A Message from the Board

The Board is committed to building a resilient business at SGX by placing sustainability at the core of what we do. We are committed to ensuring the longevity of our ecosystem, through creating long-term value to support Singapore's sustainable transition and for all our stakeholders. Incorporating environmental, social and governance in our decision-making is consistent with our commitments as a listed company, our businesses' interest, and our role as a regulator.

About the report

This sustainability report communicates our approach to build a sustainable business while providing a balanced view on our progress across our material sustainability factors.

Scope

The report covers the performance of our consolidated entities from 1 July 2020 to 30 June 2021 (FY2021). We have included the historical data for FY2019 and FY2020 for comparison where available. There has not been any restatement of figures for data disclosed in previous years.

Approach to Sustainability Reporting

In the last four financial years, we have elected to produce our report in accordance with Global Reporting Initiative (GRI) Standards (2016) – "Core". This year, we have started reporting on

our tax in accordance with the latest GRI 207 standards (revised in 2019), as part of our effort to enhance the transparency of disclosures.

Beyond the GRI and relevant UN Sustainability Development Goals (SDGs), we have adopted the standards set by Sustainability Accounting Standards Board (SASB) for Security & Commodity Exchanges issued by the Value Reporting Foundation¹. We have also started gradual adoption of the recommendations by the Task Force on Climate-Related Financial Disclosures (TCFD), including disclosing our climate-related risks, which have been identified as an emerging risk to SGX.

We have chosen both the GRI and SASB Standards due to their longstanding universal application and robust guidance, which allows for comparability

of our performance against peers and ensures we apply a dual materiality perspective to sustainability. SGX has been a supporter of the TCFD since its launch in 2017 and aims to progress further each year in embedding the recommendations into our report (pages 63 and 64).

This report is also prepared in accordance with SGX-ST Listing Rules (711A and 711B) – Sustainability Reporting.

We welcome feedback on this report and any aspect of our sustainability performance. Comments or feedback can be sent to sustainability@sgx.com.

1 The Value Reporting Foundation consists of International Integrated Reporting Council (IIRC) and SASR





SGX FIRST

(Future in Reshaping Sustainability Together)

We launched our new multi-asset sustainability platform SGX FIRST in December 2020 to facilitate collaboration, to catalyse change and deliver sustainable growth. As a part of this:

 We announced that we were going to invest \$20 million in expanding sustainability initiatives through SGX FIRST, including ESG-focused products, capacity building for the financial ecosystem, as well as strengthening internal and community commitments.





Within our organisation:



Enhanced our Sustainability Vision

We have enhanced and streamlined our sustainability approaches and strategies to reflect our vision to be a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems.



Committed to Science-based Climate Targets

We committed to science-based climate targets to reduce our carbon emissions to limit global temperature rise to 1.5-degree and in line with the Paris Agreement. This is going through a validation process with the Science Based Targets initiative (SBTi).

We have also joined 1) Business Ambition for 1.5°C, a campaign led by the SBTi in partnership with the United Nations Global Compact (UNGC) and the We Mean Business coalition, and 2) the Race to Zero, a global campaign convened by the United Nations Framework Convention on Climate Change (UNFCCC) to rally leadership and support from businesses, cities, regions and investors to build momentum around the shift to a decarbonised economy ahead of COP26, to develop a healthy, resilient, and zero-carbon future.



More Comprehensive Sustainability Disclosures

We refreshed our materiality assessment in FY2021 and expanded on our sustainability disclosures in line with GRI, SASB and the SDGs, with reference to TCFD recommendations in this FY's Sustainability Report.

Our impact on the ecosystem:



We introduced five equity futures including SGX FTSE Asia ex Japan ESG Index Futures, SGX FTSE Blossom Japan Index Futures and SGX Nikkei ESG-REIT Japan Index Futures.



We were recognised as the #1 Green Bond Listing Venue in Asia with over 50% market share of Asian issuances and top 5 marketplace globally with 7% share².



We launched Climate Impact Consistent Indices (CICI) through Scientific Beta – the only pure climate index offering on the market that helps make investment decisions and engagement practices consistent to maximise impact.



We announced plans to launch Climate Impact X (CIX) by end-2021 with DBS, Standard Chartered and Temasek. CIX will be a global carbon exchange and marketplace that provides organisations with high-quality carbon credits.

A Message from the Board



The Board is committed to building a resilient business at SGX by placing sustainability at the core of what we do.

We are committed to ensuring the longevity of our ecosystem, through creating long-term value to support Singapore's sustainable transition and for all our stakeholders. Incorporating environmental, social and governance considerations in our decision-making is consistent with our commitments as a listed company, our businesses' interest, and our role as a front-line regulator.

As a listed company, we strive towards leading sustainability practices and look to create a positive impact in our community. We aim to provide our stakeholders with a clear, comprehensive and coherent description of our sustainability strategies, targets and performance, especially the impacts of our business on the wider ecosystem through our sustainability reporting. In light of this, we have strengthened our sustainability disclosures to align with key international standards (see Approach to Sustainability Reporting for more information) and taken a comprehensive review of our material topics (see Materiality Assessment for more information).

As a business, we offer sustainable finance products and services to users of the market. An important part of our vision is to serve the market as a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems. We want to be known for trusted, quality products and solutions across asset classes that support evolving capital and trading needs in a thriving ecosystem. In December 2020, we announced that we are committing \$20 million over the next few years into expanding our sustainability capabilities and initiatives. We have launched new ESG derivatives with FTSE Russell, produced a guidance paper titled, "Credible decarbonisation and transition guidance for corporates in Asia", and announced the development of CIX with DBS, Standard Chartered and Temasek for a global carbon exchange and marketplace. These are among a strong

suite of ESG-focused investments that will strengthen the foundation for SGX as a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems.

We have also made significant progress to enhance sustainability disclosures over the years as a front-line regulator. In 2011, we issued a policy statement highlighting the importance of sustainability reporting to the market amidst early interest in ESG disclosures, and encouraged companies to do so on a voluntary basis. In 2016, as the demand for sustainability information from investors and other stakeholders rose, we introduced sustainability reporting as a listing requirement and also provided guidance on the content of the report for companies to adopt on a "comply or explain" basis. In FY2022, SGX will hold a public consultation on making climate-related reporting aligned with the internationally recognised recommendations of the TCFD.

SGX will continue to advocate transparency and accountability in delivering our sustainability targets – as we have done so this year. These continue to be the fundamental aspects required to build trust with our stakeholders.

In FY2022, the Board will continue to work closely with SGX management in order to continue building on our efforts to date.

Sustainability Governance at SGX

The Board oversees SGX's approach to sustainability and the integration of ESG matters in the formulation of SGX's longterm strategy. The Executive Management Committee (EMCO) is responsible for and reports to the Board on sustainability matters, including climate-related matters. The EMCO is chaired by the CEO and comprises senior leadership across the organisation. It is therefore well-placed to guide the development and execution of an integrated business and sustainability strategy. The EMCO approves sustainability strategies and reviews sustainability performance. It also reviews and evaluates SGX's sustainability approach, risk management policies and practices, sets targets and measures performance against the targets.

In FY2021, sustainable finance veteran, Herry Cho, joined SGX as the Head of Sustainability and Sustainable Finance (SSF), a newly created position to bolster and expand SGX's sustainability efforts. She helped set up and heads the Sustainability Steering Committee (SSC). The SSC is a CEO-sponsored committee and comprises EMCO members who lead different sustainability priorities to drive the implementation of SGX's sustainability strategy as a regulator, business and ecosystem. The SSF function, together with the committee, will also regularly update and advise EMCO on material sustainability matters.

SGX will continue to advocate transparency and accountability in delivering our sustainability targets.

Sustainability Risk Management

SGX understands the importance of developing a robust strategy and risk management framework for SGX's sustainability journey. Additionally, there is increased focus from regulators, investors and other stakeholders on requirements for enhanced climate-related risk oversight for the integration of climate risks and opportunities into investment decision-making.

Similarly, we recognise the magnitude of climate change impact on our ecosystem and business. SGX targets to fully adopt the TCFD recommendations within the next few years. Recognising that sustainability risks, including climate-related risks, are inherently linked to other strategic, financial and operational risks, we will be refining our risk taxonomy to include sustainability risks and work towards embedding sustainability risks in our Enterprise Risk Management framework (refer to Corporate Governance Report – Risk Management, pages 91 to 93).

Interview with Head of Sustainability & Sustainable Finance

A conversation with Herry Cho



What is your motivation to take up the sustainability mantle at SGX?

Today and in the coming decades, sustainable development will require a seismic systemic change in our economic and financial systems. Everyone has to play their part. My passion for enabling systemic changes, bringing to light best practices, at the same time empowering via practical solutions led me to this important post. SGX has multitude of roles and responsibilities, as a company, as a market operator, as a market regulator, and to facilitate the ecosystem's change. Facilitative leadership will play a critical role in realising SGX's vision to be a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems. It is an honour to work with all stakeholders to make SGX, and in turn Asia's financial ecosystem, a thought and action leader, protecting our planet for future generations.

How will SGX sustainability strategies stand out compared to other exchanges?

Singapore is a leading international finance, trade and legal hub in Asia with a favourable business climate and an innovative streak, at the same time exercising strong governance. Furthermore, it is gearing up to become a sustainable, green and carbon services and finance hub, and SGX plays a critical role in enabling this. We aim to provide end-to-end products, solutions and ecosystem across all stages of the sustainability journey for companies, investors, traders and other intermediaries. As a front-line regulator, SGX RegCo works closely with our stakeholders to promote

sound sustainability practices to create long-term value, including for companies.

Can you give examples of how SGX's sustainability initiatives can potentially open new business opportunities while contributing to a more sustainable ecosystem?

CIX will offer a global exchange and marketplace for companies to access high-quality carbon credits. CIX aims to leverage on satellite monitoring, machine learning and blockchain technology to enhance transparency, integrity and quality of carbon credits that deliver tangible and lasting environmental and social impact. SGX is providing guidance on carbon mitigation hierarchies so that buyers of carbon credits know when and how to utilise them. More broadly, we plan on capacity building for credible sustainability-linked and transition financing solutions such as sustainability-linked bonds and transition bonds.

Investors are increasingly focusing on achieving real-world emissions reductions. Scientific Beta, an SGX subsidiary, is catering to this increasing appetite for climate impact, and has launched a unique series of CICI.

We must also address other material ESG factors, including social and governance pillars, to attain a better outcome for investors, communities and future generations. While minimum social safeguarding is critical, we will also focus on the opportunities and business growth, such as social and sustainability bonds.

How have SGX's sustainability strategies supported the way companies, investors and intermediaries operate?

SGX has always put our ecosystem as the North Star. Our ethos is to be a positive influence, foster collaboration and partnerships to provide data, tools, resources. We aim to connect stakeholders to drive industry discussions. This has been demonstrated over the past decade of sustainability action set out in the next page, and we are ramping up by leveraging on our existing assets and expertise.

Looking forward, we will have to lead, futureproof and build.

- Lead by example, thought and action leadership (e.g. joining Race to Zero and setting up GHG science-based targets), building on global, regional and local ESG networks;
- Futureproof for increasingly complex and mandatory disclosure/data requirements (e.g. SGX RegCo will build on its mandatory sustainability reporting standards for SGX-listed companies by strengthening climate-related disclosures in the regulations after public consultation this year); and
- Build new products, solutions and culture that truly add value to the sustainable development journey of our ecosystem.

I look forward to regularly sharing with our community on SGX's progress in our contributions towards a leading sustainable financial system.

2009-2017



2009: Published SGX's first own Sustainability Report

2010: Issued Policy Statement on Sustainability Reporting

2016: TCFD Vice Chair appointment

2016: Launched iEdge ESG indices



2013: Listed first Green Bond Listing

2016: Joined UN Sustainable Stock Exchanges (SSE) initiative



2018

- Hosted ASEAN Conference on TCFD Recommendations
- Launched world's first high-grade Iron Ore Derivatives
- Published Investor Guide to Reading Sustainability Reports
- SGX-NUS Case Competition:
 Sustainable Investments

2019

- GRI ASEAN Hub partner
- Knowledge Partner to Asia Sustainable Finance Initiative (ASFI)
- Co-developed Maritime Sustainability Reporting Guide
- Inaugural sustainability reporting review with CGIO and NUS-CGS
- Launched Low-Sulphur Fuel Oil (LSFO)
 Derivative Contract

2020



Launched SGX's FIRST platform



Renewable Energy Certificates (RECs) market offerings launch by EMC

- Nasdaq Sustainable Bond Network (NSBN) initiative
- Baltic Exchange issued "nonscrubber fitted" benchmark vessel alongside IMO2020 implementation
- Launched e-learning modules on Sustainability Reporting
- Awarded Asia's Best Sustainability
 Report award at the 5th Asia Sustainability
 Reporting Awards 2020
- Became a signatory of the UN Global Compact
- Recognised on Bloomberg's Gender-Equality Index

2021



Announced launch of Climate Impact X

 Launched decarbonisation and transition white paper guide



Scientific Beta launched Climate Impact Consistent Indices



Launched ESG Derivatives

- Second sustainability reporting review with NUS-CGS
- Joint study with KPMG & NUS-CGS: "Perspectives of Financial Institutions on Sustainability Disclosures"
- SGX-NUS Case Competition: Carbon Credits

Our Sustainability Vision

As a leading multi-asset exchange, SGX wants to support our partners, companies, investors and other stakeholders in every step of their sustainability journey, as we progress to meet the expectations and demands of the market.

We will be guided by our four core pillars – Ecosystem, Company, Business, Regulator – in how we approach sustainability.

Ecosystem: Be a positive influence and foster collaboration and partnerships by providing data, tools, resources and connecting stakeholders to drive industry discussions

SGX actively collaborates with partners to drive long-term value creation for our stakeholders. We have been a partner exchange with the UN Sustainable Stock Exchange (SSE) initiative since 2016 and involved in the World Federation of Exchanges' sustainability workstreams since 2015. SGX also works with multiple industry partners on capacity-building initiatives to support our stakeholders on their sustainability journey.

Business: Offer ESG solutions, capitalising on our assets, expertise and capabilities

SGX encourages the growth of green, social, sustainability bonds and sustainability-linked bonds in Asia. We are the exclusive partner in Asia for the NSBN initiative, which aims to enhance data access and transparency of sustainable bonds.

Our Vision

To be a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems



In the ecosystem

Be a positive influence and foster collaboration and partnerships to provide data, tools, resources and connecting stakeholders to drive industry discussions.



As a company

Demonstrate leadership in sustainability.



As a business

Offer ESG solutions and support capitalising on our assets, expertise and capabilities:

- Equity
- GSSS Bonds
- Indices (incl. Scientific Beta)
- Commodities (incl. Baltic Exchange, HeveaConnect, Energy Market Company offering RECs)
- New horizon projects (CIX, new products)



As a regulator

Guide the market on sustainability-related disclosures and practices.

As the world's most liquid international market for the benchmark equity indices of China, India, Japan and ASEAN, SGX is capitalising on its expertise and capabilities to design and develop ESG-centric products and services for our customers' investment and risk management needs.

Moving forward, we intend to support and curate more green, climate-aligned or ESG products and services that will interest investors and simultaneously futureproof our business.

SGX is further fortifying our support for our subsidiaries' sustainability journey and leadership, such as for Baltic Exchange, Scientific Beta and EMC. We also recently acquired a minority stake in HeveaConnect, a digital rubber platform which provides sustainability-related information.

Regulator: Guide market on sustainability disclosures that are decision-useful for investors

As a regulator, SGX strives to be a leader in the sustainable finance ecosystem. We are committed to guiding prospective and listed companies in their sustainability journey through multi-stakeholder discussions, consultations with investors and informal engagement with listed companies.

To support our listed companies, we have organised capacity-building workshops, online training and seminars on sustainability topics to help enhance sustainability disclosures. Taking this a step further, SGX aims to help our listed companies align their climate reporting with recommendations from the TCFD.

Company: We strive to be a demonstrative leader and adopt sustainable practices, operating at the highest international standards

SGX strives to adopt sustainable business practices in line with high international standards and reduce our carbon footprint in line with science-based targets and carbon mitigation hierarchy. Through our own disclosures, we aim to lead by example in the ecosystem in which we operate.

We are an active supporter of community services. SGX is also a component of several global ESG indices including FTSE4Good Index, Bloomberg ESG Data Index and MSCI World ESG Leaders Index.

Executing our Vision

As demonstrated above, we recognise the multifaceted nature of our business and the impact that SGX has on the wider ecosystem through our roles as regulator, business and company. As such, we intend to support sustainable transitions in the market through three main strategies – to lead, future proof and build with current and new initiatives.

Lead

We are continually working closely with partners in our ecosystem to define and establish meaningful sustainability leadership in the global, regional and local arena.

Futureproof

Solidify our position in leading segments, such as fixed income, derivatives and equity.

Increase our capacity to respond to ESG risks and opportunities and foster knowledge sharing in the ecosystem.

Promote sustainability data centricity to encourage better decision making and accurate and comparable data in the market.

Build

Explore new business opportunities as demand for sustainable investments grow.

Enhance regulatory frameworks and a culture that facilitates the sustainable transition.

Demonstrating our Vision and Execution Through our Approach to Climate Action

One of the key priorities in our Sustainability Vision is climate action and we aim to be a holistic partner during every stage of the transition.

We are mindful that the decarbonisation journey towards a low-carbon economy can be complex. As such, our guidance paper "Credible decarbonisation and transition for corporates in Asia" produced with expert partners CDP, Climate Bonds Initiative (CBI) and HFW lays down six key steps:

Six key steps:



02

03

04

05

()F



Measure your carbon footprint, and understand the key risks and opportunities



Set emission reduction targets according to the carbon mitigation hierarchy per these key steps, and align to science whenever possible. Consider the level of ambition e.g. mid-term at well-below 2°C, 1.5°C and a longer-term net-zero target, with consistent interim

milestones



Reduce your absolute emissions footprints first within your operations, and within the company's supply chain



Neutralise unavoidable residual emissions in the company's own supply chain by permanently removing carbon from the atmosphere or by using quality, permanent carbon-removal credits



Compensate year-on-year (YoY) to prevent, reduce or eliminate GHG emissions inside the supply chain, and finance climate action through direct investments and quality carbon credits outside the supply chain

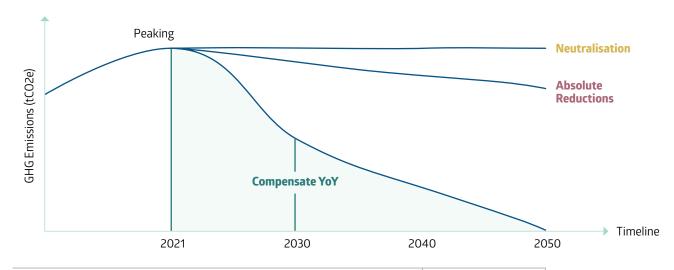


Disclose the progress of your journey YoY for steps 1 to 5

This transition necessitates Capex and Opex changes, which may only happen over a period of time in some sectors due to constraints related to policies, commercial viability and technological development. Companies should go on a rapid emissions reduction journey wherever they can, which will require financing. Our offerings on green, sustainability, transition and sustainability-linked bonds can help finance Capex such as for more energy-efficient facilities and renewable energy. Companies and investors can further hedge via ESG equity derivatives and environmentally enhanced versions of commodity derivatives.

For neutralising and compensating for the remaining unabated emissions en route to net-zero, we plan to offer high-quality carbon credits through our CIX platform.

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Absolute Reductions	Decarbonisation Capex intensive period	
Debt Financing options	 Green bonds/loans Sustainability bonds/loans Transition bonds Sustainability-Linked Bonds (SLBs)/loans 	
Equity Financing	Tap into increasing thematic and impact funds e.g. renewable energy fund or decarbonisation funds	
Neutralise Carbon removals projects/ credits	After all value chain reductions are prioritised, neutralise with investments in removal projects, credits or impact investments	
Compensate	Year-on-year as best practice and last step, purchase carbon credits to mitigate ongoing emissions	
Disclose	Disclose the target, progress and actions taken every year	

Disclosure and transparency are going to be focal points globally, which we will support via enhanced disclosure standards for the listed companies with a particular focus on climate. Our indices such as Scientific Beta's CICI provide transparency for investors, and our FIRST platform houses ESG ratings of listed companies. We have further work in progress ESG data portals for both equity and fixed income. We will continue to develop our FIRST platform to provide content and support for companies and investors who are embarking on their sustainability journey.

SGX is continuously raising disclosure and transparency standards to provide investors with timely access to decision relevant climate-related information. In addition, we seek to strengthen the climate resilience of our ecosystem through providing market guidance, research and developing climate-related products.

Stakeholder Engagement

At SGX, we define stakeholders as persons and entities which we engage with that have an influence on the value of the company. Stakeholder engagement is important to guide SGX's commercial and policy decisions. Stakeholder perspectives can provide an "outside-in" view on the impacts of our policy decisions. These views are important to help SGX's long-term commitment to nurture and build a robust Asian capital market.

We engage our key stakeholders through various platforms and channels and take their feedback into careful consideration, to ensure that our decisions benefit our stakeholders as a whole. Due to COVID-19 restrictions, engagements in FY2021 were largely conducted virtually.

The table below summarises our approach to stakeholder engagement in FY2021:

Key Stakeholders	Engagement Methods	Interests and Concerns
Employees	 Town halls, focus group discussions, employee surveys, workshops, trainings and seminars, corporate events and the Connects intranet platform. 	 Opportunities for career growth and development Employee engagement, wellness, safety and work environment Updates on organisational strategy, plans and performance
Regulators and Government	 Dialogue, feedback sessions and jointly organised events. 	Market structure developmentsCorporate governanceRegulatory policies and practices
Issuers	 Dialogue, workshops, promotional roadshows and seminars. 	Listing policies and practicesGrowing liquidity and market capitalisationAccess to investors
Intermediaries	 Dialogue, feedback sessions, training and jointly organised exercises and events. 	 Infrastructure developments and business continuity planning Regulatory policies and practices Distribution of products and services
Shareholders and Research Analysts	 Management briefings, non-deal investor roadshows, investor conferences, and annual general meeting. 	Organisational financial performanceCorporate strategy and growth initiativesDividend policy
Investment Community	 Investor perception study, retail investor education and advocacy programmes via the SGX Academy and non-deal investor roadshows. 	 Retail investor financial literacy and investment education Organisational financial performance and execution of strategy Increasing investment returns
Public and Communities	 Public consultations, seminars and programmes, scholarship and internship programmes, fundraising and corporate activities. 	 Market structure developments and corporate governance policies Academic learning opportunities Corporate social responsibility activities

Annual Institutional Investor Perception Study

Through the engagement of an independent third party, SGX has been conducting an annual investor perception study since FY2015. The purpose of the study is to understand the investment community's sentiments on our strategy, management team, investment case, capital allocation, investor communications and corporate governance. In-depth interviews were conducted with past, current and potential shareholders, followed by a comprehensive analysis of the results.

Key findings from the FY2021 investor perception survey were as follows:

- SGX continues to be viewed positively as an exchange focused on innovation with very strong corporate governance practices. Investors praised management for its consistency of strategy and execution, including the way it has successfully navigated the transition from MSCI to FTSE.
- The investment community appreciates SGX's efforts to develop its multi-asset capabilities and believes that the firm is well positioned for future long-term growth. The range of products SGX offers and its track record of creating new ones to respond to changing market needs continues to be viewed as a key differentiator.
- Investors would like to see further evidence of the contribution from new growth drivers including the acquisitions that have been made. The need to develop new growth engines is seen as particularly acute because many maintain there are still significant structural challenges facing the domestic Singaporean equity market. They believe it is vitally important for SGX to attract new high-growth companies to its exchange, despite the intense competition from regional peers, to bolster the market's liquidity and volumes.
- Respondents wish to see SGX focus on growth investments with organic growth continuing to be the highest priority, followed by inorganic opportunities.
- The quality of SGX's management team is now the most commonly cited reason to invest.

Stakeholder Survey on ESG

In a separate engagement, SGX also surveyed stakeholders to determine the level of importance we should accord to sustainability in its strategic planning, products and solutions. These include institutions such as SGX-listed companies, members and investors. In embedding sustainability in SGX's strategic planning, 75% of respondents agreed to its importance; 68% of respondents felt that it was

important that SGX continues to introduce ESG products; and 69% agreed that SGX should develop ESG information solutions to facilitate investment decisions. For retail investors, the survey found that 2 out of 3 (66%) retail investors consider ESG factors when investing. The most important factor in ESG is governance, where there is high demand for transparency. Retail investors also felt that it is important for SGX to offer ESG products (69%) and provide ESG information and solutions to help in making investment decisions (70%). However, 57% of respondents felt that ESG information is not easily accessible.

In response to the growing demand for ESG considerations among stakeholders, we have enhanced our sustainability approaches and refreshed our material assessment to cater to the sustainability development of the investing ecosystem.

Studies on Topics of Shareholders' Interest

Besides our annual investor perception survey, we also conducted two studies with our partners on sustainability disclosures.

The study 'Perspectives of Financial Institutions on Sustainability Disclosures' was published in collaboration with the National University of Singapore (NUS) Business School's Centre for Governance and Sustainability (CGS) and KPMG in Singapore. The study found that financial institutions (FIs) in Singapore highly value ESG performance, with a clear emphasis on climate risk. Majority of them expressed that they evaluate companies' sustainability disclosures as part of their decision-making process, particularly in relations to energy, water, waste and effluents.

SGX and NUS CGS also published a review of our listed companies FY2021 sustainability reports. The study found that the new reports demonstrated an overall improvement in quality compared to FY2019. This improvement was against a backdrop of greater challenges brought about by COVID-19 and climate change.

More details about these studies can be found under Section 8 (Strengthening Sustainable Resilience and Stewardship): 'Research and Collaborations'.

Public Consultations

In FY2021, SGX held four public consultations to obtain feedback on possible amendments to our rules. The consultations covered enhancements to the default management process for managing clearing member defaults, enhancements to the scope of direct enforcement actions available to SGX RegCo, a new framework to enable the listing of Special Purpose Acquisition Companies (SPACs) on the SGX Mainboard, and rule changes in connection with the GIFT Connect.

More details about the results of the public consultations can be found at: https://www.sgx.com/regulation/public-consultations.

Regulatory Response to COVID-19

COVID-19 has caused disruption to many businesses, including SGX and our stakeholders. We proactively engaged our stakeholders, responded to their needs to maintain market confidence and helped the market deal with safe distancing and sudden and unexpected financial constraints.

SGX RegCo supported our listed issuers and members through the following regulatory initiatives to enable them to focus on dealing with the challenges posed by COVID-19:

- As COVID-19 safe management measures were extended beyond earlier deadlines, SGX RegCo worked with statutory regulators to facilitate virtual general meetings until further notice, under the COVID-19 (Temporary Measures) (Alternative Arrangements for Meetings) Orders (the "Meeting Orders").
- We published two Regulator's Columns in July 2020 to set out our expectations on the preparation of financial statements and sustainability reports amid COVID-19. We also issued guidance in May 2021 on the application of accounting standards for interim and full-year financial statements.

- SGX RegCo stepped up our outreach to brokers and members, to ensure market orderliness and operational resilience. We published an Algorithmic Trading Regulatory Guide to alert members to potential operational risk areas and provide guidance on risk monitoring. We increased our monitoring of member firms to ensure that they were financially sound, and stress-tested their financial positions. In addition, we assessed retail members' responsiveness to threats and cyberattacks in a Cyber Tabletop exercise in March 2021 and communicated our expectations of members' containment, response and recovery plans based on predefined cyberattack scenarios and exercise injects.
- We also applied artificial intelligence enhancements to our real-time monitoring surveillance system which enabled us to reduce the number of false positives in alerts and identify more complex types of market misconduct during extreme market volatility.
- To facilitate fundraising by listed issuers during this period, SGX RegCo extended the availability of the enhanced share issue mandate thresholds for Mainboard companies, allowing issuers up to 31 December 2021 to seek or renew their general mandate to issue shares of up to 100% of their total issued share capital, compared with a share issue limit of 50% of their issued share capital before COVID-19. This supported companies that needed to recapitalise urgently.
- We also extended the suspension of the Financial Watch-list beyond June 2021 to enable companies to focus on meeting their current business and economic challenges.
- Given the challenging economic conditions and concerns on financial viability, SGX RegCo stepped up financial statements reviews and actively queried companies with signs of financial difficulties. SGX RegCo

- leveraged on technology and implemented Phase 1 where alerts are generated to prod disclosures when certain internally developed financial indicators are triggered. This project will continue to be enhanced in the next phases to improve predictive capability and enable early detection of fraud in companies under financial duress or those that exhibited signs of potential financial irregularities.
- SGX RegCo also stepped up engagements with companies' Audit Committees ("ACs") and external auditors to highlight areas of concerns identified by SGX RegCo based on our own internal review. The objective was to draw ACs' and external auditors' attention to areas when undertaking the audit as well as to consider if matters highlighted by SGX RegCo had been dealt with or would be considered for discussion in the key audit matters of the company's Annual Report.
- In line with Singapore's efforts to be a debt restructuring hub, we engaged market practitioners to obtain feedback on issues they faced in the application of the Listing Rules in a debt restructuring scenario. SGX RegCo is reviewing the listing rules to ensure that they are able to facilitate restructuring and potential bond defaults.

Materiality Assessment

In FY2021, we undertook a materiality review exercise with a global knowledge partner to build and expand our material factors. This was done taking into consideration the rapidly evolving sustainability landscape. As part of this exercise, we adopted the dual materiality approach when reviewing our material topics, to emphasise both the matters that are important to our value creation and the wellbeing of our stakeholders. This dual perspective helps us to understand how our material ESG topics impact the wider society, the economy, and the environment, as well as our own operations and business performance.

As an exchange and regulator, we recognise that our impact extends beyond our organisational boundary. Our materiality factors thus reflect our priorities and initiatives for both our organisation and the wider ecosystem. Some of our identified material topics have impacts that span across both boundaries.

Our materiality assessment process involved three steps: selection, assessment and validation of material topics. Firstly, we selected our material topics after considering global and sectoral ESG topics, sustainability topics identified by peers, and SGX's risks and opportunities at an organisational level. Secondly, we assessed our shortlisted material topics based on their importance to stakeholders in the decision-making process and their impact on SGX. Finally, we validated our material topics through engagement with internal stakeholders.

We believe our newly curated material sustainability topics reflect our role as a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems, as well as our position as a trusted and reputable regulator in Asian capital markets. Our material factors cover the following themes:

- 1. Leading in governance and transparency
- 2. Developing a sustainable ecosystem
- 3. Engaging, supporting and developing people
- 4. Building a sustainable business

SGX's Material Topics

The prioritisation of the following material factors was based on the importance to stakeholders in the decision-making process and their impact on SGX. They are not listed in any order of importance.

Section

Material factor

management

Alignment with international

compliance)

clean energy)

SDG7 (affordable and

and communities)

SDG13 (climate action)

TCFD recommendations

SDG11 (sustainable cities

Section	Material factor	Definitions and examples	sustainability frameworks	
markets		Efforts to combat corruption, comply with tax and other regulations, manage conflicts and maintain SGX and the broader capital market infrastructure as peaceful, just and strong institutions.	 SASB's Managing Conflict of Interest requirements GRI 205 (anti-corruption) GRI 207 (tax compliance) GRI 419 (socioeconomic compliance) SDG16 (peace, justice and strong institutions) SDG17 (partnership for the goals) 	E. JUSTICE STRONG TUTIONS TUTIONS THE GOALS
	Transparent capital markets	Efforts to disclose trading halts and pauses, involvement in automated trading, alert policy regarding the timing and nature of public release of information by listed companies that may affect a stock price, policies for ESG disclosures of listed companies, and collaborations for more transparent capital markets.	FN-EX-410a.2, FN0203-017 FN-EX-410a.3, FN0203-04 / FN-EX-410a.4 GRI 203 (indirect economic impacts) SDG8 (decent work and economic growth)	T WORK AND MIC GROWTH INTO THE PROPERTY OF T
	Business continuity	Number of significant market disruptions and downtime, data breaches, efforts to prevent technology errors, security breaches and market disruptions, and other initiatives enhancing the economic resilience of financial markets.	 SASB FN0203-08 / SASB FN-EX-550a.1 SASB FN0203-09 / FN-EX-550a.2 SASB FN0203-07 / FN-EX-550a.3 GRI 102-15 (general strategy – key impacts risks & opportunities) SDG8 (decent work and economic growth) 	T WORK AND
2. Developing a sustainable ecosystem	Demonstrative leadership in carbon emission	Commitment to science-based targets to reduce our carbon emissions to limit global	 GRI 302 (energy) GRI 305 (emissions) GRI 307 (environmental 	DABLE AND ENERGY

temperature rise to 1.5-degree and

in line with the Paris Agreement.

Efforts to minimise and conserve

resources, in line with responsible

consumption and production, and

in compliance with environmental regulations and guidelines for sustainable cities and communities.

Definitions and examples

Section	Material factor	Definitions and examples	Alignment with international sustainability frameworks
2. Developing a sustainable ecosystem	Stewardship of the financial ecosystem	Efforts to advance the adoption of globally-recognised ESG and climate-related guidelines and frameworks, through partnerships and implementation of disclosure policies.	 SASB FN-EX-410a.4 (ESG disclosures of member companies) GRI 102 (general disclosures) SDG13 (climate action) SDG17 (partnership for the goals) TCFD recommendations
3. Engaging, supporting and developing our people	Employment practices and employee development	Employment practices that ensure the health, safety and well-being of our staff, and employee development.	 GRI 401 (employment) GRI 402 (labour management and relations) GRI 403 (occupational health and safety) GRI 404 (training and education) SDG8 (decent work and economic growth)
	Diversity and inclusivity	Embracement of diversity amongst our staff, regardless of gender, age and other socio-cultural factors, and maintenance of an inclusive work environment.	 GRI 202 (market presence) GRI 405 (diversity and equal opportunity) GRI 406 (non-discrimination) GRI 407 (freedom of association and collective bargaining) SDG5 (gender equality) SDG8 (decent work and economic growth) SDG10 (reduced inequality)
4. Building a sustainable business	Economic performance	Revenue and other indicators of business growth.	SASB FN-EX-000.A & FN-EX-000.B GRI 201 (economic performance) SDG8 (decent work and economic growth)
	Sustainability products and services	Revenue-generating products that are green or ESG-focused, which contribute to SGX's business resilience while advancing international climate-related goals.	 GRI 102 (general disclosures) GRI 201 (economic performance) SDG8 (decent work and economic growth) SDG9 (industry, innovation and infrastructure) TCFD recommendations

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Summary of FY2021 Performance & FY2022 Targets for Material Themes

SGX discloses yearly performance and targets in line with its key material topics. In FY2021, our sustainability reporting practices were mostly deemed to be 'above average' among listed companies in Singapore, according to a joint review in 2021 by SGX RegCo and the Centre for CGS at the NUS Business School. In FY2021, we underwent a materiality review exercise to expand our material factors in a more holistic manner to reflect our priorities and initiatives as a company, business and a regulator.

The below highlights will be further expounded upon on pages 58 to 72.

Performance and Initiatives in FY2021

Leading in governance and transparency

Ethics and compliance

- Disclosed Code of Conduct and Ethics Policy and Tax Policy in line with GRI 207 and SASB: Managing Conflict of Interest
- Zero cases of bribery, corruption, anti-competitive behaviour, or other material non-compliance with the law
- Zero monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behaviour, market manipulation, malpractice, or other related financial industry laws or regulations (SASB FN-EX-510a.1)
- Disclosed processes for identifying and assessing conflicts of interest, including Conduct and Ethics Policy and Regulatory Conflicts Handbook (SASB FN-EX-510a.2)
- Working on advancing ethics and compliance through a public consultation on changes to listing rules regarding enforcement

Transparent capital markets

- During the year, there were 959 voluntary trading halts relating to the public release of information and 28 occurrences
 of trading pauses related to trading volatility (SASB FN-EX-410a.1)
- Disclosed involvement in automated trading and associated risks and opportunities (SASB FN-EX-410a.2)
- Disclosed alert policy (SASB FN-EX-410a.3)
- Disclosed policies for ESG disclosures of listed companies (FN-EX-410a.4)
- Collaborated with partners towards more transparent capital markets via regulatory cooperation with Nasdaq
- Published quarterly Public Quantitative disclosures in line with CPMI-IOSCO guidelines, providing transparency on how SGX's post trade, clearing, settlement and depository activities are governed and operated, and risks managed

Business continuity

- Zero significant market disruptions or downtime (SASB FN-EX-550a.1)
- Zero material data breaches (SASB FN-EX-550a.2)
- Disclosed efforts to prevent technology errors, security breaches and market disruptions (SASB FN-EX-550a.3)
 - Efforts included conducting 19 business continuity and IT disaster recovery exercises, of which 3 exercises involved industry participants

Developing a sustainable ecosystem

Demonstrative leadership via carbon and resource management

- Our first disclosure of absolute emission and intensity for Scope 1, 2 and 3 in line with Greenhouse Gas Protocol Standards
- SGX's Central Depository (CDP) moved online to reduce our environmental footprint
- Continued encouragement for staff to reduce the use of electricity and paper in offices, in line with our internal Environmental Policy
- Implemented measures to reduce electricity consumption, including office temperature management and replacement of high-consumption lighting

Stewardship of the financial ecosystem

- Continued facilitating our listed companies' navigation of the sustainability reporting requirements by offering relevant capacity building workshops and resources for them at subsidised rates or free-of-charge
- Commissioned a review and offered feedback to our listed companies on their progress in sustainability reporting
- Conducted research with partners to improve sustainability disclosures
- Conducted three large scale public investor education events
- Conducted over 250 investor education seminars and courses virtually

Performance and Initiatives in FY2021

Engaging, supporting and developing our people

Employment practices and employee development

- Achieved 60 average training hours per employee, exceeding our target of 35 average training hours per employee
 13 hours more than the 47 average training hours per employee in FY2020
- Attained the ISO 45001 (occupational health and safety management systems) certification
- With the extended work-from-home situation due to COVID-19, we helped teams and individuals to better connect with each other via team-based interventions such as the Emergenetics Profiling Report and workshops, to establish better rapport and collaboration among team members
- We continued to transition our traditional classroom instructor-led programmes to a virtual format to support our employees' efforts at continuous learning. We curated a series of learning offerings through our digital learning platforms to provide more opportunities for our employees to continue learning while working from home
- We worked on building in-house technical capabilities through the design and development of digital-learning courses
- We implemented innovation-benchmarking workshops for employees to create awareness of disruptive socioeconomic trends
- We ran leadership-development programmes for senior managers to build on our leadership capabilities

Building a sustainable business

Sustainability products and services

Launched SGX FIRST, which is Asia's only multi-stakeholder, exchange-led sustainability platform with a suite of products
across asset classes

SGX FIRST (Future In Reshaping Sustainability Together)

Fixed Income	Equities	Equity Derivatives	Indices	Commodities
 #1 Green Bond Listing Venue in Asia with more than 50% market share of Asian Issuances in the last 12 months² Top 5 Green Bonds marketplace globally with 7% market share Work in progress Bond database and digitalisation Further support for sustainability- linked and transition bonds 	 Provision of ESG Ratings of Listcos Vice-Chair of TCFD & future guidance Work in progress ESG data portal Further productisation on climate, green and ESG themes 	 Complete ESG Futures shelf in regional derivatives SGX FTSE Emerging ESG Index Futures SGX FTSE Emerging Asia ESG Index Futures SGX FTSE Asia ex Japan ESG Index Futures SGX FTSE Blossom Japan Index Futures SGX Nikkei ESG-REIT Index Futures 	 Strong thematic and proprietary capabilities ESG screening and low carbon/ESG/ climate risk filters Scientific Beta ESG & CICI iEdge SG ESG Leaders Index iEdge SG ESG Transparency Index 	 CIX: carbon exchange and market place Environmentally enhanced commodities contracts – e.g. 65% Fe Iron Ore futures RECs market offerings as part of the PowerSelect platform Baltic Exchange: Low Sulphur route pricing supporting IMO 2020 agenda HeveaConnect

- SGX is the exclusive partner in Asia for the NSBN. This network aims to be the leading source of information on green, social and sustainability bonds, to help global investors conduct due diligence, selection and monitoring of these bonds. The addition of SGX data which supports the financing of projects such as renewable energy, sustainable land use, clean transportation as well as social and humanitarian causes expands the network to 650 issuers and approximately 6,500 bonds
- SGX launched five equity futures including SGX Nikkei ESG-REIT Japan Index Futures the world's first ESG REIT derivatives. The new derivatives are designed to enable seamless adoption of ESG factors into investment portfolios

² As of May 2021, data from Bloomberg

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Performance and Initiatives in FY2021

Building a sustainable business

- SGX aims to launch CIX by end-2021 with DBS, Standard Chartered and Temasek. CIX will be a Singapore-based global
 carbon exchange and marketplace that aims to scale the voluntary carbon market by connecting an ecosystem of partners
 to empower corporations to take effective action and complement carbon reduction efforts
- Scientific Beta's CICI is the only pure climate index offering on the market that translates companies' climate performance and alignment engagement into portfolio decisions, thus helping investors to achieve real-world emissions reductions
- As part of our support to develop a sustainable supply of natural rubber, SGX invested US\$1.5 million for a stake in
 HeveaConnect a digital rubber trading platform which provides sustainability-related information

Targets for FY2022

Leading in governance and transparency

Ethics and compliance

- Maintain zero cases of material non-compliance with laws
- Disclose number of material non-compliance with laws
- Disclose number of incidents of corruption and actions taken

Transparent capital markets

- Disclose number of voluntary trading halts, and number of halts due to market volatility
- Disclose percentage of trades generated from automated trading systems
- Disclose policies relating to alerts and disclosure of material information of listed companies
- Disclose policies relating to the disclosure of ESG information by listed companies

Business continuity

- Disclose the number of significant market disruptions and downtime
- Disclose the number of material data breaches
- Demonstrate efforts in preventing technology errors, security breaches and market disruptions

Developing a sustainable ecosystem

Demonstrate leadership in carbon emission management

- Reduce Scope 2 absolute carbon emissions by 42% by FY2031, in line with the SBTi 1.5°C emissions scenario with a base year of FY2021³
- Disclose Scope 1, 2 and 3 carbon emissions for the year
- Demonstrate efforts to reduce environment footprint

Stewardship of the financial ecosystem

- Conduct education events for the investment community and listed companies, including sustainability
- Implement initiatives to encourage listed companies to advance their sustainability journey

Engaging, supporting and developing our people

Employee development, talent management and retention, employment practices and employee well-being

- Achieve 40 average training hours per employee or more, as set out in our yearly target
- Implement programmes for upgrading employee skills and transition assistance programmes
- Achieve 70% favourable learning evaluation survey results for all programmes delivered
- Achieve 90% of employees developing an individual development plan (IDP) for their personal development
- Achieve 100% performance appraisal discussions conducted for all employees

Building a sustainable business

Economic performance

Disclose the group's financial statement in accordance to accepted financial reporting standards

Sustainability products and services

- Introduce new ESG-focused investment and risk management products and services
- In line with SBTi, SGX has excluded Scope 1 from our targets as Scope 1 emissions are immaterial (<5% of combined Scope 1 & 2 emissions.) We will also seek to reduce Scope 3 emissions by engaging with suppliers to set GHG targets. More information can be found in carbon and resource management section.

The following sections further elaborate on SGX's initiatives for each of our identified material factors.

1. Leading in Governance and Transparency Ethics and Compliance (SASB: Managing Conflict of Interest)

- SASB's Managing Conflict of Interest requirements
- GRI 205 (anti-corruption)
- GRI 207 (tax compliance)
- GRI 419 (socioeconomic compliance)
- SDG16 (peace, justice and strong institutions)
- SDG17 (partnership for the goals)

Code of Conduct and Ethics Policy

At SGX, we advocate the highest level of conduct and ethical standards to maintain high standards of governance. The SGX Conduct and Ethics Policy, the Staff Dealing Policy, the Regulatory Conflicts Handbook and the Regulatory Conflicts Code and Information Barrier Policy are essential in guiding the behaviour of our employees.

All employees are required to undergo rigorous training, including annual compliance training, to familiarise themselves with these policies. These policies provide guidance on appropriate conduct for common ethical issues, such as conflicts of interest, bribery and corruption, confidential information, insider trading, among others.

We also educate all our employees on our Whistleblowing Policy, to facilitate the reporting of suspected and actual cases of improper, unethical or fraudulent conduct. The Whistleblowing Policy, including related reporting and communication channels, is publicly available on our website. The Board and EMCO take a firm stance on the ethics and integrity of SGX employees and a serious view on non-compliance.

There were no cases of bribery, corruption, anti-competitive behaviour, or other material non-compliance with the law during the year. We continue to strive to uphold the highest standards of corporate governance with respect to our stringent governance framework.

Advancing Ethics and Compliance

To further strengthen the trust and confidence of investors in the market's integrity, SGX RegCo introduced changes to the Listing Rules governing enforcement actions for greater and swifter accountability and clarity in the securities market. We also mandated all issuers to establish and maintain a whistleblowing policy. Issuers will be required to state in their annual reports that such a policy is in place for financial years commencing from 1 January 2021.

SGX RegCo's current range of direct enforcement powers is mainly confined to private actions. These actions have been regularly meted out but always away from the public eye. While public sanctions are also available, only the independent Listings Disciplinary Committee (LDC) can wield the powers for these sanctions. Challenges have also arisen from conflicts of interests when members try to form a hearing committee that satisfies quorum and independence requirements.

With effect from 1 August 2021, SGX will have the powers to deal with cases that call for public sanctions which the LDC can hear, excluding those where fines may be imposed. A fine is the most severe of disciplinary actions and the committee will continue to be the sole party to wield this power.

We have also acquired additional powers where an issuer under investigation must seek our approval

before directors can be appointed or re-appointed to its board. In addition, SGX Regco has the power to object to the appointment or re-appointment of directors and/or executive officers who are under investigation.

SGX RegCo has been working closely with different segments of the market community to raise standards, and to detect and deal with misconduct or wrongdoing. To include listed companies too can contribute to these efforts. Hence, we require companies to put in place and disclose arrangements to receive and investigate whistleblowing allegations as well as proper provisions for protection of the whistleblower within the company.

Tax Policy (in line with GRI 207)

Approach to tax (GRI 207-1) SGX is committed to regulatory compliance as part of our tax strategy, which involves:

- Complying with the relevant tax laws and regulations across countries and territories in which we operate and have a taxable presence
- 2. Filing tax returns accurately and in a timely manner, and ensuring all applicable tax obligations are fulfilled appropriately
- Paying our fair share of taxes and considering tax planning activities that are in accordance and in full compliance with tax laws before implementing business plans
- Consulting independent third-party advisors and tax authorities on transactions with significant tax uncertainty

The CFO is responsible for oversight of SGX's tax strategy and overall function, with support from the Head of Tax.

SGX is committed to tax compliance and engage regularly with authorities.

Tax governance, control and risk management (GRI 207-2)

The tax function is part of our finance team and within the responsibility of CFO. Both CFO and Head of Tax will update tax developments and tax risk assessment of our business to the Board of Directors, as necessary. Our tax function oversees our day to day responsibility for tax and ensures tax compliance. Our appetite for tax risks is low.

SGX adopts the SASB's definition of tax risks, which are risks associated with the organisation's tax practices that might lead to a negative effect on the goals of the organisation, or to financial or reputational damage.

Our tax framework consists of the following:

- We ensure that the transactions we enter are for genuine commercial reasons that are disclosed transparently
- We ensure that tax risks and tax implications are carefully thought through and communicated effectively to all stakeholders
- We seek professional advice from third-party advisors and consult with tax authorities on transactions with significant tax uncertainty
- 4. We are committed to tax compliance and ensure all tax returns are duly filed both accurately and in a timely manner

To ensure compliance with framework, internal assessments are done periodically.

SGX has a whistleblowing policy in place to report any concerns.

Our assurance process includes the following, as part of our governance control framework:

SGX has participated in the IRAS'
 Assisted Compliance Assurance (ACAP)
 programme to ensure that its GST

controls are reviewed periodically. We have been awarded "ACAP Premium" status, the highest awarded status Checks, where required, will also be conducted by third-party advisors to ensure procedures submitted are adhered to and address gaps, if any.

2. Tax returns are also prepared by third party advisors for the assurance of quality, as required. Our in-house tax professionals will review the tax returns before approving the submission to relevant tax authorities

Stakeholder engagement and management of concerns related to tax (GRI 207-3)

SGX seeks to build relationships with tax authorities and to be transparent and forthcoming about our business with relevant tax authorities. Invited SGX companies have onboarded the Enhanced Taxpayer Relationship programme with IRAS since 2015. We also ensure that any tax queries by tax authorities are responded to in a timely and transparent manner. Where there are contentious tax issues, we will seek clarifications from relevant tax authorities or seek advanced rulings to confirm tax positions.

We also constantly engage our members, the industry and relevant authorities on tax initiatives and feedback to update existing or implement new tax regulations.

<u>Country-by-country reporting</u> (GRI 207-3)

SGX looks forward to disclosing comprehensive country-by-country tax statistics once it is obligated to do so.

Managing Conflicts of Interest

- SASB FN0203-06 / FN-EX-510a.1
- SASB N0203-05 / FN-EX-510a.2
- GRI 102-16 (general disclosures

 ethics and integrity)
- GRI 102-40 to 44 (general stakeholder engagement)

- SDG16 (peace, justice and strong institutions)
- SDG17 (partnership for the goals)

SGX had zero monetary losses as a result of legal proceedings associated with fraud, insider trading, anti-trust, anti-competitive behaviour, market manipulation, malpractice, or other related financial industry laws or regulations (SASB FN-EX-510a.1).

Approach to managing conflict and interest

SASB FN-EX-510a.2: Discussion of processes for identifying and assessing conflicts of interest

SGX's Conduct and Ethics Policy sets out expectations for staff, including that they must not place themselves in a situation where a conflict of interest exists, is perceived to exist, or may potentially arise. There are prohibitions on staff engaging in concurrent employment with customers, members, vendors or competitors of SGX, or on making investments in such entities without prior approval. Approval is also required for outside directorships.

Compliance maintains and manages the Policy, and reports to both senior management and the Board on any infringements. HR manages the process of receiving, retaining and updating records relating to declarations of conflicts.

Regulatory Conflicts Handbook SASB FN-EX-510a.2: Discussion of processes for identifying and assessing conflicts of interest

The Regulatory Conflicts Handbook sets out measures for managing regulatory conflicts, which are the conflicts between regulatory decision-making by SGX and its commercial or financial objectives.

This is primarily managed by SGX RegCo, being an independently governed subsidiary that undertakes all regulatory functions on behalf of SGX and its regulatory subsidiaries. SGX also has a regulatory conflicts governance framework in place, consisting of both legislative obligations and rigorous internal standards.

Transparent Capital Markets

- SASB FN0203-02 / FN-EX-410a.1, FN0203-03 / FN-EX-410a.2, FN0203-01 / FN-EX-410a.3, FN0203-04 / FN-EX-410a.4
- GRI 203 (indirect economic impacts)
- SDG8 (decent work and economic growth)
- SDG9 (industry, innovation and infrastructure)
- SDG16 (peace, justice and strong institutions)

<u>Trading halts and pauses (SASB FN-EX-410a.1)</u>

In the past financial year, SGX has had 959 voluntary trading halts related to the public release of information and 28 trading pauses related to volatility or erratic trading.

Automated trading (SASB FN-EX-410a.2) SGX aims to disclose the percentage of our trades generated from automated trading systems.

A key risk associated with automated trading include the potential for over-trading, should automated systems fail. This may lead to heightened financial risks to the trading entity, its associated clearing participant, and potentially to the trading community. Without adequate controls and trading policies, such failures will cause reputational damage to the exchange.

SGX RegCo performs audits on clearing participants to ensure that adequate client trading limits are specified electronically in the trading system. Clearing participants are expected to perform KYC ("Know Your Client")

analysis and assign trading limits to all clients accordingly. Since further trading is halted once limits are reached, the requirement to set system trading limits mitigates the risk of over-trading should clients' automated trading systems fail.

On the other hand, opportunities of automated trading include increased trading velocity, potential revenues from offering co-location hosting, risk control services, and connectivity services.

Alert policy (SASB FN-EX-410a.3)
SGX has an alert policy regarding the timing and nature of public release of information by listed companies that may affect a stock price. Details can be found in Appendix 7A Corporate Disclosure Policy of SGX's Listing

Manual at : http://rulebook.sgx.com/rulebook/appendix-7a-corporate-disclosure-policy.

Other policies related to trading halts and pauses can be found in Appendix 7.1 of SGX's Listing Manual.

Policies for ESG disclosures of member companies SASB FN-EX-410a.4 In June 2016, SGX has made it mandatory for listed issuers to produce a sustainability report from FY ending 31 December 2017 onwards. The sustainability report must contain the content as required in the Listing Rules on a "comply or explain" basis, where listed issuers must issue a sustainability report that addresses five primary components, namely (a) material ESG factors; (b) policies, practices and performance; (c) targets; (d) sustainability reporting framework; and (e) Board Statement. The report must be issued no later than five months after the end of each FY.

Upon the implementation of mandatory sustainability reporting, SGX offered subsidised capacity-building workshops for listed issuers to guide them on the new reporting requirements. We also organised other sustainability

workshops and conferences to help listed issuers to attain a better understanding of ESG reporting.

A sustainability reporting guide as well as online training modules are available free-of-charge for all listed issuers, to guide their reporting process. In order to keep track of the progress, SGX commissions reviews of sustainability reports regarding the progress of reporting by issuers over the years and offers feedback to issuers on their progress.

Based on a survey of sustainability reports, SGX is working to identify material factors for our listed companies to report on and will be publishing guidance in the near future.

Collaborations towards more transparent capital markets Regulatory cooperation with Nasdaq and Tel-Aviv Stock Exchange ('TASE'):

SGX RegCo entered into regulatory cooperation memorandum of understanding ("MOUs") with Nasdaq and TASE respectively to help companies access capital in both jurisdictions. This cooperation aimed to facilitate the regulatory exchange of information on issuers which are dual listed on (i) SGX and Nasdaq; and (ii) SGX and TASE.

The regulatory cooperation with Nasdaq and TASE respectively strived to further enable the monitoring and assessment of issuers, and the enforcement of regulatory actions, including referrals of cases to the authorities of the respective jurisdictions.

Business Continuity

- SASB FN0203-08 / SASB FN-EX-550a.1
- SASB FN0203-09 / FN-EX-550a.2
- SASB FN0203-07 / FN-EX-550a.3
- GRI 102-15 (general strategy key impacts risks & opportunities)
- SDG8 (decent work and economic growth)

SGX has a set of established and well tested business continuity plans to ensure resilience against market disruptions and data breaches. Given the inter-dependencies between SGX and its diverse participants, our investment in well-orchestrated and designed recovery plans has provided fully functioning and well-regulated markets.

In the past FY, our markets achieved 100% uptime (SASB FN-EX-550a.1). We did not have any significant data breaches, defined as unauthorized movements or disclosures of sensitive information to parties that are not authorized to consume the information (SASB FN-EX-550a.2). Fundamental to this are our Technology and Cyber Security Resilience Frameworks, that

comprises policies, processes and tools to prevent technology errors, security breaches and market disruptions. A few of these key enablers are described in the following table (SASB FN-EX-550a.3).

Policies or efforts taken to prevent errors, breaches and disruptions	Description
Technology Resilience Framework	A framework that spans across all aspects of Technology to ensure long-term sustainability of the technology environment. The framework encompasses: Strategic Planning, Design & Build, Target Operating Model, Capacity Management, Change Management, Operational Resilience, Knowledge Management, Problem Management, Incident Management and Event Management.
Cyber Security Resilience Framework	A framework aligned to the global NIST Framework using five core functions namely Identify, Protect, Detect, Respond and Recover promoting an operational culture to addresses the dynamic cybersecurity risk.
Integrated Enterprise Command Centre and Security Operations Centre	Integrated command and control centres (Enterprise Command Centre and Security Operations Centre – ECC/SOC) that provide monitoring, detection, analysis, processing, and recovery of all technical and cyber incidents within SGX. This ensures rapid response to maintain the highest level of IT Services availability. All capabilities in ECC/SOC are remotely accessible by Work From Home Command Centre Analysts.
Annual Industry-wide Business Continuity Plan (BCP) Exercise*	Regular tests to ensure SGX's ability to failover to our Secondary Data Centre and participants' ability to connect when SGX conducts failovers.
Member Disaster Recovery (DR) Exercise*	Regular tests with market participants to ensure their ability to connect from their backup systems to SGX production systems, as part of their business continuity plans.
Industry-wide Data Recovery Test*	Regular tests with market participants to ensure their ability to reconcile data between their platforms and SGX platforms using data provided by SGX as the "golden source". This capability helps market participants to resume trading, clearing and settlement services expeditiously in a data corruption scenario.
Stringent Data Centre (DC) Physical Access Procedures	Strict physical access procedures to ensure only authorised personnel are allowed access to the Data Centre on an as-needed basis.
Robust Change Management process	Visualisation and analytical tools to provide a multi-dimensional view of potential impacts, thus mitigating the risk of incidents from failed changes.
Digital Tools	A suite of secured digital tools for both seamless collaboration and access to production systems in this new normal.
Intelligent Operations	Use of Artificial Intelligence (AI) and Machine Learning tools for automated correlation of technology alerts across the technology stack for faster resolution of incidents. Use bots to increase the efficiency and effectiveness of communications and reduce repetitive manual work around technology operations.

Policies or efforts taken to prevent errors, breaches and disruptions

Description

Capacity Management to proactively manage demand during spikes

Use data modelling to perform proactive management of system capacity.

Monitoring of energy consumption in Data Centres

Use of state-of-the-art power monitor equipment to ensure SGX's Data Centre environment is operating at optimal power utilisation and cooling consumption levels, to minimise any wastage while meeting operational requirements.

The average daily number of trades executed by SGX, by product or asset class, is as follows:



372,688

26,297

SGX Mainboard SGX Catalist

2. Developing a Sustainable Ecosystem

The success of SGX depends on the ecosystem in which it operates. The more the financial ecosystem and its respective communities thrive, the more SGX thrives.

As such, we recognise the need to build capacity to respond to the dynamic changes brought on by climate change. To do so, we will lead and strengthen the ecosystem, supporting and providing the tools necessary for companies to transition.

On the international scale, SGX has been a partner exchange with the UN SSE initiative since 2016. SGX is involved in the SSE's workgroups, including its Advisory Group on Climate Disclosure.

We support the SSE's market guidance to strengthen the sustainability of stock exchanges around the world.

On the regional scale, to help build expertise for sustainability reporting and sustainable finance for the ASEAN region, SGX was part of the founding consortium for a new GRI Regional Hub in Singapore.

SGX strives to be a demonstrative leader and manage our resources and carbon emissions. FY2021 marks our first year for the disclosure of our GHG emission Scope 1, 2 and 3. These disclosures allow us to set science-based targets to reduce our carbon footprint over time.

We are the first Asian exchange to commit to 1.5°C science-based emissions reductions targets. The targets have been submitted to SBTi for validation. We will also be committing to the Business Ambition for 1.5°C as well as joining the Race to Zero.

Task Force on Climate-Related Financial Disclosures (TCFD) recommendations – SGX's Current Alignment and Plans

SGX understands the importance of developing a strong strategy and risk management frameworks that set the foundation for SGX's climate resilience. We recognise that the TCFD recommendations are designed to help companies understand what financial markets look out for regarding risk management disclosures and provide it. It has four overarching elements - Governance, Strategy, Risk Management and Metrics and Targets – leverages scenario-analysis to assess the future impact of key climate-related risks and opportunities. While we have made progress in certain areas, such as setting metrics and targets, we recognise that there are other areas we need to strengthen, over the next few years of adopting the recommendations.

Bringing together leading partners and stakeholders to build a thriving sustainable finance ecosystem

- ASEAN Exchanges
- ASIA Sustainable Finance Initiative
- Global Reporting Initiative
- Monetary Authority of Singapore
- Sustainable Stock Exchanges
- Task Force on Climate-Related Financial Disclosures

Examples of leading partners and stakeholders

- The Baltic Exchange
- United Nations Global Compact
- Value Reporting Foundation
- World Federation of Exchanges

TCFD recommended disclosures	SGX's approach	References
Governance		
a) Information on SGX's board oversight and governance around climate-related risks and opportunities.	 SGX Board has oversight of SGX's sustainability and the integration of ESG matters in the formulation of SGX's strategy. SGX Board approves the Sustainability Report which provides comprehensive disclosures, including disclosures on SGX's climate action agenda. 	 Creating Sustainable Value A Message from the Board (page 43)
	Our Plans: We plan to enhance information processes that will support the Board and Management to consider climate-related risks and opportunities in relevant strategic decisions and understand their development.	
b) Information on SGX Management's role in assessing and managing climate-related risks and opportunities.	 The EMCO, together with Head of SSF, reports to the Board on sustainability matters, including climate-related matters, and are responsible for SGX's sustainability strategies, performance target-setting and risk policies. The SSC, formed in FY2021 and led by Head of SSF, drives the implementation of SGX's sustainability strategy and advises the EMCO on material ESG matters. 	_
	Our Plans: Refer to plans for Governance (a) above. The SSF team will prioritise climate transition among	

Strategy

- a) Climate-related risks and opportunities identified over the short, medium, and long term.
- b) Impact of climate-related risks and opportunities on the SGX's businesses, strategy, and financial planning.
- c) Resilience of the organisation's strategy, based on scenario analysis.

 SGX's approach to climate action is focused on the 4 pillars of our sustainability strategy – SGX in the ecosystem, as a company, business and regulator.

the targets it has set for the coming year to keep

pace with market demand.

• In SGX, climate-related risks mainly arise from transition risks, the most significant being the increased global focus on integrating climate-related information into investment decision-making. Policy and Technology are potentially important as well, while physical risks is likely to be low.

Our Plans:

 SGX will first strengthen our understanding of various transition risks affecting our business and potential interdependencies with other risks faced.
 We will then attempt to quantify the financial impacts and distinguish between the medium and longer term, with the help of independent subject matter experts.

- Creating Sustainable Value Sustainability Vision (pages 46 to 47)
- Creating Sustainable Value Developing a sustainable ecosystem (pages 62 to 68)
- Creating Sustainable Value
 Building a sustainable
 business (pages 70 to 72)
- Risk Management Climaterelated Risks (page 40)

TCFD recommended disclosures	SGX's approach	References	
Risk Management			
a) Information on SGX's processes for identifying and assessing climate-related risks.	 The SSC was formed to drive the implementation of SGX's sustainability strategy, including our climate agenda and climate risk management. Some climate-related risks have been categorised as emerging risks and SGX recognises that climate-related risks are inherently linked to other strategic, financial and operational risks. 	 Creating Sustainable Value – A Message from the Board (page 43) Risk Management – Climate-related Risks 	
b) Information on SGX's processes for managing climate-related risks.		(page 40) Corporate Governance – Risk Management	
	 Our Plans: SGX will work towards developing a more robust framework to define and assess how climate-related risks, as well as other ESG risks, impact our businesses, with the aim to build SGX's resilience. We will deliver training for our Risk and Sustainability Leads from various units to enable effective identification and assessment of ESG risks, including climate-related risks. SGX will continue to review our climate-related risks and update our risk registers. 	 (pages 91 to 93) Creating Sustainable Value – Developing a sustainable ecosystem (pages 62 to 68) 	
c) How SGX's processes for identifying, assessing, and managing climate-related risks are integrated into the SGX's overall risk management.	Our Plans: Recognising that climate-related risks, as well as other ESG risks, affect our businesses as do other risks monitored in our ERM framework, we will be refining our risk taxonomy to include ESG risks and embedding climate-related risks, and other ESG risks, in our ERM framework.		
Metrics and Targets			
a) Metrics used by the SGX to assess climate-related risks and opportunities in line with its strategy and risk management process.	 SGX has reported on our GHG emissions in this report. Our Plans: SGX will be establishing further metrics to track our performance against our climate action strategy. 	 Creating Sustainable Value – Developing a sustainable ecosystem (pages 62 to 68) 	
b) SGX's Scope 1, Scope 2, and Scope 3 greenhouse gas (GHG) emissions.	 SGX has measured and disclosed our Scope 1, Scope 2 and Scope 3 GHG emissions in this report. 		
c) Targets used by SGX to manage climate-related risks and opportunities and SGX's performance against targets.	 We have committed to science-based reduction targets and have submitted the targets to the SBTi for validation to ensure our emissions reduction target meets with the changes needed to keep global warming below 1.5°C compared with preindustrial levels. 		
	Our Plans: We will explore ways to improve our transition and physical risk analyses e.g. potential use of the Network for Greening the Financial System's (NGFS) climate scenarios to assess the impact on our		

business and objectives.

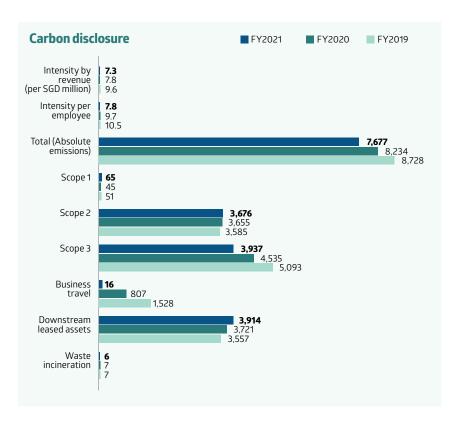
Carbon and Resource Management

- GRI 302 (energy)
- GRI 305 (emissions)
- GRI 307 (environmental compliance)
- SDG7 (affordable and clean energy)
- SDG11 (sustainable cities and communities)
- SDG13 (climate action)

This financial year marks our first disclosure of absolute emissions across Scope 1, 2 and 3, after having conducted a comprehensive carbon footprint exercise covering all relevant indirect GHG emissions from business travel, downstream leased assets and waste generated in operations. Our business travel emissions are estimated based on flight-level carbon estimates provided by our travel partners or passenger kilometres travelled. Downstream leased assets include space in data centres leased by us to our co-location clients and are presently estimated based on power and cooling consumption figures. Emissions from waste generated in operations are presently estimated using the weight of materials disposed. The GHG emissions have been externally verified in accordance with ISO 14064-3:2019.

Our Scope 1 emissions have remained largely stable, with variances due primarily to the removal of fugitive emissions in refrigerants used and natural gas reporting error identified and fixed during FY2021.

Our Scope 2 emissions saw slight increases mainly due to a technology refresh in our data centres, where the equipment being replaced and the new equipment had to run concurrently for a period during the exercise. Further, there was a ramp up in processing requirements to support work-fromhome initiatives.



Our Scope 3 emissions have seen significant reductions in emissions from business travel due to travel restrictions from COVID-19.

We have committed to reduce absolute Scope 2 GHG emissions by 42% by financial year 2031 from a financial year 2021 levels. SGX adheres to the Greenhouse Gas Protocol Standards to account for its carbon emissions.

We have excluded Scope 1 emissions from our targets as they are immaterial (i.e. under 5% of total combined Scope 1 and 2 emissions), and in accordance with SBTi companies can set science-based targets solely on the Scope (either Scope 1 or Scope 2) that covers more than 95% of the total Scope 1 and 2 emissions. For SGX, Scope 1 is significantly less than 5% of total combined Scope 1 and 2 emissions. SGX will continue to monitor and report both Scope 1 and 2 emissions,

and adjust the targets as required by the SBTi criteria.

As the primary source of emissions within our organisational boundaries is indirect emissions from electricity consumption, we will be implementing a range of initiatives to improve energy efficiency and reduce energy consumption in our offices and data centres. These include migrating selected data centre facilities to the cloud to reduce energy consumption intensity within our data centres, introducing energy-efficient equipment such as LED lights for our offices and incorporating carbon intensity considerations into relevant policies. We will also be progressively switching the power supply to renewable sources using Renewable Energy Certificates (RECs) sourced through our subsidiary the Energy Market Company (EMC). We will only procure RECs that meet the GHG Protocol Scope 2 quality criteria.

In line with the SBTi requirements and subject the validation process, we will set targets to engage with our suppliers to establish science-based emission targets within five years of our target-setting year, and work with them as appropriate to help meet their GHG reduction targets. Our emissions from our co-location services alone account for over 70% of our total Scope 3 emissions. We are engaging with our data centre provider as any changes made by the data centre provider to the source of energy impacts the carbon footprint of all colocation clients.

In addition, when business travel is eventually eased post-pandemic, SGX will consider setting business travel targets. SGX will opt for more virtual meetings and where travel is necessary, aim to adopt less carbonintensive options.

Managing our Energy Consumption

Internally, SGX strives to continue minimising our environmental footprint. Our Environmental Policy implemented in FY2016 continues to guide SGX in managing our direct and indirect impacts on energy consumption, paper and other natural resources.

SGX continues to engage with our staff to raise awareness about our shared responsibility in protecting the environment. To conserve energy, we remind our staff to turn off electrical appliances when not in use and observe the Earth Hour movement annually. To conserve paper resources, our staff are encouraged to go digital as far as possible and are discouraged from printing unless absolutely necessary. When we have to use paper, we use 100% recyclable paper products sourced from certified suppliers who are committed to zero deforestation.

We encourage our shareholders to transmit shareholder documents electronically, to conserve paper resources while increasing operational efficiency. In FY2020, we terminated the option for physical copies of our annual integrated report. Digital copies of our annual reports are available on our website. In Q3 FY2021, SGX's Central Depository (CDP) also moved online to reduce our environmental footprint, whilst offering our retail customers an instantaneous response time and improving their access to information. On the CDP Internet investor portal, all CDP account holders are now able to use Singpass to view their securities portfolios and access account statements. In the same spirit, our bond processes are going paperless as well – we completed our first pilot digital bond for Olam International in collaboration with HSBC and Temasek on 1 September 2020.

Infrastructure

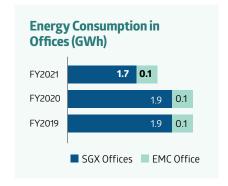
Our energy footprint mainly arises from our data centres. Our primary data centre was awarded the Standard 564 (SS564) certification for Green Data Centre – Energy & Environmental Management Systems. SS564 was developed to set a Singapore Standard for Green Data Centres. Our secondary data centre was awarded the Building and Construction Authority's Green Mark Platinum certification for excellence in energy efficiency and environmentally sustainable building design.

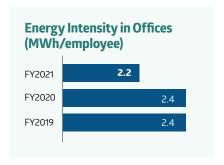
We are also conscious of the energy efficiency of our offices. SGX has implemented motion-activated light sensors in all meeting rooms, which reduces energy consumption within our offices.

Energy Consumption for FY2021

SGX consumed 1,820,362 kWh of energy for both our SGX offices and Energy Market Company (EMC) office in FY2021, which is an 8% decrease from our measured energy consumption in FY2020.

A breakdown of our energy consumption is as follows:





Note: Energy consumption and intensity only reflect operations in Singapore (SGX and EMC).

Energy consumption and intensity will not be disclosed from FY2022 as the carbon emissions from electricity will be reflected in the absolute emission under Scope 2.

Stewardship of Financial Ecosystem

- SASB FN-EX-410a.4 (ESG disclosures of member companies)
- GRI 102 (general disclosures)
- SDG13 (climate action)
- SDG17 (partnership for the goals)

SGX is committed to advancing sustainability among our stakeholders. Through our initiatives and programmes, we strive to support and guide the financial market by providing standardised sustainability products and contracts, innovating new products for the market, leading in capacity building and providing market integrity support via regulations.

Furthermore, we acknowledge our responsibility in ensuring that reliable data is available for investors to make informed decisions.

Within SGX's own ecosystem, we encourage our listed companies to advance their sustainability journey in line with internationally accepted carbon mitigation hierarchies, including reducing absolute emissions in operations and within their supply chain. SGX also recommends listed companies to set climate targets that are aligned to international standards.

As a business, we support the commodity market's switch to environmentally enhanced versions of commodity derivatives by curating and developing equivalent "greener" products to the financial ecosystem. SGX recognises that in addition to climate mitigation and decarbonisation, broader social and environmental goals and safeguards must be upheld. We will continuously review our products and solutions to support and guide the market to facilitate a just transition.

To advance sustainability in the international financial ecosystem, SGX has pledged our support for international climate-related frameworks. SGX's special advisor, Yeo Lian Sim, is a vice-chair of the TCFD and SGX is the only exchange which still contributes to the drafting of the TCFD. SGX remains a strong supporter of TCFD. SGX also supports the SSE's market guidance to strengthen sustainability amongst stock exchanges around the world.

Research and Collaborations

'Sustainability Reporting Review 2021' with NUS CGS
In collaboration with the NUS CGS,
SGX RegCo reviewed the quality of our listed companies' sustainability reporting and disclosures. Our joint report was released on 19 May 2021.

Listed companies demonstrated an overall improvement in their sustainability reporting and the level of disclosure, compared to their performance in our last review in 2019.

Based on our SGX-CGS Sustainability Reporting Scorecard, companies' average overall score increased from 60.6 in 2019 to 71.7 points in 2021, with broad-based gains across industries and market capitalisation. Small-capitalisation companies posted the largest increase in average scores (13 points), followed by mid-cap companies (10 points) and big-cap companies (6 points).

Reports are also more comprehensive compared to FY2019 reports, with 64% of companies which disclosed performance did so in the context of targets, a substantial jump from just 22% in the 2019 review. 66% of all companies disclosed unfavourable aspects of sustainability performance, up from 55% in 2019. 50% of companies disclosed both positive and negative performance trends, almost doubling the 26% in 2019.

More companies are also focusing on climate disclosures, with almost 50% discussing climate change as an economic, environmental, social and governance (EESG) factor, based on collated data up to mid-2020.

Our review indicated that listed companies are on track to attract more sustainability-conscious customers, obtain lower-cost financing and gain better access to capital. Their increased capabilities in sustainability reporting and management also reflect their strengthened business resilience against future market uncertainties and challenges.

'Perspectives of Financial Institutions on Sustainability Disclosures' Study with NUS CGS and KPMG On 23 April 2021, SGX RegCo partnered with NUS CGS and KPMG to publish a study on the perspectives of financial institutions on sustainability disclosures. The study shows that ESG – particularly climate-related disclosures like energy, water, waste and effluents – is a major consideration for most key Fls, across the processes of asset allocation, lending and underwriting. The interviewed Fls were members of the Green Finance Industry Taskforce convened by the Monetary Authority of Singapore.

All interviewed FIs expressed plans to fully integrate sustainability into their investment strategy by 2030, which also involves incorporating sustainability into their Boards' scope of jurisdiction. Almost all interviewed FIs also assessed non-financial risks.

Participating FIs reflected that the current quality and quantity of ESG disclosures could be strengthened, in line with common disclosure standards across and within industries to facilitate comparison. They also emphasised the need for capacity building for climate-related disclosures – adding that governments and regulators could facilitate stronger disclosures.

SGX strives to highlight and address our collective challenges in ESG reporting – quantification, comparability and harmonisation. As an active participant of the Green Finance Industry Taskforce, SGX strives to continue similar efforts that complement governmental initiatives under the Green Economy pillar of the Singapore Green Plan 2030.

We also plan to further enhance our sustainability reporting rules – to guide our listed companies in responding to the evolving expectations of FIs and to strengthen their trustworthiness and credibility in the eyes of their respective stakeholders.

Stakeholder Education

Every year, SGX conducts a number of investors' education events under the banner of the SGX Academy. Programmes have been specially designed to educate, engage and enable our stakeholders to make informed and responsible investment decisions. In FY2021, more than 250 educational events were conducted, and 95,000 participants of different age groups and investment aptitudes participated in the online programmes.

SGX is a regular contributor to the World Investor Week Singapore (WIW), an initiative led by International Organisation of Securities Commissions (IOSCO) to raise public awareness about the importance of investor education. SGX Academy supported WIW forums in FY2O21 and topics covered included "Investing in a Covid World" and "Investing for The Future – ESG and Sustainable Investing".

The inaugural Singapore Trading
Festival was held from 27 February to
5 March 2021 to provide investors
information and insights for investing
during the new normal, involving 20
global prominent speakers and 15,000
participants. SGX also conducted two
REITs Symposiums with REIT
Association of Singapore (REITAS) and
ShareInvestor, covering a range of topics
including ESG impact on the sector.

3. Engaging, Supporting and Developing our People

- GRI 401 (employment)
- GRI 402 (labour management and relations)
- GRI 403 (occupational health and safety)
- GRI 404 (training and education)
- SDG8 (decent work and economic growth)

Our employees come first. We are committed to advancing employees' growth and career development. SGX strives to maintain a positive work environment that values integrity, diversity, collaboration

and communication, while ensuring the well-being of our employees. We also recognise that our continued success in attracting and retaining talent is a key contributor to our ability to remain commercially viable and competitive.

Our Head of Human Resources oversees our labour practices, talent strategy, human resource policies and processes, and takes care of the welfare and well-being of our 981 employees. Our employee retention rate reached its highest at 91% and the average length of service remained consistent at eight years over the past five years.

Employee Development and Practices

- GRI 401 (employment)
- GRI 402 (labour management and relations)
- GRI 404 (training and education)
- SDG8 (decent work and economic growth)

SGX places importance on nurturing our staff. Recognising the importance of investing in the training and development of our employees, we implemented programmes to upgrade the skills of employees. We achieved 60 hours of training per employee in FY2021, exceeding our target of 35 hours per employee. The following graph illustrates the growth in the average training hours for our employees in FY2021:



At SGX, we promote a culture of lifelong learning. To support our employees' learning and development, we offer a range of structured training for both technical and soft skills, professional memberships, continuing education schemes, as well as study leave, and internal job rotation opportunities. We have also empowered our employees to take charge of their own learning agenda, by offering them leading digital-learning platforms that are accessible 24/7 at their convenience. Through these initiatives, we aim for our staff to develop into highly skilled and well-rounded employees, with transferrable experiences and expertise that would make them an asset to any organisation.

In FY2021, we launched the Emergenetics Profiling tool to support teams and managers in their efforts to build a more cohesive and collaborative culture in the midst of the pandemic. This team-based intervention is aimed at enabling team members to conduct quality conversations and establish better connections, to ensure that teams remain resilient during this challenging time.

In the coming FY, we plan to organise more ESG-related training for our staff. These upcoming training sessions will strengthen their capabilities in incorporating sustainability into their scope of work, as the financial services industry places increasing emphasis on the topic.

Talent Management and Retention

- GRI 401 (employment)
- GRI 402 (labour management and relations)
- GRI 404 (training and education)
- SDG8 (decent work and economic growth)

In FY2021, there were 121 new hires and 92 resignations.

SGX is cognisant that given the nature of our business, the talent and expertise we seek are not easily transferrable from the broader financial services industry. As such, we continually invest in a holistic talent strategy to build our internal capabilities and talent pool. SGX strives to retain talent by running regular employee-engagement activities and improving employee benefits and overall welfare in the organisation.

Our HR team actively looks for potential new hires and internal candidates of high capabilities for specialised and leadership positions. We actively offer them training and development opportunities to further their skillsets and prepare them for their potential positions in the company.

SGX also continues to offer training programmes that develop and enhance their capabilities. Leadership development is an area of focus where we continue to develop and enhance the capabilities of those in supervisory and management roles from first-level line managers to senior leaders, in partnership with reputable and established best-in-class training programme providers.

Employment Practices

- GRI 401 (employment)
- GRI 402 (labour management and relations)
- GRI 403 (occupational health and safetu)
- SDG8 (decent work and economic growth)

SGX has in place employment practices that ensure the health, safety and well-being of our staff. We have successfully obtained the ISO 45001 (occupational health and safety management systems) certification in June 2021, which demonstrates that our workplace health and safety standards are aligned to globally recognised standards.

In FY2021, despite the prolonged disruptions brought about by the COVID-19 pandemic, SGX has demonstrated resolve to minimise any impact to market operations and has taken additional steps to safeguard the safety and health of our staff and protect our work environment. These included initiatives such as:

- 1. Activating our business continuity plans for split operations and staff rotation. Implementing staggered and flexible working hours for staff required to work from office. All these were achieved with a variety of IT tools and workspace collaborations such as equipping meeting rooms with video conferencing kits and meeting pods, to enable staff to work safely and increase productivity while in office.
- 2. Implementing mandatory safemanagement measures in SGX premises, such as implementing SafeEntry access using the TraceTogether mobile application, wearing masks, practicing safe physical distancing, stepping up cleaning and sanitising efforts in offices, installing acrylic sneeze guards, applying anti-microbial coating, deploying thermal scanners and issuing personal protective equipment such as masks, hand sanitisers and disinfectant wipes.
- 3. Encouraging staff who are medically eligible to be vaccinated when the vaccine is offered. Getting vaccinated against COVID-19 is one way to significantly reduce chances of infection and help prevent severe illness if infected.

SGX has maintained the frequency of our staff engagements through regular virtual town halls. These town halls have kept employees updated about corporate developments and serve as feedback platforms for us to improve

our employees' work-from-home experience. Beyond work, we support our employees in fulfilling their personal commitments through initiatives like flexible working schemes for female employees after childbirth.

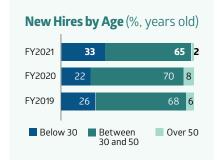
Diversity and Inclusivity

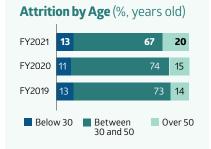
- GRI 202 & 405-7 (market presence, diversity and equal opportunity, non-discrimination and freedom of association and collective bargaining)
- SDG5 (gender equality)
- SDG8 (decent work and economic growth)
- SDG10 (reduced inequality)

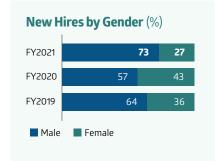
SGX embraces diversity among our staff, regardless of gender, age and other socio-cultural differences. We value how diversity broadens our collective skills and perspectives, driving innovation within our organisation. In line with our Non-Discrimination Policy, we hire on a meritocratic system and provide a competitive and fair compensation and benefits package. Our talent strategy offers equal opportunities to all deserving staff based on their performance and capabilities. There were zero reported incidents of discrimination at SGX.

In line with SDG5 (gender equality), our gender pay ratio is within a 15% range across all ranks within our organisation. In line with SDG5.5: ensuring women's full and effective participation and equal opportunities for leadership at all levels of decisionmaking, 27% of our Board is represented by female directors, which contributes to the diversity of views and perspectives at senior levels. We have had zero reported incidents of discrimination at SGX. Since 2012, SGX has been leading in the advocacy for Women on Boards in Singapore.

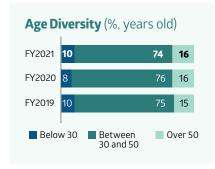
The following graphs illustrate the diversity of our workforce:

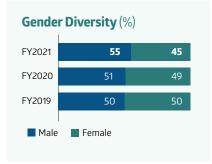






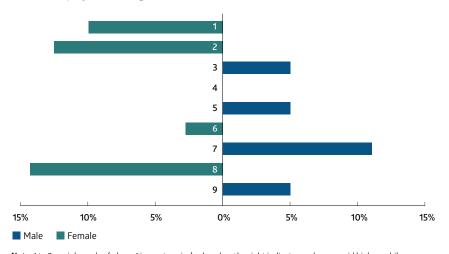






Gender Pay Gap

(across employment categories)



Note: 1 to 9 are job grades (where 1 is most senior): a band on the right indicates males are paid higher, while a band on the left indicates females are paid higher. An empty band indicates that both males and females are equally paid.

4. Building a Sustainable Business

As a leading sustainable and credible transition finance and trade hub, with end-to-end products, solutions and ecosystems, we contribute to the sustainable business development of Singapore's financial market by providing a platform for issuers to raise capital, whilst enabling investors to participate in Asia's economic growth and manage their Asian portfolio risks. As a front-line regulator, we ensure that issuers meet their ongoing obligations to investors, and participation in our markets is carried out in a fair, orderly and transparent manner. SGX is also a provider of connectivity solutions and is a trusted and secure counterparty for trade settlement.

Economic Performance

- SASB FN-EX-000.A & FN-EX-000.B
- GRI 201 (economic performance)
- SDG8 (decent work and economic growth)

In line with SASB, GRI and SDG standards and guidelines, SGX discloses our economic performance every year.

Please refer to the Financials section of the Annual Report for more details.

Sustainability Products and Services

- GRI 102 & 201 (general disclosures and economic performance)
- SDG8 (decent work and economic growth)
- SDG9 (industry, innovation and infrastructure)

To further advance sustainability in the financial market, SGX is developing and providing a range of revenue-generating sustainability products and services. This includes an ESG platform with international partners, CIX, which is aimed to be launched by the end of 2021, and different asset classes under our newly launched SGX Future in Reshaping Sustainability Together (FIRST) platform.

SGX FIRST Platform

SGX FIRST (Future in Reshaping Sustainability Together), launched on 15 December 2020, is Asia's only multi-asset, exchange-led sustainability platform.

Through SGX FIRST for our business and for the ecosystem, SGX aims to drive sustainability through partnerships and increase access to ESG information and solutions for investment decisions. Capitalising on SGX's network, assets and expertise, SGX FIRST's initiatives span across asset classes, including fixed income, equities, commodities and indices. Below is a snapshot of our existing range of products and solutions, which we will continue to build on.

Fixed Income

As the listing venue of choice for more than half of the listed international green, social and sustainability bonds in Asia-Pacific, SGX is privileged to be able to play a leading role in the sustainable finance journey.

As a global bond platform, SGX helps bond issuers maximise investor outreach and effectively engage a broad and diversified base of global market participants and investors in Asia. SGX is part of the NSBN Initiative, which strives to be the leading green, social and sustainability bond database for both listed and unlisted bonds. The database will help global investors select, monitor and conduct due diligence for these bonds. The addition of SGX data expands the network to more than 6,500 bonds, mainly from the US and Europe.

Equities

To provide independent ESG ratings on our listed companies for investors' evaluation, SGX has expanded our indexing collaboration with FTSE Russell, Morningstar Sustainalytics and MSCI to cover more than 30 companies.

All SGX-listed companies have been required to publish sustainability reports since 2016 and have received feedback on their sustainability reporting progress. They have also been encouraged to adopt TCFD recommendations to account for and respond to their exposure to climate-related risks and opportunities.

ESG Platform with International Partners

SGX is exploring collaboration with external parties to build an ESG platform. This data and workflow platform aims to help SGX-listed companies align their disclosures with major sustainability standards, foster best practices via industry benchmarking, and ultimately meet investor needs for a consistent and reliable source of ESG data.

As the global market increasingly prioritises sustainability in their investment decisions, this initiative strives to support both investors and SGX-listed companies in navigating a more sustainable financial market.

Indices

Scientific Beta, which has a strong track record in ESG and climate index design, launched a unique series of CICI in April 2021. CICI is the only pure climate index offering on the market to help investors make engagement practices consistent in order to maximise their impact. It is designed to implement the recommendations of the net-zero investment coalitions like the Institutional Investors Group on Climate Change (IIGCC) and the UN-Convened Net-Zero Asset Owner Alliance at the portfolio construction level. More than 30% of assets tracking Scientific Beta's indices already have ESG options and all its indices have advanced ESG and Climate Risk reporting to facilitate responsible investing.

Equity Derivatives

In partnership with FTSE Russell, SGX FIRST launched our first four ESG derivatives on 25 January 2021 — the SGX FTSE Emerging ESG Index Futures, SGX FTSE Emerging Asia ESG Index Futures, SGX FTSE Asia ex Japan ESG Index Futures and SGX FTSE Blossom Japan Index Futures. All four contracts have been certified by the Commodity Futures Trading Commission (CFTC), enabling market participants to trade them directly from the US. We proceeded to launch SGX Nikkei ESG-REIT Japan Index Futures in June 2021.

Moving forward, SGX will roll out more ESG-focused investment and risk management products to meet investors' needs, simultaneously futureproofing our business and driving forth the development of sustainable finance in our ecosystem.

Commodities

The global commodities sector has come into focus as climate change and sustainability become important considerations for businesses and governments. 2020 saw the introduction of new IMO regulations for reduced sulphur content in marine fuels globally targeted at reducing air pollution created in the shipping industry. Another example is the increased usage of high-grade iron ore in steel production resulting in lower emissions.

SGX has since responded in tandem with these developments. The first ESG-related commodity derivative, 65% Fe Iron Ore futures was launched in 2018. This is followed by other ESG-related commodity product launches, namely IMO2020 compliant LSFO and Methanol. SGX strives to continuously work closely with the various commodity industries to identify new ESG-related derivatives for futures launches.

Energy Market Company (EMC)

EMC launched a one-stop Marketplace for Businesses in October 2020. This platform enables companies to conveniently purchase electricity and claim the renewable source of their electricity consumption with Renewable Energy Certificates (RECs), thereby reducing their carbon footprint from energy consumption.

Baltic Exchange

As an active player in promoting sustainability efforts in the maritime sector, the Baltic Exchange has launched numerous sustainability projects, such as the Maritime Emissions Project in 2019.

The Baltic Exchange is looking into publishing carbon footprint measures tagged to its freight routes. This initiative forms part of the recommendations of the International Advisory Panel on Maritime Decarbonisation (IAP) which was issued in April 2021.

The Baltic Exchange is a member of the IAP, which comprises around 30 maritime industry leaders globally and was formed with the support of the Maritime and Port Authority of Singapore to define a strategy for maritime decarbonisation. The Baltic Exchange also sits on the Technical Committee of CIX.

Climate Impact X (CIX)

SGX announced our intention to launch a collaboration with DBS, Standard Chartered and Temasek to establish CIX as a global carbon exchange and marketplace for companies to access high-quality carbon credits on 20 May 2021. This will help catalyse the development of new carbon credit projects, required to match the growing demand for carbon credits, as global efforts gather apace to achieve net-zero GHG emissions. The platform is aiming to be officially launched by the end of 2021.

CIX will be in line with Singapore's ambition to become a global carbon services and trading hub. The venture will build on collective action by governments, corporates and individuals globally, towards a net-zero economy.

We will leverage satellite monitoring, machine learning and blockchain technology to enhance the transparency, integrity and quality of carbon credits traded on the platform. In so doing, we strive to ameliorate the climate emergency in a tangible and lasting way.

CIX will first focus on Natural
Climate Solutions (NCS) – which
supports both biodiversity and local
communities. As Asia makes up
one-third of the world's NCS supply,
CIX will be in a strong position to
capitalise on our network and
expertise to provide a robust and
transparent pipeline of carbon
credits. This is particularly important
amid growing demand for more
transparency around carbon
projects. In response, CIX will aim to
provide strong impact and risk data,

enable efficient price discovery and catalyse the development of new carbon-reduction projects.

CIX's distinct carbon credit platforms and products will serve a wide range of investors and corporates. The exchange of large-scale high-quality carbon credits via CIX will be facilitated by standardised contracts.

To scale the platform to greater heights, CIX will be guided by the Carbon Coalition, an International Advisory Council, the Taskforce on Scaling Voluntary Carbon Markets (TSVCM) and the Natural Climate Solutions Alliance among others.

Together, these venues will flexibly serve different buyer needs, providing the liquidity of high-quality standardised credits alongside premium, project-specific credits with attributes that directly align with the missions and sustainability priorities of businesses. CIX's high threshold for quality, impact and credibility will underlie all the credits it will sell, regardless of the venue.

The CIX Ecosystem

Carbon Exchange

Catering primarily to companies and institutional investors, the Exchange will facilitate the buyers and suppliers to trade large volumes of high-quality credits through standardised contracts. The exchange will cater primarily to large-scale buyers, including multinational corporations and institutional investors. It will provide the market with clearer price transparency. These standardised contracts will be defined by a set of terms and quality definitions against which carbon credits can be delivered. Compared to the direct purchase of credits from a specific project, standardised contracts will enable the pooling of a high volume of credits across multiple projects that meet the quality requirements.

Project Marketplace

The Project Marketplace will enable the purchase of high-quality carbon credits directly from specific projects, which will be ideal for custom purchases. Every listing on the Project Marketplace will be supported by transparent impact, risk and pricing data.

Corporate Social Responsibility

SGX is committed to driving positive change and impact in the communities we operate in through SGX Cares, our corporate social responsibility programme. We offer a platform that harnesses the enthusiasm of our employees and rallies the international financial community to support beneficiaries through outreach activities, raising funds for those in need and strengthening financial literacy.



Together with our corporate sponsors and partners, we sought new avenues to continue providing support to our beneficiaries not only to see them through challenging times, but to also empower them for a better future.

SGX Cares Bull Charge: Raising Funds for Those in Need

Since 2004, SGX has rallied the financial community and its listed companies to a common cause: to support the needs of underprivileged children and families, people with disabilities, and the elderly through fundraising events such as our SGX Bull Charge Charity Run and other business-led events.

Virtual Charity Run

SGX Bull Charge transformed its
Charity Run into a virtual event in
2020 to prioritise the well-being of
participants as they go the extra mile
for a good cause. We brought together
a community of over 5,000, drawn from
cities worldwide for the first time, and
successfully raised S\$3.7 million for our
SGX Bull Charge beneficiaries. SGX
matched contributions dollar-for-dollar
up to S\$1 million and donated a further
S\$500,000 for the first 100,000
kilometers completed during the race.
As the global community surpassed
150,000 km by the end of the two-week

event, SGX committed an additional 1,000 volunteer hours in support of our beneficiaries for the year ahead. The Virtual Charity Run was also recognised in The Singapore Book of Records for the participation of ultramarathoner Stephen Lim, who ran 800 km in 11 days.

Working alongside Community Chest, all funds raised will be channeled to our beneficiaries: Autism Association (Singapore), AWWA Ltd., Fei Yue Community Services, HCSA Community Services and Shared Services for Charities.



 SGX Bull Charge Virtual Charity Run 2020 flag off at the Marina Promontory along with Team Singapore athletes.



 Cheque presentation ceremony to our SGX Bull Charge beneficiaries witnessed by President Halimah Yacob.



 Chief Challenge leader board on SGX Bull Charge Running App.



Over

5,000 participants across cities worldwide



Raised more than

\$3.7m through the first SGX Bull

Charge Virtual Charity Run and other fundraising events



Pledged additional

1,000

volunteer hours in support of our beneficiaries

Corporate Social Responsibility

SGX Cares Outreach: Trusted Partner for our Beneficiaries

SGX continues to adapt its outreach programmes to engage with and support beneficiaries beyond financial contributions. SGX Cares Outreach clocked 1,385 volunteering hours over nine different activities during the year. As many as 204 unique SGX volunteers participated, touching the lives of more than 2,400 individual beneficiaries.

For our Seasons of Giving series, our employees prepared over 2,000 care packs from home for underprivileged and low-income families. Small teams of volunteers delivered the care packs to the doorsteps of recipients, spreading much joy and cheer amid a challenging year.



 Delivering Chinese New Year care packs to underprivileged and low-income families in February 2021.



Sprucing up a transitional shelter.



Donation of surgical masks to Migrant Workers' Centre.



SGX staff clocked over

volunteer hours



Contributed over

2,000

care packs to underprivileged and low-income families



Reached out to more than

2,400

individual beneficiaries



 Over 1,000 care packs ready to be delivered for Seasons of Giving in July 2020.



Christmas joy and art jamming session at Autism Association (Singapore)
 Eden Centre for Adults (Clementi).

When Singapore's safe-management measures were eased, we took another step forward in our outreach. We spruced up transitional shelter homes, volunteered at storytelling sessions for children, took part in lantern-making as well as art-jamming sessions with Autism Association (Singapore), facilitated DISC profiling for adults from HCSA Community Services and organised outings that included Community Chest Heartstrings Walk 2021.

In support of Singapore's MaskForce initiative, SGX donated 200,000 pieces of surgical masks to the migrant workers' community in 2020. Going beyond our shores, SGX recently worked with the India High Commission to offer relief to India, through a donation via the Singapore Red Cross and India Red Cross.