing agencies. This initiative complements the ADB's existing efforts to develop infrastructure in the Philippines, with significant investment in transport projects which will reduce GHG emissions and mitigate flood risks.

[In Singapore, Deputy Prime Minister Lawrence Wong announced in February the establishment of a Future Energy Fund with an initial SGD 5 billion \(around USD 3.6 billion\) investment to drive the country's transition towards cleaner fuels.](#) While emphasising the importance of natural gas in the near to medium term, he underscored the necessity of diversifying Singapore's energy sources in achieving net zero emissions. The country plans to explore options like hydrogen, ammonia, geothermal power and nuclear energy to supplement its energy mix, and critically assess evolving technologies for future deployment while ensuring energy security and sustainability.

Also in February, [Semarak Renewable Energy Sdn Bhd \(SeRenE\) secured a RM 1.88 billion \(around USD 400 million\) financing package for its green hydrogen project in Perak, positioning Malaysia as a key player in green energy.](#) The green hydrogen project, which will utilise floating photovoltaic (PV) power generation technology, was facilitated by foreign investing firms Capitale Ventures and Chalfourh LLC. Previously in January, SeRenE also had signed a RM 1.88 billion deal with PowerChina's subsidiary China Hydropower (Malaysia) Co Ltd, aiming to develop a green hydrogen project through a redevelopment of an abandoned tin ore lake.

In its 2024 Climate Strategy launched this March, [KASIKORNBANK \(KBank\) is aiming to support Thailand's businesses transition to environmentally sustainable models and seize opportunities in the "climate game" era.](#) The Strategy includes reducing GHG emissions from operations, offering green finance solutions, providing comprehensive environmental services and engaging in carbon credit-related transactions. KBank aims to attain THB 100 billion (around USD 2.7 billion) in sustainable financing and investment by 2024, contributing to Thailand's green transformation and long-term sustainable growth, while also positioning itself as a leader in the global zero-carbon economy.

Meanwhile in Cambodia, [the Green Climate Fund approved the Cambodian Climate Financing Facility \(CCFF\) in March](#), which is a USD 100 million initiative aimed at supporting Cambodia's transition to a green economy. Co-financed by the Ministry of Economy and Finance and other partners, the CCFF will provide concessional financing to sustainable private sector projects and financial institutions.

## International and Regional Collaboration for Climate Action

International and regional collaboration is key for climate action in ASEAN. When countries work together to tackle climate challenges, their cooperation enhances policy implementation, builds resilience and promotes low-carbon economies. Through shared expertise and resources, the AMS are strengthening their response to climate change while fostering global solidarity.

As the year 2023 marked the 50th anniversary of Vietnam-UK diplomatic ties, this January, [the UK Ambassador to Vietnam Iain Frew highlighted the progress in bilateral cooperation between the two countries, particularly in trade, education, and security.](#) He underscored the

Administered by the Agricultural and Rural Development Bank, with support from Mekong Strategic Capital and the Korea Development Bank, the initiative focuses on climate projects in renewable energy, sustainable agriculture and low-emission transportation. This milestone underscores Cambodia's commitment to climate action and sustainable development, with strong support from international partners such as the United States.

Also in March, [the International Finance Corporation \(IFC\) approved a USD 64 million investment through a green loan to Sermang Palang Ngan Company Limited \(SPN\) to develop renewable energy projects in Thailand, Indonesia and Vietnam.](#) The financing package includes a USD 32 million loan from IFC and a parallel loan from Siam Commercial Bank. This investment will help SPN finance the acquisition, development and construction of solar farms, solar rooftops and biomass projects in the ASEAN region, addressing the growing energy demand while reducing GHG emissions.

significance of the Vietnam-UK Free Trade Agreement and the UK's accession to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) in enhancing trade relations. Ambassador Frew also commended Vietnam's efforts in energy transition, exemplified by commitments made at COP26 and the establishment of the Just Energy Transition Partnership (JETP).

In March, [the Norwegian Hydrogen Forum \(NHF\) and the Hydrogen and Fuel Cell Association of Singapore \(HFCAS\) have formed a partnership to exchange policies and regulatory frameworks supporting hydrogen use.](#) Both countries are aiming for net zero

emissions by 2050 and have established relevant climate policies. Singapore's hydrogen strategy, which includes a target to meet half of the country's power needs with low-carbon hydrogen by 2050, aligns well with NHF's expertise and fosters collaboration in industry, research and technology development.

[The Indonesian and Norwegian governments initiated a funding process this February based on Indonesia's performance in reducing GHGs emissions through decreased deforestation](#) rates over the 2019-2020 period. This performance-based funding, or result-based payment, aims to acknowledge Indonesia's efforts in climate mitigation actions, with disbursement expected in early 2025 after the verification and recalculation of emission reductions. Norway had previously made significant payments totalling USD 312 million as part of the collaboration agreement with Indonesia signed in 2022, reflecting Indonesia's becoming an outstanding global example of emissions reduction from deforestation.

[Japanese companies Eneos, JX Nippon Oil & Gas Exploration and Mitsubishi Corporation partnered with a unit of the Malaysian state-owned energy company Petronas this](#)

[March to launch a carbon capture and storage project spanning Japan and Malaysia](#). This project aims to capture carbon dioxide emitted from industrial areas around Tokyo Bay, including an Eneos refinery, and transport it to Malaysia for storage in depleted oil fields. By fiscal 2030, the initiative plans to capture 3 million tonnes of carbon dioxide annually, eventually scaling up to 6 million tonnes. This collaboration addresses Japan's need for carbon storage space, crucial for achieving its decarbonisation goals amidst limited domestic storage options.

During [the Philippine Business Forum at the ASEAN-Australia](#) Special Summit in Melbourne on March 4, President Ferdinand Marcos Jr. secured deals worth USD 1.53 billion in investments. These agreements include 10 memoranda of understanding (MOUs) and two letters of intent (LOIs) between Filipino and Australian business leaders, covering renewable energy, waste-to-energy technology, manufacturing of health technology solutions and digital health services. The deals aim to boost investments between the Philippines and Australia, which will facilitate economic growth and foster fruitful partnerships.

## Measuring Carbon Pricing Policy Progress Towards Net Zero Emissions

As nations worldwide commit to mitigating climate change, the measurement of carbon policy progress towards net zero emissions is imperative. It involves assessing the effectiveness of policies and initiatives aimed at reducing carbon emissions across various sectors. In the context of ASEAN's energy transition, understanding and evaluating the region's carbon policy progress is crucial in achieving ambitious climate goals. Following the publication of [ACCEPT's policy brief on](#)

[the Progress of Carbon Pricing Policy in ASEAN](#), we provide updates below on further developments in this crucial area.

[Indonesia](#) is advancing its carbon trading mechanisms domestically and internationally, aiming to align constitutional mandates with global climate commitments. Recent clarifications underscore its openness to foreign participation, reflecting a commitment to leveraging natural resources for public prosperity while

adhering to international agreements. Presidential Regulation 98/2021 guides these efforts, mandating compliance for entities with Forest Exploitation Approvals. Despite challenges and scrutiny, Indonesia's proactive approach signals its commitment to sustainable development and climate action, setting a precedent for resource-rich nations worldwide.

[The Ministry of Natural Resources and Environmental Sustainability \(NRES\) in Malaysia](#) is conducting a study on the National Carbon Market Policy (DPKK), aligning it with the NDC Roadmap to Reduce Greenhouse Gas Emissions by 45% by 2030. The policy aims to support compliance and voluntary carbon market mechanisms, facilitating carbon projects for investors and involving state governments and the private sector in developing the local carbon trading industry. Discussions are ongoing with stakeholders regarding carbon taxation, considering factors like carbon subsidies and aiming for net zero carbon emissions.

[Singapore's](#) carbon market is rapidly expanding, driven by increasing awareness of climate change, government regulations and corporate sustainability commitments. With a projected market size expected to reach USD 55.14 million by 2030, the country aims to become a carbon services and trading hub for Southeast Asia and the Asia Pacific. Key factors fuelling this growth include the Carbon Pricing Act mandating emissions disclosure and taxation, as well as robust environmental and social governance (ESG) policies promoting decarbonisation. The city hosts over 70 organisations offering carbon services, and prominent market leaders like Climate Impact X and Carbon Credit Capital contribute to a thriving carbon trading ecosystem, positioning Singapore as a leader in carbon credit trading and sustainability initiatives in the region.

Following the footsteps of his predecessor, [the new Finance Secretary in the Philippines, Ralph Recto, is spearheading the implementation of carbon tax proposals to generate revenue and address environmental concerns.](#) He is emphasising the importance of carbon pricing instruments in incorporating the social and external costs associated with emissions, aiming to incentivise industries and individuals to reduce their carbon footprint. Leading a technical working group on carbon pricing, Recto underscores the need for a combination of pricing instruments to achieve a low-carbon economy, positioning the Philippines as the leader in Asia-Pacific's efforts towards net zero emissions.

The ASEAN region is moving forward with determined efforts towards achieving net zero emissions and fostering a low-carbon economy. Through robust investments in renewable energy projects, innovative financing mechanisms and collaborative initiatives, the AMS are making significant strides in reducing carbon emissions and promoting sustainable development. International and regional collaborations are further enhancing policy implementation and resource-sharing, reinforcing the collective response to climate change. In addition, the focus on measuring carbon policy progress and advancing carbon trading mechanisms demonstrates a commitment to aligning with global climate commitments and accelerating the transition towards a resilient and sustainable future for the ASEAN region.



This insight is a product of the ASEAN Climate Change and Energy Project II (ACCEPT II)

ACCEPT II is a continuation of ACCEPT Phase 1 that was successfully accomplished on 31 March 2022. The commencement of the 48-month project officially began on 1 November 2022. This collaborative project between the ASEAN Centre for Energy (ACE) and the Norwegian Institute of International Affairs (NUPI) is funded by the Norwegian Government, under the Norwegian-ASEAN Regional Integration Programme (NARIP). The project aims to support ASEAN member states and ASEAN's capacity to transition to Low-Carbon Energy System and contribute to carbon neutrality or a net zero future.

**Implemented by:**



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One Community for Sustainable Energy



**NUPI** Norwegian Institute  
of International  
Affairs

**Supported by:**



Norwegian Ministry  
of Foreign Affairs

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