Towards a Future-Proof ASEAN Economy: Leveraging Digitalization and Sustainability
Introduction

ASEAN Member States (AMS) have shown resilience in the face of the current “polycrisis”, which includes the ongoing impacts of COVID-19, Russia’s War in Ukraine, and climate change. However, external vulnerabilities – such as the synchronized monetary contraction – remain significant. In fact, the focus by central banks on price stability is now coming in to tension with the need for financial stability, following recent developments in the US and Europe. Any deviation from tighter monetary policy to address these new threats could exacerbate inflation concerns. In addition, longer-term trends related to discontent with globalization and resulting risks to trade and capital flows persist, in what the IMF has referred to as Geo-Economic Fragmentation. These challenges serve as a reminder of the interconnected nature of the global economy and the vital role of multilateral institutions like ASEAN to overcome common challenges together.

Consistent with Indonesia’s ASEAN Chairmanship themes, this paper includes analysis and proposals in three key areas critical to the financial sector:

1. **Foreign Direct Investment and supply chains**, where pandemic-related shocks and geopolitical tensions have presented opportunities for ASEAN. This section covers areas where the region could do more to benefit from these possibilities, as well as make progress on greening FDI and supply chains.

2. **The digital economy**, where recent developments have shone a light on not only digital opportunities, but also vulnerabilities of the crypto assets, as well as the potential for new technology. The paper covers wholesale CBDCs and stablecoins, generative artificial intelligence, government and insurance digitization and other digital finance solutions.

3. **Sustainability**, where both the urgency of scaling up the finance required to meet net zero commitments, as well as the need to ensure energy security have become more apparent in the last 12 months. This paper offers thoughts on transition finance, carbon pricing, debt for nature swaps and sustainable insurance.
Towards a Future-Proof ASEAN Economy: Leveraging Digitalization and Sustainability

US-ABC Industry
Recommendations

A: ASEAN FDI AND SUPPLY CHAINS

Key Takeaways

1. ASEAN can attract further FDI and capitalize on supply chain trends by removing capital flow restrictions, focusing on sustainable inward investment and considering reforms to legal frameworks which encourage the use of supply chain finance.

Foreign Direct Investment (FDI) in ASEAN returned to its record-equalling pre-pandemic high of $174bn in 20211 - a figure that has climbed steadily from $120bn in 2013. ASEAN Manufacturing Purchasing Managers’ Index (PMI) data has remained above 50 since the end of 2021, with only a couple of months of contraction at the end of 20222 and GDP projections remaining strong for 2023. Intra-ASEAN trade and investment is also an important factor: more than 20% of total merchandise trade and more than $20bn of FDI comes from within ASEAN each year. Intra-regional FDI is the second highest source of investment inflows and the US remains the largest source of inward investment to the region. In total, ASEAN has received more than $338 billion in total US foreign direct investment, more than the United States has invested in China, India, Japan, and South Korea combined.4

The OECD has detailed barriers to inward investment in the region3 and addressing these could facilitate additional capital flows that can support future economic growth. They include:

1. Foreign equity restrictions
2. Screening or approval mechanisms
3. Restrictions on the employment of foreigners as key personnel; and
4. Operational barriers such as on capital repatriation or land ownership.

SUPPLY CHAIN DIVERSIFICATION AND SUPPLY CHAIN FINANCE

Global sourcing remains a priority for multinational firms, but there is a strong emphasis on resilience strategies in light of supply chain shocks and concerns around geopolitical tensions. Aspects of the strategies include geographic diversification to avoid single sourcing, higher levels of inventory; longer term relationships with suppliers, and investment in digitalization.

In addition, firms are looking to increase the financial resilience of their supply chains, assessing greater use of products like supply chain finance, which uses the higher rating of buying companies to enable suppliers to gain access to funding. This extends finance further into the supply chain to reach smaller suppliers that need it most.

Critical aspects to enable supply chain finance include: a legal framework that incorporates secured transaction laws, allowing for the collateralization of movable assets; a modern legal framework for factoring; and effective enforcement mechanisms in case of default. E-invoicing and e-signatures can also play an enabling role.6

SUSTAINABLE SUPPLY CHAINS

The carbon footprint of FDI varies considerably across the region. FDI CO2 emissions per unit of output is lower in Vietnam and the Philippines for example, but higher in Thailand and Indonesia. Renewable power accounted for more than 50% of FDI in Laos and Cambodia in the last ten years, but fossil fuels still make up the vast majority of inward investment in most AMS.7

US-ABC believes Investment Promotion Agencies can take a greater role in encouraging sustainable FDI using sustainability-related indicators to measure activity impact and considering incentives to attract low carbon FDI. The OECD’s ASEAN Comprehensive Recovery Framework looks at ways in which AMS can do more to measure the sustainability impact of FDI and implement policy to promote green investment.8

Buyers in the supply chain can act as an anchor for incentivizing suppliers to improve carbon footprints. Firms are pursuing pilot programs which incorporate sustainability targets. Pricing discounts based on achieving greening milestones are one example of this. International Institutions such as the European Bank for Reconstruction and Development (EBRD) are creating schemes to help firms build internal green management systems.9

Suppliers

RECOMMENDATIONS

- Assess OECD’s ASEAN FDI Restrictions database for reforms which could facilitate greater FDI10
- Undertake reforms suggested by the OECD on attracting sustainable inward investment in ASEAN
- Consider ways in which Investment Promotion Agencies can encourage sustainable FDI
- Consider reforms to legal frameworks which encourage the use of supply chain finance
- Assess the work done by International Financial Institutions on attracting low carbon FDI
**Key Takeaways**

1. **Public-private collaboration on global frameworks for central bank digital currencies (CBDCs) are critical to ensuring optimization, safety and efficiency of cross-border digital payments and the avoidance of fragmentation.**

2. **Clarity on the regulatory treatment of stablecoins can help protect consumers and ensure financial stability.**

3. **By harnessing the power of digital payments, governments can help create an inclusive society built on trust, where services are accessible for all. They can also draw on innovation both in the public and the private sector – enhancing prosperity for both.**

4. **Engagement with Generative AI through research and experimentation in a sandbox-like environment can help AMS increase understanding around risks and benefits, as well as make progress on specific use cases for the financial sector.**

Crypto assets experienced volatility in 2022, highlighting various legal, governance, fraud and contagion risks, highlighting the absence of an economic anchor for crypto valuations and the fact that its activity is largely self-referential. The G20 recently reiterated an objective to ensure that: “the crypto-assets ecosystem, including so-called stablecoins, is closely monitored and subject to robust regulation, supervision, and oversight to mitigate potential risks to financial stability.” The Financial Stability Board has set out recommendations on regulatory standards for crypto-assets and stablecoins.

Responding to some of these issues, US regulators introduced enforcement actions. Some suggest that crypto firms be brought within the regulatory perimeter while others question whether that approach may lend too much legitimacy to providers and could provide an entry point to the rest of the financial system. Within this context, many jurisdictions are assessing the value of two subsets of digital assets: wholesale CBDCs and stablecoins.

### 1. Wholesale Central Bank Digital Currencies (CBDCs)

AMS has noted the benefits of wholesale Central Bank Digital Currencies (wCBDC) and their potential to address frictions in cross-border payments. For example, wCBDCs could offer financial intermediaries atomic settlement on distributed ledger technology (DLT) based infrastructure, allowing a simultaneous exchange of two linked assets in real time that could mitigate settlement risk.

AMS’ participation in the mBridge (Thailand) and Dunbar (Malaysia and Singapore) projects demonstrate this interest, as does the Philippines’ work on a wCBDC pilot and Singapore’s Project Ubin. Indonesia’s wCBDC consultation as part of Project Garuda discusses issues including capping wCBDC holdings, disintermediation, interoperability, trade-offs between speed and resilience and the potential challenges of DLT participants using different cloud systems.

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### RECOMMENDATIONS

ASEAN could develop wCBDC standards and guidelines for interoperability and governance – two areas that are increasingly important as wCBDCs becomes more common. AMS to consider the following principles:

- **Interoperability:** To ensure faster, cheaper, and safe cross-border transactions, CBDCs should be compatible with existing money forms and new innovations such as open banking, faster payments and existing cross-border functionality. It requires AMS to consider alignment with international standards (such as ISO20022), interlinking shared interfaces or common clearing mechanisms, corridors and atomic cross-platform transactions to reduce risk and facilitate FX1.

- **Innovation through collaborative partnership:** To boost economic and industry resilience, payment-related innovation offers the public sector powerful ways to achieve this. Central banks should look to leverage financial institution capabilities and infrastructure to support risk management, customer engagement and servicing. Payment-related innovation offers the public sector several powerful ways to achieve this.
2. STABLECOINS

Recent developments have highlighted that stablecoins differ in the riskiness of their referenced assets. They have drawn attention to the absence of standards for composing those referenced assets, variance in redemption rights, disclosure practices as well as auditable transparency of reserves. These factors pose risks in the event of a disorderly run on a stablecoin widely adopted across jurisdictions.

The current lack of regulation facilitates an environment that is confusing and unsafe for consumers and impedes banks’ ability to actively engage with any parts of the stablecoin ecosystem deemed to be safe. Singapore’s recent consultation on stablecoin-related activities foresees single currency-pegged stablecoins (issued by banks and non-banks) as a credible medium of exchange, subject to secure backing by reserves and appropriate regulation.

RECOMMENDATIONS

In developing regulatory frameworks for stablecoins, policymakers should seek:

- **Clarity on the regulatory treatment of stablecoins** considering various risks of stablecoin arrangements through supervisory oversight and proportionate prudent and reporting requirements.

- **Interoperability and innovation**: Encouraging interoperability between digital assets, stablecoins, and other systems or platforms to unlock open value creation and innovation, including new stablecoins business models.

- **The consistent regulation** across regulated and non-regulated stablecoin issuers and network operators. Stablecoin issuers (banks or non-banks) should be subject to similar regulation and supervisory oversight.

- **To establish minimum requirements for reserve and risk management practices**, including safe onboarding practices, clear transaction liability, complete disclosures, and appropriate accounting practices:

  1. **Fit-for-purpose Risk Management Approach**:
     - To protect customers, clear liability and responsibility are needed, from strong customer onboarding processes to transaction reliability. Should harm occur, there should be a process for taking action and making recompense to the customer.

  2. **To avoid confusion with existing requirements**, whether regulation is through amending/updating existing regulation or establishing a new framework.

  3. **Global coordination** to establish stablecoin standards and regulations to limit risks to financial stability.

  4. **To ensure appropriate labeling and distinctions with tokenized bank liabilities**, between bank and non-bank issued stablecoins, and between stablecoins (which are backed by segregated assets) and tokenized bank liabilities, not least given their different backing and regulation. Banks issuing stablecoins as a bank liability consistent with other banking activities, such as to represent deposit liabilities, should not be subject to additional licensing or regulation.

  5. **To ensure adherence to industry standards**: Digital payment tokens and stablecoins should adhere to current industry standards of operations, such as using ISO20022 for payment messages.

  6. **To enhance oversight of wallets and exchanges**, which should be required to comply with AML, privacy, data rights and consumer protection standards.

3. GENERATIVE ARTIFICIAL INTELLIGENCE

Generative AI (GAI) is artificial intelligence that can create novel content including text, images, code and video (as opposed to the traditional or “analytical AI” which involves finding patterns among data sets). The generative AI ecosystem received almost $1.4bn of VC funding last year, while other VC financing declined. Generative AI may lead to the next “Cambrian explosion” of technology innovation and generate trillions of dollars of economic value.

The advent of so-called “transformer” models (which can be trained on much larger data sets and used for a wider variety of applications) together with an open-source approach that has allowed wider access to foundation models, has led to the emergence of more than 450 GAI companies building cross-industry solutions.

Several areas in which generative AI could provide future applications for financial services:

- **Search and insight** such as creating quarterly performance reports and insights for equity research.

- **Marketing**, such as creating personalized copy, messaging, and automated marketing campaigns.

- **Customer engagement** such as voice assistants, chatbots, real time translation and agent support.

- **Legal Tech** such as generating contracts, undertaking risk assessments of documents and legal research.

However, there are several obstacles that policymakers should assess:

- **Developing enterprise-grade use cases**: consumer-grade GAI models are not ready for enterprise adoption, not least as they can fail unexpectedly, harbor bias and be poorly understood.

- **Platform dependency**: Many GAI applications are built on model layers such as OpenAI. Were these firms to cease supporting certain use cases or change their fee structures, the applications built on top could struggle.

- **IP risk**: copyright issues surrounding GAI input and output data may change with GPT4, but recent lawsuits involving the apparently unlawful scraping of content attest to current challenges.

- **Meet existing standards** such as the Fairness, Ethics, Accountability and Transparency (FEAT) principles developed by Singapore.

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RECOMMENDATIONS

AMS to engage with the GAI ecosystem through research and experimentation in a safe, sandbox-like environment to understand the risk and benefits as well as make progress around specific use cases for the financial sector. Frameworks like the Singapore-Australia Digital Economy Agreement could also be a way to advance work between jurisdictions.
4. DIGITAL DISTRIBUTION PARTNERSHIPS IN INSURANCE

Digitalization has accelerated partnerships between insurance companies and their traditional and non-traditional partners (together, “Distribution Partners”) to provide customers with risk-mitigating products and address ASEAN’s insurance protection gap. Insurers are collaborating with the e-commerce, banking, fintech, airlines, telecommunications, retail and other industries. Examples of partnership models for insurance distribution include:

- Partnering with e-commerce so personal device protection can be bundled with relevant electronics purchases.
- Partnering with airlines so customers can add travel insurance covering COVID-19 at check-out.
- Partnering with super apps to provide flexible and innovative products like travel and ride protection.

ASEAN regulators embrace digital solutions for the insurance industry, but challenges remain. First, rules and regulations within ASEAN covering partnership models are inconsistent and often struggle to keep pace with ongoing innovations. The insurance industry would like to work with financial regulators as well as Ministries responsible for digital innovation. Some simple steps to keep innovation going in this rapidly developing field include having regular consultations with key industry stakeholders (insurers, insurance associations and Distribution Partners) to discuss any proposed regulation around digital distribution of insurance in their jurisdiction.

Second, companies can face steep regulatory hurdles to partnering with insurers. Requiring the Distribution Partner to obtain additional licenses from the insurance regulator imposes a significant impediment to these innovative distribution models and may even dissuade some potential Partners. Given that insurance is already a heavily regulated industry, the insurer should bear the burden of compliance for the insurance product rather than the Partner providing a platform.

RECOMMENDATIONS

- Allow for burden of insurance product compliance to fall on insurer rather than Distribution Partners, which may not be financial services entities.
- Coordination with digital ministries to encourage a unified approach on policies impacting digital insurance solutions.
- Regular industry consultation to discuss digital distribution of insurance that include perspectives of the insurance industry and Distribution Partners.

5. HARNESING DIGITAL PAYMENTS FOR DIGITALIZATION OF GOVERNMENT AND SMALL BUSINESSES

Public sector digitalization reinforces the trust of citizens and businesses, and fosters innovation to support SME growth. There are 5 key opportunities where digital payments can accelerate digitalization.

1. Government disbursements: Digital identification, mobile communications, and digital payments are the three critical building blocks for digitalizing government disbursement and expanding financial inclusion. When successfully combined, these three elements have the power to make disbursement programs better targeted, more efficient, scalable, resilient, and citizen-centric.

2. Big payments data: Governments are turning to Big Data to help inform, measure and monitor policy initiatives. For example, payments data helps public tourism bodies understand consumer behavior and spending patterns which provide tailored services, better-informed campaigns and effective budget allocation — helping the country to stand out in an increasingly competitive international environment.

3. Government commercial payments: Digital public procurement and government commercial payments foster a more resilient business environment— reducing costs, boosting efficiency, minimizing risks, and supporting small and medium-sized enterprises (SMEs). E-procurement enables fast and frictionless payments, especially for recurring, off-the-shelf purchases. Physical or virtual cards enable seamless payment, and address the challenge of long payment cycles and late payments that affect SME’s short-term liquidity. Cards also provide cost savings and spending transparency in government's travel and entertainment (T&E).

4. Enabling Small Businesses to develop digital payment capabilities. The adoption of digital payments within the SME sector help to reduce the informal economy and boost tax revenues.

5. Government Digital Payments Acceptance:

Bringing money into government efficiently and with speed is increasingly important. Governments are harnessing technology to reduce friction and expand access for citizens and businesses to improve their interactions with government services. Digital payments not only have the power to streamline processes and lower costs but also boost revenue by providing convenient options which improve reconciliation, payment forecasting, and treasury management.

RECOMMENDATIONS

- Tap into private sector technology advancements to enhance data science expertise, security, financial literacy and inclusion, competition, data-based innovation, and open access to the payment system
- Mandate acceptance of digital payments or electronic government-to-business (G2B) and business-to-business (B2B) invoicing. Work with the payments ecosystem to develop complementary policies that flourish innovation and open access.
- Create financial incentives for digital payments to increase tax compliance and revenue.
- Foster strong collaborative partnerships with the private sector. For example, partnerships with the private sector can enhance governments’ data science expertise and accelerate data-based innovation.
- Devise government-led programs with clear legislation and concerted campaigns to support MSME digitization.

A 5% increase in digital payments per year for five consecutive years reduce informal economy by 11–13% and boost tax revenue.

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6. CROSS-BORDER DATA FLOWS

The safe and secure cross-border flow of data is essential to increase trade volume, boost productivity, and lower prices for downstream industries. Data flow also allows firms to better defend against cyberattacks and manage risk at a global level, as well as to comply with UN and country sanctions requirements. By contrast, data localization makes the digital economy more costly, less innovative, hinders risk management and compliance and inhibits financial regulatory access to information.

It is crucial to support the development of global data standards in collaboration with industry and prioritize “interoperability” between countries. Examples include the digital economic agreements negotiated by Australia and Singapore, and Singapore and the UK, as well as the bilateral statements such as the US-Singapore Joint Statement on Financial Services Data Connectivity and the Joint Statement of Intent on Data Connectivity between Bangko Sentral ng Pilipinas and The Monetary Authority of Singapore.

Key Takeaways

1. Work with international policymakers and regulators to promote best practices in market development and mitigate risks including greenwashing.

2. Support authorities to promote the integrity and development of the primary and secondary voluntary carbon markets (VCMs). Scaling VCMs requires clear and stringent measurement, reporting, and verification standards, as well as public-private collaboration and risk management and education.

3. Support the JETPs as a leading examples of climate finance initiatives. Indonesia and Vietnam in particular should progress the domestic policy environment reforms to operationalize their respective JETPs.

4. Debit-for-nature swaps and transition finance can promote environmental protection, poverty alleviation, and achieve net-zero commitments, if relevant standards and best practices are in place.

C. SUSTAINABILITY

The importance of a just and orderly transition has become more apparent in the last year, with a greater emphasis on the need to balance climate sustainability with reliability and affordability of supply. Investment will be needed in both energy security and the transition to avoid potential dislocation and instability.

1. CARBON PRICING

 Jurisdictions around the world, including those in ASEAN, are assessing and putting in place carbon trading (or carbon tax) schemes, including Indonesia, Malaysia, Singapore and Thailand. There is a lot of debate around what are the “best” carbon pricing tools – Voluntary Carbon Markets (VCMs) or compliance carbon markets (CCMs) like ETS or carbon taxes. USABC believes that both compliance and VCMs have an important and complementary role in achieving net zero objectives, as organizations like IOSCO have noted in their recent work. Compliance markets can help countries meet GHG reductions; and voluntary markets facilitate carbon credit trading, often allowing companies to reduce and remove emissions over and above what would otherwise be possible.

Direct emissions reductions are the main path to decarbonization, but high quality voluntary carbon credits can play an important complementary role. VCMs can mobilize natural capital and crowd in funding for innovative emissions reduction and removal projects. They can also work towards a global carbon price. Corporate net zero pledges can support increased demand for VCMs by perhaps 15X by 2030 and 100X by 2050. VCMs represent a significant opportunity to channel capital from developed to developing nations, since 90% of offset commitments have been made in the Global North, and the Global South has 90% of potential natural climate solutions (Indonesia has the third largest rainforest cover in the world, for example). Direct emissions reductions are the main path to decarbonization, but high quality voluntary carbon credits can play an important complementary role. VCMs can mobilize natural capital and crowd in funding for innovative emissions reduction and removal projects. They can also work towards a global carbon price. Corporate net zero pledges can support increased demand for VCMs by perhaps 15X by 2030 and 100X by 2050. VCMs represent a significant opportunity to channel capital from developed to developing nations, since 90% of offset commitments have been made in the Global North, and the Global South has 90% of potential natural climate solutions (Indonesia has the third largest rainforest cover in the world, for example).

Credits also increase emerging climate technology usage by decreasing green premiums relative to carbon-intensive alternatives. In addition to their complementary natures, formal links could be developed between CCMs and VCMs. VCM prices reflect corporates’ internal cost of carbon...
used for operations, which are likely to rise in line with compliance markets. The expansion of both CCM and VCM could see global emissions coverage of carbon pricing schemes increase from 24% today to more than 50% by the end of the decade.

**Features of well-functioning VCMs**

In allowing for the purchase of a financial instrument linked to an underlying emissions reduction/ removal project, VCMs have the potential to finance digital mitigation projects. To be well functioning, VCMs must demonstrate:

- **Additionality**: where emissions reduction would not occur without the incentive created by the credit.
- **Permanence**: that GHG emissions are unlikely to re-enter the atmosphere in future
- **Avoid leakage**: the emissions reduced will not be replaced by emissions from a new similar asset.
- **Avoid double counting**: the generation of credits can contribute to country-level NDCs, but when credits are traded overseas, there is a risk that the offsetting is counted twice. The need for a “corresponding adjustment” set out under Article 6 of the Paris Agreement is critical to tackling this challenge.

- **Scalability**: There is considerable scope to scale up VCMs in ASEAN.

1. **Harmonized credits** (based on project type, credit type - removal or avoidance – and vintage) and taxonomy increase transparency. A widespread reference index against which credits could be compared and traded also increase market activity.

2. **Banks and other FIs can support the market** through product offerings to establish carbon instruments as a mature, competitive, liquid and investable asset class.

3. **Addressing Measuring, Reporting and Verification** issues by establishing a threshold quality criterion as well as a taxonomy of attributes for carbon credits

4. **Introducing standardized spot and futures contracts** to allow trading at scale

5. **Establishing principles on the use of offsetting** to guide corporates in using carbon credits

6. **Establishing legal and accounting frameworks** (such as standard documentation, financial accounting frameworks, carbon reporting mechanisms) to allow the market to scale

7. **Tailor best practices for Anti-Money Laundering or Know Your Customer** to a VCM context

8. **Increasing consumer awareness** via product labeling and carbon credit literacy

Despite rapid growth in recent years, VCMs remain both small and fragmented. Challenges include transparency of transactions, quality of underlying projects and how VCCs are used. In its work on VCMs IOSCO has identified vulnerabilities and absences in the following areas:

- Environmental integrity for carbon credit quality, transparency on emission calculation, standardized methodologies to measure additionality of projects, carbon leakage, GHG reduction/removal permanence risk, conflicts of interest between project developers, certifiers, traders investors, etc.

- Market structure including regulatory oversight of trading environment and activities to mitigate against market abuse, carbon credit legal structure and standardization of documentation.

- Liquidity and depth in these markets as well as effective price discovery.

**Integrity Council for the Voluntary Carbon Market (ICVCM)**

The ICVCM is an independent governance body for VCMs that enhances the transparency and integrity of offsets. ICVCM’s Core Carbon Principles aim to set and enforce global threshold standards so that high quality carbon credits channel finance towards genuine and additional GHG removals and reductions. By ensuring integrity in the generation and exchange of Voluntary Carbon Credits, ICVCM facilitates a transparent, deep, liquid and standardized market which will create a powerful price signal to drive investment and scale the market.

A set of Core Carbon Principles (CCPs) – fundamental elements for high integrity credits and an Assessment Framework to evaluate whether credits meet CCPs to set standards for high quality carbon credits and provide guidance applying CCPs. These are expected to be issued in Q1 2023 following a public consultation last year.

**RECOMMENDATIONS**

- **Work with international policymakers** to promote best practices and mitigate risks including greenwashing.

- **Promote integrity** and development of the primary and secondary VCMs.

- **Leverage governance bodies** such as the ICVCM and the VCM Integrity Initiative (VCMI).

- **Support the efforts to develop principles on VCMs scaling** being done by the US, especially AMS who are members of the Asia Pacific Economic Cooperation (APEC).

- **Create clear and stringent Measurement, Reporting and Verification standards** referring to International Organization of Securities Commissions (IOSCO) guidance and introducing standardized spot and futures contracts to facilitate trading at scale.

- **Develop a widespread reference index** to increase market activity. Credit heterogeneity (based on project type, credit type - removal or avoidance – and vintage) and taxonomy will improve transparency.

- **Continued public-private consultation is crucial**. Banks and other Financial Institutions (FIs) play a key role in establishing carbon instruments as a mature, competitive, liquid and investable asset class.
2. DEBT FOR NATURE SWAPS

The COVID pandemic added significantly to global debt levels and in the last twelve months, food and energy price rises resulted from the Ukraine war, as well as US rate hikes. By Q3 2022, government debt in Emerging Markets had reached $24.5 trillion (up from $5.6 trillion in 2008)\(^4\), much of which is denominated in foreign currency. This increases vulnerability to shocks, particularly in a rising rate environment for those at the lower end of the credit rating scale.\(^4\) Fiscal space is shrinking as financing needs increase, yet governments and investors are under increasing pressure to meet their net zero and SDG objectives. IMF reported that 34 of 59 developing economies are under increasing pressure to meet their net-zero and SDG objectives. IMF reported that 34 of 59 developing economies are at high risk of fiscal crisis.\(^4\)

We need solutions that meet both debt affordability and climate concerns.

Debt-for-nature/sustainability swaps are agreements in which a government negotiates the full or partial cancellation/restructuring of its debt in exchange for a commitment to deploy the savings made in a sustainability-related project or outcome. They help creditor nations meet climate mitigation and adaptation goals, alleviating poverty by supporting sustainable development projects, promoting economic growth, and improving access to basic services such as clean water and healthcare. These deals can be either:

- **Bilateral:** where the creditor cancels the debt owed by the debtor in return for funding specific ESG-related projects. Egypt has signed bilateral deals with Germany and Italy. Uruguay engaged in a bilateral debt-for-infrastructure swap in 2003, where Spain canceled a portion of Uruguay’s sovereign debt, with the savings deployed to build a 10MW wind farm.

- **Trilateral/multilateral:** involving a third party such as an NGO, typically offering financing to purchase the debt from creditors at a discount in exchange for the sustainability project funding. A developing country could invest in environmental projects in exchange for debt restructuring. An organization could create a Special Purpose Vehicle (SPV) to raise funds through bond issuance with a credit rating above the sovereign one. The organization can then lend to the country. The country uses the loan to repurchase its debt at a discount with a portion of the interest savings used for a conservation endowment.

Challenges and benefits of debt for nature swaps

The transaction costs of involving multiple stakeholders in an agreement, the monitoring costs of ensuring the intended sustainability project results are delivered, and the financial costs involved to the creditors have all been obstacles to scaling these sorts of agreements in the past, including in ASEAN.\(^4\)

However, the benefits of debt for sustainability swaps – including their ability to improve public finances and debt sustainability, support economic growth, result in an upgrading of credit ratings and help governments deliver SDGs and net zero targets – mean they may become more commonplace in the future. The increased focus by investors on ESG considerations allows a leveraging of ESG concerns to unlock value in sovereign restructuring.

The IMF noted that while swaps should not be seen as substitutes for restructurings, given the combination of debt pressures and the climate crisis: “green debt swaps have the potential to contribute to climate finance. They have the potential to facilitate accelerated action in developing countries”.

The IMF has suggested three ways in which these instruments could be scaled:\(^4\):

1. **Include as large a share of a country’s debt as possible, which would involve more financing and additional parties such as foundations and civil society organizations buying debt on secondary markets, which is then used for climate/nature swaps.**
2. **Repurchasing debt at the lowest possible price, including through creditor incentives such as allowing them to trade in carbon credits arising from the transaction.**
3. **Minimizing the cost of the debt buy-back, with donors offering partial guarantees to lower risk.**

**RECOMMENDATIONS**

- **Conduct national debt analyses** to determine whether debt for nature swaps may be applicable for AMS in the current climate, as an additional part of the climate finance policy mix.

- **ASEAN+3 Macroeconomic Research Office (AMRO)** to incorporate carbon pricing and green finance, assessments of financial and economic impacts of various climate scenarios in its analyses of long-term climate risks.
3. TRANSITION FINANCE

Recent fossil fuel disruptions in China and Europe demonstrated that insufficient renewable energy supply leads to severe economic challenges. Transition finance is therefore crucial to ensuring energy system resilience and any assessment of its suitability should be "guided by the extent to which the activities they support are both sustainable, reliable and affordable."47

The UN’s Secretary General High-Level Expert Group is developing low-carbon transition financing standards to measure and analyze Net Zero commitments from non-state actors. The Global Financial Alliance for Net Zero (GFANZ) has also developed best practices for FI’s net-zero transition plans. Transition Finance can fall into one of four areas/financing strategies48:

Transition finance categories

- **Entities and activities that develop and scale climate solutions.** For example, a company that produces green hydrogen.

- **Entities that are already aligned with a 1.5 degree net zero pathway.** For example, a company with an SBTi-validated target demonstrating progress against this target.

- **Entities committed to transitioning in line with a 1.5 degree-aligned pathway.** For example, a manufacturer implementing clean energy projects to reduce its scope 1 and 2 emissions.

- **The accelerated managed phaseout of high-emitting physical assets.** For example, a coal-fired power plant with a plan for early decommissioning.99

Country specificity

In ASEAN, where fossil fuel dependence, industrialization and growing energy demand are key factors, unique decarbonization pathways are required. The International Energy Agency (IEA) estimates that the renewable energy supply in Asia Pacific will increase significantly in two decades, but is only estimated to account for 20% of total supply by 2040 compared to 35% in Europe.

Within ASEAN, the ratio of renewable energy in the energy supply varies, with many dependent on fossil fuels. Geographic and environmental factors are important in considering how quickly renewable energy could scale and replace traditional energy sources. For example, Vietnam’s long coastline and high solar radiation intensity make it well placed to develop wind power and solar generation while Indonesia and the Philippines have fragmented electricity grids because of their archipelagic geography.

Transition finance projects are subject to a decarbonization trajectory, which is relative to a given starting point. Green projects, by contrast, have more defined targets. There is also a lack of standardized approaches to corporate-level decarbonization strategies, nor is there an array of examples against which to develop transition finance.

Graph 2: Transition finance in ASEAN

**Total energy supply by source (2019, exjoules)**

- Brunei
- Cambodia
- China
- Indonesia
- Japan
- Laos
- Malaysia
- Myanmar
- Philippines
- Singapore
- Thailand
- Vietnam

Towards a Future-Proof ASEAN Economy: Leveraging Digitalization and Sustainability

Transition Finance mechanisms: Energy Transition Mechanism, Catalytic Green Finance Facility and the Just Energy Transition Partnerships for Indonesia and Vietnam

As ASEAN focuses on delivering on its climate commitments, the region is well-placed to operationalize a number of transition finance schemes:

- **The ASEAN Catalytic Green Finance Facility (ACGF)** has made significant progress since its launch in 2019, with more than half of the $1 billion partner funds committed to eligible projects by the end of last year, with a focus on green infrastructure through co-financing and technical assistance.50

- **The Energy Transition Mechanism (ETM)** has also met important milestones since the launch of the ETM Southeast Asia Partnership at Conference of the Parties (COP) 26. This includes the signing of an MOU at the G20 Summit in Bali on the first accelerated retirement of a privately-owned coal fired power plant. An ETM for Indonesia was launched to act as a project coordinator and there has been in-principle approval from the Climate Investment Funds Accelerating Coal Transition program of $500 million of additional concessional funding. Further support funds from the governments of Japan and Germany were also announced at COP27.51

- **The Just Energy Transition Partnerships (JETPs)** for Indonesia and Vietnam were launched in November and December 2022.52 The Glasgow Financial Alliance for Net Zero (GFANZ) coordinated private sector input and endorsed the JETPs, expressing our commitment to working with the International Partners Group to mobilize the private capital objectives with the following conditions:

  1. continued progress in improvements to the local and international policy and enabling environment;
  2. the deployment of catalytic public finance that can be used to de-risk and crowd in private finance; and
  3. a robust pipeline of tendered projects that are consistent with the JETPs transition pathway.

**RECOMMENDATIONS**

- Develop sector or country level decarbonization pathways and technology roadmaps, referencing the work done by the Economic Research Institute for ASEAN and East Asia, which examines transition technologies appropriate for different ASEAN member states, based on their decarbonization pathways and set against the following criteria: emissions impact, reliability and cost.53

- **Continue to support the ASEAN Catalytic Green Finance Facility, the Energy Transition Mechanism and the JETPs** as leading examples of climate finance initiatives. Indonesia and Vietnam should progress the domestic policy environment reforms necessary to successfully operationalize their respective JETPs.

**Within ASEAN, the ratio of renewable energy in the energy supply varies, with many dependent on fossil fuels. Geographic and environmental factors are important in considering how quickly renewable energy could scale and replace traditional energy sources. For example, Vietnam’s long coastline and high solar radiation intensity make it well placed to develop wind power and solar generation while Indonesia and the Philippines have fragmented electricity grids because of their archipelagic geography.**
4. INSURANCE AND SUSTAINABILITY

The insurance industry plays a critical role in supporting the transition to a net zero world. The Intergovernmental Panel on Climate Change (IPCC) recently reported⁵⁴ that we are in the key decade for decisive action to avoid the most severe climate change impact. Insurers equip the transition through products and services that support low-carbon solutions as well as risk engineering and underwriting expertise to mitigate emissions.

The insurance industry plays a role in preventing pollution and protecting ecosystems through environmental pollution liability insurance (“environmental insurance”), which is an excellent tool to support biodiversity protection, as it addresses natural resources damage such as water contamination and helps with clean-up costs as well as restoration costs. Even before any pollution event occurs, environmental insurance provides prevention and risk mitigation measures. In the US, Canada, Europe, and Australia, including environmental insurance as a contractual requirement is a common practice for infrastructure projects.

A study by the UN Environment Programme Finance Initiative (UNEP-FI)⁵⁵ found that the top challenges in mainstreaming environmental insurance include a lack of regulation and poor enforcement of existing regulations. As adoption is heavily influenced by regulatory environment, some Asian governments have implemented compulsory environmental insurance schemes as a tool to manage pollution risks.

South Korea has had a country-wide mandatory insurance scheme since 2016, following an environmental accident in September 2012 when eight tons of hydrofluoric acid leaked from a chemical plant in Gumi City. The chemical plant did not have the resources to cover the US$55 million in compensation and clean-up,⁵⁶ so the government had to intervene and bore the cost. To prevent recurrences, the Ministry of Environment enacted the Act on Liability for Environmental Damage and Relief Thereof⁵⁷ that mandates high-risk industrial facilities to purchase insurance to cover pollution incidents.

Similarly, Vietnam recently issued Decree 45, which introduces fines and penalties for breaches of environmental protection rules and requirements to maintain pollution liability insurance for environmentally high-risk projects and facilities.⁵⁸

Other models have been proposed in ASEAN. The Philippine Senate has a bill pending that, if passed, would mandate insurance coverage for environmentally critical projects to compensate for damage to health and property, environmental rehabilitation, remediation, and clean-up costs before operations start, with funds held in escrow by the government.⁵⁹ In 2022, Malaysia’s Department of Environment proposed mandatory insurance scheme for licensed waste premises and transporters.⁶⁰

Environmental insurance has been around for decades but its full potential to address pollution risks remains largely untapped. Insurance regulators, environmental regulators, policymakers, and insurers can collaborate in advancing the shared goal of environmental preservation by reimagining the role of environmental insurance.

RECOMMENDATIONS

- Engage with insurance market participants to help close the protection gap for environmental risks and determine appropriate scoping if developing a mandatory environmental insurance scheme.
- Collaborate with other regulators and private sector to ensure alignment between environmental protection laws and regulations and insurance solutions, be it mandatory or voluntary insurance schemes.
1. Geoeconomic Fragmentation and the Future of Multilateralism (OECD)
2. ASEAN Investment Report 2022 - ASEAN Main Portal
3. S&P Global ASEAN Manufacturing PMI, January 2023
4. ASEAN Matters for America 2021
5. ASEAN FDI Regulatory Restrictions Database (oeecd.org)
6. IFC: Supply Chain Finance by Development Banks and Public Entities 2021
7. Investment has helped to deliver growth in Southeast Asia – can it also deliver sustainable development? Hinrich Foundation, October 2022
8. S&P Global ASEAN Manufacturing PMI, January 2023
9. SUPPLY CHAIN FINANCE: Uncertainty in Global Supply Chains is Going to Stay (citigroup.com)
10. OECD Business and Finance Policy Papers | OECD iLibrary
11. Enabling sustainable investment in ASEAN | OECD Business and Finance Policy Papers | OECD iLibrary
15. Getty Images is suing the creators of AI art tool Stable Diffusion for scraping its content - The Verge
16. Ubin+: Advancing Cross-Border Connectivity with Wholesale Digital Currencies (mas.gov.sg)
17. Project Garuda: Navigating The Architecture Of Digital Rupiah (mas.gov.sg)
19. Tether Breaks Its Peg and Tumbles to $0.95 As Crypto Panic Spreads (businessinsider.com)
24. Center for Research on Foundation Models, Stanford University: Stanford CRIFM
25. Getty Images is suing the creators of AI art tool Stable Diffusion for scraping its content - The Verge
27. Next Generation Government Disbursement Programs (2022) Kearney and Visa
28. The Powerful Role Payments Data Can Play in the Public Sector (2022) Kearney and Visa
29. Digitalizing Government Commercial Payments (2022) Kearney and Visa
31. Transforming interactions between Governments, citizens and businesses (2022) Kearney and Visa
35. IIF data
37. Climate Explorer: Article 6 (worldbank.org)
38. https://oecm.org/
41. VCM - Accelerating credible net-zero climate action (vcm.org)
42. 2023-Public-Sector-Perspectives (citibank.com)
43. Institute of International Finance data, Q3 2022
44. IMF staff calculations, cited in: Swapping Debt for Climate Resilience: Article 6 - FSB (2022)
45. The pitfalls and potential of debt-for-nature swaps: A US-Indonesian case study - ScienceDirect (citi.isolation)
46. Swapping Debt for Climate or Nature Pledges Can Help Fund Resilience (imf.org)
47. ATF pg 14
49. A net zero transition plan is a set of goals, actions and accountability mechanisms to align an organization’s business activities with a pathway to net zero which is in line with achieving global net zero
50. Overview: AECF Catalytic Green Finance Facility (ACGF) | Asian Development Bank (adb.org)
51. ADB Energy Transition Mechanism Marks Significant Milestones | Asian Development Bank (adb.org)
53. Technology List and Perspectives for Transition Finance in Asia - Research | ERIA
54. https://www.unepfi.org/world/commitment-to-sustainability
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The US-ASEAN Business Council and its members are committed to being partners and resources to ASEAN governments, in supporting sustainable resilient and inclusive economic growth. We work closely with the governments to complement existing regional digital trade, finance, and sustainability efforts to build policy frameworks, align standards and jointly implement best practices to reduce barriers to trade, including:

As a part of our concrete support, the Council organizes various public-private initiatives, as follows:

1. SUPPORT THE DEVELOPMENT OF THE ASEAN DIGITAL ECONOMY FRAMEWORK AGREEMENT (DEFA)

2. 2022 WHITEPAPER ON DIGITAL TRADE PRIORITIES FOR 54TH ASEAN PRESENTED AT ASEAN ECONOMIC MINISTERS (AEM) MEETING AND WHITEPAPER ON CYBERSECURITY STANDARDS AND CONFORMITY

3. WORKING CLOSELY WITH US DEPARTMENT OF COMMERCE (DOC) AND DIGITAL TRADE STANDARD AND CONFORMANCE WORKING GROUP (DTSCWG)

4. 2020 REPORT ON A VISION FOR CROSS-BORDER E-COMMERCE IN ASEAN

As a part of our concrete support, the Council organizes various public-private initiatives, as follows:

- SME Program on Building Resiliency for ASEAN SMEs (2011-2023)
- Briefing on U.S. Treasury’s 2023 APEC Priorities with US Department of Treasury

Based on our industry field data and best practices, we will share with the 9th AFMGM a range of recommendations on digital economy and sustainability, two of AFMGM’s priorities this year.
ABOUT THE US-ASEAN BUSINESS COUNCIL

For over 35 years, the US-ASEAN Business Council has been the premier advocacy organization for US corporations operating within the dynamic Association of Southeast Asian Nations (ASEAN). Worldwide, the Council’s membership, more than 160 companies, generate over $6 trillion in revenue and employ more than 13 million people globally. Members include the largest US companies conducting business in ASEAN, and range from newcomers to the region to companies that have been working in Southeast Asia for over 100 years.

We believe opening and investing in the sustainability of efficient, resilient and competitive markets are critical to the continued growth of our member companies and innovation and job creation in the United States and Southeast Asia.

The Council has offices in: Washington, DC; New York, NY; Bangkok, Thailand; Hanoi, Vietnam; Jakarta, Indonesia; Kuala Lumpur, Malaysia; Manila, Philippines; and Singapore. The Council’s Financial Services Committee is made up of the world’s leading financial services institutions and markets participants operating in Asia’s most dynamic regional economic community.

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