



## MEDIA RELEASE

### **ISEAS - Yusof Ishak Institute, Energy Studies Institute of the National University of Singapore, and Newcastle University Release Joint Report on 'Energy Transitions in ASEAN'**

**November 22, 2021** - A new report by the ISEAS - Yusof Ishak Institute, Energy Studies Institute of the National University of Singapore, and Newcastle University shows that there are several decarbonisation pathways that can put ASEAN member states on track for an energy transition in light of an increasingly carbon-constrained world.

The report, *Energy Transitions in ASEAN*, was prepared by 12 authors, in view of the COP26 climate talks in Glasgow in November 2021. It starts by exploring the impact of COVID-19 on ASEAN countries. This is followed by an examination of how CO<sub>2</sub> emissions can be reduced, while at the same time maintaining a sustained economic growth with a mix of renewable and non-renewable energy consumption. This report also provides an analytical discussion on employment and social justice following the energy transition. It hopes to provide useful context to governments in this region when strategizing their post-pandemic recovery plans and when aligning their energy policies with the goals of the Paris Agreement.

The ASEAN region, which is composed of ten Southeast Asian states, is diverse, which makes energy transition challenging given the varying starting points, and pace of development and range in the national priorities of the respective governments.

“The economic analysis in this report suggests that sustained economic growth in ASEAN-5 countries is associated with high CO<sub>2</sub> emissions. Two main policies could be adopted in these countries. Firstly, policymakers could incentivize non-fossil fuel energy supply at a low cost of production. Secondly, they could stimulate R&D expenditure to foster the number of patents on environmental-related technologies,” remarked Atanu Ghoshray, Professor of Economics at Newcastle University Business School and author of the report.



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“If ASEAN-5 countries seek to maintain the goal of sustained economic growth, the energy transition path will be different according to the specific characteristics of each economy. For example, Indonesia has the highest CO<sub>2</sub> emissions among the ASEAN-5 countries and, therefore, a reduction in its emissions will help the entire region to meet the climate change goals. To prevent an economic slowdown, Indonesian policymakers could stimulate their economy by increasing R&D expenditure” remarked Marco Lorusso, Lecturer of Economics at Newcastle University Business School and author of the report.

Progress is further complicated by challenges of the Covid-19 pandemic. Reflecting on this, Ms Sharon Seah, leading co-editor and author of the report and Senior Fellow at ISEAS - Yusof Ishak Institute said, “It is vital that ASEAN makes bold transformative changes. The report aims to provide useful policy-relevant recommendations to consider when planning a sustainable recovery from the Covid-19 pandemic and tackling the climate crisis at the same time. The key, though, will be implementation, accountability and transparency.”

The report highlights the fact that ASEAN’s Covid-19 recovery measures are missing opportunities for a green future. Few countries in the region have tied green components to their stimulus packages, which contain some environmentally harmful measures. The report finds that green recovery policies and strategies, including enhancing collaboration and partnerships, can help put ASEAN countries on the path to economic recovery while bringing environmental and sustainability benefits.

“This report demonstrates that technically, steep and fast emission reductions in line with the Paris Agreement are feasible for the ASEAN member states. It’s a matter of showing political courage and leadership to make that transition happen,” added Melissa Low, Research Fellow at the Energy Studies Institute (ESI), National University of Singapore (NUS) and one of the leading co-editors and report’s authors.

“This report is an outcome of international collaboration between the NUS community and universities and research institutes from the UK and beyond. With Southeast Asia being one of the fastest growing regions in the world and requiring energy for development, this partnership comes at an important time to help deliver the strategic aims of COP26 and to fully implement the Paris Agreement,” said Associate Professor Lee Poh Seng, Executive Director of ESI. ESI is the official channel for the exchange of information with the UNFCCC secretariat for NUS.

Going beyond ASEAN’s current renewable energy target of 23% and energy efficiency target of 30%, coupled with the more ambitious ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025 will help signal the need for the energy transition and decarbonisation.



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Although ASEAN member states are giving more attention to renewable energy, climate action continues to be undermined by the growth in consumption of fossil fuels, especially coal. An enabling environment is critical and strong government policy and support are required. Subsidy reform and carbon pricing could level the playing field. One of the report's recommendations is that ASEAN Governments can help create a more enabling environment to facilitate renewable energy deployment in the short term. It also recommended finding greater cooperation across the ASEAN region and collaboration with other countries in the long-run, to leverage the comparative advantages of each country to meet its NDCs and recover from the Covid-19 pandemic, while addressing developmental priorities. However, this requires strong international assistance from developed countries.

The study is part of a series published ahead of COP26 by the British High Commission and the COP26 Universities Network, which comprises over 80 Universities in the United Kingdom and Singapore, to discuss the opportunities and challenges in Southeast Asia's transition to a greener economy post Covid-19. Read the press release about the Network here: <https://www.gov.uk/government/news/researchers-from-singapore-join-partnership-with-cop26-universities-network>.

Read the full report here: <https://www.gov.uk/government/publications/uk-singapore-cop26-universities-network-policy-reports>.

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## Energy Transitions in ASEAN

### **Fact Sheet**

Despite recognition that the energy sector is the main source of greenhouse gas emissions of most ASEAN member states, institutional challenges to addressing climate change and the desire to remain competitive present challenges to countries in the transition away from fossil fuels. Although ASEAN member states are giving more attention to renewable energy, climate action is undermined by fossil fuel growth, particularly coal.

The report's recommendations are presented in the hope of helping create a more enabling environment to facilitate renewable energy deployment in the short-term, and to find greater cooperation across the region in the long-run to leverage the comparative advantage of each country to meet its Nationally Determined Contributions (NDCs) while recovering from the global Covid-19 pandemic, and addressing developmental priorities. Phase 2 of the ASEAN Plan of Action for Energy Cooperation (APAEC) 2016-2025 from 2021-2025, which serves as the regional blueprint on energy cooperation endorsed at the 38<sup>th</sup> ASEAN Ministers on Energy Meeting (AMEM) last November is a good starting point.

The recommendations in this report, which are summarized below, can be integrated into the APAEC Action Plans so that the efforts are fully embraced by the ASEAN Member States (AMS).

#### Covid-19 Recovery in Southeast Asia

- Greater regional synergies needed to institutionalize green recovery.
- Build synergies between environment, energy, and trade/industry/economic development ministries.
- Collectivize small-scale renewable energy projects under a single regional portfolio to increase bankability and investment attractiveness.

#### Key Results of Economic Modelling of Energy Transition in ASEAN-5

- ASEAN-5 economies share some commonalities: a positive association between economic growth and energy consumption, as well as the prevalence of a positive relationship between economic growth and CO<sub>2</sub> emissions.
- From a policy perspective, the ASEAN-5 countries could incentivize non-fossil fuel energy production and patents based on environmental-related technologies with the objective of reducing CO<sub>2</sub> emissions.
- Given that Indonesia has the highest GDP and the largest amount of CO<sub>2</sub> emissions among the ASEAN-5 countries, the adoption of the above-mentioned policies would help

the entire region to significantly reduce carbon emissions and, thus, to meet the climate change goals. To avoid an economic slowdown, Indonesian policymakers could stimulate their economy by increasing R&D expenditure.

#### ASEAN Energy-Climate Plan in 2025

- Enhance and transform the multilateral policy approach to address climate and energy security.
- Promoting multilateral trading to unlock the benefits of the cross-country power grid, which include greater economies of scale, better access to resource diversity, and improved stability of energy supply.
- ASEAN can tap into resources from external partners.

#### Just Transitions and Job Creation

- Ensure that decarbonisation policies and programmes pay attention to creating quality jobs and decent work.
- Highlight social inclusion, gender empowerment and sustainable rural development for local communities as three key performance indicators of the success of the renewable energy transition.
- Take into account the financial, technical and logistical limitations of rural communities so as to ensure that renewable energy transitions are just, feasible and inclusive.