FoSDA FUTURE OF SUSTAINABLE DATA ALLIANCE

asifma
Growing Asia's Markets

Data Challenges and Opportunities for ESG and Sustainable Finance in Asia Pacific

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REPORT PARTNERS

ASIFMA is an independent, regional trade association with over 140 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. www.asifma.org

There is now global acknowledgement that the climate crisis is a real and immediate threat, climate concerns as well as broader environmental and social considerations need to start moving into mainstream risk assessment and opportunity analysis. Capital markets are not understanding and integrating material sustainability considerations into their investment decisions, often resulting in capital being allocated to inefficient and even environmentally or socially damaging projects and assets. FoSDA has been formed to address this urgent situation from a data perspective and foster collaboration in the ecosystem. https://futureofsustainabledata.com

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Executive Summary

The Covid-19 pandemic highlights the importance of ESG and sustainable finance, with inflows into high-ESG products globally up 40% in Q1 2020 as ESG continues to become mainstream. At the same time, climate risks are rising in Asia, with Bangladesh, China, Indonesia, Japan, India and Vietnam all particularly exposed to rising sea levels and with potential exposure to higher credit risk. Negative environmental and social impacts are starting to become evident in some sectors; therefore ESG monitoring is becoming increasingly critical to management of financial risk also.

Sustainable Finance in Asia

ESG investing in East Asia trails other regions globally with just 5% of AUM invested in sustainable projects, compared to 30% in North America; however, this is changing as institutions such as Japan's Government Pension Investment Fund and MUFG Bank adopted wide-scale ESG criteria, and markets like China, Hong Kong and Singapore look to scale green and sustainable finance markets. The largest regional climate finance investment needed is in Asia, estimated at USD $66 Trillion over three decades, which is over half the investment required globally to achieve a scenario of limiting temperature rise to 1.5° Celsius. This is driven by the scale and pace of growth of Asia's economies, growing population, increasing urbanisation, and rapid industrialisation in the region.

Data, ESG and Sustainable Finance

Yet future growth of ESG investment in Asia is *inextricably linked* to data – its availability, accessibility, reliability and comparability. When asked to nominate the greatest data challenge in ESG and sustainable finance, 56% of respondents reported 'inconsistent data'. Significantly, there is no standardisation to measurement of E, S, and G factors. Additionally, individual ESG metrics vary not only between industries and markets, but also between companies in the same industry, with the quality of company disclosures differing widely.

Data Challenges

Firms and investors 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. Variation is evident not only between markets, but also within markets.

There is also no single binding global taxonomy, and the industry wants to see greater harmonisation yet a principles-based approach that allows for tailoring the each region's specific conditions, such as relative levels of economic development.

Even when data is available, 35% of respondents cite 'poor quality data' as the greatest challenge. There are quality third party providers, however reliance on a single data source can resulting in volatile indicators over time. Another concern lies in compatibility between the vendor's methodology and metrics, including in relation to what the investor is trying to monitor.

Digitalisation & Emerging Technologies

Technology is part of the answer, but not all of it. Technologies and associated business models are evolving rapidly, spanning AI, robotics, big data, blockchain, and the Internet of Things (IoT) amongst other solutions. Asked what is needed most to scale ESG and sustainable finance enabling technologies, however, nearly half of respondents to a 2020 ASIFMA/FOSDA poll prioritise 'policy and regulation to support innovation'.

Recommendations

ASIFMA offers the following 8 key recommendations, critical to supporting and enabling the further development of green and sustainable markets in Asia::

1. A greater convergence towards a principles-based global (or at least regional) taxonomy
2. Higher, more consistent corporate disclosure standards between jurisdictions and sectors
3. Encouragement of higher standards of analysis, with incentives for more holistic and robust approaches to ESG measurement and analysis
4. Policy and regulation to support innovation and technologies that enable ESG and sustainable finance capabilities
5. A focus on education and skills to support ESG and sustainable finance capability
6. Higher standards and accountability for ESG ratings providers, potentially including regulation, and clear and harmonised requirements for product disclosure
7. Harmonisation between ESG standards and frameworks such as UN SDGs, and policy on climate change and bank supervision at systemic level, including on climate risk
8. Ongoing partnership and dialogue between the public and private sectors, as well as between stakeholders such companies and investors on disclosure and reporting standards

1. Introduction

Future of Sustainable Data Alliance

The Asia Securities Industry and Financial Markets Association (ASIFMA) is a partner of the Future of Sustainable Data Alliance (FOSDA) and is leading the Asia workstream, to understand data challenges for environmental, social, and governance (ESG) and Sustainable Finance in the Asia Pacific region.

FOSDA seeks to address the following question:

> *What data do investors and governments need to meet the requirements of regulators, citizens and market demand for sustainable investments and portfolios before 2030?*

FOSDA's key objectives are to:

1. Articulate future ESG data requirements of investors and governments to accurately integrate ESG data into decision making;
2. Promote new technology capabilities and data by highlighting the key role that new technology and data sets must play in the transition to sustainable development; and
3. Address UN Sustainable Development Goals (**"SDGs"**) related data needs and how to satisfy them for investors wanting to take greater account of SDG-related risks and impacts.

ASIFMA Virtual Events on ESG Data Challenges in Asia

As part of its workstream on ESG data challenges, ASIFMA, in collaboration with FOSDA, organised two virtual panel discussions '*Navigating ESG and Sustainable Finance in Asia*' [1] and '*ESG and Sustainable Finance in Asia: the Fintech and Data Challenge*' [2] on 14 July and 28 October 2020, respectively. The two events were attended by around 500 stakeholders, including market participants from the buy and sell sides, specialists, consultants in the ESG and sustainable finance field, policymakers and regulators.

In addition to audience participants, ASIFMA is grateful to the following speakers and panellists who took part in the two virtual discussions *(listed in alphabetic order by organisation name):*

- Ramesh Subramaniam – Director General of the Southeast Asia Regional Department, Asian Development Bank;
- Matthew Chan – Head of Public Policy and Regulatory Affairs, ASIFMA;
- Amar Gill – Managing Director and Head of Investment Stewardship, APAC, BlackRock;
- Gabriel Wilson-Otto – Global Head of Sustainability Research, BNP Paribas Asset Management;
- Elree Winnett Seelig – Head of ESG, Markets & Securities Services, Citi;
- Kamran Khan – Head of ESG for Asia Pacific, Deutsche Bank;
- Jason Wincuinas – Senior Editor, Thought Leadership Asia, Economist Intelligence Unit;
- Eugene Goyne – EY Asia-Pacific Financial Services Regulatory Lead, EY;
- Helene Li – General Manager / Founder, Fintech Association of Hong Kong / GoImpact;
- Helena Fung – Head of Sustainable Investment Asia-Pacific, FTSE Russell;
- Grace Hui – Head of Green and Sustainable Finance, Markets Division, Hong Kong Exchanges and Clearing Limited;
- Paul Andrews – Secretary General, IOSCO;

[1] Video recording may be accessed here: https://youtu.be/E-SiPlJc8CM
[2] Video recording may be accessed here: https://www.youtube.com/watch?v=TSbDcd-mfQI&feature=youtu.be

- Wang Yao – Director General, International Institute of Green Finance, Central University of Finance and Economics (Beijing);
- Satoshi Ikeda – Chief Sustainable Finance Officer, Japan Financial Services Agency; and
- Julia Walker – member of the Cambridge Institute of Sustainable Leadership, advisor at the Asian Institute of International Financial Law, and member of the United Nations Task Force of Digital Financing of the Sustainable Development Goals

Whilst it does not purport to represent the views of these individuals, this paper draws from discussion during the two events, plus research referenced during the sessions. We are grateful for the insights and thought leadership provided by the various participants.

Definition

For the purposes of this report, we define 'sustainable finance' broadly to include climate, green and social finance; consideration of longer-term economic sustainability of organisations being funded; as well as the role and stability of the overall financial system. As such, this broader definition also includes ESG investment, and is in line with definitions used by IOSCO[3], GFMA[4] and ICMA[5].

[3] IOSCO. Sustainable finance in emerging markets and the role of securities regulators. (2019) https://www.iosco.org/library/pubdocs/pdf/IOSCOPD630.pdf

[4] GFMA and BCG. Climate Finance Markets and The Real Economy. (2020) https://www.sifma.org/wp-content/uploads/2020/12/Climate-Finance-Markets-and-the-Real-Economy.pdf

[5] ICMA. Sustainable Finance High-level definitions. (2020) https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/Sustainable-Finance-High-Level-Definitions-May-2020-110520v4.pdf

2. Sustainable Finance in Asia

The Covid-19 pandemic highlights the importance of ESG and sustainable finance, with high-ESG product investment flows up 40% globally in Q1 2020 as ESG continues to become mainstream.[6] At the same time, climate risks are rising in Asia, with Bangladesh, China, Indonesia, Japan, India and Vietnam all particularly exposed to rising sea levels and with potential exposure to higher credit risk.[7] According to some commentators, negative environmental and social impacts are starting to become evident in some sectors, and therefore ESG monitoring is becoming increasingly critical to management of financial risk itself.[8]

In parallel, ESG and sustainability-related investment has become increasingly important in Asia, with EIU research, based on a 2019 survey of senior and C-suite drawn from sovereign and pension funds, investment banks and insurance funds across Asia, noting 95% of respondents now believe ESG investing is important to their firm, with 92% saying it will become even more important in coming years and 80% saying ESG has a positive impact on returns, in sharp contrast to sentiment as little as a decade earlier[9]. In addition, policymakers and exchanges increasingly see sustainable finance as a growth business.

The 2020 EIU report notes that regional distribution is uneven globally, with East Asia trailing other markets at just 5% of AUM invested in sustainable projects compared to 30% in North America; however, the same report notes that this is changing as institutions such as Japan's Government Pension Investment Fund (**"GPIF"**) and MUFG Bank adopted wide-scale ESG criteria encourage the overall trend of ESG integration into the investment process.

Though non-exhaustive, key developments in Asia include:

- Japan is taking a leadership position in Asia, with FSA (which is part of both the Network for the Greening of the Financial System and IOSCO's Taskforce Sustainable Finance), playing a key role in promoting sustainable finance and ESG.
  - Policy-wise, Japan has taken a principles approach, which has helped accelerate scaling of the market and is reflected in the FSA's 2020 revision of its Stewardship Code for corporate governance.[10]
  - Through the code and other measures, the FSA is encouraging institutional investors to focus on ESG and corporates to enhance disclosure standards.
  - The FSA has also been fostering dialogue between institutional investors and corporates on implementing FSB Task Force on Climate-related Financial Disclosures (TCFD) standards for consistent climate-related financial risk disclosures, including data challenges and the enablement of greater granularity in what is measured.
- In Hong Kong, as part of its commitment to sustainability, HKEX has launched its Sustainable and Green Exchange (STAGE), an online portal to provide information transparency on sustainable, green and social investment products.

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[6] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[7] EIU. Sustainable and actionable: An ESG study of climate and social challenges for Asia. (2020) https://perspectives.eiu.com/sites/default/files/sustainable_and_actionable_report_2.pdf
[8] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[7] EIU. Green Intelligence: Asia's ESG investing, data Integrity and technology. (2019) https://eiuperspectives.economist.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[10] FSA. Finalization of Japan's Stewardship Code (Second revised version). (2020) https://www.fsa.go.jp/en/refer/councils/stewardship/20200324.html

  - This is intended to encourage dialogue between issuers, asset managers, investors and professional advisers on sustainable and green finance.
  - STAGE will promote transparency and accessibility across all product types and asset class, and is believed to be one of the first of its kind in Asia.[11]
  - In addition, a cross-agency steering group as been set up by government agencies to grow and scale Hong Kong as a green and sustainable finance centre.
- In Singapore, MAS is also working on a comprehensive, long-term strategy to make sustainable finance a defining feature of Singapore's role as an international financial centre, alongside wealth management and FinTech.[12]
  - SGX is investing SGD 20 million in a multi-pronged expansion of its sustainability capabilities and initiatives.
  - Half of this will go towards new ESG-focused products, services and platforms, while the other half will be channelled into capacity building for the financial ecosystem, strengthening internal capabilities and increasing CSR commitments.
  - All sustainability initiatives will be housed under a newly launched multi-partner, multi-asset sustainability platform, SGX FIRST.
- In China, ESG is increasingly a focus for investors and asset owners.[13] From a policy perspective, the PBOC consulted the market on updating its 2020 Green Bond Endorsed Project Catalogue recently, with the proposed changes bringing it more in line with other international taxonomies in relation to fossil fuels.[14]
  - This is part of China's efforts to further promote green finance, starting with top-down policy with cross agency efforts being led by the PBOC.
  - Other initiatives include standardising green credit guidelines, and green trust fund and insurance standards, whilst encouraging innovation, and green pilots spanning policy and other measures to foster green transition at the provincial level.[15]
  - Other efforts include supporting international cooperation, with PBOC active in NGFS and platforms such as IFC's sustainable banking network,[16] and Green Finance Principles in 'One Belt One Road' countries.[17]
  - Disclosure of ESG is in transition from a voluntary to a mandatory regime, with CSRC expected to launch settings on this soon, with ESG index providers now numbering.

[11] HKEX. HKEX's Sustainable & Green Exchange. (2020)
https://www.hkex.com.hk/eng/stage/index.htm
[12] MAS. Sustainable Finance. (2020)
https://www.mas.gov.sg/development/sustainable-finance
[13] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020)
https://youtu.be/E-SiPlJc8CM
[14] ASIFMA. ASIFMA Response to Consultation of 2020 Green Bond Endorsed Project Catalogue. (2020)
https://www.asifma.org/wp-content/uploads/2020/06/asifma-response-to-china-2020-green-bond-catalogue-consultation-final-eng-chn.pdf
[15] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020)
https://youtu.be/E-SiPlJc8CM
[16] IFC. Sustainable Banking Network. (2020)
https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/sustainable-finance/sbn_whatsnew
[17] The Belt and Road Initiative (BRI). The Belt and Road Initiative. (2019)
https://green-bri.org/tag/green-investment-principles-gip

More generally, there is significant growing emphasis on integrating sustainability into general business and financial decision-making, with climate and sustainability risks considered increasingly as part of the broader financial risks, with implications for cost and availability of capital for firms and projects. There is also a broadening of perspective from looking at sustainability through a risk lens towards seeking investments with explicit societal benefits and social upside from business models.[18]

On the fixed income front, Asia stands at the forefront according another piece of EIU research,[19] with green-labelled instruments playing a role in funding renewable energy projects. According to the EIU, The International Energy Agency estimates that emerging markets will add about 4,000GW of new capacity by 2040, representing two-thirds of the global increase and of which half is attributable to China and India alone.

Since 2013, a variety of green and social bonds have come to the market in Asia, including:

- Social Bonds
- Sustainability Bonds
- *Sukuk* Bonds
- Transition Bonds
- Sustainability Bon

Financing Gap

According to a study by the Asia Development Bank (ADB) in 2017, Developing Asia would need approximately $26 trillion in infrastructure investment from 2016 to 2030 (or $1.7 trillion per year) in order to maintain growth, eradicate poverty, and respond to climate change (climate-adjusted estimate). The UN estimates roughly $3-$5 trillion is needed annually and globally to reach the SDGs. Even before the Covid-19 pandemic, the region in total faced a substantial investment gap of $459 billion per year ($907 billion p.a. if including social infrastructure).[20] A GFMA/BCG report in 2020 found that the largest regional climate finance investment needed is in Asia, estimated at USD $66 Trillion over three decades, or over half the investment required globally to achieve a scenario of limiting temperature rise to 1.5° Celsius. This is reflective of the scale and pace of growth of Asia's economies, growing population, increasing urbanisation, and rapid industrialisation in the region. [21]

[18] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[19] EIU. Sustainable and actionable: An ESG study of climate and social challenges for Asia. (2020) https://perspectives.eiu.com/sites/default/files/sustainable_and_actionable_report_2.pdf
[20] Asia Development Bank. Meeting Asia's Infrastructure Needs. (2017) https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure-highlights.pdf
[21] GFMA and BCG. Climate Finance Markets and The Real Economy. (2020) https://www.sifma.org/wp-content/uploads/2020/12/Climate-Finance-Markets-and-the-Real-Economy.pdf

Table 3: Estimated Infrastructure Investments and Gaps, 25 DMCs, 2016–2020
($ billion in 2015 prices)

	Estimated Current Investment (2015)	Baseline Estimates			Climate-adjusted Estimates		
		Annual Needs	Gap	Gap (% of GDP)	Annual Needs	Gap	Gap (% of GDP)
Total (25)	881	1,211	330	1.7	1,340	459	2.4
Total without PRC (24)	195	457	262	4.3	503	308	5.0
Selected Central Asia Countries (3)	6	11	5	2.3	12	7	3.1
Selected South Asia Countries (8)	134	294	160	4.7	329	195	5.7
Selected Southeast Asia Countries (7)	55	147	92	3.8	157	102	4.1
Selected Pacific Countries (5)	1	2	1	6.2	2	2	6.9
India	118	230	112	4.1	261	144	5.3
Indonesia	23	70	47	4.7	74	51	5.1
PRC	686	753	68	0.5	837	151	1.2

PRC = People's Republic of China.
Numbers in parentheses refer to the number of selected countries.
Note: The gap as a % of GDP is based on the annual average of projected GDP from 2016 to 2020. The 25 DMCs covered here are listed in Annex Table 2.
Source: ADB (2016); Country sources; Investment and Capital Stock Dataset, 1960-2015, IMF; Private Participation in Infrastructure Database; World Bank; World Bank (2015a and 2015b); World Development Indicators, World Bank; ADB estimates.

The Covid-19 pandemic has likely exacerbated these conditions, with increasing unemployment and heavier lockdown stress on private enterprises. Economic contraction in developing Asia is estimated to be 0.7% – a 60 year high – and 3.8% in Southeast Asia alone. The post-Covid youth unemployment figure is now estimated to be between 10 – 15 million across 13 APAC countries.[22] The post-pandemic economic strain is likely to widen the investment gap and lead to increasing credit risks due to ESG factors.

According to the ADB, the gap should be filled by both public and private sectors. Public finance reforms can generate additional revenues through prudent borrowing and by reorienting spending, while the private sector may need to mobilise considerable private capital which is available but not yet tapped. The OECD noted that in 2019, private pension assets make up $32 trillion in OECD countries and $0.7 trillion in 29 other non-OECD reporting jurisdictions.[23] This data reveals that there is potential for private capital to be mobilised, whether through ESG investments or other channels, to bridge the financing gap; however, the key challenge remains in terms of how to stimulate sufficient quantities of quality private investment, in light of the constrained flows for many ASEAN countries.

International Cooperation

Over the course of several years, there has been a drastic increase in private and public sector-led initiatives in response to the rising importance of climate and environment related issues. Within 2020 alone, various governments and financial regulators around the world have pushed for the development of green and sustainable markets, and whilst this global response to the climate crisis is a positive step forward in enabling the financial sector to scale green finance, the existence of multiple frameworks from different bodies could very likely lead to market fragmentation and unintended consequences.

In response to the shifts in both public and private sectors, global bodies have begun taking steps to harmonise the international response, with bodies such as IOSCO setting up a taskforce this year to identify commonalities across different guidelines from across the world with a view to developing harmonised sustainability disclosure standards, and the G30, which in October 2020 published a report with a series of recommendations to accelerate the global transition towards a net zero

[22] Sustainable Development Report 2020 (J Sachs et al; Bertlesman, SDSN, Cambridge). (2020) https://s3.amazonaws.com/sustainabledevelopment.report/2020/2020_sustainable_development_report.pdf
[23] OECD. Pension Markets in Focus. (2020) https://www.oecd.org/daf/fin/private-pensions/Pension-Markets-in-Focus-2020.pdf

carbon economy.[24] In addition, the International Financial Reporting Standards Foundation (IFRS) in September 2020 has also launched a consultation with an aim to establish a global approach to sustainability reporting that could help consolidate different initiatives and avoid fragmentation across different jurisdictions.

In 2019, Argentina, Canada, Chile, China, the EU, India, Kenya and Morocco launched the International Platform on Sustainable Finance (IPSF), since joined by the, Indonesia, Japan, New Zealand, Norway, Senegal, Singapore and Switzerland. A working group led by China and Europe has been set up to explore harmonisation of sustainable finance taxonomies.

IOSCO

IOSCO has acknowledged the rising importance of ESG matters and sustainable finance more generally, and is focused on related investor protection and transparency in markets as well as in mitigating systemic risks. In October 2018, IOSCO established its sustainable finance network (**"SFN"**) as a platform to connect interested IOSCO members and to exchange information and experiences. In January 2019, IOSCO issued a statement on ESG disclosures by issuers and published, [25] through its Growth and Emerging Markets Committee a report related to sustainable finance in emerging markets.[26] A further report on the overarching role of IOSCO and securities regulators was published in April 2020,[27] and identified three key concerns:

1. Multiple and diverse sustainability frameworks and standards;
2. Lack of common definitions of sustainable activities; and
3. Greenwashing and other investor protection challenges.

As a result of the SFN's work, the IOSCO Board agreed in February 2020 to establish a Board-level Task Force on Sustainable Finance (**"STF"**), aimed at enabling IOSCO to play a driving role in global efforts to address the issues described in its 2020 report.[28]

IOSCO's current efforts to address ESG and the above challenges include exploration by the STF of the following:

(i) **Improving sustainability–related disclosures by issuers (WS1).** WS1 will explore avenues for improving sustainability disclosures made by issuers – with a focus on climate change-related disclosures in the first instance. This work will include engaging with and influencing initiatives underway by sustainability disclosures standard setters that are exploring ways to reduce fragmentation in disclosure frameworks and standards and considering how existing standards can provide the basis for a unifying system that can serve providers of capital and stakeholders more widely.

[24] G30. Mainstreaming the Transition to a Net-Zero Economy. (2020) https://group30.org/images/uploads/publications/G30_Mainstreaming_the_Transition_to_a_Net-Zero_Economy.pdf
[25] IOSCO. Statement on Disclosure of ESG Matters by Issuers. (2019) https://www.iosco.org/library/pubdocs/pdf/IOSCOPD619.pdf
[26] IOSCO. Sustainable finance in emerging markets and the role of securities regulators. (2019) https://www.iosco.org/library/pubdocs/pdf/IOSCOPD630.pdf
[27] IOSCO. Sustainable Finance and the Role of Securities Regulators and IOSCO. (2020) https://www.iosco.org/library/pubdocs/pdf/IOSCOPD652.pdf
[28] IOSCO. IOSCO steps up its efforts to address issues around sustainability and climate change. (2020) https://www.iosco.org/news/pdf/IOSCONEWS564.pdf

(ii) **Promoting investor protection with regard to asset management matters, including addressing greenwashing (WS2).** WS2 will identify relevant practices and experiences in relation to the consideration of climate change as a financial risk and the use of sustainability-related factors in the investment decision process of asset managers. WS2 work will aim to result in specific metrics that can be arranged into relevant categories of disclosures, which could support investor protection.

(iii) **Addressing ESG ratings and data providers (WS3).** WS3 will assist members in understanding the implications of the increasing activity of the ESG data providers, including CRAs with regard to ESG ratings. WS3 will look into methodologies for ESG ratings and indices and supervisory practices relating to ESG ratings, with a particular focus on their climate-related aspects.

IOSCO is committed to work in collaboration with other international bodies in an effort to avoid duplicative efforts and to enhance coordination of relevant regulatory and supervisory approaches.

FSB

The FSB established the Task Force on Climate-related Financial Disclosures (TCFD) to develop recommendations for more effective climate-related disclosures in order to support more informed investment, credit, and insurance underwriting decisions and, in turn, enable stakeholders to understand better the concentrations of carbon-related assets in the financial sector and the financial system's exposures to climate-related risks.

A 2017 TCFD recommendations report outlines the TCFD framework for reporting climate-related financial information[29]. The TCFD is currently holding a consultation forward-looking metrics to be disclosed by financial institutions, with submissions due in January 2021.

Regulation and Policymaking

ASIFMA published a paper in March 2020, titled 'Sustainable Finance in Asia Pacific: Regulatory State of Play'[30]. It calls for greater harmonisation of standards, frameworks and policymaking to shift the financial system to a more sustainable footing, in addition to industry participants having a role to play alongside the official sector in developing capabilities and market structures to support the growth and scaling of sustainable finance and the transition to a low-carbon global economy.

To achieve this, ASIFMA encourages policymakers and regulators 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.

[29] TCFD. Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures. (2017) https://assets.bbhub.io/company/sites/60/2020/10/FINAL-2017-TCFD-Report-11052018.pdf
[30] ASIFMA. Sustainable Finance in Asia Pacific Regulatory State of play. (2020) https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf

In addition to consistent and representative taxonomies, the paper calls for coherent disclosure frameworks on 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, but requires clear thinking between the private and public sector about the data needed to support this.

3. Data, ESG and Sustainable Finance

Data Practices Today

In broad terms, investors and investment managers in Asia use a combination of information to inform ESG investment, including disclosed information, data from third parties, and raw data which needs to be sourced and analysed in-house. This is then further analysed to inform investment decisions. Approaches to data analysis can be a source of competitive advantage for asset managers.

Measuring E, S and G

For ESG investment specifically, according to the EIU's 2019 study,[31] nearly half (48%) of the 2019 EIU survey respondents said they weight Environmental (E), Governance (G), and Social (S) factors equally. 24% said they weight E factors highest, 19% weigh S factors highest, and 15% weight G factors highest. A major driver, as noted by EIU, is mainland China's increasing focus on environmental protection, perhaps more so than other jurisdictions in the region.

According to the 2019 EIU study, the top metrics used to quantify E factors include:

- Environmental technology contribution (47% of survey respondents);
- Environmental information disclosure (35%); and
- Climate action (31%).

Meanwhile the same study found the top S metrics include:

- Safety Management (44%);
- Diversity and Inclusion practices (44%);
- Sustainable cities and communities goals (42%);
- Standard certification (37%);
- Health and Wellbeing (35%); and
- Quality education (30%).

Top metrics to quantify G factors include:

- Efficiency of capital (51%);
- Anti-money laundering (AML) compliance 36%;
- Related party transactions (conflict of interest) (36%); and
- External Auditing (33%).

The 2019 EIU study notes significant overlap between E, S, and G factors in practice. For example, climate change can have both E and S implications and, as a result, some practitioners may resist classifying metrics into separate categories,[32] suggesting a fundamental divergence in analytical approach.

Data Sources and Analysis

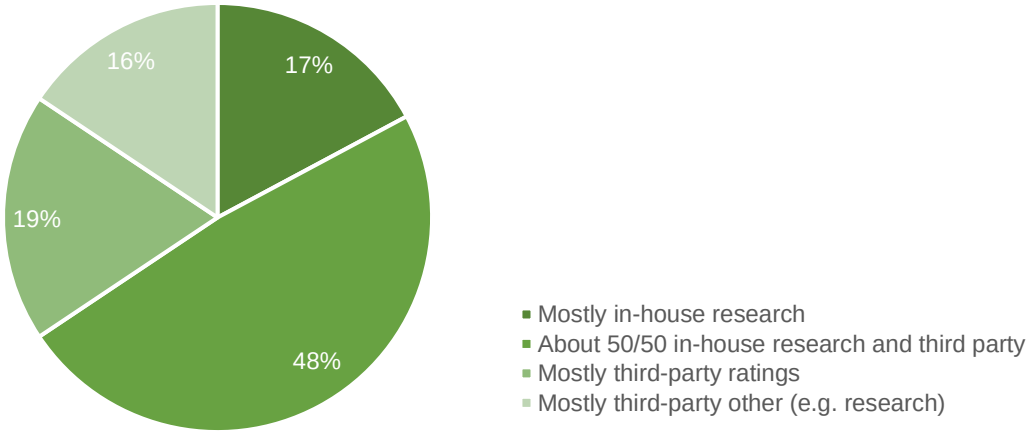
Today, according to the EIU research, ESG data is gathered from a wide range of sources, from official disclosures and third-party sources, to NGO reports, bilateral meetings and social media. Other sources include government and non-government organisation (NGO) databases. Whilst public data offers a more holistic picture, it is largely underutilised due to formatting that is often incomprehensible. Since much of the information from these sources is unstructured, Artificial

[31] EIU. Green Intelligence: Asia's ESG investing, data Integrity and technology. (2019) https://eiuperspectives.economist.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[32] Ibid.

Intelligence (AI) is becoming more prevalent in translating extensive unstructured data into meaningful and useful information.

When asked what type of data their firms are using for ESG assessment, nearly half of respondents to a 2020 ASIFMA/FOSDA poll reported using an equal amount of in-house and third-party sources, whilst 17% used mostly in-house and 19% used mostly third-party ratings.[33]

Figure 1. *If your firm is undertaking ESG assessment, what type of data is it using? (Source: ASIFMA Virtual Event Poll, July 2020)*



Data Challenges

According to the 2019 EIU study, future growth of ESG investment in Asia is *inextricably linked* to data. When asked to list the general obstacles to further developing ESG integration, respondents continually refer to data challenges overall:

- 32% nominated inadequacy of ESG data;
- 31% said there is not enough ESG data to make consistent decisions;
- 30% said a lack of clarity around ESG standards, terminology and metrics; and
- 26% mentioned ESG ratings and data applications being inconsistent; and
- 24% mentioned low transparency with regard to ESG-data sources.

In contrast, the only two non-data related barriers raised by respondents were lack of awareness and understanding of ESG (36%) and lack of client demand (20%).[34]

Lack of Standardisation and Comparability

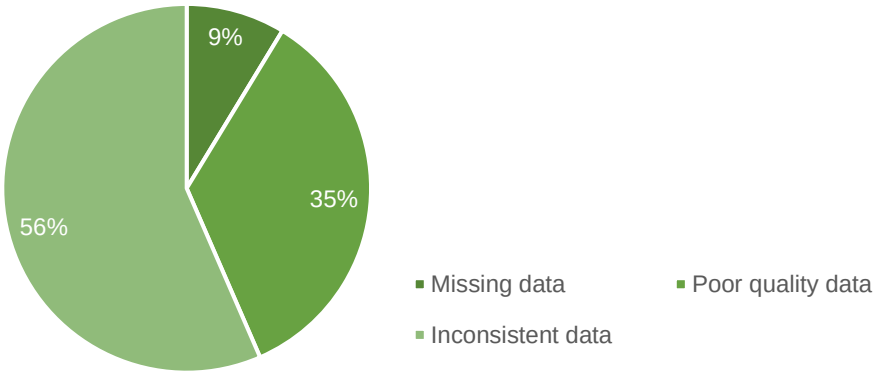
Significantly, there is no standardisation to measurement of E, S, and G factors. According to the 2019 EIU study, S factors in particular are the most difficult to measure, with analysts needing to weigh the value of very unstructured data (e.g. a complaint on social media, which may or may not portend fundamental issues).[35] Additionally, individual ESG metrics vary not only between industries and markets, but also between companies in the same industry, with the quality of company

[33] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[34] EIU. Green Intelligence: Asia's ESG investing, data Integrity and technology. (2019) https://eiuperspectives.economist.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[35] Ibid.

disclosures differing widely.[36] This results in difficulties in a lack of comparability between projects, companies, industries and markets as well as market distortions and skewed investment decisions,[37,38] while the 2020 EIU report notes this also leads to greenwashing, against which investors perceive a lack of contractual protection.[39] This is compounded when third-party data is used, with vendors using different methodologies for even the same metric.[40]

When asked to nominate the greatest data challenge in ESG and sustainable finance, 56% of respondents to a 2020 ASIFMA/FOSDA poll reported 'inconsistent data'[41]. The EIU notes that this complexity in itself is a disincentive for companies to issue green securities.[42]

Figure 2. *What is the greatest data challenge for ESG/sustainability? (Source: ASIFMA Virtual Poll, July 2020)*



The industry notes the UNDP's current work with the NGFS to tighten the UN SDGs, capturing the evolution and growth of sustainable finance since 2016, and tightening of reporting standards. In this area as well, there has been a proliferation of standards and initiatives, resulting in accountability concerns, efficiency challenges and comparability issues.

Disclosure

Firms and investors 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. From a disclosure perspective, this variation exists in both substance and form. Variation is evident not only between markets, but also within markets. As an example, in China, the 2019 EIU report notes that while

[36] ASIFMA. ASIFMA Response to Bank Negara Malaysia's Discussion Paper on Climate Change and Principle-based Taxonomy. (2020) https://www.asifma.org/wp-content/uploads/2020/04/asifma-response-to-bnm-climate-change-taxonomy-dp-v20200331-final-draft-clean4.pdf
[37] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[38] Green Intelligence: Asia's ESG investing, data integrity and technology. (2019) https://perspectives.eiu.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[39] EIU. Sustainable and actionable: An ESG study of climate and social challenges for Asia. (2020) https://perspectives.eiu.com/sites/default/files/sustainable_and_actionable_report_2.pdf
[40] Ibid.
[41] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[42] EIU. Sustainable and actionable: An ESG study of climate and social challenges for Asia. (2020) https://perspectives.eiu.com/sites/default/files/sustainable_and_actionable_report_2.pdf

there are different reporting requirements by province, the format in which data can be provided also varies between PDF, Word and JPG file formats.[43]

Other issues relate to the quality and integrity of data provided by corporates themselves. For example, an international power utility may provide only metrics of its carbon emissions in one market that it operates, where standards may be higher (e.g. Hong Kong), whereas metrics from other markets (e.g. China) representing the majority of its activities may be excluded. This gives a distorted and misleading account of its activities.[44] This can only be partially addressed through more direct engagement between, say an investment manager and investee companies.

Tightening disclosure standards will improve quality issues, which was nominated by over a third of respondents to the 2020 ASIFMA/FOSDA poll, above. The 2020 GFMA/BCG report recommends mandatory disclosure of corporate-specific, financially material, decision-relevant data relating to climate risks and opportunities on the basis that consistent global disclosure frameworks, developed in consultation with industry participants and with adequate runway for implementation, will strengthen the transparency and comparability of climate risk data.[45]

Taxonomy

Currently, there exists no single binding global taxonomy, and classification systems for 'green' assets or products differ widely across jurisdictions and industries. While the EU's leadership in establishing its taxonomy is a step forward in scaling green finance, 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 without taking into account the needs and nuances of a region like Asia where there are countries of varied levels of economic development. Also, EU taxonomy and disclosure regulations have been described as binary, classifying economic activities as 'green' and 'non-green', but providing no incentive for transitional activities.[46]

The industry welcomes leadership of jurisdictions like China and Malaysia's efforts to define taxonomies, but calls for greater regional and global harmonisation, interoperability between jurisdictions, and principles-based approaches, alongside clear and detailed definitions of sustainable activities.[47] We welcome efforts the EU and China to explore commonalities between existing taxonomies. An international approach will help address the data-comparability concerns of the 56% of respondents to the 2020 ASIFMA/FOSDA poll above.

Data Availability

When asked to nominate the greatest data challenge in ESG and sustainable finance, 35% cited 'poor quality data'.[48] The 2019 EIU study notes that 'S' factors, in particular, are hardest to quantify, yet is currently thought to have the most capacity to drive negative returns in Asia. On the other hand, 'G'

[43] EIU. Green Intelligence: Asia's ESG investing, data Integrity and technology. (2019) https://eiuperspectives.economist.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[44] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[45] GFMA and BCG. Climate Finance Markets and The Real Economy. (2020) https://www.sifma.org/wp-content/uploads/2020/12/Climate-Finance-Markets-and-the-Real-Economy.pdf
[46] ASIFMA. Sustainable Finance in Asia Pacific Regulatory State of play. (2020) https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf
[47] ASIFMA. ASIFMA Response to Consultation of 2020 Green Bond Endorsed Project Catalogue. (2020) https://www.asifma.org/wp-content/uploads/2020/06/asifma-response-to-china-2020-green-bond-catalogue-consultation-final-eng-chn.pdf
[48] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM

factors are subject to a greater degree of mandatory disclosure, resulting in greater availability of useable data. Therefore, there is a mismatch between data availability by factor vis-a-vis which factors are weighted highest (E) and/or thought to drive negative returns (S).[49] This can manifest in a lack of comparable data that is essential to compare different projects (i.e. data is available for one project but not another).

Another issue raised in our virtual discussions was the imbalance between data on ESG risk to ESG return. Increasingly, the investment community holds the view that equitable business and investment practices, coupled with good risk management, may be intrinsically linked with long-term profit returns. The imbalance in ESG risk-to-return data poses to be an ongoing challenge as firms increasingly want to assess the upside social return of investments, whereas the historical emphasis in ESG evaluation has been on downside risk.[50]

Reliability of Third Parties

The 2020 EIU report notes that third-party data from vendors can be problematic, starting with reliance on a single data source often resulting in volatile indicators over time. In addition, data from some vendors can be more accurate or reliable than others. Another source of error lies in the compatibility between the vendor's methodology and metrics, and what the investor is trying to monitor. At times there is limited clarity on methodologies underpinning ratings. In our virtual event discussion, one of the speakers spoke of the trade-off between data quality, sector coverage, and specificity within sectors and geographies.[51] There is an imperative for investment decision makers to ensure they understand the implications of ESG ratings and data employed in the investment process. Greenwashing can occur when in accurate data from ESG rating firms is used by asset managers to make "green" investment decisions.

The EIU notes that whilst credit rating agencies are regulated, ESG ratings agencies are not. To overcome some of the reliability issues, some investors have started to create their own in-house ESG scores, an avenue mostly only open to larger investors.[52] The EU has introduced requirements that impose transparency and disclosure requirements on financial products through EU benchmark regulations Sustainable Finance Disclosure Regulation (SFDR). Some commentators anticipate Asia's regulators considering similar approaches.

Forward- vs Backward-looking Perspectives

A fundamental issue is the fact that current data is backward-looking (e.g. existing or past environmental impact), with limitations at play when historical data is used to predict future factors. However, according to the 2019 report by EIU, more predictive and forward-looking data is becoming available, such as supply-chain factors and other lead indicators.[53]

[49] EIU. Green Intelligence: Asia's ESG investing, data Integrity and technology. (2019) https://eiuperspectives.economist.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[50] ASIFMA/FOSDA. Virtual Event: Navigating ESG and Sustainable Finance in Asia. (2020) https://youtu.be/E-SiPlJc8CM
[51] Ibid.
[52] EIU. Sustainable and actionable: An ESG study of climate and social challenges for Asia. (2020) https://perspectives.eiu.com/sites/default/files/sustainable_and_actionable_report_2.pdf
[53] EIU. Green Intelligence: Asia's ESG investing, data Integrity and technology. (2019) https://eiuperspectives.economist.com/sites/default/files/green_intelligence_eiu_e_fund.pdf

Accessibility and Interpretability

Given the complexity of ESG data, interpreting it for research and analytical purposes can be particularly challenging. Some commentators have noted that much data exists in unstructured form (for example, information gleaned from site visits, or even those methodically recorded in call reports), while public and government data sources obtained through regulatory disclosure requirements are often incomplete and disorganised. The 2019 EIU study further notes that data to support interpretation of 'S' factors in particular was the most difficult to obtain. To that end, investors and firms are looking increasingly for commercial advantages, and of the 300 respondents surveyed by EIU, a vast majority said they were using artificial intelligence (AI) either *always or often* to improve ESG analysis and increase efficiency by helping to consolidate data and analyse unstructured and structured data in meaningful ways.[54]

According to the study, 85% of asset and wealth management firms use AI *always or often*, compared to 65% of investment banks, (re)insurance companies and global financial firms, while number of analytics firms are now offering a range of AI tools.[55] Fintech companies are also seeking new ways to correct inefficiencies in government data sources through the use of AI technology. In fact, commentators during the virtual events noted that large potential in the use of AI software tailored for data analysis and collection to alleviate these issues.[56]

Interoperability with Financial Risk Assessment

The EIU notes that while credit rating agencies assess the material impact ESG factors may have on probability of default, ESG scores may profile an issuer, and not an individual issue, and do not necessarily capture the financial implications of factors such as credit risk exposure to ESG factors.[57] There is a need for harmonisation and interoperability between ESG standards, green finance and climate-risk management standards to which financial institutions are increasingly being held.[58]

Commentators during the virtual events elaborated on the potential of alternative data sources and emerging technologies that could assist credit institutions with risk assessment. For example, drones and geo-mapping technologies are currently being used to assess natural environmental risks to relevant assets. This could assist asset managers and insurers in their assessment of a client's asset risk before making transaction decisions. Consideration of such technologies may be particularly relevant to the insurance sector as losses to insurance companies have recently hit $150 billion per annum, much of which could be linked to the impact of climate change.[59]

[54] Green Intelligence: Asia's ESG investing, data integrity and technology. (2019) https://perspectives.eiu.com/sites/default/files/green_intelligence_eiu_e_fund.pdf
[55] Ibid.
[56] ASIFMA. Virtual Event: ESG and Sustainable Finance in Asia: the Fintech and Data Challenge. (2020) https://www.youtube.com/watch?v=TSbDcd-mfQI&feature=youtu.be
[57] Sustainable and actionable: An ESG study of climate and social challenges for Asia. (2020) https://perspectives.eiu.com/sites/default/files/sustainable_and_actionable_report_2.pdf
[58] ASIFMA. Sustainable Finance in Asia Pacific Regulatory State of play. (2020) https://www.asifma.org/wp-content/uploads/2020/03/sustainable-finance-in-asia-pacific.pdf
[59] ASIFMA. Virtual Event: ESG and Sustainable Finance in Asia: the Fintech and Data Challenge. (2020) https://www.youtube.com/watch?v=TSbDcd-mfQI&feature=youtu.be

In a response to the MAS's consultation on environmental risk management for banks, ASIFMA noted data challenges that would benefit from further supervisory guidance, including the need for standardised environmental and climate related data (or minimum standards) that banks should require corporate clients to disclose (including data from corporate clients), environmental and climate related metrics that banks should look towards assessing and in turn, what banks would be required to disclose, and benchmarks for environmental risks and key climate scenarios which could be used for risk management purposes.[60] In addition, further tools and guidance on scenario analysis would be helpful in enabling financial institutions to better understand this developing requirement for risk management.

[60] ASIFMA. ASIFMA Response to The Monetary Authority of Singapore's Consultation Paper on Proposed Guidelines on Environmental Risk Management (Banks). (2020) https://www.asifma.org/wp-content/uploads/2020/08/asifma-response-to-mas-erm-guidelines-banks-v20200807-final.pdf

4. Digitalisation & Emerging Technologies

As identified by the ADB and other global bodies, one important element to drive sustainable development and help close gaps in the availability, reliability, and adequacy of ESG data is 'digitalisation'[61]. Indeed, a number of technologies and associated business models are evolving rapidly in this area, spanning AI, robotics, 3D printing, big data, blockchain, and the Internet of Things (IoT) amongst other solutions, which offer opportunities to rethink how the public and private sectors could work together to drive green and sustainable development.

The following section identifies several use cases of technologies and innovation in the field of ESG integration and sustainability practices.

Data Collection and Analysis

Fintech companies are increasingly utilising AI software to compile data in a comprehensive manner and remove non-essential information to deliver factual and relevant data to investors. AI technology is also used to scan large amounts of government records for evidence of company failings such as non-compliance fines, regulatory breaches, non-sustainable practices, and cybersecurity violations. This not only helps investors gain a more holistic understanding of investee companies, but also increases corporate accountability and transparency, which together helps further enable and support the mobilisation of private capital.

Auditing and Monitoring

Fintech companies have also developed techniques of directly monitoring companies' operational processes and their impacts, such as through geospatial data and heatmapping technologies, that allow users to monitor the environmental impacts of manufacturing processes. New technologies also allow firms to now measure the carbon concentration levels in a factory's surroundings and allow monitoring of corporate activities using satellite imagery, which may serve as a reliable alternative to self-disclosed corporate data. The use of blockchain technology and cryptocurrencies may also increase transparency in auditing.[62]

Risk Management

Asset managers and insurance companies that often require alternative means of assessing environment and weather-related risks may also use emerging technologies in the process of risk management. Technologies such as geo-mapping, satellite imagery, drone imagery, and seismic detection tools may allow firms to assess risks related to unstable land surrounding assets of areas in relation to their proximity to fault lines, asset proximity to beaches and the ocean vis-à-vis risk related to rising sea level, and other factors relevant in consideration of certain risky investments.[63]

Additionally, corporations are increasingly utilising natural language processing technology (algorithms that process human language input and convert it into understandable representations) to collect sentiment analysis data by employing handwriting recognition technology and voice recognition devices. AI recognition of human linguistic communication allows the analysis of sentiment towards products and other objects or concerns, allowing companies to predict market

[61] United Nations ESCAP. Frontier Technologies for Sustainable Development in Asia and the Pacific. (2020) https://www.unescap.org/sites/default/files/publications/Frontier%20tech%20for%20SDG.pdf
[62] ASIFMA. Virtual Event: ESG and Sustainable Finance in Asia: the Fintech and Data Challenge. (2020) https://www.youtube.com/watch?v=TSbDcd-mfQI&feature=youtu.be
[63] Ibid.

trends and make corporate financing decisions with regards to product marketing, advertisements, and any other expenses.[64]

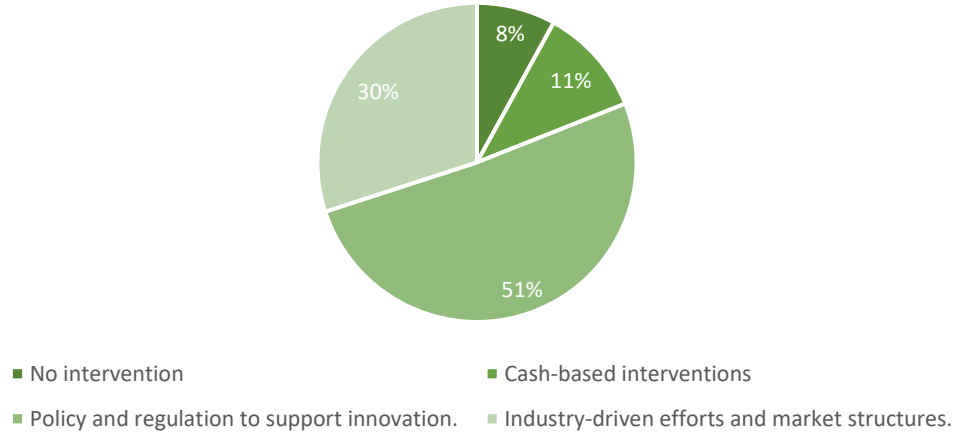
Energy Efficiency

Technologies may be used to integrate ESG principles and sustainable practices into the day-to-day conduct of business, which is notably being developed by the property and supply chain sectors within their environmentally sustainable practices.[65] In recent years, development of energy efficient architectural designs, increased use of solar panels, and implementation of smart energy systems have all significantly helped lower total carbon output of buildings and urban infrastructure. New technologies, such as IoT, are spreading rapidly in use in energy systems, vehicles and transportation systems, smart buildings and cities, and manufacturing operations which not only helps cost-cutting of total energy use, but also allows companies and organisations to actively monitor and manage energy efficiency within their business practices. Similarly, supply chains are now shifting towards eco-friendly energy sources in their distribution channels.

Scaling ESG Enabling Technologies

Asked what is needed most to scale ESG and sustainable finance enabling technologies, nearly half of respondents to a 2020 ASIFMA/FOSDA poll prioritise 'policy and regulation to support innovation', whilst 30% indicated 'industry-driven efforts and market structures' are more important.

Figure 3. *What is needed most to scale ESG and sustainable finance enabling technologies? (Source: ASIFMA Virtual Poll, October 2020)*



With the pace at which new technologies and innovation are being used to narrow data gaps in sustainable finance and ESG, the poll result highlights the importance of effective policy and regulatory measures supporting innovation, which in turn will help enable the scaling of green and sustainable investments. Policymakers and regulators are encouraged to think about innovative policy actions that utilise technologies and avoid stifling innovation, and should also be prepared to put in place responsive and adaptive regulatory and policy frameworks for the next generation of ESG-enabling technologies. In a similar vein, result also suggests that industry-driven efforts, which when undertaken by a private sector that pursue responsible technological development with a goal to tackle environmental and social concerns, are equally crucial.

[64] ASIFMA. Virtual Event: ESG and Sustainable Finance in Asia: the Fintech and Data Challenge. (2020) https://www.youtube.com/watch?v=TSbDcd-mfQI&feature=youtu.be
[65] Ibid.

5. Conclusion

As the private and public sectors plan ahead for post-Covid recovery, we are at a critical juncture to identify data gaps and obstacles to scaling ESG and sustainable finance development, and to work towards developing and accelerating green recovery strategies. ESG-based performance, both in terms of investment inflows and asset performance, has been positive during these troubling times, and many regulators and investors have recommitted to sustainable development, with greater focus on systemic risks related to climate and social concerns.

It is therefore important for Asia to focus on the data requirements for supporting ESG to ensure data asymmetries do not stall further efforts to developing and scale sustainable finance in the region, vis-à-vis other regions such as the EU which are further progress in their ESG and sustainable finance agendas and related data standards.

Recommendations

ASIFMA offers the following 8 key recommendations, critical to supporting and enabling the further development of green and sustainable markets in Asia:

1. A greater convergence towards a principles-based global (or at least regional) taxonomy
2. Higher, more consistent corporate disclosure standards between jurisdictions and sectors
3. Encouragement of higher standards of analysis, with incentives for more holistic and robust approaches to ESG measurement and analysis
4. Policy and regulation to support innovation and technologies that enable ESG and sustainable finance capabilities
5. A focus on education and skills to support ESG and sustainable finance capability
6. Higher standards and accountability for ESG ratings providers, potentially including regulation, and clear and harmonised requirements for product disclosure
7. Harmonisation between ESG standards and frameworks such as UN SDGs, and policy on climate change and bank supervision at systemic level, including on climate risk
8. Ongoing partnership and dialogue between the public and private sectors, as well as between stakeholders such companies and investors on disclosure and reporting standards