Working Committee - Capital Market Development

ASEAN Capital Markets Forum

Sustainable Finance White Papers

- Taxonomy
- ASEAN Transition Pathway
- Sustainability Disclosures and Reporting
- Strengthening Demand and Supply



Prepared by:
The Working Groups of the ASEAN Working Committee on Capital Market Development and the ASEAN Capital Markets Forum Joint Sustainable Finance Working Group's Industry Advisory Panel.

Industry Advisory Panel Convener

Sustainable Finance Institute Asia

Contents

FOREWORD

LIST OF IAP MEMBERS

WHITE PAPERS

- Taxonomy
- ASEAN Transition Pathway
- Sustainability Disclosures and Reporting
- Strengthening Demand and Supply

FOREWORD

The ASEAN Working Committee on Capital Market Development (WC-CMD) and the ASEAN Capital Markets Forum (ACMF) have made supporting the ASEAN sustainability goals a key agenda. To this end, they have established the WC-CMD-ACMF Joint Sustainable Finance Working Group (JSFWG) to further the role of ASEAN capital markets in orienting capital to the sustainability agenda. The JSFWG coordinates the sustainable finance agenda for WC-CMD and ACMF, including the implementation of the recommendations in the WC-CMD Report on Promoting Sustainable Finance in ASEAN (Report) and the ACMF Roadmap for ASEAN Sustainable Capital Markets (Roadmap).

The Report and the Roadmap are complementary documents developed by WC-CMD and ACMF respectively to enable the capital markets to support sustainability for the real economy. The 16 Recommendations in the Report and the 15 Key Recommendations in the Roadmap are geared towards creating a Sustainable Finance Ecosystem for ASEAN. This ecosystem is built on three pillars:

- An ASEAN Taxonomy to serve as a common language;
- Transition Finance Standards to enable financing for credible yet realistic transitions in the region; and
- Disclosures to support informed decision making.

The three pillars will enable demand and supply for sustainable finance to grow and create a virtuous cycle.

Recognising the importance of involving market players in the development of their policies and initiatives, the WC-CMD and ACMF set up the JSFWG Industry Advisory Panel (IAP) as the core industry interaction point, to support the efforts of the JSFWG. The IAP is aimed at engaging with and facilitating feedback from the private sector on the JSFWG's sustainable finance agenda and initiatives, while helping WC-CMD and ACMF better understand the views, ideas and needs of the private sector.

The IAP was established in 2021 under the auspices of the JSFWG and comprised at its inception four IAP Working Groups (WG) - Taxonomy, Transition Standards, Disclosures, and Strengthening Demand and Supply for Sustainable Finance. At its inception, the IAP comprised 22 member organisations from the three main segments of the financial ecosystem – capital markets, banking and insurance, as well as other finance professionals and financial services providers such as legal, accounting and credit rating agencies. The members represented a mix of both regional and global interests. The Sustainable Finance Institute Asia (SFIA) was appointed as convener of the IAP.

The IAP members had the responsibility of providing input to WC-CMD and ACMF at scheduled intervals, as well as on an as needed basis. In addition, they also provide information and feedback individually on a continuous basis.

The IAP provides a forum for members to provide their independent diverse perspectives from across the financial sector in an open and professional manner. At its inception, each of the IAP WGs were requested by the WC-CMD and ACMF to develop White Papers on the private sector's views, ideas and suggestions on their respective areas of focus. These White Papers were finalised in 2021, and encapsulated input provided to the JSFWG prior to their issuance.

When discussing the policies and initiatives of their institutions and industries, and how those policies could affect the flow of credit and investment into ASEAN countries, members of the Transition Standards WG noted that:

"Discussions between our working group members were always civil but also rigorous, transparent and open. We sought to bring that rigour to our updates to and engagements with the JSWG as we firmly believed that for our working group to have value, our views had to be grounded in reality, be open about uncertainty and explain the concerns and incentives based on how we saw them at the time. "

The Taxonomy WG and Transition Standards WG provided feedback throughout the development of the ASEAN Taxonomy for Sustainable Finance Version 1 (ASEAN Taxonomy Version 1) and this feedback was incorporated in their White Papers, and where appropriate, in Version 1 of the ASEAN Taxonomy for Sustainable Finance.

It should be noted that discussions in these White Papers have since progressed, in some cases substantially, given the passage of time and the local, regional and global developments since their issuance. However, to showcase some of the original thinking of the IAP, WC-CMD, ACMF and the WGs are now making public the White Papers that were completed in 2021.

The **White Paper on Taxonomy** reflects the views of the Taxonomy WG at the relevant time. The Taxonomy WG opined that:

"ASEAN faces challenges in implementing a common regional classification due to the different levels of economic development of its members and their individual climate priorities. Therefore, the ASEAN version of Taxonomy needs to strike a balance among member states to give them confidence in their path to transition."

It is important to note that the Taxonomy WG represented one of many interaction points for the WC-CMD, ACMF and the ASEAN Taxonomy Board in the development of the ASEAN Taxonomy Version 1, which was developed after taking into consideration the input of stakeholders representing different interest groups.

Transition is an imperative for ASEAN and both the Report and the Roadmap have highlighted the need for an orderly and just transition. Both the Taxonomy WG and the Transition Standards WG had taken this into consideration when preparing their White Papers.

The **White Paper on the ASEAN Transition Pathway** developed by the Transition Standards WG focused on the energy sector as 1) the value and importance of other 'hard to abate' sectors vary from country to country (e.g. agriculture is less critical to Singapore vs. Thailand) and 2) the prevalence of state ownership of utilities and fossil fuel producers in ASEAN makes it easier for governments to influence change and role-model behaviour in the energy sectors.

The WG took the view that:

"1) ASEAN should 'own their transition narrative' or risk being swept up in the transition narratives, and rules, of other regions and countries.
2) This means setting out a clear commitment to a Paris-Aligned or Net-Zero destination and associated transition pathways.
3) The international finance community wants the ASEAN Taxonomy to succeed as they are committed to the region and believe in the growth opportunity.
4) Pragmatism must prevail considering concerns about energy cost and security.
5) Global credibility should be the goal of the ASEAN Taxonomy.
6) Governments should act to provide the frameworks that enable the market to deliver the transition. For example:
    - *ensure the availability of high-quality data and its disclosure; and*
    - *create rules to determine the sustainability of activities, financial products, and in some cases, entities.*
7) Rules and standards should use internationally recognized metrics to enable comparability and credibility."

The White Paper on the ASEAN Transition Pathway was prepared with the following considerations:

1) ASEAN will be a great source of economic growth and therefore a target for investment.
2) Economic growth must be underpinned by energy and infrastructure growth.
3) Capital deployment from most major financial institutions can no longer ignore sustainability, especially in the energy sector and the 'hard to abate' industries.
4) There is an appreciation that developing nations face unique challenges in making the transition to a low carbon economy without sacrificing broader development goals. The standards and targets should reflect that.
5) However, the acceptable difference in those standards and targets are not clear and most financial institutions are not able or willing to dictate them.
6) To that end transition financing has stalled and there is a threat of decreasing available international liquidity for the traditional energy sectors and the 'hard to abate' industries.

The third pillar accompanying an ASEAN Taxonomy and a Transition Standards is Disclosures. Sustainability disclosure provides for transparency and accountability regarding an organisation's environmental, social, and governance practices. Information about sustainability performance enables organisations to demonstrate

their commitment to responsible business practices and help build trust with stakeholders, including investors, customers, employees, and communities. This ultimately supports decision making related to the goal of fostering a sustainable finance ecosystem that attracts capital into ASEAN, which will be needed to support the very substantial investment needs of the region for its transition.

The Disclosures WG prepared the **White Paper on Sustainability Disclosure and Reporting** to provide its perspective on the essential elements for disclosure against the backdrop of several sustainability disclosure frameworks. The Disclosures WG shared for this foreword that:

"The key development since the white paper was finalised relates to the development of the International Sustainability Standards Board (ISSB) which has been set up by the International Financial Reporting Standards (IFRS) Board of Trustees to develop a consistent global baseline for sustainability-related financial disclosures."

In 2021, the Sustainability Accounting Standards Board (SASB) merged with the International Integrated Reporting Council (IIRC) into the Value Reporting Foundation (VRF). Subsequently, VRF and Climate Disclosure Standards Board (CDSB) consolidated into the IFRS Foundation. On 26 June 2023, the ISSB issued IFRS S1 'General Requirements for Disclosure of Sustainability-related Financial Information' and IFRS S2 'Climate-related Disclosures' in June 2023. Additionally, GRI has signed a Memorandum of Understanding with ISSB to work on inter-operability of the two standards.

The developments around the ISSB are major, but the key principles and policy recommendations that the Disclosures WG laid out in their white paper remain valid. They are:

Principles applied for policy recommendations:

a) There must be a sense of urgency amongst regulators in debating, formulating, and enforcing policy recommendations;
b) Standards to foster timeliness, accuracy, and completeness of disclosure and reporting;
c) ASEAN needs to own its sustainability narrative; and
d) Building upon existing standards and frameworks and inter-operability.

Policy recommendations:

a) Establish mandatory baseline reporting standards for ASEAN corporates for listed as well as large non-listed entities;
b) Clear regulatory guidance on the content of disclosure items across (i) comparable narratives and (ii) quantitative metrics that must be reported on;
c) Regulators must address the disconnect between financial and non-financial reporting on sustainability matters;
d) Mandate third-party assurance of sustainability reporting and disclosure, support capacity building to accomplish this, and ensure regulatory supervision;
e) Governments/regulators need to support the provision of better ESG data; and

f) Governments/regulators to actively support global efforts to achieve harmonisation of global sustainability reporting standards.

The three pillars support the lever of Strengthening Demand and Supply for Sustainable Finance and the **White Paper on Strengthening Demand and Supply for Sustainable Finance** prepared by that WG recommended bolstering demand and supply through governmental initiatives. The WG noted recently that:

"As we reflect on *our recommendations to bolster demand and supply through governmental initiatives, we are pleased to report the proactive involvement of our governments. Their enthusiastic engagement and proactive approach serve as a heartening testament to their commitment to advancing the sustainable finance space. To share some examples of their initiatives, in the sovereign space, Singapore and the Philippines have become the most recent countries to issue a Sustainability Bond. In May 2023, Malaysia's Government Linked Investment Companies ("GLICs") published a joint Sustainable Investing Standards ("SIS") document. The aim of the SIS is to elevate the role of GLICs in sustainable investments, potentially driving more demand for sustainable finance. We are excited to see future governmental initiatives to further advance this space, and look forward to collaborating more closely with government bodies to facilitate this progress."*

The Strengthening Demand and Supply WG also reported that the field of transition and sustainability-linked bonds has seen significant development with the introduction of the ASEAN Sustainability-Linked Bond Standards to further promote the adoption of sustainable finance especially among ASEAN issuers in the hard-to-abate sectors as they transition to a low carbon economy.

The WG further highlighted that the revised ASEAN Taxonomy V2 has incorporated the phasing out of coal as an activity eligible for classification as a sustainable activity and that this inventive inclusion can hasten energy transition efforts within ASEAN.

However, the WG did note that:

"Despite this progress, our collective analysis indicate that additional measures are imperative to drive meaningful action. We maintain that further efforts are needed to enhance the scope and clarity of these national commitments and more importantly, what these ambitions mean to every segment of the economy. That said, it is imperative to segmentize the targets according to sectors, corporations, and other relevant entities. This should be further driven by establishing clear and measurable objectives, implementing attractive incentives and introducing policies to accelerate action. This integrated approach could profoundly influence corporate behaviour and shift strategic considerations towards sustainable projects, thereby bolstering sustainable finance."

In conclusion, the Strengthening Demand and Supply WG was of the view that the recommendations presented in its white paper remain pertinent. They hope that their implementation will contribute to the continued growth and resilience of the region and they are confident in our collective ability to drive meaningful impact within the ASEAN sustainability space.

The IAP is now in its third term (2023-2024). The current IAP comprises 24 members and 3 observers[1]. The sustainable finance space is moving rapidly and there have been significant developments since the inception of the IAP. The ASEAN Taxonomy for Sustainable Finance has advanced rapidly, with Version 1 issued in November 2021 and Version 2 in March 2023, the International Sustainability Standards Board has been created and issued its first two standards in June 2023 and the importance of data for sustainability disclosure and reporting has come to the fore. Given these developments, in order to optimise the impact and focus of the IAP, the WGs have been constituted as follows:

- Taxonomy and Transition
- Disclosures (with two sub-groups – Sustainability Reporting and Data for Disclosures)
- Strengthening Demand and Supply for Sustainable Finance

WC-CMD and ACMF hope that the White Papers will provide an insight into the interactions with the IAP, and demonstrate the close collaboration between the JSFWG and market players on the ASEAN sustainable finance agenda. WC-CMD and ACMF extend their warmest appreciation to the IAP members for their strong contributions over the last three years, and look forward to continued cooperation to develop sustainable capital markets in ASEAN.

ASEAN Working Committee on Capital Market Development

ASEAN Capital Markets Forum

22 August 2023

[1] The **APPENDIX** sets out the complete list of members and observers for each term since the IAP's inception.

APPENDIX – List of Industry Advisory Panel (IAP) members since inception

The White Papers in this publication were prepared by the 2021/2022 IAP members.

The 15 members of the 2021/2022 IAP, and the working groups they participated in, were:

Working Group on the ASEAN Sustainable Finance Taxonomy	
Organisation	**Representative(s)**
Chair: Nomura Asset Management Group	Mr. Toshiyuki Imamura Mr Gordon Youl
Aberdeen Standard Investments	Mr David Smith
RAM Sustainability Sdn Bhd	Mr Promod Dass Ms Gladys Chua

Working Group on Transition Standards	
Organisation	**Representative(s)**
Chair: The Hongkong & Shanghai Banking Corporation Limited (HSBC)	Mr. Gautam Mukharya Mr. Stewart James Ms. Mimi Concha *With contributions from*: Ms. Nadia Lazavera
Baker McKenzie	Mr. Gavin Raftery Mr Adam Farlow
International Capital Market Association (ICMA)	Mr. Mushtaq Kapasi Ms. Simone Utermarck
Bank of Ayudhya Public Company Limited (Krungsri)	Ms. Jamjun Siriganjanavong Mr. Chakrit Hansirisawasdi *With contributions from*: Mr. Shivanan Sivarajah and Mr. John Bradley (MUFG Bank)

Working Group on Disclosures	
Organisation	**Representative(s)**
Chair: ING Bank	Mr Helge Muenkel Ms Rowena Palmiery-Bayoneta
Allianz SE, Singapore Branch	Ms Claudia Salem
Indonesia Corporate Secretary Association (ICSA)	Dr Ir Hardijanto Saroso
PwC Malaysia	Dato' Mohammad Faiz Azmi Mr Andrew WK Chan

Working Group on Strengthening Demand and Supply for Sustainable Finance	
Organisation	**Representative(s)**
Chair: Maybank Investment Bank Berhad	Dato' Fad'l Mohamed Mr. Wong Kwok Kuan
BNP Paribas Asset Management	Ms. Angelia Chin Sharpe Mr. Christian Bucaro
Rajah & Tann Singapore LLP	Mr. Raymond Tong Mr. Ahmad Fikri Assegaf
Standard Chartered Bank Philippines	Ms. Lynette Ortiz Ms. Roshel Mahabeer

IAP Convener	
Organisation	**Representative**
SFIA	Mr. Donough Foley

The 22 members of the 2022/2023 IAP, and the working groups they participated in, were:

Working Group on ASEAN Sustainable Finance Taxonomy	
Organisation	**Representative(s)**
Chair: Nomura Asset Management Group	Mr. Toshiyuki Imamura
Aberdeen Asia Limited	Mr. David Smith
RAM Sustainability Sdn Bhd	Mr. Promod Dass Ms. Gladys Chua
Government Pension Fund of Thailand	Dr. Srikanya Yathip Dr. Man Juttijudata

Working Group on Disclosures	
Organisation	**Representative(s)**
i) Co-Chair (Disclosure): ING Bank ii) Co-Chair (Data): DBS Bank	Ms. Rowena Palmiery-Bayoneta Mr. Helge Muenkel
Allianz Investment Management Singapore (Data)	Ms. Ritu Arora
Indonesia Corporate Secretary Association (ICSA) (Disclosure)	Ibu Reski Damayanti Ibu Ratna Hidayati
PwC Malaysia (Disclosure)	Dato' Mohammad Faiz Azmi Mr. Andrew WK Chan
PT. Pemeringkat Efek Indonesia (PEFINDO) (Data)	Mr. Hendro Utomo Mr. Kreshna Dwinanta Armand
Dragon Capital Vietfund Management Joint Stock Company (Disclosure)	Mr. Dominic Scriven, Chairman

Working Group on Strengthening Demand and Supply for Sustainable Finance	
Organisation	**Representative(s)**
Chair: Maybank Investment Bank Berhad	Dato' Fad'l Mohamed Mr. Wong Kwok Kuan
BNP Paribas Asset Management	Ms. Angelia Chin Sharpe
Rajah & Tann Singapore LLP	Mr. Raymond Tong Mr. Ahmad Fikri Assegaf
Standard Chartered Bank Philippines	Ms. Lynette Ortiz
Bank of Ayudhya Public Company Limited (Krungsri)	Ms. Jamjun Siriganjanavong Mr. Chakrit Hansirisawasdi, Director
SBI Royal Securities Plc	Mr. Seng Chan Thoeun Mr. Shuzo Shikata

Working Group on Transition Standards	
Organisation	**Representative(s)**
Chair: The Hongkong & Shanghai Banking Corporation Limited (HSBC)	Mr. Gautam Mukharya Mr. Kelvin Tan Ms. Mimi Concha
Baker McKenzie	Mr. Gavin Raftery Mr. Adam Farlow
International Capital Market Association (ICMA)	Mr. Mushtaq Kapasi Ms. Simone Utermarck
MUFG Bank	Mr. Shivanan Sivarajah Mr. John Bradley
Climargy Inc.	Mr. Alexander Ablaza Mr. Mikhael Fiorello C. Llado

IAP Convener	
Organisation	**Representative**
SFIA	Mr. Donough Foley

The 24 members of the 2023/2024 IAP, and the working groups they will participate in, are:

Working Group on Taxonomy and Transition	
Organisation	**Representative(s)**
Chair: MUFG Bank	Mr. Shivanan Sivarajah Ms. Eiko Yamamoto
Nomura Asset Management Group	Mr. Toshiyuki Imamura
The Hongkong & Shanghai Banking Corporation Limited (HSBC)	Mr. Kelvin Tan Ms. Frances Chen
Baker McKenzie	Mr. Gavin Raftery
BNP Paribas Asset Management	Ms. Angelia Chin Sharpe
Government Pension Fund of Thailand	Dr. Srikanya Yathip Dr. Man Juttijudata
International Capital Market Association	Mr. Mushtaq Kapasi Ms. Simone Utermarck

Working Group on Disclosures	
Sub-group on Sustainability Reporting	
Organisation	**Representative(s)**
Co-Chair: CIMB Group	Mr. Jefferi Mahmud Hashim Ms. Lim Tse Yee
Aberdeen Asia Limited	Mr. David Smith
PwC	Mr. Soo Hoo Khoon Yean Mr. Andrew WK Chan
Indonesia Stock Exchange	Mr. Jeffrey Hendrik Mr. Ignatius Denny Wicaksono
Provident Capital Partners	Mr. Gordon Youl
Sub-group on Data for Disclosures	
Co-Chair: DBS Bank	Mr. Helge Muenkel
Indonesia Corporate Secretary Association (ICSA)	Ibu Reski Damayanti Ibu Ratna Hidayati
Dragon Capital Vietfund Management Stock Company	Mr. Dominic Scriven
EY Corporate Services Limited	Ms. Nithawan Jarernporn Ms. Wilaiporn Ittiwiroon

Working Group on Supply and Demand	
Organisation	**Representative(s)**
Chair: Maybank Investment Bank Berhad	Dato' Fad'l Mohamed Mr. Wong Kwok Kuan
Climargy Inc.	Mr. Alexander Ablaza Mr. Mikhael Fiorello C. Llado
Bank of Ayudhya (Krungsri)	Ms. Jamjun Siriganjanavong Mr. Chakrit Hansirisawasdi
Standard Chartered Bank Philippines	Ms. Rowena Kapunan Ms. Alicia Carballo
SBI Royal Securities	Mr. Kenji Nakanishi Mr. Sieng Sokrith
Rajah & Tann Singapore LLP	Mr. Raymond Tong Mr. Ahmad Fikri Assegaf
PT Manulife Asset Management representing the Indonesian Investment Manager Association	Ibu Afifa Ibu Naila Firdausi
International Finance Corporation	Ms. Huong Nguyen

IAP Observers	
Organisation	**Representative(s)**
Myanmar Insurance Association	Mr. U Thaung Han
uab securities limited	Ms. Kyawt Kay Khaing Mr. Mahesh K Bhandari
RHB Securities (Cambodia) Plc	Mr. Iv Ranarith Mr. Isaac Goh Paik Hwa

IAP Convener	
Organisation	**Representative**
SFIA	Mr. Donough Foley

ASEAN Taxonomy White Paper

Date : December 2021

Prepared by : Working Group on Taxonomy of the WC-CMD - ACMF Joint Sustainable Finance Working Group Industry Advisory Panel

Working Group members :

- Nomura Asset Management Group
- Aberdeen Standard Investments
- RAM Sustainability Sdn Bhd

Executive summary

- While the detail of individual approaches among nations varies, the commitment to Net Zero in 2050 is increasing globally. While many globalinvestors manage their portfolios in accordance with the Paris Agreement, it is predictedthat it will be hard for international investment capital to inflow to ASEAN countries unless they adopt an approach intended over time to align more closely to the basis on which investors will select investment targets going forward.
- Asset managers who participate to Net-Zero Asset Managers Initiatives have to commit to **a)** Work in partnership with asset owner clients on decarbonisation goals, consistent with an ambition to reach net zero emissions by 2050 or sooner across all assets under management ('AUM'), **b)** Set an interim target for the proportion of assets to be managed in line with the attainment of net zero emissions by 2050 or sooner, **c)** Review the interim target at least every five years, with a view to ratcheting up the proportion of AUM covered until 100% of assets are included.
- It is the IAP's view that the ASEAN taxonomy needs to be created to be consistent with such international investor trends. In other words, it is expected that it will be difficult for ASEAN countriesto obtain international investment capital with the ambitious climate target if they cannot adapt to these trends.
- In order for attracting international investment and financing with aiming the ambitious climate targets in ASEAN countries, ASEAN companies need to do **a)** Disclosure of GHG emissions of Scope 3 based on PCAF standards, **b)**Setting emission reduction targets consistent with the Paris Agreement, **c)** Engagement with financial institutions to set emission targets, **d)** Enhancement of information disclosure that enables engagement by financial institutions, **e)** Formulate a transition plan to achieve emission reduction targets.
- ASEAN faces challenges in the implementation of a common regional taxonomy due to the differing levels of economic and functional development on the member countries and their individual development and climate priorities. Any taxonomy needs to balance these factors against the desire to attract investment and to give confidence about a path to transition. A tiered approach is one method which would allow individual countries and entities to choose goals to apply to them and to approach transition

through up tier-ing. We have considered three approaches: **a) Principles Based Taxonomy with Optional Rules Based Protocol, b) Multi-Tiered Rules Based Approach, c) Scorecard Based Approach**.

1. Introduction

In March 2018, the European Commission announced the Sustainable Finance Action Plan as a measure to achieve the EU's commitment to SDGs and the achievement of the target of lowering the global average temperature increase to well below 2 degrees Celsius agreed on by the Paris Agreement, and it developed the EU Taxonomy as one of the action plans. The EU Taxonomy is a classification of economic activities that contribute to the EU's sustainability policy, and thresholds are set for each economic activity.

The EU Taxonomy set out six environmental goals: "Climate change mitigation", "Climate change adaptation", "The sustainable use and protection of water and marine resources", "The transition to a circular economy", "Pollution prevention and control" and "The protection and restoration of biodiversity and ecosystems". Projects, assets and activities that contribute to these six objectives are subject to sustainable finance, but the EU Taxonomy, published in March 2021, was created with a focus solely on climate change mitigation and adaptation.

While the EU Taxonomy represents a significant development in the alignment of climate goals with access to finance, for the purpose of the Paris Agreement to limit the rise in global average temperature to well below the level 2 degrees Celsius and achieve that target of the level 1.5 degrees Celsius higher than before industrialization, a definition of sustainable finance activities that is universally accepted as consistent with those objectives at the international, national and regional levels is needed.

While the EU has set its own goal of halving GHG emissions within the EU by 2030 and reducing them to virtually zero by 2050, NDCs (Nationally Determined Contributions) differ from country to country. While the ultimate goal may be to apply the same taxonomy to the whole world, reality dictates the necessity to consider the circumstances of each country and in particular their differing levels of social and economic development. As a consequence, there will be a transition process during which it will be necessary to allow regional and national sustainable finance markets to develop in accordance with their own taxonomies.

There is also something to be gained from the development of sustainable finance markets. Financial institutions are increasingly reporting globally in accordance with TCFD. This requires them to consider not only the risk to their organizations from climate change, but also how they can balance this risk through opportunities which have a lower climate risk. A credible taxonomy within ASEAN, where significant investment in transition is necessary, could serve to build a framework that focuses on increasing future opportunities while reducing risk. Importantly it could focus sustainable capital around mid-stage efforts essential for decarbonisation.

2. Overview of international developments

While the detail of individual approaches among nations varies, commitments to Net Zero in 2050 are increasing globally. As at the end of 2020, 123 countries and 1 region had committed to Net Zero by 2050. Two of them have already achieved it, six have enacted legislation, the EU and three countries have submitted legislation, and 11 have described the net zero commitment in government documents.The ratio of committed countries / regions to global CO2 emissions is 23.2% (2017 results). In case of including the US, it accounts for 37.7% of the world's total CO2 emissions. China has announced net zero in 2060, India in 2070.

In September 2019, the Net Zero Asset Owners Alliance, an asset owner initiative committed to carbon neutrality of their investment portfolios by 2050, was established. It was led by the United Nations Environment Program and Financial Initiative (UNEP-FI) and the Principles for Responsible Investment (PRI), with the aim of achieving the Paris Agreement goals. 46 institutions, including leading global insurance companies and pension funds, are members, and the total assets under management of the member institutions exceed $ 6.6 trillion (as of August 2021).

Similarly, on December 11, 2020, the day before the 5th anniversary of the adoption of the Paris Agreement, the Net Zero Asset Managers Initiative, an initiative by a global asset management company that supports Net Zero for 2050, was launched. It is operated mainly by investor networks such as PRI, CDP, Ceres, IGCC, IIGCC and AIGCC1.

The NetZero Asset Managers Initiative includes asset managers from around the world who are committed to NetZero's goals. As of July 2021, 128 companies have joined, and the total assets under management of the member companies are 43 trillion dollars.

When it was first established in December 2020, only seven months prior, it had 30 member companies and total assets under management of $ 9 trillion, which is indicative of the rapid and increasing pace of change.

Participating asset managers have to commit to:

a) Work in partnership with asset owner clients on decarbonisation goals, consistent with an ambition to reach net zero emissions by 2050 or sooner across all assets under management ('AUM')
b) Set an interim target for the proportion of assets to be managed in line with the attainment of net zero emissions by 2050 or sooner
c) Review our interim target at least every five years, with a view to ratcheting up the proportion of AUM covered until 100% of assets are included.

In order to implement these commitments, the asset management firms must do the following 10 items:

For assets committed to be managed in line with the attainment of net zero emissions by 2050 or sooner (under commitment b)

1. Set interim targets for 2030, consistent with a fair share of the 50% global reduction in CO2 identified as a requirement in the IPCC special report on global warming of 1.5°C
2. Take account of portfolio Scope 1 & 2 emissions and, to the extent possible, material portfolio Scope 3 emissions
3. Prioritise the achievement of real economy emissions reductions within the sectors and companies in which we invest
4. If using offsets, invest in long-term carbon removal, where there are no technologically and/or financially viable alternatives to eliminate emissions
5. As required, create investment products aligned with net zero emissions by 2050 and facilitate increased investment in climate solutions

Across all assets under management

6. Provide asset owner clients with information and analytics on net zero investing and climate risk and opportunity
7. Implement a stewardship and engagement strategy, with a clear escalation and voting policy, that is consistent with our ambition for all assets under management

to achieve net zero emissions by 2050 or sooner

8. Engage with actors key to the investment system including credit rating agencies, auditors, stock exchanges, proxy advisers, investment consultants, and data and service providers to ensure that products and services available to investors are consistent with the aim of achieving global net zero emissions by 2050 or sooner
9. Ensure any relevant direct and indirect policy advocacy we undertake is supportive of achieving global net zero emissions by 2050 or sooner

Accountability

10. Publish TCFD disclosures, including a climate action plan, annually, and submit them to the Investor Agenda via its partner organisations for review to ensure theapproach applied is based on a robust methodology, consistent with the UN Race toZero criteria, and action is being taken in line with the commitments made here

An ASEAN Taxonomy also needs to be consistent with such international investor trends. AMS will find it increasingly difficult to obtain international investment capital if they cannot adapt to these trends.

3. The gap between ASEAN and the Paris Agreement Targets Based on Equity Indices Analysis

To understand the total carbon emissions of the AMS, we used data from ISS, and performed scenario analyses based on the three scenarios in the World Energy Outlook 2019 issued by the International Energy Agency (IEA). For the total carbon emissions used in our scenario analyses, in light of the specific characteristics of transition risk in each sector, we used only Scope 1 emissions for the utility companies, only Scope 3 emissions for fossil fuel producing companies, and both Scope 1 and Scope 2 emissions for all other companies.

The three scenarios we used are:

1. Sustainable Development Scenario (SDS): The 1.5°C scenario aligned with the target of the Paris Agreement, which is to work to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels.
2. Stated Policies Scenario (STEPS): A scenario which assumes that governments carry

out policy initiatives they have already announced, on the assumption that countries will execute existing policy frameworks and ambitions. Under this scenario, the earth's temperature is projected to rise approximately 2.7°C by the end of this century.

3. Current Policies Scenario (CPS): A scenario under which countries continue, but make no changes to, their current policies. Under this scenario, the earth's temperature is projected to rise approximately 3.2°C by the end of this century.

The temperature score for each portfolio is not a weighted average of the temperature scores for each company, but is calculated based on the position of the portfolio's expected 2050 emissions in the three carbon budget scenarios against the temperature suggested by that scenario.

The temperature score of an individual company is determined by the consistency ratio with the SDS scenario (1.5 ° C scenario = Paris Agreement) in 2050. For example, a company's temperature score consistent with SDS in 2050 would be 1.5 ° C, otherwise it would be determined by the relationship between emissions and temperature rise. Scores are calculated in the range of 1.5 to 6 ° C in 0.1 ° C increments, with 1.5 ° C as a minimum score meaning that emissions in 2050 are expected to be below the SDS carbon budget, on the other hand, the maximum of 6 ° C as a maximum score meaning to be much above the budget.

Similarly, the temperature score of the portfolio is calculated by comparing the consistency ratio with the SDS scenario in 2050 with the other two scenarios. For example, the score of a portfolio with the emissions in 2050 projected to be between the SDS and the STEPS (2.7 ° C) carbon budget is calculated to be between 1.5 ° C and 2.7 ° C, e.g. around 2.1 ° C.

The scenario analysis of the ASEAN market based on the MSCI ASEAN equities indices as of the end of August 2021 is as follows.

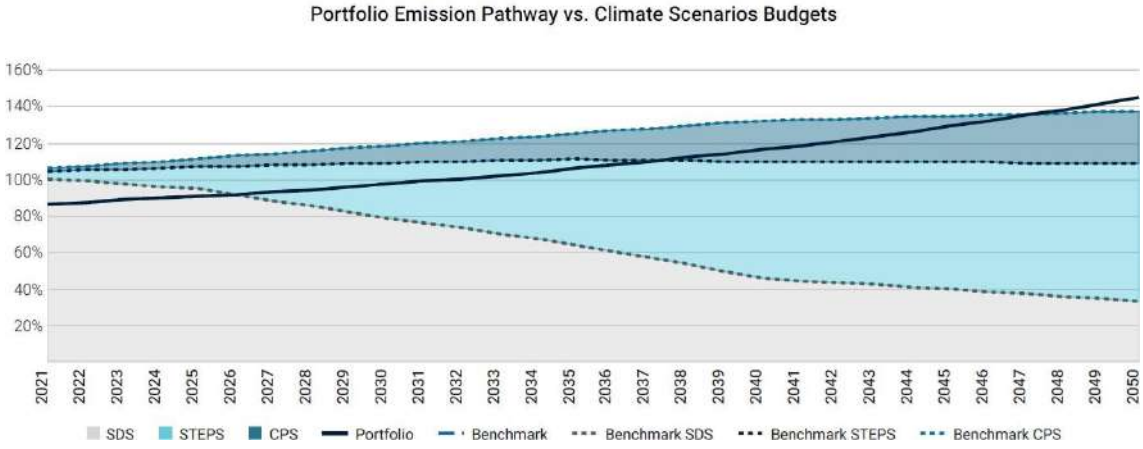
Portfolio and Benchmark Comparison to SDS Budget (Red = Overshoot)				
	2021	2030	2040	2050
Portfolio	-13.78%	+24.07%	+156.01%	+338.25%
Benchmark	-13.78%	+24.07%	+156.01%	+338.25%

2026

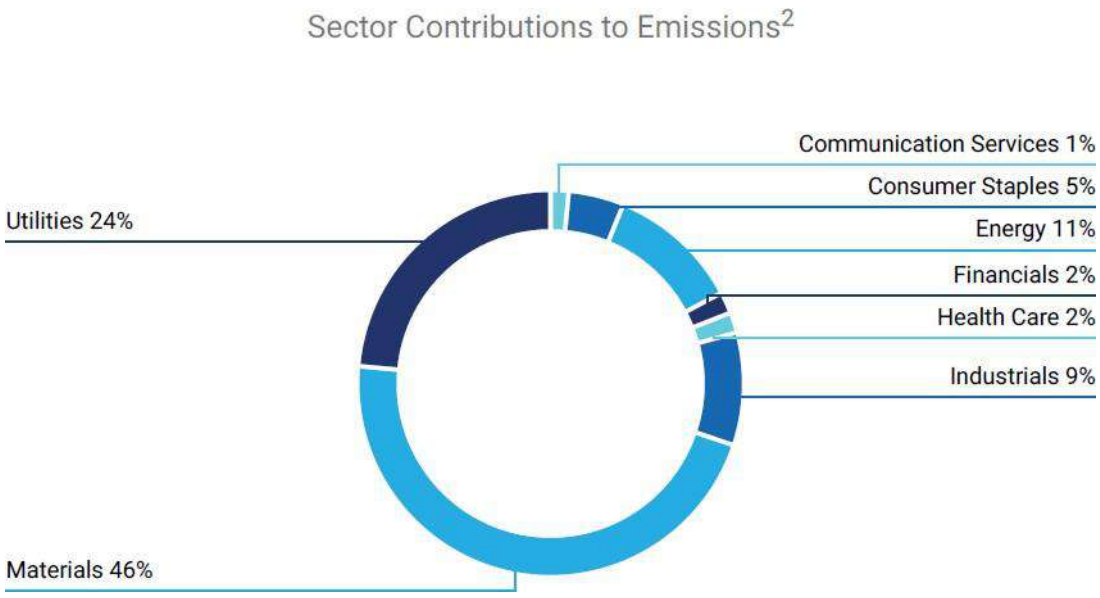
The portfolio exceeds its SDS budget in 2026.

3.4°C

The portfolio is associated with a potential temperature increase of 3.4°C by 2050.

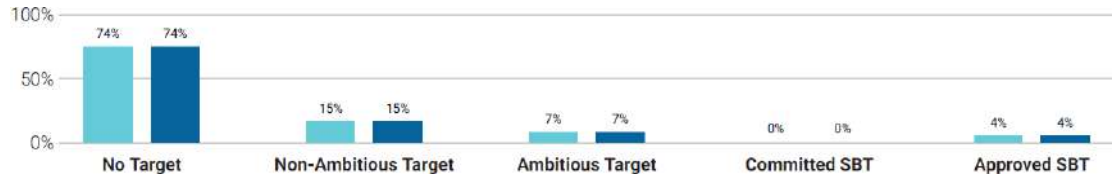


Source: ISS Climate



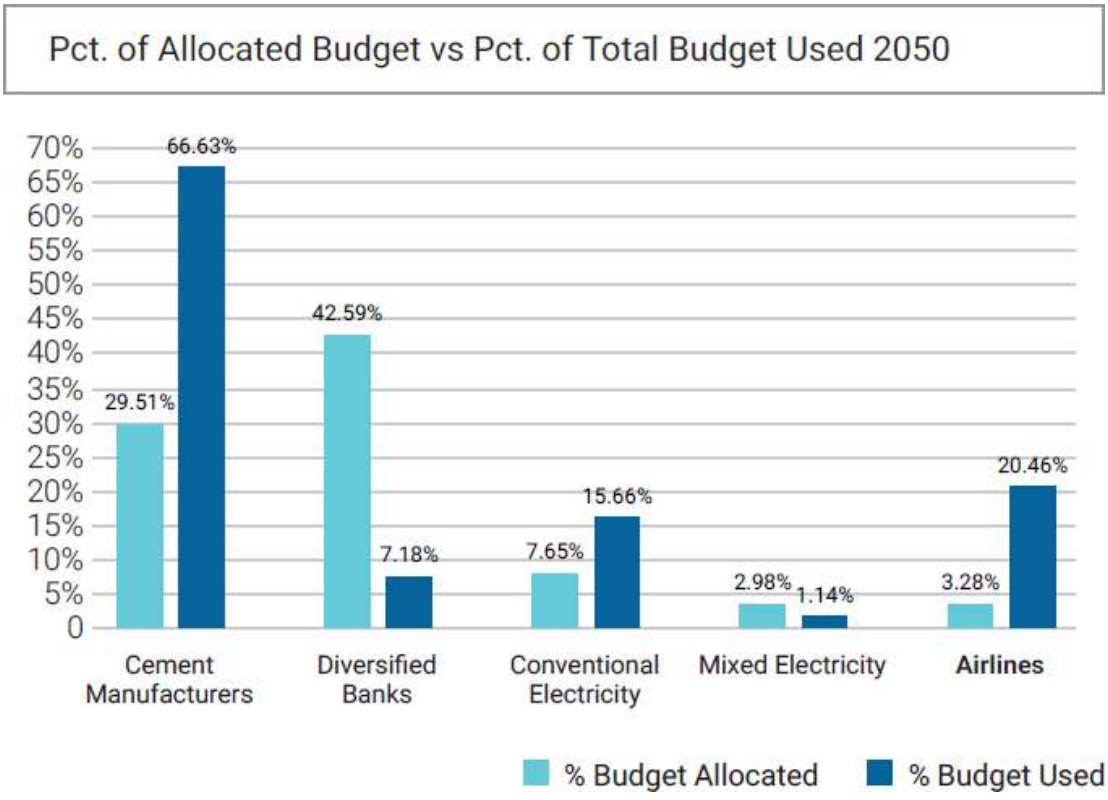
Source: ISS Climate

Emissions in the ASEAN market would exceed the upper limit allowed by SDS in 2026, resulting in temperatures rising to 3.4 ° C by 2050. In the industry, materials and utilities make a large contribution to emissions.



Source: ISS Climate

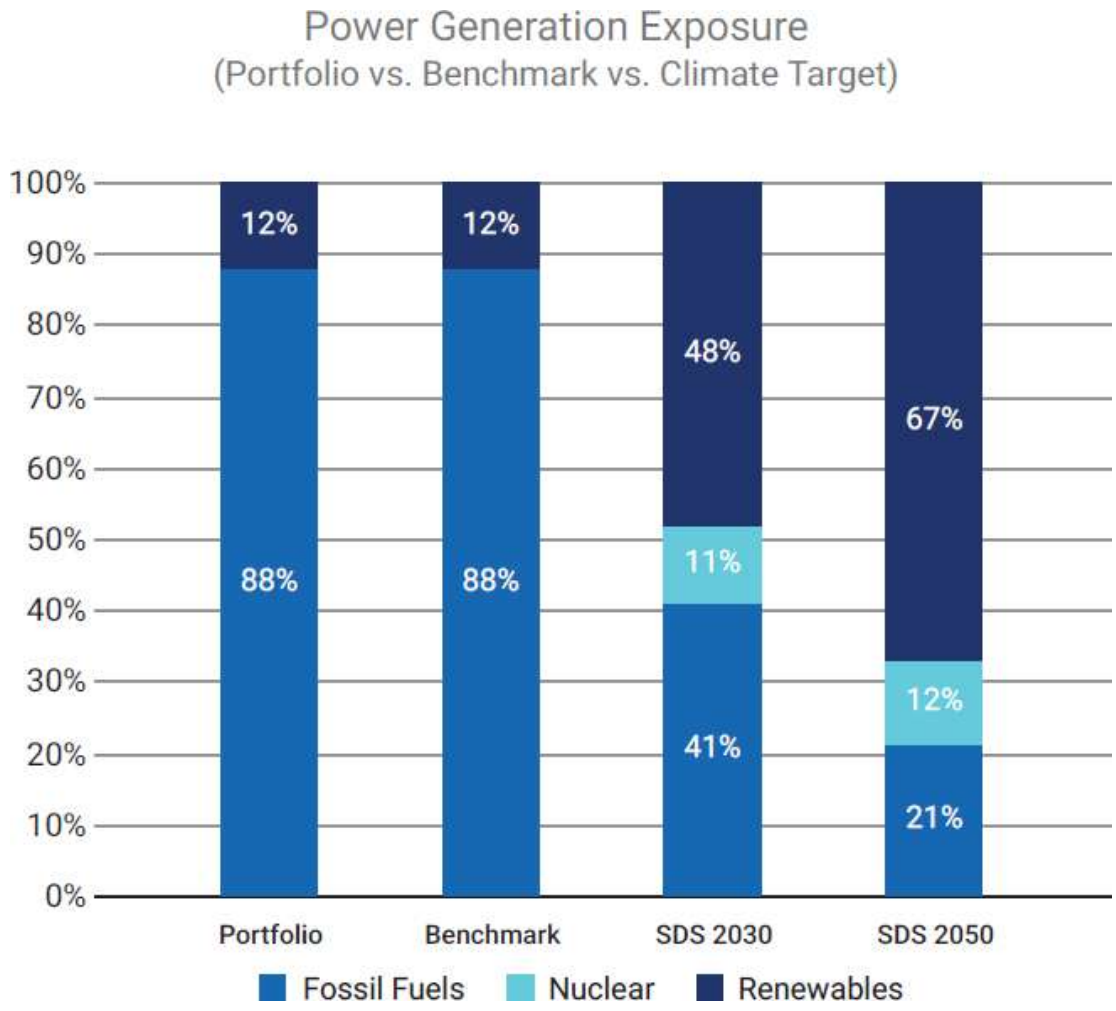
In order to transition, ASEAN companies need to commit to alignment with international climate goals and demonstrate future progress. Currently 11% of the ASEAN equity portfolio's value is committed to such a goal. This includes ambitious targets set by the companies as well as committed and approved Science Based Targets (SBT). While commitments are not a guarantee to reach a goal, the 74% of the portfolio without a goal is unlikely to transition and should receive special attention from a climate risk conscious investor.



Source: ISS Climate

The budget allocated to the ASEAN equity portfolio by SBT is dependent on the portfolio companies. The graph above compares the percent of the portfolio's SDS budget allocated to a defined sub-sector compared to the percent of the portfolio's budget used within the

same sub-sector for the years 2050. Cement manufactures and airlines industries would be predicted to significantly exceed the budget allocated in 2050.



Source: ISS Climate

For a decarbonized future economy, it is key to transition the energy generation mix from fossil to renewable sources. Utilities relying on fossil power production without a transition plan might run a higher risk of getting hit by climate change regulatory measures as well as reputational damages. The graph above compares the energy generation mix of the ASEAN equity portfolio and a Sustainable Development Scenario (SDS) compatible mix in 2030 and 2050, according to the International Energy Agency. ASEAN country would need to reduce fossil fuels to about half by 2030 and about a quarter by 2050, and increase renewable energy to about four times by 2030 and nearly six times by 2050.

For the reference, an analysis result of each country in MSCI ASEAN equity indices as of the end of August of 2021 is as follows:

	Year exceeding the upper limit allowed by SDS	Potential temperature increase by 2050 suggested by constituent companies of each country indices
Indonesia	2021	6°C
Philippines	2021	6°C
Malaysia	2027	2.7°C
Singapore	2033	3.3°C
Thai	2039	1.8°C
Vietnam	2021	5.8°C

Source: ISS Climate

4. What ASEAN should do

As global investors increasingly manage their portfolios in accordance with the Paris Agreement, we predict that it will be harder for international investment capital to inflow to the AMS without a change in the current situation. Even where capital is available, pricing may be higher to reflect perceived climate risk. In order to avoid this, it is necessary to understand from what perspective investors will select investment targets going forward.

Apart from risk/return, international investors use the GHG emissions of investee companies when selecting investment targets from the perspective of climate change, and the scope of the emission includes "Scope 3", which is the emission of the entire supply chain, in addition to "Scope 1" and "Scope 2" as the emission from the activities of investee companies. Regarding the emissions of Scope 3, the basic concept and measurement / reporting method is organized in "the Corporate Value Chains Accounting and Reporting Standard (Scope 3

Standards)", which was published in 2011 by the GHG Protocol, an international organization. Among them, the amount of emissions from the companies to which financial institutions invest and finance is called "Category 15". Based on the practice of financial institutions and Scope 3 standard, "The Global GHG Accounting and Reporting Standard" (PCAF standard) for the financial industry was announced in November 2020, by embodying and developing the measurement method of "Category 15 of Scope 3". PCAF is an abbreviation of "Partnership for Carbon Accounting Financials" and is an initiative launched in 2015 with the aim of developing and disseminating standards for measuring and reporting GHG emissions of investees. As of August 2021, 146 financial institutions in 44 countries are members of PCAF, and the total assets of the member reach $ 47.2 trillion.

Financial institutions that adopt the PCAF standard need to measure and report the emissions of Scope 1 and Scope 2 of investee companies in all industries. On the other hand, it is required to gradually expand the scope of measurement and reporting of the emission of Scope 3 from some industries. Energy (oil and gas) and mining will be started in 2021, transportation, construction, and materials will be start in 2024, and other industries will be start in 2026. In other words, it is required to prioritize measurement and reporting from industries with high GHG emissions. And this PCAF standard is expected to spread as an international measurement method in the future.

One of the most influential factors to the spread of PCAF is the revised TCFD guidance, which was publicly consulted from June to July 2021. The revised draft requires financial institutions to measure and report the emissions of Scope 3 of the investee companies and to set and verify reduction targets according to the PCAF standard. A revised version of the TCFD Disclosure Guidance is scheduled to be published in the fall of 2021, but it is highly likely that the PCAF standard will become an international standard for scope 3 measurement and reporting in the future. As a result, it is expected that the number of financial institutions aiming to reduce the GHG emissions of Scope 3 of the investee companies to net zero will increase in the future.

Similarly, the SBT Initiative, which certifies corporate reduction targets in line with the Paris Agreement, published a pilot version of the target guidance for financial institutions in October 2020, which shows the setting criteria for targeting the emission reduction of Scope 3 of the investee companies. This pilot version of the guidance also requires financial institutions to set reduction targets for each asset class and major industry after measuring the emissions of scope 3 of the investee companies by using the PCAF standard. On top of

that, financial institutions are requires to encourage investee companies to reduce GHG emission or set the reduction target, so that the emission of the portfolio by industry will match the scenario of the SBT initiative's target of less than 2 ° C or 1.5 ° C for each industry.

Based on the above, the following are required in order for attracting international investment and financing with aiming the ambitious climate targets in ASEAN countries.

1. Disclosure of GHG emissions of Scope 3 based on PCAF standards
2. Setting emission reduction targets consistent with the Paris Agreement
3. Engagement with financial institutions to set emission targets
4. Enhancement of information disclosure that enables engagement by financial institutions
5. Formulate a transition plan to achieve emission reduction targets

This is especially important in high-emission industries such as materials and the utility sector, as seen in scenario analysis.

5. An ASEAN Taxonomy for Sustainable Finance

While it is important for individual AMS to consider the development of their own domestic sustainable financing markets, and to consider the adoption of country specific taxonomies to support this, there is also a need within ASEAN to be aligned on underlying principles and to have a common language for labelling economic activities and investments. Historically this has been recognized through organisations such as the ASEAN Capital Markets Forum which has developed regional standards for green, social and sustainable bonds. An ASEAN Taxonomy is a logical next step in this journey, as reflected in the establishment of the ASEAN Taxonomy Board and the publication of Version 1 of the ASEAN Taxonomy for Sustainable Finance published by the ASEAN Taxonomy Board in November of 2021 ("ATSF").

We believe that AMS and entities already provide an attractive investment environment, and we believe that investors understand the particular challenges faced by the region.

➢ Purpose and scope of ASEAN taxonomy

We believe that the AMS need to define the purpose and scope of application of an ASEAN Taxonomy, and consult with stakeholders such as companies and investors who are trying to

promote sustainable finance in ASEAN. We note that this consultation is a key element on the ATSF. We believe that the following points in particular should be considered:

- Design a taxonomy that will guide the AMS in promoting sustainable finance in their own countries.
- To align the investment with the purpose of climate in accordance with the provisions described in Article 2, Paragraph 1 (c) of the Paris Agreement: Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. In other words, the purpose is to transform finance into one that is in line with the purpose of climate change.
- The realization of the Paris Agreement cannot be achieved by the treaty alone. It is important to work with non-governmental players as well, and financial professionals are very important players. Building a taxonomy is a great route to reach the goal through non-government players. Therefore, the taxonomy in the AMS to needs to contribute to the decision-making of investors and capital market participants.
- Ultimately, as the taxonomy will be linked to information disclosure by financial institutions, information disclosure in line with the taxonomy will need to be established as an ASEAN wide rule, and sustainable finance for the AMS led by financial institutions will be promoted.

➢ **Basic principles**

We believe that the AMS need to formulate Taxonomy in consideration of the following basic principles.

- Investment and financing in the AMS need to be made after identifying materiality (important environmental issues) and significance (significant impact on the environment).
- Investing and financing in the AMS need to be made after identifying what kind of projects, assets, and activities have a significant adverse effect on the environment, and what kind of important issues the environmental changes bring to their own countries and their own companies. The overarching principle should be “Do No Significant Harm”.
- Investment and financing in ASEAN countries need to be made after indicating the extent to which each economic activity has an adverse effect, whether it is at the world level, national level, or local level.
- Investment and financing in ASEAN countries need to be made by paying attention to

the expected amount of GHG emission reduction in the future.

- **Framework for identifying climate change risks and opportunities in ASEAN**

ASEAN countries need establish a framework for identifying the targets of investees in terms of transitions regarding climate change risks and opportunities in ASEAN countries in accordance with the Paris Agreement. For the concept of transitions, the recommendations from the Transitions WG should be referred to.

- **A framework for assessing, monitoring and reporting the impact of investees on climate change targets**

ASEAN countries need to develop frameworks for impact assessment, monitoring, reporting and others in investment and financing to achieve climate change targets. For details, they should refer to the recommendations from the Information Disclosure WG.

6. Addressing the ASEAN Challenges Through a Flexible Approach

ASEAN faces challenges in the implementation of a common regional taxonomy due to the differing levels of economic and functional development of the AMS and their individual development and climate priorities. Any taxonomy needs to balance these factors against the desire to attract investment and to give confidence about a path to transition.

ATSF explicitly recognizes these challenges and further categorises them under the headings of Geographic Limitations, Funding Gaps and Hurdles, Technology Capacity Gaps, R&D Gaps, Financial Markets/Engagement Capacity, Transition of Economy Challenges and General Lack of Awareness and Data. We note that at least one AMS recognizes difficulties with each of these categories of challenges.

In preparing this white paper, we have considered three approaches to addressing these challenges in a taxonomy. There are of course variations to these approaches, and they do not purport to be exhaustive, but we believe that they encompass a good spectrum of possible approaches to the challenges of an ASEAN wide taxonomy.

- **Principles Based Taxonomy with Optional Rules Based Protocol**

We note that this is the approach adopted in the ATSF, through the concepts of a Foundation Framework and a Plus Standard.

This approach contemplates an ASEAN wide principles based taxonomy without specific targets with an optional rules based protocol which can be adopted by individual AMS and entities. The principles would need to acceptable to all AMS day one and the optional rules based protocol sufficiently ambitious to attract investors with a focus on sustainability. The benefits of such a system are that it is simple and embraces some path to more ambitious goals while recognizing the realities of differential development.

While the Foundation Framework in the ATSF is anchored around desirable principles (decarbonisation, avoiding carbon lock in, doing no significant harm and encouraging mitigation), a principles based taxonomy may not satisfy investor demand for measurable goals, and in the long term, they will want to understand the specific path to adoption of the Plus Standard.

We note that the Plus Standard contemplates a rules based protocol which is itself tiered with regard to single activity to reflect different starting points. The ATSF describes this as a stacked approach and contemplates that the Entry and Intermediate tiers will be retired at some point in time, leaving only an Advanced tier. As the Advanced tier would ideally track closely to international taxonomies, including the EU taxonomy, this may preclude its adoption by certain AMS or entities, even where they have ambitions to make measurable change. In practice, these AMS and entities may see reduced attractiveness to the ATSF over the longer term if they are forced out of the Entry or Intermediate tier (or are in fact unable to qualify for either with respect to a specific activity). This could have the undesirable outcome of "bumping" certain AMS and entities out of compliance.

An alternative tiered approach is considered below.

- **Multi-Tiered Rules Based Approach**

This approach addresses the diversity of development among AMS and entities by adopting an increasingly strict set of rules based tiers with specific sectoral targets and rules. The principal difference between this and the ATSF is that it does not include the Foundation Framework. This addresses the concern identified above regarding the extent to which investors will give credit to the Foundation Framework.

The requirement for the Foundation Framework is obviated by setting the lowest tier at a

level which is acceptable to all the AMS for all specified activities, with an intermediate tier which represents a significant ambition for the majority of the AMS and a top tier which is close in alignment to international taxonomies (including the EU taxonomy). While significant work will be required to determine the appropriate levels for each activity in each tier (and presumably a science based approach will be extensively adopted), this approach has the benefits of being entirely rules based, measurable and can be tied to a story of transition. The AMS and entities would be free to adopt any tier, to move up tiers over time and could additionally select different tiers for different sectors of economic activity. In the latter case, they would not be required to adopt the requirements of that tier across the board. This gives the maximum flexibility to put the best possible case to investors. Unlike the Plus Standard we do not believe that it will be necessary to retire the two bottom level tiers, although their acceptability to investors may decline over time, and the expectation is that the AMS and entities will be incentivized to up tier over time.

- **Scorecard Based Approach**

This approach more heavily leverages the work undertaken by the EU in the development of its taxonomy by adopting a process of scoring against the EU taxonomy to reflect how a particular AMS or entity measures against that taxonomy. ASEAN would essentially implement a method for measuring against the EU taxonomy which results in a percentage score, with 100 representing complete alignment with the EU. This would allow investors to make a determination based on their views regarding an acceptable score for a particular jurisdiction or entity (in the same manner they do, for example with credit ratings) and would allow for easy comparison between different opportunities, including in the same jurisdiction. The process of scoring could be undertaken by the usual second party opinion providers. The score would be accompanied by sufficient commentary to provide investors with the necessary context to allow them to properly evaluate the score. The score could also be part of the pricing equation for the transaction, and a common yardstick / reference point to measure progress of AMS and industries as well.

- **Conclusions**

We believe that any one of these approaches can work and would achieve the outcomes of ensuring that capital flows to the region, the AMS and entities are incentivized to seek investments that will mitigate climate change and that investors have a clear framework

against which to make an investment decision. Similarly, they can all achieve the ASEAN Taxonomy Board's objective of serving as a common building block to enable an orderly transition and foster sustainable finance.

Given the requirement for a taxonomy to also drive transformation in the real economy, and ultimately to facilitate a virtuous cycle, we believe that it is desirable that all AMS and entities adopt a rules based taxonomy as quickly as possible. While we understand the reasons for the Foundation Framework, and we accept that investors will allow significant flexibility for AMS and entities to adopt standards which today are less than the "gold standard" provided by taxonomies like the EU Taxonomy, it is our expectation that investors will prefer a taxonomy which adopts credible science based targets.

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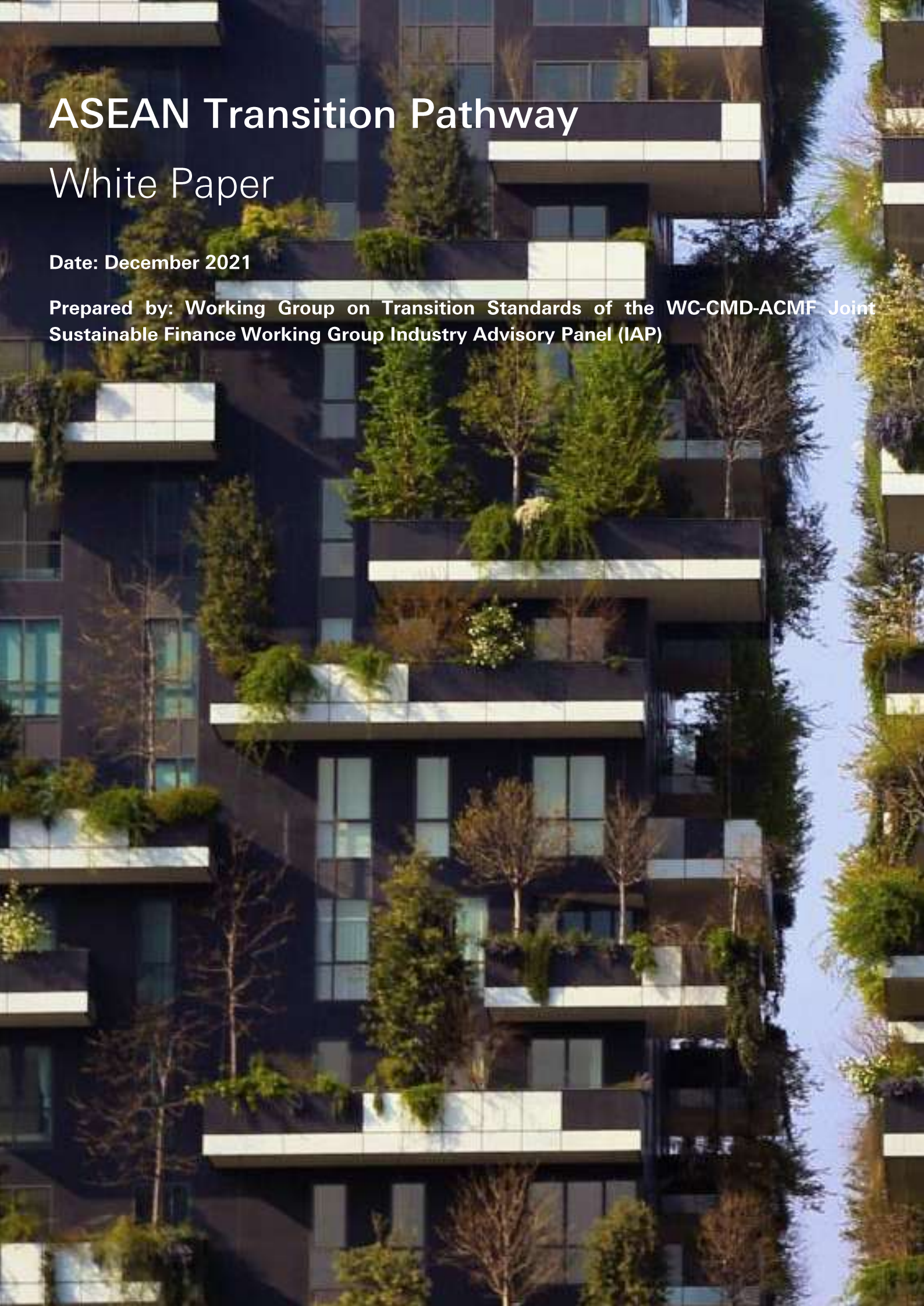

ASEAN Transition Pathway

White Paper

Date: December 2021

Prepared by: Working Group on Transition Standards of the WC-CMD-ACMF Joint Sustainable Finance Working Group Industry Advisory Panel (IAP)

Working Group on Transition Standards

Chaired by HSBC

Working Group Members:

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- ICMA
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This report was put together with the collaboration of a number of sister working groups under the Industry Advisory Panel, for which thee authors wish to express their thanks. These are the working groups on ASEAN Sustainable Finance Taxonomy, Disclosures, and Strengthening Demand and Supply for Sustainable Finance.

Executive Summary

The challenge is urgent…

The recent IPCC report had been described as the last chance to heed the wake-up call for the planet. It leaves no doubt over the role of human activity in contributing to climate change. This has given rise to weather and climate extremes, and to sea level rise.

The IPCC also find that temperature rises are effectively locked-in until at least the middle of this century. Other key findings are that every fraction of a degree really matters leading to dangerous and costly impacts. And that that carbon sinks — land and oceans — are at great risk. They currently absorb more than half of the carbon dioxide the world emits, but become less effective at absorbing CO2 as emissions increase.

The world's remaining carbon budget consistent with 1.5 degrees C is only 400 gigatonnes of carbon dioxide (GtCO2), as of 2020. Assuming recent global emissions levels this amounts to about 10 years before we exhaust the budget.

So it's clear that global warming of 1.5 degrees and 2 degrees will be exceeded unless deep reductions in CO2 and other greenhouse gas emissions are made in the coming decades. Left unchecked, the impact would be profound with widespread changes to habitability, quality of life, economic growth and development.

This is a vital agenda for ASEAN. By 2100 it is projected that rising sea-levels will affect 436 million people living near the region's coastlines.

…but there is still time if we act now.

All regions of the world have a role to play in supporting the transition to a low carbon economy. But the challenge varies across regions and economies at different stages of development.

ASEAN GDP per capita stands at US$ 4,849[i] compared to, for example, an EU average of US$ 34,129.[ii] And the ASEAN average masks a huge variation from Myanmar at US$ 1,423 to Singapore at US$64,103. So the scale of the challenge is of a different order.

It is vital that global policy makers allow for these differences within a coherent framework and consistent approach.

A Credible Transition Pathway

While the ASEAN transition pathway does not need to be identical to other regions, it does need to be credible if the international finance community is to fully support the transition. The following factors should underpin any credible transition plan:

- **Destination Net-Zero.** ASEAN and most of its member states have not yet committed to net-zero emissions. The politics and practicalities driving this are complex in the context of a *Just Transition*.

  Nevertheless, in the face of the IPCC findings, the momentum toward net-zero commitments by countries, regional blocks and major private sector players is likely to prove irresistible. It is likely that ASEAN and its member states will, in time, commit to net-zero as a destination.

  The sooner this is done the better for signaling and planning purposes. Regardless, the lack of a public commitment to net-zero should not inhibit the shorter term planning necessary to mobilise businesses and finance.

- **Scale and Pace of transition pathway.** ASEAN economies need to manage continued growth and raise the living standards of their people while decarbonising. This is likely to mean the transition is more back-end loaded than in advanced economies. However, this does not detract from the importance of setting short term targets and identifying key inflection points in the transition to low carbon.

  For example, developing economies may argue that emissions will need to increase in the short term as their economies grow (via the use of traditional technologies for scalability and cost reasons). They can acknowledge this but state they will still focus on emissions intensity, identifying a timeline for reaching peak emissions and clarifying the intention to reduce absolute emissions thereafter.

  Further work is required on how to use credible measures of decarbonisation burden share in shaping transition plans at the sectoral level. Potential reference points include sectoral contribution to a country's Paris commitment, Nationally Determined Contributions (NDCs), or decarbonisation burden share as set out by the IPCC or NGFS. Climate Action Tracker provides assessments of country NDCs and whether they are Paris-aligned and now uses some explicit assumptions around "fair share". But this is just one of many ways of allocating share & pace of action.

- **Establish, publish and regularly update a Transition Plan.** The very existence of an ASEAN plan or framework is of critical importance.

A fragmented approach to transition across ASEAN members would risk missing out on finance that would follow rules set in other regions. At the same time a coherent framework needs to capture large differences in economic development among member states. The watchwords should be clarity and simplicity. A tiered approach could work provided the criteria for these tiers incentivise progress and evolve to reflect climate science and technological progress.

But there is a premium on speed. The vanguard work carried out in the EU is a valuable reference point for work in other regions. So setting out legitimate differences in approach, timing, or pace of transition must be done as soon as possible if these differences are to be recognised and adopted by the broader financial community.

- **Adopt internationally recognised metrics and standards.** Use the metrics and methodologies being adopted by the international community and other policy centres.

- **Plan to adopt new technologies.** Build on wider sectoral shifts wherever possible, particularly the take-up of new transformative technologies.

- **Strict conditionality around use of carbon offsets.** In a glide path that sees short term increases in emissions, and with some residual emissions likely to factor beyond the transition, carbon offsets can play a role. But these must be part of a credible decarbonisation pathway.

- **The plan should apply to sectors and corporate entities as well as activities.** The classification of economic activities into five different categories – "near zero"; "pathway to zero"; "no pathway to zero"; "interim" and "stranded" - as proposed by the Climate Bonds Initiative, may be helpful in this regard.

  Likewise, the treatment of an activity under a transition taxonomy in accordance with its intermediate and ultimate compatibility with net-zero, for example:

  - ***Pathway to zero*** activities must decarbonize and transition to green in the time frame adopted by countries to meet net-zero destination.

  - ***Interim activities*** that drive short term emissions reductions but will then be phased out; and

  - ***Stranded activities*** to be phased out as quickly as possible and replaced by low carbon alternatives.

These categorisations can be helpful in delineating the transition challenge in a way that is easy to understand and operationalise.

Key components of an ASEAN energy sector transition

According to the International Energy Authority (IEA), under current plans, emissions from emerging and developing economies are projected to grow by 5 gigatonnes (Gt) over the next two decades. In contrast, they are projected to fall by 2 Gt in advanced economies and to plateau in China. This report focuses on the energy sector transition as it is the highest GHG-emitting sector.

At the same time, annual investments across all parts of the energy sector in developing and emerging markets have fallen by around 20% since 2016, in part because of some persistent challenges in mobilising finance for clean energy projects. So an unprecedented increase in clean energy spending is required to put countries on a pathway towards Paris-Aligned or net-zero emissions.

ASEAN needs to provide the necessary energy for development while decarbonising its economies. Fossil fuels are expected to dominate the energy mix in ASEAN between 2030 and 2040, including continued reliance on coal. Greater adoption of renewables and commerciality of decarbonisation technologies will be key to accelerating the energy transition; however, the latter is only expected after 2030.

State owned enterprises dominate the sector and are therefore key actors for governments to influence in dictating the pace of transition. As are multinationals whose supply chains will be forced to transition or risk being left behind.

Drawing on, *inter alia*, the IEA analysis, a common agenda between ASEAN governments would support more ambitious goals. This could include:

- Increasing the share of renewables in energy road maps; accelerating the retirement of coal; and strengthening power grid resilience and flexibility.
- A multi-faceted approach to carbon pricing, for example, carbon taxes and emissions trading scheme(s).
- The coordinated pooling of resources in order to develop public goods to help address shared challenges.
- Collaboration as supply, demand and infrastructure need to move at approximately the same time.

Transition metrics for the energy Sector in ASEAN should cover:

- Emissions milestones and interim targets.
- Change in the energy mix over a period of time.

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- Energy efficiency absolute improvement goals, aligned to targets.
- Percentage targets for the volume of CO2 captured from carbon capture and storage facilities by 2035; and
- The percentage mix of green, blue and grey hydrogen provision, supported.

The Financial Sector Transition

Dynamic and transformative change is underway across the financial sector. It will limit the acceptable exposure to carbon intensive sectors, but it will also increase the appetite to supply credit and investment towards the new technologies and business models central to the transition.

Driving these changes in the financial sector are:

- **Financial industry commitments to net-zero:** For example, the Glasgow Financial Alliance for Net Zero, under the auspices of the UN, brings together 160 firms responsible for assets of over $70 trillion. The initiative aims to accelerate the transition to net zero by 2050 grounded in science through the Science Based Targets Initiative.
- **Investor and client demand:** Demand for ESG funds has increased markedly. And interest in climate change as an investment theme is soaring.
- **Industry codes and principles.** ICMA developed Principles in this area that underpin much of industry activity. These cover Green and Sustainability Bond Principles, and Sustainability Linked Bond Principles. The CBI's Climate Bond Standards play a similar role but are more prescriptive and tailored to the sectoral level. These principles are mirrored in the loan market. ASEAN has moved quickly in this area to produce related standards tailored to activity and investment in the ASEAN region.

  Associated climate-related disclosure standards have been drawn up by industry in the Taskforce on Climate-related Financial Disclosures (TCFD). These standards will increasingly be made mandatory in many countries.
- **Product innovation:** The principles and guidelines above have underpinned innovation in FIs and markets. The bond markets have developed Green, Social or Sustainability bonds tied to Use of Proceeds. These products are mirrored in loans. Supply chain finance is being used to ensure a corporate's own commitments extend to supplier firms.
- **Regulatory expectations and obligations:** The regulatory community through bodies such as the NGFS, Basel and IOSCO, as well as individual regulators, is making

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demands on the industries they regulate in terms of limiting exposure to climate-related risk and stress testing. FIs are responding by factoring climate-related risk into their broader risk methodologies and decision making processes.

- **Government action, including Treaty commitments:** Aside from COP itself, the concept of transition is gradually becoming **enshrined in legally binding instruments.** For example, the provisions of international trade agreements committing states to tackling climate change, and commercial contract clauses requiring counterparts to maintain a sustainability ranking above a certain level.

In addition to these developments wider societal expectations will also shape the role of finance more generally as being part of the solution; not part of the problem.

Taken together, these trends are expected to have a profound and transformative impact on the financial industry, which will feed through to the credit and investment climate for the real economy.

The role of ASEAN Governments and Regulators

ASEAN governments and regulators have been innovators in the development of sustainable finance markets. Many of the directional changes taking place in the financial industry will deliver maximum benefit if they take place in an enabling policy environment. Governments are working on or have already published their own sustainable finance taxonomies, including Bank Negara Malaysia's Climate Change and Principle Based Taxonomy.

ASEAN governments and regulators should consider a diverse range of potential tools to support and encourage transition finance. Key components of that policy landscape are:

- ***Clear and Credible Destination and Pathway***
    - A clear commitment to Paris-Aligned or Net-Zero destination and associated transition pathway as set out above. Absent a net-zero commitment, there will still be a premium on clear short term planning as it will demonstrate an appetite to ultimately develop a long term strategy.
    - The use of internationally recognised metrics by which to judge progress.
    - Embrace international standards on reporting wherever possible, for example those emerging from the newly established Sustainability Accounting Board.
    - Establish transparent and high level political oversight of ASEAN's transition. This will provide confidence. For example, having Transition Planning as a

standing item at the ASEAN Leaders Summit would send a clear signal to the market.

- ***Regulatory Change to underpin transition***
    - Availability of high quality data and a clear timeline to mandatory climate-related disclosure in order that firms can prepare to measure and collect the data.
    - Encouragement and adoption of product standards consistent with international best practice.
    - Consideration of sustainability factors in prudential regulation of finance.
- ***Broader change to incentivise transition***
    - Broader incentives, including fiscal, to drive behavior and encourage sustainable capital market issuance.
    - Government participation in sustainable finance markets. Government issuance of sustainable bonds provides confidence to national corporate issuers, a benchmark for sustainability frameworks and reporting. It can also encourage, through the issuance process and investor engagement, stronger environmental policies and transparency on climate transition
    - Greater use of blended finance. Provision of blended capital from development finance institutions is critical to attract private investment to markets and sectors at early stages of readiness – or in situations where the risks are hard to mitigate, such as energy access projects for vulnerable communities or in remote areas.
    - Government encouragement for key industry players to take part in regional and international initiatives aimed at building capacity and raising standards. For example, the IFC's Alliance for Green Commercial Banks in Asia, and the Glasgow Financial Alliance for Net Zero under the auspices of the UN.
    - Embedding climate transition principles in government R&D investment and procurement policy.
    - Setting a price for carbon and facilitating credible compliance and voluntary carbon offset markets.

Next Steps

Based on feedback from the ASEAN Taxonomy Board and WC-CMD-ACMF Joint Sustainable Finance Working Group, the working group on Transition Standards will seek to build out some of the proposals and analysis in this interim report. In particular, the methodological approach to link "burden share" of decarbonisation and the pace and scale of transition requires further work.

Post COP 26, the members of the IAP stand ready to further develop thinking on the Transition. That work inevitably extends beyond the expertise held in the financial sector. In time, inputs from a wider group of stakeholders are likely to be needed, including academics, policy makers and sectoral specialists. As such, it could be worth considering now whether and how to bring a wider group of stakeholders into the industry outreach process.

Since the circulation of this report, ASEAN has published its taxonomy version 1. The working group welcomes its publication. It's an important step in setting out a framework that can accommodate the needs of ASEAN Members and contribute to the international discussion on how to make taxonomy and transition coherent internationally. The ASEAN taxonomy reflects a number of the recommendations contained in this report. Other recommendations are relevant for the next phase of the ASEAN taxonomy and transition work on which we look forward to engaging with the ASEAN Taxonomy Board and related Committees.

Introduction

The recent Intergovernmental Panel on Climate Change (IPCC) report had been described as the last chance to heed the wake-up call for the planet.

It is now unequivocal that human-caused emissions, such as from burning fossil fuels and cutting down trees, are responsible for recent warming. Of the 1.1 degrees C of warming seen since the pre-industrial era, the IPCC finds that less than 0.1 degrees C is due to natural forces, such as volcanos or variations in the sun.

The IPCC Working Group I sixth assessment report shows that the world will probably reach or exceed 1.5 degrees C of warming within just the next two decades. Whether we limit warming to this level and prevent the most severe climate impacts depends on actions taken this decade. Other key findings of the report are:

- Only with ambitious emissions cuts can the world keep global temperature rise to 1.5 degrees C, the limit scientists say is necessary for preventing the worst climate impacts. Under a high-emissions scenario, the IPCC finds the world may warm by 4.4 degrees C by 2100, with catastrophic results.

- If the world takes a very ambitious action to curb emissions in the 2020s, we can still limit warming to 1.5 degrees C by the end of the century.

- The world's remaining carbon budget — the total amount we can emit and still have a likely chance of limiting warming to 1.5 degrees C — is only 400 gigatonnes of carbon dioxide (GtCO2) as of the beginning of 2020. Assuming recent global emissions levels of 36.4 GtCO2 per annum, this amounts to about 10 years before we exhaust the budget.

- Small-scale efforts won't be sufficient; we'll need rapid, transformational change. However, the IPCC notes that the climate system will not immediately respond to carbon removal. Some impacts, such as sea level rise, will not be reversible for at least several centuries even after emissions fall.

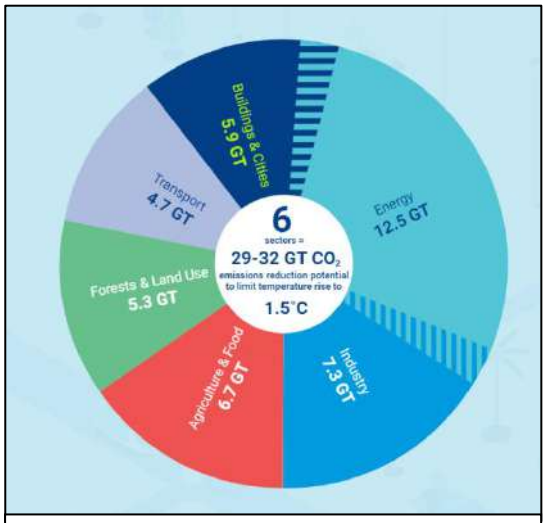
- The IPCC report shows that no region will be left untouched by the impacts of climate change, with enormous human and economic costs that far outweigh the costs of action.

- Every fraction of a degree of warming leads to more dangerous and costly impacts. The report profiles the consequences of the world warming by 1.5 degrees C and how much worse the effects will be if temperatures rise by 2 degrees C or 4 degrees C. Every fraction of a degree of warming really matters — whether related to the intensity and frequency of extreme precipitation, the severity of droughts and heat waves, or the loss of ice and snow. And many consequences of climate change will become irreversible over time, most notably melting ice sheets, rising seas, species loss and more acidic oceans.

- The report also finds that carbon sinks — land and oceans — are at great risk. They currently absorb more than half of the carbon dioxide the world emits, but become less effective at absorbing CO2 as emissions increase. Under some scenarios studied by the IPCC, the land sink eventually turns into a source, emitting CO2 instead of sucking it in. This can lead to runaway warming. This is already evident in the southeast Amazon rainforest, which is no longer a carbon sinks due to a combination of local warming and deforestation.

Meeting Paris Agreement goals requires action on the part of all actors in society across the world. But the key focus is on the policymakers. As most climate pledges are not underpinned by near-term policies and measures, this paper draws out and explores some of the central issues integral to transition pathways for ASEAN Member States (MSs).

Finance is central to facilitate the transition. The paper considers the developing approach to transition in the financial sector. Banks, insurers, asset managers and other providers of capital will be driven by shifting market dynamics and regulatory requirements whilst managing the funds in their remit. The key to success for policymakers is to incentivise the urgent and difficult transition of "Hard-to-Abate (HtA)" sectors to dovetail with the supply of finance from both public and private sectors.



Source: UNEP The Six Sector Solution to Climate Change, 2021

Structure of the Paper

Chapter One of this paper sets out the key considerations that policymakers will need to grapple with in approaching the transition. It notes the most important sectors involved in ASEAN economies' transition. The relative importance of these will vary between countries. Complimentary work is produced by the Climate Bonds Initiative (CBI) looking at the issues underlying the transition in 6 HtA sectors. To avoid overlap, this paper aims to illustrate issues around the transition pathway by focusing on one of the key sectors – the energy sector that is associated with around three quarters of the current emissions.

Chapter Two discusses transition in the financial sector. It highlights the efforts being made in individual organisations to achieve net-zero and the various drivers of a net-zero approach for the Financial Industry (FI).

Chapter Three looks at what these trends mean for the financial sector's support for the transition in the real economy. And what measures would be helpful from the official sector in order to provide a supportive enabling environment for the supply of credit and investment.

Chapter 1: Destination, Transition Pathway and the Energy Sector

The Destination

As signatories to the Paris Agreement, ASEAN member states have committed to a reduction in Green House Gases (GHG) consistent with a well below 2 degrees temperature rise, and preferably 1.5 degrees. In aggregate, this requires economic activity to become Paris-aligned, with net zero emissions reached between 2050 and 2070.

According to IPCC, net-zero emissions will be achieved when all GHG emissions released by humans are counterbalanced by removing GHGs from the atmosphere in a process known as carbon removal. This entails reducing human-caused emissions as much as possible, and balancing remaining GHGs with an equivalent amount of carbon removal.

The latest science suggests that reaching the Paris Agreement's temperature goals will require reaching net-zero emissions on the following timelines:

- In scenarios limiting warming to 1.5 degrees C, carbon dioxide (CO2) needs to reach net-zero between 2044 and 2052, and total GHG emissions must reach net-zero between 2063 and 2068. Reaching net zero earlier in the range avoids a risk of temporarily overshooting 1.5 degrees C. Reaching the top of the range almost guarantees surpassing 1.5 degrees C for some time before it eventually drops down.
- In scenarios limiting warming to 2 degrees C, CO2 needs to reach net zero by 2070 (for a 66% likelihood of limiting warming to 2 degrees C) to 2085 (with a 50-66% likelihood). Total GHG emissions must reach net-zero by the end of the century or beyond.

The Special Report on Global Warming of 1.5°C, from IPCC, finds that if the world reaches net-zero emissions by 2040, the chance of limiting warming to 1.5 degrees C is considerably higher. The sooner emissions peak, and the lower they are at that point, the more realistic achieving net zero becomes. This would also create less reliance on carbon removal in the second half of the century.

This does not suggest that all countries need to reach net-zero emissions at the same time. The precise "burden share" of the global reduction required is of course a political as well as technical question. Aside from significant GDP per capita differences across ASEAN member states, the cost of sovereign borrowing will also be influenced by the extent to which these countries are exposed to climate risk.

However, The momentum toward net-zero commitments by countries, regional blocks and major private sector players is likely to prove irresistible. Hence ASEAN and its member states will, in time, need to make firm commitments to net-zero as a destination. However, the pace and scale of the transition as well timeline to reach the end goal is likely to vary for each member state to reflect national differences.

The Transition Pathway

To cater for the diversity of ASEAN economies, a practical approach to transition should provide flexibility to address the specificities of the economies within a coherent ASEAN-wide framework.

The six key sectors that have been identified by the United Nations Environmental Program (UNEP) as key to the transition are: energy, industry, agriculture and food, forests and land use, transport, building and cities.[iii]

In designing the appropriate transition pathway, policymakers are likely to consider:

1. Determining an ***appropriate scale/level of decarbonisation ambition*** for each sector, including the targeted end state and key interim milestones.

2. Putting in place appropriate ***transition metrics*** to measure the progress of transition.

3. Identifying key ***transition challenges*** for each sector in ASEAN and the ASEAN member country context, and proposing solutions to these challenges.

4. Identifying ***actions by policymakers that are required to stimulate the transition***, including accelerating finance, providing investment incentives and tax/price incentives for innovation or enhancements of the regulatory framework (while managing the potential economic, technological and demographic impact during the transition journey).

5. Implementing ***flanking policies*** to mitigate any social impacts during the transition journey, for example, in the area of re-skilling and developing new industries.

Key Features of Nationally Determined Contributions (NDCs) for ASEAN

ASEAN countries have prepared and communicated NDCs to reduce GHG emissions with targets for medium term or long term. The targets are defined individually by countries using varied metrics and sectors, hence these are not comparable. *A uniform definition of targets would allow for benchmarking amongst ASEAN geographies along with tracking along transition pathways.*

In terms of the 2^0 or 1.5^0 metrics as per the Paris Agreement, ASEAN targets are not well-defined and largely not in line to achieve the reductions by the turn of the century. *Standard net-zero commitments at stronger levels, along with specific transition pathways, would reflect an enhanced commitment to the Paris Agreement and improve investments in the region.* Most countries highlight higher commitments in case international support is provided through cooperation under the Paris Agreement. *This reinforces the requirement for collaboration within the region and industries to effectively implement transition pathways.*

ASEAN geographies are considering market-based carbon pricing tools, ***wherein a uniform approach across ASEAN countries will help create a stable trading market in the region.***

Member State	NDC Commitments[iv]
Vietnam	▪ With domestic resources, reduce total GHG emissions by 7.3% by 2025 (53 $MtCO_2e$) and about 9% by 2030 (83.9 $MtCO_2e$) compared to BAU scenario (base 2014). The emissions under the BAU scenario are estimated to be 528.4 $MtCO_2e$ in 2020, 726.2 $MtCO_2e$ in 2025, and 927.9 $MtCO_2e$ of CO2eq in 2030. ▪ Contribution can be increased by up to 25% with international support through bilateral and multicultural cooperation and implementation of new mechanisms in Paris Agreement. Vietnam has announced carbon emission neutrality by 2050 during the recent COP26, along with a roadmap to reduce coal-fired power generation.
Thailand	▪ Reduce GHG emissions by 20% by 2030 from projected BAU level of 555 $MtCO_2e$ – these will be implemented through NDC Roadmap Mitigation 2021-2030. BAU projections are based with 2005 as base year. ▪ Contribution can increase up to 25% subject to enhanced access to 'technology development and transfer, financial resources and capacity building support. ▪ Thailand is developing a Long-term Low Greenhouse Gas Emission Development Strategy (LT-LEDS) designed to help Thailand achieve sustainable development, low carbon growth, and climate change resilience by 2050. Extending NDC scenario to 2050, Thailand shows 30.4% reduction from BAU emissions and plans for a 'low carbon' society.

	Under its LT-LEDS, Thailand announced at COP26 that it aims to reach carbon neutrality in 2050 and net zero carbon emissions by 2065.
Singapore	▪ Absolute GHG emissions limitation target to peak GHG emissions at 65 $MtCO_2e$ around 2030. ▪ Other Commitments: Reduce emissions by 50% from their peak in 2030 to 33 MtCO2e by 2050 and net-zero as soon as viable in second half of century under Long-Term Low Emissions Development Strategy (LEDs).
Philippines	▪ 2.71% reduction in projected BAU cumulative GHG emissions of 3,340.3 $MtCO_2e$ for period 2020 to 2030. ▪ 72.29% is conditional on support or means of implementation under the Paris Agreement.
Myanmar	▪ Total emissions reductions of 244.52 $MtCO_2e$ by 2030 by increasing the share of renewable energy to 39% and reducing net emissions from the forestry sector by 25%. ▪ Total emissions reductions of 414.75 $MtCO_2e$ by 2030 subject to conditions of international finance and technical support by 2030.
Malaysia	▪ Carbon intensity (against GDP) reduction of 45% in 2030 compared to 2005 level (an increase of 10% from earlier submission). Malaysia has announced goal to become carbon neutral "as early as 2050" along with commitment to stop building new coal-fired power plants.
Laos	▪ 60% GHG emission reductions compared to baseline scenario, or around 62,000 $ktCO_2e$ in absolute terms. ▪ Sector level targets for land use change and forestry; hydropower; energy efficiency; transport. NDC include sector level conditional mitigation scenario based on increased level financial support from developed countries, which would allow to achieve net zero emissions by 2050.
Indonesia	▪ Reduce emissions by 29% by 2030 compared to its BAU level of 2.87 $GtCO_2e$. ▪ Target can be increased to 41% reduction subject to 'availability of international support for finance, technology transfer and development and capacity building. Under its Long-Term Strategy for Low Carbon and Climate Resilience 2050 (LTS-LCCR 2050), Indonesia intends to explore opportunity to rapidly progress towards net-zero emissions in 2060 or sooner.
Cambodia	▪ Emissions reduction (with forestry and land use - FOLU) by 2030 of c. 64.6 $MtCO_2e$/year (41.7% reduction compared to BAU case).
Brunei	▪ Reduction in GHG emissions by 20% relative to Business-As-Usual level of 29.5 MtCO2e by 2030.

Driving the transition

Approaches differ depending on the relative roles of government and the market in driving the transition. Many HtA industry players in the US are keen to let the market determine the pathway (e.g. via carbon trading / pricing) once an overall target is set, as opposed to Government-imposed sectoral targets. But either way, federal policies have not yet been determined to cover the whole economy. The EU, on the other hand, is putting in place an ambitious and granular regulatory framework to guide economic development towards Paris goals. We believe the *Governments of ASEAN member states can stimulate the transition by providing science-based targets on sector-specific pathways across all sectors*. Successful transition metrics could include:

- Using clear **emissions accounting baselines** to set decarbonisation targets by sector to enable net-zero outcomes and enable financial market participants to assess and develop transition plans.

- Providing short and medium term (2030) **sector level and scientifically-aligned emissions targets** across high climate impact sectors in the real economy.

We have used the energy sector to illustrate the challenges that transition entails and the policy choices and trade-offs policy makers are likely to face. Energy is chosen given its association with around three quarters of emissions, according to IEA.

The Transition in the Energy Sector

The energy sector has potential to cut 12.5 Gigatonnes (Gt) of greenhouse gas emissions annually.[v] Humanity already has the technology to deliver this huge reduction by transitioning to renewable energy and being more efficient with the power it consumes. The International Energy Association, in collaboration with the World Bank and World Economic Forum, has produced an informative analysis that maps out the landscape for clean energy finance in emerging and developing economies, and conditions necessary for unleashing clean energy investments.[vi] Priority actions to mobilise the necessary capital to finance clean energy transitions require drive by both corporate and government actors.

South East Asia Landscape

South East Asia (SEA) accounts for less than 5 percent of global emissions and faces the challenges of needing to simultaneously (i) provide the necessary energy for development and (ii) decarbonise its economies.

A significant gap exists between SEA's current energy road map to 2040 and delivering on the Paris Agreement. If fossil fuels are not curtailed, a significant increase in renewables capacity is required on top of the existing pipeline.

The region is fragmented and despite efforts to step up renewables capacity, **fossil fuels are set to dominate the energy mix between 2030 and 2040.** Coal-fired power is required for base load power generation and will continue to increase due to its favourable economics. The role of gas in maintaining grid reliability will also remain critical over the next decade.

The latest IPCC report makes clear the urgency for all countries to reach peak and net zero emissions as soon as possible. However, there is growing international recognition that stricter standards such as those in Europe may not be an appropriate benchmark for ASEAN. This is particularly acute in the energy sector considering the region's growth dynamics and cost of energy issues related to inflation and affordability.

Greater adoption of renewables and commerciality of decarbonisation technologies will be key to accelerating the energy transition. While other regions are expected to drive technological advancement, ASEAN governments can introduce policies that incentivise the early adoption of these technologies.

Widespread 'Net zero' is the end-game

Aside from Laos' 2050 and Indonesia's 2060 targets, net zero ambitions have not yet been established in SEA. Given the current and forecast continued reliance on fossil fuels in these energy roadmaps, there is a strong possibility that the heavy lifting during the journey to net zero may be post 2040. For instance, Singapore has indicated it will only target net zero in the second half of this century.

As a point of reference, in Japan's new 2030 targets, coal is projected to remain a material part of the energy mix as part of its net-zero objective, suggesting that energy security has, at least, an equal weighting with economics and emissions.

ASEAN governments have an opportunity to set (ambitious) national and sub-national net zero objectives and (reasonable) interim targets as a way to spur their economies into action. Public and private sector companies can then align their climate goals with national targets. Key components of the policy approach should cover:

- ***Commercialisation of decarbonisation technologies*** are only expected post 2030. As such, interim emissions targets up to and including 2030 are likely to be pragmatic rather than aspirational as the region will continue to rely on fossil fuels.

- ***State owned enterprises*** ("SOEs", e.g. National Oil and Power Companies) dominate the power and energy sectors in ASEAN and are therefore **key actors** for governments to influence **in dictating the pace of transition**. Governments have historically used SOEs to develop new capabilities in order to address economic and energy challenges. China, for example, has developed energy transition policies around its SOEs, which:

    - control a critical amount of resources, and could scale up decarbonisation efforts by setting net zero targets and stricter standards, and encouraging private sector companies to match their ambitions; and

    - could directly accelerate the transition by rapidly scaling up their (nascent) renewable energy targets.

- ***Multinational companies*** ("MNCs") are forced to **re-imagine their supply chains** in order to reach net zero targets. Supply chains account for an average of 73% of MNC's total emissions. As such, suppliers based in ASEAN will have to follow suit on MNC's transition ambitions or risk being left behind.

A **common agenda between ASEAN governments** will also support more ambitious climate goals, for example:

- Within the energy sector, this could include*: i)* ***increasing the share of renewables*** *in energy road maps; ii)* ***accelerating the retirement of coal;*** *and iii)* ***strengthening power grid resilience and flexibility.***

- A *multi-faceted approach* ***to carbon pricing.*** **For example, national carbon tax regimes** alongside a **regional emissions trading scheme** that covers **100 per cent of energy emissions,** and **recognises** (high quality) **carbon offsets,** would enable ASEAN to compete on a global level. It would also incentivise cleaner consumption patterns and lower emissions.

    - To-date, only 36 per cent of global energy emissions are covered by a carbon tax or an emissions trading scheme. And average carbon prices in most markets are under US$20/T compared to low emissions technologies which require US$100/T.

    - In SEA, a carbon tax of US$3.7 per tonne of CO2 exists in Singapore while Indonesia plans to introduce one priced at US$5.2.

- The **coordinated** *pooling of resources in order to develop public goods* across ASEAN will help address shared challenges in particular noting the regions' vulnerability to the effects of climate change. This could include new technologies, disaster and risk management, and water resource management.
- *Collaboration* is the name of the game as supply, demand and infrastructure need to move at approximately the same time. Timing the market incorrectly could lead to white elephants or costs incurred without commensurate earnings. Another key consideration is that many of the new

technologies and new ways of developing energy involve separate industries and value chains which means cross-sector collaboration will be critical.

- For example, players in the oil industry are working closely with aviation (including engine manufacturers) which makes it easier for them to time the market with their new fuel solutions i.e. there is minimal value in developing synthetic fuels for aviation if the engine manufacturers are not aligned and the airlines are unable to make the economics stack up.
- *Build alliances with regional energy companies.* O&G companies are used to working with competitors on projects (field partnership, unitisation etc.). So there should be cultural and behavioral precedents between the regional national oil companies (NOCs). We would recommend closer participation between the producers and the power companies as their businesses are closely aligned.
- ***Build alliances with Europe's first movers*** – European oil and gas (O&G) and power companies are leading the global market. Many European O&G companies are exiting Asia as the prospects for O&G are less attractive. Developing clear investment strategies and aspirations may attract them back into the region and provide ASEAN with better opportunities to be at the forefront of the transition.

Transition Metrics for the Energy Sector in ASEAN

Transition metrics for the Energy Sector in ASEAN should cover:

1. *Emissions milestones and interim targets.* **There are some methodological choices in framing these:**
   - *Absolute emissions vs. emissions intensity* – all countries should reach net zero emissions; however, the current growth dynamics of ASEAN countries and non-commerciality of decarbonisation technologies are likely to necessitate increases in absolute emissions. **As such, peak emissions should be reached as soon as possible and during this period, reductions in emissions intensity can be prioritised as a means to track and improve emissions efficiency.**

     For example, the global banking community accepts the steel industry's focus on emissions intensity instead of absolute emissions in sustainability linked loans. This is in part due to the non-commerciality of decarbonisation technologies in traditional blast furnace steel-making methods alongside limited scrap availability required for alternative electric arc furnace methods.
   - *Regional vs. national energy sector emissions targets* – ASEAN level emission targets would be ideal, however, they require significant oversight and cross-border agreement. The ASEAN region is fragmented along the lines of economic development and perceived scope to decarbonise – as such, burden sharing and allowances for different decarbonisation pathways can help bridge the gap between more and less developed countries to decarbonise. But the framework should be dynamic, encouraging less developed countries to contribute more meaningfully in time.
   - *ASEAN vs. Europe* – it is generally acknowledged that ASEAN may need a longer time frame than the more mature economies of Europe to reduce emissions. As such the stricter reduction targets in Europe may not be appropriate in ASEAN today, but they are a useful benchmark for what may be appropriate in due course.
2. *Change in the energy mix over a period of time.*
3. *Energy efficiency absolute improvement goals*, aligned to overall sector targets.
4. *Percentage targets for the volume of CO2 captured from carbon capture* and storage facilities by 2035, in order to incentivise their development.
5. The *percentage mix of green, blue and grey hydrogen provision*, supported, for example, by large-scale programmes for the development of green hydrogen to decarbonise heavy industry.

Chapter 2: Financial Industry Transition in ASEAN: own net-zero ambitions and driving transition in the real economy

Understanding Challenges of the Transition

In recent years (and accelerating in recent months), we have observed net-zero commitments being made by governments, as well as commercial actors, including the finance industry, signaling a complete shift of landscape.

- Net-zero commitments on own operations as well as customer portfolios leading to changes in business practices, product offerings, and risk management etc.
- Obligations introduced by governments and regulators on the industry are likely to prevent or reduce the flow of credit to and investment in firms that are not on the transition pathway.
- Increasingly, financial institutions will be seeking to support companies that have a transition pathway that matches their own. For international commercial banks, emissions will soon be recorded and monitored, similar to the way traditional indicators of creditworthiness are monitored now.

It is worth noting that several financial institutions have already resolved to end support for thermal coal (mining, infrastructure and power).

Using its allocation role, FIs (both regulated and unregulated) can direct transition in the corporate sector by investing in and lending to companies that contribute positively to the Sustainable Development Goals (SDGs), and by divesting and ceasing to lend to companies that have a negative impact.

In turn, Governments of ASEAN member states can support the transition by putting in place regulatory policies and incentives that support these goals. Subsidisation (including the withdrawal of subsidies for fossil fuels), capital relief and other measures would to a great extent determine the direction of transition pathways, as well as its speed. Just as it is easier to lend and invest in countries with higher credit ratings, it will be easier to lend and invest in countries that are 'on track' in terms of energy transition.

Financial Industry's Own Net Zero Commitments

Setting a **decarbonisation or net-zero target** is key for embedding the climate change agenda in a FI's strategy. Science Based Targets has developed an approach for target setting by various types of entities, including corporates and financial institutions, based on their structure, size, GHG emissions screening, and the composition of inventory.[vii] These are likely to get significant traction in the industry.

Once a **decarbonisation target** is set, the implementation process involves a range of initiatives to reduce emissions, and other sustainability targets. Activities aimed at implementation of the target can broadly be categorized in three categories:

1. *Reduce, replace, remove self-generated emissions*: This strategy addresses self-generated emissions in three phases, by first reducing carbon emissions from consumption, and then replacing remaining emissions with low-carbon alternatives in line with the Paris Agreement. Remaining emissions that cannot be reduced or replaced can be removed by procuring high-quality offsets at a later stage.

2. *Vendor/supplier management to reduce emissions in supply chains*: This is an essential element of decarbonising for most FIs, as most emissions are usually concentrated in their supply chains. Supplier emissions can be calculated using a methodology based on supplier spend; vendor management programmes can encourage suppliers to make their own carbon commitments, and to disclose their emissions. Some examples include revisions in vendor onboarding processes, reviewing procurement processes to ensure cascading of the sustainability agenda, review of waste management processes of vendors, etc.

3. *Capacity building*: This is paramount for decarbonisation as it allows for building sustainability into decision-making processes across all areas of a FI. Options for implementation may vary from face-to-face/virtual internal courses, to external online modules.

The Financial Industry Role in driving transition in the real economy

The industry has a critical role in directing and accelerating the transition. If corporates are aware of the shift in approach to risk appetite and climate-related exposure within the finance industry, then alongside their own ESG agenda, this influences corporates' decision-making.

Developments in recent years have made sustainability an increasingly existential issue for many FIs.

A number of trends and action on the part of stakeholders are driving this change, including:

A. Investor and client demand

B. Product innovation

C. Industry codes and principles

D. Regulatory expectations and obligations

E. Government action, including Treaty commitments

A. <u>Investor and Client Demand</u>

Asset owners and retail investors are increasingly seeking to "green" their portfolios. Societal pressure and demand will lead to a shift in investments to states and sectors that are on a solid transition trajectory.

Failure to direct transition in an appropriate and timely manner may result in **reduction in foreign direct investment**, which is vital for ASEAN countries.

By way of illustration, the box on the next page sets out some of the trends in fixed income markets.

Developments in Fixed Income Markets

There is a growing appetite among our clients, especially European institutional clients, for sustainable investing. The main approaches are:

- Integration;
- Exclusions;
- Enhanced ESG overlay (above average ESG score for instance or best in class approach); and
- Impact investing (for example, green bonds, the revenues of which are used to finance green projects).

In addition to the ESG integration approach, there is evidence of European institutional clients asking for exclusions stand-alone strategies. Compared to a conventional mandate, a negative screening or exclusion approach is driven by the clients' particular ethical values or concerns. This kind of strategy excludes certain sectors, companies or countries from an investment universe to avoid controversial business practices and products.

For example, many exclusion strategies avoid investing in industries and activities such as tobacco, weapons, alcohol, nuclear power, gambling and pornography. This is not an exhaustive list. And new exclusion factors have emerged in the past few years that are more climate centric, such as, thermal coal and controversial oil and gas companies. Norms based exclusions can also be based on behaviour that conflicts with sustainability standards, broader environmental standards and/or human rights violations. Usually it requires the tracking of breaches to the UN Global principles and Human Rights or OECD Guidelines for Multinational Enterprises.

We also have European institutional clients asking for above average ESG scores, relative to benchmark. Some clients only focus on one or two pillars of E, S and G. For example, HSBC has recently developed a climate scoring tool to meet one of our client's request for a strategy aiming to support/fund climate transition. They have also worked on a bespoke ESG score biased toward social considerations for another institutional client. They use MSCI and Sustainalytics ESG ratings and have their own proprietary ESG score. These trends are mirrored in the wider international banking community to varying degrees, but with most banks increasingly focusing on it and therefore catching up.

There is a growing demand for climate solutions as a growing proportion of institutional investors in Europe commit to Net Zero (aligned to a 2-degree temperature rise). Their investment strategies focus either on decarbonisation and/or on Paris aligned portfolios.

Methodologically, this can be ascertained using measures of the portfolio carbon intensity and portfolio temperature relative to the 2-degree target (Trucost), or avoided carbon (Carbon 4) can be used. In addition to the launch of a climate fund using a proprietary bespoke climate score, HSBC has also worked on Net Zero strategies with some of their European institutional clients.

The recent EU benchmark regulation (emergence of Climate transition and Paris Aligned benchmarks) is contributing to that trend.

The sustainability goal of an ESG fixed income mandate can be a combination of exclusions, guidelines, above average ESG scores relative to benchmark and a share of green bonds with a report of climate indicators.

B. Product Innovation

Innovation is key to providing the right incentives for clients to make the transition to a low carbon future. The industry is responding with innovative products across credit and debt markets including securitisation of sustainable assets and sustainable infrastructure finance, to bring a wider class of investors to the table.

Greening of Supply Chains

The greening of **supply chains** may leave behind companies that are not on the transition trajectory – especially critical as ASEAN intends to remain a key hub for multi-national corporations and we are witnessing a huge supply chain reordering as a result of COVID. The box below provides an illustration for Walmart, one of the world's largest retailers.

Debt instruments to finance climate transition

Sustainable use-of-proceeds (UoP) bonds have experienced exponential growth since the introduction of the Green Bond Principles (GBP) in 2014 and the Social Bond Principles and Sustainability Bond Guidelines in 2017. Cumulative issuance has surpassed the milestone of USD 2 trillion, marking the wide acceptance and popularity of these products globally.

Green bonds are any type of bond instrument where the proceeds or an equivalent amount will be exclusively applied to finance or re-finance, in part or in full, new and/or existing eligible green projects, and which are aligned with the four core components of the GBP. Sustainability bonds also follow this approach and are any type of bond instrument where the proceeds will be exclusively applied to a combination of eligible green and social projects.

Green bonds and sustainability bonds, as evidenced by over USD 400 billion of annual issuance in 2020, have proven to be useful instruments for issuers to finance projects addressing climate change mitigation and adaptation.

However, in order to meet the objectives of the Paris Agreement, it is crucial to provide products and incentives for companies that will not have obvious green projects to make progress that will be considered to be Transition or Paris-aligned. These include those in 'hard-to-abate' sectors that have to decarbonise and will have to demonstrate credible, material, ambitious commitments and practices for climate transition to investors.

CASE STUDY: A global Sustainable Supply Chain Finance (Sustainable SCF) program to support Walmart's sustainability initiatives.

The client:

Incorporated in Delaware, Walmart is the world's largest retailer and operates a chain of discount department stores and warehouse stores serving more than 100m customers each week through around 11,300 stores under 58 banners in 27 countries and e-commerce websites in 10 countries. Walmart is listed on the New York Stock Exchange with a turnover of USD514bn and market cap of USD288bn.

Client need:

- Provide tiered pricing to Walmart's suppliers to drive their achievement of certain sustainability goals as part of Walmart's "Project Gigaton" and "Sustainability Index Scorecard Program"
- Project Gigaton – a Walmart initiative to remove one billion metric tons (a gigaton) of greenhouse gases from the global supply chain by 2030.
- Sustainability Index Scorecard Program – scorecards that help Walmart benchmark suppliers and encourage continuous improvement in meeting sustainability objectives. These are provided by The Sustainability Consortium (TSC).
- Partner with a bank to provide a supplier financing program linked to and aligned with the client's sustainability ranking of their suppliers
- Support supplier communications and provision of information relating to Sustainable SCF features and benefits

The solution

- Global Sustainable SCF program hubbed in Hong Kong, allowing suppliers who demonstrate meeting relevant sustainability criteria in either initiative to apply for financing rates that take account of meeting such criteria, based on a sustainability rating framework developed by Walmart and TCS
- Tiered Sustainable SCF pricing model tied to suppliers' sustainability ratings, and based on Walmart's credit relationship with HSBC, as is typical in SCF programs
- The Sustainable SCF program is potentially open to all suppliers (excl. Bangladesh) of Walmart in the US, Canada and Mexico taking meaningful efforts towards sustainability

HSBC Role

- Willingness and capability to provide support and collaborate on new initiative to ultimately deliver a sustainability linked SCF program for Walmart
- Robust supplier onboarding capabilities
- Strategic SCF banking partner to Walmart, with the potential of offering pre-shipment financing as part of a holistic supply chain solution.

In response to the growing discussion about how to ensure credibility and integrity of transition finance, ICMA convened a working group on Climate Transition Finance in January 2020 and published the Climate Transition

Finance Handbook (CTF Handbook) in December 2020. The CTF Handbook represents the consensus reached by the more than 80 members of the Climate Transition Finance Working Group including issuers, investors, underwriters, external reviewers and NGOs. The CTF Handbook, as an additional thematic guidance for issuers, can be used in conjunction with any of the Principles like the GBP to issue, for example, green 'transition-themed' bonds.

The CTF Handbook provides clear guidance on the practices, actions and disclosures to be made available when raising funds in debt capital markets for climate transition-related purposes, around four elements:

- Issuer's climate transition strategy and governance;
- Business model environmental materiality;
- Climate transition strategy to be 'science-based' including targets and pathways; and
- Implementation transparency.

Japanese authorities are supportive of this approach of entity-level disclosure for climate transition finance. In May 2021, Japan's Ministry of Economy, Trade and Industry (METI), Financial Services Agency and the Ministry of the Environment published the Basic Guidelines on Climate Transition Finance which explicitly confirms its alignment with the CTF Handbook. Japan's Basic Guidelines establish a position for transition finance in Japan and emphasise the importance of a comprehensive judgment of issuers' 'transition strategies' towards decarbonisation, as well as the reliability and transparency with which those strategies are implemented. To facilitate corporates to adopt the Basic Guidelines, METI also announced that a roadmap for decarbonisation initiatives will be developed for each industrial sector, which companies can refer to in the development of their own strategies and climate change measures.

Aside from UoP Bonds, another type of instrument***, Sustainability-linked Bonds (SLBs),*** which are general corporate purpose bonds, can be used to finance transition. The Sustainability-Linked Bond Principles (SLBP) were published in June 2020 with the aim to further develop the key role that debt markets can play in funding and encouraging companies that contribute to sustainability.

The focus here is more on an issuer's strategy for decarbonisation and its related transition plan, efforts and commitments. With SLBs, the financial and/or structural characteristics can vary depending on whether the issuer achieves predefined sustainability objectives. In that sense, issuers are committing explicitly (including in the bond documentation) to future improvements in sustainability outcome(s) within a predefined timeline. The SLBP have five core components:

- Selection of Key Performance Indicators (KPIs);
- Calibration of Sustainability Performance Targets (SPTs);
- Bond characteristics;
- Reporting;
- Verification.

Since the publication of the SLBP and the European Central Bank (ECB) announcing that it would accept environmentally focused SLBs as collateral, issuance has proliferated to over USD 60bn by August 2021.[viii]

Issuers from very diverse industries, including energy and utility, cement, pulp and paper, chemicals, real estate, airlines, shipping, automotive, telecommunications, luxury products and retail, have set KPIs and SPTs related to GHG emissions for their SLBs.

Thus, UoP bonds, such as green and sustainability bonds, especially if used in conjunction with the CTF Handbook to add a transition theme, and SLBs, on their own or in conjunction with the CTF Handbook to emphasise the transition theme, can provide ideal instruments for financing climate transition.

Examples of combinations of the Principles/CTF Handbook seen in the market include:

- GBP and SLBP: Takamatsu Construction Group issued a sustainability-linked green bond in March 2021, which has a revenue target on contributing to the SDGs and whose proceeds are used to construct a green building.
- GBP and CTF Handbook: Seaspan issued a blue transition bond in July 2021 and earmarks the proceeds to Alternative Fuel Containerships and Marine Vessel Energy Efficiency projects. (N.B. "blue" is also a theme that can be done based on the GBP).
- SLBP and CTF Handbook: Repsol has issued an SLB with KPIs/SPTs of reducing the carbon intensity indicator (scope 1, 2 and 3) by 2025 and 2030 respectively. The transition financing framework is aligned with the CTF Handbook.

Finally, where a transition may have negative impacts for workers and communities, the CTF Handbook recommends that issuers should outline how they have incorporated consideration of a 'just transition' into their climate transition strategy, and may also detail any 'social' expenditures that are considered relevant within the context of transition finance.

To summarise, the thematic guidance for climate transition finance in form of the CTF Handbook can be used in conjunction with all the existing Principles to further define and enable climate transition finance, rather than adding another set of 'transition bond principles' and making the sustainable finance market more crowded with labels. Issuers wanting to label their bonds aligned with the CTF Handbook a "transition bond" can of course still do so.

An overview of the products and related guidance covered by the Principles is depicted in the graph on the next page, and accompanied by a case study.



CASE STUDY: Thai Union's maiden Sustainability-Linked Bond

The Client:

Thai Union Group Public Company Limited (Thai Union) is a Thailand based producer of high quality seafood products. The company was founded in 1977 and has a global workforce of over 44,000 people. The portfolio includes some of the most recognisable market leading brands such as Chicken of the Sea, John West, Petit Navire, Parmentier, Mareblu, King Oscar, and Rügen Fisch, along with Thai-leading brands SEALECT, Fisho, Qfresh, Monori, Bellotta and Marvo.

Client Need:

- Sustainability is intrinsic to Thai Union's culture and mission ("Healthy Living, Healthy Oceans") encapsulated under their sustainability strategy, entitled "SeaChange®", which seeks to drive meaningful improvement not just within Thai Union but also across the entire global seafood industry.
- Thai Union was a prime candidate for ESG financing and wanted to be the first Sustainability-Linked Bond issuer in Thailand.
- Such a financing initiative would in turn help develop the Thai Debt Capital Markets and support the regulators' desire to develop ESG finance.
- It also allowed the company to seek out local fixed-income investors with an ESG focus.

The Solution:

A Sustainability-Linked Financing Framework was established to reinforce Thai Union's commitment to Sustainability Goals under the UNSDGs. This provided an opportunity for investors, and other stakeholders, to take comfort in Thai Union's long term commitment to ESG.

A Series of education and information sharing sessions were held to ensure a clear understanding of the KPIs/SPTs and to give investors a chance to express their concerns and raise questions.

Krungsri/MUFG Role:

As Thai Union's Sustainability-linked Bonds advisor, Krungsri/MUFG help to bridge the 'gap' of various stakeholders' constraints i.e. investment accounting, implementation under newly established SEC's Sustainability-Linked-Bond regulations, Bank of Thailand's definition of derivatives and testing period, and strike a balance on the appropriate 'robustness and ambitiousness' of KPIs/SPTs between issuer, verifier, the regulator and investors.

In addition to these product developments, there is a focus on developing markets that reflect a price for carbon.

Emissions trading systems are market-based instruments that create incentives to reduce emissions where these are most cost-effective. **Carbon markets** is one of the emissions trading systems which is currently gaining popularity globally.

When discussing carbon markets, it is necessary to make a distinction between (i) mandatory carbon markets, and (ii) voluntary carbon markets.

- **Compliance (mandatory) carbon markets** exist because of policy decisions – some standards limit certain emissions, and allow for carbon credits to be traded. These are supply driven.

- **Voluntary carbon markets** are driven by consumer preference. They allow a consumer to choose to do more than policy decisions require, and reduce the environmental impact of their actions. Voluntary carbon markets are demand-driven.

Compliance carbon markets may take much longer to agree and implement. Therefore, there is utility in more urgent development of voluntary carbon markets. Most economists recognise **carbon pricing is the single most powerful policy lever to drive the transition**, but carbon pricing needs to be universal to be effective and to avoid distorting competition.

High quality carbon credits have potential to contribute to the battle against climate change in ASEAN, particularly for hard to abate sectors. ASEAN has **significant natural capacity for carbon absorption**. However, there should be strict conditionality around the usage of carbon credits.

1. Only a certain percentage of carbon reduction (dependent on the decarbonisation rate) can be achieved through the purchasing of carbon offsets. **Carbon reduction should always be prioritised** before purchasing of carbon credits. Carbon markets should be **linked to transition pathways**. The underlying projects must be **aligned to mandatory decarbonisation**.

2. Voluntary Carbon Markets have to ensure the highest level of transparency, by catalysing market players to **develop infrastructure and solutions that promote data transparency, funding availability, ease of access, and price transparency**. Price control is appropriate for mandatory carbon markets only; this should not be applicable to voluntary carbon markets.

3. **Credibility of the credits is critical**. It is necessary to ensure that VCM transactions are made up of high integrity carbon credits (with robust governance for overseeing that the threshold is met).

4. Governments should recognize that they could **benefit from international capital** to protect and restore ecosystem. Expensive transformative projects would require significant investment, and demand for high quality carbon credit is expected to grow. Sellers could be local corporates only, but buyers may be international.

5. The **Taskforce for Voluntary Carbon Markets (TSVCM)** is likely to set the rules of the road in terms of the standards that need to be met to be considered credible and interoperable. It will build on existing recognised standards and require the use of offsets to be part of transition aligned decarbonisation strategy. ASEAN should seek to get involved in the new governance body that will set these standards and audit VCMs for compatibility. In particular ASEAN could ensure that the projects evolves to work effectively in emerging markets, covering SMEs and the agriculture sector.

If carbon taxes and emissions trading schemes are interlinked and made compatible, carbon "leakage" can be reduced and with it the pressure to introduce "carbon border adjustments". In the medium term, voluntary and compliance carbon markets will need to be integrated in order to be impactful.

C. Industry Codes and Principles.

Existing product standards and guidelines around the globe are based on the ICMA Principles. This section explores how these Principles have shaped developments in order to meet investor and client demand; and to prevent "green washing".

The Green Bond Principles (GBP), Social Bond Principles (SBP), the Sustainability Bond Guidelines (SBG), and the Sustainability-Linked Bond Principles (SLBP) – The "Principles"

The Green and Social Bond Principles (GBP & SBP) as well as the Sustainability Bond Guidelines (SBG), for a mix of green and social projects, and the Sustainability-linked Bond Principles (SLBP), have become the de-facto global standards, underpinning the sustainable bonds[1] market for both UoP and general corporate purpose bonds.

The Principles, as they are referred to collectively, are voluntary guidelines that provide guidance to Standard Setting Associations, corporates and financial institutions when issuing sustainable bonds. They also provide investors with the core components of a sustainable bond and the steps that bonds labelled as "green", "social", "sustainability" or "sustainability-linked" should ideally have followed and shown alignment to in a bond framework.

The Principles are created by a market led initiative (the Executive Committee) consisting of 24 organizations comprising an equal distribution between issuers, investors and underwriters with 8 representatives from each category. They are frequently updated in response to market developments on the basis of a consultation of members and observers (approx. 400 firms globally).

The Principles have become the leading framework globally for issuance of sustainable bonds, underpinning over 95% of international green, social and sustainability bond issuance in 2020[2]. The GBP and SBP were updated in June 2021, reflecting the sophistication, development and growth of the global sustainable bond market.

Green, Social and Sustainability Bonds are any type of bond instrument where the proceeds will be exclusively applied to eligible environmental or social projects or a combination of both.

Sustainability-Linked Bonds are general corporate purpose bonds for which the financial and/or structural characteristics (i.e. coupon, maturity, repayment amount) can vary depending on whether the issuer achieves predefined sustainability objectives within a predefined timeline. These are aligned with the five core components on the SLBP.

The Principles outline best practices when issuing these four types of bonds through global guidelines and recommendations that promote transparency and disclosure. This underpins the integrity of the market and supports market development.

In December 2020, ICMA also issued the Climate Transition Finance Handbook which works as an additional thematic guidance for the sustainable bond market and can be used in conjunction with the Principles.

[1] sustainable bonds include Green, Social and Sustainability Bonds (use-of-proceeds bonds) and Sustainability-Linked Bonds.
[2] worldwide (ex-China). ICMA analysis based on Environmental Finance Bond Data

Climate Bonds Standard

The Climate Bonds Standard, developed by the Climate Bonds Initiative (CBI), is based on but more prescriptive than the GBP in that it provides green definitions that are sector specific, developed by scientists and industry experts. These fall into eight broad categories under the CBI Taxonomy.

Development of the Climate Bonds Standard by the CBI involved a wide coalition of academic and industry experts preparing open access guidelines by which climate-related investments can be associated with green bonds. Sector specific standards are also used for certification which is a form of external review of sustainable bonds.

The ASEAN Green Bond Standards, the ASEAN Social Bond Standards, and the ASEAN Sustainability Bond Standards

The ASEAN Capital Markets Forum (ACMF) introduced the ASEAN Green Bond Standards in 2017, which were developed based on the Green Bond Principles (GBP) and tailored to meet the needs and commitment of the ASEAN capital markets.

Following the success of the Green Bond Standards, ACMF launched the ASEAN Social and Sustainability Bond Standards in 2018. The standards are intended to provide additional guidance on the application of the GBP, as well as to enhance transparency, consistency and uniformity of ASEAN sustainable bonds.

EU Green Bond Standard (EU GBS)

Following the publication of the proposed EU Green Bond Standards in March 2020, the European Commission published its proposal for a Regulation on European Green Bonds ("EuGBs") on 6 July 2021. The draft Regulation will be negotiated in the European Parliament and among Members of the Council of the European Union as part of the co-legislative process.

The draft Regulation proposes a voluntary label of EuGBs. It builds on market best practices such as the Green Bond Principles (GBP) and sets out the following main features and requirements for EuGBs:

- There is a mandatory requirement for the Use of Proceeds (UoPs) to align with the EU Taxonomy. The UoPs should relate to activities that: (i) already meet the Taxonomy requirements; or (ii) that will meet the Taxonomy-criteria within a 5-year timeline in the context of a Taxonomy-alignment plan (which can be extended up to 10 years if justified and documented). This reflects the Commission's intention to render the EuGBs a useful and dynamic tool for financing the transition.

- Issuers are required to draw up a "Factsheet" document and obtain a pre-issuance external review on the factsheet. Both of these need to be published on the issuer's website prior to public offering.

- Issuers are required to report annually on the allocation of proceeds until the proceeds have been fully allocated, and issue an impact report at least once after the final allocation and during the lifetime of the bond.

- Issuers are required to obtain a post-issuance external review on the final allocation report (except for FIs issuing portfolio-based EuGBs, who need to obtain an external review on each allocation report).

National Regulations/Guidelines

Many jurisdictions have adopted the Principles and/or developed their own regulations or guidelines that are aligned with or fundamentally similar to the Principles. Examples from Asia include:

- China has green bond guidelines for different types of bonds in the onshore markets, including, for example, green financial bonds, green enterprise bonds, green corporate bonds, and green debt financing instruments.
- In Japan, the Ministry of the Environment established the Green Bond Guidelines in 2017 and updated them in 2020. The Financial Services Agency also published the draft version of the Social Bond Guidelines for comments, which are consistent with the Social Bond Principles and contains local characteristics.
- In India, SEBI issued a circular in 2017 on the Disclosure Requirements for Issuance and Listing of Green Debt Securities. Aligned with the Green Bond Principles, the guidelines are applicable to listed green debt securities and introduce mandatory disclosure on the use of proceeds, environmental impact and its methodology, process for determining continuing eligibility of projects/assets, etc.
- In Indonesia, OJK issued a detailed Regulation on the Issuance and the Terms of Green Bond in 2017.
- Malaysia launched its Sustainable and Responsible Investment (SRI) Sukuk Framework back in 2014 and updated it in 2019.
- The SEC Philippines approved in 2018 the Guidelines on the Issuance of Green Bonds Under the ASEAN Green Bond Standards.
- In 2018, Thai SEC amended the regulation on debt instruments to include specific disclosure requirements for green bond issuances.
- In November 2020, Thai SEC sought public comments on the proposed amendments and new regulations related to issuance and offer for sale of sustainability-linked bonds.
- In May 2021, Thai SEC's regulations related to issuance and offer for sale of sustainability-linked bonds became effective.

These and other examples of local adaptations, can be found in the ICMA Compendium of international policy initiatives & best market practice.

The Loan Markets

For the loan markets, the Loan Market Association (LMA), together with the Asia Pacific Loan Market Association (APLMA) and the Loan Syndications & Trading Association (LSTA), manages the Green Loan Principles (GLP), the Social Loan Principles (SLP) and the Sustainability-Linked Loan Principles (SLLP).

With a view to promoting consistency across financial markets, the GLP and the SLP build on and refer to the Green and Social Bond Principles (GBP & SBP), and the SLLP which had initially been released before the bond guidance, have been structurally adjusted to align with the Sustainability Linked Bond Principles (SLBP).

D. Regulatory Expectations and Obligations

The regulatory community, through bodies (such as the NGFS, Basel and IOSCO), as well as individual regulators is making demands on the industries they regulate in terms of limiting exposure to climate-related risk and stress testing. This section illustrates what this means for a large FI by setting out a typical approach to risk management.

Integrating Climate Risk into Enterprise Risk management by FIs

Incorporating climate risk into Enterprise Risk Management has become a top priority for FIs. Among the regulators, the Prudential Regulation Authority (PRA) and European Banking Authority (EBA) are at the forefront of climate regulation, setting out supervisory expectations on climate risk management. A number of regulatory bodies in Asia have also released either draft or final supervisory expectations, for example, the Monetary Authority of Singapore (MAS).

As per recent survey done by Ernst & Yong (EY) and the Institute of International Finance (IIF) across 88 FIs in 33 countries, 90% of Asia-Pacific financial institutions' chief risk officers (CROs) consider climate change as the top emerging risk in the next five years. Recent Accenture research shows that 71% of U.S. financial institutions can monitor and assess their carbon footprint today, and 67% are prepared to direct capital away from the energy sector to assist in the transition to a low-carbon economy. Many economies and leading global financial institutions have set net zero targets for 2050 or 2060 for financed emissions.

In line with the Net Zero Commitments, FIs are overhauling their risk management framework and governance structure to manage and mitigate climate risks. FIs are getting more involved in this area, and many additional Climate Risk and Strategy committees are being established, with initiatives for upskilling senior management and Boards underway.

These Boards have the responsibility to oversee and approve the Climate Strategy, including a risk management strategy. The first milestone in the journey will be designing a clear Risk Appetite statement (Qualitative & Quantitative) along with key performance and risk limits. This can be prescribed across sectors, portfolios and risk categories such as credit risk, strategic risk, compliance risk, resilience risk, reputation risk and impact of climate risk on own operations.

Financial institutions are at varying stages of maturity for integrating climate risk impact into credit and investment strategy. This integration has to consider three perspectives: 1) understanding exposure to high transition or physical sectors or borrowers; 2) understanding how clients are managing or planning to manage this risk; and 3) measuring progress in reducing the climate risk impact (*eg: emissions*).

To align climate-risk exposure with risk appetite and the business and credit strategy, risk managers should embed climate-risk considerations into capital allocations, loan approvals, portfolio monitoring, and reporting. Climate risk assessment, monitoring and reporting will have to be carried out at customer, sector, portfolio and perhaps even at transaction level. Borrowers from high risk transition sectors will have to undergo enhanced due diligence to identify and quantify Climate Risk posed or faced by them and arrive at residual risks, after factoring in plans to mitigate these risks.

Effective integration of ESG or Transition Risk considerations involve relying on an appropriate and widely agreeable Green taxonomy to help direct financial flows towards sustainable development. Financial institutions are developing the data models, analytical tools and approaches needed to assess their clients' environmental impact, whilst trying to address the challenges around emissions and other ESG data.

Risk-management teams are also preparing a range of potential mitigants to offset the adverse effect of transition on the entities, borrowers and portfolio.

Many FIs have decided not to serve certain companies or sectors or are exercising caution in others to manage credit, liquidity and reputational risk. However, to achieve risk mitigation without significant disruption to economic activities, financial institutions are developing a suite of green asset and liability products tailored for large corporates, SMEs and retail customers. For example, the Sustainability-linked Loan Grant Scheme by MAS (which will defray the cost of establishing compliance for green loans to accelerate take-up of green facilities by SMEs).

Some financial institutions have also moved ahead with linking management and board remuneration to the achievement of climate targets, to catalyze the execution of their strategy. Strengthening Climate Risk management requires stepping up capacity building initiatives for the organization, clients and industry also. For example, the Singapore Green Finance Centre announced by MAS is a collaboration between Singapore Management University (SMU) and Imperial College Business School and 8 founding FIs for research tailored to the Asian context and groom a pipeline of talent in green finance.

FIs are in the process of setting up their scenario analysis to assess their resilience. Climate scenario analysis using "what-if" analysis tools or quantitative models to quantify the potential exposures to transition and physical risks is crucial in transition planning. Financial institutions have to quantify the impact by counterparty, risk type and in aggregate on a portfolio and entity basis. Industry has been witnessing an increase in scenario guidance from the Intergovernmental agencies, with the scenarios commonly applied being published by Network for Greening the Financial System (NGFS) comprising (a) Orderly: early, ambitious action to a net zero CO_2 emissions economy; (b) Disorderly: action that is late, disruptive, sudden and/or unanticipated, and (c) Hot house world: limited action leads to significant global warming and strongly increased exposure to physical risks.

However, the data challenges faced by the industry has meant that most scenario analyses start with exploratory and qualitative analysis on specific sectors and/or larger customers, relying on expert judgment.

Financial institutions have made significant progress in disclosing the impact of climate change, opportunities, key metrics that they are currently using and developing, in their annual reports, some are even issuing separate ESG Reports. The recommendations of the Taskforce on Climate-related Financial Disclosures (TCFD) are emerging as the leading disclosure framework. Whilst some regulators are already prescriptive in terms of disclosure requirements, other regulators are looking to define their expectations in this area.

Government Action and Treaty Commitments

Aside from COP itself, the concept of transition is gradually becoming **enshrined in legally binding instruments**. Some examples include provisions of international trade agreements committing states to tackling climate change, and commercial contract clauses requiring counterparts to maintain a sustainability ranking above a certain level.

The EU is putting measures in place to address **carbon leakage** – a process whereby greenhouse gas emissions are simply displaced rather reduced by steps taken to tackle climate change. They will also introduce a carbon border tax to reflect the consumption of goods and services from producers overseas that are not subject to equivalent climate regulations.

These developments highlight the urgency with which corporates and nations in ASEAN need to develop their transition pathways.

Chapter 3: Supporting Clients' Transition and the Role of Government

Mobilising capital on a much larger scale will require a dramatic increase in the role of the private sector, and an enhanced role for international and development finance institutions will be critical to catalyse this investment. Energy investments today in emerging and developing economies rely heavily on public sources of finance, but the IEA estimates over 70% of clean energy investments will need to be privately financed, especially in renewable power and efficiency.

Public sources of finance, including state owned enterprises, will continue to play vital roles, especially in grid infrastructure and in transitions for emissions-intensive sectors. Provision of blended capital from development finance institutions is critical to attract private investment to markets and sectors at early stages of readiness – or in situations where the risks are hard to mitigate, such as energy access projects for vulnerable communities or in remote areas.[ix]

Role of the Financial Sector

The most significant contribution a financial institution can make is supporting its clients' decarbonisation strategy. To do so, FIs need to consider the following steps:

1. Clarity over what a credible transition entails in the financial institution;
2. Set a target for own portfolio decarbonisation;
3. Define transition finance standards and protocols that reflect the needs of clients on different stages of their transition journey;
4. Educate staff on the changes in the firm and train client facing staff to engage clients on what sustainability is likely to mean for their business models;
5. Increase the portfolio of transition finance solutions, and continuously innovate to expand it; and
6. Create a decision-making matrix for assessing investment opportunities in respect of their alignment with the transition.

For a large FI, this will require the setting of internal standards, targets and processes on sustainability related themes. Central to these are:

- **Internal Taxonomy:** This is likely to be based as far as possible on the official sector work. In order for the industry to support transition, the most important part of this framework will be a **"transition taxonomy"** that encourages investment in Brown industries to improve their environmental and climate performance.

  As discussed in Chapter 1, Transition Pathways should be tailored to sector and geography. This will enable the industry to remain engaged with clients making the transition in the countries that face the greatest challenge. The risk of an absolute and global standard would be to restrict investment and fail to build on the many long-term and enduring relationships between FI and client that should be central to the financing of the transition.

- **Internal capacity building:** A major challenge for international FIs will be the education and training of client-facing staff to enable them to engage with clients on what the sustainability challenge

means for them; and how the transition in finance plays into that. The ideal outcome is tailored financial support that incentivises progress along the transition glide path.

- **Increasing portfolio of transition finance solutions** is central to the decarbonisation of the most HtA sectors. The growing market for green bond/loans and related transition-focused products is encouraging. In addition to solutions for corporates, financial institutions are seeking to embed ESG across retail client engagement and investment solutions. The industry is beginning to develop offerings in this area, for example green mortgages and deposits.

- **Availability and quality of data:** setting and achieving transition targets relies heavily on the **availability of comprehensive and comparable data.** As most corporates are not currently required to disclose their emissions, financial institutions are lacking data to assess the carbon footprint of their portfolios. Unless policymakers drive ESG data disclosure requirements, and make disclosures mandatory, consistent, credible and verifiable, there will be no foundation for target setting and baselining.

- **Eligibility for transition finance** can be assessed in line with the International Capital Markets Association (ICMA) Climate Transition Finance Handbook. This analyses a company's performance against four key areas:

    - **Company's transition strategy and governance**: the financing should enable a customer's climate change strategy; it should serve to support the implementation of an issuer's corporate strategy to transform the business model in a way which effectively addresses climate-related risks and contributes to alignment with Paris goals.

    - **Business model environmental materiality**: the planned climate transition trajectory should be relevant to the environmentally material parts of the corporate's business model, taking into account potential future scenarios which may impact on current determinations concerning materiality.

    - **"Science-based" climate transition strategy**: the corporate's strategy should reference science-based targets and transition pathways.

    - **Implementation transparency**: market communication of a financing instrument should provide transparency on the underlying investment program including capital and operations expenditures.

Once a financial institution is able to understand a customer's transition trajectory, and the potential pathway, it can place its potential exposure and positive contribution in the context of its own exposure limits and targets.

Role of Government: Creating an Enabling Environment for the Transition

While private finance has the potential to drive transition, it can best do so if pro-actively supported by appropriate public policy measures, including regulation.

Outlined below are important areas where government and regulatory intervention is essential to support the allocation of credit and investment, as well as supporting the transition in the broader economy.

A) Clear and Credible Destination and Pathway

Determining an appropriate level of decarbonisation ambition for each sector.

Governments of ASEAN member states can support the transition by providing science-based targets for sector-specific Paris-aligned destinations and pathways across all sectors. This could be supported by more granular national and sub-national decarbonisation and net-zero carbon targets.

A sector-by-sector approach with individual targets could include, for example, large-scale programmes for the retrofitting of public and private sector buildings to achieve specific levels of energy efficiency performance, e.g. a percentage of building stock insulated by 2030.

Consistent Transition Metrics and Thresholds

Successful transition metrics would include:

- Using clear emissions accounting baselines to set decarbonisation targets by sector to enable net-zero outcomes and enable banks and other financial market participants to assess and develop transition plans.
- Providing medium term (2030) sector level scientifically-aligned emissions targets and thresholds across high climate impact sectors in the real economy.

B) Regulatory Change to Underpin the Transition

Reporting, Data, and Disclosure

There is currently a lack of consistent, economy-wide data on GHG emissions. Harmonising the approach to GHG accounting, with data by sub-sector and at national level, will better enable industry to set decarbonisation targets, and international financial institutions to track emissions reduction on a country-by-country basis. This would ideally be supported by open source data platforms as a 'common good' in order to provide better information and measurement of impact.

In finance, the TCFD has become a de-facto standard for climate-related financial disclosures. Governments should consider a clear timeline to making TCFD-like disclosure mandatory. This would enable firms to put in place plans to collect the necessary data.

For example, G7 announced in June 2021 their support for mandatory climate risk disclosure, which should be aligned with the recommendations of TCFD. Also, SEBI in India and HKEX in Hong Kong have already issued guidelines requiring or encouraging reporting of carbon emissions as part of the ESG disclosure rules for listed companies.

Prudential regulation

Some central banks and bank regulators have begun to consider whether prudential regulation may also be used as a tool to encourage further sustainable issuance and investment.

For example, China's PBOC has established a framework of evaluating green finance performance of banks that is intended to be incorporated into the Macro Prudential Assessment. PBOC reviews and scores banks quarterly based on quantitative metrics related to green loan and green bond holdings, as well as progress on the banks' own green finance strategy.

Some bank and insurance prudential regulators have also started to consider the possibility of adjusting risk weights of green and other sustainable assets, though these proposals have so far not received consensus support in the market.

C) Broader Support to Incentivise Transition

Government Incentives / Stimulus

Currently, green products do not enjoy pricing advantage, which reduces their competitiveness. Government should consider creating incentives to provide preferential treatment to sustainable products, whilst halting policies that prop up the fossil fuels industry, including excessive subsidies. For example, policymakers should develop policies that incentivize renewable energy and promote energy efficiency.

Many jurisdictions already provide grant schemes to subsidise the cost of external review of green bonds and loans, such as Hong Kong, Japan, Malaysia, and Singapore. Besides that, Malaysia has offered tax deductions for expenditures incurred on the issuance of SRI sukuk. Some local governments in China have also implemented incentive or subsidy schemes for green bonds and loans in the form of interest subsidies, issuance subsidies, guarantee subsidies for issuers or money awards to lead underwriters.

Another type of policy measure to make sustainable products more attractive is for central banks to offer more favorable treatment in the collateral market. In China, for example, green bonds and green loans have been included by PBOC since June 2018 in the scope of eligible collateral for medium-term loan facilitation (MLF). Under the MLF, banks may use high credit quality green bonds and green loans as collateral to borrow from PBOC at below market rates. This encourages lending to green projects and indirectly helps promote green bond market liquidity.

Also, the European Central Bank announced in September 2020 that sustainability-linked bonds will become eligible as collateral for Eurosystem credit operations and also for Eurosystem outright purchases for monetary policy purposes, provided they comply with all other eligibility criteria.

Direct government participation in sustainable finance market

Government issuance of sustainable products provides confidence to national corporate issuers, a benchmark for sustainability frameworks and reporting. It can also encourage, through the issuance process and investor engagement, stronger environmental policies and transparency on climate transition.

Many jurisdictions have issued government green bonds, contributing to the market development and raising awareness of sustainable finance. In Asia, jurisdictions including Hong Kong, Indonesia, Malaysia, South Korea, and Thailand have issued green bonds and sustainable sukuk.

The EU's efforts are also noteworthy. On 16 September 2020, the European Commission announced that 30% of the EUR 750bn package for the Next Generation EU budget will be raised through green bonds. The EC is also issuing social bonds to finance its up to €100 billion SURE instrument on the capital markets.

Official sector investors, such as sovereign wealth funds, may also provide leadership to local and regional investors, and build reliable demand for domestic sustainability issuance.

Carbon Price and the Development of Carbon Off-set markets

Build on the work of the UN's Task force on Scaling up Voluntary Carbon Offset Markets to provide a transitional tool that can be credibly used, particularly in hard to abate sectors.

Invest in Research & Development (R&D), and Green FinTech

Directing public funding to bring new clean technologies closer to market including support for R&D and for companies involved in it. National "Hydrogen Strategies" - which make funds available to develop and scale up the applications of clean hydrogen - are a welcome example of such an approach.

"Green FinTech" typically describes companies or initiatives which have a positive impact on the environment, e.g. resulting in lower greenhouse gas emissions or greater biodiversity. Interest in Green Fintech solutions is steadily increasing with innovations across sustainable and competitive tech-driven financial products services. Some application examples may include automating the procurement of carbon offsets, or tokensing products of "greening" activities – e.g. reforestation, solar panels installation etc.

Embedding transition in government procurement policy

Governments may also encourage corporates to commit to climate transition by managing their suppliers, signaling the importance of climate transition to the wider society. For example, the UK government announced in a Procurement Policy Note in June 2021 that bidding suppliers with an anticipated contract value above £5 million per annum will be required to provide a Carbon Reduction Plan. Suppliers have to confirm their commitment to achieving Net Zero by 2050 for their UK operations, disclose their current GHG emissions, and update such Carbon Reduction Plans annually on their website.

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[iii] UN Environment Programme: The Six Sector Solution to Climate Change, 2021 (link)
[iv] UNFCCC NDC Registry (link)
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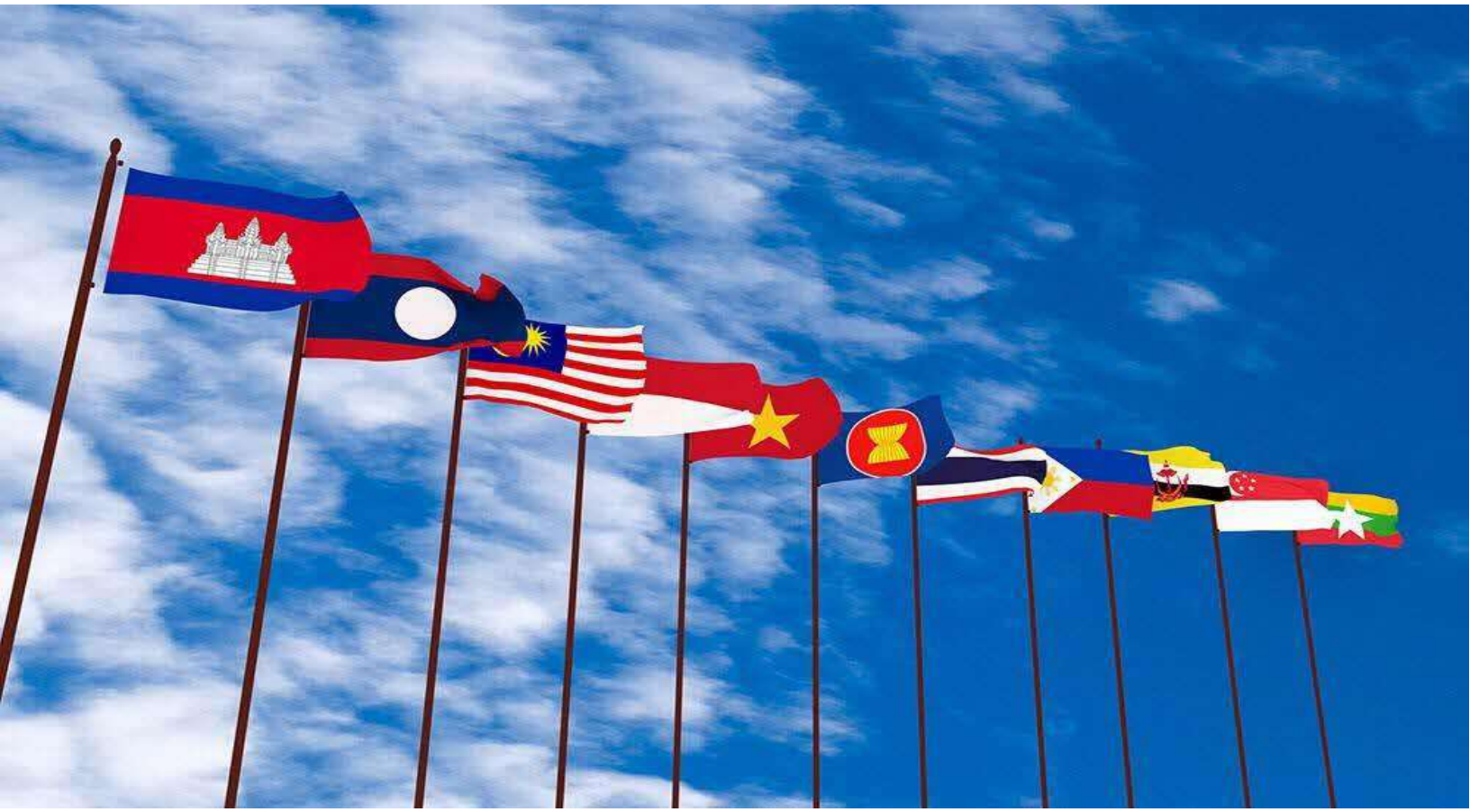

WHITE PAPER ON SUSTAINABILITY DISCLOSURE AND REPORTING

Prepared by:
The Working Group on Disclosures of the WC-CMD - ACMF Joint Sustainable Finance Working Group Industry Advisory Panel

Working Group Members:

- **ING Bank**
- **Allianz SE, Singapore Branch**
- **Indonesia Corporate Secretary Association (ICSA)**
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November 2021

Contents

1 Introduction 3

2 Perspectives of investors - Views and demands 4

2.1 The global perspective 4

2.2 The ASEAN perspective 6

3 Assessment of status quo on sustainability disclosure and reporting 8

3.1 The global perspective 8

3.2 The ASEAN perspective 9

4 Understanding the "why" behind the status quo on sustainability disclosure and reporting 11

4.1 Introduction 11

4.2 Corporate survey 11

5 Policy recommendations 13

Glossary 17

References 19

Appendix 20

A: List of investor demands for sustainability information and areas of focus for companies, IOSCO 20

B: Top 10 most useful disclosure elements by score and variance, TCFD 2020 Status Report 20

C: Investor Survey – Breakdown of ESG investing strategies 21

D: Investor Survey – Breakdown of dedicated ESG impact funds 21

E: Investor Survey – Importance of disclosure principles 22

F: Investor Survey – Challenges faced by investors in adopting sustainable investing in ASEAN 24

G: Sustainability Reporting in ASEAN Studies, Professor Loh, 2020 25

H: Corporate Survey – Breakdown of participating industries 26

I: Corporate Survey – Quality of ESG data from regulators 27

J: Corporate Survey – ESG-related data from ASEAN governments 27

K: Corporate Survey – Extent of the challenge of multiple ESG reporting standards 28

L: Corporate Survey – Drivers behind challenges in ESG reporting standards 28

M: Corporate Survey – Enablers for improvement in corporate ESG reporting 29

N: Corporate Survey – Frequency of audits on sustainability reports 29

O: Corporate survey – Drivers of the lack of audits of sustainability report 30

P: Corporate Survey – Provision of financially material ESG disclosures that sufficiently influence investor decisions 30

Q: Corporate Survey – Gaps in sustainability reporting by Investors and Corporates 31

R: Current Status of Sustainability Reporting in ASEAN countries 32

S: SGX List of Core ESG Metrics 33

T: Usefulness of Disclosure Topics 34

U: Extract of qualitative and quantitative metrics from the ISSB / Prototype and SGX List of Core ESG metrics 35

1 Introduction

The ASEAN Capital Markets Forum (ACMF) and the ASEAN Working Committee on Capital Market Development (WC-CMD) established an Industry Advisory Panel (IAP) to actively engage the private sector on the ACMF and WC-CMD's sustainable finance agenda and initiatives. The task of the IAP is to identify sustainable finance policy recommendations which serve one key purpose: to attract capital within and into ASEAN to enable the ASEAN countries' transition to more sustainable economic models (the "Purpose").

In developing its work, the IAP was divided into 4 workstreams, namely Taxonomy, Transition Standards, Strengthening Demand and Supply for Sustainable Finance, and Sustainability Disclosure and Reporting. This paper focuses on Sustainability Disclosure and Reporting.

Importantly, the work of the 4 sub-groups is intrinsically linked, and hence, the policy recommendations from the 4 workstreams should be assessed holistically.

Research Approach of this IAP sub-group on sustainability reporting and disclosure

The sub-group's research approach can be sub-divided into two parts: (i) a comprehensive meta-research of the significant work that has already been done in this field globally, and (ii) the group's primary research in the form of two surveys, one addressed to investors that are active in ASEAN, and one addressed to ASEAN-headquartered corporates.

On the meta-research: many reputable organisations including the International Financial Reporting Standards (IFRS) Board and the International Organisation of Securities Commissions (IOSCO) have examined this topic from various angles, for example, the impact of sustainability reporting on organisational performance. Whilst the sub-group examined all such work for this white paper, it. concluded that its primary research, especially with a specific ASEAN focus, would be instrumental to provide well-informed policy recommendations to the ACMF and WC-CMD. As such, this sub-group conducted two surveys which will be described further in Chapters 2.1 and 2.2.

Structure

As mentioned above, this whitepaper examines the role of sustainability disclosure and reporting as one pillar to accomplish the Purpose.

- The next chapter will discuss the perspectives of those that could provide the capital needed for the ASEAN's transition, i.e., investors and their specific views and demands.
- This is followed by the third chapter describing the existing reporting and disclosure standards, initiatives, and trends globally and within ASEAN.
- Subsequently, the fourth chapter seeks to understand the "why", i.e., the motivations and considerations behind current standards, initiatives, and trends on reporting and disclosure practices.
- Finally, the last chapter will discuss policy recommendations that will help to accomplish the Purpose, which is supported by the insights gained from the previous chapters and the surveys conducted.

2 Perspectives of investors - Views and demands

Given the Purpose of our IAP work, as highlighted above, we started our analysis by assessing the viewpoints and demands from investors that provide the capital needed to accommodate the ASEAN region's transition to a more sustainable economic region.

We currently witness an explosion in the number of investors that have an ESG focus as seen from the exponential increase in assets under management (AUM) under asset managers who are signatories of the United Nations' Principles of Responsible Investing (UN PRI) as seen in Figure 1. However, the spread of this dramatic increase in signatories is not equal across regions. In fact, as of July 2021, ASEAN signatories only contribute to 4% of the total signatories worldwide (Figure 2).

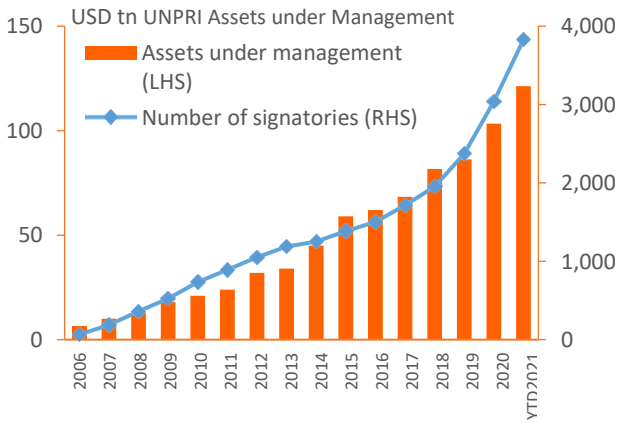

Figure 1 – Signatories and AUM under UN PRI

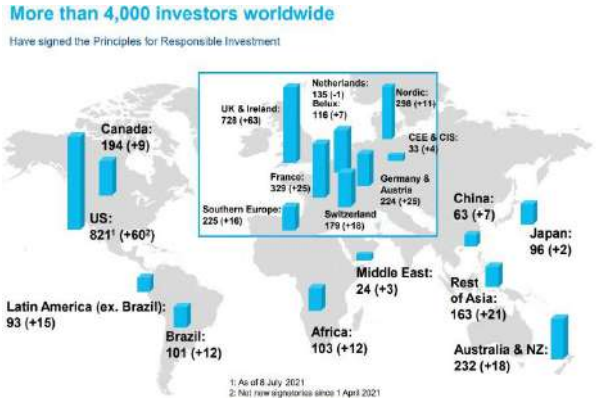

Figure 2 – Spread of UN PRI signatories across regions

The above data shows the limited AUM of ESG- focused investors that reside within ASEAN. This insight was also derived upon analysing the number of signatories and alliance members to Principles of Sustainable Insurance (UN PSI) and the Net Zero Asset Owner Alliance (UN NZ-AOA), which are internationally recognized initiatives convened by the United Nations.

Hence, to be able to finance the ASEAN region's transition, capital from outside of ASEAN must be attracted into ASEAN. In turn, this underscores the importance of accounting for the views and demands from global investors to accomplish the Purpose.

2.1 The global perspective

Chapter 2.1 outlines the existing research initiatives conducted by globally recognised organisations to better understand investor priorities.

IOSCO's Report on Sustainability-related Issuer Disclosures

IOSCO published a report titled 'Report on Sustainability-related Issuer Disclosures' in June 2021. IOSCO engaged extensively with approximately 60 asset managers across 19 jurisdictions to determine how asset managers use sustainability information provided by corporate issuers and what information they consider to be useful in decision-making. The IOSCO workstream also analysed corporate reports of 90

companies across 5 sectors[1] and 6 jurisdictions[2] to gain insights into the current sustainability-related information that investors were receiving from companies (International Organisation of Securities Commissions, 2021).

Based on the report, it is observed that there are 5 points that investors look out for concerning companies' sustainability reporting (Appendix A):

- Comprehensive, consistent, and comparable sustainability-related reports that will aid in investment and risk analysis.
- Systematic reporting against established frameworks and standards.
- Investor-oriented and industry-specific information in areas of environmental, social, and governance (ESG).
- A mix of narrative information and quantitative metrics.
- The linkage between sustainability risks and opportunities as well as business strategy and financials.

With these demands and priorities established, the IOSCO then noted clear areas for improvement and focus concerning companies' current reporting (Appendix A):

- Companies' sustainability-related disclosures are not complete, consistent, and comparable.
- Companies report selectively against multiple different standards and frameworks.
- Companies' sustainability-related disclosures aim to meet multiple stakeholders' needs (e.g., shareholders, government, suppliers, employees, and customers).
- Companies do provide a mix of qualitative and quantitative information, but quantitative information is limited and not consistent.
- Generally, companies do not provide detailed disclosures on the impact of sustainability practices on their financial performance and there is inconsistency in location (e.g., annual report, standalone reports, corporate websites, etc.) and timing of reports, as well as application of audit and assurance.

These conclusions were also consistent with the International Federation of Accountants (IFAC)'s global benchmark study with approximately 1,400 companies across 22 jurisdictions. The IFAC reports that 68% of surveyed companies relied on more than 1 established framework (IFAC, ACIPA, CIMA, 2021).

ASIFMA's paper on Investors' ESG Expectations

Asia Securities Industry and Financial Markets Association (ASIFMA) released a report on Investors' ESG Expectations, which sought to help Asian companies improve their engagement with and disclosure of sustainability issues. In this report, the reasons for investor expectations and the specifics of their expectations were clearly outlined. Considering investor expectations and the unique business landscape in Asia, specifically the dynamics of family control or state ownership in companies, the high prevalence of conglomerates, and a compliance mindset, the report found that the framework provided by the Task Force on Climate-related Financial Disclosures (TCFD) can be adapted to a broad set of ESG issues. The report also acknowledged the effectiveness of other international standards such as the Sustainability

[1] Consumer discretionary; Real estate; Industrials; Energy; and Consumer staples.
[2] Australia; China; European Union; Singapore; United Kingdom; United States.

Accounting Standards Board (SASB), Global Reporting Initiative (GRI), and International Financial Reporting Standards (IFRS).

Ultimately, ASIFMA's Asset Management Group suggests that the management of ESG issues is not limited to sustainability disclosures but rather, it also involves the commitment and engagement from the top of organisations as well as regulators in accelerating regulations, codes of conduct, and rules. (ASIFMA, 2021)

TCFD's 2020 Status Report

In TCFD's 2020 Status Report, a survey was conducted among investors from organisations with over $5 trillion assets under management, lenders from banks with more than $9 trillion in total assets, and experienced analysts from major credit rating agencies. The group of expert users rated the usefulness of specific types of information relating to climate-related disclosures.

Based on their responses, the top 10 most useful disclosure elements were identified (Appendix B) and an illustrative implementation plan for disclosures was crafted. This illustrative implementation plan highlights how a hypothetical company seeking to enhance its existing reporting standard to cover Strategy and Metrics and Targets recommendations would prioritise disclosure information. This acts as a case study for corporates to learn from and structure their improvement journey. As corporates release more comprehensive climate-related disclosures, this will aid investors in their financial decision-making.

2.2 The ASEAN perspective

While the meta-analysis of the abovementioned reports provided very good insights on investor priorities and perspectives, the working group went further to conduct primary research through an online survey with investors that operate out of Asia and actively invest in ASEAN corporates.

The group sought to get feedback from a broad range of investors, including asset managers, commercial banks, insurance, pension funds, and public or government agencies (Figure 3) with green, social, or ESG funds. Refer to Appendix C for a breakdown of ESG investing strategies adopted by the survey respondents and Appendix D for the breakdown of dedicated green, social, or ESG impact funds managed by the respondents.

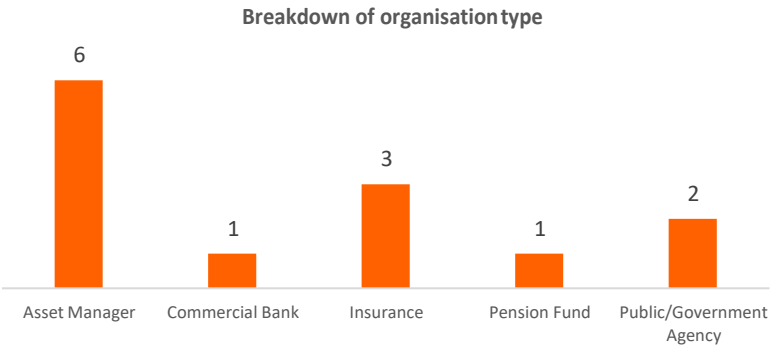

Figure 3 – Breakdown of investor type
Source: IAP working group research

The 'Rating' question format was utilised multiple times throughout the survey, where investors were prompted to rate several statements on a scale. Responses were subsequently given numerical weights, allowing the working group to calculate overall weighted averages which signify the overall direction expressed by investors.

Insight 1: Investors investing within the ASEAN region highly value the completeness, consistency, and comparability of sustainability-related information and the creation and adoption of a mandatory common international standard for sustainability-related financial reporting

Investors were prompted to rate the importance of a list of disclosure principles from 1 to 5, with 1 being 'Very Important' and 5 being 'Not At All Important'. The lower the score, the greater the importance was placed on the disclosure principle. Refer to Appendix E for the full list of disclosure principles and scores. The results point to top disclosure principles that must be accounted for in developing ASEAN's sustainability reporting framework.

Disclosure Principles	Scores
The completeness, consistency, and comparability of sustainability-related information	1.54
In the absence of a mandatory common international standard (in certain jurisdictions) at this stage: that investee companies report systematically against established frameworks (such as TCFD, SASB, CDP, CDSP, IIRC, GRI, or others)	1.54
Disclosure of quantitative metrics as relevant for the respective sector the investee company operates in	1.62
Provision of sustainability reporting in English	1.62
The creation and adoption of a mandatory common international standard for sustainability-related financial reporting	1.69

Insight 2: Current ESG disclosure by ASEAN companies is not deemed sufficient by global investors

As seen in Figure 4, 62% of investors shared that the current quality and level of disclosure by investee companies in ASEAN is sufficient for investment decisions only to a small extent. This points to the need for drastic improvements in disclosure performance required from ASEAN companies.

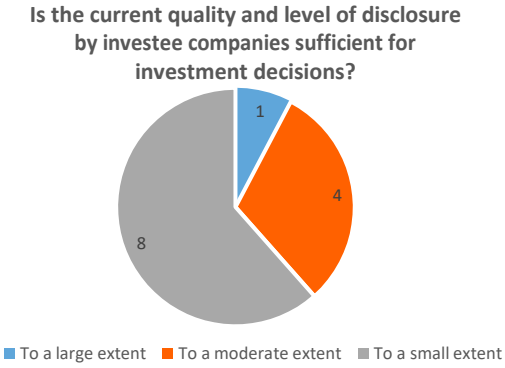

Figure 4 – Breakdown of countries
Source: IAP working group research

Insight 3: Data poses the greatest challenge to global investors investing within the ASEAN region

Investors were prompted to rate the extent of the impact of a list of challenges in sustainable investing within ASEAN from 1 to 4, with 1 being 'To a Large Extent and 4 being 'No Impact'. The lower the score, the greater the importance was placed on the disclosure principle. Refer to Appendix F for a list of disclosure principles and scores. The top 2 challenges were related to the availability and quality of data provided by potential investee companies in ASEAN.

Impact of challenges in sustainable investing within ASEAN	Scores
Poor quality/availability of data and analytics	1.77
Poor quality of sustainability investment reporting	2.00

Overall, the insights gathered from the survey did not come as a surprise and are aligned with the results derived from existing research papers highlighted in Chapter 2.1. The proposed recommendations in

Chapter 5 stem from the insights from the meta-research in Chapter 2.1 and primary research in Chapter 2.2, which identifies the priorities and perspectives of global investors investing in the ASEAN region.

3 Assessment of status quo on sustainability disclosure and reporting

Chapter 2 discussed a range of investor priorities and perspectives. In Chapter 3, we aim to provide an understanding of the current standards, initiatives, and trends related to corporate sustainability disclosure and reporting on a global scale and within ASEAN.

3.1 The global perspective

IFRS Standards

The International Financial Reporting Standards (IFRS) is the leading accounting standard used by companies to prepare and publish financial statements in more than 140 countries. 5 ASEAN countries have adopted IFRS: Cambodia, Brunei, Malaysia, Philippines, and Singapore. Please refer to Appendix R for more information.

To encourage globally consistent standards, promote comparable metrics, and coordinate across different sustainability disclosures, the IFRS Foundation joined forces with IOSCO to develop a plan to establish a new International Sustainability Standards Board (ISSB) to sit alongside the International Accounting Standards Board (IASB).

The IFRS Foundation shares IOSCO's vision which has the following key elements:

- Establishing an ISSB with strong governance to promote international consistency and comparability in sustainability-related information and form the basis of the development of an audit and assurance framework. The ISSB will set the new global floor for reporting sustainability-related financial information to providers of capital, on which jurisdictions across the world can layer their own, more ambitious policy priorities using a building blocks approach. ISSB plans to build a global corporate reporting system (refer to section below).
- Building on existing efforts by leveraging on the content of existing sustainability-related reporting principles, framework, and guidance. The IOSCO specifically identified TCFD as a base framework to develop its standards upon and has committed to building upon work by the existing framework- and standard-setting institutions (see next section).
- Encouraging a 'Building Blocks' Approach to provide a consistent and comparable global baseline of sustainability-related information (IOSCO, 2021).

Harmonization of standards by the framework- and standard-setting institutions

Five internationally significant framework- and standard-setting institutions – CDP, Climate Disclosure Standards Board (CDSB), Global Reporting Initiative (GRI), International Integrated Reporting Council (IIRC), and Sustainability Accounting Standards Board (SASB) ("the alliance") – published a report on a prototype climate-related financial disclosure standard in December 2020.

The report illustrates how their current frameworks, standards, and platforms, along with the elements set out by the TCFD, can be used together to provide a running start for the development of global standards that enable the disclosure of how sustainability matters create or erode enterprise value.

In their joint statement of intent published in September 2020, the alliance stressed their willingness and readiness to work with the Trustees of the IFRS Foundation in this area. The paper demonstrates that standard-setting for sustainability-related financial disclosure is a natural extension of the IFRS Foundation's current role and provides insight into how such an ambition can be achieved by building on content that already exists.

The alliance noted the importance of 'double materiality' as sustainability-related financial disclosure standards would enable the disclosure of how sustainability matters create or erode enterprise value. This type of reporting is distinct from pure sustainability reporting, which is designed to illuminate a company's most significant impacts on the environment, people, and economy. The principle of double materiality mandates that sustainability reporting and sustainability-related financial disclosure must be interrelated reporting concepts.

Corporate sustainability reporting directive (CSRD) and the EU Taxonomy

The European Union's Corporate Sustainability Reporting Directive (CSRD) proposal was introduced in April 2021 and builds upon existing EU requirements. This mandate covers the following companies:

- All listed or non-listed large companies (2 out of 3 criteria met)
    - Revenues > EUR 40 million
    - Total assets > EUR 20 million
    - > 250 employees
- All companies with listed securities on EU-regulated markets (European Commission, 2021)

Companies are to report the percentage of current revenue, capital expenditure, and operational expenditure coming from activities aligned with the EU Taxonomy and the percentage of future revenues coming from activities aligned with the EU Taxonomy.

Companies must also disclose additional information on double materiality, the process of materiality selection, forward-looking information (targets and progress), information on intangibles (social, human, and intellectual capital), strategic alignment to the Paris Agreement objective (1.5-degree scenario), and conduct reporting in line with Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy Regulation. Companies must engage third-party assurance of the data disclosed.

To ensure compliance with the reporting requirements, companies use the EU Taxonomy to identify sustainable and transitional business activities. The EU Taxonomy also suggests metrics and data that companies may use in reporting. The interconnectivity between the CSRD and the EU Taxonomy stresses the importance of the interdependence between (i) sustainability disclosure and reporting and (ii) the definitions of what is a sustainable or transitional economic activity. This is a principle that should be deliberated for ASEAN as well (European Commission, 2021).

TCFD Public Consultation on Metrics, Targets, and Transition Plans (2021)

TCFD held a public consultation come survey from June to July 2021 on its proposed guidance on disclosure of climate-related metrics, targets, and transition plans. In total, the consultation received over 240 survey responses and letters, with 205 respondents identifying as users or preparers of disclosure.

Some key takeaways from the survey on climate disclosures include:

- Many corporate preparers disclose proposed metrics, though disclosure of Scope 1, Scope 2, and Scope 3 GHG emissions is far ahead of disclosure of other metrics. Majority of respondents say Scope 1 and Scope 2 GHG emissions should be disclosed irrespective of materiality, and most other metrics should be disclosed based on materiality
- Corporate preparers agree there are challenges in disclosing the proposed metrics, particularly related to data access and methodology selection/application. Corporate preparers also identified data access and methodology as top challenges in disclosing the financial impact of climate change

3.2 The ASEAN perspective

Monetary Authority of Singapore (MAS) Survey

In 2020, the Monetary Authority of Singapore (MAS) surveyed ACMF members to consolidate information relating to the general sustainability reporting regime and sustainability-related disclosures required of listed companies in these countries. For member countries without such requirements, the survey sought to find out whether they have plans to implement such requirements as well as the policy thinking and implementation progress of their plans.

The survey results found that six out of ten ASEAN member countries have sustainability reporting requirements for listed issuers, all of which have varying standards relating to sustainability disclosures (Appendix R).

Laos, and Myanmar, two of the four-member countries without sustainability reporting requirements, have expressed plans to introduce sustainability reporting requirements on listed companies. Brunei, which is still in the process of setting up a securities exchange, is considering the implementation of such requirements in the future whereas Cambodia has no plans to do so for the time being (ASEAN Capital Market Forum Working Group, 2021).

Sustainability Reporting in ASEAN studies by Professor Lawrence Loh, National University of Singapore

A similar study has been conducted several times by the National University of Singapore (NUS)'s Centre for Governance and Sustainability which aims to present the results of a comparative study of corporate sustainability practices in six ASEAN countries (Figure 4). The latest publication was based on the assessment of the reporting principles and content of disclosures in the FY2019 sustainability reports of the top 100 publicly listed companies by market capitalisation in various ASEAN countries. A total of 582 companies were assessed.

	Sustainability Reporting Requirements for listed issuers
Brunei	×
Cambodia	×
Indonesia	✓
Laos	×
Malaysia	✓
Myanmar	×
Philippines	✓
Singapore	✓
Thailand	✓
Vietnam	✓

Figure 4 - ASEAN countries and sustainability reporting requirement
Source: MAS; Authors' compilation

Overall, the report found that ASEAN companies generally exhibit stronger performance on the reporting principles than on content (Appendix G). The content of reporting covers 4 areas – disclosure of performance data, targets, whether the report has been prepared following recognised reporting frameworks, and assurance, whereas the principles of reporting cover 6 aspects, namely

stakeholder engagement, materiality, completeness, balance, risk, and opportunities and board governance.

For content, the highest rate of disclosure was observed for disclosure of reporting framework across all 6 ASEAN countries. For principles, the highest rate of disclosure was observed for materiality across all 6 ASEAN countries (Loh, 2020).

In essence, the studies done by the MAS and the NUS are both focused on describing the sustainability reporting practices by corporate across the ASEAN countries but are limited in explaining the 'why', i.e., the reasons for the current status quo on sustainability disclosure and reporting within ASEAN. As such, this sub-group concluded that it had to conduct its primary research to find out more about the 'why'.

4 Understanding the "why" behind the status quo on sustainability disclosure and reporting

4.1 Introduction

This chapter seeks to understand the "why", i.e., the motivations and considerations behind the current standards, initiatives, and trends on reporting and disclosure practices. Whilst a lot of good work has already gone into this field, the sub-group concluded that its primary research, especially with a specific ASEAN focus, would be instrumental to provide well-informed policy recommendations to the ACMF and WC-CMD.

4.2 Corporate survey

An online survey was conducted among 47 ASEAN-headquartered corporates targeting corporates that are among the top 100 by market capitalisation in the respective ASEAN country. The survey focused on the larger economies within ASEAN. Figure 5 provides the breakdown of countries that are represented within the survey. Refer to Appendix H for a breakdown of the participating industries.

The survey was structured into 6 sections and sought to understand the role and influence of governments and stakeholders on the level of sustainability disclosure, and other aspects such as the common disclosure standards utilised, perspectives on auditing and assurance of sustainability disclosures, and the ease of data collection.

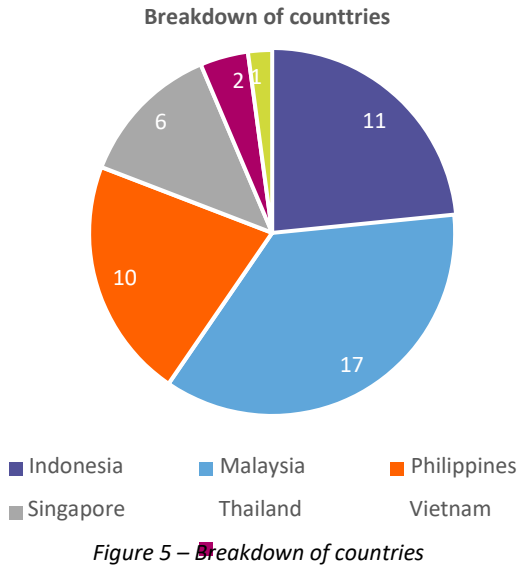

Figure 5 – Breakdown of countries
Source: IAP working group research

Insight 1: Demand for better quality ESG data from governments/regulators

64% of survey respondents assessed that ESG-related data currently provided by ASEAN governments/regulators are not sufficient, timely, and easy to source nor comprehend (Appendix I), indicating the need for governments/regulators to improve its provision of high-quality ESG data. This is a strong need from corporates with more than 74% of respondents believing that government-provided

ESG-related data would moderately to largely help with making sustainability-related business decisions (Appendix J).

Insight 2: Multiple ESG reporting standards create challenges

According to Appendix K, 77% of survey respondents indicated that multiple ESG reporting standards create challenges for ESG reporting either to a moderate or large extent, citing that conflicting metrics and data required and the different target audience of the various sustainability standards contribute the most to challenges faced (Appendix L).

Insight 3: Corporates demand a convergence in ESG standards on a global or ASEAN-level and for ASEAN regulators to collective agree on an ASEAN taxonomy

As seen in Appendix L, approximately 85% of corporates believe that a move to converge ESG standards on a global or ASEAN level will help corporates either by a moderate or a large extent to improve sustainability reporting and disclosure.

A similar proportion of corporates also strongly advocates for ASEAN securities regulators to collectively agree on an ASEAN-level taxonomy by providing clear definitions of 'Sustainability and Sustainable Investments' (Appendix M), showing a clear relationship between the four pillars and workstreams of the ACMF. The development of an ASEAN-level taxonomy is helmed by a separate workgroup.

Insight 4: Corporates do not audit sustainability reports largely because it is not mandatory

62% of the respondents shared that the organisation's sustainability report is not audited on an ad-hoc or regular basis (Appendix N). Out of this pool of respondents, approximately 90% of corporates do not audit their sustainability reports as it is not a regulatory requirement in their operating jurisdiction (Appendix O). Unaudited sustainability reports lack an additional layer of assurance and transparency required by global investors. A change in regulatory compliance, such as mandating the assurance of regulatory reports to ensure consistency between financial and sustainability disclosures, is required to increase the proportion of audited sustainability reports and thus encourage investment flows into the ASEAN region.

Insight 5: Poor understanding of investor demands on corporate sustainability reporting

Appendix P highlights that 77% of corporate survey respondents believe that their organisation provides financially material ESG disclosures that could sufficiently influence investor decisions. The respondents were subsequently asked to identify gaps between areas of improvement to better meet foreign investor demands. The results were juxtaposed with responses from global investors from the survey mentioned in Chapter 2.2.

The comparison between the two surveys shows that there was a severe mismatch in corporate understanding of global investor demands. While investors place heavy emphasis on governance, specifically board oversight and management's responsibilities, corporates believe that metrics and targets on climate, scope 1, 2, and 3 GHG emissions, and resilience of corporate strategy were vital (Appendix Q).

5 Policy recommendations

In Chapter 2, we identified priorities and perspectives from global investors that were validated by our primary research through a survey with investors. Chapter 3 showcased the current behaviour of corporate sustainability reporting and disclosure within the ASEAN countries. Subsequently, Chapter 4 explored the motivations and reasons behind current behaviour and reporting trends. Finally, Chapter 5 will highlight 4 principles and 6 policy recommendations that build upon work from the previous Chapters.

The recommendations below are tailored for the Purpose of this report, as iterated in Chapter 1. It does not address all stakeholder needs.

Principles

1. *Urgency*:
    a. There must be a sense of urgency amongst regulators in debating, formulating, and enforcing policy recommendations. We do not have the time to wait until the perfect solution has been developed such as the anticipated ISSB standards. We must start our journey now, and then progressively improve.
2. *Standards to foster timeliness, accuracy, and completeness of disclosure and reporting*
    a. Sustainability reporting frameworks should be complete by covering all financially material environmental, social, and governance topics as relevant.
    b. There should be a range of cross-sector and industry-specific sustainability-related disclosures. This provides depth into individual industries but also ensures comparability across sectors.
3. *ASEAN needs to own its sustainability narrative:*
    a. Regulators, investors, and corporates must manage expectations by confidently creating our own 'ASEAN narrative' in relation to our future transition to more sustainable economies. ASEAN cannot take existing solutions or approaches (e.g. the EU Taxonomy) wholesale due to its nascent sustainability journey and uniqueness and complexities of the participating economies. If we do not create and own our ASEAN narrative, global investors will do it for us. This principle is key to all 4 sub-groups of the IAP, but particularly for the Taxonomy and Transition sub-groups.
4. *Build upon existing standards and frameworks and inter-operability:*
    a. ASEAN should leverage on the work done globally in the field of sustainability reporting and disclosure and then tweak it as necessary to fit the ASEAN context. We do not have the time to start from scratch. There is a need to contextualise existing solutions (e.g. the EU Taxonomy) but one cannot currently expect ASEAN to meet all global standards.
    b. Inter-operability covers different areas such as (i) data management (I.e., how to most efficiently source, manage and use data for different disclosure standards), and (ii) the design of disclosure standards itself (I.e., how a could corporate use certain disclosures made under one standard as a building block for disclosures to be made under a separate standard). Kindly refer to comments below on SASB materiality map.

Policy Recommendations

1. *We recommend establishing mandatory baseline reporting standards for ASEAN corporates*:

a. Design

- These standards shall be aligned with accepted global standards. ASEAN standards may deviate from global standards (see Principle 3 above) but should eventually transition towards global standards. ASEAN needs to be transparent around any diversion between ASEAN and global reporting standards.
- Given the general global direction towards the ISSB, implement ISSB once it is set (even if IFRS is not fully implemented in each ASEAN country). Consider a "light version of the ISSB as an interim solution. But referring to Principle 1, we must not wait until ISSB is finalized, but start our journey today.
- Incentives to improve reporting standards over time should be set by regulators but will also come from global investors via the pricing of capital.

b. ***Scope***: extend the scope of corporates that are subject to mandatory reporting. The key idea is not to mandate reporting for listed companies only, but also to have corporates of a certain minimum size report on sustainability disclosures as well. Referencing the EU's CSRD in Chapter 3.1, ASEAN may reference revenues and/or total assets and/or number of employees. The precise design of the thresholds is to be discussed and may differ slightly between ASEAN countries.

c. ***Phase-in***: implement a phased-in approach given the varying maturity across ASEAN countries. ASEAN can adopt a comply-or-explain policy for the first 2 years to ease corporates into mandatory sustainability reporting.

2. *Clear regulatory guidance on the content of disclosure items across (i) comparable narratives and (ii) quantitative metrics that must be reported on*.
    a. Two choices can be considered:
        - *Option A*: Be very prescriptive in what disclosure items are required. This option was explored by the Singapore Exchange (SGX), which prescribed a list of 27 core ESG metrics for all Singaporean corporates to disclose (Appendix S).
        - *Option B*: Not be very prescriptive in what disclosure items are required but provide strong guidance on how to determine material disclosure items that must be disclosed. Example solution: use the SASB materiality map (https://materiality.sasb.org/), which provides clear guidance on a sectoral basis, and which is a globally accepted gold standard for institutional investors.
    b. We propose Option B as material ESG topics differ substantially by sector. Regulators could set a minimum number of disclosure items across the "E", the "S" and the "G" as prescribed by the SASB materiality map.
    c. However, we acknowledge that Option A may be easier to implement and allows for comparability across corporates. If Option A is chosen, we recommend prescribing disclosure items per sector as material ESG topics vary tremendously across sectors, I.e. to deviate from the approach taken by the SGX as SGX's suggested list is the same for all sectors.
    d. Additionally, on option "A.", we explored identifying useful disclosure items by exploring investors perspectives and supporting this with our primary research data:
        - The TCFD's status report (Chapter 2.1) and investor survey (Chapter 2.2) were analysed to identify global investors' perspectives on which disclosure elements

were viewed as the most useful to least useful for financial decision-making. Column A in Appendix T showcases the list according to the TCFD report, while Column B highlights the same perspective shared in our survey with global investors. Column C aggregates the usefulness scores by taking a weighted average of each disclosure topic.

- Subsequently, the working group sought to propose various metrics and targets that should be disclosed by ASEAN companies. In anticipation of the ISSB's release of the sustainability accounting standards, the working group analysed the prototype released by the alliance of sustainability standards and framework setters (Chapter 3.1) as the ISSB has acknowledged that it will refer to the existing work of these organisations. Columns E and F of Appendix U identify qualitative and quantitative disclosures identified within the prototype that should be disclosed by ASEAN companies. Column G also maps quantitative metrics as recommended by SGX within the consultation paper on core ESG metrics.
- Some examples of metrics include:
  - Board independence (%)
  - Absolute emissions by: Total, Scope 1, 2, and 3 according to GHG Protocol Corporate Standard
  - Science-based carbon emissions reduction targets informed by 1.5 degrees pathway

e. We must iterate that across both options, standards must include general guidance on the usage of carbon offsets. The basic principle should be:
   - If economic activity is hard-to-abate, carbon offsets and technologies like CCUS are acceptable.
   - If economic activity is not hard-to-abate, abate it. Don't use carbon offsets and technologies like CCUS.

3. *Regulators must address the disconnect between financial and non-financial reporting on sustainability matters*.
   a. Based on the public consultations conducted by TCFD in 2021 (Chapter 3.1), majority of corporate preparers consider climate-related risks and opportunities but have no intention of reporting them until it is mandatory and enforced (McBrien, TCFD Status Report – Following the brick road to better disclosures, 2021).
   b. CDSB further observed that far too many companies do not tell a consistent story across their reporting channels, leaving stakeholders the responsibility to paint a narrative of the firm's position and long-term value creation strategy (McBrien, Climate Disclosure Standards Board, 2021).
   c. While, this is not a policy recommendation in itself, we stress this as a separate point due to its importance. If policy recommendation 2 is implemented efficiently, this point 3 on connecting financial and non-financial reporting will be covered automatically.

4. *Mandate third-party assurance of sustainability reporting and disclosure, support capacity building to accomplish this, and ensure regulatory supervision.*
    a. Mandating third-party assurance following the International Auditing and Assurance Standards Board (IAASB) framework and standards, such as:
        - The International Framework for Assurance Engagements; and
        - The International Standard on Assurance Engagements (ISAE) 3000
    b. Ensure assurance service providers attend regular upskilling sessions with subject matter experts to bridge the knowledge gap.
    c. Local regulatory supervisors of the financial markets should include in their scope of responsibilities a periodical review of the sustainability disclosures to contribute to a sustainable financial system.

5. *Governments/regulators to support the provision of better ESG data.*
    a. The provision of better ESG data will provide corporates with a holistic view of the ESG implications of its business models and make long-term strategic plans.
    b. Some examples of high-quality data from governments/regulators include:
        - Coastal areas and low-lying river areas prone to floods and sea-level rise
            - 77% of Southeast Asians living along the coast or in low lying river deltas will be threatened by rising temperature and sea levels (Center for Strategic & International Studies, 2020)
        - Heatmap and rainfall patterns by the state to assess trends that may impact outdoor business activities.
        - Impact of rising temperature on agriculture yield, in particular, rice, food production, and cash crop as these can adversely affect national food security.
        - GHG standards, calculation, and reporting used by governments for their country's Biennial Update Report to the United Nations Framework Convention on Climate Change.

6. *Governments/regulators to actively support global efforts to achieve harmonisation of global sustainability reporting standards*
    a. ASEAN must play a key role in the existing global efforts in the harmonisation of global sustainability reporting frameworks, such as IFRS' development of the ISSB. This can be done directly or indirectly e.g., via initiatives that work with or support the IFRS Foundation.

Glossary

ACMF refers to the ASEAN Capital Markets Forum, a high-level grouping of capital market regulators from 10 ASEAN jurisdictions.

ASEAN refers to the Association of Southeast Asian Nations, an economic union comprising 10 member states in Southeast Asia, namely Brunei Darussalam, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

ASIFMA refers to the Asia Securities Industry and Financial Markets Association (ASIFMA), an independent, regional trade association with more than 150 member firms comprising a diverse range of leading financial institutions from both the buy and sell-side.

CDP refers to the Carbon Disclosure Project, an international non-profit organisation that helps companies and cities disclose their environmental impact

CDSB refers to the Climate Disclosure Standards Board, an international association of business and environmental non-governmental organisations working to provide material information for investors and financial markets through the integration of climate change-related information into mainstream financial reporting.

CSRD refers to the Corporate Sustainability Reporting Directive (CSRD), a new directive that aims to revise and strengthen the existing rules introduced by the Non-Financial Reporting Directive (NFRD).

EIU refers to The Economist Intelligence Unit, the research, and analysis division of Economist Group

ESG refers to environmental, social, and governance.

GAAP refers to the Generally Accepted Accounting Principles, the accounting standard adopted by the US Securities and Exchange Commission.

GRI refers to the Global Reporting Initiative, an independent, international organisation that provides the widely used GRI Standards for sustainability reporting

IAP refers to the Industry Advisory Panel, which operates under the auspices of the WC-CMD-ACMF Joint Sustainable Finance Working Group (JSFWG), which coordinates the sustainable finance agenda for ACMF and WC-CMD.

IFAC refers to the International Federation of Accountants, a global advocacy organisation for the accountancy profession.

IFRS refers to the International Financial Reporting Standards (IFRS), the leading accounting standard used by companies to prepare and publish financial statements in more than 140 countries.

IIRC refers to the International Integrated Reporting Council, a global coalition of regulators, investors, companies, standard setters, the accounting profession, academia, and NGOs.

IOSCO refers to the International Organisation of Securities Commissions, the international body consisting of the world's securities regulators in more than 130 jurisdictions.

ISSB refers to the International Sustainability Standards Board, a board that will sit alongside the International Accounting Standards Board (IASB) to introduce sustainability reporting standards for companies.

MAS refers to the Monetary Authority of Singapore, the central bank of Singapore.

NUS refers to the National University of Singapore, a national research university based in Singapore.

SASB refers to the Sustainability Accounting Standards Board, a non-profit organisation to develops sustainability accounting standards.

SFDR refers to Sustainable Finance Disclosure Regulation, a set of EU rules which to make the sustainability profile of funds more comparable and better understood by end-investors.

TCFD refers to the Task Force on Climate-Related Financial Disclosures, an organisation that aims to develop a set of voluntary climate-related financial risk disclosures.

UN NZ AOA refers to the United Nations-convened Net-Zero Asset Owner Alliance, an international group of institutional investors committed to transitioning their investment portfolios to net-zero greenhouse gas by 2050.

UN PRI refers to the United Nations Principles for Responsible Investment, a United Nations-supported international network of investors that works to promote sustainable investment through the incorporation of ESG factors into investment decision-making.

UN PSI refers to the United Nations Principles for Sustainable Insurance, a global sustainability framework and collaborative initiative between the United Nations and the insurance industry.

WC-CMD refers to the ASEAN Working Committee on Capital Market Development, a committee monitoring initiatives and progress in the development of ASEAN capital markets.

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Appendix

A: List of investor demands for sustainability information and areas of focus for companies, IOSCO



Source: IOSCO's Report on Sustainability-related Issuer Disclosures

B: Top 10 most useful disclosure elements by score and variance, TCFD 2020 Status Report

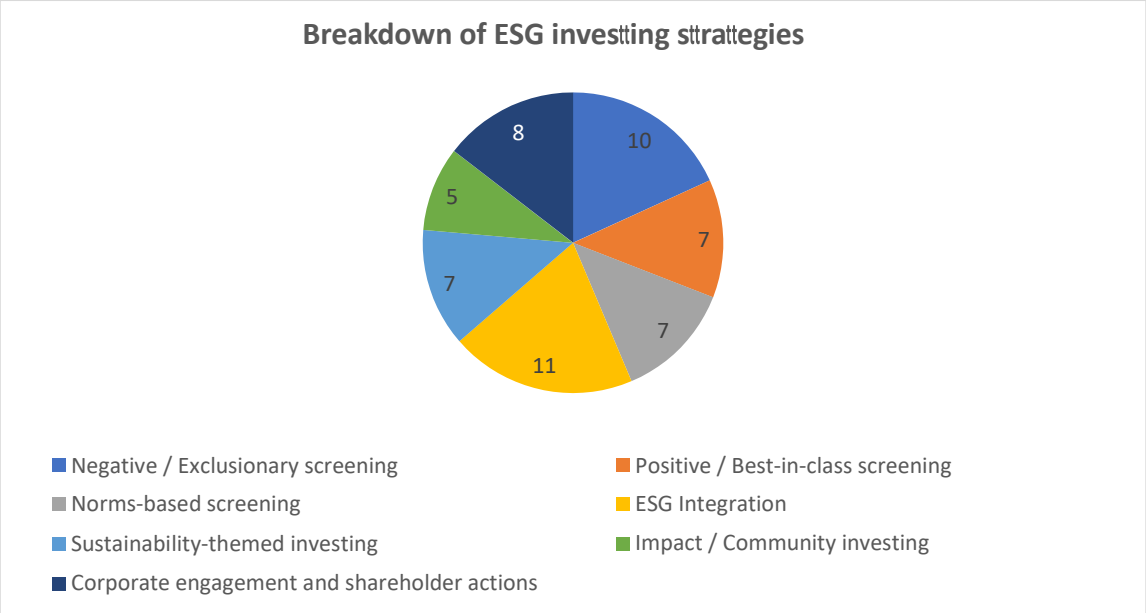
Top Ten Most Useful Disclosure Elements by Score and Variance

Recommended Disclosure	Disclosure Element	Score	Var.*	Rank
Strategy b)	How climate-related issues have **affected business and strategy**	1.1	0.1	1
Metrics and Targets a)	**Key metrics on climate-related issues** for most recent period and historical periods	1.3	0.2	2
Strategy a)	The **material climate-related issues** identified for **each sector and geography**	1.3	0.3	3
Metrics and Targets b)	**Scope 1 GHG emissions** for the most recent period and historical periods	1.3	0.4	4
Metrics and Targets c)	Climate-related **targets related to GHG emissions**	1.3	0.4	5
Strategy a)	The **material climate-related issues identified**	1.4	0.2	6
Metrics and Targets b)	**Scope 2 GHG emissions** for the most recent period and historical periods	1.4	0.4	7
Metrics and Targets c)	The **timeframes** over which climate-related **targets** apply	1.4	0.4	8
Metrics and Targets c)	**Key performance indicators** used to assess progress against **climate-related targets**	1.5	0.4	9
Governance a)	Board consideration of climate-related issues for **major capital expenditures, acquisitions, and divestitures**	1.5	0.6	10

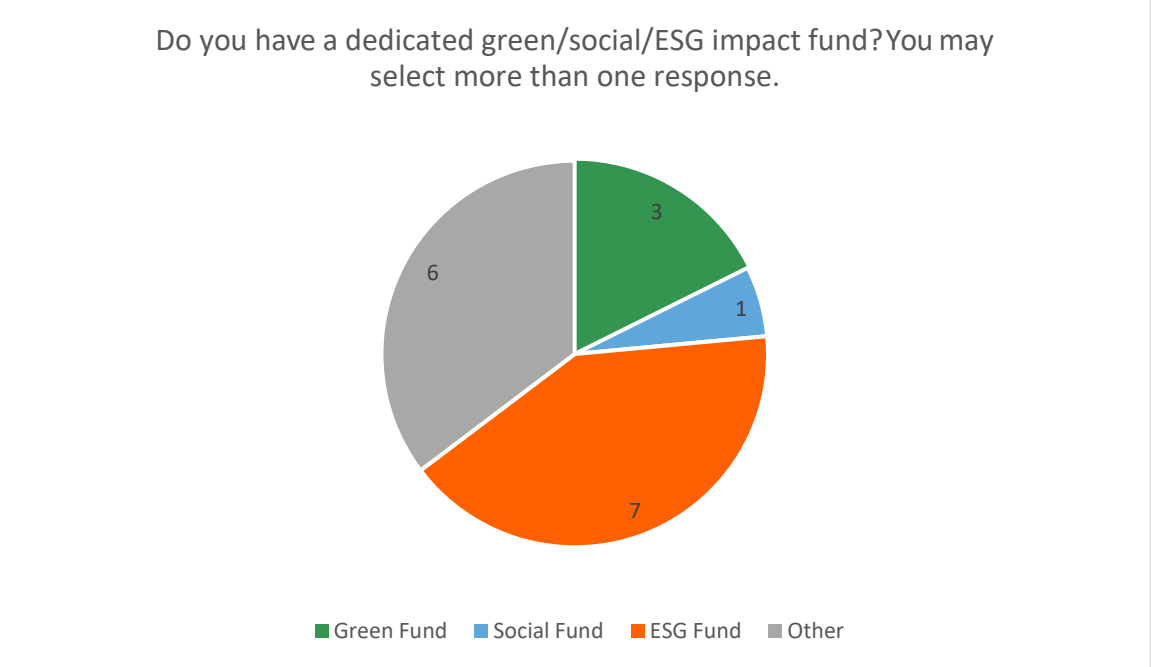
* Var. refers to variance.

Source: TCFD 2020 Status Report

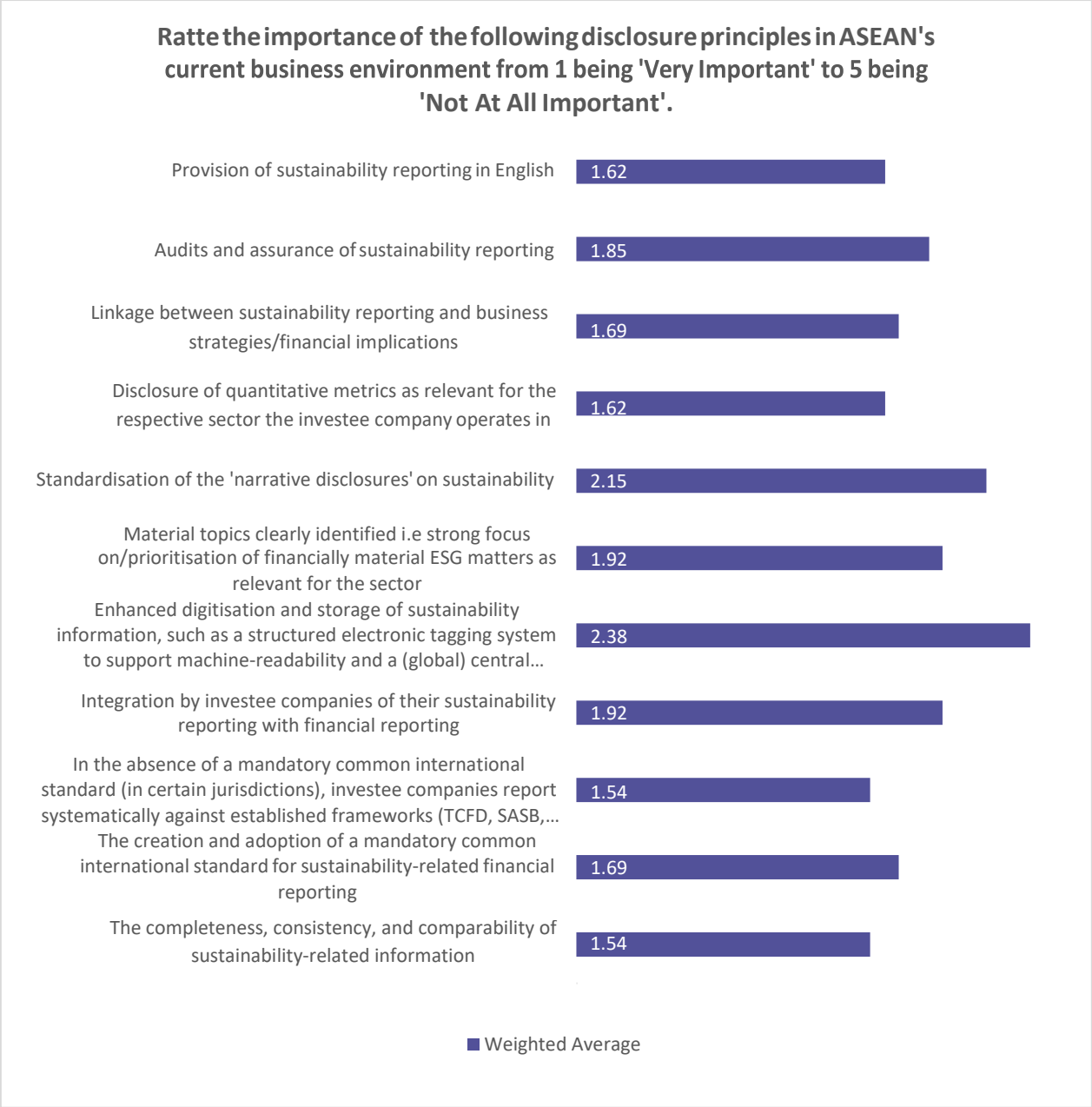
C: Investor Survey – Breakdown of ESG investing strategies



D: Investor Survey – Breakdown of dedicated ESG impact funds



E: Investor Survey – Importance of disclosure principles



	Very Important	Important	Neutral	Low Importance	Not At All Important	Weighted Average
The completeness, consistency, and comparability of sustainability-related information	7	5	1	0	0	1.54
The creation and adoption of a mandatory common international standard for	7	3	3	0	0	1.69

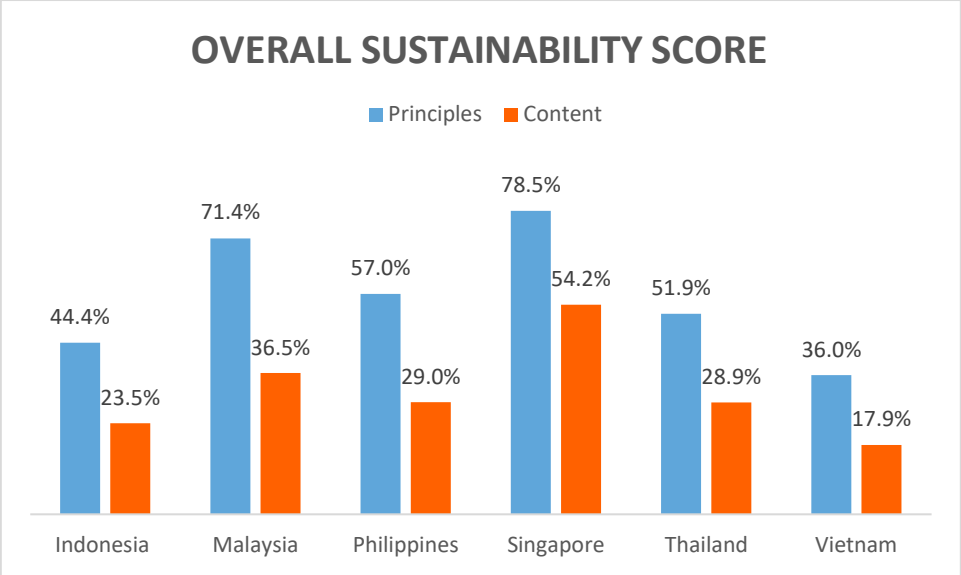
sustainability-related financial reporting						
In the absence of a mandatory common international standard (in certain jurisdictions), investee companies report systematically against established frameworks (TCFD, SASB, CDP, GRI, or others)	6	7	0	0	0	1.54
Integration by investee companies of their sustainability reporting with financial reporting	4	8	0	0	1	1.92
Enhanced digitisation and storage of sustainability information, such as a structured electronic tagging system to support machine readability and a (global) central repository	2	7	2	1	1	2.38
Material topics identified i.e strong focus on/prioritisation of financially material ESG matters as relevant for the sector	2	10	1	0	0	1.92
Standardisation of the 'narrative disclosures' on sustainability	2	9	1	0	1	2.15
Disclosure of quantitative metrics as relevant for the respective sector the investee company operates in	5	8	0	0	0	1.62
Linkage between sustainability reporting and business strategies/financial implications	5	7	1	0	0	1.69
Audits and assurance of sustainability reporting	5	6	1	1	0	1.85
Provision of sustainability reporting in English	7	5	0	1	0	1.52

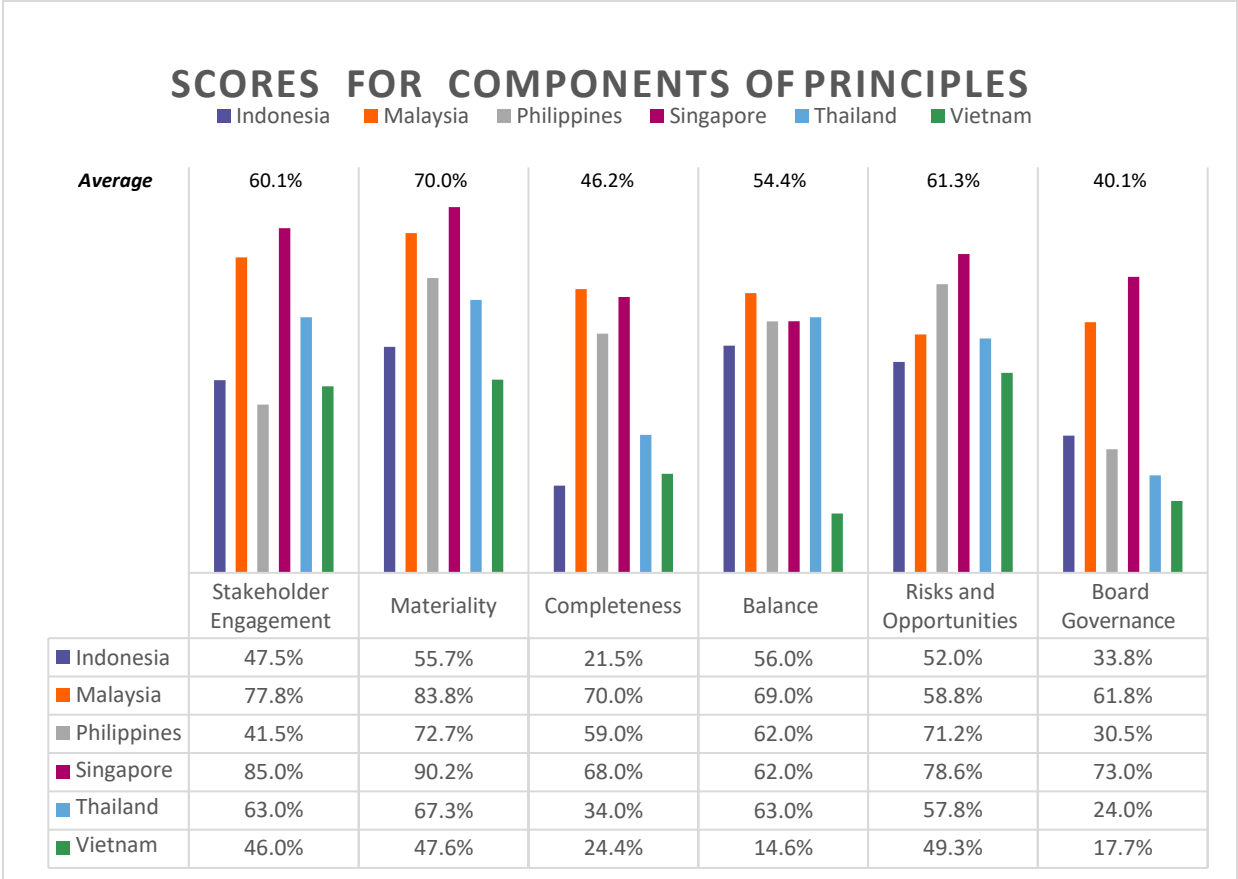
F: Investor Survey – Challenges faced by investors in adopting sustainable investing in ASEAN



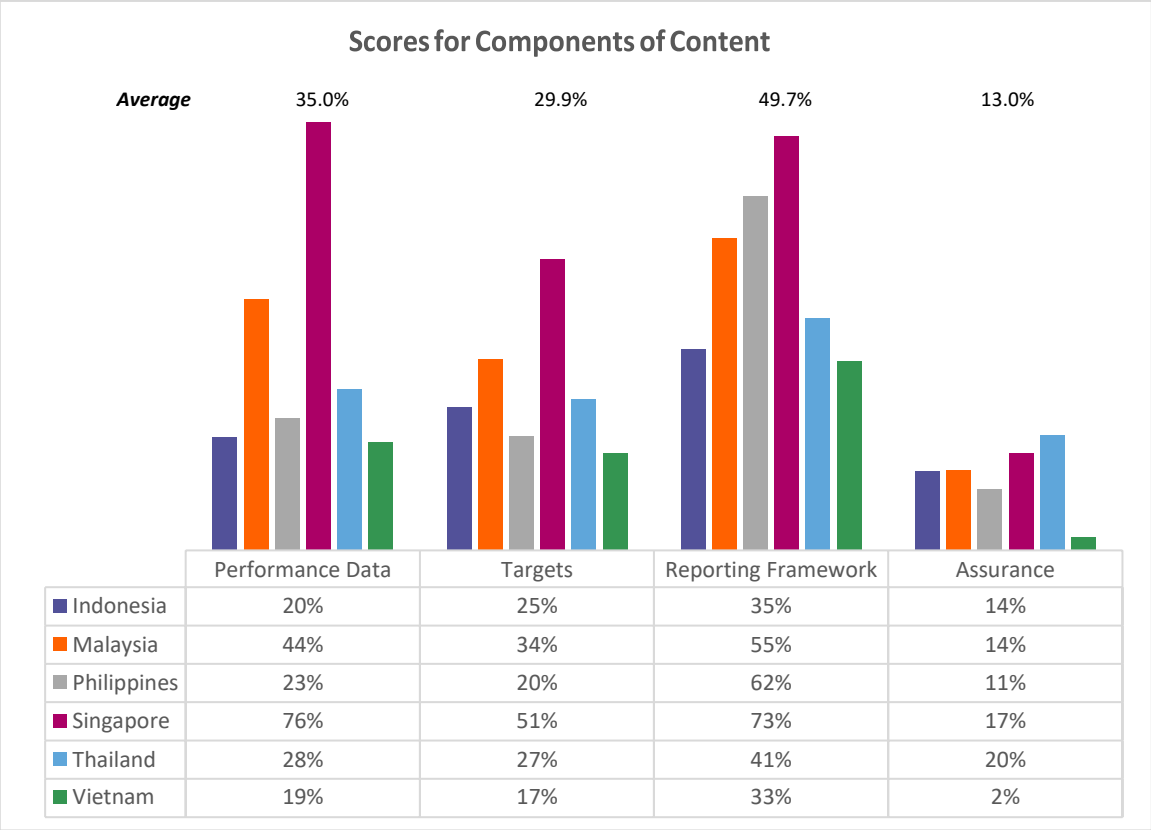
	To a large extent	To a moderate extent	To a small extent	No impact	Weighted Average
Poor quality/availability of data and analytics	6	5	1	1	1.77
Poor quality of sustainability investment reporting	4	5	4	0	2.00
Not enough products available which match my sustainability objectives	3	8	2	0	1.92
Unsure of its ability to generate persistent returns	3	3	5	2	2.46
Internal resourcing constraints	2	7	3	1	2.23
Lack of knowledge of how best to implement	3	3	6	1	2.38
No corporate policy or top down initiative	2	3	5	3	2.69
Higher fees relative to non-sustainable investment fees	2	4	3	4	2.69
Transaction and tax costs of rebalancing to sustainable targets or benchmarks	3	3	4	3	2.54

G: Sustainability Reporting in ASEAN Studies, Professor Loh, 2020



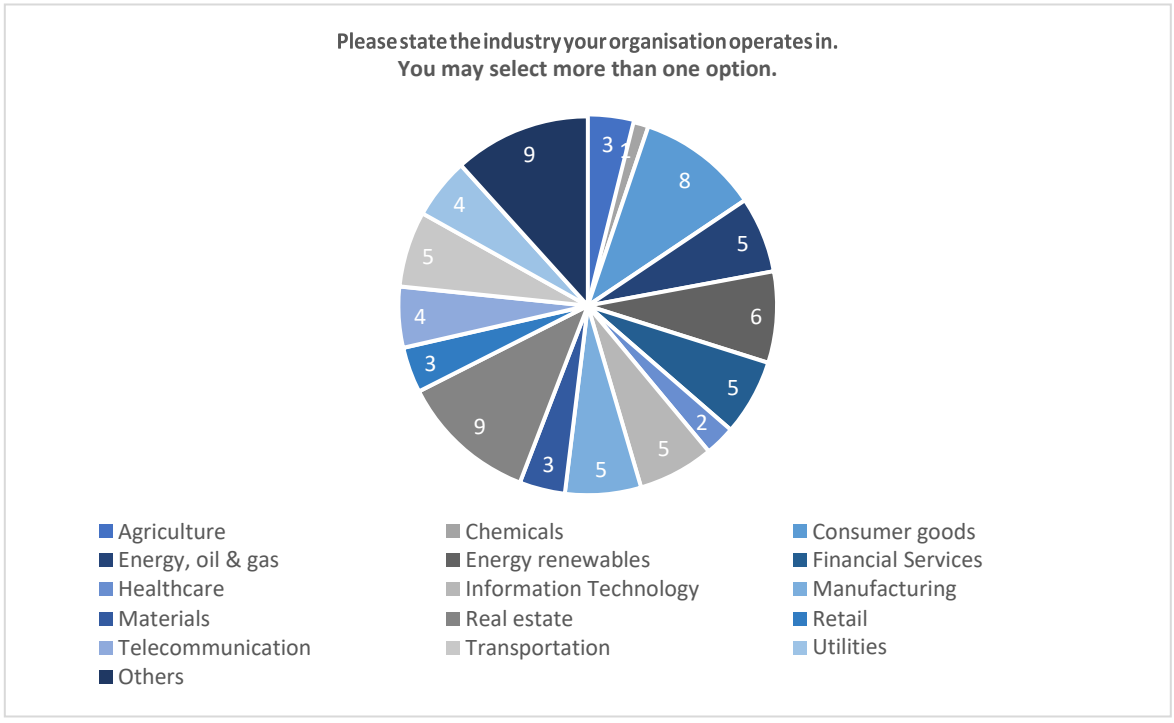


	Stakeholder Engagement	Materiality	Completeness	Balance	Risks and Opportunities	Board Governance
Indonesia	47.5%	55.7%	21.5%	56.0%	52.0%	33.8%
Malaysia	77.8%	83.8%	70.0%	69.0%	58.8%	61.8%
Philippines	41.5%	72.7%	59.0%	62.0%	71.2%	30.5%
Singapore	85.0%	90.2%	68.0%	62.0%	78.6%	73.0%
Thailand	63.0%	67.3%	34.0%	63.0%	57.8%	24.0%
Vietnam	46.0%	47.6%	24.4%	14.6%	49.3%	17.7%

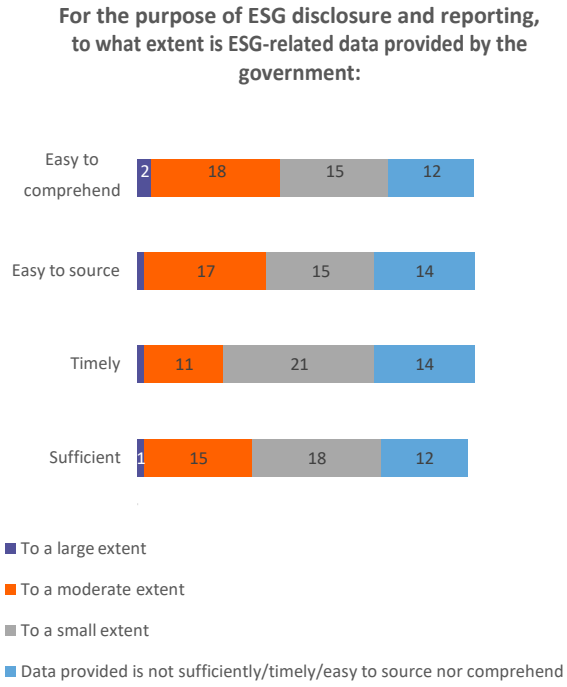


	Performance Data	Targets	Reporting Framework	Assurance
Indonesia	20%	25%	35%	14%
Malaysia	44%	34%	55%	14%
Philippines	23%	20%	62%	11%
Singapore	76%	51%	73%	17%
Thailand	28%	27%	41%	20%
Vietnam	19%	17%	33%	2%

H: Corporate Survey – Breakdown of participating industries

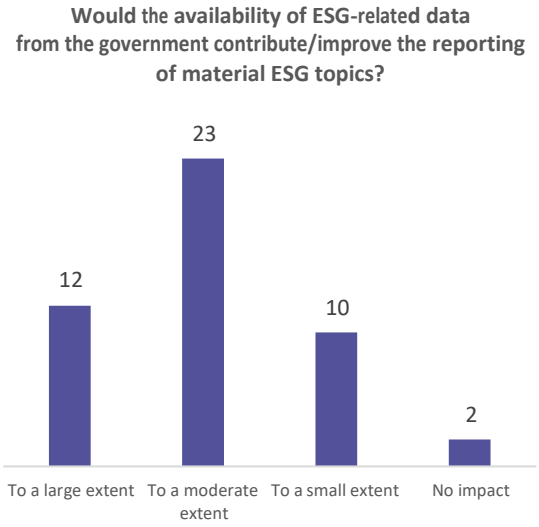


I: Corporate Survey – Quality of ESG data from regulators



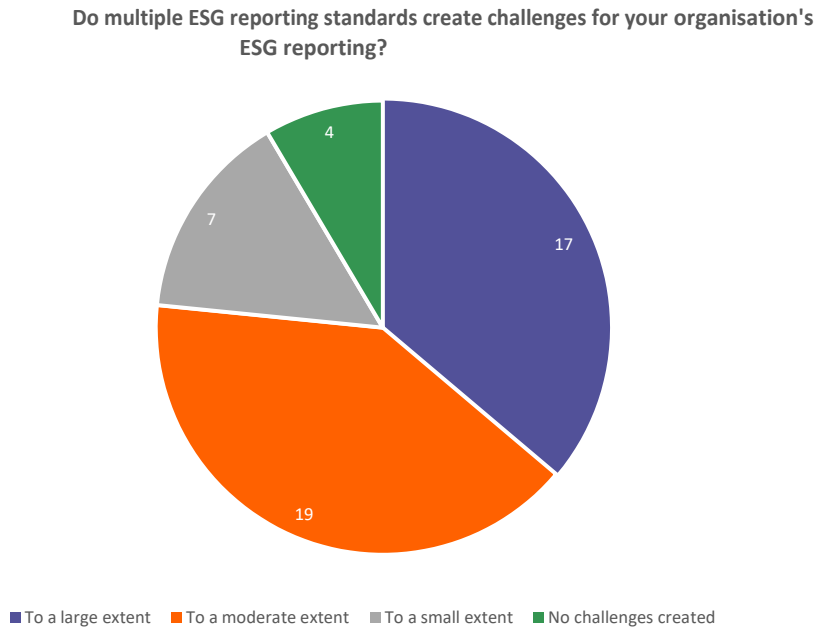
Source: IAP working group research

J: Corporate Survey – ESG-related data from ASEAN governments



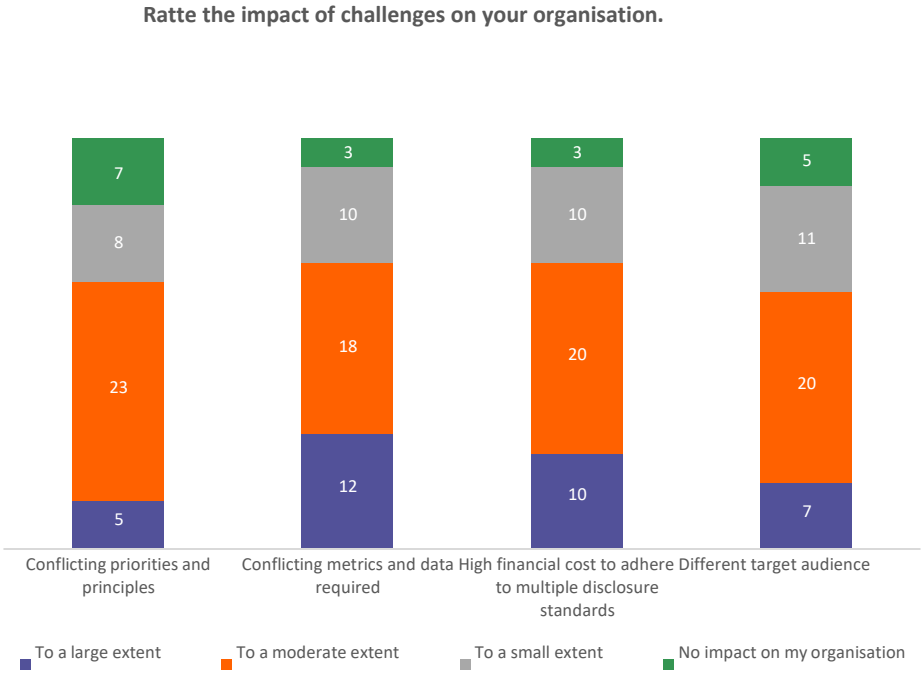
Source: IAP working group research

K: Corporate Survey – Extent of the challenge of multiple ESG reporting standards



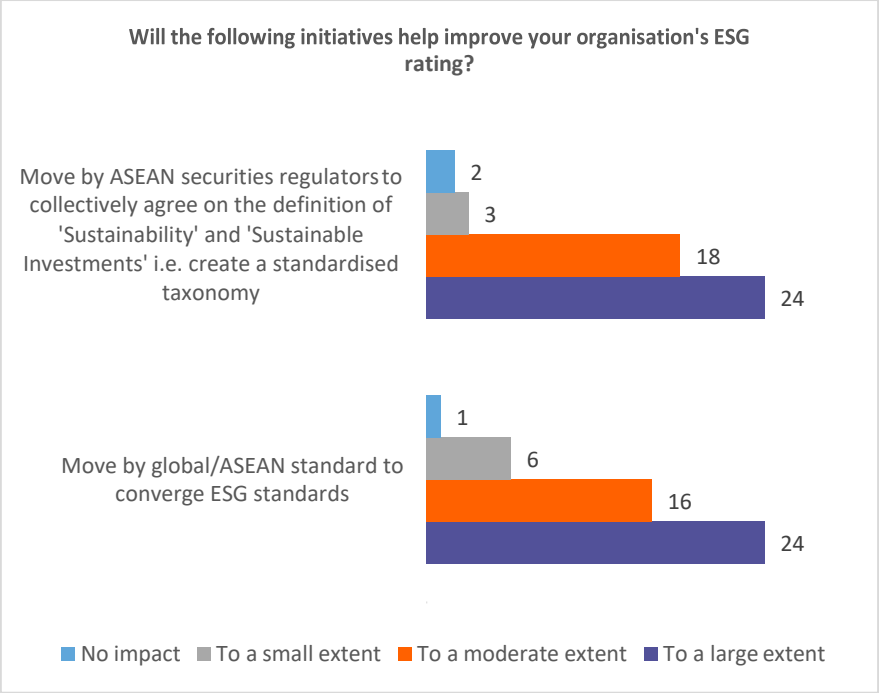
Source: IAP working group research

L: Corporate Survey – Drivers behind challenges in ESG reporting standards



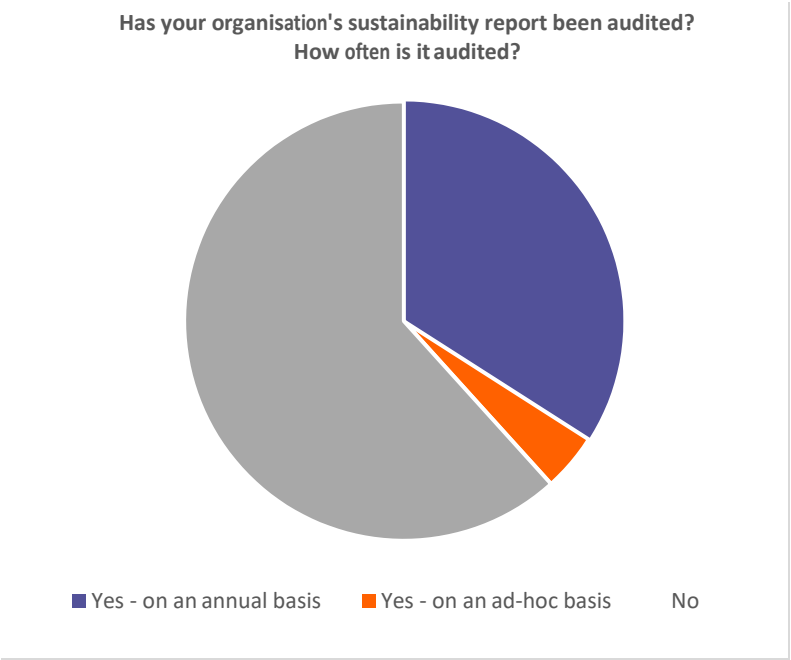
Source: IAP working group research

M: Corporate Survey – Enablers for improvement in corporate ESG reporting



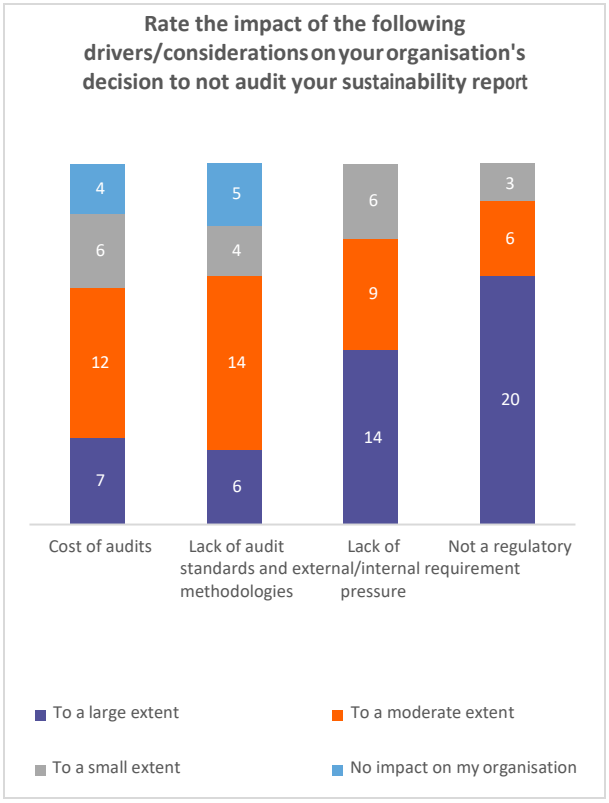
Source: IAP working group research

N: Corporate Survey – Frequency of audits on sustainability reports



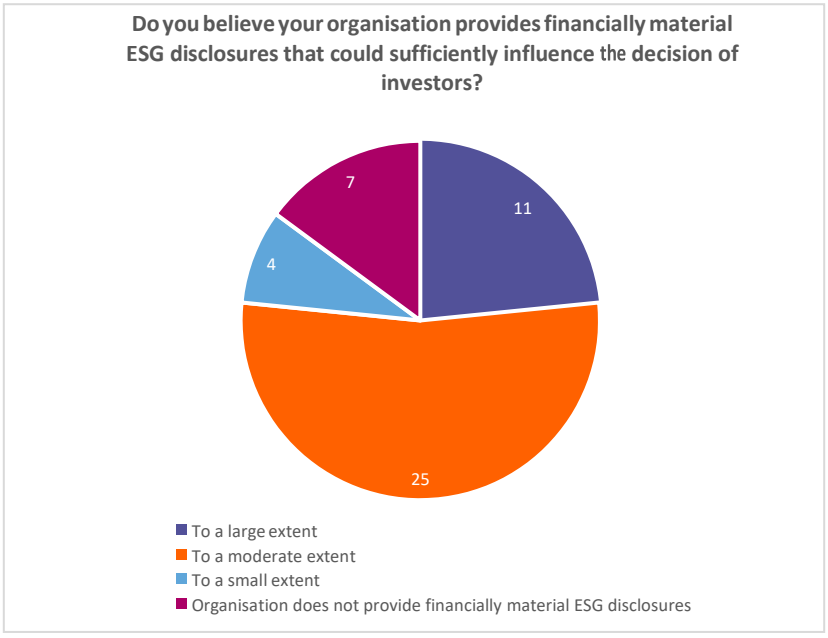
Source: IAP working group research

O: Corporate survey – Drivers of the lack of audits of sustainability report



Source: IAP working group research

P: Corporate Survey – Provision of financially material ESG disclosures that sufficiently influence investor decisions



Source: IAP working group primary research

Q: Corporate Survey – Gaps in sustainability reporting by Investors and Corporates

Ranking of gaps identified by Investors	Ranking of gaps identified by Corporates
1. Governance: Board oversight 2. Governance: Management's role 3. Risk Management: Risk management processes 4. Strategy: Resilience of strategy 5. Risk Management: Risk identification and assessment processes 6. Risk Management: Integration into overall risk management 7. Strategy: Risk and opportunities 8. Metrics and targets: Climate-related metrics and targets 9. Metrics and targets: Social-related metrics and targets 10. Metrics and targets: governance-related metrics and targets 11. Metrics and targets: Scope 1, 2, and 3 GHG emissions	1. Metrics and targets: Climate-related metrics and targets 2. Metrics and targets: Scope 1, 2, and 3 GHG emissions 3. Strategy: Resilience of strategy 4. Metrics and targets: Social-related metrics and targets 5. Governance: Board oversight 6. Strategy: Risk and opportunities 7. Metrics and targets: governance-related metrics and targets 8. Risk Management: Integration into overall risk management 9. Governance: Management's role 10. Risk Management: Risk management processes 11. Risk Management: Risk identification and assessment processes

R: Current Status of Sustainability Reporting in ASEAN countries

	(Sustainability Finance-related) Taxonomy on a national level established or planned?	Sustainability-related disclosure standards established or planned within such national Taxonomy?	Is sustainability reporting mandatory for listed companies?	Does the national regulator enforce any sustainable-related disclosure standards (and if "yes" voluntary or mandatory)?	IFRS implemented or planned to be implemented?	Sustainability reporting standards/framework, Mandatory or Voluntary (Source: from MAS ESG survey)	Sustainability-related standards/frameworks that are applied nationally to some extent?						
							GRI	IR	SASB	CDSB	CDP	TCFD	Others
Brunei			No	No	Yes								
Cambodia			No	No	Yes								
Indonesia	Planned - FS[3]		Yes	No	No	Voluntary, with recommended frameworks	Yes [4]		Yes[4]			Yes[5]	SDGs & UNGC[6]
Laos			No	No	No								
Malaysia	Planned[7]	Planned - FS[7]	Yes	No	Yes	Voluntary, with a recommended framework Mandatory (GRI standards and TCFD) for certain sustainability-related aspects only	Yes[8]	Yes[9]				Yes[10]	
Myanmar			No	No	No, but plans to by 2022-23								
Philippines	Announced[11]		Yes	No	Yes	Voluntary, with recommended frameworks	Yes[12]	Yes[12]	Yes[12]			Yes[12]	SDGs & UNGC[13]
Singapore	Planned - FS[14]	Planned - FS[14] (13)	Yes	No	Yes	Voluntary, with recommended frameworks	Yes[4]	Yes[9]	Yes[4]			Yes[6]	SDGs & UNGC[6]
Thailand			No	No	No, and no date has been set for convergence	Voluntary, with recommended frameworks	Yes[15]	Yes[16]				Yes[17]	
Vietnam			Yes	No	No, but plans to be in 2025	Voluntary, with recommended frameworks	Yes[18]						

[3] Learning from mistakes, Indonesia moves to next phase of sustainable finance roadmap
[4] Page 11 - IFAC: Benchmarking GP in Sustainability Assurance
[5] Pg 31 – TCFD Disclosure in Asia
[6] Pg 12 – IFAC: Benchmarking GP in Sustainability Assurance
[7] SC plans to release guides on SRI Taxonomy by year-end; Joint Statement by Bank Negara Malaysia and Securities Commission Malaysia: Towards Greening the Financial Sector
[8] Pg 25 - Bursa Malaysia Sustainability Reporting Guide (2nd Ed)
[9] Integrated Reporting in ASEAN
[10] EY Survey: Malaysia's PLCs at nascent stage of climate risk reporting
[11] Unlocking Opportunities at the Local Level by BSP Governor Benjamin E. Diokno
[12] Sustainability reporting in the Philippines: Year One review
[13] Republic of the Philippines Securities and Exchange Commission – Sustainability Reporting Guidelines for Publicly-Listed Companies
[14] Association of Banks in Singapore – Green Finance Industry Taskforce (GFIT) Taxonomy Public Consultation; Singapore consults on Green Finance Taxonomy for financial institutions
[15] Thai Institute of Directors – Sustainability Reporting Trends to Watch
[16] Pgs 9&41 – ACCA Insights into Integrated Reporting
[17] Thailand SEC declares support for TCFD, enhanced ESG disclosures
[18] Annual/sustainability reports of several companies in Vietnam adopting GRI standards

S: SGX List of Core ESG Metrics

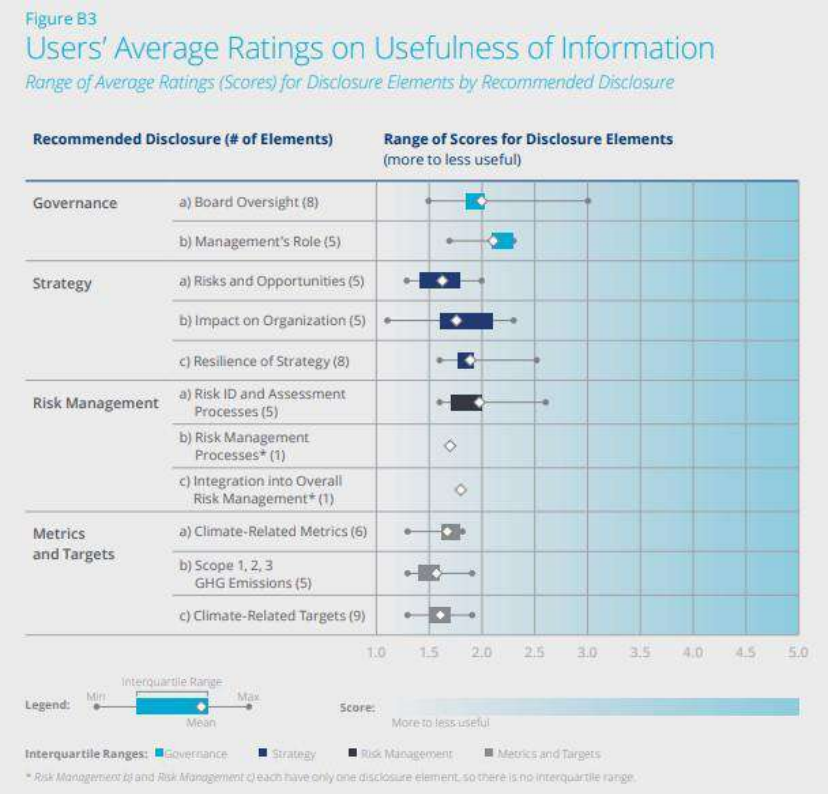
Topic		**Mettric**	**Unitt**
Environment	Greenhouse gas emissions ("GHG")	Absolute emissions by (a) Total; (b) Scope 1, Scope 2; and (c) Scope 3, if appropriate	tCO2e
		Emission intensities by: (a) Total; (b) Scope 1, Scope 2; and (c) Scope 3, if appropriate	tCO2e/organisation-specific metrics
	Energy consumption	Total energy consumption	MWhs or GJ
		Energy consumption intensity	MWhs or GJ/organisation-specific metrics
	Water consumption	Total water consumption	ML or m3
		Water consumption intensity	ML or m3/organisation-specific metrics
	Water generation	Total wate generated	t
Social	Gender diversity	Current employees by gender	Percentage (%)
		New hires and turnover by gender	Percentage (%)
	Age-based diversity	Current employees by age groups	Percentage (%)
		New hires and turnover by age groups	Percentage (%)
	Employment	Total turnover	Number and Percentage (%)
		Total number of employees	Number
	Development & training	Average training hours per employee	Hours/No. of employees
		Average training hours per employee by gender	Hours/No. of employees
	Occupational health & safety	Fatalities	No. of cases
		High-consequence injuries	No. of cases
		Recordable injuries	No. of cases
		Recordable work-related ill health cases	No. of cases
Governance	Board Composition	Board independence	Percentage (%)
		Women on the board	Percentage (%)
	Management diversity	Women in the management team	Percentage (%)
	Ethical behaviour	Anti-corruption disclosures	Discussion and no. of standards
		Anti-corruption training for employees	Number and Percentage (%)
	Certifications	List of relevant certifications	List
	Alignment with frameworks	Alignment with frameworks and disclosure practices	GRI/TCFD/SASB/SDGs/Others

	Assurance	Assurance of sustainability report	Internal/External/None

Source: Consultation paper on starting with a common set of core ESG metrics, Singapore Exchange.
Consultation Paper on Starting with a Common Set of Core ESG Metrics.pdf (sgx.com)

T: Usefulness of Disclosure Topics

	A	B	C
	TCFD *Chapter 2.1*	Investor Survey *Chapter 2.2*	Aggregated Response
Most useful	Governance: Board oversight	Governance: Management's role	Governance: Management's role
	Governance: Management's role	Strategy: Impact on organisation	Governance: Board oversight
	Risk management: Risk identification and assessment processes	Risk Management: Risk management processes	Strategy: Impact on organisation
	Strategy: Resilience of strategy	Governance: Board oversight	Strategy: Resilience of strategy
	Risk management: Integration into overall risk management	Strategy: Risk and opportunities	Risk Management: Risk management processes
	Strategy: Impact on organisation	Strategy: Resilience of strategy	Risk management: Risk identification and assessment processes
	Risk Management: Risk management processes	Risk management: Integration into overall risk management	Risk management: Integration into overall risk management
	Strategy: Risk and opportunities	Metrics and targets: Climate-related metrics	Strategy: Risk and opportunities
	Metrics and targets: Climate-related metrics	Risk management: Risk identification and assessment processes	Metrics and targets: Climate-related metrics
	Metrics and targets: Climate-related targets	Metrics and targets: Scope 1,2,3 GHG Emissions	Metrics and targets: Climate-related targets
Least useful	Metrics and targets: Scope 1,2,3 GHG Emissions	Metrics and targets: Climate-related targets	Metrics and targets: Scope 1,2,3 GHG Emissions



Source: TCFD Status Report 2020

U: Extract of qualitative and quantitative metrics from the ISSB / Prototype and SGX List of Core ESG metrics

	D	E	F	G
Aggregated Response	**ISSB / Prototype disclosure objective**	**Extract of ISSB / Prototype qualitative disclosure metrics**	**Extract of ISSB / Prototype quantitative disclosure metrics**	**Extract of Singapore Exchange's (SGX) list of core ESG metrics**
Governance: Management's role	To understand the governance processes, controls, and procedures used for managing climate-related risks and opportunities	A description of management's role in assessing and managing climate-related risks and opportunities	NA	• Women in the management team (%) • Anti-corruption disclosures • Anti-corruption training for employees (%) • Assurance of sustainability report

Governance: Board oversight		A description of how the board holds management accountable for the implementation of climate-related policies, strategies, and targets, including whether and how related performance metrics are incorporated into remuneration policies.	NA	• Board Independence (%) • Women on the board (%)
Strategy: Impact on organisation	To understand how the implications of climate-related risks and opportunities are integrated into the entity's strategy and implications for the entity's business model, including how resources are to be used to support strategic resilience to climate-related risks and to realise climate-related opportunities	A description of the impact of identified climate-related risks and opportunities on the entity's business model and strategy	Descriptions and quantification that gives insight into the extent of risk in those areas of concentration: asset bases, facilities, geographies, products, or other categorisation to quantify the value at risk (e.g., x assets in regions with high baseline water stress, properties located in designated flood hazard areas)	NA
Strategy: Resilience of strategy		An analysis of whether and how the resilience of the entity's strategy and business model may be affected by climate-related risks and opportunities	Whether the organisation has been conducted against a range of climate-related scenarios including a 2 degree Celsius or lower scenario and scenarios consistent with increased	NA

			physical climate-related risks and if so, which scenarios have been considered, source of the scenario used, and on which scenarios the assessment of strategic resilience is based;	
Risk Management: Risk management processes	To understand how climate-related risks are identified, assessed, and managed and what risk management process is used	Policies, objectives, activities, and processes used for managing the risk and substantially contributing to climate change mitigation and adaptation	NA	NA
Risk management: Risk identification and assessment processes		• how risks are identified and prioritised • the process used to assess the impact of the risk	NA	NA
Risk management: Integration into overall risk management		The entity shall explain its risk management process and strategy for each category of climate-related risk that it identifies and disclose	NA	NA
Strategy: Risk and opportunities	To understand the way in which the implications of climate-related risks and opportunities are integrated into the entity's strategy and implications	A description of the climate-related risks and opportunities that enhance, threaten, or may change the entity's business model and strategy over the short-,	• the nature of the risk and how it is categorised according to the definition of climate risks and opportunities;	NA

	for the entity's business model, including how resources are to be used to support strategic resilience to climate-related risks and to realise climate-related opportunities	medium- and long-term	• how each risk arises or is expected to arise;	

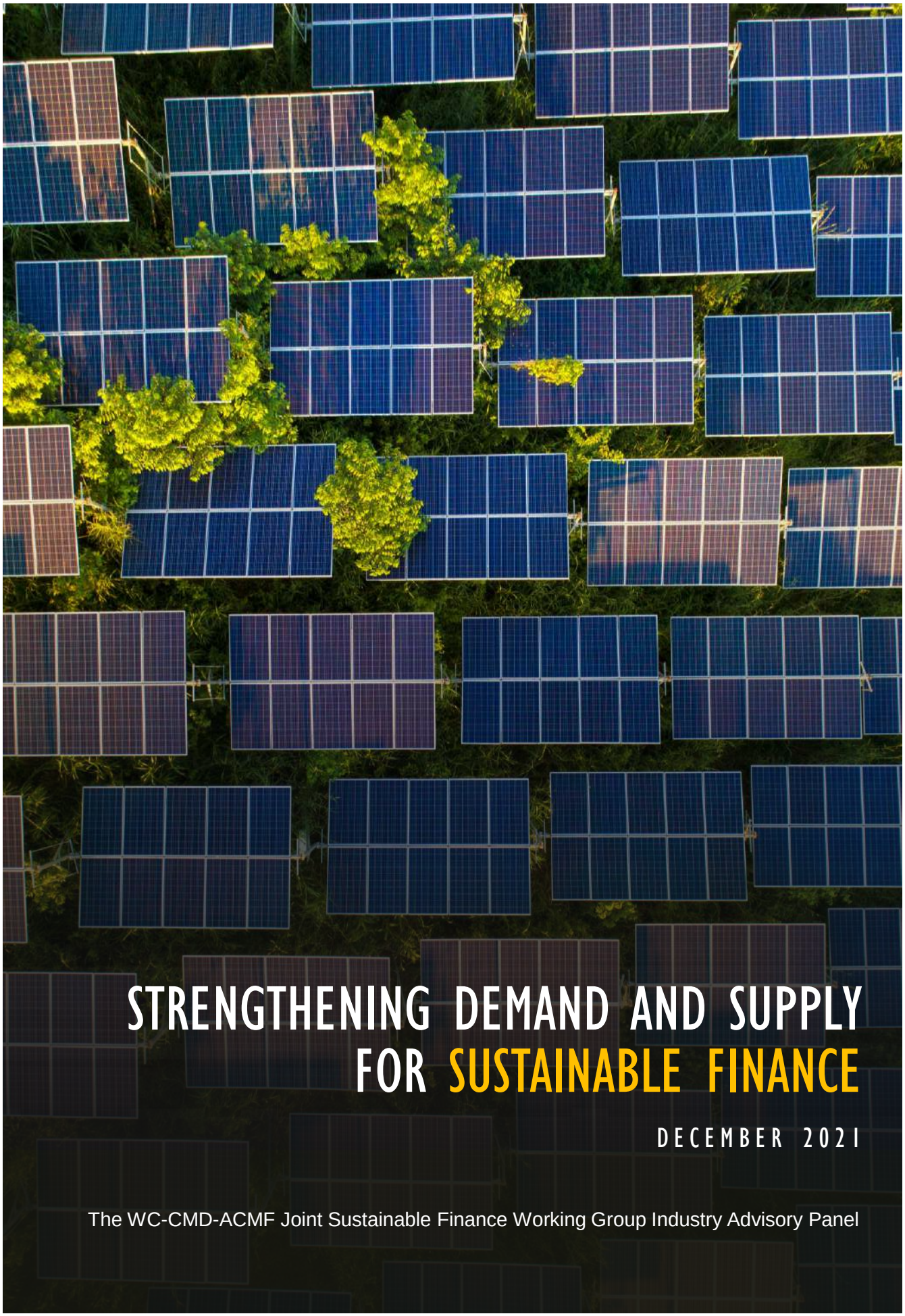
Metrics and targets: Climate-related metrics	To understand the metrics and targets used to assess and manage climate-related risks and opportunities	To achieve the objective, an entity shall disclose cross-industry and industry-specific matters.	• The current carbon price or range of prices used for assessing climate risks and making investment and strategic decisions; and
			• the effect on these climate-related risks and opportunities of strategic and operational decisions made by companies to manage performance;
				• Absolute emissions by:
				  • Total
				  • Scope 1
				  • Scope 2
				  • Scope 3, if appropriate
				• Total energy consumption
				• Energy consumption intensity
				• Total water consumption
				• Water consumption intensity
				• Total waste generated

Metrics and targets: Climate-related targets			• the target and associated ambition, such as: ○ science-based targets to achieve 2 degree Celsius warming or lower;	
Metrics and targets: Scope			Targets that relate to the	

1,2,3 GHG Emissions			reduction of Scope 1, 2, and 3 GHG emissions, water usage, energy usage in line with anticipated regulatory requirements or market constraints or other goals;	

Source: Reporting on enterprise value, Illustrated with a prototype climate-related financial disclosure standard, CDP, CDSB, GRI, IIRC, and SASB. Reporting-on-enterprise-value_climate-prototype_Dec20.pdf (netdna-ssl.com)

Source: Consultation paper on starting with a common set of core ESG metrics, Singapore Exchange. Consultation Paper on Starting with a Common Set of Core ESG Metrics.pdf (sgx.com)



STRENGTHENING DEMAND AND SUPPLY FOR SUSTAINABLE FINANCE

DECEMBER 2021

The WC-CMD-ACMF Joint Sustainable Finance Working Group Industry Advisory Panel



This white paper has been jointly prepared by the working group on Strengthening Demand and Supply for Sustainable Finance as a contribution to the ASEAN Working Committee on Capital Market Development (WC-CMD) and the ASEAN Capital Markets Forum (ACMF) Joint Sustainable Finance Working Group Industry Advisory Panel convened by the Sustainable Finance Institute Asia.

Working Group on Strengthening Demand and Supply for Sustainable Finance

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Contents

1. Introduction

2. Snapshot of the ASEAN Green, Social and Sustainability Bond Market

3. Challenges in Mainstreaming Sustainable Finance in ASEAN

4. Potential Solutions – The Quick Wins

    8. Government Initiatives to Scale Up Demand and Supply

    9. Promote Transition and Sustainability-Linked Bonds

    10. Creation of a Centralised Knowledge Repository

5. Potential Solutions – Longer Term Initiatives

    11. Fostering an Enabling Policy Environment

    13. Increasing Climate-Focused Disclosures

    15. Capacity Building

6. Conclusion

Introduction

Sustainable Finance in ASEAN



Much has been written on the scale of the investment gap required for ASEAN to advance and achieve its ambitions under the United Nations Sustainable Development Goals (UN SDG) and the Paris Agreement. The United Nations Conference on Trade and Development (UNCTAD) estimated that developing countries will require an additional USD2.5 trillion in financing per year up to 2030 to realise the SDGs[1]. Meanwhile, the Asian Development Bank (ADB) estimated that ASEAN will require circa USD3.1 trillion from 2016-2030 to build climate-resilient infrastructure[2].

Thus, the growth of sustainable finance in ASEAN is critical to support both climate, as well as the broader sustainable development agenda. The scope of sustainable finance is very wide, covering loans, capital markets, trade finance etc., while the choice of instrument often depends on several factors including the maturity of the corporates, accessibility to markets and scale of financing.

Nonetheless, given the purview of the WC-CMD and the ACMF, this paper will explore recommendations for strengthening demand and supply for sustainable finance in the context of the capital markets.

In the short-term, we will explore low-hanging initiatives that can quickly inject supply and demand into the Green, Social and Sustainability-labelled bond markets in ASEAN to alleviate immediate constraints.

While not intended as a permanent solution, such initiatives can play a role to strengthen government signals in support of sustainable finance, raise general market awareness and jump-start a virtuous cycle of supply and demand.

Over the longer term, to achieve lasting and meaningful growth in sustainable finance, it is imperative that the underlying barriers to scaling up demand and supply are addressed. As climate change and sustainable development issues become mainstream, investor willingness and demand is also shifting rapidly towards sustainable investments. However, the supply of available projects in ASEAN remains a primary constraint. There is an urgent need for governments in ASEAN to articulate the clear policy directions, as well as develop and implement the enabling policy environments necessary for pipelines of sustainable projects to emerge at scale.

The capital markets have been and remain an impactful, adaptable and responsive platform to mobilise the vast amounts of capital needed to close the investment gaps in ASEAN. With the right policy conditions in place, the stage is set for the rapid acceleration of sustainable finance in ASEAN.

[1] UN Global Compact & EY, Closing the SDG Financing Gap in ASEAN, 2020

[2] ADB, Meeting Asia's infrastructure needs, 2017

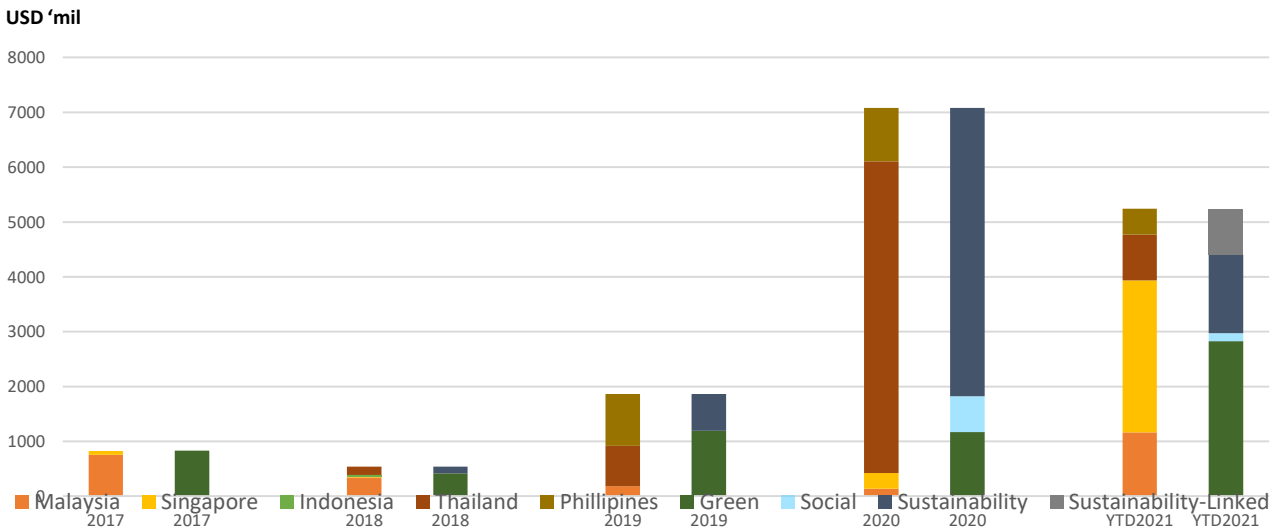
Snapshot of the ASEAN Green, Social, Sustainability and Sustainability-Linked Bond Market

The ASEAN GSS bond market has been growing steadily over the years in terms of volume and diversification in format…[3]

The ASEAN Green, Social, Sustainability and Sustainability-Linked ("**GSS**") bond market has witnessed steady growth albeit still being at a relatively nascent stage. The local currency ("**LCY**") market performed strongly in 2020, almost quadrupling with a record-breaking issuance volume of USD7.1 billion vs. USD1.9 billion in 2019. This was mainly attributable to the Government of Thailand's debut sustainability bond taps of THB147.0 billion[4] (USD4.4 billion equivalent).

While sustainability and social bonds took centre stage in 2020 against the backdrop of COVID-19, 2021 saw the emergence of ASEAN's first sustainability-linked bonds in the LCY space, namely Surbana Jurong's SGD250 million issuance and Thai Union's THB5 billion issuance.

GSS bond issuance volume by country and format – LCY issuances



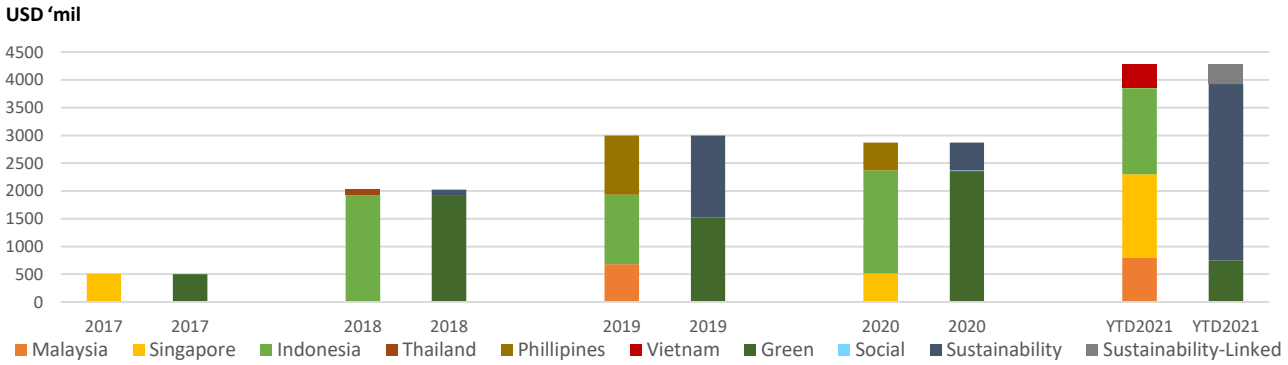
Source: Bloomberg (as at 31 October 2021)

Meanwhile, USD issuances of GSS bonds have also been growing steadily, reaching USD4.28 billion as at 31 October 2021. 2021 also saw a marked increase in sustainability and sustainability-linked bonds, including Government of Malaysia's USD800.0 million Sustainability Sukuk, United Overseas Bank's USD1.5 billion sustainability bond and PT Japfa Comfeed Indonesia's USD350.0 million sustainability-linked bond, amongst others.

[3] Source: Bloomberg as at 31 October 2021. Includes labelled and non-labelled Green, Social, Sustainability and Sustainability-Linked bond/Sukuk issued by corporates and sovereigns in accordance with Bloomberg classification and criteria.

[4] Includes all amounts issued across multiple taps up to 31 October 2021.

GSS bond issuance volume by country and format – USD issuances



Source: Bloomberg (as at 31 October 2021)

…but despite this commendable growth, the ASEAN GSS bond market is still limited in scale and diversity

Notwithstanding the steady growth over the years and supported by the bumper year of GSS bond issuances in 2020, the GSS bond market still represents a fraction of the overall bond market. To illustrate, in the LCY corporate space, GSS bonds make up only 2.9% of the outstanding LCY corporate bond market within the ASEAN 6.

Snapshot of the LCY corporate bond market [5] [6]

	Philippines	Thailand	Singapore	Malaysia	Indonesia	Vietnam[7]	ASEAN 6
Outstanding LCY Corporate Bond (USD 'mil)	23,003	93,485	36,751	97,796	24,249	21,420	**296,704**
Outstanding LCY Corporate GSS Bond (USD 'mil)	1,950	2,293	1,854	2,508	17	-	**8,622**
% LCY Corporate GSS Bond	8.48%	2.45%	5.04%	2.56%	0.07%	-	**2.9%**

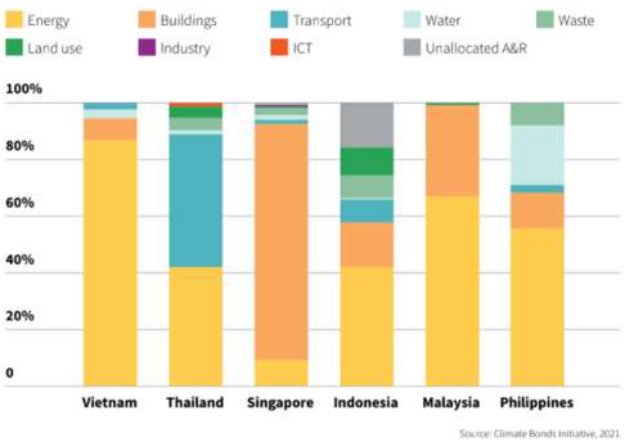
[5] Includes outstanding labelled and non-labelled Green, Social, Sustainability and Sustainability-linked issued by corporates in accordance with Bloomberg classification and criteria

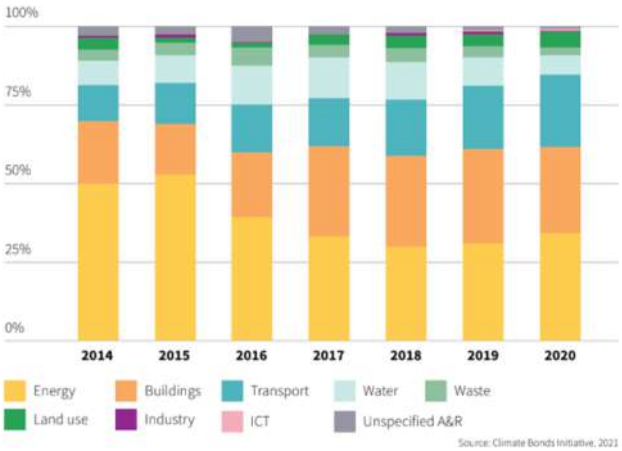
[6] Source: Bloomberg as at 31 October 2021

[7] Vietnam figures as at September 2021 from AsianBondsOnline

Meanwhile, GSS issuances in ASEAN have been quite concentrated in the buildings and energy sector, with these two sectors accounting for circa 80%[8] of cumulative issuance volume in ASEAN vs. 60% globally[9].

Cumulative issuance volume by sector in ASEAN vs. globally [8] [9]





While early momentum is encouraging, there is untapped potential for the ASEAN GSS bond market to accelerate its growth

Within ASEAN, each member state has seen encouraging growth in their respective GSS bond market, led by landmark sovereign issuances and the introduction of regulatory incentives for such thematic issuances. The investor landscape is also evolving quickly, with the number of signatories to the UN Principles for Responsible Investing ("**UN PRI**") in ASEAN 6 growing from a total of 9 in 2016 to 75 as at 31 October 2021[10]. These trends, coupled with holistic efforts to strengthen both the demand and supply sides, will serve to accelerate the growth of sustainable finance in ASEAN's capital markets.

[8] Climate Bonds Initiative, ASEAN Sustainable Finance State of the Market 2020

[9] Climate Bonds Initiative, Sustainable Debt Global State of the Market 2020

[10] UN PRI website

Challenges in Mainstreaming Sustainable Finance in ASEAN

Momentum for sustainable investing growing among ASEAN investors, but constraints remain

Based on our engagements with selected asset managers, there is high willingness from investors to focus on sustainable investing, especially at the board level. Many are starting to see ESG as a key strategy to remain competitive, but the lack of a consistent and investible pipeline of issuances hampers new product development. On the other hand, some investors have highlighted that client demand for sustainable investing is relatively muted vs. Europe, where strong public social awareness translated into demand for ESG products. Issues around availability, quality and/or consistency of disclosure are also recurring themes.

These observations are consistent with the results of HSBC's annual Sustainable Financing and Investing Survey[11] 2021 focusing on ASEAN, where the top three reasons holding back investors from pursuing ESG investing more fully and broadly within their organisations were cited as: (i) shortage of expertise or qualified staff (38%), (ii) lack of comparability of ESG data across issuers (37%) and (iii) lack of demand from clients (35%). Other key issues highlighted by ASEAN investors include lack of disclosure by issuers, lack of attractive investment opportunities and poor quality or availability of ESG data.

[11] HSBC, Sustainable financing and investing survey 2021: ASEAN report, 2021

Sustainability is also growing in strategic importance for ASEAN issuers

Per HSBC's survey, 96% of ASEAN issuers say that they have increased their focus and attention on environmental and social issues in the past 12 months. In addition, they are also expecting significant change to their business models and capital allocation over the coming years; which in turn, will drive opportunities in sustainable finance. On the ground, conversations with clients on GSS bonds are also starting to shift, evolving from "why should I" to "how can I go to market"?

However, a lack of familiarity with GSS formats and the costs of meeting green bond requirements still pose a barrier especially for smaller issuers. Such issuers tend to focus on financial incentives, whether in the form of price differentiation i.e. cheaper yields, or incentives around issuance costs and tax deductions. While such financial incentives do have a role to play, they cannot be a long-term solution.

Ultimately, issuers' desire or need to pursue sustainable finance would have to be driven by a deeper, underlying strategy or requirement to transition their business models, and thus make the necessary investments that entails. Such a shift will provide a lasting impetus for the supply of GSS bonds in the market.

In this respect, policy-makers and regulators are pivotal to foster a policy environment that will enable pipelines of green projects to emerge at scale – for example, to translate or cascade nationally determined contributions ("**NDCs**") into sector emission limits, to provide fiscal support that can spur the volume of green projects (e.g. incentives, grants, loan guarantees, spending on research and development to spur innovations etc.) or even, to put a price on carbon.

Potential Solutions The Quick Wins

In the short-term, we will explore low-hanging initiatives that can quickly inject supply and demand into the GSS-labelled bond markets in ASEAN to alleviate immediate constraints. While not intended as a permanent solution, such initiatives can play a role to strengthen government signals in support of sustainable finance, raise general market awareness and jump-start a virtuous cycle of supply and demand.



Government Initiatives to Scale Up Demand and Supply

Governments and policy-makers play a pivotal role in enabling the growth of sustainable finance, through clear "top-down" mandates and policies that can incentivise or shift entire industries and across all classes of economic actors. However, policy development takes time given its inherent complexity. In the short term, there is potential for governments to leverage on their reach and influence to pursue several avenues for promoting sustainable finance.

Tapping on local institutions to provide a supportive demand base for sustainable finance

On the demand side, one such way is by tapping on local institutions such as sovereign wealth funds ("**SWF**") and state pensions to provide a supportive demand base for GSS bonds. Given the insignificant weighting of ASEAN in regional and global indices, the large pools of sustainability- or green-dedicated international capital may not fully reach local shores. Indeed, emerging market fixed income is a highly indexed product driven by passive investing strategies with a tendency to stick to the benchmark. This deprives potential GSS issuers the attention and benefits that may arise from a more discerning demand base.

Thus, governments should encourage local institutions to create strategic investment mandates to support GSS bonds. As outlined in a recent Imperial College report[12], "there is significant untapped capacity for joint investment programs between SWFs and local pension plans to fund long-dated infrastructure projects. They have exactly the type of long-term, patient capital needed to fund technology innovation and sustainable infrastructure."

Encouraging government-related GSS issuances and adopting "sustainability first" procurement practices

On the supply side, there is huge potential for government agencies and government-linked entities to inject significant supply into the GSS market. Such entities often play a major role in mobilising or raising financing for the nation's infrastructure across a diverse range of sectors, from water resource and management to affordable housing and clean transportation. The creation of a mandate for such entities to raise sustainable financing for all eligible projects will go a long way in generating scale and diversity in supply and provide greater impetus for investors to develop sustainable investment portfolios.

As outlined in WC-CMD's 2020 report on promoting sustainable finance, governments can also adopt a "sustainability first" approach in their procurement practices, for instance, by encouraging all recipients of eligible government-awarded projects to raise sustainable financing where possible. Such initiatives will help to signal the importance of the sustainable finance agenda to the wider market.

[12] Imperial College Business School, The Race for Green Capital in Emerging Markets, 2021

Promote Transition and Sustainability-Linked Bonds

Transition bonds and sustainability-linked bonds ("SLBs") will be key to broadening the sustainable finance universe…

Transition is an important topic especially for ASEAN, where economies as a whole are still very dependent on commodities and hard-to-abate sectors. Corporates in these sectors have generally found it difficult to access the GSS market due to the relatively narrow scope of the use-of-proceeds ("**UoP**") format. Hence, transition bonds as a product will be key for these sectors to access the capital they need to transform their business models, and move from brown to green, or even less brown.

A recent report by the Climate Bonds Initiative ("**CBI**") [13] underscores the critical role of transition bonds, highlighting that "transition bonds offer a pathway to making the sustainable finance space more inclusive, with the double dividend of adding much-demanded diversity around industry sectors and risk profiles to suit a broader spectrum of investor mandates and contributing to market liquidity."

SLBs offer much of the same benefits, as they are not asset or project specific like UoP bonds, but instead focus more holistically at the entity level to communicate a more dynamic and forward-looking view of a company's trajectory. Thus, corporates across all sectors and at all stages in their sustainability journey will have the potential to access the sustainable finance market via SLBs.

[13] Climate Bonds Initiative, Sustainable Debt Global State of the Market 2020.

[14] Climate Bonds Initiative, Sustainable Debt Global State of the Market 2020.

[15] Natixis, 2019 Global Investor Survey, 2019

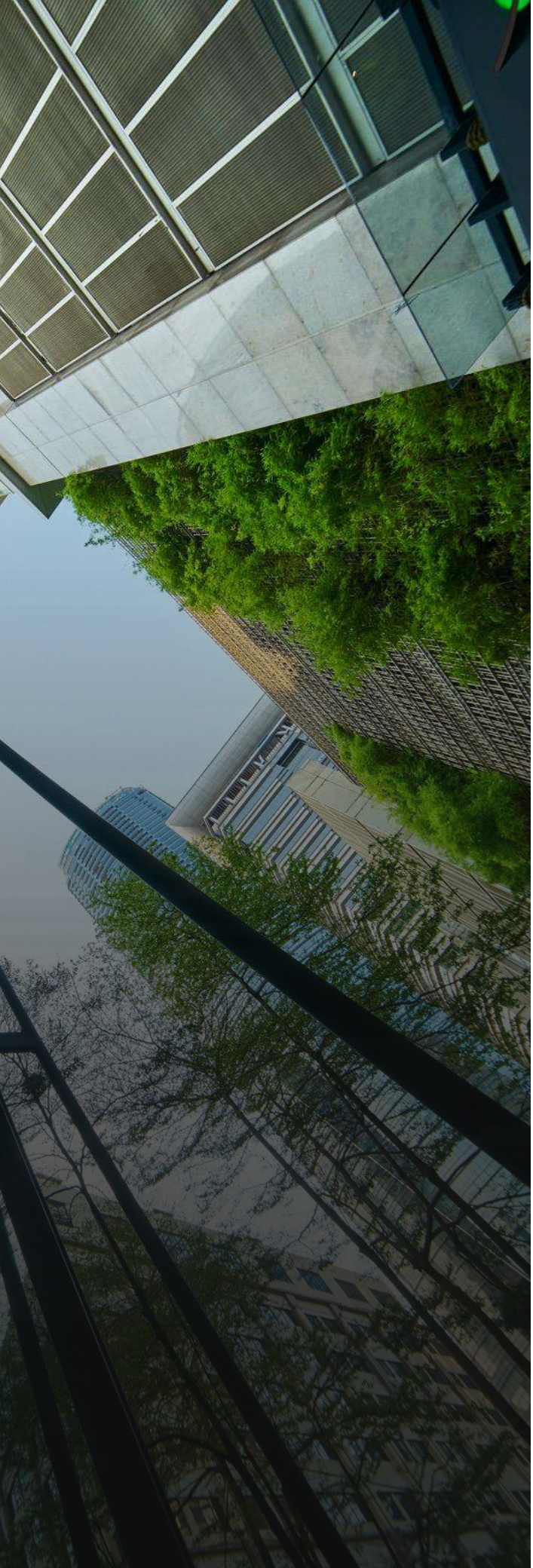
…but is still in its infancy in ASEAN

From our interactions with issuers, there is growing interest to explore transition-type instruments and SLBs. However, significant uncertainty remains on what qualifies as "transition", leading to fears of being perceived as "greenwashing". We also observe a gap in specialized knowledge and technical expertise among market participants in ASEAN – issuers, intermediaries and investors alike – surrounding sector transition pathways, as well as understanding transition within a local context and how to assess social impact considerations. CBI observes similar concerns in the SLB space[14], including the difficulty to benchmark the ambition of the targets or key performance indicators ("**KPIs**") against a wider global ambition such as the Paris Agreement.

Among the ASEAN investors that we have engaged, transition bonds and SLBs are still a relatively unfamiliar space as ASEAN has yet to see its first transition bond, while SLB issuances debuted only in 2021. Thus, the ongoing efforts within ASEAN to develop transition standards and a common sustainable finance taxonomy will be key enablers to building capacity and scaling up transition bonds and SLBs in the region.

However, direction of travel is clear – credibility is paramount

Leveraging on a Natixis survey[15] of 75 global investors totaling $9 trillion of assets under management, it is interesting to note that 75% of respondents were willing to invest in brown companies' transition but without leniency. Further, 43% of respondents declared not to be in favour of bonds dedicated to finance transition, whatever their formats, if the transition claim is not properly defined with criteria, thresholds, or reference to a climate scenario.



Creation of a Centralised Knowledge Repository

The concept of a centralised knowledge repository has been explored in the ACMF Roadmap[16], but worth a mention given the twofold potential of a centralised platform – first, to promote and facilitate greater flow and access of information among all market participants in ASEAN. While there is a variety of sustainable finance resources available online, they are often fragmented across different platforms. An ASEAN-centric, one-stop resource centre to serve issuers, investors and intermediaries alike will help to raise awareness, educate market participants and reduce informational friction.

More importantly, such a platform could also be used to serve as a live repository of request for proposals on projects eligible for sustainable finance. This will enable greater transparency on potential investment opportunities and facilitate the discovery process between investors and issuers.

[16] ASEAN Capital Markets Forum, Roadmap for ASEAN Sustainable Capital Markets, 2020

Potential Solutions – Longer Term Initiatives

Fostering an Enabling Policy Environment

While national ambitions are beginning to form across the region, the translation of such ambitions into policy and implementation has been mixed

There have been a number of major announcements by ASEAN governments on ambitions to reduce emission levels, including 3 net zero or carbon neutrality commitments (Laos, Indonesia, Malaysia) and 4 national green plans (e.g. Singapore's Green Plan 2030, Thailand's Bio-Circular-Green Economy model).

However, most countries in ASEAN do not yet have all the elements of an effective Net Zero plan (e.g., Net Zero committed to law, absolute 2030 emissions targets, full sector coverage), leaving more to be done to enhance the scope and clarity of their commitment. Countries should strive towards having well-developed frameworks to ensure sufficient progress towards their respective nationally determined contributions ("**NDCs**"). For each sector, there should be clear communications of national targets, implementation strategy, laws and regulations that will be amended to meet the countries overall sustainability-related targets. Then we believe the corporates will react accordingly.

A company's desire or need to pursue sustainable finance would have to be driven by a deeper, underlying strategy or requirement to transition their business models, and thus make the necessary investments that entails

A clearer cascading of national-level ambitions and NDCs, whether through incentives, policies or regulations, would serve to impact behaviour at the corporate-level and tilt incentive structures and strategic considerations toward sustainable projects, and in turn sustainable finance.

As more companies make investments to greenify or transition their business models, this will naturally lead to more opportunities to raise sustainable financing, across all sectors. On the back of this a strong supply pipeline of sustainable projects that can be funded by GSS bonds, investors' reception to participating in the GSS bond market is anticipated to increase, given the diversity of supply (currently concentrated in energy and buildings), choice, liquidity, and potential benefit of scale.

However, on the ground, the number of corporates that have made major sustainable project investments appears to be limited, due to a combination of factors including lack of regulatory push, poor investment economics, as well as a lack of technical knowledge and capability.



Clear policy directions and implementation of enabling policy environments will be necessary for pipelines of sustainable projects to emerge at scale

In our view, the best example where this has been successful is in the power sector, whereby various governments have announced clear renewable energy targets. For example, Vietnam saw remarkable growth in solar capacity additions, increasing from only 86 MW in 2018 to 4,750 MW in 2019[17].

An important driver was the government's intention to develop solar power generation as a new economic sector. Following this, the Renewable Energy Development Strategy 2015 detailed targets for developing the renewables sector. The importance of this sector has been re-emphasized in the recent Political Bureau Resolution no. 55 on National Energy Development Orientations (Vietnam Political Bureau, 2020). These policies was supported by initiatives such as attractive feed-in tariffs ("**FiT**"), flexibility to mobilise funding from all sources, including foreign funding, income tax exemptions, import tariff exemptions for imported equipment and land-lease payment exemptions.

Another country, where there has been significant growth in investment in renewable energy ("**RE**") projects is Malaysia. In Malaysia, deployment of RE started with the Small Renewable Energy Program ("**SREP**") in 2001, and then subsequently the Renewable Energy Act was passed in 2011 ("**RE 2011**"). To supplement passing of the RE 2011, several mechanisms was introduced includes among others the introduction of Feed-in-Tariff ("**FiT**") mechanism in 2011, Large Scale Solar ("**LSS**") tenders beginning in 2016, while hydro and biomass tenders were launched by Sustainable Energy Development Authority ("**SEDA**") beginning in 2018. In addition, the Malaysian government has announced clear and ambitious targets in this sector, where it targets to achieve 31% and 40%[18] of total capacity in Malaysia to be in renewable energy by 2025 and 2035 respectively.

As seen from the Vietnam and Malaysia experience, clear targets and incentives offer sector incumbents and new entrants the policy certainty to invest in renewable energy projects as it is aligned with the national agenda. Consequently, financing for renewable energy projects has also grown in tandem.

Policy makers should provide clear policy direction across multiple sectors

Establishing an appropriate policy framework will also be essential for governments in ASEAN to encourage greater green investment. Another sector which has seen some success in ASEAN is in the property sector in Singapore. Singapore launched its first Green Building Masterplan in 2006 and second Green Building Masterplan in 2009[19], where it then stated its established goal of having at "least 80% of the buildings in Singapore to be green by 2030". Since then, the Masterplan was updated in 2016 and the target launched have been complemented by the introduction of standards, grants and capacity building. In addition, the Singapore government has taken the lead by requiring all new public sector buildings to attain Green Mark certifications.

Accordingly, corporates in Singapore are actively supporting this agenda and significant growth in investment in green buildings has been observed. The impact of this is also reflected in the growth of sustainable financing for green buildings.

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[17] 2021/28 "Vietnam's Solar Power Boom: Policy Implications for Other ASEAN Member States" ISEAS Yusof Ishak Institute

[18] Interview Dato' Hamzah bin Hussin, Chief Executive Officer, Sustainable Energy Development Authority ("SEDA") with Energy Watch, https://www.energywatch.com.my/blog/2021/08/20/a-decade-of-renewables-growth-in-malaysia-where-do-we-go-from-here/

[19] 3rd Green Building Masterplan

Increasing Climate-Focused Disclosures

Although ASEAN has established a sustainable disclosure regime, further transparency can be achieved to satisfy the disclosure needs of investors

In terms of mandatory disclosures, ASEAN seems to have made good strides relative to the US and UK. Sustainability reporting in ASEAN has been in place since 2017 compared to the US and UK, which only started rolling out mandatory rulings in late 2020 to early 2021. However, it is worth noting that countries including Indonesia and the Philippines only had a requirement after 2020; Sustainalytics foresees further improvement in ESG disclosure in these markets in the next few years[20].

In addition, all exchanges of the ASEAN 6 countries are members of the Sustainable Stock Exchange ("**SSE**") Initiative, an initiative that saw 108 exchanges around the world sign on as SSE Partner Exchanges and make voluntary public commitments to promote sustainability in their respective markets.

Notably, in a 2019 report by Corporate Knights[21] which ranked the sustainability disclosure performance of 47 stock exchanges worldwide, the Stock Exchange of Thailand ranked 9th, the highest of all exchanges in the Asia Pacific region. The Singapore Exchange, Philippine Stock Exchange, and Indonesia Stock Exchange ranked 24, 30, and 36, respectively.

Globally, asset managers find sustainability related disclosures to be lacking, incomplete and not comparable

The Task Force on Climate-related Financial Disclosures ("**TCFD**") in its June 2020 status report[22] found that while disclosure of climate-related financial information has increased since 2017, it remains insufficient for investors. TCFD recommends for companies with both public debt and equity to disclose:

- **metrics and targets** used to assess and manage relevant climate-related risks and opportunities.
- **strategy** for dealing with actual and potential impacts of climate-related risks and opportunities;
- **risk management**, i.e., how the organisation identifies, assesses, and manages climate-related risks; and
- **governance structure** and processes around climate-related risks and opportunities;

In addition, the International Organisation of Securities Commissions ("**IOSCO**") had in June 2021[23], issued its final report on Sustainability-related Issuer Disclosures. Through its engagement with assets managers, IOSCO found that with regards to sustainability, currently companies are reporting selectively against multiple different standards and frameworks, making it difficult for investors to make its assessment.

Overall, investors had a preference for a common international standard. In absence of common international standards, companies should at minimum conduct systemic reporting against established frameworks and standards.

The TCFD's and IOSCO's findings in their respective reports are in line with our discussions with various asset managers in ASEAN. Asset managers have mentioned a preference for corporates and issuers across ASEAN to adopt a single disclosure standard such as TCFD for ease of comparability and benchmarking. Notwithstanding the various options for disclosure standards currently in the market, the adoption of a single, common standard across ASEAN will significantly address a critical pressure point among the investor community.

[20] Frank Pan (May 13, 2021), ESG Disclosure and Performance in South East Asia, Sustainalytics.

[21] Measuring Sustainability Disclosure, Ranking the World's Stock Exchanges 2019, Corporate Knight

[22] Task Force on Climate-related Financial Disclosures 2020 Status Report

[23] International Organisation of Securities Commissions, Report on Sustainability-related Issuer Disclosures, Final Report, 2021



Improvements in climate-related disclosures will help investors reduce the cost of integrating sustainability considerations into their investment decisions

Making climate-related financial information publicly available will help investors to better understand the performance of their assets, consider the risks of their investments, and ultimately make more informed investment choices.

Several investors have also indicated that when investing in GSS bonds, it is not just about looking at a particular bond in isolation. What they really seek to understand is a bond in the context of the company's overall trajectory, its targets and pathways to decarbonisation. With clearer guidelines of disclosure standards, issuers and investors would be better able to manage 'greenwashing' risk.

Meanwhile, improvements in climate-related disclosures will also help market intermediaries better understand and appreciate the climate risks and opportunities, as well as the overall transition strategy of companies, and leverage on such information to proactively bring financing ideas to the fore.

Capacity Building

Technical expertise is a key enabler to the development of the ASEAN sustainability finance markets as it is the people behind the institutions which are driving supply and demand

Capacity building will be key for developing ASEAN's sustainable finance demand and supply ecosystem. ASEAN in general is still in the nascent stage of sustainable finance, and there is currently a lack of sustainability-related domain expertise in areas such as risk analysis, due diligence, verifications and deal structuring.

Based on feedback from investors, the level of expertise varies from institution to institution, ranging anywhere from very basic to having baseline competency. However, the general observation is that human capital resources with the appropriate skillset are still generally nascent and evolving and are daunted by the complexity of measuring sustainability factors and considerations. In addition, considerations are broad, evolving, and differ by industry, creating a challenging environment for early-stage sustainable finance stakeholders to navigate.



A focus on skills and building a talent pool is critical to grow the ASEAN sustainable finance landscape

Building up the sustainable finance eco-system requires strategic initiatives in sustainability-related education and deepening the talent pool. Diverse stakeholders are thus needed to build the knowledge base. These include among others:

- **Corporates**: Risk analysis and impact assessment, strategy development, supply chain assessment, investment monitoring, and stakeholder management.
- **Investors**: Identifying, assessing, and managing environmental and social risks as part of decision-making is still relatively new to investors. Investors will need to develop the capability to conduct an assessment of environmental and social due diligence, credit and/or investment review that includes ESG risks, and continued supervision on ESG risks.
- **Intermediaries**: Sustainable projects knowledge and/or sustainable finance product verification, environmental impact assessment, ESG risk management, and mitigation, as well as the development of frameworks.
- **Government/regulators**: Develop relevant sustainable finance standards and track and measure progress on sustainable finance.

As highlighted in HSBC's Sustainable Finance and Investing Survey 2021[24], the shortage of expertise and qualified staff is becoming more pressing in Asia, where over 40% of institutional investors cite this as a reason holding them back from pursuing ESG investing more fully, up from 26% in 2020.

Therefore for ASEAN to be competitive in building and attracting talent in this very dynamic and growing space, there is a need to approach capacity building holistically. This includes widening education opportunities, creating awareness on the importance of sustainability across all levels of society and improving job creation and compensation in sustainable finance.

[24] HSBC, Sustainable Finance and Investing Survey 2021: Asia Report

While each stakeholder group may have its own unique requirement, capacity building, upskilling and talent nurturing can come in various formats

Our proposed actions include:

1. Regulators can collaborate with Multilateral Development Banks, Non-Government organisations, academics, sector and technical experts, and professional bodies to provide educational materials, workshops and training.
    - To encourage higher participation, governments can consider providing tax and related incentives for undertaking sustainability-related training.
2. Regulators can organise forums and active dialogue with the largest players in the relevant industries across ASEAN.
    - This may include “Cross-border” collaborative teach-in sessions for ASEAN market participants to exchange sustainable finance-related experiences and for market participants to learn from each other.
3. Introduce sustainable finance-related courses into university education and financial professional certificate programs.
    - The UK Government, has conducted an interesting initiative whereby it collaborated with University of Oxford to create a short course for UK government policy officials and diplomatic services personal to provide foundational knowledge on green finance[25]. ASEAN governments may wish to organise similar courses for its officials to differentiate itself and facilitate the building sustainable finance eco-system in ASEAN.

[25] HM Government: Green Finance Strategy: Transforming Finance for Greener Future

Conclusion

The vulnerability of ASEAN countries to the impacts of climate change highlight the urgent need for the region to invest in climate change mitigation and adaptation measures, while balancing the social and economic development of ASEAN's 650 million strong population.

Sustainable finance, through the capital markets, have been and remain an impactful, adaptable and responsive platform to mobilise the vast amounts of capital needed to close the investment gaps in ASEAN. With the right policy conditions in place, the stage is set for the rapid acceleration of sustainable finance in ASEAN.



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