

A BIENNIAL PUBLICATION PROVIDING CONCISE ANALYSES AND PERSPECTIVES ON ASEAN MATTERS

# SUSTAINABLE TRANSFORMATION IN ASEAN

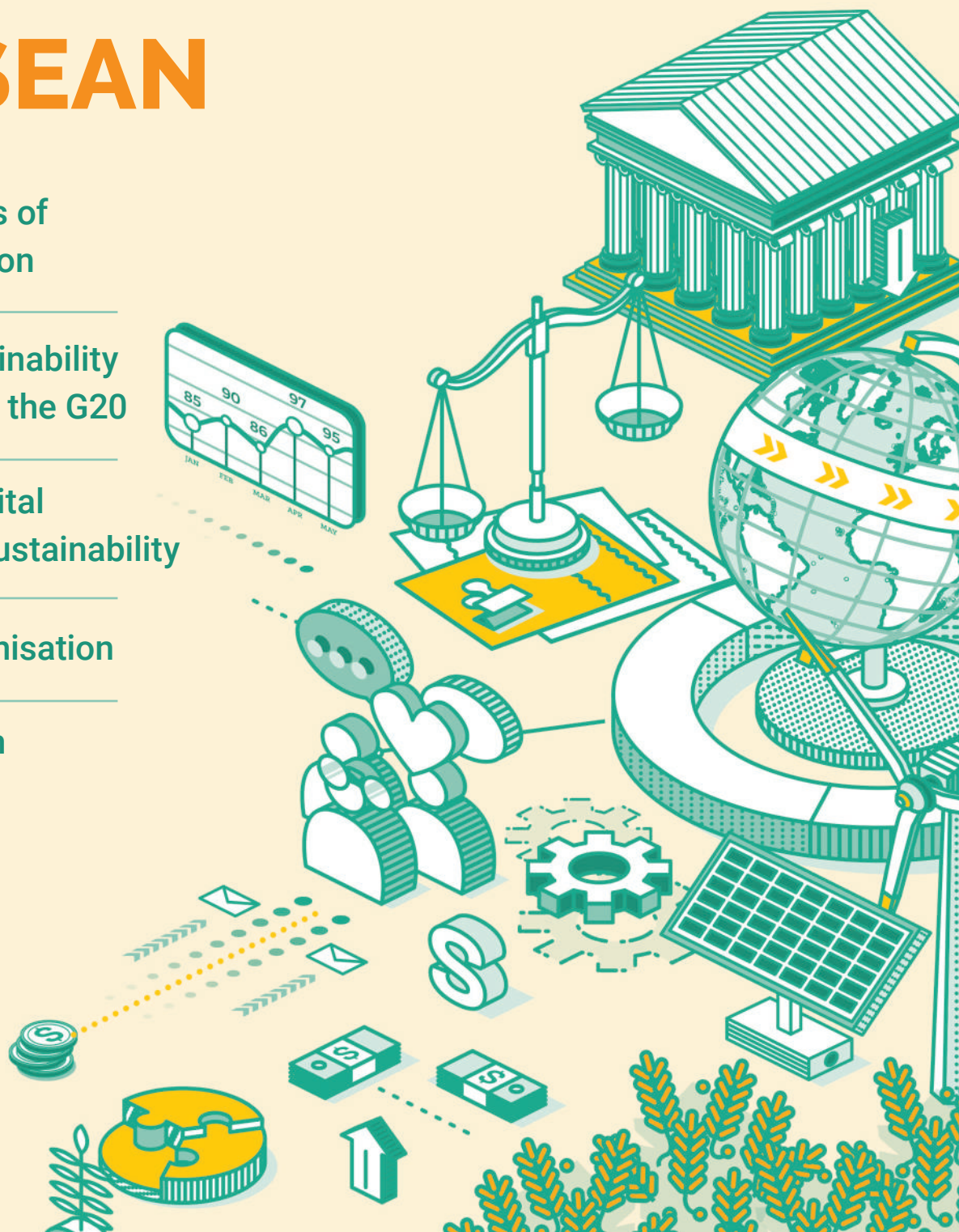
The Geopolitics of  
Energy Transition

Learning Sustainability  
Financing from the G20

Leveraging Digital  
Economy for Sustainability

Military Modernisation

Astrotourism in  
Southeast Asia



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ISEAS-Yusof Ishak Institute (formerly Institute of Southeast Asian Studies) is an autonomous organisation established in 1968. It is a regional centre dedicated to the study of socio-political, security, and economic trends and developments in Southeast Asia and its wider geostrategic and economic environment. The ASEAN Studies Centre (ASC) was established in 2008 under the ISEAS-Yusof Ishak Institute to research on issues pertaining to the Association of Southeast Asian Nations (ASEAN) as a regional organisation. The ASC is the first Institutional Recipient of the ASEAN Prize in 2020, a prestigious award to honour outstanding achievements of individuals or organisations who have made meaningful contributions to ASEAN.

# Editorial Notes

**2023** might have left COVID-19 behind but global economic recovery was yet again disrupted by multiple, compounding crises. Russia's invasion of Ukraine entered its second year, with socio-economic impacts reverberating across the world. Beyond the humanitarian catastrophe, the war of attrition has created shockwaves in global food and energy markets. Closer to home, violence in Myanmar intensified and the enactment of the stringent political parties law raised doubts over the upcoming general election's legitimacy. Myanmar's pathway to peace looks distant, with stalled progress on the Five-Point Consensus and an extension of the junta-imposed state of emergency by another six months. Strategic competition between the US and China continues to tamper with regional stability and prosperity, heightening concerns of a proxy war in the Taiwan Strait and disruptions in supply chains. These events have deepened fragmentations and tested individual, as well as collective commitments to multilateralism.

Amidst turbulent times, an honourable mention should be given to Indonesia for their successful helm of the G20 Presidency last year. Indonesia's convening power proved to be a diplomatic triumph, delivering an unexpected Leaders' Declaration and concrete deliverables, including the Just Energy Transition Partnership and the Pandemic Fund – placing sustainability at the heart of recovery efforts and bringing up the voices of least developed countries into the global agenda. This year, all eyes are still on Indonesia as it assumes the Chairmanship of ASEAN. The theme *ASEAN Matters: Epicentrum of Growth* is an epitome of the regional bloc's main preoccupations – to avoid becoming a proxy for great-power rivalries and to ensure the rivalries do not obstruct the region's collective vision of sustainable development for its people.

Can ASEAN be the epicentre of growth? Indeed, Southeast Asia's economic outlook has brightened and is predicted to hit 4.7% growth by the Asian Development Bank, making way for a stronger, sustainable recovery in one of the world's fastest-growing regions. With this in mind, our Analysis contributors investigate the different geopolitical thrusts that ASEAN must navigate, including Indonesia's ability to re-energise regional economic integration in uncertain times, a changing military landscape spurring military modernisation in Southeast Asia, and the diminishing role of ASEAN in the Myanmar crisis.

In line with the theme of this issue, our *Spotlight* contributors consider the different pathways to sustainable transformation in ASEAN – be it economic, environmental, or socio-political. Recognising that there is no one-size-fits-all solution to sustainability, our contributors look at pertinent topics ranging from the energy transition and food security, to circular economy, digitalisation, and health preparedness. Regional experts examine the different elements required for a successful energy transition and ways to overcome the obstacles to decarbonisation. Southeast Asia's potential to be a hotspot for public health emergencies necessitates an exploration of a stronger regional health architecture to collectively combat future pandemics. Our *ASEAN In Figures* zooms in on sustainable business in ASEAN and the large untapped potentials of the region's small-and-medium-sized enterprises (SMEs) in the region's quest for sustainability.

Beyond *Spotlight*, we are honoured to have Ambassador M.I. Derry Aman, Permanent Representative of Indonesia to ASEAN, share his *Insider Views* on Indonesia's Chairmanship priorities. Finally, our *Sights and Sounds* contributors reflect on contemporary socio-cultural phenomena in the region's dynamically changing society, such as the emergence of football ultras and the rise of astrotourism as a potential alternative tourist attraction.

We would like to take this opportunity to bid a fond farewell to Dr. Sithanoxay Suvannaphakdy, who served as Lead Researcher for Economic Affairs at the ASEAN Studies Centre and a member of the Editorial Committee of *ASEANFocus* from 2020. The ASC team is grateful for Dr. Suvannaphakdy's invaluable contributions and we wish him the best in his future endeavours.

In line with digitalisation efforts, individual *ASEANFocus* articles are now uploaded to the Institute's main commentary site *Fulcrum* (<https://fulcrum.sg/>) and on various social media platforms (Twitter, LinkedIn, Facebook) so that readers can read, share, and comment. The entire publication is also available in a PDF format on the ISEAS website and in hard copies that can be picked up at the Institute. We hope that readers continue to support *ASEANFocus* and find value in the research that we bring to you. 📖

## ASEAN Economic Community in Uncertain Times: Can the Indonesian Chair Lead in a Challenging World?

**Julia Tijaja** highlights several initiatives and Indonesia's role in re-energising the ASEAN Economic Community.

The post-COVID world looks very different in 2023 from just a year ago, as the world's second-largest economy, China, reopened. The Russia-Ukraine war that started in February 2022, resulted in the food, energy, and cost-of-living crises, along with increasing and intensifying climate-related events, and provided a glimpse of today's post-COVID polycrisis world.

Geopolitics is increasingly shaping global economic governance, far beyond simple tariff wars. Policy-driven fragmentation will lead to a new noodle bowl — this time not of free trade agreements (FTAs) but of supply chain governance, leading to inefficiencies and higher producer and consumer costs, at least in the short term. Currently, the multilateral trading system is ill-equipped to respond.

This is not good news for ASEAN, whose economies have been growing, albeit unevenly, by participating in international production sharing. The region is not big enough to undo this trend, but — along with other middle powers — can influence its trajectory enough to avoid hitting the iceberg.

Accounting for 36% of ASEAN's gross domestic product (GDP) and 41% of its population, Indonesia is the natural leader of ASEAN. After a successful G20 presidency, Indonesia is now in charge of steering ASEAN through another challenging year. Its Chairmanship year coincides with the finalisation of the core elements of the ASEAN Post-2025 Vision and the acceleration of the Post-2025 visioning process — a momentous task for the Chair.

Indonesia's Chairmanship theme of ASEAN Matters: Epicentrum of Growth puts the ASEAN Economic Community (AEC) at its centre. ASEAN sceptics implied that the theme is a diversion from ASEAN's political issues that are unlikely to be resolved, whilst ASEAN's relatively robust growth is a given, but this view seems myopic. The AEC's growth prospect is indeed guaranteed by ASEAN's continued relevance, internally

and externally. However, recovery and growth prospects may be at risk of being stunted by geopolitical power struggles, if multilateral rules are being disregarded, and ASEAN matters little more than as proxies.

Under the AEC, Indonesia's Chairmanship will be pursued under three strategic thrusts: (1) rebuilding regional growth, connectivity, and new competitiveness, (2) accelerating inclusive digital economy transformation and participation, and (3) promoting sustainable economic growth for a resilient future. With 16 priority economic deliverables to focus on, in addition to hundreds of AEC annual action lines, a few impactful ones are worth elaborating on.

First, on digitalisation, all eyes will be on the highly anticipated Digital Economy Framework Agreement (DEFA), the natural next step in ASEAN's digital agenda. The 2021 *Bandar Seri Begawan Roadmap*, which aims to leverage digital transformation to accelerate the region's COVID-19 recovery, stipulates that a study be conducted by 2023 to examine areas that can be included in a framework to accelerate ASEAN's digital integration prior to the commencement of ASEAN DEFA negotiations by 2025. Indonesia wants to accelerate this conservative timeline by having a Leaders' Statement on the development of ASEAN DEFA and the early commencement of negotiations as its deliverable, hopefully along with clear parameters to guide negotiations towards its timely conclusion, in time for ASEAN's Post-2025 Vision.

Consistent with its G20 priorities, energy security will also feature strongly in Indonesia's ASEAN Chairmanship, including work on the financing aspect of a just and inclusive transition. On the infrastructure side, Indonesia will seek to expand the ASEAN Power Grid and Trans-ASEAN Gas Pipeline to meet the region's rising energy demands efficiently. An ASEAN declaration on sustainable energy security through interconnectivity is also expected.

In addition, the Chairmanship is keen to make strides toward a regional electric vehicle (EV) ecosystem. ASEAN members are at different baselines for EV industries. A broader perspective of the EV ecosystem, including batteries, components, R&D, transition, and waste management, will make the vision more practicable. The potential is immense. The region's EV market is expected to more than quintuple to US\$2.7 billion in just six years from 2021 to 2027. But this deliverable will involve work in the long haul. As Chair, Indonesia should identify the milestones for this year and set the scope and mechanism for future cooperation.



ASEAN CPRs meet to discuss Indonesia's priorities and targets under the AEC



Kick-Off of Indonesia's ASEAN Chairmanship 2023

Alongside the Chairmanship priorities, ASEAN is progressing to develop a strategy for carbon neutrality. Manifold current initiatives in finance, circular economy, and other sectoral cooperation may benefit from a holistic vision and strategy, which needs the support of all ASEAN members and relevant sectors. To do so, it will need to recognise the different members' starting points, in terms of levels of commitment, capacity, and resource endowments to deliver value to individual members and the region alike.

Another Indonesian Chairmanship deliverable will be on food security, continuing its G20 presidency priorities. Majority of the ASEAN members are food importers. Food price inflation is observed across ASEAN, though lower than in other regions. Food security is multidimensional and needs to be addressed along the value chains, from research and development, efficient input markets, sustainable commodity diversification, agricultural practices, supply chain and logistics, crisis response, to trade policy. The agriculture sector needs to address this through dialogue and coordination with the trade, finance, investment, transport, digital, and science and technology sectors.

Curbing inflation and ensuring financial stability will be important for ASEAN economic recovery. Indonesia will seek to strengthen the Chiang Mai Initiative Multilateralization by enhancing its operational readiness and deepening global collaboration. We can expect deliverables relating to payment connectivity, including QR code interoperability, and the promotion of local currency transactions to strengthen the region's financial stability. In line with its G20 achievements, Indonesia will promote transition finance to support sustainable finance and the green economy, mainstreaming of digital finance into ASEAN banking integration, as well as digital financial literacy and inclusion (including by enhancing digital financial services).

As initiator and Chair of the Regional Comprehensive Economic Partnership (RCEP), Indonesia will seek to secure key RCEP milestones this year. These could include establishing an interim RCEP Secretariat in Jakarta as a support unit within the ASEAN Secretariat and promoting the implementation and utilisation of the RCEP at the national level.

Additionally, Indonesia will also seek to spearhead the completion and signing of the protocol to upgrade the ASEAN-Australia-New Zealand Free Trade Area (AANZFTA), as well as to ensure progress in the FTA upgrade with China and FTA review with India. Therefore, amidst high expectations around Indonesia's ASEAN Chairmanship, there will be a few high-impact deliverables that serve as the foundation for a post-polycrisis AEC.

Discussions on the implication of geopolitically-driven decoupling on AEC should, however, be intensified. Some ASEAN countries are keen to seize the opportunity from global supply chain restructuring — a valid but incomplete optimism. If global decoupling leads to a higher-cost economy and a weakened rules-based global economic architecture, the region will be at a disadvantage. It is in ASEAN's interest to build its economic resilience by upholding open and inclusive multilateralism, including jointly with other countries sharing the same values.

ASEAN and its individual members should also be more strategic and coordinated in their engagement in parallel frameworks. More proactive approach to World Trade Organization (WTO) reform is one avenue, particularly on its rulemaking function. Another is the Indo-Pacific Economic Framework (IPEF). The seven IPEF-participating ASEAN countries could coordinate their negotiating positions, including with other participating middle power countries as appropriate. ASEAN should also seek to clarify IPEF's position vis-à-vis ASEAN-US economic cooperation.

As this year's Chair, Indonesia has the chance to elevate ASEAN's economic agenda to the next level. It must not only ensure that ASEAN matters, but that ASEAN leads and empowers.

**Dr. Julia Tijaja** is an ASEAN, trade, and global value chain specialist. She was formerly Director of ASEAN Integration Monitoring at the ASEAN Secretariat from 2015 to 2021. The views expressed in this article are those of the author.

# Military Modernisation in Southeast Asia: Learning from the Russia-Ukraine War

**Ian Storey** examines the factors driving defence modernisation in Southeast Asia and how the region may draw lessons from the Russia-Ukraine war.



The Cheonghae Unit of the Republic of Korea's Navy

If one were to believe the mainstream media, in response to intensifying US-China rivalry, Southeast Asia is in the midst of a frantic arms race. Rest assured, it is not.

Academics define an arms race as a dynamic in which two or more countries perceive each other to be a clear and present danger, ramp up defence spending as a percentage of gross domestic product (GDP), and try to match each other's military capabilities weapon for weapon. Historical examples include the Anglo-German naval rivalry prior to World War I and the nuclear arms race during the Cold War. Thankfully, however, this dynamic is absent from Southeast Asia today.

To be sure, most Southeast Asian countries are modernising their armed forces. But defence modernisation is a complex phenomenon involving a host of drivers and enablers. One of the most important drivers is recapitalisation. After a few decades, old, obsolete and worn out fighter aircraft, tanks, and warships need to be replaced with new equipment.

Another factor is changes in doctrine, for instance, a shift away from internal to external defence (the former places an emphasis on armies, the latter on navies and air forces, both of which require more costly weapons). The Philippines, for instance, is shifting away from counter-insurgency operations to protecting its maritime interests in the South China Sea.

Another driver of defence modernisation is threat assessments. What are the threats (real or perceived) facing the country, and how should we prepare to meet them? For some countries, the threat is clear. Vietnam, for example, views China's expansionist activities in the maritime domain as a threat to its territorial and jurisdictional claims in the South China Sea. Since the early 1990s, it has been equipping its armed forces with fighter jets and submarines to deter China.

Defence planners also make capabilities-based assessments, a process that sometimes fosters a "keeping up with the neighbours" mentality. A prime example of this is Thailand, which in 2017 ordered three submarines from China (although the delivery has been delayed due to the export embargo of the engines) simply because nearly all of its neighbours have submarines (including Malaysia, Vietnam, Indonesia, Singapore, and even Myanmar).

Corruption is another factor. Major arms purchases come with hefty price tags and provide venal politicians with opportunities to skim off a percentage of the deal and pocket millions. Corruption often leads to substandard equipment, inflated contracts, and unnecessary purchases.

At the end of the day, the top brass' wish lists are subject to budgetary restrictions. Even when economies are booming, governments have only finite financial resources and competing priorities – the old "guns versus

butter” conundrum. Should money be spent on fighter planes and tanks, or schools and hospitals?

Although Southeast Asia is a region of 650 million people, and home to some of the fastest growing economies in the world, defence budgets are relatively modest, compared to other regions such as Northeast Asia, the Middle East, and Europe. Most countries’ defence outlays account for around 2-3% of GDP – hardly the spending habits of a region undergoing an “arms race”.

According to the Swedish think tank Stockholm International Peace Research Institute (SIPRI), in 2021, the countries of Southeast Asia collectively spent US\$43 billion on defence, only 2% of global defence spending (Northeast Asia spent US\$411 billion or 19% of the world’s total, Europe US\$418 billion or 20%, and America US\$827 billion or 39%).

Will Russia’s invasion of Ukraine lead Southeast Asian countries to increase defence spending? As the conflict is geographically far removed from the region, probably not. But defence ministries across the region will no doubt have been watching the Russia-Ukraine conflict with keen interest and making their own conclusions.

However, drawing lessons from the Russia-Ukraine war is problematic, for two reasons. First, it isn’t over yet, and may still hold surprises. Second, while the combatants have deployed new military technologies, many of the battlefield engagements have been reminiscent of wars in the early and mid-twentieth centuries: the trench warfare of World War I, and the use of heavy armour and artillery in World War II.

Nevertheless, one of the most important takeaways of the conflict is that large-scale conventional wars have not been consigned to history. It has also demonstrated that diplomacy doesn’t always succeed, and that irrational decisions can lead to full-blown conflict. This should concern the Southeast Asian claimants in the South China Sea. Regional governments should also worry about the prospects of a conflict in the Taiwan Straits, which would be right on Southeast Asia’s doorstep and could drag in one or more regional states.

Aside from the wider geopolitical implications of the war, defence planners will be looking closely at what the combatants did right and what they did wrong.

Russia’s armed forces have fared badly due to a combination of poor strategic planning, leadership and training, weak logistics, low morale, and endemic corruption. Conversely, the Ukrainians have done much better than expected thanks to superior planning, leadership, training, Western-supplied arms, and modified Soviet-era equipment. In particular, Southeast Asian military analysts will be looking at Ukraine’s effective use of drones for surveillance, targeting and delivering ordinances, and other forms of fairly inexpensive asymmetric warfare tactics.

Going forward, the war is likely to have an impact on many regional states’ procurement decisions.



For the past two decades, Russia has been the largest supplier of arms to Southeast Asia (US\$11 billion in sales since 2000, compared to America’s US\$8.4 billion). Many regional countries preferred Russian weapons to Western ones because they were cheaper, Moscow was willing to accept part payment in commodities, and sales were not contingent on human rights records.

But even before the war, Russian arms sales to the region had been falling. Vietnam, which is Russia’s number one customer, had paused its military modernisation programme, while the threat of US sanctions had put other countries off buying from Russia (most notably, Indonesia cancelled an order for 11 SU-35 fighter jets, while the Philippines terminated an agreement to buy 16 military helicopters).

The conflict in Ukraine will make matters worse for Russia’s defence industry. Western (and Asian) sanctions and export controls will make it much harder for Russia to finance military deals and obtain advanced technologies critical in the production of modern military hardware.

The war has also been a public relations disaster for Russia’s defence sector due to the high attrition rates suffered by Russia’s armed forces in Ukraine, including the destruction of large numbers of tanks and infantry fighting vehicles, as well as the loss of fighter aircraft, helicopters, and warships.

This has serious implications for Vietnam, as its doctrine, training, and most of its inventory are of Russian origin. This will push Hanoi to accelerate the diversification of its arms imports away from Russia, but this will be costly and time-consuming.

The eclipse of Russia’s defence industry in Southeast Asia and across the world will create new opportunities for arms companies in the US, Europe, and Asia.

South Korea may stand to gain the most. In the last five years, it has become the number one arms seller in the region, racking up sales of nearly US\$2 billion. Indonesia, the Philippines and Thailand are among its biggest global customers. South Korean equipment is high-tech, affordable, and, unlike the US, China and Russia, fewer geopolitical strings are attached.

**Dr. Ian Storey** is Senior Fellow at the ISEAS-Yusof Ishak Institute and Editor of Contemporary Southeast Asia.

# The Diminishing Role of ASEAN in the Myanmar Crisis

**Gwen Robinson** looks at the evolving crisis in Myanmar and highlights the diminishing role of ASEAN as the international community runs out of patience.

A great irony emerging from Myanmar's coup on 1 February 2021 is how it enabled military chief Min Aung Hlaing to achieve something no modern Myanmar leader could ever do: unite a fractious society. In a country long dominated by its Bamar majority yet riven by ethnic, social and religious tensions, resistance groups driven by popular fury bridged traditional divides to come together in the post-coup period.

That anger also gave rise to the parallel National Unity Government (NUG), a shadow parliament of ousted lawmakers, a people's assembly, a network of local governments, and a new generation of resistance fighters. By early 2023, unprecedented cooperation on the battlefield between mainstream ethnic armed groups and people's defence forces had seen significant gains in many parts of the country.

Unlike similar efforts in the wake of Myanmar's 1988 coup by pro-democracy forces to form a parallel government and raise a resistance army, today's revolutionary fervour does not appear to be fading. Woefully under-resourced resistance forces now operate in more than 50% of Myanmar, although primarily in rural areas.

Yet in regional diplomatic terms, the coup had the opposite effect, shattering the cohesion of the ten-member Association of Southeast Asian Nations. Initial mediation efforts by ASEAN leaders led to the so-called Five-Point Consensus (5PC) with the junta leader in April 2021 to halt violence, recognise an ASEAN special envoy,

allow dialogue between all parties, and grant access for humanitarian aid.

The 5PC, later rejected by Min Aung Hlaing who claimed he was following his own "five-point" plan to resolve tensions, has become an embarrassment for ASEAN, highlighting its collective policy paralysis. Indonesia, as the group's rotating Chair for 2023, is trying to change that. But it is a monumental task. ASEAN's decision to suspend Myanmar from sending political representatives to high-level meetings smashed its cornerstone principles of centrality and non-interference in each other's affairs – leaving the group in an open-ended "10-minus-1" configuration.

Despite the regime's intensification of a savage military campaign that has displaced more than 1.3 million people, killed more than 30,000 on all sides and doubled the number of people living below the poverty line to more than 45%, ASEAN is effectively divided over Myanmar.

On one side, the Mekong region nations – Thailand, Cambodia, Vietnam and Laos – favoured continued engagement with the junta, or the State Administration Council. But Indonesia and Malaysia, clearly concerned by the post-coup savagery and still angered by the military's 2016-17 expulsion of nearly 1 million Rohingya Muslims, pushed to further isolate their pariah member. They were joined by Singapore and, to a lesser extent, the Philippines and Brunei. From early 2023, Indonesia as ASEAN Chair shifted to a more measured yet secretive stance, launching quiet talks with all sides including the



Kusuma Pandu Wijaya@ASEAN Secretariat

Indonesian Foreign Minister Retno Marsudi sets up a Special Envoy's office to coordinate ASEAN's response



NUG and the junta. While behind-the-scenes diplomacy may sometimes be necessary, it is difficult to measure progress when details are lacking for accountability.

Western countries, including an increasingly proactive US and UK, have slapped multiple sanctions on Myanmar's junta but have publicly deferred to ASEAN to lead crisis resolution efforts through the 5PC. Japan, which has poured billions of dollars in aid and investment into the country, has tried to hold a middle path, suspending new official aid after the coup but remaining protective of its interests including hundreds of Japanese companies invested in Myanmar. Despite Tokyo's strong stance against Russia's war in Ukraine, so far it has refused to consider bilateral sanctions, while discreetly trying to distance itself from the junta. Its special envoy Yohei Sasakawa has helped channel humanitarian aid to resistance-linked groups but also insists that elections are the "only exit strategy" for the regime.

In broader diplomatic circles there is a growing sense that time is running out for Myanmar diplomacy, not only due to escalating atrocities but also Min Aung Hlaing's efforts to legitimise his coup regime. The general touted his intention to stage elections within 2023. That timetable may have slipped, given his admission in February that less than two-thirds of the country's 330 townships were "stable and peaceful". The state of emergency was extended for another six months casting doubt over the timing of the election. Yet, preparations for a poll have continued, including the distribution of electronic vote-counting machines to regional centres and the launch of an unrealistically stringent party registration process.

The prospect of stage-managed elections that would hand the military regime fresh legitimacy in the eyes of sympathetic powers such as China, Russia, and India has raised new alarm in Western capitals.

Summing up Washington's view, US State Department counsellor Derek Chollet told media ahead of his visit to Indonesia and Thailand in late March: "Unfortunately the news is only getting worse inside Myanmar, which I think increases the urgency that we feel to try to get something done. And our lines of effort that the US has pursued with our partners over the last several years remain, which is continuing to try to punish and isolate and pressure the junta."

Within ASEAN, negotiations rooted in the flawed Five-Point plan remain the main strategy. Beyond Indonesia's quiet diplomacy, however, divergent efforts by Thailand have fuelled Western concerns about a steady shift to a more "minilateral" – even entrepreneurial – approach toward Myanmar. In December, Thailand's foreign ministry convened what became known as a "non-ASEAN, ASEAN meeting" that included the foreign minister of Myanmar's junta among five Mekong region countries but was rejected by other ASEAN members.

Highlighting deepening regional divisions over Myanmar, Thailand in late March hosted a secretive "Track 1.5" meeting of concerned countries, mainly Myanmar's neighbouring states. The low-key gathering drew



Myanmar citizens take to the streets to protest the elections

Mg.Hla@Wikimedia Commons

an uneasy mix of government and non-government representatives from about 11 countries and organisations including India, Bangladesh, China, Japan and the five Mekong region countries, including senior Myanmar officials. Notably absent were the five ASEAN countries with differing views as well as any US official representative, although the meeting had heard from conservative American academic Karl Jackson.

The participation of awkward neighbours such as India and China in this hasty, ill-planned session underlined ASEAN's weak grip on the expanding crisis and heightening concern – not least of its convenor, Thailand. Underscored by its shared border and reliance on natural gas imports from Myanmar for at least 15% of its energy needs, Thailand has the most at stake among regional countries. China, an unenthusiastic yet strong backer of the junta, also looms large over Mekong countries through its massive Belt and Road infrastructure projects.

There were no concrete outcomes from the March Track 1.5 talks nor agreement on a fresh round. However, the meeting reinforced the rising wave of Myanmar-driven backroom diplomacy. As Thai analyst Kavi Chongkittavorn noted, the Bangkok gathering was "a first stepping stone for more informal dialogue events... It's imperative for delegates from Myanmar to hear views directly from other countries with stakes in its future."

But Washington and other Western capitals are taking the opposite view, requesting ASEAN to continue isolating Myanmar's junta and increasing pressure on frontline countries such as Thailand to facilitate cross-border aid to resistance-held areas. Moreover, the US administration is increasingly putting money where its mouth is, following the December 2022 passage of legislation by the US Congress which approved support for Myanmar's resistance forces including (non-lethal) assistance to armed groups.

For ASEAN however, the prospect of being saddled with a "failed state," as Chollet described Myanmar, remains the group's greatest existential nightmare.

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# Obstacles to Decarbonisation in Southeast Asia

**Sharon Seah** looks at decarbonisation challenges in Southeast Asia's electricity generation, transportation and agriculture sectors, as well as other factors hampering such efforts.



Bill Dickinson@Flickr

Emissions coming out of an electricity-generating facility

From politicians' speeches to policy documents and media reports, the terms 'low-carbon', 'net-zero', 'carbon neutral', 'decarbonisation' have been making their way into climate discussions in Southeast Asia. However, the concept of decarbonisation remains poorly understood and indefinite, if not impossible, to translate into the vernacular languages of Southeast Asia. For instance, the Bahasa Indonesia term '*dekarbonisasi*' is a direct transliteration used in the ISEAS-Yusof Ishak Institute's annual climate survey in 2022 to poll regional respondents' views on the obstacles their countries faced in the process of decarbonisation.

There is no standard definition of the word 'decarbonisation'. Cambridge English Dictionary gives two definitions. The environmental meaning is "the process of stopping or reducing carbon gases, especially carbon dioxide, being released into the atmosphere as the result of a process, for example the burning of fossil fuels". The engineering meaning is "the process of removing carbon or material containing carbon from a substance or from an object, such as an engine". Collins Dictionary takes it further by defining it as "the process of reducing and removing carbon dioxide output from a country's economy" whereas Merriam-Webster simplifies it as the "process of removing carbon from (something)". Without a standard definition, the processes, means and

measures of successful decarbonisation will be difficult. Hence climate scholars and analysts have pegged the measurement of decarbonisation to the amount of greenhouse gases (GHG) removed in order to meet the temperature limit goals set by the world.

Historically, Southeast Asia is one of the lowest GHG emitting regions in the world. From 1990 to 2019, the region's contribution to global GHG emissions was less than 7% but its net emissions expanded exponentially during the same period. Current projections estimate that ASEAN's CO<sub>2</sub> emissions per capita will increase by 139% between 2015 and 2040. The region's claim to being one of the lowest emitters will ring hollow in the coming decades as the region continues to experience high population and economic growth. In tandem with strong growth trajectories, its contribution to higher GHG emissions will come from industrial, agricultural, economic activities, and patterns of consumption that are the hallmarks of middle-class societies. Southeast Asia will therefore find itself on shaky ground hiding behind the right to economic development without doing its part to decarbonise.

One of the largest contributors to Southeast Asia's carbon emissions is the electricity generation sectors. The region's dominant source of energy comes from fossil

fuels such as coal, oil, and gas. Southeast Asia possesses such resources in abundance but it is also equally well endowed with renewable energy resources such as hydro, solar, geothermal and in some places, wind. However, overdependence on fossil fuels for power generation makes it difficult for governments to transition to renewable energy. A key factor is the sustained use of fossil fuel subsidies to alleviate poverty and hardships particularly during times of severe economic downturns.

A 2016 United Nations Environment Programme (UNEP) report using Indonesia as a case study demonstrated that the country made 14 attempts at subsidy reform since the 1998 Asian Financial Crisis but each time with varying degrees of success. Subsidies may be a favoured tool in many regional governments' economic recovery playbooks but what it ultimately does is undermine the energy transition by committing a country to carbon-lock in of fossil fuel technologies, decrease competitiveness of renewable energy generation, and put off renewable energy investors. If there are no off-takers for electricity generated by renewable sources, then there is no business case for investors. The reverse would be true if renewable energy generation enjoyed subsidies from the state.

Poor energy infrastructure in the region makes it difficult to support the use of renewable energy sources such as solar and wind power. Current power grid structures cannot support high intermittency of renewable sources and in the long-run can cause problems to national power grids. Vietnam, for example, experienced a solar boom in recent years and expanded its solar capacity 200-fold from 85 MW in 2017 to nearly 17,000 MW in 2021. However, its existing grid infrastructure has not been able to cope with the supply spikes thus leading to renewable energy farms being asked to limit operations. Hence, one of the obstacles to decarbonisation, besides being the prohibitive costs of renewable energy technology (which admittedly for some forms of technology such as solar photovoltaic panels have come down in the last decade), is the capacity of a national power grid to support the use of renewable energy.

Electrification of the transportation sector has also been dominating the discourse in Southeast Asia as proof of intention to decarbonise. Transportation is a key contributor to GHG emissions in the region. In recent years, countries have begun championing a shift to adopt electric vehicles (EV). Thailand is now leading the EV race in Southeast Asia followed by Indonesia and Singapore. The ASEAN EV market is projected to grow from US\$500 million in 2021 to US\$2.7 billion in 2027. Generous EV incentives have attracted Japanese and Chinese carmakers to the region. This discourse carries a dominant economic imperative as Southeast Asia has a strong automotive manufacturing base in countries like Thailand, Indonesia and Malaysia. Pivoting to the production of EVs is therefore very attractive as a means to maintain global competitiveness in the automotive markets. However, without decarbonising the power generation sector, the only "benefit" of electrifying the transportation sector will simply be an improvement in air quality without a reduction in GHG emissions.



Electric car-sharing company BlueSG fleet parked in front of an apartment complex in Singapore

Agriculture, land-use change, and forestry is another large contributor of GHG emissions in ASEAN. Six out of ten ASEAN member states – Cambodia, Indonesia, Laos, Myanmar, Philippines and Vietnam – are bulk commodity and agricultural producers that are heavily reliant on the sector for economic development and growth. Rice-production in particular is one of the hardest to abate because firstly, existing agricultural practices are difficult to change; secondly, there is a lack of farming incentives; and lastly, the absence of institutional support. Decarbonising this sector will be gargantuan as it is highly fragmented with over 100 million smallholder farmers in the region. Take the age-old practice of flooding rice paddies for example which contributes to high methane emissions (which is very potent at 80 times the global warming potential) which can be remedied with the arduous Alternate-Wet-Dry (AWD) technique to reduce emissions and build resilience. However, scaling up AWD has proven to be tremendously difficult.

Other key obstacles to this region's decarbonisation journey include: limited access to financial resources and technology to develop and implement clean energy projects; limited public awareness which makes it difficult to support decarbonisation efforts; and limited regional cooperation and coordination which hinders the development of regional policies and regulations to support an energy transition. In a 2022 regional climate survey, more than 50% of Southeast Asians say that insufficient financial resources are their country's top obstacle. This is followed by another 50% who say that the lack of R&D, technology and expertise is hampering them.

But perhaps one of the most stubborn obstacles to decarbonisation is the lack of political will and leadership in Southeast Asia. Unlike other regions and countries, the growth of green political parties in Southeast Asia has been poor. No politician is willing to bet his or her political career on driving a long-term issue like climate change especially striking a balance between creating conducive business conditions and pushing for climate action as in the case of the Philippines. This is unlikely to change anytime soon, although with changing demographics, politicians cannot afford to ignore their younger and increasingly impatient electorate who care about climate change more than before.

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# Renewable Energy Investment in ASEAN: Unfolding Trajectories and Challenges

**Kaho Yu puts together four enabling factors that could help ASEAN drive its renewable energy transition.**

**T**he ASEAN region, one of the fastest-growing energy and power markets in the world, has witnessed a surge in renewable energy investments. The International Energy Agency forecasts that energy demand in the ASEAN region will grow by as much as 60% by 2040, where coal will continue to play a major role in the energy mix. The urgent need to mitigate climate change and reduce the dependence on fossil fuels has prompted an increase in renewable energy investments in the region. This shift can be attributed to four enabling factors driving the renewable energy landscape while regulators and investors navigate various opportunities and challenges in their pursuit of a sustainable future.

## Understanding Cost Dynamics

Rapid advancements in renewable energy technology have led to reduced costs, enhanced efficiency, and improved grid integration within the ASEAN region. By 2030, renewables are projected to be 15% cheaper than fossil fuels, making them increasingly attractive to investors. The abundance of natural resources, such as solar, wind, and hydro, further bolsters the feasibility of additional renewable energy projects. Moreover, the overall trend indicates growing competitiveness between renewable and fossil fuel technologies. Consequently, in the long run, coal combined with carbon capture and storage (CCS) technology is expected to struggle to compete against renewables due to the significant generation costs associated with these technologies.

Nevertheless, as it currently stands, renewables and storage still cost a premium compared to the power generated from fossil fuels. This disparity is due to construction cost differentials, land and renewable resource availability, as well as regulatory and permitting requirements. Moreover, renewables deployed near demand centres tend to be more expensive, and the technologies required to support decarbonisation while maintaining grid reliability are costly. However, the necessity for infrastructure upgrades has, in turn, become an attractive proposition for international investment in ASEAN renewable energy development.

## The Role of Policy: Domestic, Regional and International Initiatives

Domestic policies and targets in ASEAN countries have generated robust market signals for investment in renewables. Many of these countries have established ambitious renewable energy targets and implemented supporting policies, including feed-in tariffs, tax incentives, export restrictions, and public financing schemes. Following discussions at the 2021 United Nations Climate Change Conference (COP26), five major Southeast Asian nations announced carbon neutrality targets for 2050 or later, along with plans to phase out coal. These measures have equipped ASEAN countries with the means to scale up and redirect investments toward renewables and new energy technologies.



Trung Nam Solar Power Plant in Ninh Thuan Province, Vietnam

Furthermore, regional and international cooperation plays a crucial role in accelerating renewable energy investments. For instance, the ASEAN Power Grid is designed to facilitate the integration and cross-border trade of electricity generated from renewable sources, thereby encouraging investment in renewable energy projects. Other regional cooperation frameworks, such as the *ASEAN Plan of Action for Energy Cooperation*, promote collaboration in research and development, technology transfer and capacity building, which are appealing to investors. In addressing challenges such as limitations in financial resources and technical capacity, ASEAN countries are also leveraging international support from various organisations and bilateral assistance from developed nations.



### Carbon Pricing to Drive Investments in Renewables

The expeditious development of carbon pricing instruments in the ASEAN region has significant potential to encourage greater investment in renewable energy. By increasing the cost of using fossil fuels, these instruments incentivise businesses to transition to cleaner energy sources over the long term. Carbon pricing mechanisms, such as carbon taxes, emissions trading systems (ETS), and carbon border tariffs, oblige carbon-intensive industries to account for the external costs associated with greenhouse gas emissions. The internalisation of these costs levels the playing field, accelerating the transition to renewable energy sources, such as wind and solar, by rendering them more competitive with coal and other fossil fuels.

Crucially, the implementation of carbon pricing policies sends a definitive signal to the market that governments are committed to reducing greenhouse gas emissions and transitioning towards a low-carbon economy. This commitment encourages investors to redirect capital towards renewable energy projects and capacity building. Furthermore, revenue generated from carbon pricing instruments can be strategically reinvested into renewable energy initiatives, as well as environmental and sustainability projects, further bolstering the growth of the clean energy sector.

### Geopolitics as a Catalyst

The Ukraine crisis has catalysed the Southeast Asian renewable and power markets, expediting the widespread adoption of renewables alongside fossil fuel. The energy market fluctuations during the crisis have

not dampened demand growth in Southeast and South Asia; instead, they have prompted the adoption of a 'Coal + Gas + Renewables' strategy. It is essential for ASEAN countries to increase the share of renewable sources in power generation as part of the strategy to ensure energy security and sustainability.

Furthermore, the energy crisis in recent years has led to the emergence of a stable renewable power market as a more favourable destination for investments than the volatile oil market. The skyrocketing spot prices of fossil fuels during the Ukraine crisis have rendered renewables comparatively more cost-effective. ASEAN countries have emerged as an alternative market for investors trying to diversify away from markets impacted by US-China trade tensions. Although supply chain disruptions due to COVID-19 reversed the declining trend in the cost of renewable power generation in 2020 and 2021, supply chain bottlenecks for renewables began to ease in 2022, driving new generation from wind and solar power.

### Navigating Profitability Challenges for Investors

The ASEAN renewable energy market has witnessed a substantial influx of investments in recent years. However, this growth presents several challenges for investors. First, investors with increased exposure to renewable markets face greater price volatility and escalating system costs, as regulators are introducing market reforms to accelerate the energy transition. Second, the associated costs of renewable energy, including equipment supply chain disruptions, inadequate grid integration, import tariffs and regional policy disparity, are on the rise. Third, factors such as curtailment, price cannibalisation, and policy or contract adjustments are introducing new uncertainties and additional barriers to profitability.

In response to these challenges, investors must reassess their financial strategies to achieve the desired return on investment. This process entails a thorough evaluation of their risk profiles, considering the multitude of uncertainties that may affect their projects' profitability. A comprehensive understanding of these risks and the diverse markets within the ASEAN region is crucial in making informed decisions and effectively managing the various risks that could undermine energy transitions.

Given ASEAN's current reliance on fossil fuels, proponents of renewable energies have a long journey ahead before renewables become the dominant source of energy in the region. The future of renewable energies in the ASEAN region depends heavily on investment in projects that can amplify the usage of renewables, such as cross-border grid integration, and green hydrogen. As the region moves towards a more sustainable energy future, it is essential for ASEAN countries to capitalise on the opportunities presented by renewable energy investments while diligently managing the risks associated with geopolitical competition.

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# The Geopolitics of Energy Transition in ASEAN

**Mirza Sadaqat Huda** discusses the rising demand for critical minerals and cross-border energy trade and their geopolitical implications to ASEAN.

**A**SEAN countries face the difficult task of addressing the financial, bureaucratic and socio-economic challenges of replacing fossil fuels with renewables while navigating the increasingly complex geopolitics of energy transition.

Throughout history, energy has influenced and has been influenced by geopolitics. In the 19<sup>th</sup> century, coal was the driving force of the Industrial Revolution and an important resource for the colonial empires that left a lasting legacy on the international system. In the 20<sup>th</sup> century, the geopolitics of oil and gas have manifested in strategic partnerships between Middle East countries and the West, the securitisation of vital shipping lanes and increasing domestic instability in multiple resource-rich regions. Within this context, there has been increasing momentum towards transitioning to renewable energy resources.

While the world still depends on fossil fuels for more than 80% of its energy supply, renewable generation capacity grew by 130% in the last decade, while non-renewables only grew by 24%. Energy transition is likely to have a significant impact on power, conflicts, and coalitions in the international system, but its impact on ASEAN has yet to be identified.

One of the main debates in academic studies of energy transition is whether the zero-sum politics of fossil fuels will continue in an era of renewables or give way to a more peaceful, interdependent world. Policymakers have also recognised the geopolitical importance of transition. In 2020, the International Renewable Energy Agency (IRENA) formed the 'Collaborative Framework on the Geopolitics of Energy Transformation (CF-GET)' which engages policymakers on the geopolitical consequences of energy transition. In ASEAN, energy transition has mostly been discussed from the technical, financial and policy perspectives, which is explained by the region's heavy dependence on fossil fuels and plethora of socio-economic challenges.



Ore containing copper, cobalt, and nickel

Paul-Alain Hunt@Unsplash

Currently more than 80% of ASEAN's total primary energy supply comes from fossil fuels while renewable energy accounts for a little more than 14%. ASEAN's energy-related greenhouse gas (GHG) emissions are projected to increase by 34-147% between 2017 and 2040. Despite significant challenges to transition, about 82% of ASEAN's new capacity in 2020 was from renewable resources, driven by hydroelectric dams in Laos, solar power in Vietnam and wind power in the Philippines and Thailand.

These developments in renewable energy generation has taken place in an increasingly conflictual geopolitical landscape. The invasion of Ukraine and Nancy Pelosi's visit to Taiwan are flashpoints in a broader trend towards economic decoupling, entrenchment of securitised discourses on energy and embargoes on trade in technology between China, the US and Russia.

According to an IRENA study, there are at least two major geopolitical trends relevant to ASEAN's energy transition. First, the increasing demand of critical minerals. The production of renewable energy requires a number of metals and minerals, particularly lithium, nickel, cobalt, rare earth elements (REEs), copper and silicon. These raw materials are called "critical minerals" due to their significant supply constraints. Many studies on critical minerals argue that the control of the supply chains of critical minerals can be used as a geopolitical tool. Such perceptions stem from the fact that China controls the extraction and/or processing of a majority of rare earths, cobalt and lithium. In recent years, there has been increasing discourse on using Southeast Asia's deposit of critical minerals to diversify supply chains. Indonesia and the Philippines have large nickel resources, while Myanmar is a large producer of tin and rare earths. Indonesia, Myanmar and the Philippines are significant copper producers.

Developing ASEAN's critical minerals can go a long way towards diversifying supply chains. However, the development of critical minerals is likely to be undertaken with multiple partners in the West as well as with China. Given the region's close economic ties with China, any attempts by the West to use Southeast Asia's critical minerals to 'decouple' from Beijing will most likely be unsuccessful.

Given the growing solar panel, lithium battery and electric vehicle industries in ASEAN, the region's countries would want to move from extraction to higher-value downstream activities such as refining and processing.



Technicians repair a wind turbine on a solar farm in the Philippines

The recent ban by Indonesia on the export of nickel ore led to an increase in the country's processing industries, which shows that Southeast Asian countries are ready to move up the supply chain of critical minerals. However, the extraction and processing of critical minerals will take a high level of expertise and significant investments, for which ASEAN is likely to collaborate with external partners.

By being open to collaboration with all parties, ASEAN can also avoid being a part of binary and parochial initiatives on critical mineral supply chains. Given the significant environmental and social costs of mineral extraction, it is important that ASEAN continues the momentum towards developing regional frameworks on mining, which can also reduce the overtly geopolitical framing of the issue.

Another possible issue faced by ASEAN is the disruption of cross-border energy trade. Energy transition will entail independence of energy supply and also facilitate interdependence with neighbouring states. While solar and wind farms will allow most countries to have some level of autonomy, transition will also encourage trade through cross-border grids, as this allows the use of multiple sources of energy, thereby addressing renewable's intermittent nature.

However, some analysts have suggested that given that energy transition entails the electrification of large segments of economies, countries that control cross-border or regional grids can exert undue geopolitical influence on their neighbours. In worst case scenarios, geopolitical conflicts can lead to deliberate disruptions of electricity supplies, causing significant socio-economic damages. Such predictions are not completely theoretical, as evidenced by the attacks on the Nord Stream pipeline in 2022.

ASEAN has made important progress in the development of cross-border energy trade in recent years. In June 2022, the region's first multilateral cross-border electricity trade initiative was commissioned between Laos, Thailand, Malaysia and Singapore. The

project facilitates the import of up to 100 MW of electricity using existing interconnections. The ASEAN Power Grid (APG) has been making slow but steady progress, and 8 of 16 key power interconnection projects have been completed, increasing regional cross-border transmission capacity to 7,720 MW. Multiple new cross-border interconnections are being planned between Cambodia-Singapore, Laos-Singapore, and Sarawak-Singapore.

Cross-border grids in ASEAN face a number of challenges. However, the region's geopolitical realities do not support the theory of deliberate disruptions. There is increasing economic interdependence at the regional level, and despite some level of mistrust, countries are well accustomed to resolving differences through dialogue. In ASEAN, disruptions to energy can be caused by protectionism, rather than conflicts.

In 2021, Malaysia banned the export of renewable energy to Singapore, purportedly to prevent such trade from hampering the country's climate goals. While the recent agreement on energy cooperation between Indonesia and Singapore is encouraging, it is not clear how such initiatives can be implemented given that Jakarta banned renewable energy exports last year. These domestic imperatives can result in disruptions to energy trade, which can discourage investment in cross-border grids. ASEAN needs to address this issue by developing institutional frameworks that facilitate dispute resolution and timely exchange of information.

Geopolitics has undermined global efforts towards accelerating energy transition. However, ASEAN can reflect on its history of navigating tricky geopolitical landscapes to promote pragmatic and mutually beneficial policies on critical minerals and cross-border grids. This will require investment in the capacity building of existing domestic and regional institutions to facilitate a timely and peaceful transition to clean energy.

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# Does Food Protection Equal Food Security? Lessons from ASEAN's Experience with Rice

Drawing on personal experience as an advisor in Asia, **C. Peter Timmer**, a leading authority on agricultural development, highlights the role of ASEAN in ensuring food security.



Rice seller in Indonesia

Chris Quintana@International  
Rice Research Institute

developed by Borlaug at the Rockefeller Foundation research center in Mexico. The Green Revolution was on its way.

When the International Rice Research Institute (IRRI) in the Philippines released its first short-statured, fertiliser-responsive rice variety (IR-8) in November 1966, the food security prospect for Asia was radically transformed. Even traditional rice-importing countries such as Indonesia and the Philippines could start to think realistically about investing in rice self-sufficiency campaigns. Dependence on the volatile world rice market could be exchanged for stable domestic rice production. Or so the dreams went.

**F**ood protection using trade measures works in two ways. Surplus countries tax or ban exports to protect domestic consumers, often at the expense of poorer farmers. Deficit countries ban or tax imports to protect domestic farmers, at the expense of poorer consumers. Poverty tends to increase in both cases, and it is possible that food security is not actually enhanced in either case. Why do countries protect their food sector? An important aspect of political legitimacy in Asian countries is reasonably stable rice prices in domestic markets. Protection in both rice exporting and importing countries can help stabilise domestic rice prices. At least politically, there is no necessary trade-off. Food protection and food security can go hand-in-hand.

In 1972, Indonesia learned the hard way that dreams of self-sufficiency in rice would require more than a national plan. The world food crisis from 1972 to 1974 was tough on Asia generally, and on Indonesia in particular. Thailand's ban on rice exports meant that the world's biggest rice market disappeared for almost a year. Globally, rice prices spiralled out of control. Higher oil prices increased Indonesian financial resources, and the rice crisis built political support for government policies designed to increase domestic rice production. More broadly, all ASEAN rice importers invested in securing supplies. Three decades passed without a world food crisis.

Economists have long argued that free trade is the best path to food security. Political forces have often made this principle impossible to follow, especially in times of turbulent markets, when food security is most at risk. ASEAN has confronted these conflicts often since its founding in 1967. There are successes and failures. By learning from experience, ASEAN has discovered that dialogue and cooperation are key to regional food security.

In 2007, world food supplies tightened and prices for wheat, maize, and vegetable oils rose. Several Asian countries reconsidered the wisdom of maintaining low domestic rice stocks. The Philippines, in particular, tried to build up their rice stockpile to protect against shortages.

The political importance of food security was highlighted by the back-to-back monsoon failures on the Indian Sub-continent in 1965 and 1966. Then, the world was alerted to a looming catastrophe if growth in grain production lags behind population growth. The United States, holding the world's largest grain reserves, was a reluctant and arrogant food aid donor. No PL-480 wheat – surplus wheat in government storage used as food aid – would be shipped unless India supported President Lyndon Johnson's Vietnam War policies. India realised that its independence was at stake and turned to Norman Borlaug, the renowned plant breeder, and his Indian colleagues who were pushing for the adoption of the short-statured, fertiliser-responsive wheat varieties

Higher rice prices in exporting countries, especially India, Vietnam, and Thailand, led to export controls to protect domestic consumers. Importing countries, especially the Philippines, scrambled for supplies. Fears of shortages



Farmers in Thailand harvest wheat crops

Siebe Baarda@Flickr





M. Risyah Hidayat@Indonesia G20 Media Center

spread, resulting in panicked hoarding by millions of households, farmers, traders, and some governments. This resulted in a sudden price explosion.

Fortunately, a speculative price spike can be ended by “pricking the bubble” and deflating expectations. Falling prices reverse hoarding behaviour. When the government of Japan announced in May 2008 (after international urging) that it would sell 300,000 tonnes of its surplus “WTO” rice stocks to the Philippines, prices in world rice markets started to fall immediately. By late August 2008, medium-quality rice for export from Vietnam was available for half the price in late April, as dis-hoarding gained momentum. In the end, Japan never sold any surplus rice.

The lessons from 2008 were still vivid as ASEAN leaders faced the current world food crisis. In 2022, the world faced two dilemmas: serious shortages of physical grain supplies because of disrupted supply chains from COVID-19 and the Russian invasion of Ukraine; and the reluctance of major players in the world food economy to trust international grain markets for their domestic food security needs, whether imports or exports.

Fortunately, the world community navigated around the food crisis. Collective action was proposed at the G20 Summit Meeting in November 2022 in Bali, chaired by Indonesia. The G20 Declaration emphasised that the world community could help stabilise food, fertiliser, and energy markets by avoiding panicked actions. The gains from a collective agreement to protect a *global public commons* — the resilience and depth of world grain markets, for importers and exporters — were available to all parties.

ASEAN leaders meet regularly to discuss national policies on food security, and how changes in those policies might affect the global rice market. Important lessons were learned from the food crisis in 2008. First, build up rice stocks in importing countries. Second, don’t panic, and talk through the food security issues at ASEAN Summits and relevant meetings. This low-key

approach has worked. The spike in world food prices in 2011 included wheat, maize and soybeans/ vegetable oils, but not rice. World rice prices have been relatively stable since, despite considerable fluctuations in the prices of other staple foods on world markets.

These lessons carried through to the 2022 food crisis. COVID-19 and Russia’s invasion of Ukraine fundamentally changed the food supply situation, and prices rose significantly. Disrupted energy supplies and high prices also raised the cost of food across the supply chain, from farm inputs to farming activities, to processing and transportation to retail outlets. Food price inflation will not slow quickly.

Significant risk factors, including adverse weather, port disruptions, and export barriers, could cause rice prices to rise sharply in 2023. ASEAN, through quiet cooperation, can prevent the world rice economy from spiralling out of control.

ASEAN has no enforcement mechanisms if individual countries want to do something that will adversely affect world rice prices, but the forum and discussion where ASEAN heads of state meet twice a year have proven remarkably successful. The record is clear. Rice prices used to be much more unstable than wheat and maize, because of the very thin world rice market. The opposite has been true since 2008, although the rice market remains thinly traded. ASEAN deserves credit.

Indonesia has the opportunity of the ASEAN Chairmanship to keep food security on the regional agenda. Bringing India into active discussions would be very helpful, especially as India is chairing the G20 this year. A strong joint statement from ASEAN and India on the importance of keeping regional borders reasonably open to food trade (not just rice) would be welcomed.

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# Is ASEAN Prepared for Future Pandemics?

**Bony Wiem Lestari, Aly Diana, Adriana Viola Miranda, and Fadilah Fitri Arsy** call for ASEAN countries to enhance regional collective actions for future health preparedness.

**H**ealth issues are increasingly recognised as security threats to Southeast Asia. Due to its tropical climate, rapid socio-economic advancement, urbanisation, and shifting environmental conditions, it is a hotspot for public health emergencies. The risks of emerging infectious diseases and the global mortality rate in Southeast Asia are among the highest globally mainly due to natural disasters. Furthermore, the region is not spared from the rise of global epidemiological transition from infectious diseases to noncommunicable diseases (NCDs), such as cardiovascular diseases and stroke. These issues are further exacerbated by the ever-increasing consequences of climate change.

The impact of health on regional security cannot be overstated, as health has long-term socio-economic impacts. ASEAN recorded a total of US\$91 billion in disaster-related economic loss between 2004-2014. Similarly, NCDs and infectious diseases have also become major economic burdens, as these events often lead to out-of-pocket expenditure for medical care, the intangible caregiver burden, and long-term productivity loss. The COVID-19 pandemic has cost the government unprecedented economic loss due to public health responses, border closures, and travel restrictions. Against this backdrop, health security, defined as "the measures required to minimise the vulnerability to public health events that endanger lives across borders," is critical to ensure the security of ASEAN. This can be achieved by creating a resilient, secure, and sustainable regional health architecture.

## Major Health Threats in ASEAN

Southeast Asia is vulnerable to various health threats. First, the region is an epicentre for emerging and re-emerging infectious diseases, including the two major

outbreaks of Avian Influenza A (H5N1) and COVID-19. At the same time, antimicrobial resistance, which occurs when bacteria, fungi, and other pathogens acquire resistance to the currently available drugs, is on the rise due to overuse, underuse, and misuse of antimicrobials. The rise of NCDs related to rapid urbanisation and lifestyle changes further threatens health security in ASEAN.

The region is also prone to disasters. Between 2004-2014, more than 50% of global disaster-related casualties were recorded in ASEAN countries. The risks of health threats are increased with worsening climate change. According to the *ASEAN State of Climate Change Report 2021*, health has been identified by all ASEAN countries as a sector that is most vulnerable to climate change impacts.

## Regional Health Security in ASEAN

Before the COVID-19 pandemic, ASEAN had reported major advancements in health security and emergency preparedness. For instance, the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) and the AADMER Fund were launched in 2005 to improve regional disaster preparedness. This was followed by the 2016 declaration on 'One ASEAN, One Response'. These mechanisms provided relief and humanitarian assistance, including medical aid to address various disasters as demonstrated in the 2018 tsunami in Indonesia and the 2021 Super Typhoon Rai in the Philippines.

Unfortunately, public health capacity gaps are still prevalent. When the COVID-19 pandemic hit the region, many ASEAN states were unable to manage the large influx of patients. Unclear coordination mechanisms, inadequate surveillance measures, shortage of healthcare workers, and lack of health emergency funding were also observed. As a result, ASEAN countries' responses to the pandemic varied significantly according to their capacities and risk tolerance. ASEAN's principle of non-interference towards domestic challenges has also been cited as hampering effective regional disaster responses and public health emergencies. These issues were put to test during the COVID-19 pandemic when ASEAN countries unilaterally closed and opened their borders according to their countries' readiness rather than coordinating with their neighbours or within ASEAN. But the COVID-19 experience brought about positive impact. Most ASEAN countries increased their emergency preparedness spending after the pandemic.



A man carries his belongings through floodwaters in Manila, the Philippines

Evangelos Petratos@EU Civil Protection and Humanitarian Aid



Delivery of Pfizer vaccines through the ASEAN COVID-19 Response Fund

According to the 2021 Global Health Security (GHS) Index, seven out of eleven Southeast Asian countries (including Timor-Leste) have overall scores higher than the global average. All ASEAN countries, except Timor-Leste, have higher scores for the detection and reporting categories, having put in place active systems for real-time surveillance and case reporting.

Various efforts to curb the pandemic were also evident at the regional level. In 2020, the COVID-19 ASEAN Response Fund was established. Since then, the fund has assisted ASEAN countries in procuring COVID-19 diagnostics tools and vaccines. ASEAN also strengthened its information-sharing and capacity-building programs, partly in collaboration with external partners, such as the European Union and the World Health Organization. The fund will be changed to “ASEAN Response Fund for Public Health Emergencies and Emerging Diseases” (or “ASEAN Response Fund” in short) to address future public health emergencies when COVID-19 is no longer deemed a threat in the region.

ASEAN has also enforced the ASEAN Comprehensive Recovery Framework and the ASEAN Post-2015 Health Development Agenda, which include strengthening the health system and essential health services as their key priorities. Furthermore, in November 2022, the association established the ASEAN Centre for Public Health Emergencies and Emerging Diseases (ACPHEED), a centre of excellence and regional hub to fortify ASEAN's regional public health emergency preparedness. The ACPHEED Secretariat has been established in Bangkok.

### Collective Actions for Future Health Preparedness

While the pandemic has improved ASEAN's commitment to regional health security, some gaps remain to be addressed. First, despite the reported improvements, emergency preparedness disparities among ASEAN countries are still evident. The 2021 GHS Index reported that infection control practices and equipment availability in seven ASEAN states were suboptimal. Furthermore, most countries have insufficient capabilities to access or develop vaccines, therapeutics, and diagnostics (VTD) tools. Most of the efforts to strengthen these capabilities are hindered by limited access to capacity and resources, high reliance on imported materials for VTD tool development, and limited awareness and acceptance among the general public. The region is also having

difficulties developing robust intelligent surveillance systems due to health system disparities, fragmented data gathering, and discrepancies in administration standards.

Addressing these barriers through ASEAN is still crucial. It is time to recognise both the need and the potential of managing healthcare from a regional perspective, as the pandemic teaches us valuable lessons that remain relevant. Strengthening regional health architecture should be prioritised by creating clear operationalisation strategies, e.g. a *Regional Action Plan for Health Security*, as well as conducting information sharing, capacity-building, technology transfer, and digital health transformation. The scope of the ‘One ASEAN, One Response’ concept should be widened to cover other public health emergencies, such as future pandemics. Furthermore, ASEAN governments should follow the post-COVID commitment to strengthen their health systems. The public health-related regional bodies, such as the ACPHEED, should have the capacity to develop tools, training curricula, and surveillance strategies required to advance regional health security.

There is also a need to ensure the sustainability of the ASEAN Response Fund as the endowment fund for future public health emergencies. ASEAN governments should continue their funding commitments that have been displayed during the pandemic and foster collaborations with external funders. It is also crucial to continuously identify potential threats to regional collaboration. In terms of the principle of non-interference, it may serve as a springboard for continuous collaboration: as the understanding that geographic boundaries do not limit health threats, so will the urgency to conduct collective actions.

In conclusion, mitigating and effectively addressing the complex and multidimensional health threats, including future pandemics in ASEAN requires an agile and collaborative regional health system.

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# Circular Economy for ASEAN's Sustainable Future

**Patree Witoonchart and Kannika Thampanishvong** draw lessons from the implementation of Thailand's Bio-Circular-Green Economy and how ASEAN countries can envision their circular economies.

**H**ow can countries simultaneously sustain growth while preserving the planet? Amidst the multitude of solutions, the “circular economy” idea has become increasingly popular. Is this truly part of the solution, and how can ASEAN countries make use of its purported benefits? In its latest development plan, Thailand envisions a “Bio-Circular-Green Economy” (BCG) model for its sustainable future.

What is a circular economy? A circular economy is a “closed-loop” model of production and consumption based on the principles of waste elimination, product/material circulation, and nature regeneration. It directly opposes the unsustainable “take-make-dispose” linear industrial model, leading to reduced greenhouse gas emissions and create new market opportunities within the closed-loop model. Without circularity, valuable resources are needlessly wasted. Thailand recognises the model's potential to create new industries and jobs, and generate economic value.

## Thailand's Circular Economy Model

As part of the Bangkok Goals of the Asia-Pacific Economic Cooperation (APEC) in 2022, Thailand unveiled its Bio-Circular-Green (BCG) Economy, an alternative national development model that aims to drive sustainable growth and reduce carbon emissions by using technology and innovation to capitalise on the country's existing strengths in natural resources and cultural diversity. The four strategic sectors were

chosen for their enormous economic potential, namely (1) agriculture and food, (2) energy, materials, and biochemicals, (3) wellness and medicine, and (4) tourism and creative economy.

Many of Thailand's industries generate waste and by-products from the production process. Combining technology, innovation, and entrepreneurship can turn these wastes and by-products into high-value forms like those at the top of the value creation pyramid. Smart farming, for example, uses agricultural technologies to increase agricultural efficiency, and eliminate the need for harmful chemicals, leading to higher-quality ingredients that can be further processed into premium health supplements. This model of value creation also applies to products and waste, which is one of the keys to implementing circularity in the economy.

## Circularity under Thailand's BCG Economy Plan

Under Thailand's BCG broad strategic sector umbrellas, the sub-sectors with the high potential for circularity are identified under the BCG in Action: Circular Economy (2020) plan such as plastics, food and agriculture, and building materials. The visions for these three sectors are in response to current shortcomings and the potential for new, innovative markets. In the plastics industry, less than a quarter of plastics are currently recycled and Thailand consistently ranks as one of the top global contributors to plastic pollution.



Dedicated Session on Bangkok Goals on the Bio-Circular-Green Economy (BCG)

The BCG Economy plan sets an ambitious aim to recycle 100% of polyethylene terephthalate (PET) and polyethylene (PE) plastics by 2030 through mechanisms such as allocating funds to create “waste hubs”, support for start-up businesses in recycling, expansion of extended producer responsibility measures, and amendments to laws restricting the use of recycled plastics in food packaging. Such a recycling goal, if achieved, could also help Thailand save on energy costs.

The food and agricultural sectors face two main problems: open agricultural burning, and food loss and waste (FLW). Farmers burn crops for various reasons, such as labour shortage and ease of harvest, resulting in substantial air pollution and carbon emissions. FLW occurs at every stage of the food production and distribution process, resulting in a 30% loss rate. Both problems can be addressed by applying circular economy principles: the BCG Economy Plan aims to eliminate agricultural burning, cut food loss from 30% to 10%, and halve food waste. The mechanisms include amending laws to enable the recovery of useful resources from industrial waste, and creating financial incentives to turn agricultural residue into resources.

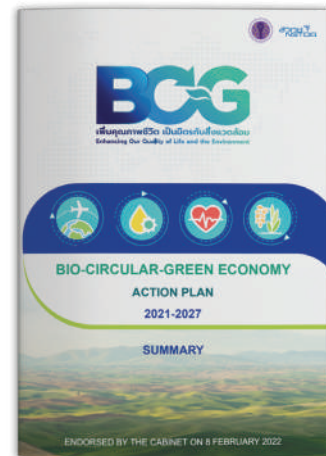
In the building materials industry, the BCG Economy Plan focuses on integrating circularity at all stages throughout the whole supply chain, from design to materials procurement to construction and repair. Mechanisms for supporting this transition under the BCG plan include developing a digital infrastructure for building materials, supporting the innovation of environmentally friendly materials, and driving sustainable urbanisation structure with regards to city planning.

Despite its significant potential, issues such as low level of awareness and cooperation in waste management behaviours, institutional and regulatory barriers, and limited markets for circular economy products remain challenges to the adoption of circular economy in Thailand. The BCG roadmap was created with these issues in mind and contains many mechanisms for facilitating solutions, though its effectiveness remains to be seen.

### **The Way Forward for ASEAN Economies**

At the national level, ASEAN countries are prioritising green and sustainable growth. Every nation has produced some form of national-level policies with this objective, with countries such as Vietnam and Indonesia explicitly prioritising the circular economy as a strategy. At the regional level, ASEAN has also taken steps to realise a circular economy. At the 20<sup>th</sup> ASEAN Economic Community (AEC) Council Meeting, a Framework for Circular Economy was adopted to guide ASEAN in achieving its long-term goals of a resilient economy, resource efficiency, and sustainable and inclusive growth.

With this ambition in mind, ASEAN countries can take cues from Thailand’s BCG initiative to guide their own circular economy development plans. Thailand has identified five important conditions for success. First, the plan will be driven through key projects and focus



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### **Thailand's BCG Economy Action Plan 2021-2027**

sectors in order to gather on-the-ground information and act as models for future upscaling of the concepts. Second, circular economy solution platforms should be created to facilitate capacity-building in innovation and technology, and connect a network of target groups. Third, businesses, society, and the general public should be aware and educated on the concept of sustainable consumption and production. Fourth, incentives, laws, and regulations must support the circular economy market. Fifth, there must be cooperation at all levels and in every sector of society including international cooperation. Notably, as the BCG is specifically designed to complement and bolster Thailand’s competitive advantages, each country must customise the plan to their own strengths, needs, capacities, and challenges.

Plastics management can serve as an excellent starting point for many ASEAN countries that face similar challenges to Thailand. By applying a circular economy framework where plastics are designed with long lifespan, repair, sharing, efficient collecting, and recycling integrated into every step, plastics management can serve as a starting model for other sectors of the economy. Tools such as extended producer responsibility and regulatory amendments can aid this transition. At the regional level, ASEAN can establish voluntary technical standards for plastics which will facilitate recycling across the different countries, and mandate the substitution or removal of harmful plastic additives.

In conclusion, the circular economy is an important component for achieving sustainable economic growth and mitigating carbon emissions in ASEAN. Thailand's BCG initiative provides a grand vision for realising a circular economy in the country and, potentially, for the region. However, every country has its own unique strengths and challenges, and it may be necessary to start with different sectors depending on each country's circumstances. Lastly, while positive steps have been taken both on national and regional levels, more needs to be done to ensure good plans and intentions come to fruition.

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## Going Beyond Commitments: Learning Sustainability Financing from the G20

**Maria Monica Wihardja** provides an overview of how Indonesia spearheaded the G20 Sustainability Financing initiatives and how ASEAN can learn from that experience.



Lailly Rachey@Presidential Press Bureau

The G20 Bali Leaders' Declaration was not short on commitments and pledges to create new global funds to address the world's multiple short-term and structural sustainability challenges today. These commitments include the establishment of the new Pandemic Fund and the new Resilience and Sustainability Trust. Recognising the heightened debt vulnerabilities among many emerging markets and developing economies (EMDE) due to the COVID-19 pandemic while facing pressing needs to invest in climate mitigation and adaptation, the G20 also came up with a Common Framework for Debt Treatment beyond the Debt Service Suspension Initiative to help low-income and other vulnerable countries restructure their debts.

Sustainable finance is recognised as key to supporting EMDE towards a green, resilient, and inclusive development (GRID). Under the G20 Sustainable Finance Working Group, progress was made in developing and adopting standards and taxonomies for identifying 'sustainable' activities. Indonesia also launched the Energy Transition Mechanism to help EMDE like Indonesia which rely heavily on fossil fuels to transition to renewable energy.

These commitments are made in the context that we are not in normal times, as Kharas and Rivard alluded to in their recent report "Debt, Creditworthiness, and Climate: A New Development Dilemma". For many countries, this means deteriorating creditworthiness, rising costs of financing, high fiscal deficits, low economic growth, and high inflation due to skyrocketing food, energy and

fertiliser prices. Moreover, many EMDE are facing an entrenched development-dilemma conundrum where they must choose between protecting their vulnerable citizens and micro, small enterprises from the impacts of the high inflation, job losses and high cost of financing, versus investing in the transition to green energy. Investing in sustainability is still perceived as a luxury instead of a top development priority.

At the same time, the world is facing climate challenges that demand an urgent call for every stakeholder globally to play its role in addressing it. The proliferation of global funds and other commitments to scale up sustainable financing are a recognition that all countries need to work together to address the tragedy of our global commons.

The statistics are telling. As cited by Kharas and Rivard, one-quarter of the global greenhouse gas emissions come from developing countries without an investment grade credit rating, which means the cost of financing is very high since the risks are higher for investors to invest in these countries, and hence, they impose higher interest rates. Moreover, almost all advanced economies could borrow from the global capital markets at rates below 5%, while only six out of 52 EMDE can borrow at this rate. However, without these countries transitioning to green energy, the global target to limit temperature increase below 1.5 degrees remains elusive.

This means that without access to cheaper capital, such as through non-concessional and concessional official financing by international financial institutions (IFI), many

EMDE are not incentivised to invest in decarbonising their economies. This explains why the various sustainable financing commitments at the G20 provides not only access to cheaper capital but also technical assistance and capacity building to help countries plan their transition strategies and manage their transitional risks.

What can ASEAN learn from various G20 initiatives so far to scale up sustainability financing and encourage countries to take climate action?

First, addressing sustainability issues needs long-term and sustained strategic investments in the scale of trillions, and not billions, of dollars. Currently, most pledges are still in the billions, such as the US\$100 billion Climate Fund and the US\$100 billion Resilience and Sustainability Trust, or the US\$1.4 billion-pledged Pandemic Fund.

As a recent report by Basri and Riefky, titled “Ensuring Inclusive, Affordable, and Smooth Climate Transition in Indonesia”, argues, a primary reason for the discrepancy between agreement and inaction is “a difference of views on who should do what”. In the spirit of *‘gotong royong’* (idea of community self-help), the High-Level Advisory Group on Sustainable and Inclusive Recovery and Growth (HLAG) – an international panel of development experts – recommends the division of labour on who-should-do-what to scale up sustainability financing. This includes the role of multilateral development banks (MDBs) and the International Monetary Fund (IMF) to increase their provision of technical expertise and financial assistance, in particular through concessional financing to de-risk investments with low risk-adjusted returns. It also urges governments to bolster domestic resource mobilisation, including through carbon taxes, phasing out from ‘dirty sector’ subsidies, fossil fuel excise, plastic excise, and green tax incentives. Blended finance, which adopts the spirit of *‘gotong royong’*, has gained popularity among the G20 countries. It is a structuring approach that brings various actors together, including private philanthropists and impact investors, to invest in projects while achieving their own goals – whether financial, social and environmental, or both.

Second, commitment alone is insufficient. Instead, we have to explore the ‘how to’ do so, especially in weathering transitional risks, as Basri and Riefky argue in their report. The HLAG recommends that each country must design their own institutional framework arrangements to fit specific country contexts and needs. There is no one-size-fits-all. Recognising the domestic political economy of a green energy transition is critical in this regard.

For countries facing the development-dilemma conundrum, the energy transition agenda must be directly linked to the development target and the country’s priorities. Since political cycles are usually short (except in authoritarian governments), 10 years at the maximum, compared to the maturity of green projects and investments that could span over 30 years, policymakers could start with low-hanging fruits to gain political support in the short run to sustain the



green transition plan over the long term. Institutional, regulatory, bureaucratic, and governance weaknesses should be considered when governments plan their energy transitions, especially in their short-term plans. Identifying losers and winners, and prioritising policies and sequencing reforms will help weather the transitional risks. Lastly, public communication, awareness, and support for climate action could help ease pressures on governments and policy makers.

Third, global level reforms are needed to enable the ‘big investment push’ towards GRID. As highlighted by Kharas and Rivard, the major IFI could change their methodology in how they assess the creditworthiness of countries, which is used by potential investors to make investment decisions. Since climate vulnerability will increase financial risks and stifle financial stability, the methodology could consider climate resilience and vulnerability in assessing creditworthiness to incentivise countries to invest in climate actions. Countries that refrain from investing in climate mitigation and adaptation will find it more difficult to improve their credit ratings. Equally as important, Kharas and Rivard also noted that the key to success in the big-investment-push scenario is improving investment climate and strengthening institutions.

Without sound governance and institutions, EMDE will find it difficult to credibly and transparently execute the green investments they commit to undertake. ‘Just transition’ partnership, involving neutral partners such as MDBs, is a starting point. Just Energy Transition Partnership (JETP) in Indonesia could help Indonesia deliver its ambitious goal in climate action while achieving GRID. However, it needs the active involvement of relevant domestic stakeholders to succeed including regulatory reform strategy and regulatory sandboxing.

Indonesia wants to sustain the momentum of the G20 Summit last year into its ASEAN Chairmanship this year. Learning from the G20 sustainability financing initiatives, ASEAN could focus on, first, the ‘who-should-do-what’ when it comes to working together to achieve regional and global climate action target; second, the ‘how-to-do-so’ when it comes to individual-country implementations; third, the ‘big-investment-push’ narrative when EMDE in ASEAN are faced with a development dilemma.

**Dr. Maria Monica Wihardja** is Visiting Fellow in the Indonesia Studies Programme and the Regional Economic Studies Programme, ISEAS—Yusof Ishak Institute.

# Leveraging the Rise of Digital Economy for Sustainability

**Melinda Martinus** calls for ASEAN to harness the rise of the digital economy beyond profit to focus on the people and environment.

The ASEAN region is witnessing the rise of the digital economy. Driven by the high penetration of mobile devices, the steady growth of middle-class consumers, and a relatively young and productive population, the region's digital economy growth can be twice as fast as the region's gross domestic product (GDP) reaching up to US\$1 trillion in gross merchandise value (GMV) by 2030. While the impacts of the digital economy on the region's growth are apparent, there is an emerging discourse that links sustainability with digitalisation. Some evidence shows that ASEAN can leverage the rise of the digital economy not only for growth but also for a sustainable future.

The concept of sustainability can be defined by three dimensions: profit, people, and the planet, frequently summarised as the "3Ps". Many studies about the rise of the digital economy in ASEAN have focused much on the first P: profit. These usually include projections of the value, market size, opportunities for future expansion, and the growth prospects of their countries arising from the digital economy. Driven mainly by regional businesses and industries, the benefits of the digital economy for growth have further influenced regional policymakers to realise a seamless digital trade ecosystem. By doing this, ASEAN will harness the potential of digitalisation to make its region attractive for investments and ultimately realise its regional economic integration vision.

The discourse on digitalisation and the second P: people, is increasingly popular, particularly among development partners, governments, academic communities, and

civil society in the region. The digital economy presents significant opportunities for countries in the region to improve human development. For instance, the rise of edu-tech platforms has helped regional governments to revolutionise education, making it more accessible and affordable. Online learning platforms can provide access to a wide range of educational resources to people who cannot afford the high costs of traditional higher education. Digital health technology, such as telemedicine, has proven effective in providing health services during COVID-19, particularly for people living in remote or underserved areas.

The digital economy can boost productivity, increase incomes, and improve livelihood by creating employment opportunities and enabling access to business expansions. According to a study by the Tech for Good Institute in 2021, more than 60% of driver-partners across Southeast Asian countries have experienced an increase in personal income after joining the ride-hailing platform Grab. The study also found that eight in 10 digitally enabled food and retail micro, small and medium-sized enterprises (MSMEs) reported that they could reach more customers after joining digital-marketplaces. Digitalisation has helped them in keeping transaction records, thus building their credit score and improving access to finance. 74% of MSMEs with digital loans in the study claimed that they were previously unable to get financing from banks or conventional lenders.

However, despite some positive evidence for the people, the rise of digital economy also possesses some threats



A farmer in Thailand uses drones to spray fertiliser on crops





such as job displacement for those employed in low-skilled and routine-based industries. This can have a disproportionate impact on marginalised communities that may lack the skills or training necessary to adapt to new roles in the digital economy. There is a need to ensure technology like high-speed internet and electronic devices are widely available for disadvantaged communities to ease the digital divide and lessen inequality. In addition, the jobs offered in the digital economy sector are sensitive to economic headwinds. Recently, the region has seen a string of layoffs in the tech industry that are impacting vulnerable workers without adequate social protection.

While conversations on the digital economy have surrounded the economic and social development impacts, more dialogue is needed to advance the third P: the planet or environment. According to the World Economic Forum, digital technology can help to cut global greenhouse gas emissions (GHG) by 15%. The rise of the digital economy has the potential to contribute to sustainability in many ways. For instance, from the consumption point of view, e-commerce and online purchasing can lessen the need for physical storefronts and reduce energy use and waste production. Digital communication tools like video conferencing can also reduce business travel, which can significantly reduce carbon emissions.

From the production side, the adoption of emerging technology services such as precision agriculture, smart grids, and energy-efficient buildings can help improve resource efficiency while boosting economic productivity. The digitalisation of business operations can help to facilitate sustainable supply chains, and assist industries to monitor their business risks and suppliers efficiently.

At the same time, rapid digital economy adoption can have an impact on infrastructure sectors that produce significant GHG emissions, particularly the power generation sector and logistics. The energy needed to power (and cool) data centres, for instance, is massive. The use of fossil fuels like coal and gas to power these data centres can contribute to climate change. Similarly, while the digital economy can help businesses to decarbonise their operations, the need for logistical services like warehousing and shipping services will only increase, thus still releasing a vast amount of GHG emissions.

### What Can ASEAN Do?

The latest scientific report by the Intergovernmental Panel on Climate Change (IPCC) concludes that climate change has already caused widespread and substantial losses to almost every aspect of human life on this planet, and the impact on future generations depend on the choices made now. Being one of the most vulnerable regions to climate impacts, ASEAN must rethink its growth strategies in the long term and take a sustainability pathway for its future development. As evidence shows, the rise of digital economy is a double-edged sword that can trigger sustainable practices and drive more consumption.

Currently, ASEAN is spearheading the ASEAN Digital Economy Framework Agreement (DEFA) to prepare ASEAN to be a leading digital economy. In addition to harmonising digital trade regulations to enable the regions' businesses to tap revenues from the regional consumer markets, ASEAN needs to ensure the agreement includes rigorous sustainability components. Embedding climate disclosure and transparency in the agreement and prioritising sustainable goods and services to be traded regionally will help to send a strong signal that the region is committed to sustainability practices.

It is time for ASEAN to collaboratively craft its digital economy vision while realising its economic integration and sustainability goals. Rather than building data centres and warehouses in every locality and compete for investments, ASEAN countries can think about creating a collective network of regional logistic centres to pool their resources together and streamline shipping processes. In a way, this option will not only allow ASEAN countries to address inefficiency but also reduce carbon footprints.

The rise of digital economy is a rare window of opportunity for ASEAN to not only unleash its economic growth but also ensure its future sustainability and economic integration. ASEAN should seize this opportunity.

**Ms. Melinda Martinus** is Lead Researcher at the ASEAN Studies Centre, ISEAS—Yusof Ishak Institute.

# SUSTAINABLE BUSINESS IN ASEAN



**77%** of organisations in ASEAN are focusing on becoming sustainable, and are being driven to develop and demonstrate an Environmental, Social, and Governance (ESG) consciousness in their actions and investment.

However, only **23%** of them have a corporate sustainability strategy.<sup>1</sup>

## Focus of Organisations' Sustainability Strategy in ASEAN:<sup>1</sup>



## Major Barriers to Sustainability Projects in ASEAN:<sup>1</sup>

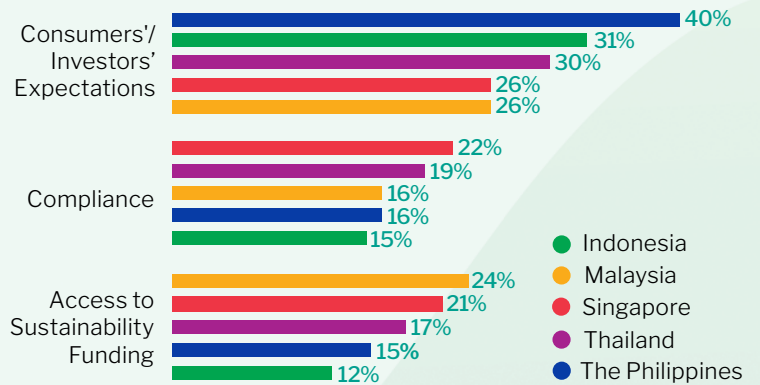


Only **4%** of organisations across ASEAN have a holistic strategy and are focusing on external challenges such as negotiating ambiguous reporting frameworks.<sup>1</sup>

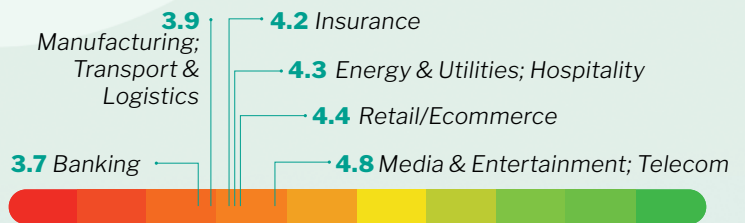
Small and medium-sized enterprises (SMEs) contribute over **50%** of Southeast Asia's gross domestic product (GDP) and are facing challenges in adopting greener practices, accessing finance, addressing regulatory barriers, and obtaining information. Facilitating green transitions for ASEAN SMEs and engaging them for the green economy are required.<sup>10</sup>



## Key Drivers of Sustainability in ASEAN Organisations:<sup>1</sup>



Industries that are leading the way in their strategies and initiatives (noting that sustainability initiatives are still in their early stages) include Media & Entertainment, Telecom, and Energy & Utilities with cost-related incentives to adopt sustainable practices for future survival.<sup>1</sup>



Sustainability Maturity Index Across Industries in ASEAN (Rated on a scale of 1-10 where 10 is most mature)

In order to reduce carbon emissions in ASEAN countries, the private sector should:<sup>13</sup>

Adopt green supply chain practices

**24.7%**

Invest in R&D and technology

**19.7%**

Adopt greater transparency and accountability in corporate social responsibility reporting

**16.4%**

Set and commit to a net-zero emissions target

**13.9%**

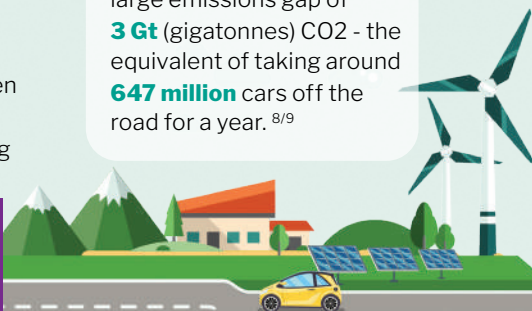
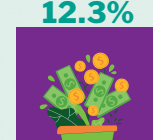
Create public awareness through company campaigns

**12.8%**

Provide green investment and financing

**12.3%**

Southeast Asia still has a large emissions gap of **3 Gt** (gigatonnes) CO<sub>2</sub> - the equivalent of taking around **647 million** cars off the road for a year.<sup>8/9</sup>



Southeast Asian stock exchanges that are part of the **Sustainable Stock Exchanges Initiative (SSE Initiative)**, and have ESG reporting required as a listing rule for some or all listed companies:<sup>11</sup>

-  Indonesia Stock Exchange
-  Bursa Malaysia
-  Philippine Stock Exchange
-  Singapore Exchange
-  Stock Exchange of Thailand
-  Hanoi Stock Exchange
-  Ho Chi Minh Stock Exchange



ASEAN governments and the Asian Development Bank established the **ASEAN Catalytic Green Finance Facility (ACGF)** in 2019 as an ASEAN Infrastructure Fund Initiative to finance infrastructure projects that promote environmental sustainability and contribute to climate change goals.<sup>7</sup>

CIMB Bank Berhad headquartered in Malaysia, and DBS Bank Ltd, OCBC Bank, and UOB in Singapore are members of the Net-Zero Banking Alliance which is part of the **Glasgow Financial Alliance for Net Zero** - the world's largest coalition of financial institutions committed to transitioning the global economy to net-zero greenhouse gas emissions.<sup>12</sup>

State and regional governments play a vital role in driving climate action and delivering sustainable economies.

Ten Indonesian provinces are the only regional governments in Southeast Asia that reported and disclosed their climate data to CDP in 2022.<sup>4</sup>

- Aceh
- Riau Province
- Siak Regency
- Central Kalimantan
- East Kalimantan
- North Kalimantan
- West Kalimantan
- West Nusa Tenggara Province
- Papua
- West Papua Province



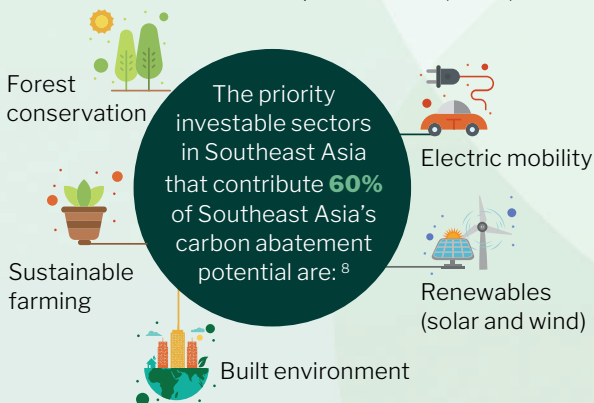
**Singapore's City Developments Limited (CDL)** is the only company in Southeast Asia to remain on the CDP\* A List for five consecutive years since 2017 for its environmental leadership in climate change and water security initiatives.<sup>2</sup>



In Southeast Asia, **Dipolog City of The Philippines** and **Iskandar Regional Development Authority of Malaysia** have been listed in the CDP's 2022 Cities A List for their transparency and bold climate action.<sup>3</sup>



Climate change, biodiversity, and inclusive social development are the top priorities for sustainability, including the need to scale SME engagement locally with the Sustainable Development Goals (SDGs).<sup>6</sup>



**US\$3 trillion** in green investment is needed to build energy infrastructure and nature-based solutions to be on track to 1.5°C pathway by 2030, of which less than **1%** has been invested to date.<sup>8</sup>

**Green Investments in Southeast Asia Since 2020:<sup>9</sup>**

-  **US\$15 billion** invested cumulatively by various investors
-  **US\$11 billion** deployed cumulatively by corporate firms in the region since 2020, with a focus on renewables and built environment



**Sources:**

- (1) Ecosystem Kyndryl ASEAN Digital Transformation Study, 2022
- (2) City Developments Limited (CDL), Press Release 13 December 2022
- (3) Cities A List 2022, CDP
- (4) States and Regions that reported to CDP in 2022, CDP
- (5) CDP Data 2022 (Note: This data was collected in partnership by CDP and ICLEI - Local Governments for Sustainability)
- (6) UNGC Leaders Summit 2022, United Nations Thailand
- (7) The Asian Development Bank
- (8) Southeast Asia's Green Economy 2022 Report, Bain & Company, Temasek and Microsoft, 2022
- (9) Channel News Asia, 7 June 2022
- (10) Facilitating the green transition for ASEAN SMEs, ASEAN Secretariat and OECD, 2021
- (11) The Sustainable Stock Exchanges Initiative
- (12) The Glasgow Financial Alliance for Net Zero
- (13) Southeast Asia Climate Outlook 2022 Survey Report, ISEAS-Yusof Ishak Institute

\*CDP (formerly known as the Carbon Disclosure Project) is an international non-profit organisation in which investors, companies, cities, nations, and regions voluntarily disclose their environmental data to a global information disclosure system to manage environmental and climate impacts.

# Anchoring ASEAN amidst Uncertainty: Indonesia's Chairmanship Priorities

ASEANFocus is privileged to feature the Permanent Representative of Indonesia to ASEAN Ambassador M.I. Derry Aman's perspectives on the priorities of Indonesia's Chairmanship of ASEAN.



**Ambassador M.I. Derry Aman** is an Indonesian career diplomat who graduated from the Ministry of Foreign Affairs Diplomatic School in 1994. His work experiences include the conduct of international relations and cooperation in a bilateral, regional and global setting, within the ASEAN Mechanisms, United Nations Global Conferences, United Nations Economic and Social Commission for Asia and the Pacific, and the World Trade Organization.

**AF: What are Indonesia's priorities and plans for its Chairmanship 2023 under the theme of "ASEAN Matters: Epicentrum of Growth?"**

**DERRY AMAN:** Indonesia's Chairmanship is taking place amidst geopolitical and geo-economic challenges that are global and multi-dimensional. There are three key pillars of Indonesia's Chairmanship, namely that, ASEAN Matters, ASEAN as an Epicentrum of Growth, and the mainstreaming and implementation of the ASEAN Outlook on the Indo-Pacific (AOIP).

"ASEAN Matters" means that ASEAN needs to remain relevant for its people in this region, and beyond. Indonesia wants ASEAN to remain significant, important and relevant. ASEAN should be able to navigate geopolitical dynamics in the region and strengthen its unity and capacity in order to address future challenges. Indonesia would like to make sure that "ASEAN Matters" by focusing on strengthening ASEAN's readiness to address current and future challenges in the ASEAN Post-2025 Vision and towards 2045. This includes enhancing ASEAN capacity in decision-making process, improving the effectiveness of ASEAN-led mechanisms, and strengthening the ASEAN Secretariat.

Indonesia's Chairmanship endeavours to advance ASEAN as an Epicentrum of Growth while promoting regional stability. Indonesia will lead ASEAN to strengthen its regional health architecture; ensure energy security to support the transition from fossil energy to clean and renewable energy; strengthen food security, including ensuring robust supply chains; facilitation of trade; and enhancing financial stability. Indonesia will also highlight specific areas to support economic growth in the region, such as the development of the electric vehicle ecosystem.

Lastly, Indonesia's Chairmanship will prioritise the mainstreaming and implementation of the AOIP. This is to realise an Indo-Pacific region that is inclusive, peaceful, stable and prosperous. The implementation of the AOIP should focus on supporting an inclusive regional architecture, promoting economic development and concrete cooperation, as well as building partnerships within the Indo-Pacific region.

**AF: Indonesia has been playing a leading role in the adoption and implementation of the ASEAN Outlook on the Indo-Pacific (AOIP). How is Indonesia planning to mainstream the AOIP and to raise the stature of ASEAN in the Indo-Pacific?**

**DERRY AMAN:** Last month, on behalf of the Committee of Permanent Representatives to ASEAN (CPR), I formally invited ASEAN's external partners to implement the mainstreaming of the AOIP. ASEAN looks forward to concrete and tangible projects, programmes, or activities that could be conducted in the region, not only between ASEAN and its external partners but also among the partners themselves.



ASEAN Foreign Ministers and ASEAN Secretary-General call on Indonesian President



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Handover of Cambodia's Chairmanship of the CPR to Indonesia

The key elements of the AOIP, such as openness, transparency, inclusivity, rules-based order and respect for international law, good governance, respect for sovereignty, and non-intervention, will serve as the guiding principles in the implementation of the AOIP. The concrete projects and activities undertaken should reflect the view that the Asia-Pacific and Indian Ocean regions are closely integrated and interconnected, with ASEAN playing a central and strategic role. ASEAN would work towards promoting an Indo-Pacific region of dialogue and cooperation instead of rivalry, and of development and prosperity for all.

Indonesia underscores the importance of the maritime domain and perspective in the evolving regional architecture. This in itself would raise the stature of ASEAN in the region as we promote ASEAN's view of the Indo-Pacific region, which may be distinguished from other concepts, views, or outlooks on the Indo-Pacific.

Indonesia is planning to organise the ASEAN Indo-Pacific Forum (AIPF) to implement the AOIP, consisting of four flagship events namely, an ASEAN Youth Dialogue and Digital Development for Sustainable Development Goals; an ASEAN Business and Investment Summit (ABIS); an ASEAN Indo-Pacific Infrastructure Forum; and an ASEAN Creative Economy Forum. The AIPF is not a political forum for government officials, but rather an inclusive forum to facilitate concrete cooperation among different stakeholders, especially the business sector to tap into the benefits and opportunities of ASEAN. This will be a concrete contribution of ASEAN under Indonesia's Chairmanship, to foster economic growth and to be part of the solution to various global problems.

**AF: As ASEAN chair, how will Indonesia lead ASEAN in demonstrating leadership and strengthening ASEAN centrality and unity in managing rising uncertainties?**

**DERRY AMAN:** ASEAN centrality has always been a foundation for ASEAN cooperation. Each country

has its own national interest, and we cannot expect all ASEAN member states to always share common positions. Fundamentally, if there are any differences, disagreements, disputes, or even conflicts within ASEAN, it should be managed and resolved in a peaceful manner through dialogue and cooperation. This region shall always be a region of peace, stability, and prosperity. It is important for ASEAN member states and ASEAN external partners, including the major powers, to respect the principles of ASEAN as enshrined in key ASEAN documents.

However, we do understand that there are rising uncertainties within the region and globally. At the regional level, major powers' rivalries could spillover and potentially destabilise the region. ASEAN should not only act as a mediator to potential conflicts, including those among great powers, but to strengthen cooperation to overcome geopolitical and other challenges. The implementation and mainstreaming of the AOIP with ASEAN external partners is an example of how ASEAN may leverage on its initiative to promote cooperation and build trust.

**AF: What steps will Indonesia be taking to implement the Five-Point Consensus (5PC) and address the quagmire in Myanmar? Is ASEAN confident of playing a constructive role in Myanmar's upcoming general elections without being accused of whitewashing the event?**

**DERRY AMAN:** The establishment of the Office of the Special Envoy of the ASEAN Chair reflects Indonesia's commitment to address the Myanmar issue and implement the 5PC. ASEAN may expect shuttle diplomacy and behind the scene diplomacy in our efforts to further advance the implementation of the 5PC. While we are very disappointed at the lack of progress in the implementation of the 5PC, ASEAN is confident of playing a constructive role in Myanmar's upcoming general elections.

Indonesia will put forward three approaches. First, to engage all stakeholders as a first step in facilitating inclusive national dialogues. Second, to build conducive conditions to pave the way for an inclusive dialogue, eliminating violence, and ensuring the continuation of humanitarian assistance. Third, to synergise ASEAN efforts with neighbouring countries that are concerned about the spillover effects, as well as with the Special Envoys of the United Nations (UN) and other countries.

**AF: ASEAN leaders agreed in-principle to admit Timor-Leste to be the 11<sup>th</sup> member of ASEAN last year. How confident is Indonesia in bringing Timor-Leste fully on board as a member of ASEAN by 2023?**

**DERRY AMAN:** ASEAN welcomes Timor-Leste as the 11<sup>th</sup> member although there are further assessments to be made during their observership period. ASEAN is deliberating on a roadmap for Timor-Leste's membership. We may need a bit more time towards a full ASEAN membership for Timor-Leste. However, we are not dismissing the possibility of a rapid process towards that end.

The participation of Timor-Leste at the ASEAN Foreign Ministers' Meetings and other related meetings on 3-4 February 2023 is a testament to Indonesia's commitment to expediting the full participation of Timor-Leste in all ASEAN meetings. Aside from the ASEAN Foreign Ministers' Meetings, Timor-Leste also participated in all Senior Officials Meetings as well as the meetings of the CPR and other related meetings with external partners as an observer.



Timor-Leste participated in the 32<sup>nd</sup> ASEAN Coordinating Council (ACC) Meeting and the ASEAN Foreign Ministers' Retreat

Kusuma Pandu Wijaya@ASEAN Secretariat

**AF: Indonesia has committed to making progress in negotiating a Code of Conduct in the South China Sea (COC) by finding a new approach to accelerate the process. What sort of approach can we expect from Indonesia?**

**DERRY AMAN:** Indonesia will continue the work started by Cambodia last year and had recently hosted an ASEAN-China meeting on the COC on 8-10 March.

Our aim is not only just to speed up the process of the COC negotiations, but also to ensure an effective and substantive COC in the South China Sea that is consistent with international law, including the 1982 United Nations Convention on the Law of the Sea (UNCLOS). Indonesia's approach will focus on encouraging and conducting more discussions and negotiation rounds as well as exploring new approaches to speed up the negotiation process.

**AF: Beyond managing great power rivalry, how does Indonesia plan to contribute to the strengthening of ASEAN's institutional capacity and its decision-making process?**

**DERRY AMAN:** Indonesia has proposed a couple of ways to advance the efforts to strengthen ASEAN institutional capacity and decision-making process. This matter was discussed during the 32<sup>nd</sup> ASEAN Coordinating Council Meeting and ASEAN Ministerial Meeting Retreat in February at the ASEAN Secretariat.

First, we are working on the establishment of a SOM Working Group on strengthening the ASEAN decision-making process, and for recommendations to be made within the year.

Second, we are looking at strengthening the East Asia Summit and to deliver three key tasks during our Chairmanship, namely to: develop and finalise a simplified and streamlined document of *EAS Plan of Action (2024-2028)*; formulate a single EAS Leaders' Statement as the outcome of the East Asia Summit; and finalise the Terms of Reference for the East Asia Summit Ambassadors based in Jakarta.

Furthermore, we are also committed to strengthening the role and mandate of the CPR, as well as enhancing the role of the Secretary-General of ASEAN. The Secretary-General of ASEAN will be encouraged and expected to provide views to the ASEAN Leaders and Ministers from the Secretariat's vantage point.

The last point is on strengthening the coordination of cross-pillar issues and ensuring adequate funding for the ASEAN Secretariat. This could include an increase in equal annual contributions of ASEAN member states to the annual operating budget of the Secretariat and conducting an in-depth study on the resources required for the ASEAN Secretariat and towards the ASEAN community-building agenda.

Indonesia is also stepping up efforts to maximise the usage of the ASEAN Secretariat in Jakarta, to host as many ASEAN meetings and in turn promote Jakarta and especially the ASEAN Secretariat as the diplomatic capital city of ASEAN.

**AF: How will Indonesia mainstream climate issues in the 2023 agenda? Can we expect to see an ASEAN Green Deal emerge?**

**DERRY AMAN:** Last year, one of the priorities of Indonesian Presidency in G20 is to promote energy transition towards new and sustainable energy, in order



Kick-off celebration of Indonesia's ASEAN Chairmanship in Jakarta

Muchlis Jr@Presidential Press Bureau

to ensure a green and sustainable future and to manage the climate change issues more effectively. This year, we want to continue advocating this issue within ASEAN.

I mentioned earlier about the ASEAN Indo-Pacific Forum, which consists of three sub-themes. One of which is “Green Infrastructure and Resilient Supply Chain.” Indonesia will make sure that climate change is taken seriously in ASEAN agenda and given special attention during our ASEAN Chairmanship.

Indonesia, along with other ASEAN member states, has consistently upheld its commitment to climate mitigation and adaptation. Each AMS has submitted its respective nationally determined contribution (NDCs) to the United Nations Framework Convention on Climate Change (UNFCCC).

ASEAN as a whole has also developed and implemented the ASEAN Working Group on Climate Change Action Plan together with ASEAN external partners. It has also published the *ASEAN State of Climate Change Report (ASCCR)*, which provides an overall outlook of the state of play of climate change issues in the ASEAN region.

Energy security and renewable energy is a priority that corresponds to the pillar “Epicentrum of Growth”. Moving forward, Indonesia will continue to prioritise climate change in ASEAN through initiatives to support energy transition and support the use of electric vehicles, promote various climate mitigation and adaptation initiatives at the community level, and collectively participate in the Conference of the Parties (COP) of the UNFCCC, to deliver ASEAN’s views and efforts related to climate change at the global level.

ASEAN is committed to uphold the principle of equity and common but differentiated responsibilities and respective capabilities (CBDRRC) under the UNFCCC. I believe that all ASEAN member states recognise the importance of supporting transition from fossil energy to clean and renewable energy. However, the transition must be planned and done by thoroughly taking into account the developmental differences that exist within ASEAN.

In the meantime, ASEAN is encouraging all relevant stakeholders to work closely together in considering the possible establishment of an ASEAN Green Deal.

#### **AF: What are your personal challenges in chairing the CPR and your aspirations for ASEAN?**

**DERRY AMAN:** I am grateful to have a great team to support me in chairing a long list of meetings and in effectively managing a hectic CPR schedule. My team includes first my fellow Ambassadors/ Permanent Representatives to ASEAN who have supported Indonesia’s Chairmanship through their kind understanding, cooperation and collaboration. Second, the dedicated and hardworking CPR Working Group members who have assisted the CPR in the deliberation of many issues, including kicking off all negotiating processes of outcome documents. Third, the Indonesian ASEAN National Secretariat, who have given continuous policy guidance and recommendations for the conduct of our mandates and works.

Last but definitely not least, all my colleagues at the Indonesian Mission to ASEAN in Jakarta for the substantive and technical support extended to me across all meetings and tasks.

# The Rise of Football Ultras in Southeast Asia

**Muhammad Afiq Hajis** analyses the cultural phenomenon of Ultras in Southeast Asia, their spirit of collectivism, and marginalised identities in society.



Mohd Fazlin Mohd Effendy Ool@Flickr

Ultras Malaya gather for a football match in Bukit Jalil National Stadium

**F**ootball is more than just a sport in Southeast Asia; it is a cultural phenomenon that brings people from all walks of life together. From the sprawling archipelago of Indonesia to the lush hillsides of Thailand and the verdant rice paddies of Vietnam, the passion for football is deeply rooted in the social fabric of the region, expressed in various fascinating ways.

At the heart of Southeast Asia's football culture are the Ultras, the devoted fans who go to great lengths to support their favourite teams. Originating in Italy in the 1950s, the term 'Ultras' has become synonymous worldwide with the dedicated and often-organised fans of football teams or associations. The Ultras' behavioural tendencies include flares, chanting in unison, and colourful unfurling banners in the stands, creating an electric atmosphere that inspires their team and intimidates their opponents.

This is no different in Southeast Asia, where the Ultras are known for their unwavering dedication to their teams and the vibrant atmosphere they create in stadiums. Take, for example, the Jakmania – the Persija Jakarta Ultras, who often pack the Gelora Bung Karno Stadium with almost 50,000 fans, chanting and singing with every breath of their lungs. Their enthusiasm and fervour are contagious, igniting a sense of community and belonging among individuals of all backgrounds.

For many football or non-football fans, the experience of being in a stadium filled with passionate Ultras can be exhilarating and gives them a sense of belonging to something bigger than themselves. Whether it is the intense atmosphere of a match between fierce rivals, or the joyous celebrations that accompany a hard-fought victory, the passion of Southeast Asian football Ultras is truly infectious.



From a socio-anthropological perspective, the Ultras phenomenon in Southeast Asia is fascinating because it reflects the complex interplay of politics, identity, and community. The Ultras culture is a means through which people express their identities and affiliations, both with their local communities and the larger nation-state. At the same time, Ultras often become the vanguard of political and social movements, using the power of their passion and dedication to raise awareness about issues that are important to them. When it comes to specific characteristics of the Ultras in different Southeast Asian countries, there are intriguing differences that reflect the unique social, political, and cultural contexts in which they exist.



A game of football on the beaches of Nga Trang, Vietnam

Yesomono @Flickr

In Indonesia, for example, the Pasoepati Ultras emerged due to a lack of identity within the community and the political developments in the city of Surakarta, more commonly known as Solo. Football in Solo had strong ties to the Suharto regime in the 1990s, with Suharto's oldest son owning the most successful football club in Solo at that time, Arseto Solo Football Club. After the club disbanded following the regime's fall in 1998, the Pasoepati Ultras settled on Persis Solo as their new team, symbolising right-wing politics in Indonesian football.



Myanmar football fans erupt in cheer as they celebrate their team's goal

William@Flickr

By adopting Persis Solo as their team, the Pasoepati Ultras strengthened their links with the city's identity, as Persis Solo is the oldest club in the city, founded in 1923. The club's history and heritage were essential in creating a sense of a glorious past that became central to the formation of the Ultras' and supporters' identities. A section of the Pasoepati further renamed and rebranded themselves as Ultras 1923, in honour of Persis Solo, identified as the primary football club of the city. Football and identity-making became integrated, and many other supporters of different clubs around Indonesia followed a similar trajectory.

In Jakarta, the Jakmania Ultras can be seen as a reflection of the outcasts and unemployed individuals living in the overpopulated city of Jakarta. The Manggarai district in South Jakarta is a stronghold for Jakmania Ultras, where they often gather and display their support for the football team through graffiti signs and symbols. Subsequently, this region is known for its frequent riots and small-scale clashes called *tawuran*. For many Jakmania Ultras, football matches and gatherings serve as an escapism from their challenging circumstances.



Warm-up before a football match starts in Ubud, Indonesia

Jorge Franganillo @Flickr



Multiple ongoing football matches in a field in Hanoi, Vietnam

The sense of belonging, recognition, and reputation of being part of the Jakmania Ultras is essential for these Persija Jakarta fans to feel a sense of personal worth and identity. Through football and Jakmania, they find a community that offers them a sense of purpose and camaraderie.

For those who face unemployment and social marginalisation, this group provides an opportunity to feel valued and acknowledged. Thus, the Jakmania Ultras represent more than just a group of football supporters. They symbolise the struggles many face in Jakarta and offer a sense of belonging and identity to those who may feel disconnected from mainstream society.

Apart from serving as an identity-making tool, Ultras groups often attempt to raise awareness on issues that are important to them. For instance, the Ultras Malaya (UM), composed of members from different ethnic backgrounds and states, has repeatedly spoken out against the Football Association of Malaysia (FAM) and the persistent corruption within the organisation.

Most famously, in a World Cup Qualifier match against Saudi Arabia in 2015, the UM entered the stadium late in the 31<sup>st</sup> minute to symbolise their protest against the FAM leadership, which the Pahang royalty had led for 31 years. Consequently, they began hurling insulting chants towards the FAM and expressed their disapproval of their governance.

At the 87<sup>th</sup> minute, things slowly turned rowdy as the Ultras began throwing flares into the pitch resulting in injuries and the game's abandonment. Despite the consequences and injuries, the UM did not show any signs of remorse. In fact, their official Twitter account tweeted, "Sorry players. Sorry Malaysians. Sorry Saudi Arabians. But it had to be done".

A senior group member further expressed that they had exhausted all the proper channels to express their frustrations with the FAM and therefore turned to humiliate the body. The UM's actions illustrate how Ultras groups are willing to resort to drastic measures to highlight issues that are important to them.



A group of young monks play football in the grounds of a temple in Mawlamyine, Myanmar



Children play football in Koh Panyee, Thailand



Supporter of Indonesia's Persija Jakarta fill up a stadium in a match during an Asian Football Club match

Nevertheless, not all Ultras groups rely on violence when expressing their views or dissatisfactions. For instance, the Thai Ultras of Muangthong United Football Club (FC) and Buriram FC constantly conduct peaceful demonstrations and chants to raise awareness of various issues while supporting the pro-democracy movements in Thailand. Similarly, in Myanmar, the Yangon United FC Ultras have constantly used their social media platforms to raise awareness about the situation in Myanmar. In addition, they have also organised fundraising campaigns to support families affected by the conflict and protests in Myanmar.

In all, the Ultras culture in Southeast Asia is a product of the region's unique social and cultural context. It reflects the diversity and complexity of Southeast Asian society, and while there are similarities across the region, there are also notable differences.



Malaysian football fans enter the stadium to watch a game

Football is more than just a game in Southeast Asia; it is a way of life and a reflection of the deep-seated values and aspirations of the people. The Ultras culture is one expression of this passion and has become an integral part of Southeast Asian football culture. However, the culture is not immune to controversy. In some instances, the ultras have been associated with hooliganism and violence, which has tarnished their reputation. Despite this, the ultras play a significant role in Southeast Asian football culture, and their influence in society is evident.

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A boy practicing his football skills during sunset in Bantayan Island, the Philippines

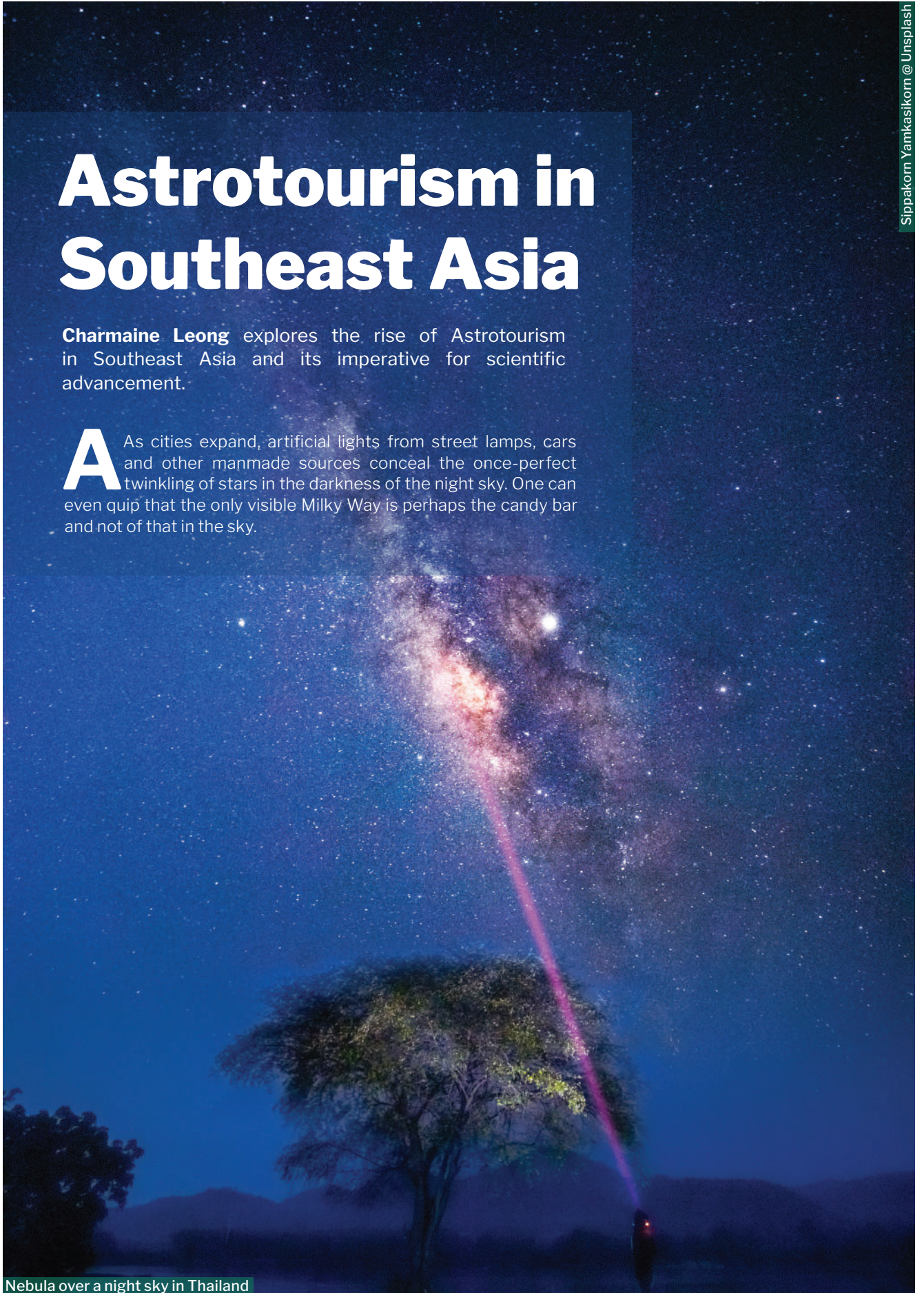
# Astrotourism in Southeast Asia

**Charmaine Leong** explores the rise of Astrotourism in Southeast Asia and its imperative for scientific advancement.

**A**s cities expand, artificial lights from street lamps, cars and other manmade sources conceal the once-perfect twinkling of stars in the darkness of the night sky. One can even quip that the only visible Milky Way is perhaps the candy bar and not of that in the sky.

Sippakorn Yamkasikorn @ Unsplash

Nebula over a night sky in Thailand





isarescheewin@Shutterstock

Long exposure image showing star trails over Ratanabon Paya in Mrauk-U, Myanmar

Traditionally, Southeast Asians integrate ancient astronomical knowledge into their lives, mainly to determine agricultural and harvest timings. Fishermen and sailors also depended on celestial knowledge for navigation. Regionally, astronomy was also correlated to one's destiny and religion, especially in Buddhism. A 9<sup>th</sup> century Mahayana Buddhist temple in Central Java named the Borobudur Temple, had its biggest stupa, a gigantic 15,000 square metres stone structure, on the highest level accurately aligned with temporal and seasonal changes, acting as a sundial for the locals.

Today, these astronomical activities have evolved into astrotourism, an experiential venture combining travel with astronomy, which has been gaining traction in Southeast Asia. Although less popular than in Europe and Australia that pride themselves on the *Aurora Borealis* and *Aurora Australis* — more commonly known as the Northern and Southern Lights — respectively, other astronomical phenomena, such as the Super Blue Blood Moon, lunar eclipses and the total solar eclipse, have attracted visitors from all over to catch a glimpse of these rare events that can only be viewed in some parts of the world, including in Southeast Asia. Astrotourism is largely understood as having two subtypes — terrestrial or dark sky tourism and space tourism.

Occurring once every 2,380 full moons, or once every 265 years, the once in a lifetime Super Blue Blood Moon was visible from Indonesia's Nyiur Melambai beach, Belitung Island, on 31 January 2018. Its success in boosting tourism revenue for the country led Indonesia to host the lunar eclipse near the Mars opposition — a phenomenon where Mars is 180 degrees directly opposite the sun — on 27 July in the same year, the longest total lunar eclipse that happened in a century.

The total solar eclipse, typically visible only at the North or South Pole, or in the middle of an ocean, also took place over Indonesia on 9 March 2016. Due to its large terrain, and thus more frequent occurrences of such events, Indonesia is poised to become the leading country for astronomical observances in the future. Apart from Indonesia, tourists can also flock to Thailand's Koh Kood or Myanmar's Bagan, relatively less-crowded areas for stargazing in the region.



Christian Gloor@Flickr

Phases of the Super Blue Blood Moon in Wakatobi, Indonesia



The Milky Way visible in a night sky in Surabaya, Indonesia

Abdul Rahman@Flickr

Compared to space tourism, terrestrial tourism, in which stargazing is the most common activity, is more sustainable in the long term, as preserving the dark sky to observe astronomical phenomena requires countries to limit activities that contribute to light pollution. In turn, countries reduce their reliance on coal-powered energy sources while providing tourists and locals with the knowledge to protect nature and the environment, a concept similar to ecotourism. The rise in tourism revenue benefits not only the country's economy but also the livelihoods of the locals, who convert their houses into Airbnbs (holiday homes rental) to host tourists.

In contrast, the space race between aerospace corporations such as SpaceX and Virgin Galactic increases emissions (which are released by the fuel-operated space crafts and the construction of spaceports), thins the ozone layer and accelerates climate change and global warming. Moreover, the exorbitant costs of flights to space, ranging from a quarter of a million dollars to US\$50 million per seat, cater to the rich elites and alienate budding astronomers. Thankfully, the scientific community has raised concerns about the ecological destruction caused by space tourism, allowing terrestrial tourism to dominate astrotourism.

For countries and localities with higher levels of light pollution, such as Singapore and some parts of Malaysia and Vietnam, terrestrial tourism is impossible since artificial lights on the streets act like a fog that obscures the light produced from the faint stars. However, this does not mean that locals and tourists in these countries cannot enjoy the same astronomical experience. With the investment in astronomical facilities, namely observatories and scientific telescopes, the Singapore Science Centre Observatory, Malaysia's JAC Johor Astronomy Observatory and Vietnam's Nha Trang Observatory circumvent the issue of light pollution.



The Observatory at the Singapore Science Centre

Sengkang@Wikimedia Commons

Southeast Asian countries have also made their mark in space by giving meaningful names to previously unnamed exoplanets (a planet outside the solar system) and their stars discovered by scientists. Seven countries (Brunei, Indonesia, Malaysia, Myanmar, the Philippines, Singapore and Thailand) successfully earned their glory when they managed to do so during the competition held by the International Astronomical Union on 17 December 2019. The new names are often linked to the culture and heritage of these countries that could be showcased to the world. For example, the Philippines' exoplanet *Haik* and its star *Amansinaya* are named after



Crescent Moon, Venus, and Jupiter over Singapore's skyline

Nicolas Lannuzel@Wikimedia Commons



Starry night in Lào Cai, Vietnam

Kim Phong@Unsplash

deities associated with the sea in Tagalog mythology, which is believed to bring protection to fishermen at sea. Similarly, Singapore's exoplanet *Viculus* and its star *Parumleo* are Latin terms meaning "small village" and "little lion", respectively, symbolising the humble beginnings of the nation.

Being a latecomer to space activities, Southeast Asian countries rely on international cooperation with countries that have long-established themselves in this field, such as the US, China, Japan and India, for funds, technology and talent development. Specifically, satellite applications have garnered strong interest from Southeast Asian countries to advance the sharing of information via cloud computing to predict natural disasters and climate change. For example, the Thailand Earth Observation Satellite helps Vietnam and Myanmar in monitoring disaster areas, while supporting Thailand and Laos in tracking tourist arrivals. Another example of regional cooperation is the ASEAN Sub-Committee on Space Technology and Application – fully funded by ASEAN members – which meets biannually to expedite space technology transfer and conduct training workshops.

Despite its benefits, the huge expenditure required to invest in space activities and technologies (even for terrestrial tourism) may be questioned by the public. In the case of the Philippines, strong public support for

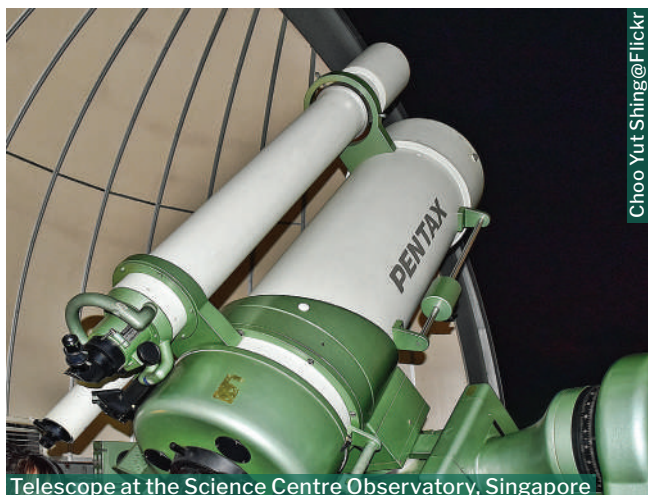
such activities has resulted in the passing of a law to establish a national space programme in 2018, which had previously failed in 2012.

Striking a right balance between investing in scientific advancement versus increasing social welfare is important. In fact, the governments of Vietnam and Laos have been criticised for its spending in space technologies instead of focusing on social and economic development to lift their population out of poverty.



Nocturnal sky in Thakhek, Laos

Sitoo@Flickr



Telescope at the Science Centre Observatory, Singapore

Choo Yut Shing@Flickr

Astrotourism, especially in the form of terrestrial tourism, has economic and environmental benefits for Southeast Asian countries. Yet, the exorbitant expenditure to invest in space technology in both terrestrial and space tourism has been questioned by critics who deem it unreasonable should it be done at the expense of the population's social well-being. Astrotourism has expanded the typical definition of travel and seeks to unite novices and experts alike to learn more about astronomy within and beyond the solar system.

Southeast Asia is not just a region rich in culture and traditions; if one simply pauses and looks above, one can then appreciate the beauty of the night sky and other astronomical phenomena that are only observable in this area.

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# BOGYOKE AUNG SAN MARKET

Myanmar

Southeast Asia is known for its sprawling markets, offering the opportunity to immerse in local cultures. Myanmar is no exception, with its Bogyoke Aung San Market boasting over 1,000 shops that showcase the country's flavours, handicrafts, gems, silverware, and textiles on full display to locals and visitors alike. Located in the heart of Yangon, Bogyoke Aung San Market's colonial architecture and inner cobblestone alleys have earned it a place on the city's Heritage List. Beyond being one of Yangon's most popular tourist destinations, it holds historical significance. Bogyoke Aung San Market was inaugurated in 1926 during the waning years of British rule and was formerly called Scott's Market after the then Municipal Governor Gavin C. Scott. It was later renamed after General (*Bogyoke* meaning General) Aung San after Myanmar's independence in 1948. Nearly a century later, Bogyoke Aung San Market remains a busy and popular destination offering a unique shopping experience with a shade of history.

*(Sources: Architectural Guide Yangon, Bangkok Post, Myanmar Insider, Tourism in Myanmar)*