



CIO Special

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Asian growth needs ESG

Key take aways

- There is increased Asian interest in ESG investing. Pressure on investors and asset managers to integrate ESG into their investment processes, as well as interest from a public-administration perspective, have been accelerated by the coronavirus pandemic.
- Favouring demographics and economic integration of the region are supportive of the case that ESG interest is not simply driven by its positive environment, social and governance effects, but also by its contribution to sustain overall levels of economic growth.
- The use of Artificial Intelligence (AI) and digitalization will help with deficiencies in the quality of existing ESG data and support the harmonisation of data, ESG standards and government frameworks.

01 GDP growth sustainability

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Asia has faced a growth setback from the coronavirus crisis, but it is expected to be the fastest region to recover. We forecast that China will grow by 8.7% in 2021, India 11%, ASEAN 5.3% (vs. 3.5% for Eurozone and 5.0% for U.S.). Looking further forward, three out of five of the biggest world economies are expected to be in Asia in 2050.¹

Different economies can follow different growth paths dependent on natural resource consumption, population growth and the current GDP.² But population growth may make existing paths unsustainable, meaning that a comprehensive structural change is required.

Asia needs to work out how to sustain existing high levels of economic growth, not least because much of its population is still below average income. The hope is that economic productivity and competitiveness can be improved by firm-level ESG implementation, leading to stronger net economic growth.³

So across the region, in a range of sectors including food production, energy, transport and financial markets, new companies and products are on the rise focusing heavily on ESG.

But, to sustain high growth rates, ESG will also need to be further integrated and considered at a policy and broader sectoral level. It has already become an integral part of economic development, working with non-ecosystem services (e.g. technology), and may have lower adoption costs than in developed markets.⁴

ESG development in Asia has been further reinforced by the coronavirus pandemic, and there is growing optimism that momentum here will be maintained as unprecedented levels of global stimulus and low interest rates help drive more funds into eco-friendly businesses.⁵ China, for example, has experienced an 18-fold increase in ESG ETFs over the past two years.⁶

ESG's ability to boost growth. An Oxford University study finds a statistically significant relationship between a firm's ESG performance (across each individual component) and a country's living standards, as measured by GDP per capita.⁷

02 Asian ESG initiatives

03 Asian ESG opportunities

04 Conclusion



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This relationship has major implications for per capita incomes in emerging economies. For example, if Indonesian firms were to improve their environmental performance to reach the level of the highest performers in the dataset, this would be associated with an increase in GDP per capita by 15%, from roughly USD4,300 to USD4,900. The study suggests that if a portion of the pandemic recovery efforts were directed at enhancing companies' ESG practices and especially social performance this could also stimulate economic growth, all things remaining equal. Some economies in the region already accept this: Singapore has a "Green Plan 2030", whereby sustainable living, energy reset and the green economy are integral pillars to its economic growth, climate and resource resilience and generation of new business opportunities over this decade by e.g. greening 80% of Singapore's buildings by 2030 and reducing the waste sent to landfill by 30%.⁸

Beyond encouraging further growth, the shift to a more sustainably-driven approach is being boosted by four other main drivers.

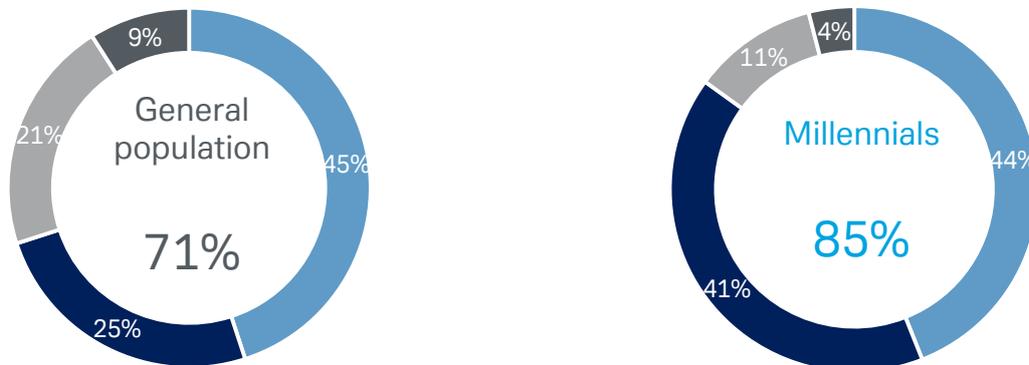
Investor enthusiasm. Social and economic interest in ESG has encouraged investors and asset managers to incorporate ESG into investment decisions.⁹ More APAC-based asset managers are adopting sustainable investing and recognising its value. This is manifest through the almost tripling in the number of asset

managers signing up the Principles for Responsible Investment (PRI) from 104 in 2015 to over 300 in 2020.¹⁰ Governments and regulators across the world, including Asia Pacific, are pushing sustainable and stewardship responsibilities and rules for companies to report ESG standards, both in their own businesses and increasingly in their supply chain partners. The coronavirus pandemic has illustrated even more the interconnectedness of markets and challenges to societies and economies.¹¹ In addition, the region's tech-savvy entrepreneurs are finding new ways to improve transparency and hold corporates to account, mainly through the use of technology and artificial intelligence (AI). For example, the South Korea economy has a strong dominance of the tightly-linked family-owned businesses "chaebol", and these new patterns may put increased pressure on them to operate in a more socially responsible way.¹²

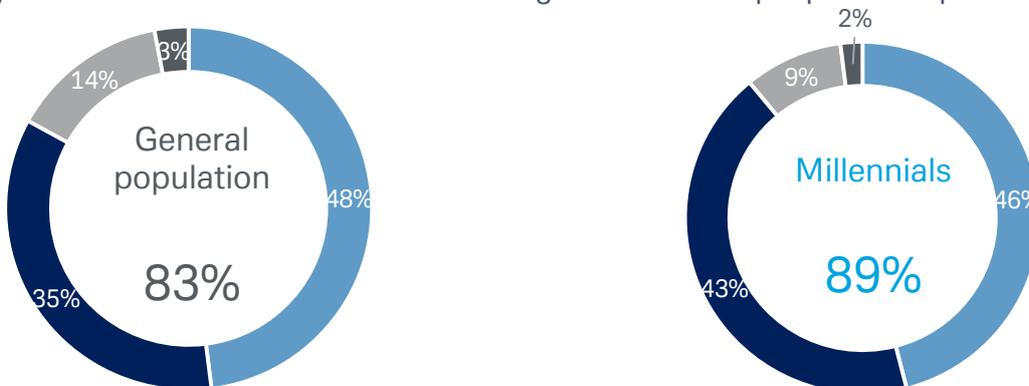
Demographics. Asia's Millennials make up almost 25% of the population in the region and many are interested in sustainability.¹³ It is estimated that about 35% of Asia's wealth will be in the hands of Millennials by 2025, the highest rate of change in any global region.¹⁴ Millennial investors actively seek investment options that closely align with their values. A 2019 survey showed that 89% of Millennials believe that they can lift people out of poverty by their investment decisions (see Figure 1).¹⁵

Figure 1: Millennials believe they can affect change through investments

Can my investment decisions influence the amount of climate change caused by human activities?



Can my investment decisions create economic growth that lifts people out of poverty?



■ Strongly agree ■ Somewhat agree ■ Somewhat disagree ■ Strongly disagree

Source: Morgan Stanley, Deutsche Bank AG. Data as of September 2019.



Regional integration. The Regional Comprehensive Economic Partnership (RCEP) was agreed to in November 2020, with the signatories having a combined GDP of USD26.2trn annually. This could have immense consequences for the economic prosperity and well-being of the 2.3bn people within the bloc (30% of the world population), and will perhaps make them less reliant on western consumers. From an ESG perspective, the new business landscape may eventually create major opportunities in the form of enhanced regulation and new anti-monopoly measures, applied by governmental bodies in order to protect fair competition. As is shown in our CIO Special “The G in ESG: Governance – a question of balance”, this will have to be balanced against broader social and environmental concerns.

Digitalization and data analytics. Roughly 70% of new economic value created in Southeast Asia by 2030 is expected to be based on digitally-enabled platforms.¹⁶ As internet penetration rates continue to rise in Southeast Asia, ASEAN grows more interconnected by the day. Given its 660+ million inhabitants, the region will be among the world’s most promising markets for a variety of internet-based services. The scale of adoption of digitalization is driving greater efficiency, and at the same time helps to reshape business models and furthering sustainable practices and appropriate governance structures. Smart digital innovations are anticipated to help reduce energy demand, for example.¹⁷

Data analytics technology should help solve existing problems around ESG assessments, identify sustainable enterprises, and also correlate ESG with financial performance. To accommodate demand, a burgeoning number of analytics firms, many of which originate in Asia, are now offering an increasing range of AI tools and techniques to help investors. There is also clearly room for catch-up with other regions in terms of data harmonisation. The general expectation that the amount of available data will increase across the APAC is supported by investors’ need to understand more areas of ESG reporting in order to make decisions.¹⁸ While ESG has a historical way of assessing data, AI can be used for forward-looking and predictive data in areas such as measuring supply-chain impacts, or looking at shareholder relationships and management profiles in order to flag up issues early on.¹⁹

regulators in Asia to harmonise their existing ESG standards with the EU taxonomy, especially on controversial items such as the use of fossil fuels and nuclear energy.²²

Integration of ESG into national policy agendas. Individual governments in the region have been promoting ESG as part of their economic agendas. In 2019, Hong Kong’s Monetary Authority introduced several measures to develop the city as a regional hub for sustainable banking and green finance. Hong Kong’s stock exchange regulator (HKEX) is contributing to this movement by introducing ESG-focused listing requirements, enhancing corporate governance and transparency, and updating its reporting guidelines.²³ Singapore is also a driver of sustainability. In August 2019, for example, the country’s prime minister highlighted ESG’s importance to the nation’s economic progress.²⁴ The Monetary Authority of Singapore (MAS), Singapore’s central bank, has laid out plans to invest USD2bn in developing the country as a green finance hub and promote sustainable financing in the financial sector.²⁵ ESG investing is also picking up in India gradually, despite a range of policy initiatives dating back to 2011, when national voluntary ESG guidelines were first suggested. In 2019, the Securities and Exchange Board of India (SEBI) made it mandatory for top 1000 companies to publish annual business responsibility reports.²⁶ Policy-wise, Japan has taken a principles-based approach, which has helped accelerate scaling of the market and is reflected in the Financial Services Agency’s 2020 revision of its Stewardship Code for corporate governance.²⁷ In January 2021, the South Korean regulator (the Financial Services Commission) announced a series of measures to improve corporate disclosure rules in South Korea, and initiatives to promote ESG. This highlights the necessity in creating an appropriate regulatory environment, to include measures such as the implementation of mandatory ESG disclosures for listed companies.²⁸

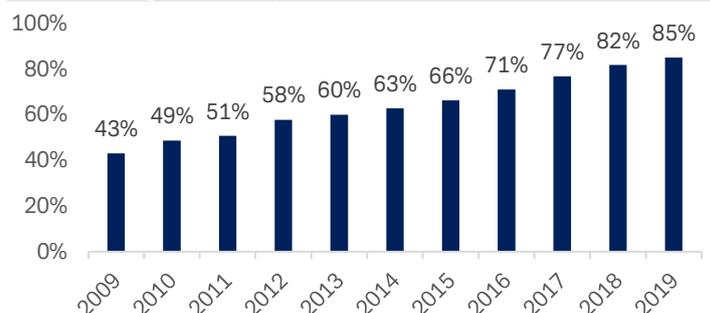
The Chinese government is also expected to place a higher priority on climate change in its 14th 5-year plan, to be announced in March 2021.²⁹ As part of the plan, it is reported that the manufacturing industry will see a push towards more high-end, intelligent, and green technology.³⁰ Climate related topics were already included in the 13th plan, so it is expected that these will grow in importance going forward. A further signal from Beijing in highlighting sustainability practises within corporate policy could encourage capital flows toward ESG-managed assets in Asia but also across the globe. Some industries are also incentivized to adopt corporate social responsibility (CSR) policies – leading to a higher proportion of released CSR reports as depicted in Figure 2.

02 Asian ESG initiatives

Regulatory developments have been a key factor behind growing ESG momentum. Developments include stewardship codes, ESG risk management guidelines, formation of steering committees and collaboration between industry players. Also, pressure of EU and U.S. investors making investments into Asia markets has exerted influence in this area, with institutional investors having increasing allocations to ESG assets and awarding ESG mandates.²⁰

Asian ESG standards will also be affected by EU taxonomy. Asian asset managers’ or investors’ portfolios have to comply with EU’s taxonomy and regulation in the future if they want to do business in the EU.²¹ Green finance products need to be refined to ensure they meet EU taxonomy standards, which were implemented at the end of 2020. However, it will take time for

Figure 2: Proportion of CSI300 companies releasing CSR reports



Source: SynTao Green Finance, Ping An, Deutsche Bank AG. As of June 2020.



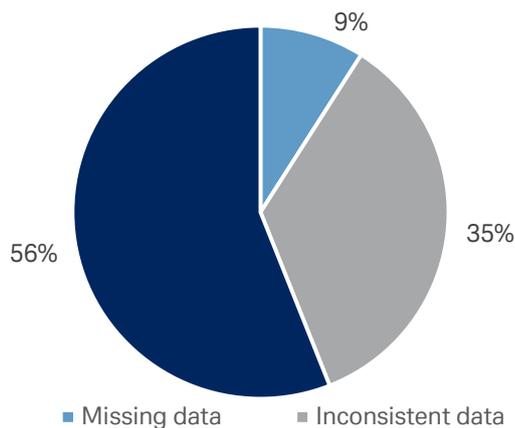
03 Asian ESG opportunities

There are many opportunities for ESG investment in Asia, but it is worth starting by highlighting a number of challenges.

The first challenge is that Asia is a highly **diverse region** – in terms of income levels (e.g. GDP per capita in Japan, Malaysia, and Vietnam is USD40,200, USD11,400, and USD2,700, respectively), types of governments that follows its own rules and development models using a variety of policy systems and with a large geographical reach.³¹ Standardizing ESG standards with a coordinated methodology and taxonomy may thus prove to be more difficult than in Europe or the U.S.

This poses an issue when it comes to standardising data. According to a study, future growth of ESG investment in Asia is inter-linked with data.³² ESG obstacles are often cited to be inconsistent or missing ESG data, lack of clarity on standards and terminology and inconsistencies in ESG ratings and data applications (see Figure 3).

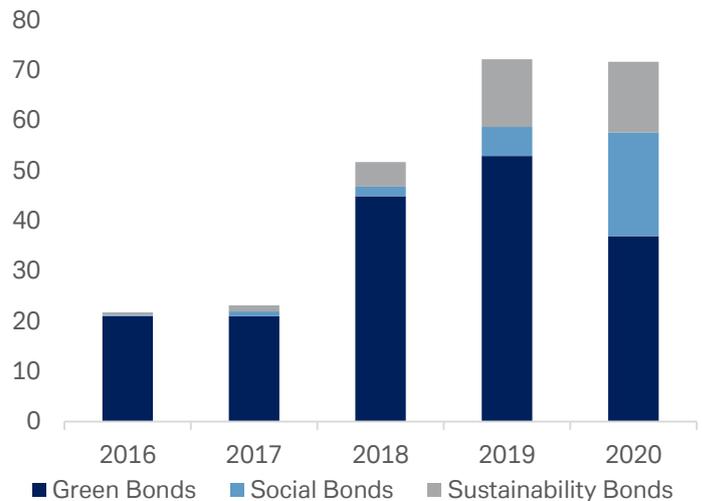
Figure 3: Data challenges for ESG



Source: ASIFMA Virtual Poll, Deutsche Bank AG. Data as of July 2020.

Governments are starting to align with market standards. From a policy perspective, the People's Bank of China (PBoC) consulted the market on updating its 2020 Green Bond Endorsed Project Catalogue, with the proposed changes bringing it more in line with other international taxonomies in relation to fossil fuels.³³ This is taking place as the number of green bonds is rising, and social bonds are becoming more prominent, in part due to the Covid-19 pandemic (Figure 4). Harmonization of standards might also have implications for many of the overseas projects that Beijing is keen to promote, for example through China's Belt and Road Initiative. China has proposed a plan for a "green silk road" which could promote cooperation between China and the countries along the Belt and Road routes in environmental areas.

Figure 4: Green bond market augmented by social and sustainability issue, USD billion



Source: Bloomberg Finance L.P., Deutsche Bank AG. Data as of December 3, 2020.

Asia is also implementing ESG investment at a time when most economies in the region are still **growing very fast** – and still have a significant focus on heavy industry. Asian economies are therefore trying to implement ESG measures at a different stage of their development cycle than the EU or U.S. They may also be faced by different sustainability issues, ranging from endangered species conservation, air pollution, deforestation and water security.³⁴ In addition, there remains a perceived tension between economic returns on investment and ethical or ideological considerations.³⁵

These differences will of course also create varying threats and responses. **Rising sea levels**, for example, are predicted to affect a large share of Asia's population and businesses, and companies and businesses are responding to this. Singapore is trying to come around the fresh water supply shortages by engaging actively in water desalination. In early February, the national water agency PUB (the Public Utilities Board) and Keppel officially opened Singapore's first large-scale dual-mode desalination plant, able to treat both fresh and seawater, and its fourth desalination plant overall. Desalinated water is planned to meet 30% of Singapore's future water needs by 2060.³⁶ Singapore has become a global leader on recycled waste water and desalinated water, as well as water conservation in general making it a prime example in resource stewardship and activating the circular economy. Singapore's per capita residential demand for water has fallen consistently for the last 15 years providing an exception to a worldwide increase, according to a report from the United Nations Environment Program.³⁷

In addition, Asia leverages on its research and development capabilities in the area of **marine biotechnology**. Four of the most important players in marine biotechnology can be found in Asia, namely China, India, South Korea and Japan. China has biotechnology imbedded in the Five Year Plans through the National Hi-Tech R&D Program '863', while national biotechnology strategies are integral for India, South Korea and Japan.³⁸ **Fisheries** also present an opportunity for ASEAN



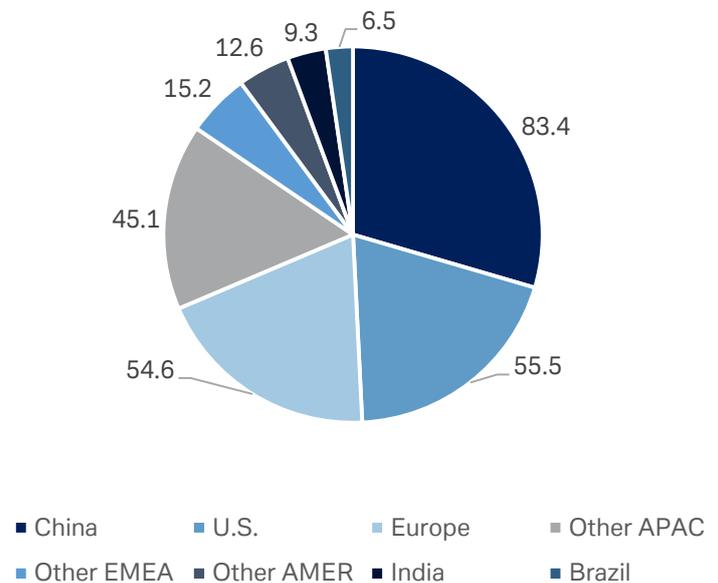
countries, as their fish production accounts for 25% of global production and is an important component of growth for the region. There is however a need for regional collective action in the fishing industry. ASEAN countries can do better by leveraging more the science-based knowledge of the region's marine ecosystem to help them establish a strategic regional marine policy.³⁹ As an example of leading practice, in 2019 the Indonesian Ministry of Marine Affairs and Fisheries (MMAF) and the Marine Stewardship Council signed a Memorandum of Understanding (MoU), highlighting a joint commitment to strengthening collaboration on sustainable fishing.⁴⁰ Please refer to our CIO Special "Understanding the blue economy" for further insights.

Another opportunity derives from the **high tech base** of many Asian economies which could be used to assist ESG investment. New investment flows into utility scale renewables energy projects in the Asian region are forecast to be up to USD250bn by 2025.⁴¹ By 2030, APAC is predicted to become the largest offshore wind power market by increasing the share in the global offshore wind market from 24% in 2019 to over 42% in 2025.⁴² While China still has a heavy reliance on coal, it is making efforts to diversify energy production into more environmentally-friendly areas. China makes 60% of the world's solar panels and installs more than half of them.⁴³ In addition, China has taken the dominant role regarding offshore wind energy in Asia with more than 70% market share. What this means is that China could also be a great source of data on the impact of ESG technologies on an economy.

Technology can further be leveraged to drive sustainability in the **energy** and **infrastructure** sectors. There are increasing needs to conserve economic and environmental resources while fostering the performance of existing energy infrastructure. The Asian Development Bank (ADB) has committed USD80bn for 2019-2030 for climate change efforts, and argues that renewable energy for power generation is growing rapidly in the region and is facilitated by technology improvements in solar and wind power technologies. China, India, Japan and Bangladesh are at the forefront of renewable energy developments in the region.⁴⁴ In order to meet China's climate targets, the government plans to force regional grid firms to buy at least 40% of power from non-fossil fuel sources by 2030.⁴⁵ Figure 5 illustrates that the leading regions for investment in renewable energy capacity were China, the U.S., Europe and APAC in 2019. According to the International Energy Agency (IEA), energy demand in India will expand the most out of any country in the next two decades.⁴⁶ Solar power currently makes up 4% of India's power supply but this is set to grow 18-fold by 2040, paving the way for net-zero emissions within its energy sector by the mid-2060s.⁴⁷

In addition, new technologies, such as IoT (the "internet of things" i.e. interconnection and data sharing between multiple devices) are spreading rapidly within the areas of energy systems, vehicles and transportation, smart buildings and cities, and manufacturing operations. This contributes to lower costs of total energy use and allows companies and organisations to actively monitor and manage energy efficiency within their business practices.⁴⁸

Figure 5: Investments in renewable energy capacity by region, USD billion



Footnote: Total values include estimates for undisclosed deals.
Source: UNEP, Frankfurt School-UNEP Centre, Bloomberg NEF, Deutsche Bank AG. Data as of 2019.

04 Conclusion

Continuing need for Asian ESG investment. There is increased Asian interest in ESG investing. Pressure on investors and asset managers to integrate ESG into their investment processes has been accelerated by the coronavirus pandemic. Thereby, they are becoming more sophisticated on climate strategies.⁴⁹ Environmental concerns are on factor bringing business opportunities in the region, to tackle (for example) the effects of loss of biodiversity and implications for the blue economy.

ESG investment could boost longer-term GDP growth. Interest in ESG investing may increasingly be driven not just by its positive environment, social and governance effects, but also by its contribution to sustain overall levels of economic growth. Studies show that environmental and governance performance factors have a positive effect on growth in GDP per capita, and this relationship appears more pronounced in developing than developed economies.

This suggests that if some proportion of pandemic recovery efforts is directed at enhancing companies' ESG practices (and especially social performance) this could also stimulate economic growth, all other things remaining equal.

Standards and data need to be improved further. ESG standards and government frameworks are increasing in Asia, but harmonisation of data needs to be tackled further. The use of AI and digitalization will help with deficiencies in the quality of existing ESG data. This will be key in providing insights and linking ESG opportunities together with stewardship practices. Transparency is key.



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Glossary

ADB is the Asian Development Bank.

AI stands for artificial intelligence and emphasizes the development of intelligence machines.

The Asia-Pacific (**APAC**) comprises the countries in or near the Western Pacific Ocean.

The Association of Southeast Asian Nations (**ASEAN**) comprises Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar and Vietnam.

Corporate social responsibility (**CSR**) is a commitment to manage the ESG effects of a company.

ESG stands for Environment, Social, Governance, and is the acronym most commonly used for sustainable investments.

Exchange Traded Funds (**ETFs**) are investment funds traded on stock exchanges.

The European Union (**EU**) comprises 27 member states as a political and economic union.

The Eurozone (**EUZ**) is formed of 19 European Union member states that have adopted the euro as their common currency and sole legal tender.

Gross domestic product (**GDP**) is the monetary value of all the finished goods and services produced within a country's borders in a specific time period.

Green bonds are fixed-income instruments that finance projects relating to climate-related or environmental projects.

HKEX stand for the Hong Kong Exchanges and Clearing.

IEA refers to the International Energy Agency and is an autonomous intergovernmental organisation.

IoT stands for the Internet of things and is a system to collect or transfer data over networks.

MAS is the Monetary Authority of Singapore.

Millennials, or Generation Y, were born between 1981 and 1996.

MMAF is the Indonesian Ministry of Marine Affairs and Fisheries.

MoU is the Marine Stewardship Council signed a Memorandum of Understanding.

The People's Bank of China (**PBoC**) is the central bank of the People's Republic of China.

The Principles for Responsible Investment (**PRI**) is an international network of investors supported by the United Nations.

The Regional Comprehensive Economic Partnership (**RCEP**) is a free trade agreement and forms the world's largest trading bloc.

SEBI refers to the Securities and Exchange Board of India and is the regulator of the securities and commodity market.

Sustainability bonds are issues where proceeds will be exclusively applied to finance or re-finance a combination of green and social projects or activities.

The United Nations (**UN**) aims to increase political and economic cooperation among its member countries.

USD is the currency code for the U.S. Dollar.



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