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Growing Asia's Markets

HERBERT SMITH FREEHILLS

Sustainable Finance in Asia Pacific

Regulatory State of Play

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ASIFMA is an independent, regional trade association with over 125 member firms comprising a diverse range of leading financial institutions from both the buy and sell side including banks, asset managers, law firms and market infrastructure service providers. Together, **we harness the shared interests of the financial industry to promote the development of liquid, deep and broad capital markets in Asia.** ASIFMA advocates stable, innovative and competitive Asian capital markets that are necessary to support the region's economic growth. We drive **consensus, advocate solutions and effect change around key issues through the collective strength and clarity of one industry voice.** Our many initiatives include consultations with regulators and exchanges, development of uniform industry standards, advocacy for enhanced markets through policy papers, and lowering the cost of doing business in the region. Through the GFMA alliance with SIFMA in the US and AFME in Europe, ASIFMA also provides insights on **global best practices and standards to benefit the region.**

Contents

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1 OVERVIEW

The transition to sustainable finance is increasingly a high-priority business issue for firms, with global bodies and local policymakers rapidly developing initiatives to support and incentivise investment in low-carbon businesses and activities, as well as enable corporates, institutional investors, and banks to take account of climate-related risks.

At the same time, Environmental, Social and Governance ("**ESG**") issues are increasingly taking centre stage as institutional investors exert their influence and channel funds towards investments that deliver measurable non-financial benefits along with improved long-term financial returns.

In the last five years we have seen the signing of the 2015 Paris Agreement, publication of the United Nations 2030 Agenda which includes 17 Sustainable Development Goals ("**SDG**"), the European Commission's ("**Commission**") publication of its Action Plan on Sustainable Finance, the launch of the UN Principles for Responsible Banking, and other major international initiatives focusing on sustainability within the financial sector.

With increasing global attention and momentum building across various markets, including those in Asia Pacific, there is a proliferation of related initiatives. Notwithstanding their positive intent, fragmented approaches introduce challenges that may ultimately undermine the development of sustainable finance, through increased complexity and lack of coordination.

Today, firms are navigating a confusing landscape of disclosure frameworks, incentive structures, data collection methods, and external assessments developed and implemented in various markets and jurisdictions by both the public and private sectors. Convergence to common frameworks is needed, whilst still allowing flexibility for nuance and differences between different economies' paths to sustainability.

This paper is intended to positively support progress towards shared sustainability objectives. It provides an overview of developments to date in major Asia Pacific jurisdictions, as well as the broader evolving international policy environment, examining practical implications for industry participants and policymakers, and calling for greater coordination at this critical early stage of defining international policy settings in relation to sustainability. It also shines light on variances in approach and emphasis within different jurisdictions and frameworks. Finally, it calls for the voice of Asia Pacific to be heard more prominently in international discourse on these critical international policy issues to boost the effectiveness.

We commend efforts to date in tackling what is an extremely complex, multidimensional issue.

2 CHALLENGES FOR POLICYMAKERS AND REGULATORS

The industry strongly supports the transition to a sustainable global economy. In addition to industry-led initiatives, we also recognise the important role policymakers and regulators play in scaling up sustainable finance in capital markets, and that coordination and commitment by all major jurisdictions are needed to ensure cohesion and clear policy direction. Equally, industry participants have a role to play in further developing capabilities and market structures to support the growth of sustainable finance and the transition to a low-carbon economy.

To achieve this, policymakers and regulators are encouraged to:

- Engage directly with the private sector in their own markets through transparent consultation processes during the development stage of taxonomy, prudential requirements, and ESG reporting and disclosure requirements; and
- Ensure that they take a coordinated regulatory approach internationally, with commitment from regulators in all major jurisdictions to achieve greater international consistency, ranging from approaches towards taxonomies and corporate disclosure to measurement of climate-related risks and use of incentives and other mechanisms to prevent market failure.

Not only would a coordinated and holistic approach catalyse innovation and incentivise greater participation from the private sector, but also support continued growth and development of sustainable finance in markets. Indeed, a key objective of this paper is to draw attention to the variety of approaches and frameworks being implemented, and to highlight the need for greater consistency and compatibility between regimes, including with respect to economies at different stages of development.

ASIFMA encourages policymakers in Asia Pacific jurisdictions to coordinate with each other and apply the following principles:

1. Avoid requirements that are unduly complex or prescriptive, while being aware of unintended consequences of regulation such as market distortion and fragmentation;
2. Strive for consistency and compatibility whilst allowing for the variation of economic and capital markets development, a key feature of the Asia Pacific region;
3. Where possible, align policies and frameworks with international standards to avoid unnecessary complexity and unlevel-playing-field issues for market participants operating globally; and
4. Where international standards are not yet under development, seek to encourage and catalyse development of such standards, particularly as Asia Pacific jurisdictions have unique perspectives in not only being significant recipients of sustainable finance, but also being most impacted by sustainability challenges.

Global coordination is essential because like climate change, investing and financing do not take place within the bounds of clear borders, and cross-border capital flows are so vital. Indeed, while most of the investment needed to achieve the Paris Agreement's goals will come from developed economies, emerging markets, including those in Asia, are often most in need of investment and will be impacted heavily by regulation impacting investment decisions. This must be taken into account during policy design, which should support the appropriate flow of funding to maximise investment in sustainability.

We encourage Asia Pacific policymakers to engage actively with their international counterparts, and to represent this region's perspective prominently in global fora.

The European Union ("**EU**") is today at the forefront of international policy development and, while such leadership is to be commended, it is not prudent for the industry and policymakers to leave standard-setting to any one jurisdiction alone, or for standards to be established without due consideration of unintended consequences and potential market distortions.

By actively sharing perspectives with others and contributing to policymaking elsewhere, this can also help to ensure compatibility and interoperability between regimes. Active and early-stage participation in international coordinating forums such as the Network for Greening the Financial System ("**NGFS**") by regulators in the Asia Pacific region are highly welcome.

In addition, Asia Pacific regulators may also consider forming a specific regional task force with sub-groups targeting specific issues such as regulatory disclosure, ESG scoring, risk management, etc., or working through other existing industry structures and in order to achieve the level of coordination needed for an effective regional approach to sustainability, and engagement globally.

2.1 Consistent and Representative Taxonomy

Currently, there exist a wide range of taxonomies developed by different jurisdictions, organisations, and individual firms with substantively differing interpretations of what makes a product or activity 'sustainable'. In September 2019, the industry, through ASIFMA's sister organisation Association for Financial Markets in Europe ("**AFME**"), responded to the European Commission Technical Expert Group's ("**TEG**") June 2019 Technical Report on developing an EU Taxonomy.

The industry appreciates progress made by the EU to establish an EU-wide taxonomy and acknowledges it as a step forward in scaling and driving green finance forward; however, there is uncertainty as to how this, which has been constructed from a European perspective, may impact the Asia Pacific region if it were to become the *de facto* global standard. We note that the EU taxonomy is tailored specifically to a European perspective, while certain areas would not fit in the context of markets of this region. For example, agriculture related criteria, as outlined in the EU taxonomy, focuses more on greenhouse gas reduction rather than sustainable farming practices such as reduced use of pesticides, biodiversity-friendly techniques and water conservation, which may be priorities in other markets.

In its current form, the EU taxonomy and disclosure regulations have been described by some as binary in approach, classifying economic activities as 'green' and 'non-green' and this characterisation is true at one level, but it should be borne in mind that the terms of debate are framed under the regulations as " environmentally sustainable" or not; and a short spectrum is recognised with activities/products meeting this highest standard at one end and those that do not at the other. Sitting somewhere in between are those activities that comprise investments in products that "promote" "environmental characteristics". The industry believes that it is important to avoid strictly binary approaches to classifying sustainable finance activities. This is because sectors and companies that do not meet 'green' principles can still have the potential to become significant contributors to sustainability and help transition to a green economy. Specifically, this may disincentivise investment in transition activities which may be critical in other regions. For example, large company groups with both 'green' and 'brown' assets may be prevented from receiving funding on all their projects under the taxonomy, with a further potential consequence being that over time 'brown' assets, despite potential to transition to 'green', may become concentrated in the hands of those less concerned with sustainability. We thus urge policymakers and regulators to bear in the mind that supporting 'greening' is also incredibly important and to ensure no disincentives for investment in areas that could become 'green'. In addition, we once again stress the importance of international coordination on taxonomies, acknowledging the important dialogue that has been taking place to date between the European Investment Bank and People's Bank of China to align the two definitions of green finance, for example.

We urge Asia's policymakers to work with the EU and other jurisdictions to develop a common global framework for taxonomies whilst ensuring flexibility for regional specificities, including the different needs of developed and emerging markets, and flexibility for different interpretations of sustainability, provided there is sufficient transparency for informed comparisons by investors and market participants.

Considerations for transition and enabling activities to achieve compliance with taxonomies should also be included to avoid unintended carbon lock-in effects and limiting funding for sustainable investments by banks and investors. On cross-border issues, policy considerations should include the enablement of deference between jurisdictions as a means of minimising regulatory driven market fragmentation.

Notably, the International Organisation of Securities Commissions' ("**IOSCO**") Growth and Emerging Markets Committee ("**GEMC**") published recommendations in June 2019 for how market regulators in emerging markets can support sustainable finance. We note that the IOSCO recommendations, while not overly technical or prescriptive, suggest a framework in which individual regulators should be able to define lists of eligible projects and activities relevant to their local market. Furthermore, the Organisation for Economic Co-operation and Development ("**OECD**") is currently working to produce an overview report on taxonomies including comparisons of the European and Chinese versions, as well as other definitions of sustainable finance later in 2020.

The industry recommends Asia Pacific's policymakers carefully consider such recommendations and engage assertively in open dialogue with other jurisdictions in international and regional fora such as the International Platform on Sustainable Finance, NGFS, Financial Stability Board ("**FSB**"), the IOSCO Asia-Pacific Regional Committee ("**APRC**"), and ASEAN.

2.2 Reliable Data and Harmonised Disclosure

Sustainable finance cannot exist in isolation from the broader economy. It requires a coherent disclosure framework on the key material factors connecting all segments of the investment cycle – from companies to investment management companies, to their shareholders and clients. This will ensure transparency and comparability between sustainability metrics throughout the economy.

There remain considerable challenges regarding the consistency of ESG today. ESG data is difficult to obtain, and most firms rely heavily on third-party providers. While we acknowledge the growing number of ESG data providers and improvements in the quality of corporate ESG reporting and disclosure, there is still a lack of robust and reliable ESG and climate-related data for a wide range of investee companies' activities and practices.

Additionally, individual ESG metrics vary not only between industries and markets, but also between companies of the same industry, with quality of company disclosures differing widely. ESG scoring between different data providers also varies. Through dialogue with industry, regulators can play a role in establishing robust frameworks for better, more consistent and comparable ESG data disclosure.

We note that certain bodies within this region, such as Hong Kong Exchange ("**HKEX**"), have already enhanced their listing requirements. However, sustainability and non-financial reporting by corporates is still developing. It is important that requirements placed on the financial sector do not outpace the ability of the corporate sector to provide the required information.

Where data is not available in relation to certain ESG criteria, there is a risk of under-representation of certain environmentally sustainable sectors, with potential to distort markets and skew investment decisions at this important early stage. ESG data reporting and disclosure requirements should be enhanced to help address data availability and comparability issues, and consideration should be given to align private and public taxonomies for transparency and better usage of data. ASIFMA recommends policymakers and regulators work closely together with the industry to advance mutual understanding of data requirements and reporting standards needed to enable actionable, reliable, harmonised disclosure standards to support informed, long term investment decision making.

2.3 Common Approach to Prudential Risk Assessment and Stress Testing

We note divergence between developing risk management standards in terms of their scope (e.g. UK focuses on climate in its supervisory statement, Singapore and Hong Kong focus on environment, and Germany focus on sustainability risk management standards) as well as general expectations.

We also note emerging divergences in the design of climate-change scenario analysis and stress-testing exercises and encourage those jurisdictions that have announced tests, or have plans to, to not only align with the planned NGFS scenarios, but also to align on key aspects of the test design around the timeframes, scope of examined exposures, and granularity of analyses. Climate-related stress tests may not fully simulate the complete impact of climate risk on balance sheets with the same granularity as standard credit or market stresses. There may also be challenges to aligning approaches for multi-national institutions.

The industry recommends policymakers and regulators ensure that a clear and consistent causal relationship between the sustainability classification and risk profile of an asset can be demonstrated, and appropriate methodologies for cross-border scenario analysis and green stress-testing be established before imposing requirements of climate-related stress tests and differentiated prudential treatment of 'green' and 'brown' assets.

The industry welcomes global initiatives aimed at establishing such a causal relationship and working to establish shared methodologies for green stress-testing, such as the NGFS's work on scenario testing.

2.4 Interplay between Industry-developed Initiatives and Policy

Where possible, policymakers and regulators are encouraged to be mindful of overly prescriptive policy measures, which risk stifling market-led initiatives that have supported the development of sustainable finance to date. Global financial institutions typically align their sustainability practices, including product and service development, to industry-developed frameworks and best practices, which can be valuable in ensuring consistency in a market where consistent global regulatory and supervisory approaches have yet to be developed. Such industry-developed frameworks have the flexibility to be updated when markets mature and innovation in products and services necessitates change in approach.

The industry, as noted earlier, recognises there is a critical role for policymaking and regulatory guidance on common definitions, frameworks, and taxonomies, particularly to prevent 'greenwashing' and to provide clarity to investors through consistent market standards.

2.5 Concluding Remarks

ASIFMA and its members appreciate the work being done by policymakers and regulators in this region with the financial sector to transition the region's economy and markets to a more sustainable footing. We reiterate the need for policymakers and regulators to establish a coordinated approach to taxonomies, disclosure requirements, and other policies both at a regional and global level, recognising the fact that any one financial system cannot work in isolation. We also encourage, wherever possible, dialogue and engagement between the private and public sectors to meet the complex and multifaceted process of transitioning the economies' sustainability, and ensuring the international financial system is well placed to efficiently serve this challenge.

The rest of the paper provides a state-of-play overview of sustainable finance developments at an international and regional level, relevant to Asia Pacific, to form as a basis for industry, policymakers and regulators to benchmark their efforts and contemplate greater future coordination.

We are at a critical early stage of defining international policy in relation to sustainability. As new developments in sustainable finance emerge, we will continue to refine our analysis of these issues and recommendations, and engage across the region in support of the principles outlined above.

3 KEY POLICY SUMMARY

There are a number of topics of cross-jurisdictional importance. Three core issues are explained here given their significance in the international regulatory dialogue.

3.1 Taxonomy/Classification Systems for Green Assets or Products

A classification system provides the basis for determining whether an economic activity is environmentally sustainable. Currently, there is no binding global taxonomy, but international regulatory bodies, such as the Climate Bonds Initiative, have developed a voluntary taxonomy for green bonds. Classification systems for green assets or products, therefore, differ across jurisdictions. The NGFS also emphasised the need to "exploit potential synergies" in different jurisdictions to harmonise green taxonomies.

In Europe, the EU Taxonomy Regulation sets out a general framework for what can be classified as "environmentally sustainable economic activity". It identifies six environmental objectives. An economic activity will be environmentally sustainable if it complies with four specified requirements. The Regulation recognises three types of economic activities, namely sustainable activity, enabling activity and transitional activity, but explicitly excludes power generation activities that use solid fossil fuels, such as coal, as a sustainable activity.

In China, the Green Bond Endorsed Project Catalogue defines six main categories and 31 sub-categories of projects that are eligible for green bond financing. The Chinese taxonomy differs from the EU's, in that the Chinese taxonomy allows clean coal projects to be included on the list of projects financed by green bonds. Noting the different standards in the two jurisdictions, the European Investment Bank and the People's Bank of China ("**PBOC**") have been liaising with each other to align the two jurisdictions' definition of green finance.

The Bank Negara Malaysia in December 2019 issued a discussion paper on "Climate Change and Principle-based Taxonomy" for public consultation. The discussion paper aims to provide an overview on climate change and its impact to the financial system as well as serve as guidance to facilitate financial institutions identifying and classifying economic activities that could contribute to climate change objectives.

3.2 ESG Disclosure

In recent years, investors' preferences have been shifting towards interest in financial products that incorporate ESG factors. These factors now have a material impact on investors' decisions or the value of an investment. As such, disclosure of these factors can be viewed as a way to improve transparency and address information asymmetries between investors and companies on sustainability issues. As part of the EU's Sustainable Finance Action Plan, the EU Disclosure Regulation was introduced, setting out how financial market participants and financial advisors must integrate ESG risks and opportunities in their process, procedures, and policies. The Regulation also provides uniform rules on how financial market participants should inform investors about their compliance with the integration of ESG risks and opportunities.

Similar developments can be found in Asia Pacific. China, Australia, Malaysia and India have recently updated their respective listing requirements or provided further guidelines on disclosing ESG information. For example, Bursa Malaysia's listing requirements mandate that a listed issuer include in its annual report a narrative statement of its management of material economic, environmental and social risks and opportunities. This statement must contain information in accordance with Bursa Malaysia's Sustainability Reporting Guide.

In Hong Kong, the HKEX concluded that, subject to certain modifications or clarifications, the proposals outlined in its 2017 consultation paper on enhancements to its ESG reporting guide and related-listing rules should be adopted. The proposals include a requirement to include a statement from the company's board setting out its consideration of ESG issues. In Singapore and New Zealand, a "comply or explain" regime for sustainability reporting has been implemented, where listed companies are required to disclose and explain their sustainability practices.

3.3 Integration of Climate-related Risk in Supervisory Mandates of Central Banks

The Task Force on Climate-related Financial Disclosures ("**TCFD**") identifies two categories of climate related risks namely, physical and transition risks. The former refers to risks relating to the physical impacts of climate change, such as floods or sea level rise. The latter refers to risks arising from adjustment to a lower-carbon economy; risks that are legal, policy-related or technological in nature.

The UK's Prudential Regulation Authority ("**PRA**") is one of the leading actors in integrating climate issues into prudential regulations. The PRA expects firms to embed the consideration of climate-related risks into their governance and risk management arrangements, and, where proportionate, use scenario analysis to inform strategy setting and risk assessment. In December 2019, the PRA issued a discussion paper confirming the Bank of England's intention to use its 2021 Biennial Explanatory Scenario to stress test the resilience of the banks, insurers and UK financial system to climate-related risks. The European Banking Authority ("**EBA"**) is investigating whether green assets are less risky than brown or non-green assets. The EBA will also develop the work on the incorporation of ESG factors into risk management and supervision as well as a dedicated climate change stress test.

Similar developments can also be found in some of the jurisdictions in Asia Pacific The PBOC has incorporated green finance into its macro prudential assessment system. On 31 December 2019, the Hong Kong Monetary Authority ("**HKMA**") carried out a consultation on the "Common Assessment Framework on Green and Sustainable Banking", which covered risk management and stress testing and referred to the policy implemented by the PRA of the UK.

In early 2020, the Australian Prudential Regulation Authority (**"APRA"**) outlined its plans to develop a prudential practice guide focused on climate-related financial risks, as well as a climate change vulnerability assessment in a letter to all APRA-regulated institutions and update its superannuation Prudential Practice Guide SPG 530 Investment Governance, which covers ESG investments.

The Bank of Thailand ("**BOT**") also encouraged financial institutions to comply with its Sustainable Banking Guidelines – Responsible Lending. The guidelines have four main objectives: (i) to promote commitment on issuing loans responsibly; (ii) to promote awareness of stakeholder engagement; (iii) to promote internal implementation mechanisms to improve efficiency and productivity; and (iv) to promote transparency.

3.4 Matrix of Key Themes by Jurisdiction

Jurisdiction	Taxonomy framework	Disclosure	Lending	Green stress-testing	Prudential regulations	Green bonds	Investment practices (e.g. guidance to asset managers relating to ESG investments, or central bank ESG investment policies)
Developed Markets							
EU	√	√	●	√	√	√	√
UK	√	√	●	√	√	√	√
Mainland China	√	√	√		√	√	√
Hong Kong		√		●	●	√	√
Singapore		√	√			√	√
Japan		√				√	√
Australia		√					√
New Zealand		√	√			√	●
Emerging Markets							
Indonesia		√	√			√	√
Malaysia	●	√	√			√	√
India		√				√	
Thailand		√	√			√	

√ = Policy or rules have already been implemented
• = Proposals still under consideration (rules that are expected to come into force)

4 INTERNATIONAL REGULATORY DEVELOPMENTS

4.1 Initiatives by the International Organization of Securities Commissions (“IOSCO”)

4.1.1 Disclosure of ESG Matters by Issuers

In January 2019, IOSCO released a Statement on Disclosure of ESG Matters by Issuers which emphasises the importance of considering ESG matters in their disclosures and filings. The statement refers to IOSCO Principle 16 which requires issuers to provide full, accurate and timely disclosure of financial results, risk and other information which is material to investors’ decisions and notes that, although characterised as non-financial, ESG matters may also have material impacts on investors’ decisions.

The statement encourages issuers to consider the materiality of ESG matters to their business, assess the risks and opportunities and, where such factors may have a “material impact”, make disclosures. Such disclosures should include:

- the impact or potential impact on their financial performance and value creation;
- any insights on the governance and oversight of ESG-related material risks; and
- the risk assessment methodologies and frameworks used in preparing any material ESG disclosures.

4.1.2 Recommendations for Emerging Markets and the Role of Securities Regulators

On 5 June 2019, IOSCO published its final report on sustainable finance in emerging markets and the role of securities regulators. Drawing upon analysis by IOSCO’s GEMC and dialogue with market participants, the report sets out 10 recommendations for consideration by IOSCO members when issuing regulations and guidance on sustainability-themed capital market products and ESG disclosure requirements. These recommendations aim to foster transparency, facilitate the development of sustainable finance and promote the harmonisation of international securities guidance on sustainable instruments.

The recommendations fall into the following categories:

- Integration of material ESG-specific issues in overall risk assessment and governance by issuers and other regulated entities, including at the Board level (**Recommendation 1**);
- Integration by institutional investors (including asset managers and asset owners) of ESG-specific issues into their investment analysis, strategies and overall governance (**Recommendation 2**);
- Requirement by regulators for disclosure of material ESG-specific risks (including transition risks), reporting and adequate data quality (**Recommendation 3**);
- Definition and classification of the sustainable instruments (**Recommendation 4**);
- Specific requirements regarding sustainable instruments, including offering document requirements and external review (**Recommendations 5 to 9**); and
- Building capacity and expertise for ESG issues across regulators and market participants, and implementation of appropriate monitoring mechanisms (**Recommendation 10**).

In applying the recommendations, IOSCO encourages regulators and market participants to maintain an open dialogue and consider local conditions, the level of market development in a particular region and any global or regional efforts in the area of sustainable finance.

4.1.3 Sustainable Finance Network

IOSCO confirmed sustainable finance as a key priority of its 2019 work programme. To that end, it has recently established a Sustainable Finance Network of securities regulators[1] to encourage exchanges among members on initiatives and regulatory approaches in relation to sustainable finance. The Network held its first stakeholder meeting in June 2019 and its first objective will be to undertake a survey of national initiatives taken by securities regulators and other international organisations. In its 2020 work programme published on 30 January 2020, the IOSCO reiterated their endeavour to continue addressing issues related to Sustainable Finance Network and Grown and Emerging Markets.

4.2 Initiatives by the FSB

The FSB established a TCFD in December 2015. The objective of the TCFD is the development of a set of voluntary, consistent, climate-related financial risk disclosures for use by companies in providing information to investors, lenders, insurers and other stakeholders. On 17 December 2019, the FSB published its work programme for 2020 stating that it would continue to assess vulnerabilities the in global financial system, coordinated by the FSB Standing Committee on the Assessment of Vulnerabilities (**"SCAV"**). In particular, the SCAV would examine the financial stability implications of climate change.

4.2.1 TCFD Final Recommendations

Following a period of public consultation, the TCFD published its final report in June 2017. The Report consists of 11 recommendations on climate-related financial risk disclosures for use by organisations in their financial filings ("**Recommendations**").

The Recommendations canvass four key themes:

- **Governance**: disclosure of an organisation's governance around climate-related risks and opportunities;
- **Strategy**: disclosure of the actual and potential impacts of these risks and opportunities on an organisation's business, strategy and financial planning, where material;
- **Risk Management**: disclosure of the processes used by an organisation to identify, assess and manage climate risk; and
- **Metrics and Targets**: disclosure of the metrics and targets used to assess and manage climate-related risk and opportunities.

The recommended disclosures are adoptable by all organisations across jurisdictions and sectors (including the financial sector and non-financial industries most impacted by climate change); supplemental sector-specific guidance is also provided.

[1] The Sustainable Finance Network is chaired by Erik Thedéen, the Director General of the Finansinspektionen of Sweden.

The Recommendations set out seven principles for effective disclosure, whereby, disclosure should (1) represent relevant information; (2) be specific and complete; (3) be clear, balanced and understandable ; (4) be consistent over time; (5) be comparable among companies within a sector, industry, or portfolio; (6) be reliable, verifiable and objective; and (7) be provided on a timely basis.

In defining “climate-related risk”, the Recommendations identify two categories:

- **“Physical risks”** are those risks related to the physical impacts of climate change; and
- **“Transition risks”** are those arising from the adjustment to a lower-carbon economy. These risks may be legal, policy-related, reputational, market or technological in nature.

The TCFD also recommends that organisations use “scenario analysis” as a tool for appropriately incorporating the potential and uncertain effects of climate change into their strategic planning processes.[2] This involves the development of hypothetical constructs designed to assess how both transition and physical risks may impact the business, strategies, and financial performance over time. The Recommendations refer to the “2°C scenario” as a common and meaningful scenario to be applied, although it is worth noting that since the Recommendations were issued, an increasing number of companies are also applying 1.5°C scenario.[3]

4.2.2 TCFD 2019 Status Report

The TCFD issued Status Reports in June 2018 and 2019 which summarised the extent to which companies’ annual filings and reports align with the Recommendations.

The 2019 Status Report identified the following key themes and findings:

- Disclosure has increased since 2016 but is insufficient for investors;
- Further clarity is required on the potential financial impact of climate-related issues on businesses;
- Where companies use scenario analysis, the majority do not disclose information on the resilience of their business strategies; and
- The involvement of multiple functions of organisations (including risk management, finance and executive management), rather than only sustainability and corporate responsibility functions is required to mainstream climate-related issues in organisations.

4.2.3 Work programme for 2020

In addition to publishing another Status Report in 2020, the TCFD intends to undertake additional work to clarify elements of its supplemental guidance, develop process guidance on introducing and undertaking scenario analysis and identify business-relevant and accessible climate-related scenario.

[2] The FSB issued supplemental technical guidance on The Use Of Scenario Analysis in Disclosure of Climate-Related Risk and Opportunities in parallel to the Final Report.

[3] See for example, an example cited by TCFD of a TCFD-aligned disclosure: 2019 Status Report, page 20.

4.3 *ISO standard*

A Technical Committee 322 (ISO) on sustainable finance was set up for supporting the alignment of international language around sustainable finance. The committee is chaired by British Standards Institution and is expected to start working soon. It is expected that any future ISO standard on sustainable finance will likely include a transition element.

4.4 NGFS Initiatives

The NGFS is a voluntary international platform comprised of 42 member central banks and supervisors[4]. It was established in December 2017 with a stated mission of (i) defining and promoting best practices to be implemented within and outside of the NGFS membership and (ii) conducting or commissioning analytical work on green finance. In September 2019, the New York Department of Financial Services became the first U.S. state financial regulator to join the NGFS. The US Federal Reserve has signalled that it is considering joining the NGFS.

4.4.1 A Call for Action: April 2019 Recommendations

In April 2019, NGFS published the report A Call for Action: Climate Change as a Source of Financial Risk (the **"Report"**)which recognised that while it was likely that climate-related risks were a source of financial risk, such risk was not fully reflected in asset valuations. The Report therefore sets out 6 recommendations for central banks, policymakers, supervisors and financial institutions to foster collective leadership and globally coordinated action on climate-related risk. Although the recommendations are not binding, they reflect best practice identified by NGFS members in facilitating the role of the financial sector in achieving the goals of the Paris Agreement.

Most relevantly, Recommendation 1 focuses on the integration of climate-related risks into financial stability monitoring and micro-supervision. NGFS highlights scenario analysis as an important tool for authorities, which could be used to assess how climate change will impact the macro-economy, financial system, and safety and soundness of financial firms. As a result, the report considers how it could be implemented into authorities' toolkits. The recommendation refers to all three pillars of Basel in the framework for integrating climate-related factors into prudential supervision.

[4] The members of the NGFS are as follows: Abu Dhabi Financial Services Regulatory Authority, Banco Central de Costa Rica, Banca d'Italia, Banco de España, Banco de México, Banco de la República (Central Bank of Colombia), Banco de Portugal, Bank Al-Maghrib, Bank Indonesia, Bank Negara Malaysia (Central Bank of Malaysia), Bank of Canada, Bank of England, Bank of Finland, Bank of Greece, Bank of Japan, Bank of Korea, Bank of Thailand, Banque Centrale de Tunisie, Banque centrale du Luxembourg, Banque de France, Bank of Russia, Bundesanstalt für Finanzdienstleistungsaufsicht, Central Bank of Hungary, Central Bank of Ireland, Central Bank of Malta, Comision Nacional Bancaria y de Valores (Mexico), Comisión para el Mercado Financiero de Chile, Commission de Surveillance du Secteur Financier (Luxembourg), Danmarks Nationalbank, De Nederlandsche Bank, Department of Financial Services (DFS) of the State of New York, Deutsche Bundesbank, Dubai Financial Services Authority, European Banking Authority (EBA), European Central Bank (ECB), European Insurance and Occupational Pensions Authority (EIOPA), Finansinspektionen (Swedish FSA), Finanstilsynet (Norwegian FSA), Guernsey Financial Services Commission, Hong Kong Monetary Authority, Japan FSA, Monetary Authority of Singapore, National Bank of Belgium, Národná banka Slovenska, Norges Bank, Oesterreichische Nationalbank (OeNB), People's Bank of China, Reserve Bank of Australia, Reserve Bank of New Zealand, South African Reserve Bank, Superintendencia Financiera De Colombia, Sveriges Riksbank, Swiss Financial Market Supervisory Authority (FINMA) and Swiss National Bank.

In addition, Recommendation 6 encourages the development of a green taxonomy for defining and classifying green financial assets to promote transparency around economic activity contributing to the transition to a low-carbon economy. Noting China's Green Bond Endorsed Project Catalogue[5] and the European Commission's Action Plan on Sustainable Finance[6], the report emphasises the need to "exploit potential synergies" in different jurisdictions to harmonise green taxonomies.

On 23 July 2019, NGFS published a Technical Supplement to its Report providing an overview of existing approaches for quantitatively assessing climate-related risks and identifying key areas for further research.

4.4.2 Technical Document on SRI Approaches

On 17 October 2019, NGFS published an SRI investment guide encouraging central banks to lead by example and adopt sustainable and responsible investment practices in their portfolio management to mitigate sustainability risk, whilst acknowledging their unique challenges relating to their legal policy mandates. Central banks are encouraged to apply the TCFD framework to their own disclosures.

4.4.3 Next Steps for NGFS

NGFS intends to develop (i) a handbook on climate and environmental risk management and (ii) voluntary guidelines on scenario-based risk analysis. It also intends to perform an exploratory data collection from selected banks in 2019 as part of a more in-depth study of non-climate variables which may affect the default rates and performance of green assets.

4.5 International Green Bond Standards or Certifications

*4.5.1 Green Bond Principles ("**GBP**"), Social Bond Principles ("**SBP**") and Sustainability Bond Guidelines ("**SBG**") (all together, "**the Principles**")*

The Principles are a set of voluntary guidelines which aim to promote transparency and integrity in the development of the green, social and sustainability bond market. The Principles are intended for broad use by market participants. The GBP were established by a consortium of investment banks in 2014 and were last updated in June 2018. The Principles are governed by an Executive Committee that consists of issuers, underwriters and investors with the Secretariat being provided by the International Capital Market Association ("**ICMA**").

The Principles consist of four core components:

- **Use of proceeds**: issuances aligned with the Principles should provide an investment opportunity that has transparent green and/or social credentials. The Principles provide a high-level and non-exhaustive list of "eligible" project categories. For GBP, the list includes for instance renewable energy, energy efficiency, pollution prevention and control,

[5] The Catalogue is an official list of green projects eligible for financing via green bonds. It covers climate change mitigation and adaptation projects, and broader environmental projects such as projects addressing air pollution.

[6] For more information on the European Commission initiatives, see paragraph 4.8 below.

environmentally sustainable management of living natural resources and land use, terrestrial and aquatic biodiversity conservation, clean transportation, sustainable water and wastewater management, climate change adaptation, eco-efficient and/or circular economy adapted products, production technologies and processes, and green buildings.

- **Process for project evaluation and selection**: the Principles require an issuer to clearly communicate the environmental or social sustainability objectives, the process for determining how a project fits within eligible categories and any related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material environmental and social risks.
- **Management of proceeds**: the net proceeds of the green, social or sustainability bond, or an amount equal to these net proceeds should be credited to a sub-account, moved to a sub-portfolio, or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for green and/or social projects.
- **Reporting**: issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and on a timely basis in case of material developments. The Principles also recommend the reporting of expected or achieved impact.

The Principles also recommend that issuers engage in an external review process to obtain "outside input" confirming the alignment of an issuer's bond or bond programme with the four components above. The Executive Committee of the Principles has recently established two separate working groups to examine the emerging sustainability/KPI-linked bond and climate transition finance.

4.5.2 Climate Bonds Initiative

The Climate Bonds Initiative ("**CBI**") is an international, investor-focused, not-for-profit which provides sector-specific eligibility criteria for green assets and projects. CBI's climate bonds standard can be applied to climate bonds and green bonds. An issuer can apply for certification of a bond prior its issuance using CBI's "Climate Bonds Certification" mark.

The CBI has developed a Climate Bonds Taxonomy as a guide for issuers, investors, governments and municipalities in determining whether investments will deliver a low carbon economy. The taxonomy identifies eight broad categories of assets and projects: energy, transport, water, buildings, land use & marine resources, industry, waste and ICT. It also provides greenhouse gas emissions screening criteria consistent with the 2°C global warming target set by the Paris Agreement: a traffic light system determines compatibility of identified assets and projects with a 2°C decarbonisation trajectory.

CBI's ongoing work falls into three workstreams:

- market intelligence (reporting on green bond market evolution, sizing the climate bonds universe and demonstrating green infrastructure pipelines);
- developing a trusted standard; and
- providing policy models and advice.

4.5.3 ASEAN Green Bond Standards

The ASEAN Capital Markets Forum ("**ACMF**") has developed the ASEAN Green Bond Standards as a tool for assisting ASEAN capital markets to drive growth and meet investors' interest for green investments. They are intended to enhance transparency, consistency and uniformity of ASEAN green bonds.

The ASEAN Green Bond Standards are a product of collaboration with ICMA. They are based on the GBP. However, ACMF's standards aim to provide more granularity on how to apply the GBP's broad standards across ASEAN markets.

The ASEAN Green Bond Standards are aligned with the GBP's four core components, with key additional features including:

- Eligible issuers;
- Ineligible projects;
- Continuous accessibility to information;
- Encouraging more frequent reporting; and
- Disclosure of external review.

4.6 Green Loan Market

4.6.1 Green Loan Principles

In March 2018, the Asia Pacific Loan Market Association (**"APLMA**"), a pan Asian-association dedicated to promoting growth and liquidity in the primary and second loan markets in the Asia Pacific region, proposed the Green Loan Principles ("**GLPs**"). The GLPs provide a framework of standards and voluntary guidelines for the green loan market and for market participants to apply on a deal-by-deal basis. It is modelled on the GBP of the ICMA so as to ensure consistency across financial markets.

"Green Loan" is defined as any type of loan instrument made available exclusively to finance (or re-finance) new or existing eligible Green Projects. Green Loans must align with the core components of the GLPs canvassed below: -

- **Use of Proceeds**: the loan proceeds must be utilized for eligible Green Projects. The GLPs set out a non-exhaustive list of categories of "eligible" green projects, with the objective of addressing key areas of environmental concern such as climate change, natural resources depletion, loss of biodiversity, and air, water and soil pollution.
- **Process for Project Evaluation and Selection**: the GLPs require borrowers to clearly communicate the environmental sustainability objectives of a project, the process for determining how a project fits within an eligible category and any related eligibility criteria.
- **Management of Proceeds**: the net proceeds of the Green Loan should be credited to a dedicated account or otherwise tracked by the borrowers in an appropriate manner.

- **Reporting**: borrowers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until fully drawn, and on a timely basis in case of material developments.

The GLPs also recommend borrowers to engage in an external review process to obtain outside input on the green loan process and confirm the alignment of a borrower's green loan framework with the four components above.

*4.6.2 Sustainability Linked Loan Principles ("**SLLPs**")*

In March 2019, APLMA launched the SLLPs to promote the development of and preserve the integrity of the sustainability linked products by providing a set of voluntary recommended guidelines. The sustainability linked loan differs from a green loan, in that, the use of proceeds of the loan is not a determining factor. It allows lenders to incentivise the sustainability performance of borrowers by aligning the loan terms to the borrower's performance against the predetermined sustainability performance targets ("**SPTs**").

The SSLPs consist of four core components:

- **Relationship to Borrower's Overall Corporate Social Responsibility ("CSR") Strategy**: the borrower must clearly communicate its sustainability objectives as set out in its CSR strategy and how these align with its proposed SPTs;
- **Target Setting – measuring the sustainability of the borrowers**: the SPTs must be negotiated and set between the borrowers and lenders for each transaction. The SPTs must be ambitious and meaningful to the borrower's business and tied to a sustainability improvement, in relation to a predetermined performance target benchmark;
- **Reporting**: borrowers should make, and keep, readily available up to date information relating to their SPTs and this information should be provided to institutions participating in the loan annually. SPPLs also encourage borrowers to publicly report information relating to their SPTs and to include this in their annual or CSR reports; and
- **Review**: the need for external review should be negotiated and agreed between borrowers and lenders on a transaction by transaction basis. In the event that no external review is agreed, it is still strongly recommended that a borrower should demonstrate or develop the internal expertise to validate the calculation of its performance against SPTs and to thoroughly document such expertise. Such documentation should be communicated to the lenders and where appropriate, be made publicly available.

4.7 Further International Regulatory Initiatives

In addition to the above, a number of other international bodies have increased their focus on sustainable finance. The table in Appendix 1 sets out a summary of these developments. However, the following are of particular note:

- The **World Bank Group's** Climate Change Action Plan 2016-2020 aims to provide concrete actions to support countries in translating their Nationally Determined Contributions ("**NDCs**") under the Paris Agreement into climate policies and investment plans. In January 2019, it also launched an Action Plan on Climate Change Adaptation and Resilience which promised to develop a new rating system to create incentives for, and improve the tracking of, global progress on climate change adaptation and resilience.

- The **International Monetary Fund** published its Global Financial Stability Report: Lower for Longer in April 2019. Chapter 6 of the report addresses sustainable finance and recommends some policy changes to foster further development in this area.
- In October 2018, the **World Federation of Exchanges** published 5 Sustainability Principles for member exchanges to assist them in promoting the sustainable finance agenda.
- The **Coalition of Finance Ministers for Climate Action** was set up to foster cohesion between global and domestic action on climate change. It has endorsed the Helsinki Principles which are designed to promote climate action through fiscal policy and public finance.
- The **UNEP Finance Initiative** launched its Principles for Responsible Banking in September 2019, which help banks to align their businesses with the goals of the Paris Agreement and the UN Sustainable Development Goals.
- The **Equator Principles** are a framework for determining and managing environmental and social risk; Equator Principle 4 was issued in November 2019. The International Finance Corporation has also released a Green Bond Market Development Toolkit to help regulators foster local green bond markets.
- The **United Nations Principles for Responsible Investment ("UNPRI")** issued guidance in late 2018 to assets owners on implementing the TCFD Recommendations. In February 2019, it announced that its strategy and governance risk indicators were to become mandatory to report for its signatories from this year (i.e.2020). There are approximately 2,300 corporate signatories to the UNPRI as of 2019.

4.8 European Commission Initiatives

The Commission published its Action Plan on Sustainable Finance (the "**Action Plan**") in March 2018, which has become the primary legislative umbrella under which various sustainable finance-focused initiatives across Europe are being pursued.

The three main initiatives being pursued by the Commission under the Action Plan are:

- Establishing a unified EU classification system on what can be considered an environmentally sustainable economic activity;
- Imposing consistent sustainability-related disclosure requirements on all financial market participants (which include institutional investors and asset managers); and
- Creating a new category of benchmarks comprising low-carbon and positive carbon impact benchmarks to provide investors with better information on the carbon footprint of their investments.

On 6 December 2019, the EBA published its Action Plan outlining plans, deliverables and mandates to cover ESG-related factors and ESG risk between 2020 and 2025. EBA will work on incorporating ESG factors into risk management and supervision, and develop a dedicated climate change stress test.

Alongside the Action Plan, the Commission is also working on proposed amendments to existing EU legislation, such as the AIFM Directive ("**AIFMD**") and the MiFID II Regulation ("**MiFID II**") with a view to streamlining the relevant provisions with the proposals set out in the Action Plan.

4.8.1 EU Taxonomy Regulation

On 18 December 2019, the European Parliament (“**Parliament”**)and the European Council (**“Council**”) reached political agreement on the proposal on “Establishment of a framework to facilitate sustainable investment” (the "**EU Taxonomy Regulation**").

The political agreement set out a general framework for what can be classified as an “environmentally sustainable economic activity”. It lists the six environmental objectives (climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control and protection and restoration of biodiversity and ecosystems) and sets out the four requirements that economic activities need to comply with in order to qualify as "environmentally sustainable". The four requirements are as follows:

- Provide a substantial contribution to at least one of the six environmental objectives above;
- “No significant harm” to any of the other environmental objectives;
- Compliance with robust and science-based technical screening criteria; and,
- Compliance with minimum social and governance safeguards.

The other key points to note at this stage are:

- After considerable debate between the European Parliament and the European Council, the Taxonomy Regulation will not only apply to sustainable financial products, but also sets out requirements for "mainstream" financial products that are not using the taxonomy as well as reporting requirements for large firms already subject to the Non-Financial Reporting Directive (“**NFRD**”). The NFRD requires certain large companies to include a non-financial statement (e.g. on environmental or social issues) as part of their annual public reporting obligations. However, the corporate level disclosures may facilitate those required to be made by financial market participants pursuant to the Regulation on sustainability-related disclosures in the financial services sector (**“EU Disclosure Regulation”**).
- The Taxonomy Regulation recognises three different types of environmentally sustainable economic activities: (i) sustainable activities; (ii) transition activities (for which there are no technologically and economically feasible low-carbon alternatives, but that support the transition to a climate-neutral economy); and (iii) enabling activities (that enable others to make a substantial contribution to one or more of the objectives). Significantly, the EU Taxonomy Regulation creates a review clause which would allow the Commission to investigate the creation of a "brown" taxonomy in due course.

The final legislative text is yet to be published and, consequently, there is lesser clarity on the form of the EU Taxonomy Regulation than there is in relation to the EU Disclosure Regulation or the Regulation on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds ("**EU Benchmarks Regulation**"), both of which have now been published in the Official Journal. The taxonomy will be developed through delegated acts, expected to be published as follows:

- The delegated act on the first two climate-related objectives (i.e. climate change mitigation and climate change adaptation) is expected to be adopted by the Commission by 31 December 2020 (to start applying from 31 December 2021); and
- The delegated act on the remaining four environmental objectives is expected to be adopted by the Commission by 31 December 2021 (to start applying from 31 December 2022).

The TEG, which is providing input into the development of these delegated acts, is expected to finalise its recommendations by February 2020. The EC has further extended the mandate of the TEG until 30 September 2020 in order to retain the knowledge of the TEG in an advisory role until the Platform on Sustainable Finance becomes operational.

4.8.2 EU Disclosure Regulation

In April 2019, an inter-institutional agreement was reached between the European Parliament and the European Council in relation to the text of the EU Disclosure Regulation. The EU Disclosure Regulation was published in the Official Journal on 27 November 2019, and will apply with effect from 10 March 2021 (with the periodic reporting obligations applying from 1 January 2022).

The EU Disclosure Regulation introduces additional disclosure requirements for financial market participants, which not only relate to the integration of sustainability risks into investment decision-making and the provision of investment advice, but also extend to the disclosure of the impact of investment decisions and investment advice on the basis of proportionality and, in particular, the requirement to disclose sustainability impacts will not apply to smaller asset managers or institutional investors.

Other key proposals set out in the EU Disclosure Regulation (as supplemented by corresponding amendments being proposed to MiFID II and the AIFMD) are as follows:

- Financial market participants will be required to take into account the principal adverse impact of investment decisions on sustainability factors as part of fulfilling their due diligence obligations and to develop engagement strategies including for the exercise of voting rights, where available, with a view to reducing the principal adverse impact of investee companies on sustainability factors;
- Entities in scope of the regulation will have to provide a range of disclosures on their websites, in pre-contractual documentation, and through periodic reporting; and
- Investment firms providing investment advice or portfolio management services will be required to have a reasonable basis for determining that the specific transaction being recommended or entered into meets the investment objectives of the client in question, the client's risk tolerance and any preferences, including "ESG preferences", where relevant.

The EU Disclosure Regulation also proposes additional disclosure obligations for financial products which either: (i) have as their objective "sustainable investment" or (ii) promote environmental and social characteristics and whose investee companies follow good governance practices. For these purposes, "sustainable investments" have been defined as investment in economic activities that contribute to an environmental objective or a social objective, do not significantly harm either of those objectives and whose investee companies follow good governance practices. It is not yet clear what it means to be a financial product that promotes environmental or social characteristics.

European supervisory authorities are expected to develop regulatory technical standards on the details of the presentation and content of the required disclosure, with drafts of these standards to be submitted to the Commission by 30 December 2020. On 6 February 2020, the European Securities and Markets Authority ("**ESMA**") set out its Strategy on Sustainable Finance. It committed to placing sustainability at the core of its activities and embedded ESG factors into its work. It set out ESMA's central priorities, which included transparency obligations, risk analysis on green bonds, ESG investing, convergence of national supervisory practices on ESG factors, taxonomy, and supervision. ESMA will work with the EBA and European Insurance and Occupational Pensions Authority to produce the mandated technical standards. It expects to deliver its first set of regulatory technical standards in the second half of 2020 and its second set in 2021. Given that the EU Disclosure Regulation applies from 10 March 2021, the short period available after the drafts become available is a cause for concern amongst financial market participants.

4.8.3 Climate-related Benchmarks

In March 2019, the European Parliament in its plenary session approved the agreement on low-carbon benchmarks as part of the broader EU Benchmarks Regulation, with the text being published in the Official Journal on 27 November 2019.

Two new categories of voluntary low-carbon benchmarks are being created, which are:
- EU climate transition benchmarks, where the underlying assets are selected, weighted or excluded in such a manner that the resulting benchmark portfolio is on a decarbonisation trajectory and which is also constructed in accordance with certain minimum standards – for these purposes, a "decarbonisation trajectory" means a measurable, science-based and time-bound trajectory to reduce scope 1, 2 and 3 carbon emissions towards the alignment with the long-term global warming target of the Paris Climate Agreement; and
- EU Paris-aligned benchmarks, where the underlying assets are selected in such a manner that the resulting benchmark portfolio's carbon emissions are aligned with the long-term global warming target of the Paris Agreement and which is also constructed in accordance with certain minimum standards.

Only administrators that comply with the requirements laid down by the EU Benchmarks Regulation will be eligible to use the labels of "EU Climate Transition Benchmark" or "EU Paris-aligned Benchmark" when marketing benchmarks in the Union. However, there is no obligation on asset managers to use these benchmarks for financial products being marketed as environmentally sustainable.

Additional disclosure obligations have been imposed on administrators of benchmarks on whether or not their benchmarks pursue ESG objectives and to what extent their benchmarks ensure an overall degree of alignment with the target of reducing carbon emissions, or, attaining the long-term global warming targets of the Paris Climate Agreement. On 20 December 2019, the TEG published a Handbook on climate benchmarks and benchmarks' ESG disclosures. The handbook follows publication of TEG's final Report on climate benchmarks on 30 September 2019. The aim of the handbook is to clarify the recommendations put forward by TEG and to respond to frequently asked questions from the market.

4.8.4 EU Green Deal

On 11 December 2019, the EU Commission set out a European Green deal, which expressed an ambition to achieve climate neutrality objective by 2050 and to mainstream sustainability in all EU policies and to make the EU the global leader in driving sustainability.

The intention to mainstream sustainability is supported by the following legislative or policy initiatives:

Proposal for a Just Transition Mechanism, including a Just Transition Fund – as part of Sustainable Europe Investment Plan	January 2020
Review of the NFRD (Consultation on the possible reform or improvements that could be made to NFRD was launched on 22 February 2020)	2020
Renewed sustainable finance strategy	Autumn 2020
Initiatives to screen and benchmark green budgeting practices of the Member States and of the EU	From 2020
Review of the relevant State aid guidelines, including the environment and energy State aid guidelines	2021
Align all new Commission initiatives in line with the objectives of the Green Deal and promote innovation	From 2020
Stakeholders to identify and remedy incoherent legislation that reduces the effectiveness in delivering the European Green Deal	From 2020
Integration of the SDG in the European Semester	From 2020

Other proposals forming part of the EU Green Deal include:

- A 'Climate Law' to be presented in March 2020;
- A new circular economy action plan will be tabled in March 2020;
- A new biodiversity strategy will be presented in March 2020;
- The new strategy will aim for a "green and healthier agriculture" system, to be tabled in Spring 2020; and
- Electric vehicles will be further encouraged with an objective of deploying 1 million public charging points across Europe by 2025.

4.9 Prudential Regulation

4.9.1 Prudential Regulation Authority

The UK's PRA has been one of the leading actors in integrating climate issues into prudential regulation. It published Policy Statement 11/19 in April 2019 in order to consult the industry on proposed approaches to managing financial risks from climate change. The PRA provided feedback to responses to a Consultation Paper concerning banks' and insurers' approaches to managing the financial risks from climate change. The respondents generally welcomed the PRA's proposals and urged the PRA to move quickly on climate change issues.

The key highlights from the Policy Statement were:

- The PRA proposed that firms address the financial risks from climate change through their existing risk management framework, in line with their board-approved risk appetite, while recognising that the nature of financial risks from climate change required a strategic approach;
- Firms should liaise with their supervisors to develop an appropriate approach to incorporate climate considerations into the Internal Capital Adequacy Assessment Process (“**ICCAP**”) or Own Risk and Solvency Assessment ("**ORSA**"). The PRA expected this to be an iterative process and approaches would mature over time as methodologies develop;
- The PRA also proposed that firms use scenario analysis to assess the impact of the financial risks from climate change on their current business strategy, and to inform the risk identification process; and
- Many respondents requested further guidance on issues relating to scenario analysis, including (i) how best to overcome the lack of data, (ii) developing and publishing reference scenarios and key assumptions, and (iii) how to build expertise within and outside firms to undertake scenario analysis. The PRA responded by saying that it was not in a position to provide any further guidance but would aim to do so in the future.

The Policy Statement was accompanied by Supervisory Statement SS3/19, which set out the PRA's expectations of firms in the face of what it recognised were unique challenges of climate change. Firms should:

- Embed the consideration of the financial risks of climate change into their governance and risk management arrangements;
- Where proportionate, use scenario analysis (both long-and-short term) to inform strategy setting and risk assessment;
- In addition to their existing requirements to disclose information on material risks under their Pillar 3 disclosures, consider whether further disclosures were necessary to enhance transparency; and
- Have an initial plan in place to address the expectations and submit an updated Senior Management Function form in mid-October 2019.

The PRA has also established a Climate Finance Risk Forum ("**CFRF**"), co-chaired with the Financial Conduct Authority, which will share best practice and build capacity across financial regulators and industry to respond to the financial risks from climate change. Four working groups have been tasked with producing guidance on risk management, scenario analysis, disclosure and innovation. Draft practical guidance and recommendations were presented at the November 2019 meeting of the CFRF, and its intention is to publish final versions in Spring 2020 with a view to obtaining wider industry input on them.

On 23 January 2020, the PRA published a policy statement, providing feedback to responses to the consultation paper on updating its Pillar 2 capital framework. It has decided to add a reference to its existing policy on managing climate-related financial risks.

4.9.2 Stress Testing

The PRA's Policy Statement 11/19 noted the value in considering climate change as part of the PRA's stress testing exercises, in particular whether it could be part of a future Biennial Exploratory Scenario ("**BES**"). The PRA noted that scenario analysis would be exploratory and conducted proportionately as firms' expertise developed, which should reduce resource costs. It emphasised that firms should not wait to initiate scenario analysis as this was important in understanding the risks each firm faced from climate change. ICAAP for banks was considered to be useful frameworks within which to consider the financial risks from climate change. The PRA also expected firms to conduct scenario analysis on a sufficiently regular basis to ensure the results could feed into the board-approved strategy for managing the financial risks from climate change.

As part of its regulation of insurance firms, the PRA has begun to use stress-testing exercises. In 2019, insurers were requested to consider the impact of three greenhouse emission scenarios on their business models and asset valuations. The PRA also asked firms who had already developed climate change scenarios to provide the assumptions behind those scenarios to assist the PRA to understand the range and parameters currently considered by insurers.

In December 2019, the Financial Policy Committee ("**FPC**") and Prudential Regulation Committee ("**PRC**") of the Bank of England issued a Discussion Paper confirming the Bank's intention to use its 2021 BES to stress test the resilience of the largest banks, insurers and the UK financial system to the physical and transition risks from climate change.

In its Discussion Paper, the Bank of England noted that the 2021 BES will contain certain differences from traditional stress-testing methodologies to reflect the distinct characteristics of climate-related financial risks:

- The BES will test resilience by reference to three different climate scenarios embodying the risks of earlier and later policy action to reach the Paris Climate Agreement target, and a 'no additional policy action' scenario where that target is not met and more severe physical risks result;
- The BES will use a 30-year modelling horizon reflecting the longer period over which climate change will occur and policies will seek to mitigate it. It is proposed that participants in the BES will assume the nominal size and composition of their balance sheets (as at 30 June 2020) will remain static and will run projections at 5-year intervals over the 30-year horizon;
- The Bank is proposing to publish pathways for temperature, emissions and climate policies, together with a defined set of macro-financial and financial market variables to be used in the BES; and
- Firms will be expected to assess the vulnerability of individual counterparties' business models to the underlying climate-related risks in each scenario.

The Bank envisages the BES to be carried out in two parts: (1) BES participants to quantify the change in the value of their balance sheets over time in the different scenarios, in order to understand the vulnerability of their current business models to climate change; and (2) participants to assess how they would change their business models in response to the risks identified in each scenario, for example, by reducing their exposures to sectors at risk and redeploying capital to capture opportunities identified.

The Bank is seeking feedback on its Discussion Paper and the design of the BES by 18 March 2020, and anticipates launching the BES in the second half of 2020 and publishing results of the exercise in 2021.

4.9.3 European Prudential Regulation

At a European level, prudential regulatory engagement with sustainable finance is at an early stage, but initial steps are being taken. The Commission's Action Plan proposed exploring the feasibility of integrating climate-related risks in banks' capital requirements framework. A key assumption, which the EBA is investigating, is whether green assets are less risky than brown or non-green assets.

On 6 December 2019, the EBA published its Action Plan on Sustainable Finance outlining its approach and timeline for delivering mandates related to ESG factors as set out in the revised Capital Requirements regulation ("**CRR II**") and Capital Requirements Directive ("**CRD V**"). The first phase of its plan will focus on strategy and risk management, as well as key metrics and disclosure. In the second phase, the EBA will develop a climate change stress test. The third phase will focus on studying the prudential treatment of "green" exposure.

5 ASIA PACIFIC REGULATORY DEVELOPMENTS

5.1 Asia Pacific Regional Bodies

*5.1.1 Association of Southeast Asia Nations ("**ASEAN**")*

The ACMF, a high-level grouping of capital market regulators from all 10 ASEAN jurisdictions, developed the ASEAN Green Bond Standards, the ASEAN Social Bond Standards and the ASEAN Sustainability Bond Standards in 2017 and 2018 to create a sustainable asset class in ASEAN, in particular to meet the region's infrastructure and social development financing needs. The standards were developed based on the ICMA's Principles. It provides more specific guidance on how the ICMA's guidance is to be applied across ASEAN. They are intended to enhance transparency, consistency and uniformity of ASEAN green, social and sustainability bonds, which will reduce due diligence cost and assist global investors in making informed investment decisions.

The key principles under the standards relate to use of proceeds, process for project evaluation and selection, management of proceeds and reporting to investors. As of 8 November 2019, the ACMF had on its record 98 issuances of ASEAN green/social/sustainability bonds or sukuks, totalling over USD2.6 billion. The issuances originated from Malaysia, the Philippines, Singapore and Thailand to fund a variety of projects such as those relating to green buildings, renewable energy, sustainable water management and affordable housing.

The ACMF is currently developing the Roadmap for ASEAN Sustainable Capital Markets to outline key strategies and mechanisms to strengthen capital markets as a driving force for sustainable development. The roadmap will address key areas such as ESG information or disclosure standards, analytical tools, and stakeholder awareness and engagement. Feedback has been gathered from stakeholders such as issuers, institutional investors, information providers and ESG-related organisations through the ACMF Industry Consultative Panels.

*5.1.2 Asian Development Bank ("**ADB**")*

The ADB was the first multilateral development bank to make a climate financing commitment at the United Nations Climate Change Summit in September 2015. In December 2019, it announced that it had achieved a key commitment to double its annual climate investments, one year ahead of time, from USD3 billion in 2014 to over USD6 billion in climate-related financing in 2019. The ADB has indicated that it is ready to step up as the climate bank for Asia and the Pacific, in terms of both financing and technical assistance. The ADB is committed to helping its developing member countries meet their targets under the Paris Agreement, enabling them to transition to a low-carbon, climate-resilient growth and development path, as reflected in its Strategy 2030.

Some of the other initiatives the ADB has been involved in include the ASEAN Catalytic Green Finance Facility launched in April 2019 in conjunction with Southeast Asian governments and major financiers, to mobilise USD1 billion to provide loans and necessary technical assistance for sovereign green infrastructure projects such as sustainable transport, clean energy, and resilient water systems. In May 2019, the ADB also launched its Action Plan for Healthy Oceans and Sustainable Blue Economies (designed in collaboration with the World Wide Fund for Nature) to support the efforts of its developing member countries to achieve sustainable development goals. The action plan will expand financing and technical assistance for ocean health and marine economy projects to USD5 billion from 2019 to 2024, including co-financing from partners.

*5.1.3 Asia Infrastructure Investment Bank ("**AIIB**")*

The AIIB was established in 2016 after the United Nations adopted the 2030 Agenda for Sustainable Development, which included 17 sustainable development goals. Its Environmental and Social Framework therefore gives recognition to and aligns with such goals. As at the end of 2018, the AIIB had invested in over 34 projects aligned with the goals.

In early 2019, the AIIB board of directors approved USD500 million for the Asia ESG Enhanced Credit Managed Portfolio which aimed to develop infrastructure as an asset class, develop debt capital markets for infrastructure and promote the integration of ESG principles in fixed income investments in emerging Asia.

5.2 Developed Markets

5.2.1 Mainland China

China is a signatory to the 2015 Paris Agreement and has pledged to source 20% of its energy from low-carbon sources by 2030 and to cut emissions per unit of GDP by 60-65% of 2005 levels by 2030.

Mainland China has placed a high priority on sustainable finance, which it views as key to its continued economic development. Since 2007, the financial authorities and the environmental protection authority have promulgated a series of official circulars and guidelines on use of financial tools and products to support sustainable economic development. On 31 August 2016, seven ministerial agencies, including the PBOC, jointly promulgated guidelines which set out the definition of green finance, incentives, disclosure requirements, a development plan for green financial products, and risk mitigation. Mainland China is the world's second largest green bond market with green bond issuances in 2018 at roughly USD 43 billion.

Beginning in 2017, the European Investment Bank and the PBOC have had discussions to align the two jurisdictions' definition of green finance. Currently, the PBOC allows clean coal projects to be included in the list of projects financed by green bonds, a taxonomy that differs from the EU's. Other developments include Mainland China's December 2017 launch of the world's largest nationwide carbon trading scheme and the March 2019 supplementary agreement between the Luxembourg Stock Exchange ("**LuxSE**") and the Shanghai Stock Exchange ("**SSE**") allowing Chinese investors to obtain information about green bonds listed on the LuxSE.

On the regulatory front and in furtherance of Mainland China's 13th Five Year Plan (2016-2020), the PBOC issued in June 2017 a standardisation plan, which sought to develop standards for financial institutions' green products, information disclosure for green credit, and green credit ratings. The PBOC has also incorporated green finance into its macro prudential assessment system. In June 2017, China launched a green finance pilot zone in 5 provinces. In July 2018, the PBOC issued a performance evaluation plan which provided the basis by which banking financial institutions would be assessed in relation to their green credits.

The PBOC and the China Securities Regulatory Commission ("**CSRC**") jointly released additional green bond certification guidelines in December 2017. These guidelines are broadly modelled on the Climate Bonds Standard. On 6 November 2019, the China's National Development and Reform Commission also updated the Catalogue for Guiding Industry Restructuring.

In September 2018, the CSRC updated its corporate governance code providing a framework for listed companies' disclosure of ESG information, a requirement that is anticipated to become mandatory by 2020. In April 2019, the PBOC issued a joint circular supporting the issuance of debt financing instruments in Mainland China's five green finance pilot zones. Finally, the SSE has taken an active role in supporting green finance in the stock market, as demonstrated by its Green Vision Finance and Action Plan (2018-2020).

In December 2019, the China Banking and Insurance Regulatory Commission ("**CBIRC**") published the guidance opinion for promoting high-quality development of the banking and insurance industries. One of the key areas was promoting green finance, and CBIRC purported to actively develop green bonds, green credit-asset backed securitisation, establish a green development fund and explore new green financial products, such as carbon finance, climate bond, climate insurance, blue bond, etc.

5.2.2 Hong Kong

Hong Kong is a major green finance hub, with USD11 billion in green bonds issued and arranged in 2018, a significant increase from USD3 billion in 2017. Issuers include multilateral development banks as well as local, Mainland and international private sector entities. In May 2019, the Hong Kong government issued its inaugural USD1 billion 5-year green bond, which attracted a strong demand from investors globally. In February 2020, the Hong Kong government announced its plan to issue green bonds totalling HKD66 billion within the next five years.

The SFC announced its Strategic Framework for Green Finance in September 2018. Among the key action items are enhancing disclosure by listed companies of environmental information (in particular climate-related disclosure), conducting a survey of asset managers and asset owners on their sustainable investment practices and engaging with the industry to formulate appropriate policies and guidance, facilitating the development of a wider range of green-related investments, supporting investor awareness in green finance, and participating in international initiatives.

With regards to the SFC's first action item above, the HKEX published in December 2019 conclusions to its consultation on proposed enhancements to its ESG reporting guide and related listing rules, including a requirement to include a statement from the company board setting out its consideration of ESG issues. As for the second action item, the SFC published a circular in April 2019 to provide guidance to management companies of SFC-authorised funds with an ESG investment focus, and released the results of its survey of asset managers in December 2019, indicating that it plans to develop standards and provide practical guidance on the management of climate change risks in asset management, and establish an industry group to exchange views amongst the SFC and experts on environmental and climate risks and on sustainable finance. As at the end of 2019, there were around 30 SFC-authorised funds with a green or ESG focus.

In May 2019, the HKMA announced three measures to support green finance development. Firstly, the HKMA would promote green and sustainable banking by developing a common framework to assess the "greenness" of banks. In late December 2019, the HKMA launched an industry consultation on its proposed framework, which consists of six elements – (1) governance, (2) corporate planning and tools, (3) risk management process, (4) business policies, products and services, (5) performance and resources and (6) disclosure and communication. Secondly, as the manager of the Exchange Fund, the HKMA would give priority to green and ESG investments if the long-term return is comparable to other investments on a risk-adjusted basis. Thirdly, the HKMA would establish the Centre for Green Finance under its Infrastructure Financing Facilitation Office, to serve as a platform for technical support and experience sharing for the green development of the banking and finance industry. This centre has now been established. The HKMA also participates in international initiatives, such as the NGFS.

The Hong Kong Quality Assurance Agency ("**HKQAA**"), established by the Hong Kong government, has operated the Green Finance Certification Scheme since 2016. The scheme provides third-party conformity assessments for green finance issuers and incorporates a variety of certification standards, including the Green Bond Principles, PBOC guidance on green bonds, Clean Development Mechanism under the U.N. Framework Convention on Climate Change and ISO 26000 Guidance on Social Responsibility.

5.2.3 Singapore

Singapore is a signatory to the 2015 Paris Agreement and committed to reduce its emission intensity by 36% by 2030, compared to 2005 levels. Singapore is a founding member of the NGFS and has pushed for the adoption of industry best practices to promote a strong sustainability focus. Banks in Singapore are to assess their clients' ESG risks as part of credit evaluation processes. In the asset management industry, the Singapore Stewardship Principles for Responsible Investors were launched in 2016. In the capital markets, the Singapore Exchange ("**SGX**") has implemented a "comply or explain" regime for sustainability reporting in 2018, where listed companies are required to disclose and explain their sustainability practices. The reason for the sustainability reporting requirements is to enhance the visibility of SGX-listed companies among investors who seek sustainable investment and want to review a company's ESG efforts. In insurance, key players are factoring ESG into investment and underwriting processes and supporting climate risk resilience solutions from Singapore.

Singapore has also taken steps to nurture the growth of the green bond market. The Monetary Authority of Singapore ("**MAS**") introduced the Green Bond Grant scheme in 2017 to encourage the issuance of green bonds. In 2019, the MAS expanded the Green Bond Scheme to include social and sustainability bonds, and renamed the scheme as "Sustainable Bond Grant Scheme". In order to take advantage of the scheme, proceeds of bonds issued by qualified issuers must be used to fund projects that deliver environmental and social benefits. The bonds must meet criteria as prescribed by MAS, such as a minimum principal issue amount of SGD200 million. The implementation of the scheme highlights the strategic focus of MAS to promote sustainable financing in Singapore's financial sector and attract both international and domestic issuers to issue their bonds in Singapore and to list them on the SGX.

MAS is pushing for deeper ESG integration within Singapore's financial institutions by engaging the senior management and boards of local banks to promote effective adoption of industry standards and enhancement of ESG disclosures. MAS has also included the banks' sustainability practices in its supervisory assessments.

In November 2019, MAS announced that it had set up a USD 2 billion green investments programme to invest in public market investment strategies that have a strong green focus. It would place funds with asset managers who are committed to drive regional green efforts out of Singapore and contribute to MAS's other green finance initiatives, including developing green markets and managing environmental risks.

MAS has co-drafted a set of draft Environment Risk Management Guidelines with the Investment Management Association of Singapore to provide guidance to asset managers on sound environmental risk management practices for funds and segregated mandates. The guidelines will be issued in the first quarter of 2020 for public consultation.

In November 2019, MAS announced the implementation of the Green Finance Action Plan which aimed to build a financial system that would be more resilient to environmental risks, develop green finance solutions and market. The plan will be articulated through actions in six areas: -

- Setting Environmental Risk Management Guidelines across the banking, insurance, and asset management sectors;
- Developing grant schemes to support mainstreaming of green and sustainability linked loans;
- Launching a USD2 million Green Investment Programme;
- Supporting expansion plans of external reviewers and rating agencies;
- Anchoring Centres of Excellence with world-class research institutions and leading universities to contribute Asia-focused climate research and training programmes; and
- Featuring Green Finance as a key theme in the 2020 Fintech Hackcelerator.

5.2.4 Japan

Japan is a signatory to the 2015 Paris Agreement and committed to reduce its emission by 26% on 2013 levels by 2030. The Japanese sustainable finance market has experienced a huge growth in the last few years, expanding from USD0.5 trillion in 2016 to USD2.1 trillion in 2018. The Tokyo Stock Exchange ("**TSE**") currently offers 10 ESG indices and has established platforms for various ESG-related products such as green bonds.

On 28 March 2017, the Ministry of the Environment issued the "Green Bond Guidelines, 2017". The guidelines establish standards for green bond issuances in accordance with the Green Bond Principles.

The Government Pension Investment Fund has played an important role in the promotion of sustainable finance. It added descriptions on ESG in its investment principles in October 2017, and has continuously encouraged asset managers to consider ESG factors in their investment decisions.

On the policy side, the Japanese Cabinet agreed on the Long-term Strategy under the Paris Agreement in June 2019, recognising the importance of sustainable finance and proposing measures for further promotion.

Although the amended Stewardship Code states that institutional investors may consider ESG factors in their investment decisions, it does not impose a binding obligation on institutional investors. Similarly, the amended Corporate Governance Code requires listed companies to take appropriate measures to address sustainability issues on a comply-or-explain basis, but there are currently no detailed requirements on the disclosure of ESG information.

Nonetheless, the situation may change quickly in the next few years. The Japan Exchange Group ("**JPX**"), which operates the TSE, joined the Sustainable Stock Exchanges Initiative in December 2017. As a partner exchange in the initiative, the JPX is expected to voluntarily commit to promoting long-term sustainable investment and improving ESG disclosure and performance among listed companies.

In view of the increased awareness on corporate disclosure and use of climate-related information highlighted by the TCFD, the TCFD Consortium was launched in Japan in May 2019 as a platform for discussion on effective disclosure of climate-related information. The Ministry of Economy, Trade and Industry, the Financial Services Agency and the Ministry of the Environment participate in the consortium as observers, raising momentum for addressing ESG disclosure requirements. 239 Japanese companies and organisations have expressed their support for the TCFD as of 1 February 2019. In November 2019, the Bank of Japan joined the NGFS as a member.

5.2.5 Australia

Australia is a signatory to the 2015 Paris Agreement and has committed to a 26 to 28% reduction in emissions by 2030 on 2005 levels. In Australia, the focus of regulatory developments in this area has been management and disclosure of the risks of climate change to the financial world, including decreased asset values and potential business disruption.

In 2018, the Australian Accounting Standards Board and Auditing and Assurance Standards Board issued joint guidance on assessing climate-related risks in the context of financial statements. The guidance signals to report preparers, assurers and auditors that they must approach climate change-related issues with the same degree of rigour as any other financial variable.

Earlier in 2019, the Australian Securities and Investments Commission published updates to clarify the application of its guidance on disclosure of climate change-related opportunities and risks, which it described as "systemic". Similarly, the 2019 edition of the Australian Securities Exchange ("**ASX**") Corporate Governance Council's Corporate Governance Principles and Recommendations includes commentary on how the environmental risks of climate change should be disclosed. Recommendation 7.4, in particular, states that "*a listed entity should disclose whether it has any material exposure to environmental or social risks and, if it does, how it manages or intends to manage those risks*".

In February 2020, the Governance Institute Australia issued a "*Practical Guide to Reporting against ASX Corporate Governance Council's Corporate Governance Principles and Recommendations",* referring to a legal opinion written by Noel Hutley SC and Sebastian-Harford Davis on directors' duties and climate change. The legal opinion was first issued in 2016 and was later revised in early 2019 and opined on the extent to which the law permitted or required Australian company directors to respond to climate change risks. In short, the opinion highlighted the need to (a) understand directors' duties relating to risk to business from climate change and (b) ensure adequate disclosure relating to material risks from climate change. It advised that if company directors consider climate change risks actively, disclose them properly and respond appropriately, it would reduce their exposure to liability.

In 2018 the APRA conducted a climate change survey, which is to be followed by a deeper supervisory assessments of entities that participated in 2018 by mid-2020. The APRA's 2019 review of its superannuation prudential framework observed that attention could be given to reviewing and updating the guidance on consideration of ESG factors in formulating an investment strategy. Australia's financial services regulators have also commented on the financial and economic significance of climate change. The Australian government has indicated an increased focus on developing the social impact investing market and has released principles articulating its role in that development. In early 2020, the APRA outlined its plans to develop a prudential practice guide focused on climate-related financial risks, as well as a climate change vulnerability assessment in a letter to all APRA-regulated institutions and intends to update its superannuation Prudential Practice Guide SPG 530 Investment Governance, which includes paragraphs related to ESG investments.

APRA will also be seeking to undertake a climate change financial risk vulnerability assessment. The assessment will begin with Australia's largest authorised deposit-taking institutions (**"ADIs"**). Beginning with the ADI industry will provide helpful insights on the impact of a changing climate on the broader economy, which will be analysed in conjunction with the Reserve Bank of Australia. The ADI vulnerability assessment will be designed in 2020 and executed in 2021, with other industries to follow.

The increasing involvement of industry bodies may shift the regulatory focus from disclosure of risks to the promotion of "ethical" finance – including green financial products.

The Australian Sustainable Finance Initiative, whose membership includes leaders from across the financial sector, civil society and academia, aims to design a roadmap for realigning the finance sector to support greater social, environmental and economic outcomes for Australia. Impact Investing Australia and the Australian Advisory Board on Impact Investing, comprised of leaders across business and not-for-profit sectors, are working to establish an independent financial institution to accelerate development and achieve scale for impact investing.

Stewardship codes are also increasingly common, including rules on how fund managers engage with and influence ESG factors. The Australian Council of Superannuation Investors ("**ACSI**") launched a voluntary code in 2018 emphasising its members' commitment to incorporating ESG considerations into their investment strategies. In 2019, the ACSI Governance Guidelines were revised. The Guidelines now recommend the use of the TCFD Recommendations and articulate an expectation that entities materially exposed to climate change risk will use the TCFD recommended disclosure.

5.2.6 New Zealand

New Zealand is a signatory to the 2015 Paris Agreement and has committed to reduce its emission by 30% on 2005 levels by 2030, which translates to an 11% reduction on 1990 levels. Three sustainable finance products are currently available in New Zealand: green bonds, sustainable linked loans, and green loans. The Auckland City Council has used green bonds for its electric train fleet and property company Argosy for its green building portfolio. Between 2012 and 2018, the green bond was the most common form of sustainable finance used, but the sustainable linked loan is rising in popularity due to its flexibility. The sustainable linked loan works by applying a discount to the base lending margin proportionate to how successfully a company adheres to its environmentally driven targets. In October 2019, ANZ bank entered into New Zealand's first sustainable linked loan, agreeing to a four year NZD 50 million ESG linked loan with Synlait Milk company. This encourages Synlait to improve its performance against independent ESG criteria. By contrast, the green loan refinances a specific project or asset. A recent example of this is Contact Energy's Green Borrowing Programme.

At the end of 2018, the New Zealand government pledged NZD 100 million towards green investment finance, with a particular focus on reducing New Zealand's greenhouse gas emissions. The New Zealand Green Investment Finance Ltd ("**NZGIF**") was established as the vehicle for dispersing these funds. The overall aim of NZGIF is to accelerate low emissions investment in New Zealand. New Zealand intends to transition towards a net-zero-emissions economy by 2050.

Changes to New Zealand's Emissions Trading Scheme ("**ETS**") have also been proposed to assist alignment with New Zealand's emissions reduction targets. First established in 2008, the scheme incentivises reduction in emissions and increased forestry. Foresters are allocated units according to how much carbon dioxide is absorbed by their trees. One metric tonne of carbon dioxide or carbon dioxide equivalent is worth one New Zealand Emission Unit ("**NZU**"). These units can be sold on the NZ ETS market and emitters must purchase enough of these units to cover their emissions. The unit supply and price controls of the ETS are currently under consultation with a view to their legislation by mid-2020.

In August 2018, the New Zealand Productivity Commission issued its Low Emissions Economy report which recommended a comply-or-explain disclosure regime. In October 2019, New Zealand's government entered into consultations about imposing this regime which would require financial firms and listed companies to report on the actual and potential climate-related risks posed by their business strategy and what governance and climate related risk management is in place and the metrics and targets of that management and governance. Alternatively, the company must explain why it is not relevant for the organisation to do so.

In early 2019, the New Zealand Sustainable Finance Forum was established under the Aotearoa Circle. The Aotearoa Circle was formed to reduce the degradation of New Zealand's natural resources by acting as the intermediary between leaders in the public and private sector to facilitate cooperation towards this goal. The Sustainable Finance Forum released their first report by way of interim report in October 2019. Its key suggestions include improve the availability and quality of environmental and social data, price natural and social capital, clarify fiduciary duties from the ESG perspective, link performance management and sustainable outcomes, and move towards risk-based insurance pricing and monitor climate change and other sustainability risks in the financial sector.

5.3 Emerging Markets

5.3.1 Indonesia

Indonesia is a signatory to the 2015 Paris Agreement and has pledged to reduce its emission by 29% by 2030. It will increase its reduction goal to 41%, conditional on support from international cooperation. In recent years, Indonesia has seen considerable reforms relating to sustainable finance. The Indonesian Financial Services Authority (*Otoritas Jasa Keuangan* ("**OJK**")) published a comprehensive Sustainable Finance Roadmap in 2015 to develop the sustainable finance sector. The three main objectives of the roadmap are to increase funding from financial services institutions for green projects, increase demand for green financial products and services, and increase supervision and coordination of the implementation of sustainable finance.

To strengthen the commitment to support sustainable finance and pursuant to the 2015 roadmap, OJK issued a regulation in 2017 requiring financial services institutions, issuing companies and public companies to implement sustainable finance principles (such as responsible investing, management of social and environmental risks, and inclusivity) in their operations. The regulation also provides that OJK may provide incentives for effective implementation of sustainable finance.

In the same year, OJK also issued a regulation setting out the requirements that have to be satisfied when issuing green bonds, such as obtaining an opinion from an environmental expert and including certain prescribed information in the prospectus. However, despite the government's continuous effort to promote green bonds, news reports have indicated that there have not been many issuances of green bonds in Indonesia and only 29% of purchasers of green bonds are considered as "green investors" (i.e., investors who are interested in environmental issues). Some parties, including the Indonesia Minister of Finance, have suggested that in order to attract more green investors, the reporting format relating to green bonds will need to be simplified. It should be highlighted that Indonesia was the first Asian country to issue sovereign green bonds in early 2018.

In February 2019, OJK appointed 8 banks to commence credit distribution based on sustainable finance principles. The appointed banks have been involved in various sustainable finance projects, such as those relating to renewable energy, green building and infrastructures, and eco-tourism.

5.3.2 Malaysia

Malaysia is a signatory to the 2015 Paris Agreement and has committed an unconditional reduction of emission intensity of 35% by 2030 from its 2005 baseline, with a further 10% reduction upon receipt of climate finance, technology transfer, and capacity building from developed countries.

Its sustainable finance ecosystem benefits from a set of guidelines particularly in the debt capital markets space. These include the Sustainable and Responsible Investment ("**SRI**") Sukuk framework (2016), the ASEAN Green Bonds Standards (2017), the ASEAN Social Bond Standards (2018) and the ASEAN Sustainability Bond Standards (2018). The ASEAN standards are generally more stringent as they encourage more frequent reporting and greater transparency regarding the credentials of external reviewers and use of proceeds. Ongoing compliance of the above frameworks is largely self-regulated.

Bursa Malaysia's listing requirements require a listed issuer to include in its annual report a narrative statement of its management of material economic, environmental and social risks and opportunities. Such statement must contain information that is balanced, comparable and meaningful according to Bursa Malaysia's Sustainability Reporting Guide.

In November 2019, Bank Negara Malaysia issued the Value-based Intermediation ("**VBI**") Financing and Investment Impact Assessment Framework, which aimed to facilitate the implementation of an impact-based risk management system for assessing the financing and investment activities of Islamic financial institutions in line with their respective VBI commitments. It also serves as a reference for other financial institutions intending to incorporate ESG risk considerations in their own risk management system.

In December 2019, Bank Negara Malaysia issued a discussion paper on “Climate Change and Principle-based Taxonomy” for public consultation. The discussion paper aims to provide an overview of climate change and its impact to the financial system. It is intended to serve as guidance to facilitate financial institutions in (1) identifying and classifying economic activities that could contribute to climate change objectives and (2) preparing and building capabilities in managing the financial risks from climate change.

Pursuant to the Budget 2020 speech, RM2 billion will be allocated to Bank Pembangunan Malaysia Berhad’s Sustainable Development Financing Fund, which will provide a financing rate subsidy of 2% to companies that demonstrate continuous contribution to the 17 SDG under the United Nations Development Programme. In addition, the tax exemption for fund management companies managing SRI funds and the tax deduction on the cost of issuing SRI Sukuk will be extended to 2023.

5.3.3 India

India is a signatory to the 2015 Paris Agreement and has promised a 33-35% reduction in emission intensity by 2030 on 2005 levels. It also pledged to raise the share of zero-carbon electricity generating capacity to 40% of its renewable energy capacity by 2030. India intends to cover the USD2.5 trillion cost of its pledge with both domestic and international funds.

ESG regulatory requirements in India continue to be a part of the Business Responsibility Reporting ("**BRR**") norms issued by the Securities and Exchange Board of India ("**SEBI**") in August 2012, which were extended to the top 500 listed companies (including banks and other financial institutions) in November 2015. These BRR norms have been formulated in accordance with the National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business introduced in 2011.The BRR norms' key principles include asking businesses to respect, protect, and make efforts to restore the environment" and "support inclusive growth and equitable development".

The importance of sustainable financing in India's context continues to increase as India has set ambitious renewable energy targets. The size of India's corporate bond market including green bonds as a proportion to its GDP has been low. However, these have been increasing since May 2017 when the SEBI framed specific additional disclosure and other requirements for the issuance of green debt securities.

The SEBI regulations are based on GBP. Under these regulations, the categories for which funds raised by green debt securities can be used are defined broadly. Additional disclosures required in the offer document raising sustainable financing include a statement on the environmental objectives of the issuer, brief details of the issuer's decision-making process for determination of eligibility of projects and the procedures in place to track the deployment of the issue proceeds. The SEBI regulations also require additional ongoing disclosures, such as those relating to utilisation of proceeds of the issue and details of the unutilised proceeds.

In 2018 and 2019, several Indian renewable energy companies successfully tapped the international capital markets for their funding needs. On 30 July 2019, the Reserve Bank of India allowed Indian corporates to use the proceeds from overseas borrowing to repay rupee debt while earlier offshore funding was only permitted for incurring capital expenditure. This further fuelled raising of funds through this route. Even after several successful fundraisings, investor’s appetite for new Indian corporates seeking sustainable financing in the international capital markets continues to be healthy.

5.3.4 Thailand

Generally speaking, Thailand does not yet have any substantive regulations relating to sustainable finance. The country, however, recently touched on this subject matter in the "20-Year National Strategy" announced by the National Council for Peace and Order in October 2018. This strategy laid out the general public policy framework applicable to government public administrations.

The national strategy expressly provides that the country's development during the strategy’s time-frame will focus on an appropriate balance between social and economic development and environmental stewardship, where one of the objectives is to develop Thailand into a green and sustainable economy by promoting environmentally-friendly economic growth and improved quality of life. The strategy, at its core, is aimed at building Thailand into "a developed country with security, prosperity and sustainability in accordance with the Sufficiency Economy Philosophy”.

A number of key regulators have issued policies and guidelines to encourage compliance with the national strategy. The Securities and Exchange Commission of Thailand ("**SEC**") encourages the offering of green bonds, social bonds and sustainability bonds by exempting filing fees for listing information from issuers of debt securities in order to promote environmentally sustainable investment and funding. The green bond, social bond and sustainability bond market is currently valued at approximately THB30 billion or USD1 billion. The SEC is also involved in the ASEAN Low Carbon Energy Programme with the UK Prosperity Fund and several other South East Asian countries.

The BOT encourages financial institutions to comply with its Sustainable Banking Guidelines – Responsible Lending. The guidelines have four main objectives: (i) to promote commitment on issuing loans responsibly; (ii) to promote awareness of stakeholder engagement; (iii) to promote internal implementation mechanisms to improve efficiency and productivity; and (iv) to promote transparency. For example, under the guidelines, banks are required to establish internal policies and processes to address key ESG risks in their lending activities and to publish relevant statements, policies and processes in their annual/sustainability reports or websites. A memorandum of understanding regarding the guidelines was entered into between the BOT, the Thai Bankers' Association and 15 banks in Thailand on 13 August 2019.

Certified climate bonds or green bonds are also gaining ground in Thailand. The first green bond was issued in Thailand in late 2018 and it is expected that several more will be issued in 2020 by banking institutions and large corporations.

5.4 Other Asia Pacific Jurisdictions

In addition to the jurisdictions discussed in this paper, it is noted that there are also developments in sustainable finance in other Asia-Pacific jurisdictions, such as Taiwan and Korea. That said, some Asia-Pacific countries have not yet had any development in sustainable finance. Given that this paper intends to be a living document, further iterations will capture developments in additional jurisdictions of the Asia Pacific in the future.

APPENDIX A: SURVEY OF OTHER INTERNATIONAL BODIES

In addition to the international bodies discussed in this Paper, a number of other international bodies have increased their focus on sustainable finance. The table below sets out a summary of these developments.

International Regulator/Body	Mandate	Recent Developments
Bank for International Settlements (“**BIS**”)	The BIS was established in 1930 and is owned by 60 central banks. It assists them in their pursuit of monetary and financial stability.	• In September 2019, BIS launched an open-ended fund for central bank investments in green bonds. • In January 2020, BIS with the Banque de France published a book titled “The Green Swan: Central Banking and financial Stability in the Age of Climate Change.”
The Carbon Disclosure Project ("**CDP**")	CDP is an international non-profit organisation that runs a global environmental disclosure system.	• The CDP published its 2019 Climate Change Report which noted that 53% of companies reporting to CDP identified climate-related risks which could have a substantive financial or strategic impact on the business.
Climate Disclosure Standards Board ("**CDSB**")	CDSB is a consortium of businesses and environmental NGOs who have devised a framework for reporting environmental information.	• In April 2018, the CDSB issued a framework of guiding principles for reporting environmental information and associated business impacts.
Coalition of Finance Ministers for Climate Action (the "**Coalition**")	The Coalition was launched in April 2019 with the goal of promoting cohesion between domestic and global action on climate change and accelerating action to implement the Paris Agreement.	• In April 2019, the Coalition endorsed the Helsinki Principles which seek to promote national climate action through fiscal policy and public finance.

International Regulator/Body	Mandate	Recent Developments
European Sustainable Investment Forum ("**Eurosif**")	Eurosif is a European association for the promotion and advancement of sustainable and responsible investment across Europe, for the benefit of its members.	• The European SRI Transparency Code was updated in 2018 to reflect the most relevant practices in SRI and sustainable finance, including the TCFD, article 173 of the French Energy Transition Law and the European Commission's HLEG report on sustainable finance.
Global Green Finance Council ("**GGFC**")	The GGFC was created in 2017 to bring together key global and regional associations and stakeholders involved in green financing.	• The GGFC created the Global and European Green Finance Policy Directory.
Group of 20 ("**G20**")	The G20 is a forum for world leaders from 19 nations and the EU intended to foster global economic cooperation. Its members comprise 85% of the world's GDP and two-thirds of its population.	• The Sustainable Finance Study Group's Synthesis Report sets out recommendations, including in relation to the creation of sustainable assets for capital markets. • The G20 Energy Efficiency Finance Task Group was established in 2014. It published a stocktake report in 2019 which sets out their findings from the June 2019 Global Summit and numerous bilateral engagements conducted in its lead-up.
International Capital Markets Association ("**ICMA**")	ICMA is a not-for-profit membership organisation that serves the needs of its wide range of members firms with the mission of promoting resilient and well-functioning international debt capital markets.	• ICMA hosts the Green Bond Principles, Social Bond Principles and the Sustainability Bond Guidelines as secretariat. The Principles are voluntary process guidelines that recommend transparency and designed to promote disclosure and integrity in green , social and sustainability bond markets.

International Regulator/Body	Mandate	Recent Developments
International Monetary Fund ("**IMF**")	The IMF was created in 1945 to ensure the stability of the international monetary system and comprises 189 countries.	• Chapter 6 of its Global Financial Stability Report: Lower for Longer addresses sustainable finance and suggests some policy changes to foster further development in this area. These include standardising ESG investment terminology and product definitions, making corporate ESG reporting more consistent and clarifying the role of ESG factors in prudent investment governance by regulators. • The report also proposes that regulators and central banks incorporate ESG principles and climate-related financial risks into financial stability monitoring and microsupervision.
International Organization of Securities Commissions ("**IOSCO**") Sustainable Finance Network ("**SFN**")	IOSCO set up the SFN in May 2018 to allow members to share their experiences and monitor ESG developments.	• IOSCO identified sustainable finance as one of its Board's priorities for 2019. • IOSCO's GEMC published a report of recommendations for securities regulators to help them build regulatory frameworks for sustainable finance.
International Platform on Sustainable Finance ("**IPSF**")	The IPSF is a forum for exchanging and coordinating efforts on initiatives and approaches to sustainable finance.	• The IPSF is a new organisation and was launched on 18 October 2019.
Loan Market Association ("**LMA**")	The LMA was founded in 1996 to improve liquidity, transparency and efficiency in syndicated loan markets in Europe, the Middle East and Africa.	• The LMA's Green Loan Principles establish a framework of market standards and guidelines for use in the wholesale green loan market.

International Regulator/Body	Mandate	Recent Developments
National Association of Securities Dealers Automated Quotations System ("**NASDAQ**")	Nasdaq is an American stock market for trading electronic securities around the world.	• NASDAQ published ESG Reporting Guide 2.0, which was intended to eliminate impractical metrics, incorporate new developments into the marketplace, standardise guidance and to improve ESG engagement for small and medium sized businesses.
Organisation for Economic Co-operation and Development ("**OECD**")	The OECD is an intergovernmental organisation founded in 1961 to promote economic progress and trade.	• The OECD has established a Centre on Green Finance and Investment, with the objective of catalysing and supporting the transition to a green, low-emissions and climate-resilient global economy through effective policies, instruments and institutions. • In 2018, it published a report on Making Blended Finance Work for the Sustainable Development Goals.
The Poseidon Principles Association ("**PPA**")	The PPA was set up in June 2019 to govern the Poseidon Principles: a framework for integrating climate considerations into ship finance portfolios.	• 11 leading banks, jointly representing approximately USD 100 billion in loans, including Citi, Crédit Agricole and Société Générale established the Poseidon Principles.
Principles for Responsible Investment ("**PRI**")	The PRI is an international, UN-backed organisation which promotes responsible investment.	• The Principles for Responsible Investment are a set of opt-in guidelines promoting the development of a sustainable global financial system.
Sustainability Accounting Standards Board ("**SASB**")	The SASB was set up in 2011 to establish industry specific disclosure standards which enable companies and investors to make informed decisions about ESG governance issues.	• SASB has published 77 sets of industry-specific standards which identify financially important sustainability topics and metrics.

International Regulator/Body	Mandate	Recent Developments
Sustainable Banking Network ("**SBN**")	The IFC launched the SBN as a community of banking and financial regulatory bodies and banking associations. Members include the China Banking Regulatory Commission, India Banks Association, Central Bank of Nigeria and the Bank of Bangladesh.	• The SBN issued their 2019 Progress Report which identifies the essential components to implementing a sustainable finance framework. • The Equator Principles are a risk management framework for managing environmental and social risk in project finance. Equator Principles 4 was issued in November 2019.
Thun Group of Banks	The Thun Group of Banks is an informal group of banks who focus on sharing expertise to support the integration of the UN Guiding Principles on Business and Human Rights ("**UNGPS**") into banking institutions.	• The Thun Group of Banks has published papers on the implications of UNGPs 13b & 17 and on UNGPs 16-21.
UN Environment Programme Finance Initiative ("**UNEPFI**")	UNEPFI is a partnership between the UN and the global financial sector to advance sustainable finance.	• The Principles for Responsible Banking ("**PRB**") were launched in September 2019, with 130 banks holding USD 47 trillion in assets signing up. • The Guide to Banking and Sustainability provides guidance on how to improve sustainability.
UN Sustainable Stock Exchanges ("**UNSSE**")	UNSSE is a partnership between UN bodies including UNEPFI and UNPRI dedicated to building the capacity of stock exchanges to promote sustainable investment.	• In 2015, UNSSE published Model Guidance on Reporting ESG Information to Investors for exchanges. • It has also issued a report entitled How Stock Exchanges Can Grow Green Finance.

International Regulator/Body	Mandate	Recent Developments
The World Bank	The World Bank works on sustainable solutions to reduce poverty and build prosperity in developing countries.	• The World Bank Group's Climate Change Action Plan aims to support countries in translating their Nationally Determined Contributions ("**NDCs**") under the Paris Agreement/COP21 into climate policies and investment plans. The World Bank will help to "green" the financial sector in a number of ways including providing technical advice to financial institutions, expanding financing for green investments, encouraging the creation of appropriate environmental performance standards and promoting the development of a green bond market. • It also launched a new Action Plan on Climate Change Adaptation and Resilience.
World Federation of Exchanges ("**WFE**")	WFE is a global industry association for exchanges and clearing houses. Its members include the Australian Securities Exchange and the China Securities Depository and Clearing Corporation Ltd.	• In October 2018, the WEF published 5 Sustainability Principles for member exchanges to assist their members to promote the sustainable finance agenda.

UNIT 3603, TOWER 2

LIPPO CENTRE

89 QUEENSWAY

ADMIRALTY

HONG KONG

TEL +852 2531 6500

WWW.ASIFMA.ORG