

TAT SENG PACKAGING GROUP LTD

提升核心能力，塑造成长动力

BUILDING CAPABILITIES, SHAPING GROWTH



SUSTAINABILITY REPORT | 2024

CONTENTS

ABOUT TAT SENG PACKAGING GROUP LTD	2
OUR MISSION AND VISION	2
SUSTAINABILITY VISION AND MISSION STATEMENT	2
MEMBERSHIP AND ASSOCIATIONS	2
ABOUT THIS REPORT	3
ORGANISATIONAL DETAILS	3
REPORTING FRAMEWORK	5
RESTATEMENT OF INFORMATION	5
EXTERNAL ASSURANCE AND INTERNAL REVIEW	5
FEEDBACK	5
CLIMATE AND SUSTAINABILITY GOVERNANCE	6
MESSAGE FROM THE BOARD	6
SUSTAINABILITY IN THE BOARD	7
SUSTAINABILITY GOVERNANCE AND LEADERSHIP	9
POLICIES AND PRACTICES	10
STAKEHOLDER INCLUSIVENESS	12
MATERIALITY ASSESSMENT	13
CLIMATE-RELATED RISKS AND OPPORTUNITIES	17
GOVERNANCE	17
STRATEGY	18
RISK MANAGEMENT	18
SUSTAINABILITY TARGETS AND PERFORMANCE	25
RESPONSIBLE BUSINESS PRACTICES	27
ECONOMIC PERFORMANCE	27
ANTI-CORRUPTION	28
BETTERING THE PLANET	29
ENERGY AND GHG EMISSIONS MANAGEMENT	29
WATER AND EFFLUENTS MANAGEMENT	36
WASTE MANAGEMENT	37
RESPONSIBLE SUPPLY CHAIN	38
RAW MATERIAL MANAGEMENT	38
SUPPLY CHAIN MANAGEMENT	39
SUPPORTING PEOPLE AND COMMUNITIES	41
EMPLOYMENT	41
OCCUPATIONAL HEALTH AND SAFETY	44
TRAINING AND EDUCATION	47
APPENDIX	49
APPENDIX 1: GRI CONTENT INDEX	49
APPENDIX 2: SASB CONTENT INDEX	53
Table A. Sustainability Disclosure Topics & Metrics	53
Table B. Activity Metrics	53
APPENDIX 3: TCFD CONTENT INDEX	54
APPENDIX 4: IFRS S2 CONTENT INDEX	54
APPENDIX 5: CONVERSION FACTORS FOR ENERGY	59
APPENDIX 6: EMISSION FACTORS FOR SCOPE 1 GREENHOUSE GAS EMISSIONS	59
APPENDIX 7: EMISSION FACTORS FOR SCOPE 2 GREENHOUSE GAS EMISSIONS	59
APPENDIX 8: EMISSION FACTORS FOR SCOPE 3 GREENHOUSE GAS EMISSIONS	59

SECTION 1: OVERVIEW OF OUR GROUP

ABOUT TAT SENG PACKAGING GROUP LTD

[GRI 2-1, 2-6]

Founded in 1968, Tat Seng Packaging Group Ltd (**“the Company”**) is a leading provider of corrugated packaging solutions, serving a diverse range of industries across Singapore and China. With over 50 years of experience, the Company specialises in designing, manufacturing, and delivering high-quality packaging products tailored to customers’ specifications.

The Company was incorporated in Singapore and has been publicly listed since 2001 and is the only listed corrugated packaging company on the Singapore Exchange Securities Trading Limited (**“SGX-ST”**). The Company is committed toward driving innovation, quality, and excellence in their product portfolio which includes corrugated boards, cartons, die-cut boxes, heavy-duty packaging, customised pallets, and other packaging-related solutions.

With the Group’s headquarters in Singapore, the Company operates state-of-the-art manufacturing facilities in China, located in the provinces of Jiangsu, Anhui, and Tianjin, overseen by the regional headquarters located in Suzhou. Our customers comprise of multinational corporations and local manufacturers in food & beverage, electronics & electrical, medical & healthcare, pharmaceutical & chemical, printing, publishers & converters sectors, as well as other export-related sectors.

Rooted in a philosophy of long-term partnerships and continuous innovation, the Company aims to exceed customer expectations through exceptional service and cutting-edge solutions.

OUR MISSION AND VISION

Vision: To be the preferred corrugated packaging solution provider

Mission:

- Generate win-win solutions with customers
- Provide growth opportunities for employees
- Create values for shareholders
- Care for our communities and environment

SUSTAINABILITY VISION AND MISSION STATEMENT

Our vision for sustainable development integration is to provide high-quality products and services to our customers while minimising the negative environmental impacts and increasing our positive social impacts.

Our mission for sustainable development integration is to provide corrugated paper packaging solutions by adopting international best practices that positively impact stakeholders in our supply chain.

MEMBERSHIP AND ASSOCIATIONS

[GRI 2-28]

- China Packaging Federation
- Corrugated Box Manufacturers Association
- International Safe Transit Association (**“ISTA”**)
- Singapore Business Federation
- Singapore-China Business Association
- Singapore Chinese Chamber of Commerce & Industry
- Singapore Manufacturing Federation
- Singapore National Employers Federation (**“SNEF”**)
- Tripartite Alliance for Fair & Progressive Employment Practices

SECTION 1: OVERVIEW OF OUR GROUP

Other Certification and External Recognition

- EcoVadis Annual Assessment
- Forest Stewardship Council (“FSC®Chain of Custody”) Certification
- ISO 14001 Environmental Management System Certification
- ISO 9001 Quality Management System Certification
- ISO 45001 Occupational Health and Safety Certification
- ISO 50001 Energy Management System Certification
- Silver status of recognition on Responsible Business Alliance
- Green Electricity Certificate
- Green Electricity Consumption Certificate

ABOUT THIS REPORT

ORGANISATIONAL DETAILS

[GRI 2-1, 2-2, 2-6]

Tat Seng Packaging Group Ltd reaffirms our commitment to sustainability with our eighth Sustainability Report which discloses the Company’s vision, management approach and progress in sustainable development. This report covers Tat Seng Packaging Group Ltd and our subsidiaries (collectively mentioned as “**Tat Seng**” or “**the Group**”) hereafter in Singapore and China, including United Packaging Industries Pte. Ltd. (“**UPI**”), Tat Seng Packaging (Suzhou) Co., Ltd. (“**TSSZ**”), Hefei Dansun Packaging Co., Ltd. (“**HFDS**”), Nantong Tat Seng Packaging Co., Ltd. (“**NTTS**”) and Tianjin Dansun Packaging Co., Ltd. (“**TJDS**”), Nantong Hengcheng Paper Industry Co., Ltd. and Guangzhou Dansun Packaging Co., Ltd., the same operations and subsidiaries declared in the annual report. As Nantong Hengcheng Paper Industry Co., Ltd. has no operation and sales activities while Guangzhou Dansun Packaging Co., Ltd. has not started operation since its incorporation in 2022, both subsidiaries will not be covered in this report.

There have been no changes in the operational size, structure, business activities, value chain, or sector of operation compared to the reporting period of FY2023. There were no minority interests, mergers, acquisitions or disposal of entities in FY2024 that fall within the reporting boundary of this report.

SECTION 1: OVERVIEW OF OUR GROUP



TAT SENG PACKAGING GROUP LTD.

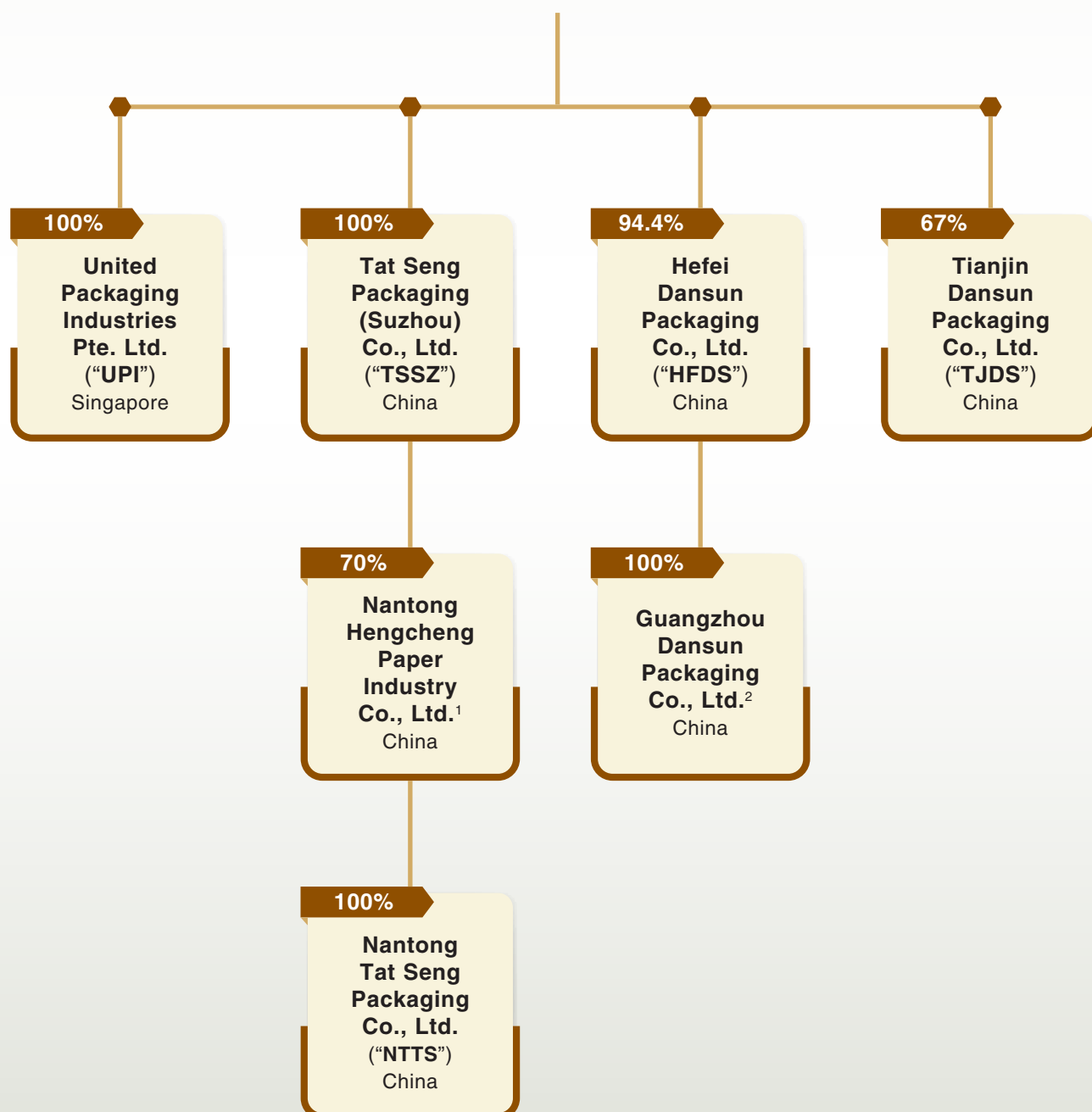


Figure 1: The Group's Corporate Structure^{1 2} and the Shareholdings Breakdown

¹ Nantong Hengcheng Paper Industry Co., Ltd currently has no operation and sales activities

² Guangzhou Dansun Packaging Co., Ltd has not started operation since its incorporation in 2022.

SECTION 1: OVERVIEW OF OUR GROUP

REPORTING FRAMEWORK

The annual sustainability report is prepared in compliance with SGX Listing Rules 711A and 711B on a “comply or explain” basis. It aligns with the six primary components outlined in Practice Note 7.6.

This report adopts globally recognised sustainability frameworks, the GRI Universal Standards 2021 (“GRI”) to standardise reporting practices across the Group. By reporting in accordance with the GRI Standards, the report will be adhering to the reporting principles of accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness and verifiability. The Group also adopts the Task Force on Climate-related Financial Disclosures (“TCFD”) recommendations for climate-related disclosures.

In alignment with SGX’s mandatory requirement to adopt the International Sustainability Standards Board (“ISSB”) IFRS standards starting from the financial year 2025 for reporting period of 1 January to 31 December 2024, the Group decided to do a transition to IFRS standards. For this sustainability report, the Group references the Sustainability Accounting Standards Board (“SASB”) disclosure topics, ensuring their alignment with GRI-reported material topics to facilitate this transition in reporting standard.

Reporting Period and Frequency

[GRI 2-3a]

This report is published on an annual basis and should be read in conjunction with the Group’s Annual Report 2024. Unless otherwise specified, this report covers the Group’s financial year 2024 from 1 January 2024 to 31 December 2024.

Confirmation and Approval

[GRI 2-3c]

The policy, practice and performance data presented in this report was obtained from formal documents and operational statistics across the Group. This report was published on 30 April 2025 and made available on both the Company’s website (<https://www.tspg.sg>) and SGX’s website (<https://www.sgx.com/>) upon approval by the Board of Directors. No printed copies were produced.

RESTATEMENT OF INFORMATION

[GRI 2-4]

There has been no restatement of information from the previous reporting period.

EXTERNAL ASSURANCE AND INTERNAL REVIEW

[GRI 2-5]

We have established an internal review process of our sustainability governance and reporting against the AA1000 Assurance Standard since 2022. Report planning processes, materiality assessment data collection and board governance are covered in the internal review. While there has not been an external assurance for this report, we will continue to review the need for external assurance on our sustainability reporting, taking into consideration regulatory requirements and the evolving reporting landscape.

FEEDBACK

[GRI 2-3d]

For enquiries and feedback regarding our sustainability initiatives or the content of this report, please contact us via the following channels.

Sustainability Development Committee
Email: ir@tspg.sg
Tel: (65) 6326 8805

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

CLIMATE AND SUSTAINABILITY GOVERNANCE

MESSAGE FROM THE BOARD

[GRI 2-14, 2-22]

The Board of Directors of Tat Seng Packaging Group Ltd (“**The Board**”) remains steadfast in its commitment to advancing sustainability as a core element of our business strategy. Recognising the increasing global emphasis on environmental stewardship, regulatory compliance, and the adoption of circular economy practices, we view sustainability as both a responsibility and an opportunity to strengthen our business resilience and foster long-term value creation.

In FY2024, businesses globally, including Tat Seng Packaging Group Ltd and its subsidiaries are contending with a dynamic landscape marked by significant challenges. These include economic uncertainties stemming from geopolitical tensions and trade protectionism, weak consumer demand and intensified competition across industries, inflationary pressures, supply chain disruptions exacerbated by extreme weather events, and evolving customer expectations for sustainable products. Furthermore, companies face tightening regulatory requirements on carbon emissions and broader environmental standards, alongside the rapid pace of technological advancements, which necessitate constant adaptation and innovation.

A key aspect of our approach is our proactive risk mitigation strategy. The Group actively identifies and assesses environmental, economic, and social risks, including resource scarcity, rising operational costs, and market competition. To address these challenges, we optimise procurement strategies to reduce costs by sourcing locally and negotiating favourable terms with suppliers, while also enhancing operational efficiency and cost control measures.

Aside from addressing challenges, we remain focused on leveraging opportunities. By aligning our sustainability strategies with our business objectives, we aim to address risks, enhance operational efficiency, and capture growth opportunities in emerging markets such as renewable energy and electric vehicles.

Our approach prioritises the development of eco-friendly products, investments in renewable energy, and optimising energy efficiency. Key initiatives include expanding the use of recyclable materials, integrating low-carbon transportation methods, installing solar panels, and advancing production processes to reduce wastes and emissions. Notable progress includes wastewater recycling systems in Singapore, transitioning to electric forklifts, enhancing packaging durability to reduce product waste, developing innovative moulded pulp packaging solutions and installing smart power saver device in Hefei. Education and training are also underway within the Group to increase the employee’s awareness on sustainability.

The Board is actively engaged in supporting management’s efforts by regularly reviewing sustainability and climate-related strategies and ensuring alignment with global trends and regulatory requirements. We also reviewed and endorsed emerging risks and opportunities identified by the management team, enabling a proactive response to market and environmental changes. To achieve these goals, we continue to promote collaboration with stakeholders, foster a culture of innovation, and prioritise the professional growth and well-being of our employees through fair employment practices and continuous development opportunities.

Looking ahead, the Group remains committed to driving sustainability as a strategic pillar, supporting the circular economy, and ensuring compliance with statutory and local laws. The Board will continue to work closely with the management to enhance our environmental, social, and governance (“**ESG**”) performance, creating shared value for all stakeholders while ensuring sustainable growth for the Group.

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

SUSTAINABILITY IN THE BOARD

[GRI 2-9, 2-11, 2-17]

The Board is composed of the Executive Chairman, Chief Executive Officer and three Non-Executive and Independent Directors, bringing a diverse blend of expertise in business management, finance, engineering, chemistry, and industry-specific knowledge. This diversity supports the Board's ability to exercise objective and independent judgment in overseeing the Group's corporate affairs and sustainability governance, management, and disclosure. Their respective tenures, other significant positions and competencies are disclosed in the Group's Annual Report FY2024 under the Board of Directors and Board Composition and Guidance section.

Our Board Committees comprises of the Nominating Committee ("NC"), Remuneration Committee ("RC"), and Audit and Risk Committee ("ARC").

The Directors have identified a few areas for which the Board has direct responsibility for decision making including:

- Overseeing the sustainability strategy and embedding ESG and climate considerations into business strategy
- Setting sustainability direction and performance targets
- Approving material ESG topics and climate-related risks for the Group's sustainability report

The roles of the Executive Chairman and Chief Executive Officer ("CEO") are clearly separated to ensure balanced authority, accountability, and independent decision-making within the Board. The Executive Chairman guides the Company's strategic direction, while the CEO manages daily operations and growth initiatives. With Independent Directors as a majority, the Board ensures objective judgement and balanced decision-making, free from undue influence by any individual or group.

The Company encourages Directors and key management personnel to participate in ongoing training programs covering new laws, regulations, sustainability developments, and industry-specific issues. Management closely monitors regulatory changes, ensuring relevant training is provided to support Directors in their duties. The Company had arranged for all Directors to undergo training on sustainability reporting, enhancing their understanding of ESG priorities and industry standards.

Board Nomination

[GRI 2-10]

The NC oversees Board succession planning, evaluates candidates for Board and Board Committee roles, and reviews Director's performance to recommend re-election and re-appointment as appropriate.

In identifying and nominating qualified candidates, the NC considers merit-based criteria, including character, expertise, skills, track record, and other qualities that support a diverse and inclusive Board culture. Candidates are selected based on their character, judgement, and relevant business expertise, with a focus on core competencies in finance, accounting, and law, ensuring they are well-equipped to fulfil their responsibilities effectively.

The NC prioritises a range of perspectives and is guided by the SGX-ST Listing Rules, the Companies Act, and the 2018 Corporate Governance Code, taking into account factors like gender, age, ethnicity, and geographic representation to enhance Board diversity. The Board has established that a minimum of 10% of its total seats be allocated to women, while also ensuring representation across diverse age groups. The NC will periodically review these objectives and propose amendments to the Board Diversity Policy as needed.

In executing the Board Diversity Policy, the NC will consider the Company's diversity goals and the varied dynamics of the business landscape in which it operates. The approach will remain flexible to support effective succession planning and to ensure the Company continues to attract and retain highly qualified individuals for Board roles.

Independent Directors make up the majority of the Board in compliance with Provision 2.2 of the 2018 Code to ensure independence of the Board.

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Evaluation of the Board's Performance

[GRI 2-18]

The Board conducts a formal annual assessment to evaluate its overall effectiveness, as well as the performance of each Board Committee and individual Director. This performance evaluation process, led by the NC, involves self-assessments and feedback from each Director, ensuring comprehensive insight into the Board's functionality and individual contributions.

The NC is responsible for assessing the effectiveness of the Board, each Board Committee, and individual Directors. Although external facilitators were not engaged for the current assessment, the NC retains the authority to enlist such assistance in the future if necessary, with costs covered by the Company.

Remuneration Policies

[GRI 2-19, 2-20]

The Board follows a formal and transparent process for developing remuneration policies for Directors and key management personnel, ensuring alignment with the Group's long-term interests and shareholder value. No Director participates in decision-making for their own compensation.

The RC reviews remuneration packages based on industry standards, peer company benchmarks, the Company's performance, and individual contributions. This approach ensures that the interests of Directors and key management personnel are aligned with those of shareholders. Shareholders' approvals are sought at the 2024 Annual General Meeting ("AGM") for the payment of the Directors' proposed fees with 99.997% of the votes casted in support of the resolution.

Prevention of Conflict of Interest

[GRI 2-15]

The Board has established clear policies and procedures for managing conflicts of interest. Directors facing a conflict are required to recuse themselves from related discussions and decisions to maintain objectivity. In compliance with Chapter 9 of the SGX-ST Listing Manual on interested person transactions, the ARC meets semi-annually to review any potential transactions, ensuring they are conducted on normal commercial terms and do not prejudice shareholder interests.

Each independent director must annually complete a Director's Independence Checklist to confirm their independence in accordance with the SGX-ST Listing Rules and the 2018 Code. None of the non-executive or independent directors, nor their immediate family members, should hold significant interests in any organisation that has engaged in transactions S\$50,000 (to an individual) or S\$200,000 (to a firm), with the Company or its subsidiaries in the current or previous financial year. In addition, present directorships in other listed companies of each director are disclosed in our annual report.

No material contracts involving Director or controlling shareholder interests were in place at the close of FY2024.

Please refer to the Corporate Governance section of our Annual Report FY2024 for detailed information relating to the Composition of the Board, Criteria for nominating of Board members, Prevention and mitigation of conflict of interest, Board diversity, Communication of critical concerns, Collective knowledge of the highest governance body, Evaluation of the performance of the highest governance body, Remuneration policies and processes to determine remuneration.

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

SUSTAINABILITY GOVERNANCE AND LEADERSHIP

[GRI 2-12, 2-13, 2-14, 2-16]

Sustainability Reporting Structure

The Board holds ultimate responsibility for the Company's sustainability reporting, ensuring that material ESG factors are integrated into strategic planning, monitored, and managed effectively. The Board interacts tightly with the management team, and this resulted in a robust sustainability governance across all levels of the organisation.

Supporting the Board is the Sustainability Development Committee ("**the Committee**"), which promotes and oversees sustainable business practices within the Group. Comprising the Managing Director/CEO, Group Chief Financial Officer, and the Sustainability Reporting Team, the Committee manages sustainability data, prepares the annual sustainability report per SGX guidelines, and oversees relevant projects. Regular updates and consultations with external sustainability consultants further strengthen the reporting process. The ARC will be responsible for the internal review of the developed sustainability report before its publication.

Execution of sustainability initiatives lies with the General Manager ("**GM**") and the support from respective Heads of Departments ("**HODs**"). Feedback from employees will be gathered through the execution of sustainability initiatives, which are led by HODs. Through the Committee, Tat Seng's employees contribute insights on the organisation's ESG impact, fostering an inclusive and responsive approach to sustainability management.

The Committee updates the Board of sustainability related matters during the Board meetings. In addition, updates on sustainability performance are presented for the Board via email communication for their endorsement and approval to ensure comprehensive oversight and alignment with sustainability goals. In the reporting year, no critical concerns were raised to the Board, reflecting the Group's proactive approach to sustainability governance and reporting.

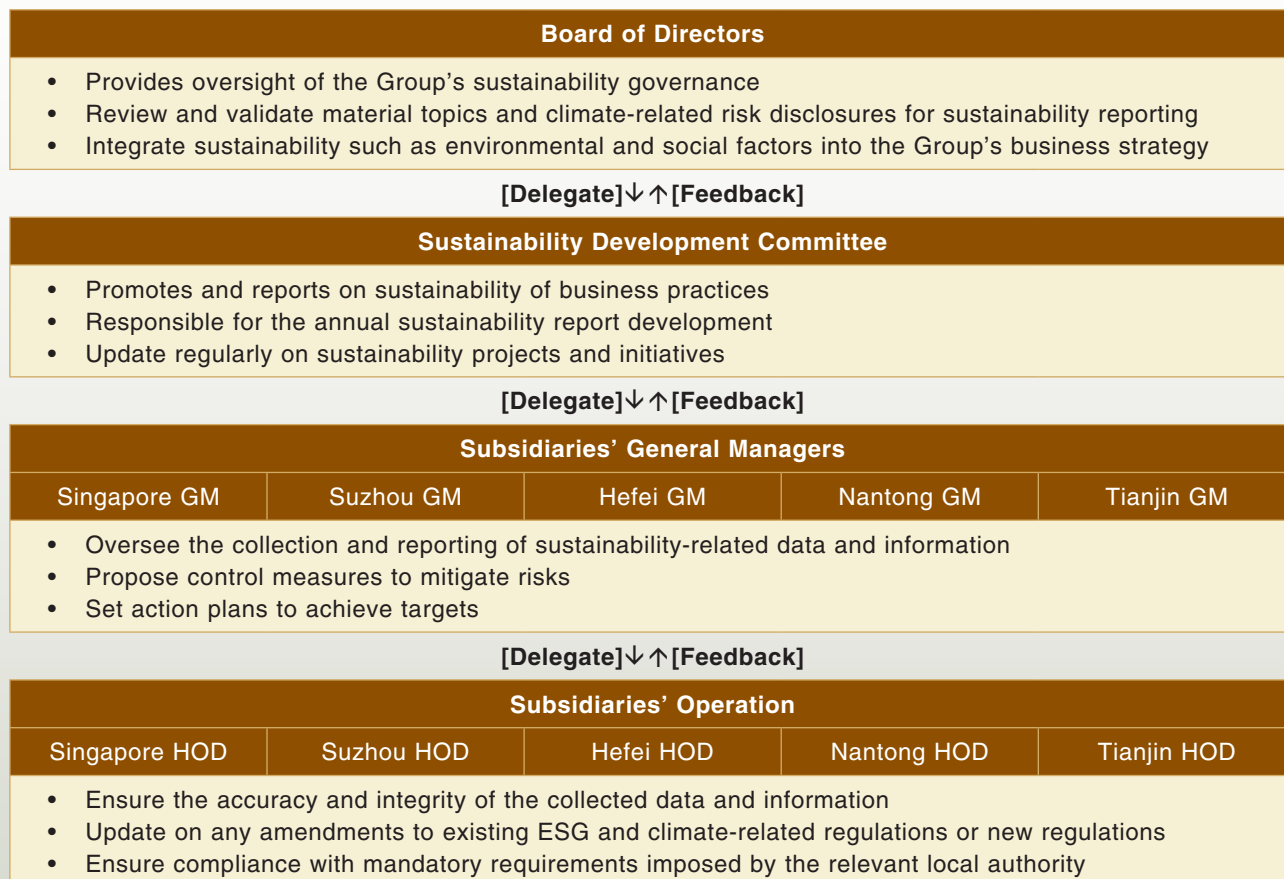


Figure 2: Sustainability Reporting Structure

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

POLICIES AND PRACTICES

[GRI 2-16, 2-23, 2-24, 2-25, 2-26, 2-27]

We are guided by a robust set of policies that underpin our commitment to conducting business operations in a responsible and ethical manner. These policies are seamlessly integrated into our organisational practices, reflecting our dedication to upholding the highest standards of integrity and accountability.

Tat Seng policies and practices adhere to local laws and regulations, with reference to the Tripartite Alliance for Fair & Progressive Employment Practices.

Once approved by the ARC or management, these policies are communicated across the Company and its subsidiaries through our employee onboarding, regular briefings, training sessions and electronic dissemination. Additionally, we engage our business partners and stakeholders by embedding these policies into agreements and publishing them in our sustainability reports, available on our corporate website.

To mitigate potential risks arising from evolving regulations and best practices in corporate governance, sustainability reporting, and employment practices, we conduct regular reviews and updates of our policies whenever necessary, ensuring a structured approach to due diligence. By embedding these principles into our operations and fostering a culture of ethical conduct, we uphold a precautionary approach that safeguards human right, operational resilience, and long-term value creation.

In 2024, there were no non-compliance with laws and regulations within the Group. For any concern about the Group's policies and practices, feedback can be sent to:

Chairman of the Audit and Risk Committee

c/o Company Secretary of Tat Seng Packaging Group Ltd
Impetus Corporate Solutions Pte. Ltd.
11 Collyer Quay
#16-02 The Arcade
Singapore 049317
Email: whistleblow@tspg.sg

Conflict of Interest

- Included in the Code of Business Ethics to protect the interest of the Company
- ARC meets half yearly to review on any interested person transaction to ensure the appropriateness of such transactions
- No transaction of the Company's shares for the period commencing one month before announcement of financial results
- Disclosures to be made to Human Resource Manager, General Manager or Director for their assessment of relevance
- Suspected violations are reportable via email

Investor Relations Policy

- Instills transparency of our compliance with SGX-ST listing rules

Code of Business Ethics

- Enforces employees' compliance with laws, rules and regulations, and Company policies during operation
- Commits to transparency, accountability and independence in corporate governance
- Engages with society and stakeholders on human right issues related to business
- Seeks to promote respect for human right
- Intolerant of discrimination and harassment criteria
- Establishes fair employment practices
- Strictly prohibits child and forced labour

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Personal Data Protection Policy

- Applies to all employees, subsidiaries, customers, suppliers and shareholders

Anti-Bribery and Anti-Corruption Policy

- Prohibits direct or indirect bribery including receiving, offering, promising, authorising or “anything of value” to any customer, supplier or other third party
- Applies to the Group’s Board and all employees, and extends to third party business partners and affiliates
- Punishes violation with disciplinary action including immediate termination of employment

Anti-Competitive Practices

- Commits to fair competition within the framework of laws
- Abstains from unfair trade practices

Money Laundering

- Strictly prohibits activities that conceal true origin and ownership of proceeds from criminal activities

Disclosure of Information

- Abides by confidentiality clauses regarding Company’s confidential information, processes know-how, technical information, business plan and intention, legal matter, and intellectual property

Sustainable Sourcing

- Abides by local environmental legislation and regulations
- Upholds highest standards of environmental, social and economic practices
- Identifies and addresses areas of higher risk for non-sustainable sourcing through engagement and communication with relevant suppliers and business partners

Risk Assessment

- Conducted annually
- Findings submitted to ARC for approval and scoping of upcoming internal audit

Whistle-Blowing Policy

- Outlines scope and reporting procedure for suspected unethical and illegal acts
- Protects whistle-blower from reprisal

Figure 3: Policies and Practices

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

STAKEHOLDER INCLUSIVENESS

[GRI 2-25, 2-29]

The Group is committed to fostering transparent and meaningful communication with its stakeholders and considers stakeholders to be those impacted by our activities and whose actions, in turn, can influence the Group's operations. The Group's website (<https://www.tspg.sg>) is an important conduit for communicating with our stakeholders. Through diverse engagement channels, we regularly listen to stakeholder opinions and address their concerns regarding sustainable development by enhancing our management practices. We believe that cultivating strong relationships with stakeholders and valuing their perspectives are integral to our long-term success.

In 2024, the Group actively engaged with key stakeholders, including shareholders, investors, employees, suppliers, customers, bankers, professional service providers, and government and regulatory bodies. Feedback and suggestions gathered during these interactions provided valuable insights into their expectations for the Group's sustainability efforts and guided our approach to addressing their concerns.

Table 1 outlines the stakeholder groups we engage with on an ongoing basis, detailing our engagement methods, their key interests and concerns, and the Group's corresponding responses to these issues.

Table 1: List of Stakeholders and Our Response to Their Interests

Stakeholders	Engagement Approaches	Interests and Concerns	Our Responses
Employees	<ul style="list-style-type: none"> • Safety committee meetings • Appraisal • Training programmes • Internal communication • Career development programmes • Online Survey 	<ul style="list-style-type: none"> • Staff feedback • Staff performance • Staff improvement suggestions • Career development and training opportunities • Related to ESG subject 	<ul style="list-style-type: none"> • Review appraisal on job performances across all levels of employment • Respective management team will review and implement proposed suggestions
Customers	<ul style="list-style-type: none"> • Trade shows and customer visits • Plant audit by customer • Customer satisfaction survey • Customer feedback • Online Survey 	<ul style="list-style-type: none"> • Customer relationship • Performance & quality satisfaction • Related to ESG subject 	<ul style="list-style-type: none"> • Maintain and improve quality satisfaction and reputation
Suppliers	<ul style="list-style-type: none"> • Emails, teleconferences • Quotation, Contracts or Agreements • Due diligence in FSC certification • Online Survey 	<ul style="list-style-type: none"> • Adherence to Supplier Code of Conduct and Supplier Code of Ethics • Contract terms and conditions • Sustainability along the supply chain • Related to ESG subject 	<ul style="list-style-type: none"> • Ensure Supplier complies with the Code of Ethics, Code of Conduct and contract terms
Shareholders and Investors	<ul style="list-style-type: none"> • Annual General Meeting • Annual Report • Sustainability Report • Corporate announcements via SGXNet 	<ul style="list-style-type: none"> • Shareholder's interest on performance • Financial performance and corporate governance • Sustainability performance 	<ul style="list-style-type: none"> • Communicate with shareholders through AGM, and investor relation email • Ensure timely disclosure of information as required by the SGX listing rules

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Stakeholders	Engagement Approaches	Interests and Concerns	Our Responses
Government and Regulatory Bodies	<ul style="list-style-type: none"> • Webinar & dialogues with government agencies • Physical meetings 	<ul style="list-style-type: none"> • Compliance with regulations • Application for permits or licenses • Mandate reporting • Related to ESG subject 	<ul style="list-style-type: none"> • Ensure compliance with government agencies • Establish energy management system and policies
Bankers and Professional Service Providers	<ul style="list-style-type: none"> • Emails and teleconferences • Quotations, contracts and agreements • Online survey 	<ul style="list-style-type: none"> • Contract terms and conditions • Related to ESG subject 	<ul style="list-style-type: none"> • Ensure compliance with Code of Business Ethics

MATERIALITY ASSESSMENT

[GRI 2-12, 2-13, 2-14, 2-29, 3-1, 3-2, 3-3]

Process of Identifying Material Topics

In addition to the regular dialogue and engagement, the Group conducted a comprehensive materiality assessment to identify key ESG topics, also referred to as material topics, relevant to its business operations and stakeholders. This same process, used in FY2023 for the identification of material topics, included an online questionnaire, peer benchmarking, industry review, and a comparison of historical ESG priorities.



Figure 4: Process of Identifying Material Topics

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Stakeholder Identification for Online Questionnaire

The Group identified critical internal and external stakeholders for the completion of an online questionnaire to ensure their perspectives were considered in developing this sustainability report.

- **Internal Stakeholders:** Board of Directors, management, and employees.
- **External Stakeholders:** Suppliers, customers, bankers, service providers, and freight forwarding companies.

Breakdown of Internal Stakeholders' Response

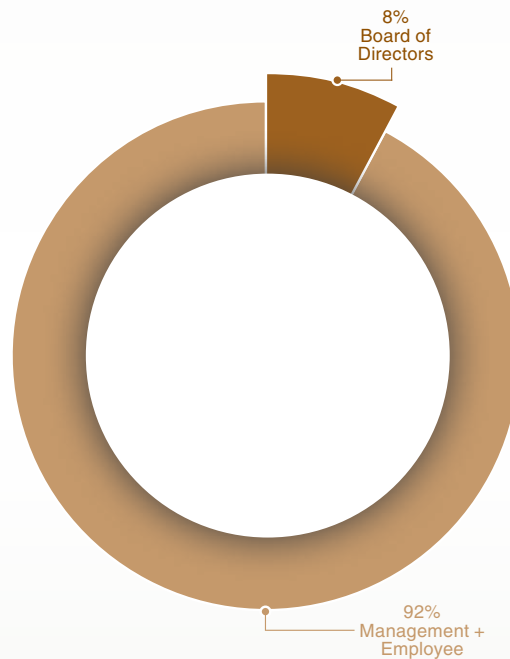


Figure 5: Breakdown of Internal Stakeholders' Response

Breakdown of External Stakeholders' Response

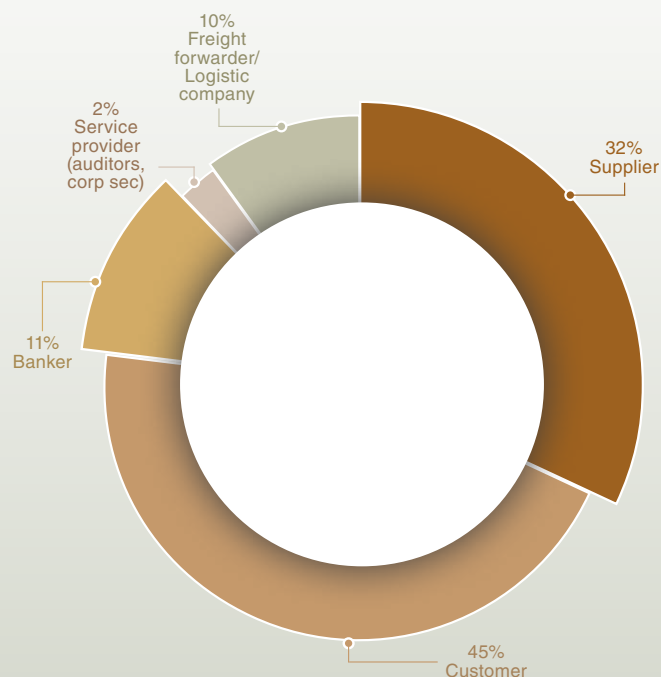


Figure 6: Breakdown of External Stakeholders' Response

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Targeted Stakeholder Engagement (via Online Questionnaire)

A survey was conducted via an online questionnaire using ESG topics derived from the GRI and SASB standards for the containers and packaging industry. Responses from stakeholders were collected over a three-week period, providing insights into the topics of greatest importance to stakeholders and their perceived impact on the Group. The ESG topics were ranked accordingly to the survey results on a materiality matrix according to their level of importance to the stakeholders and the impact to the Group.



Figure 7: Materiality Matrix

Review and Prioritisation

The materiality assessment process involved multiple review methodologies to prioritise ESG topics:

1. Stakeholder Engagement Results

ESG topics were ranked using a materiality matrix, evaluating their importance to stakeholders and their impact on the Group. The top 10 topics were further prioritised for consideration.

2. Peer Review

ESG topics were benchmarked against six industry peers of similar size, sector, and geographical presence. Topics reported by at least 50% of peers were shortlisted.

3. Industry Benchmark

Key emerging ESG factors in enabling a company's successful transformation in the paper and packaging sector were reviewed to align the Group's reporting with industry developments.

4. 3-Year Comparison

Recurring material topics from the Group's last three sustainability reports were considered to ensure consistency in tracking ongoing initiatives.

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Selection and Validation of Material Topics

A preliminary list of 12 ESG topics was consolidated from the assessment methodologies and presented to the Committee for review. For FY2024, the topic on procurement practices has dropped significantly in its ranking in the online survey where the topic on supplier social assessment has jumped in its ranking, underlining a possible change in the focus from the stakeholders. Supplier social assessment has also been a topic reported by peers and highlighted in the industry benchmark. As a result, the topic on procurement practices has been replaced by the topic on supplier social assessment in this report. The Board validated and approved the final material topics through a formal resolution. Following Board approval, data collection for the annual sustainability report commenced.

Table 2: List of The Group's Material Topics for FY2024

Material Topics		Boundary, where impact of the material topic occurs									Impacts addressed in this Report
		Within Operation ³			Outside Operation ⁴						
		Board	Management	General Employees	Shareholders & Investors	Business Partners	Suppliers	Customers	Government & NGOs	Local Communities	
Economic											
1	Economic Performance	✓	✓	✓	✓	✓	✓	✓		✓	Economic
2	Anti-corruption	✓	✓	✓	✓	✓	✓	✓	✓	✓	Business Ethics
Environment											
3	Material (Raw Material)	✓	✓	✓	✓	✓	✓	✓	✓	✓	Climate Change
4	Energy/Energy Management	✓	✓	✓	✓			✓	✓	✓	Energy
5	Water and Effluents/ Water Management	✓	✓	✓	✓			✓	✓	✓	Water Security
6	Emissions/GHG Emissions/Air Quality	✓	✓	✓	✓	✓	✓	✓	✓	✓	Climate Change
7	Waste/Waste Management	✓	✓	✓	✓			✓	✓	✓	Climate Change
8	Supplier Environmental Assessment/Supply Chain Management	✓	✓	✓		✓	✓	✓	✓	✓	Supply Chain Impact & Resilience
Social											
9	Employment	✓	✓	✓	✓				✓	✓	Human Capital and Diversity
10	Occupational Health and Safety	✓	✓	✓	✓	✓	✓	✓	✓	✓	Health & Safety
11	Training and Education	✓	✓	✓	✓				✓	✓	Human Capital Development
12	Supplier Social Assessment	✓	✓	✓		✓	✓	✓	✓	✓	Supply Chain Impact & Resilience

³ The Group's activities have contributed directly to this impact.

⁴ The Group contributes indirectly to this impact through its business relationships etc.

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

CLIMATE-RELATED RISKS AND OPPORTUNITIES

[GRI 201-2]

Overview of Climate Disclosure

Operating in a business landscape where climate-related risks have a significant impact, we acknowledge that the increasing frequency and severity of climate change effects require urgent action. The Group remains committed to sustainable operations and continuously evaluates strategies to minimise its environmental footprint.

As a publicly listed company on the Singapore Exchange (“SGX”), Tat Seng is required to publish an annual sustainability report on a ‘comply or explain’ basis, in accordance with Practice Note 7.6 of the SGX-ST Listing Rules. This includes alignment with the TCFD recommendations. SGX encourages a phased approach to TCFD adoption over three years. In line with Listing Rule 711B and IFRS S2 Climate-related Disclosures, Tat Seng adheres to climate-related disclosure requirements based on TCFD’s four core pillars in our FY2023 Sustainability Report (https://www.tspg.sg/images/pdfs/Sustainability_Reports/SR2023.pdf): Governance, Strategy, Risk Management, and Metrics & Targets. As a corrugated packaging company, we are progressively working towards full TCFD alignment and are conducting quantitative scenario analysis this year as part of SGX’s recommended phased approach.

GOVERNANCE

[GRI 2-12]

The Board acknowledges the Group’s significant progress in integrating sustainability into its operations through initiatives such as emissions reduction, energy, developing more sustainable products, and the adoption of renewable energy sources. The Board oversees the Group’s sustainability and climate-related strategies, while GMs and operational teams across entities are responsible for identifying risks and opportunities in response to evolving sustainability requirements. These insights are reported to the Committee and the CEO. The CEO subsequently presents key findings and material developments to the Board for discussion and endorsement as part of our sustainability reporting. SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE from our Sustainability Report of FY2023 details how the TCFD process has been built around the four pillars of Governance, Strategy, Risk Management, and Metrics & Targets and how the qualitative analysis was conducted for our risks. The other 3 pillars are detailed as part of our risk assessment study in the below paragraphs.

Our Journey of Climate Disclosure

The Group began assessing climate-related risks in FY2023 using the TCFD framework. Since committing to TCFD recommendations, we have adopted SGX’s phased approach to implementation:

- **FY2023:** Identified climate-related risks and opportunities through:
 - o A stakeholder survey to gather perspectives on future climate risks.
 - o Benchmarking survey results against industry peers and global guidelines.
 - o Management validation and prioritisation of key climate risks based on likelihood and severity.
 - o Conducted qualitative scenario analysis to assess how different climate scenarios could impact business operations, supply chains, and market dynamics. This exercise helped identify gaps in mitigation strategies.

The below risks were validated by the Board:

- o Increased pricing of GHG emissions
 - o Uncertainty in market signals & increased cost of raw materials
 - o Increased severity of extreme weather events such as floods affecting production
- **FY2024:** Enhanced the analysis by incorporating quantitative aspects for the climate-related risks and opportunities, linking scenario assessments to financial targets, mitigation measures, and performance indicators.

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

STRATEGY

The Group conducted a scenario-based climate risk assessment using the Intergovernmental Panel on Climate Change (“IPCC”) Shared Socioeconomic Pathways (“SSPs”) and Representative Concentration Pathways (“RCPs”). The scenarios outlined below have been carefully chosen to simulate both high levels of climate-related transition risks and physical risks, ensuring that our business resilience is rigorously tested across a diverse range of potential situations.

Climate Scenario Analysis

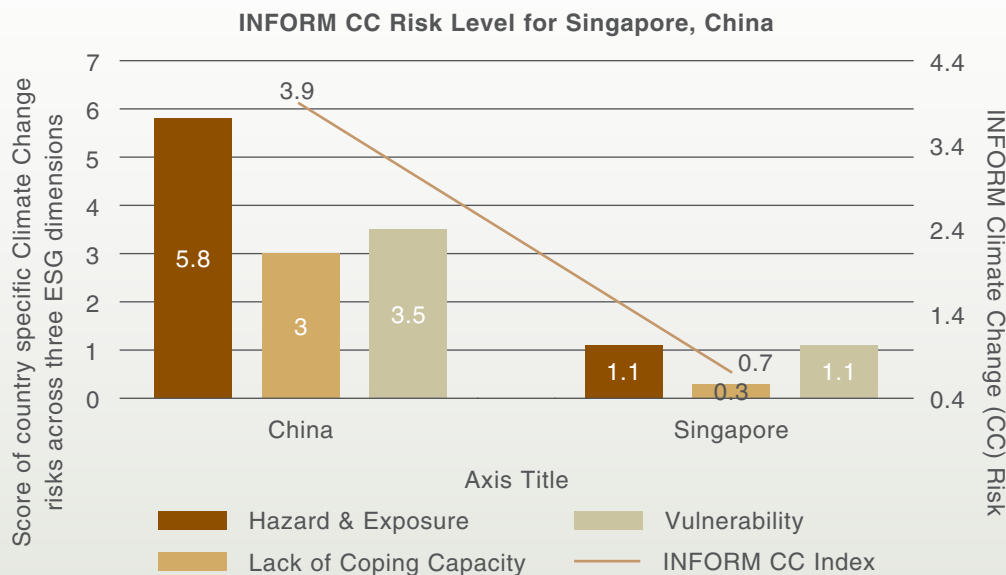
- **Best-case scenario:** Global temperature rise remains below 2°C (SSP1/RCP1). This scenario is associated with a high level of climate-related transition risks due to the transition towards to a low-carbon economy.
- **Worst-case scenario:** Business-as-usual pathway, with temperatures increasing between 3.3°C and 5.7°C above pre-industrial levels (SSP5/RCP5). As compared to last year, this year we are conducting the analysis for SSP5 scenario to cover both the extreme end impact analysis. This scenario is associated with a high level of climate-related physical risks due to the increase in global temperatures.

RISK MANAGEMENT

[GRI 201-2]

Physical Risk Findings

For better representation of risk exposure and opportunities, we used the INFORM Risk Index tool, a global, open-source risk assessment tool for natural disasters and crises, to assess country-specific climate change risks across three ESG dimensions: Hazard & Exposure, Vulnerability, and Lack of Coping Capacity. Each dimension was treated equally in the analysis for China and Singapore where majority of the business operations are located in.



SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Legend for risk level⁵

CLASSES THRESHOLDS IN INFORM			
Dimension	CLASS	MAX	MIN
RISK	very high	10	6.5
	high	6.4	5.0
	medium	4.9	3.5
	low	3.4	2.0
	very low	1.9	0.0

In terms of the three ESG dimensions,

- Singapore has climate change risk index score of 0.7 which puts the country under very low risk.
- China has climate change risk index score of 3.9 which puts the country under medium risk, tending towards high risk by 2080 under pessimistic scenarios.

Figure 8: Risk Assessment Analysis

Key observation of the analysis is:

- China faces the highest disaster risk due to high exposure and vulnerability, despite moderate coping capacity.

The qualitative study in 2023 revealed that the locations for TJDS and TSSZ are at a high risk to flooding and aligns with the results we have depicted in Figure 9 below for risk of flooding in 2050 (medium term).

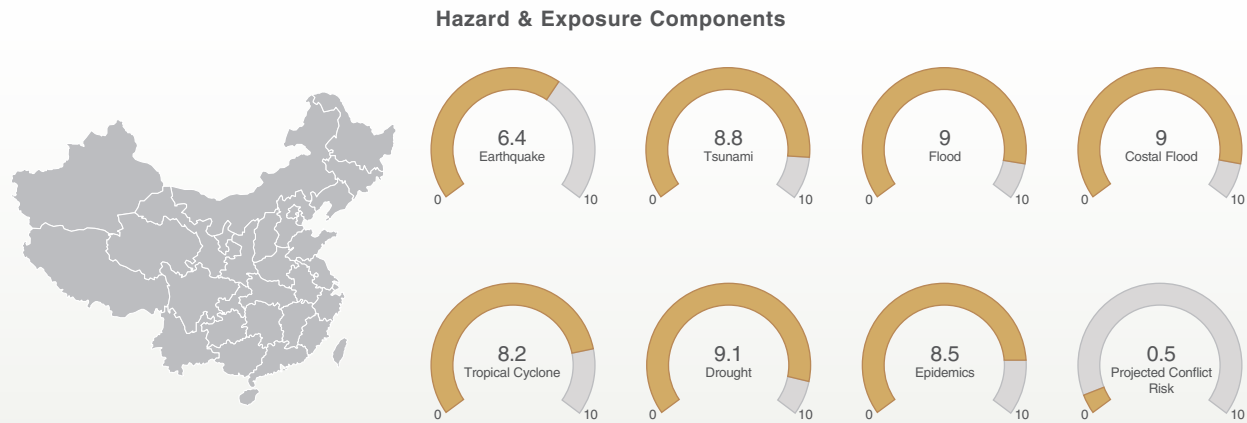


Figure 9: Disaster Risk in China

- Singapore demonstrates strong disaster resilience due to minimal exposure, low vulnerability, and effective coping mechanisms.

For our China segment, hazard level thresholds indicate an environmental risk of 53% in 2025 (SSP1/RCP1) and 58% by 2080 (SSP5/RCP5). This increasing trend underscores the importance of implementing transition strategies, such as investing in renewable energy solutions and other technological advancements.

⁵ pg. 56/90 of INFORM Index for Risk Management Concept and Methodology Version 2017

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Table 3: Environmental Risk in China in 2025 and 2080

HAZARD & EXPOSURE	very high	10.0	6.1	Year	Risk Level	Total Risk	Aggregate Risk %
	high	6.0	4.1	2025 (near term) (RCP1/SSP1)	5.3 ⁶	10	5.3/10 = 53%
	medium	4.0	2.7				
	low	2.6	1.5	2080/2100 (long term) (RCP5/SSP5)	5.8 ⁷	10	5.8/10 = 58%
	very low	1.4	0.0				

Approximate asset value (\$) at risk (\$\$) in million			
		2025	2080
Asset value ⁸ (\$\$) in million		53%	58%
TSSZ	8.10	4.29	4.70
NTTS	26.60	14.10	15.43
TJDS	8.20	4.35	4.76
HFDS	16.70	8.85	9.69

Historic Impacts and Their Plausible Future Projections

The Group faced few incidents last year at HFDS and TSSZ. Based on last year's study, HFDS entity location risk was low; however, the historic events warrant attention to this location and our study depicted below provided us with a larger picture on the plausible scenarios in the coming future.

Based on our best and worst-case scenarios, there is an 58% increase in the climate change risk for China by the year 2080. Three out of the four locations are classified as high risk, and historic events have caused damage across two facilities. Table 4 below depicts the approximate losses keeping all other parameters constant, our assessments of floods, coastal floods and other extreme weather events in Figure 9, puts 58% of the total revenue of China at risk by 2080 or 2100, where these incidents will increase in frequency and severity, if the mitigation measures are not implemented effectively. With the assumption of 6.8%⁹ revenue increase year-on-year as per compound annual growth rate (CAGR) for China Packaging Materials market, the damage in the financial numbers would be substantial.

Table 4: Future Projections of Climate-Related Impacts

	Scenario	Number of Incidents	Duration of impact (in days)	Financial Losses (\$\$) projected
Historic (FY2024)	HFDS	3	4	21,000
2080 Scenario	HFDS	5	6	33,180
Historic (FY2024)	TSSZ	1	3	21,500
2080 Scenario	TSSZ	2	5	33,970

⁶ <https://web.jrc.ec.europa.eu/dashboard/INFORMRISKCOUNTRYPROFILE2024/?no-header=1&vvlISO3=AFG&no-scroll=1>

⁷ 5.8 is the hazard risk level in China in the year 2080 from INFORM Index. <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Climate-Change/INFORM-Climate-Change-Tool>

⁸ Asset value figures are the net book value of property, plant and equipment and right-of-use assets as at 31/12/2024.

⁹ <https://www.grandviewresearch.com/horizon/outlook/packaging-materials-market/china?utm>

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Transition Risk Findings

The Group has identified three transitional risks: carbon pricing, cost of raw materials and uncertainty in market signals. Each of the risks are assessed for their impacts and severity.

Singapore has outlined a progressive increase in its carbon tax rates to support its net-zero emissions target:

- 2019 to 2023: S\$5 per tonne of CO₂ equivalent (tCO₂e).
- 2024 and 2025: S\$25 per tCO₂e.
- 2026 and 2027: S\$45 per tCO₂e.
- By 2030: between S\$50 and S\$80 per tCO₂e.

China has yet to implement any carbon pricing initiatives. From a national perspective, the Group has not been subject to carbon taxes so far. However, in the near future, we expect some form of carbon offset program to be introduced by our publicly listed customers in China. Reducing our carbon emissions by transitioning to renewable energy will thus help mitigate these potential risks associated with increasing carbon pricing. Additionally, carbon taxes are expected to rise significantly by 2050 and 2100 if net-zero targets are not achieved. However, by that time, the impact of physical risks will have increased considerably, shifting the focus away from carbon taxes.

To capitalise on any transitional opportunities, the Group is closely monitoring potential regulatory changes in the near future which could encompass the following from the Chinese regulators:

- Expanding and improving the carbon trading market to incentivise emission reduction through market mechanism
- Enforcing stricter environment regulations to drive industrial restructuring and improve energy efficiency
- Providing financial and fiscal support to promote renewable energy
- Increasing investment in R&D to accelerate the commercialisation of low-carbon technologies
- Enhancing public engagement through education and awareness campaigns

The second and third transition risks are rising cost of raw materials and uncertain market signals. The Group sees the opportunity to address both risks by adapting to changing customer sentiments in the market, through the adoption of sustainable materials and production practices, which also improves the Group's branding and allows for its expansion into new markets. However, the Group is also cautious of the increased costs of sustainable material and challenges within the supply chain regarding the availability of such materials and will be preparing the business to mitigate them in the long term. The Group will also continue to improve technologies, production efficiency, and reduce energy waste.

Cost of corrugated cardboard skyrocketed as ecommerce boomed. In 2024, the U.S. corrugated packaging industry saw a 15%¹⁰ rise in pulp costs, driven by supply chain disruptions and heightened demand. Based on this assumption, the assessment was done as below. The assessment evaluates the financial impact of increasing raw material costs on the Group's gross margin, considering various cost escalation scenarios.

¹⁰ <https://korpack.com/the-rising-costs-of-corrugated-packaging-in-the-u-s-an-in-depth-analysis/>

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Table 5: Financial Impact of Increasing Raw Material Costs

Current Raw Material Cost at approximate 63% of revenue (based on financial data of FY2024)	63%
Group Revenue, S\$ million	253.9
Raw Material cost FY2024, S\$ million	160.4
Gross Margin, S\$ million (before cost increase) = Revenue – Raw Material Cost	93.5
Projected Group Revenue, S\$ million (assuming 6.8% increase)	271.2
Projected Raw Material cost in the future years, S\$ million (assuming an additional 15% increase, based on 63% of revenue)	196.5
Projected Gross Margin, S\$ million (after cost increase) = Revenue – Raw Material Cost	74.7
Simulated % Drop in Gross Margin	20.1%

A 15% increase in raw material costs results in a 20.1% decline in gross margin, significantly impacting profitability. The assessment highlights the vulnerability of profitability to rising raw material costs. Proactive mitigation strategies, including supplier diversification and cost control measures, will be essential in maintaining financial resilience.

Risk Mitigation

The Group conducts an annual enterprise risk survey as part of its comprehensive risk assessment, encompassing all business processes, including climate-related risks. The top 10 risks identified from the survey are presented to the ARC during its meetings for review and to determine further action to enhance the Group's internal controls.

Regarding climate risk, each subsidiary employs its own approach to identify and assess risks, such as conducting Strengths, Weaknesses, Opportunities, and Threats (“**SWOT**”) analyses as well as gathering and analysing publicly available environmental and weather-related data.

Additionally, an external auditor is engaged to perform internal audits on specific high-risk business processes, as determined by the annual risk assessment and guided by the ARC's directives.

Approach and Mitigation Measures

The Group applies the following to mitigate, reduce the occurrence of identified risks:

- Adjusting business strategies or processes to avoid high risk activities
- Ensure the coverage of insurance is sufficient on the Group's assets
- Outsourcing high-risk business functions to or seeking advice from specialised institutions to minimise risks
- Regularly conduct training to raise awareness and knowledge of employees
- Establish standard operating procedure (“**SOP**”) to address identified risk
- Regularly update with latest regulations change and industrial trend

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Overall, the Group has implemented or plans to implement the following mitigation measures,

- For recurring annual climate phenomenon in TSSZ, the facility has established a SOP on typhoon or rainstorm prevention, by closely monitoring and making preparations in advance to reduce damage by the extreme weather.
- Switching of diesel forklifts to electric forklifts:
 - o Upon analysis of the total cost of operating a 5-tonne diesel forklift and electric forklift, taking into account purchase, fuel, maintenance and repair costs over a 5-years period, it has been found that the total cost of ownership for an electric forklift could be lower than that of a diesel forklift.
 - o As such, we have switched 4 diesel forklifts to electric forklifts for TSSZ and 1 diesel forklift to 2 electric forklifts for UPI.
- In July 2024, HFDS successfully completed the 2023 GHG verification which achieved a further reduction in the emission as compared to prior years. This reduction was driven by several key initiatives, including:
 - o Implementation of (an automated system for calculation of the weight of residual paper rolls) Original paper residual roll system:
 - Introduced an automated system for calculating the weight of residual paper rolls, replacing the previous manual method involving diesel forklifts.
 - This initiative significantly reduced the reliance on diesel forklifts which helps in reducing our monthly diesel consumption.
 - o AI-powered temperature regulation system for Corrugator:
 - An investment was made to optimise the steam pipeline of the corrugated production line.
 - Temperature sensors and control units were added at key steam usage points, enabling precise temperature control with a smart temperature control system.
 - This upgrade reduced steam consumption, lowered energy losses, and improved the physical properties and flatness of the corrugated boards.
 - o Deployment of a 2.69MW Rooftop Solar Photovoltaic Project:
 - The distributed solar PV system generated 1,410,555 kWh of electricity.
 - This contributed to a reduction of 1,087 tCO₂e in carbon emissions.
- HFDS & Singapore facilities completed installation of solar panel in 2023, whereas
 - o TSSZ: Solar panel will be installing in 2025 (approximately 1.5MW)
 - o NTTS: Solar panel will be installing in 2025 (approximately 0.9MW)
 - o TJDS: To evaluate the feasibility of solar system in 2025

SECTION 2: CLIMATE AND SUSTAINABILITY GOVERNANCE

Declining Solar Costs

The levelized cost of electricity (“LCOE”)^{11 12} for solar has been dropping steadily, driven by:

- Technological advancements (higher panel efficiency, better storage)
- Economies of scale (lower manufacturing and installation costs)
- Policy incentives (carbon taxes, subsidies, and feed-in tariffs)

Table 6: Declining Solar Costs

Year	Estimated LCOE (\$/MWh)	Cost Reduction (%)
2020	~\$40-\$50	Baseline
2030	~\$20-\$30	40-50% cheaper
2050	~\$10-\$20	70-80% cheaper
2100	<\$10	~90% cheaper

Table 7: Outlook on Solar in 2030, 2050, and 2100

By 2030	By 2050	By 2100
<ul style="list-style-type: none"> • Declining Solar Costs: Solar panel efficiency is expected to increase, and installation costs may decrease due to technological advancements. • Grid Price Volatility: Traditional electricity costs may continue rising due to fossil fuel price fluctuations and carbon pricing policies. • Higher Savings Potential: If solar efficiency improves and grid prices rise, savings could surpass 50-60% compared to grid electricity. 	<ul style="list-style-type: none"> • Widespread Energy Transition: Solar and other renewable energy sources could dominate, reducing dependency on fossil fuels significantly. • Storage Integration: Advances in battery storage could enable full reliance on solar, minimising grid dependence and potentially achieving 70-80% savings. • Carbon Neutrality Targets: Many governments and companies aim for net-zero emissions, making solar energy a key contributor to sustainability. 	<ul style="list-style-type: none"> • Fully Renewable Grid: If global energy systems transition to 100% renewables, solar energy might be the primary power source, leading to near 90% savings on electricity costs compared to fossil-fuel-based grids. • Climate Impact Reduction: The shift to solar would significantly reduce CO₂ emissions, helping to mitigate extreme climate events and stabilise energy systems.

By 2050, solar is expected to be the cheapest energy source globally, making near full reliance on solar energy a possibility. If Tat Seng continues to expand the solar adoption initiative, its savings could reach 90%, and by 2100, nearly full cost avoidance may be possible as solar energy becomes dominant.

Conclusion

Tat Seng is making significant strides in integrating climate risk management and sustainability into its operations. The Group has committed to aligning its climate disclosures with the TCFD framework, progressing from qualitative assessments in FY2023 to incorporating quantitative aspects in FY2024. By analysing climate scenarios and risks, Tat Seng has also identified critical risks associated with physical hazards, such as floods and extreme weather, particularly in its China facilities. Additionally, transition risks such as rising carbon pricing and the escalating cost of raw materials have been identified. The Group is actively implementing mitigation strategies, including renewable energy adoption, process improvements, and carbon reduction initiatives, such as the deployment of solar panels and energy-efficient technologies.

¹¹ https://www.eia.gov/outlooks/aeo/electricity_generation/pdf/AEO2023_LCOE_report.pdf?utm

¹² <https://www.dnv.com/energy-transition-outlook/download/?utm>

SECTION 3: COMMITMENT TO SUSTAINABILITY

SUSTAINABILITY TARGETS AND PERFORMANCE

[GRI 3-3f]

The Group recognises the importance of having targets to drive performance and has established group-level targets in 2023. These targets are set after engagement and consultation with various stakeholders including representatives from the subsidiaries. The targets span across the topics most material to the business and comprised of both near and medium-term targets. These targets set at the corporate level will be cascaded down to the subsidiaries resulting in operational initiatives and targets at the subsidiary level. For visibility on the progress towards these group-level targets, the performances will be monitored and disclosed against the subsidiary-level targets under the respective sections of the topics. Moving forward, we aim to refine our target-setting process to establish long-term goals for existing focus areas. For material topics that currently lack specific targets, we will engage stakeholders to develop meaningful objectives that align with our sustainability and business strategies.

Table 8: Group-Level Targets and Key Performance Indicators

ESG Topics	Key Performance Indicators	Targets	FY2024 Performance	Link to Business Strategies	Impacts on Financial performance
Material	Percentage of FSC-certified suppliers engaged	Achieve 75% or above of FSC-certified suppliers engaged over the long term	73%	A targeted % for FSC accredited suppliers and FSC-certified raw paper procurement will influence the selection process for new suppliers and affect the management for existing suppliers (e.g. annual assessment etc).	A targeted % for FSC accredited suppliers and FSC-certified raw paper procurement may result in higher procurement cost due to FSC certification or accreditation. However, the Group could also charge a premium for providing sustainable products resulting in an increase in revenue.
Occupational Health and Safety	Number of fatalities by work-related injury	Achieve zero occurrence of fatalities	Zero work-related fatal injuries	A low or zero injuries or fatalities rate are in alignment with the Group's commitment in providing a safe working environment for the employees.	A low or zero injuries or fatalities rate could result in lower liabilities in terms of compensation incurred by the Group and minimise productivity losses in term of loss man-hour and work stoppages. However, it is to note that budget will be required for safety-related training to achieve the target(s).
Training and Education	Average training hours per employee	Yearly revision and improvement of training plan	10.0 hours	Commitment to employees training is in alignment with the Group's strategy in developing the workforce to be more productive and efficient in their roles.	By having a more productive and efficient workforce, the Group will be able to achieve a higher production yield and higher quality outputs, reducing or minimising financial loss due to lower production yield and production scrap. However, it is to note that budget will be required for related training to achieve the target(s).

SECTION 3: COMMITMENT TO SUSTAINABILITY

ESG Topics	Key Performance Indicators	Targets	FY2024 Performance	Link to Business Strategies	Impacts on Financial performance
Anti-Corruption	Number of corruption cases	Maintain zero corruption case as a static target	Zero corruption cases	A zero-corruption occurrence is in alignment with the Group's business code of conduct.	Any corruption occurrence could result in hefty lawsuit and fines leading to negative financial impact. It could also affect the reputation of the Group leading to additional revenue loss in term of loss in market share.
Employment	Number of child labour cases	Zero child labour as a static target	Zero child labour cases	Fair and equitable employment practices reinforce the Group's strategies towards building human capital. It also helps with talent attraction and higher employee retention rate.	Fair and equitable employment practices reduce the cost in recruitment due to lower employee turnover and higher retention rate.
	Number of long service employee (5 years or above)	Yearly review of employee benefits, appraisal process and promotion track	577 employees		
Energy	PV system deployment status	Extend adoption of green energy by deploying more PV system on-site by 2028	Onsite PV systems at UPI and HFDS	Transiting towards higher adoption of renewable energy sources (e.g. solar energy) is in alignment with the Group's strategy in addressing climate change and ensuring energy security in a low-carbon business environment.	By increasing the energy mix towards renewable energy (e.g. solar energy) the Group will lower the Scope 2 emissions resulting in lower risk of being subjected to regulatory tax (e.g. carbon tax) in future.
	Energy Intensity	Explore resource efficient solutions via improvement and upgrade of machinery by 2028	1.222 GJ per tonne paper usage (to set quantitative target with base year in near future)		
	Renewable energy penetration rate	Achieve 25% solar energy dependency out of the Group's total electricity consumption by 2033	17%		
Emissions	Emission Intensity	Reduce emission per tonne of product volume from now to 2033	0.121 tCO ₂ e per tonne paper usage (to set quantitative target with base year in near future)	A reduction in GHG emissions is in line with global mitigation effort in addressing climate change. This is also in alignment with the Group's transition towards a lower-carbon business model.	Through decarbonisation, the Group will be at a lower regulatory risk such as carbon tax which could result in additional financial obligation. This will also lower the risk of additional costs for importing into jurisdictions that impose tax on high-carbon products. The Group could also enter new markets that prioritise sustainable companies.

SECTION 3: COMMITMENT TO SUSTAINABILITY

RESPONSIBLE BUSINESS PRACTICES

ECONOMIC PERFORMANCE

[GRI 3-3, 201-1, 201-3, 201-4]

The Group recognises that economic performance is the cornerstone of sustainable growth, enabling us to generate long-term value for stakeholders while advancing our environmental and social responsibilities. Guided by prudent financial management and strategic foresight, the Group remains committed to delivering strong and resilient financial results amidst an ever-evolving global landscape.

In 2024, the Group successfully navigated challenges such as fluctuating market demands, economic uncertainties, and increasing regulatory requirements. By prioritising operational efficiency, cost optimisation, and innovative product development, the Group has reinforced its competitiveness and maintained a robust financial position. Our commitment to sustainable business practices ensures that economic growth aligns with broader objectives, benefiting not only the organisation but also the communities and markets in which we operate.

This section outlines the Group's financial performance, strategic initiatives, and the economic value created for stakeholders, reflecting our unwavering dedication to sustainable and responsible business practices.

Table 9: Comparison of Audited Economic Performance in SGD

	FY2023 S\$'000	Group FY2024 S\$'000
Economic Value Generated		
Revenue, interest income & disposal gains	261,270	257,272
Economic Value Distributed		
Operating costs (e.g. materials, product components & other operating costs)	191,043	187,170
Employee wages and benefits: Employee costs include salaries and benefits	34,802	36,455
Payments to providers of capital: Dividend & interest paid	10,097	10,494
Payments to governments: Net Incomes taxes paid	4,291	3,508
Community investment (e.g. voluntary donations to charity)	6	26
Economic value retained		
Direct economic value generated – Economic value distributed	21,031	19,619
Net profits:	19,973	19,944

We adhere to the regulatory requirements of Singapore's Central Provident Fund ("CPF") and China's Social Insurance System by contributing to our employees' retirement savings. Additionally, we are deeply grateful for the financial support of S\$1.24 million provided by the governments of Singapore and China in FY2024.

The Group is committed to achieving sustainable growth and profitability as our primary economic performance objective. To this end, we focus on driving revenue growth, effectively managing cost drivers, and exploring new opportunities for expansion, all underpinned by a robust management reporting system. Additionally, The Group is dedicated to assessing climate change-related risks and opportunities through frameworks such as TCFD under IFRS S2 standard, acknowledging their potential to impact operations, revenues, and expenses.

SECTION 3: COMMITMENT TO SUSTAINABILITY

ANTI-CORRUPTION

[GRI 2-27, 205]

Policy and Management Approach

[GRI 3-3]

The Group is unwavering in our commitment to maintaining the highest standards of ethical business practices. We recognise that an erosion of ethical and transparent leadership may lead to sanctions under laws, loss of investor confidence, reputation risks and financial mismanage. To mitigate these risks, we maintain a zero-tolerance approach toward all forms of bribery and corruption, extending beyond our employees to include all third parties such as customers, suppliers, contractors, government bodies, and other organisations or individuals we engage with. This includes promising, offering, authorising, giving, or accepting anything of value – either directly or indirectly – intended to obtain or retain business or secure an improper advantage. Employees and Board members are expressly prohibited from engaging in or authorising transactions that could be construed as corrupt practices.

We empower our employees to actively uphold these principles by requiring them to promptly report any suspected breaches of the anti-corruption policy. Reports may be directed to their immediate supervisors or escalated to the Chairman of the ARC in accordance with the Group's whistleblowing policy. We enforce strict disciplinary actions for violations, including instances where individuals conceal breaches or retaliate against whistleblowers. To foster a culture of accountability and transparency, whistleblowers are protected from reprisal.

Communication and Training

[GRI 205-2a, b, c, e]

We place a strong emphasis on communication and education to prevent corruption across the Group. The anti-corruption policy and any relevant updates are systematically communicated to all employees and Board members. Our Code of Business Ethics, Anti-Bribery and Anti-Corruption policy are made available to our Singapore entity whereas Employee Integrity Agreement, Anti-Bribery and Anti-Corruption policy are provided for our China entities. All employees and Board members must acknowledge receipt and understanding of the policies during onboarding. To reinforce compliance, regular training sessions are held, including mandatory anti-corruption training for new hires. Participation and acknowledgment are monitored to ensure adherence and assess effectiveness.

Our commitment to anti-corruption extends to our external stakeholders through partner agreements, including the Supplier Code of Conduct. These agreements explicitly outline our anti-corruption stance, incorporating clauses that prohibit bribery and corruption. Contracts include provisions allowing for immediate termination in cases of violations by third parties, reinforcing our dedication to upholding integrity across all partnerships.

By embedding robust anti-corruption measures and fostering a culture of transparency and accountability, Tat Seng demonstrates its steadfast commitment to ethical conduct, safeguarding the trust of stakeholders and the sustainability of our operations.

In FY2024, our anti-corruption policies were communicated to 90% of our top suppliers, 82% of our top customers, and 80% of our bankers and sub-contractors. For UPI in Singapore, instead of the top suppliers, our communication on our policies is channelled to our main raw material suppliers. We remain committed to working closely with our suppliers, customers, and other stakeholders to communicate our anti-corruption policies, while striving to achieve a higher level of agreement.

SECTION 3: COMMITMENT TO SUSTAINABILITY

Table 10: Communication Percentage Across Various Stakeholders

		FY2024	FY2024 (% achieved)
Top Suppliers	Total Number	89	
	Company's anti-corruption policy have been communicated	80	90%
Top Customers	Total Number	91	
	Company's anti-corruption policy have been communicated	75	82%
Bankers and Sub-contractors	Total Number	69	
	Company's anti-corruption policy have been communicated	55	80%

Performance

[GRI 3-3f, 205-3]

In FY2024, there were no reporting or confirmed incidents of corruption, which is in line with our target. There were also no instances of non-compliance with laws and regulations.

BETTERING THE PLANET

ENERGY AND GHG EMISSIONS MANAGEMENT

[GRI 302, 305]

Energy Conservation and Efficiency

[GRI 3-3, 302-1, 302-4, SASB RT-CP-130]

The Group recognises that excessive or inefficient energy use in our operations can have significant financial, environmental, and operational consequences. Energy-intensive operations contribute to GHG emissions, accelerating climate change. All our entities conduct regular maintenance on our equipment and systems to avoid inefficient energy use and minimise energy wastage. In our Singapore entity, whenever a spike in energy consumption is detected, our Environmental Management System committee will investigate the root cause and take preventive or corrective measures to address the issue. Therefore, our commitment to addressing climate change is reflected in our comprehensive energy management approach and energy conservation initiatives, aimed at minimising our environmental impact and improving operational efficiency. Energy conservation in our Singapore entity is guided by an environmental policy that prioritises sustainable practices. Energy-efficient lighting and natural lighting via windows and skylights are used wherever possible to reduce electricity consumption. Blinds are strategically utilised to manage sunlight, ensuring air-conditioning systems maintain optimal temperature settings without overcooling. Air-conditioning units are switched off when rooms are not in use. Furthermore, energy-efficient equipment and machinery with energy-saving features are prioritised in procurement decisions.

Regular energy reviews form the cornerstone of our energy management efforts. For instance, HFDS, which has been using solar electricity since 2023, conducts an annual energy review and generates detailed reports identifying energy reduction opportunities, setting targets, and recommending actionable improvements.

At NTTs, similar energy conservation practices are in place, including maintaining air-conditioning temperatures at 26°C in summer and 20°C in winter, activating equipment on standby modes, or turning them off when they are not in use.

TSSZ takes these initiatives further by incorporating fuel efficiency in forklift operations, focusing on diesel recycling and reduction. Boiler operations using natural gas are optimised to reduce energy consumption. Machines are turned off when idle, and regular maintenance ensures optimal performance and reduced electricity consumption.

SECTION 3: COMMITMENT TO SUSTAINABILITY

Through these efforts, we aim to maintain the same alignment in energy conservation across our subsidiaries to drive meaningful reductions in energy usage, contributing to climate action while enhancing operational sustainability.

Energy

[GRI 302-1, 302-3, SASB RT-CP-130a.1]

The Group's energy consumption is calculated based on energy bills and meter readings, with conversion factors based on the 2006 IPCC Guidelines. There was an overall decrease in Group energy consumption by 2% from FY2023 to FY2024, attributed to the installation of a new wastewater treatment facility which reduces natural gas consumption, and the switch from diesel to electric forklifts in the Singapore segment.

Table 11: Energy Consumption Breakdown

Scope 1			Scope 2		
Diesel ^{Appendix 5.1}	Petrol	Natural Gas	Electricity ^{Appendix 5.2}	Purchased Steam ^{Appendix 5.3}	Solar Energy
19,023 GJ	1,294 GJ	84,320 GJ	49,415 GJ	171,343 GJ	9,924 GJ
Total Energy Consumption (related to Scope 1 emission sources) 104,637 GJ			Total Energy Consumption (related to Scope 2 emission sources) 230,682 GJ		
325,395 GJ Total non-renewable energy consumption	+	9,924 GJ Total renewable energy consumption	=	335,319 GJ Total energy consumption in FY2024	
Energy Intensity (Using Paper Usage as denominator) 1.222 GJ/tonne Paper Usage					

Total Energy Consumption from FY2023 to FY2024

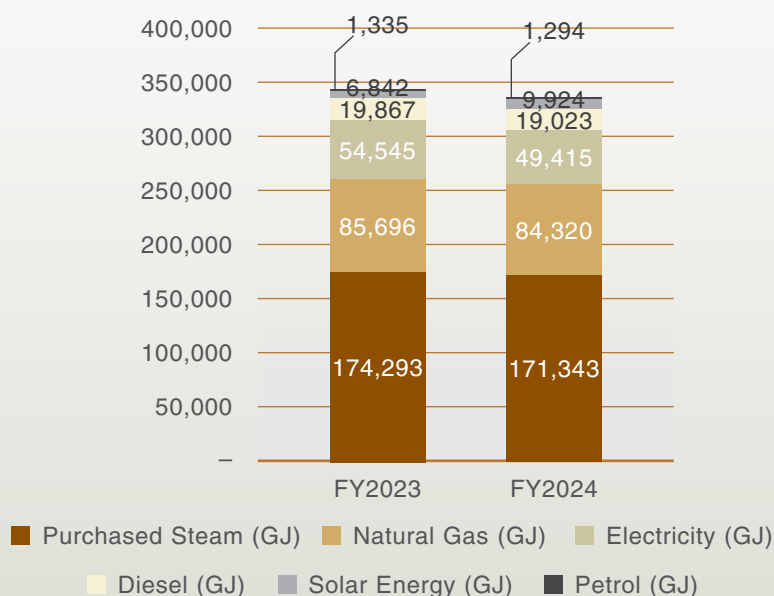


Figure 10: Yearly Comparison of Total Energy Consumption

SECTION 3: COMMITMENT TO SUSTAINABILITY

Performance

[GRI 302-3]

In calculating our FY2023 and FY2024 energy intensity values, we used paper usage volume as the denominator with the view that it better reflects our production activities. Our Group's energy intensity decreased from 1.346 GJ/tonne paper usage volume¹³ in FY2023 to 1.222 GJ/tonne paper usage volume in FY2024, or an improvement of 9.2% reduction in energy intensity.

In our Singapore segment, our paper usage volume remained relatively stable while energy usage was reduced. This was attributed to the abovementioned new wastewater treatment facility and adoption of electric forklifts. In our China segment, an increase in energy usage was outpaced by a rise in paper usage volume due to increase of production activities, which further improved our energy intensity.

Group Energy Intensity (GJ/tonne paper usage)

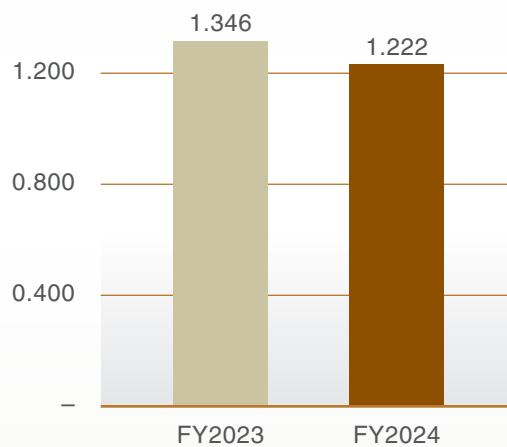


Figure 11: Group-Level Year-on-Year Energy Intensity

GHG Emissions Management

[GRI 3-3, 305, SASB RT-CP-110a.2]

Effective management of GHG emissions is critical in mitigating climate change and ensuring long-term business resilience. Failure to address GHG emissions can lead to significant negative impacts, including increased regulatory costs, reputational damage, higher energy costs, and reduced competitiveness as industries shift towards low-carbon solutions. In addition, there would be heightened exposure to climate-related risks such as extreme weather events and supply chain disruptions. Recognising these challenges, the Group remains committed to implementing proactive measures to monitor, manage, and reduce our GHG emissions in alignment with global sustainability goals.

Reinforcing our commitment to managing GHG, we conduct an annual GHG emissions measurement exercise to assess our performance and the effectiveness of our conservation measures.

We adopt the operational control approach to define our organisational boundaries, with emissions assessed and calculated using the GHG Protocol and the IPCC Fifth Assessment Report ("AR5"). This robust framework ensures accurate and consistent reporting of our emissions footprint.

¹³ We have adjusted our FY2023 energy intensity value by changing the denominator from production volume (as reported in FY2023 Sustainability Report) to paper usage volume, to ensure consistency with the methodology used in FY2024.

SECTION 3: COMMITMENT TO SUSTAINABILITY

GHG Emissions Sources

[GRI 305-1, 305-2, 305-3]

Our Scope 1 GHG emissions mainly arises from the consumption of energy such as diesel, petrol and natural gas for our operations whereas our Scope 2 GHG emissions is primarily from the consumption of purchased steam and electricity for production. We have also voluntary disclose selected categories of Scope 3 GHG emissions which are material to our business which, per the GHG Protocol classification, are as follows:

- Category 1 “Purchased Goods and Services”
- Category 4* “Upstream Transportation and Distribution”
- Category 6 “Business Travel”
- Category 7 “Employee Commuting”.

* The calculation assumes all costs associated with transportation in sale of products to customer is borne by the Group entirely.

GHG Emissions and Emissions Intensity

[GRI 305-4]

We established our organizational boundary by applying the operational control approach and followed the methodology outlined in the GHG Protocols, which encompasses seven types of GHGs. We use the Global Warming Potential from IPCC AR5. There were no relevant biogenic emissions within our reporting boundary.

From FY2023 to FY2024, the Group saw a 2% reduction in Scope 1 emissions and a 5% decline in Scope 2 emissions. However, Scope 3 emissions increased significantly by 80%, primarily driven by higher emissions under Category 1 (‘Purchased Goods and Services’). This increase was mainly due to the updated emission factor¹⁴ used to better reflect the emissions intensity of purchased materials, despite a 3.6% decrease in actual raw material spend.

Table 12: GHG Emissions Breakdown by Category (Scope 1, 2, and 3)

Scope 1 <small>Appendix 6</small>			Scope 2 <small>Appendix 7</small>		
Diesel	Petrol	Natural Gas	Electricity	Purchased Steam	Solar Energy
1,432 tCO ₂ e	93 tCO ₂ e	4,735 tCO ₂ e	10,127 tCO ₂ e	16,916 tCO ₂ e	4 tCO ₂ e
Total Scope 1 Emissions 6,260 tCO ₂ e			Total Scope 2 Emissions 27,047 tCO ₂ e		
Total Scope 1 & 2 Emissions 33,307 tCO ₂ e					
Emission Intensity (Using Paper Usage as denominator) 0.121 tCO ₂ e/tonne Paper Usage					
Selected Scope 3 <small>Appendix 8</small>					
Category 1: Purchased Goods and Services	Category 4: Upstream Transportation and Distribution	Category 6: Business Travel	Category 7: Employee Commute		
135,134 tCO ₂ e	5,943 tCO ₂ e	220 tCO ₂ e	344 tCO ₂ e		
Total Selected Scope 3 Emissions 141,641 tCO ₂ e					

¹⁴ Emission Factor used to calculate Scope 3, Category 1 emissions from Purchased Paper Roll was updated from 0.45 kgCO₂e/2023 SGD (2021) to 0.89 kgCO₂e/2024 SGD (2022).

SECTION 3: COMMITMENT TO SUSTAINABILITY

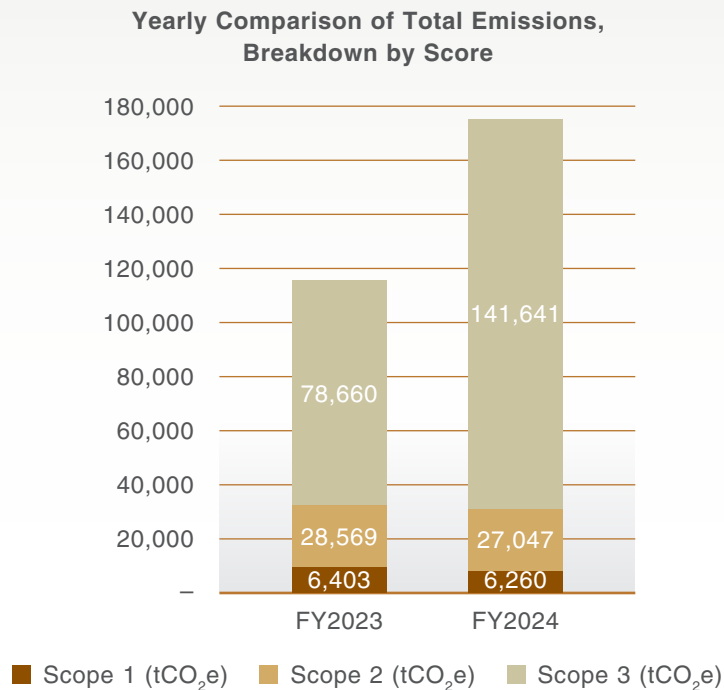


Figure 12: Yearly Comparison of Total Emissions, Breakdown by Scope

Similar to FY2023, Scope 3 category 1 “Purchased Goods and Services” remain our most significant emission source, comprising 77% of our total emissions of 174,948 tCO₂e. Scope 2 remains a significant source due to our reliance on grid-electricity and purchased steam, amounting to 15% of our total emissions. We plan to continue monitoring our Scope 3 inventory in the next few years before setting a base year.

SECTION 3: COMMITMENT TO SUSTAINABILITY

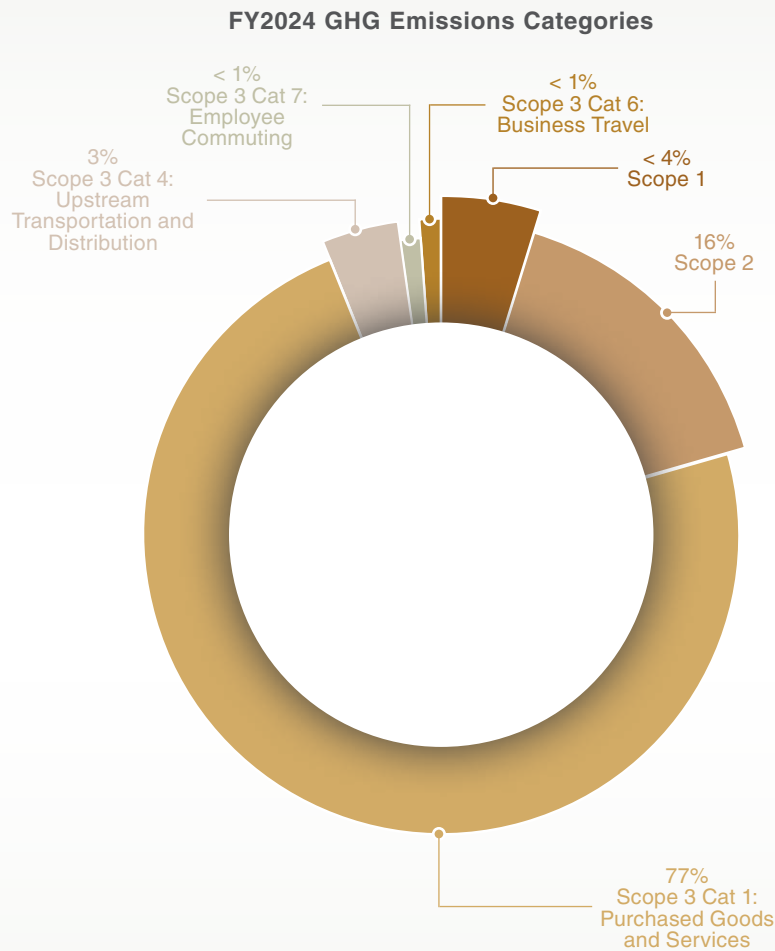


Figure 13: Breakdown of Scope 1, 2 and 3 Emissions

Performance in Scope 1 & 2 Emissions [GRI 305-4]

Similar to our energy intensity calculations, we also used paper usage volume for our emissions intensity calculations in both FY2023¹⁵ and FY2024 to better reflect the Group's production activities. The Group experienced an overall 12% decrease in Scope 1 & 2 emission intensity from FY2023 to FY2024.

This is largely driven by lower Group energy consumption from the abovementioned initiatives implemented in the Singapore segment – specifically, the installation of a new wastewater treatment facility that reduced natural gas usage, and the replacement of diesel-powered forklifts with electric ones – which contributed to a decrease in Scope 1 emissions. Additionally, increased generation and utilisation of solar energy across the Group reduced our reliance on grid electricity, resulting in lower Scope 2 emissions. Collectively, these initiatives have improved overall emissions intensity on a Group basis.

¹⁵ We have adjusted our FY2023 emission intensity value by changing the denominator from production volume (as reported in FY2023 Sustainability Report) to paper usage volume, to ensure consistency with the methodology used in FY2024.

SECTION 3: COMMITMENT TO SUSTAINABILITY

Group Emission Intensity (tCO₂e/tonne paper usage)

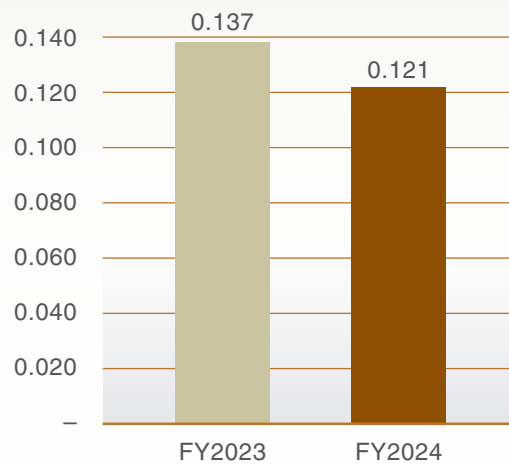


Figure 14: Group-Level Scope 1 & 2 Emission Intensity (FY2023 vs FY2024)

Reduction of GHG Emissions

[GRI 305-5]

Beyond conservation, we have implemented targeted measures across our operations to further reduce our carbon footprint:

Scope 1 GHG emissions reduction:

- UPI installed a high-efficiency boiler in late 2022, reducing natural gas consumption. In 2023, a new wastewater treatment facility was operationalised, utilising electricity instead of natural gas.
- TSSZ has transitioned to electric forklifts achieving significant fuel savings.
- HFDS has also adopted electric forklifts, implemented a closed-loop steam piping system to reuse condensate. HFDS has set an ambitious goal of achieving zero emissions by 2060.

Scope 2 GHG emissions reduction:

- UPI and HFDS have been using solar panels to increase their renewable energy adoption. TSSZ and NTTS will also be installing solar panels in 2025.
- NTTS replaced manual light switches in its workshop with sensor-based systems to improve energy efficiency.
- HFDS built a hazardous waste drying room and use the waste heat of corrugating line steam to dry the sludge collected at the sewage station to reduce the weight of sludge disposal.
- TJDS transitioned to energy-efficient LED lighting systems. TSSZ and NTTS are also planning a similar initiative.

Scope 3 GHG emissions reduction:

- NTTS encouraged employees to travel green and initiated energy-saving activities in its offices.
- HFDS optimised its shuttle bus services and secured more centralised employee housing to streamline employee commute via shuttle bus.

These initiatives reflect our dedication to reducing emissions, optimising resource usage, and advancing toward our sustainability goals while aligning with global climate action priorities.

SECTION 3: COMMITMENT TO SUSTAINABILITY

WATER AND EFFLUENTS MANAGEMENT

[GRI 303, SASB RT-CP-140]

Our Interaction with Water

[GRI 3-3, 303-1]

Effective water and effluent management are essential for maintaining environmental sustainability and operational efficiency. Without proper oversight, excessive water consumption and improper discharge of effluents can lead to resource depletion, environmental pollution, regulatory non-compliance, financial penalties and increased operational costs. As a producer of paper-based products, it is essential that we understand the significance of our water usage and discharge in terms of its environmental impact on the communities and ecosystems where we operate.

Our water supply is sourced from municipal systems and is used across various functions, including production processes such as corrugated product manufacturing, printing, machine cleaning, as well as for drinking and sanitation purposes. Recognising the importance of water conservation, we have implemented a range of initiatives to manage our water use and discharge efficiently.

Management of Our Water Use and Discharge

[GRI 303-2, SASB RT-CP-140a.2]

Water meters are installed in all plants to monitor usage closely, and regular machine inspections and maintenance are conducted to prevent leaks. Any unusual spikes in water consumption are promptly investigated, and corrective actions are taken. Additionally, we continuously review and optimise our processes to identify opportunities for reducing water usage.

To manage wastewater and effluent effectively to prevent unintended water pollution, we have established robust control systems at all plants. Following UPI, NTTS's industrial effluent also undergoes a recycling process, enabling water to be reused within our operations. At TSSZ, HFDS and TJDS industrial wastewater are treated before being discharged into the municipal sewer system, adhering strictly to local quality standards.

Through these measures, we aim to minimise our water footprint, responsibly manage effluent, and contribute to sustainable water management practices.

Performance

[GRI 303-3, 303-4, 303-5, SASB RT-CP-140a.3]

The Group's total water purchased in FY2024 was 83.1 Megalitres, a 19% decrease from FY2023 total water purchase of 102.8 Megalitres. This decrease is driven by improvement in water usage in NTTS and the completion of a building in HFDS which had contributed to a higher water usage during its construction in 2023.

Table 13: Group Water Purchase

	FY2023	FY2024
Total Water Purchase (MI)	102.8	83.1

We track our monthly water purchase using utility bills and our internal metering records, and closely oversee our performance in water purchase, consumption, and discharge. There have been no incidents of non-compliance with water quality standards or regulations, and we aim to maintain our record of full compliance.

SECTION 3: COMMITMENT TO SUSTAINABILITY

WASTE MANAGEMENT

[GRI 3-3, 306, SASB RT-CP-150]

Waste Generation

[GRI 306-1]

An effective waste management is critical to minimising environmental impact and ensuring sustainable resource use. Without a structured approach to waste reduction and recycling, excessive waste generation can contribute to land pollution, increased GHG emissions from waste disposal and higher disposal costs. Inefficient waste handling can also lead to resource inefficiencies, regulatory non-compliance and lost opportunities to recover valuable materials through recycling and circular economy practices.

As paper-based raw materials is used mainly in our production, the main bulk of our waste generated in our production is paper waste. In addition to that, due to the printing nature of our production, residual resin film and ink containers are also generated as waste.

Waste Management

[GRI 306-2, SASB RT-CP-150a.1]

We are dedicated to environmental protection through the implementation of an effective Environmental Management System (“EMS”), which aims to prevent pollution by minimising waste generation during production and ensuring responsible waste management and disposal practices.

Wastepaper management system are established in all plants to address the primary waste generated from production processes. Additionally, we have implemented a quality management system and overproduction controls to minimise defects and prevent overproduction.

Recognising that our operations occasionally produce residual resin film and used ink containers, we have established a robust waste segregation system. Hazardous waste is carefully separated from non-hazardous waste, with further segregation of recyclable materials – including hazardous recyclables – from non-recyclable waste to enhance recycling rates. All waste types are clearly identified with designated storage bins, and hazardous waste is properly registered, monitored, and disposed of to ensure worker safety and compliance with regulations.

To reduce material waste, procuring optimal quantities of raw materials to prevent obsolescence or shelf-life expiry. This holistic approach supports our commitment to reducing environmental impact and promoting sustainable production practices.

Performance

[GRI 306-3, 306-4, 306-5]

The Group generated 23,586 metric tons of total paper waste from operation and non-operation related sources, an overall 7% increase in paper waste generated from FY2023 due to increase in production activities in the China segment. We remain committed to recycling all wastepaper, be it from production or non-production sources.

Table 14: Group Total Waste Generated

	FY2023	FY2024
Total waste generated (metric tons)	21,979	23,586

We continue to monitor our waste performance and refine our management system, with plans to streamline our approach to establish group-level targets that will be disseminated to our subsidiaries for them to initiate further waste reduction initiatives.

SECTION 3: COMMITMENT TO SUSTAINABILITY

RESPONSIBLE SUPPLY CHAIN

RAW MATERIAL MANAGEMENT

[GRI 301]

Raw Material Management

[GRI 3-3, 301]

We are dedicated to responsible sourcing and ensuring that our raw materials align with sustainable forestry practices. Neglecting sustainable practices can lead to resource depletion at an unsustainable rate resulting in long-term negative environmental impact. These could result in regulatory risks, rising costs, and reputational damage for the Group. As a producer of paper-based packaging, our primary raw material is paper, the sourcing of which carries the risk of extensive logging and deforestation. This could result in potential biodiversity loss and contribute to global warming.

All our plants are accredited under the FSC Chain of Custody (“CoC”) and we have established an internal FSC CoC manual as a guideline for our procurement process to ensure seamless integration of the FSC CoC system throughout our supply chain. This underscores our commitment to sourcing from FSC-accredited suppliers with any non-conforming purchases promptly identified and flagged, followed by immediate cessation of sales for non-compliant FSC products. Additionally, we regularly consult the FSC platform to verify the conformity status of our current and potential paper suppliers. Based on FSC’s standards and practices on the sourcing, processing and selling of paper products, we strive to eliminate the following activities from our supply chain.

- illegal logging or the trade in illegal wood or forest products,
- violation of traditional and human rights in forestry operations,
- destruction of high conservation values in forestry operations,
- significant conversion of forests to plantations or non-forest use,
- introduction of genetically modified organisms in forestry operation, and
- violation of any of the International Labour Organisation’s core conventions.

We will strive to work with our supply chain partners towards achieving 75% or above of FSC-certified suppliers engaged over the long term.

Raw Materials Consumed for Production

[GRI 301-1]

The Group monitors our paper consumption through our ERP system. We saw an overall increase 8% in paper usage from 254,468 tonnes in FY2023 to 274,447 tonnes in FY2024. This increase was a result of higher sales volume during the year.

SECTION 3: COMMITMENT TO SUSTAINABILITY

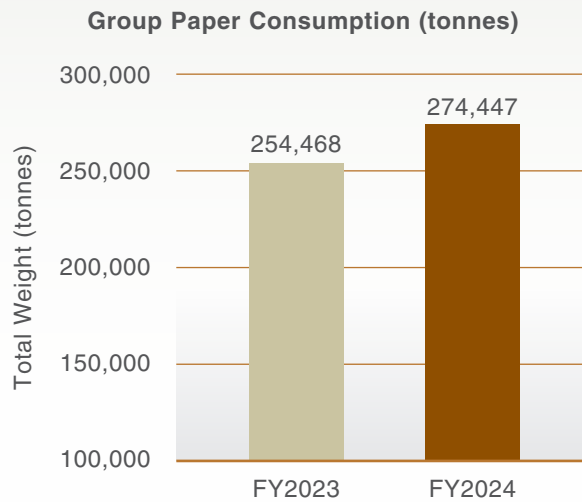


Figure 15: Yearly Comparison of Total Weight of Paper Used (tonnes)

SUPPLY CHAIN MANAGEMENT

[GRI 308, 414, SASB RT-CP-430]

Sustainability within Our Supply Chain

[GRI 3-3, 308, 414, SASB RT-CP-430]

We recognise our responsibility to ensure sustainable practices within our supply chain as failing to assess suppliers' environmental and social practices can lead to negative environmental impacts, unethical labour practices which could result in supply chain disruptions for our business. There could also be increased risk of regulatory non-compliance and reputational damage. As part of this commitment, we work closely with our suppliers and business partners to uphold sustainable business practices.

Our Sustainable Procurement Policy prioritises suppliers who actively reduce their environmental footprint and conduct their business in a safe, ethical, and socially responsible manner, in compliance with local laws and regulations. Additionally, we expect our suppliers to align with the high ethical standards we uphold, supported by robust corporate governance systems.

To ensure alignment, suppliers are required to complete an assessment questionnaire for self-evaluation of their environmental and social practices.

Environmental assessment criteria include:

- FSC certification
- Implementation of an EMS (e.g., ISO 14001)
- Established environmental policies
- Procedures for handling and disposing of hazardous waste
- Measurement and reporting of GHG emissions
- GHG reduction plans and mitigation measures for climate-related risks

SECTION 3: COMMITMENT TO SUSTAINABILITY

Social assessment criteria include:

- Workplace management practices
- Health and safety management systems
- Policies against forced and child labour
- Measures to prevent discrimination and harassment
- Adherence to a code of business conduct
- Sustainable procurement practices

We communicate our expectations clearly through our Supplier Code of Conduct, which outlines the standards for ethical, environmental, and social practices. Suppliers and business partners are required to acknowledge and comply with these guidelines before being approved as our suppliers. For existing suppliers, we request that they perform a self-assessment and acknowledgement of our Company Supplier Code of Conduct annually to ensure compliance. Any suppliers who failed to meet this requirement or found to have been involved in negative impacts will be followed up promptly and may result in the disqualification of their approved status.

Supplier Environmental Assessment

[GRI 308-1, 308-2]

We aim to begin our due diligence as early as the pre-engagement stage. We continue to ensure the sustainability of our supply chain through regular supplier environmental assessments. As part of our ongoing efforts to conduct more robust screening of our new suppliers, our procurement will request for the submission of a self-assessment checklist during their onboarding process. The table below summarises the number of new suppliers screened and negative environmental impact assessed in our supply chain.

In FY2024, 62 suppliers were assessed, of which 10 were new suppliers, and none were found to have significant actual or potential environmental impacts.

Table 15: Disclosure on Supplier Environmental Assessment

Supplier Environmental Assessment		FY2023	FY2024
New Suppliers	Suppliers Screened	20	10
Assessment of Negative Impact in Supply Chain	Suppliers Assessed	59	62
	Suppliers Flagged	0	0

Supplier Social Assessment

[GRI 414-1, 414-2]

In FY2024, the Group began screening both new and existing suppliers based on social criteria such as workplace management practices and policies on health and safety, prevention of forced labour, child labour, discrimination and harassment, as part of our efforts to conduct a more comprehensive assessment of our supply chain.

In FY2024, 10 new suppliers were screened, 62 suppliers were assessed and none were found to have significant actual or potential social impacts.

SECTION 3: COMMITMENT TO SUSTAINABILITY

Table 16: Disclosure on Supplier Social Assessment

Supplier Social Assessment		FY2024
New Suppliers	Suppliers Screened	10
Assessment of Negative Impact in Supply Chain	Suppliers Assessed	62
	Suppliers Flagged	0

In FY2024, we did not establish specific targets for supplier environmental and social assessments as we were in the process of refining our data collection and calculation systems for these areas, especially for social assessment as it is a new material topic identified.

SUPPORTING PEOPLE AND COMMUNITIES

EMPLOYMENT

[GRI 401]

Employment Practices

[GRI 2-30, 3-3, 401]

At our Group, we have a strong belief towards fair employment practices and an equitable compensation and benefits framework in order to attract and retain talented and dedicated employees. A lack of employment practices such as fair wages, safe working conditions and career development opportunities can lead to high turnover, low employee engagement, and challenges in attracting and retaining talent. Respect for human rights is a cornerstone of our values, and we strive to foster a workplace environment that encourages open and honest communication, mutual respect, and collaboration among all employees.

We adhere to applicable labour and employment regulations in all regions where we operate and actively promote diversity, inclusion, and freedom of association. Our policies prioritise the protection of employees' privacy and dignity, ensuring safe and healthy working conditions across our operations.

While we do not operate under collective bargaining agreements, our employment policies for our Singapore entity are guided by the principles of the Tripartite Alliance for Fair & Progressive Employment Practices ("TAFEP"). For our China entities, we adhere strictly according to the relevant union law and regulations. We firmly oppose child labour, forced labour, and all forms of discrimination.

To recognise and reward employees' contributions, we have implemented a performance appraisal system that sets clear expectations and ensures rewards are aligned with achievements. Our comprehensive policies also govern employee onboarding, transfers, and departures, ensuring fairness and consistency throughout every stage of employment.

In recruitment and appointment processes, we maintain transparency and equity by adhering to a clear policy that provides equal opportunities for both potential candidates and existing employees. Our commitment to fair employment underscores our broader goal of creating an inclusive, supportive, and ethical workplace culture.

SECTION 3: COMMITMENT TO SUSTAINABILITY

Employee Benefits

[GRI 401-2]

Our diverse compensation, insurance, leave as well as health and medical benefits are shown below.

Leave Entitlement

- Annual leave
- Medical leave
- Hospitalisation leave
- Parental leave
- Marriage leave
- Childcare leave
- Compassionate leave
- Breastfeeding time-off
- Examination leave
- Training leave

Employment benefits

- Merit-based compensation
- Provision of safe and healthy working condition
- Fair disciplinary and dismissal practices

Health and Medical Benefits

- Medical consultation coverage
- Occupational health screening
- Insurance coverage

Lodging and Accommodation benefits

- Employee hostel
- Rental subsidy

Business travel benefits

- Per Diem allowances
- Outstation allowances

Freedom for Association

- Principles of the Tripartite Alliance for Fair & Progressive Employment Practices (Singapore)
- Union Law (China)

Retirement Provision

- Contribution to employee's retirement funds according to local regulations

Career Development

- External and in-house training programmes
 - Facilitation for continued employability
-

SECTION 3: COMMITMENT TO SUSTAINABILITY

Employee Demographics

[GRI 2-7, 2-8, SASB RT-CP-000.C]

Based on our personnel records from our human resources department as of 31 December 2024, we employed a total of 1,119 individuals. Among them, 96% are permanent staff, and 4% are temporary staff. In FY2024, we did not employ any non-guaranteed hours workers or engage individuals outside formal employment structures. There were no significant fluctuations in the number of employees in FY2024 and compared to FY2023.

Table 17: Employee Composition by Age Group, Region and Employee Category in FY2024

			Male	Female
Total Number of Employees	Local		643	378
	Foreigner		85	13
Permanent Staff	Local	Permanent	546	313
		Contract	55	11
		Intern	–	1
		Rehired	12	42
	Foreigner	Permanent	84	13
		Contract	1	–
		Intern	–	–
		Rehired	–	–
Temporary Employees	Local		30	11
	Foreigner		–	–
Number of Board of Directors	Age	Under 30 years old	–	–
		30 – 50 years old	–	–
		Over 50 years old	9	1
	Region	Local	9	1
		Foreigner	–	–
Number of Employees	Age	Under 30 years old	85	43
		30 – 50 years old	391	261
		Over 50 years old	243	86
	Region	Local	634	377
		Foreigner	85	13
Employee by Length of Service		Less than 5 years	370	172
		5 – 10 years	143	88
		More than 10 years	215	131

SECTION 3: COMMITMENT TO SUSTAINABILITY

New Hires and Turnover

[GRI 401-1]

The new hire and turnover rates were determined based on the total number of employees within each respective segment. In FY2024, the new hire rate was 8% for the Singapore segment and 61% for the China segment. Similarly, the turnover rate was 8% for the Singapore segment and 64% for the China segment.

Table 18: New Hires and Turnover in FY2024

			Male	Female
New Hires	Age	Under 30 years old	153	42
		30 – 50 years old	182	48
		Over 50 years old	139	23
	Region	Local	462	110
		Foreigner	12	3
Employee Turnover	Age	Under 30 years old	157	41
		30 – 50 years old	193	52
		Over 50 years old	146	29
	Region	Local	484	121
		Foreigner	12	1

Parental Leave

[GRI 401-3]

All our employees are entitled to parental leave. The number of employees who took parental leave are shown in the table below, all coming from the China segment.

Table 19: Table Summary of Parental Leave in FY2024

	Male	Female
Total Number of Employees that were Entitled to Parental Leave	728 (All Staff)	391 (All Staff)
Total Number of Employees that Took Parental Leave in FY2024	20	22

OCCUPATIONAL HEALTH AND SAFETY

[GRI 3-3, 403]

The Group considers the health, safety, and well-being of our employees as paramount. We recognise that a lack of emphasis on occupational health and safety can lead to increased workplace accidents, illnesses, and legal liabilities. Poor safety practices not only endanger employees but also disrupt operations, reduce productivity, and damage the Group's reputation. Hence, we are committed to complying with local legal requirements and safety standards while fostering a culture that prioritises safe work practices at all times. Our approach emphasises eliminating workplace safety and health hazards to reduce risks, providing a robust framework for setting and achieving safety and health objectives, and continuously improving our workplace safety and health systems through regular reviews.

In addition to safeguarding employees' well-being, the Group is dedicated to protecting our business and personnel against physical security threats that could result in severe and unacceptable disruptions to operations. By integrating these principles into our operational framework, we strive to create a secure and resilient working environment that empowers our workforce while supporting the sustainability and continuity of our business.

SECTION 3: COMMITMENT TO SUSTAINABILITY

OHS Management System

[GRI 403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-8]

For the Singapore segment, our Workplace Safety and Health Committee, along with departmental supervisors, holds regular meetings to review and enhance existing risk assessments. Risk assessments are conducted by thoroughly evaluating all foreseeable risk factors within work processes. Periodic refresher training on safe operations is provided to employees, and all staff are covered under our Workplace Safety and Health management system. Employees are to remove themselves immediately from work situations that they believe could cause injury or ill health.

In the China segment, operations comply with national laws on occupational disease prevention and control, with a systematic approach to identifying safety hazards and occupational health risks. We have established a production safety standard performance evaluation and management system to monitor safety conditions, supported by third-party occupational hazard assessments. Under the oversight of the production safety assessment group, safety risks are continuously identified and addressed through timely corrective measures. Each subsidiary in China has a Workplace Safety and Health Committee and designated personnel responsible for incident investigation and follow-ups. We implement hazard identification and risk assessment procedures, guided by the “Four No” principle of accident management. Feedback and complaint channels are in place to encourage hazard reporting. Employees are empowered to remove themselves from hazardous situations, and evacuations are mandatory in emergencies. They are also informed about occupational hazard alert and disclosure procedures, with annual reports on occupational health and safety systems presented to the staff congress.

To ensure thorough and effective oversight of our occupational health and safety issues, we have implemented the following management system, as outlined below, for our operations in Singapore and China.

Table 20: Scope Covered by OHS Management System

Singapore Segment		China Segment	
1	Safety training for new and existing employees including Forklift Drivers	1	Safety training for new and existing employees, and examination before commencement of work, as well as re-train program for yearly renewal of forklift driving license and specialised job
2	Provision of safe work equipment and tools, safety shoes, PPE personal protection equipment and earplugs	2	Provision of protective gear according to national standard
3	Practise the concept of 5S to maintain a tidy, clean and safe working environment	3	Design and examination of new or re-development by higher management before commencement of work
4	Monthly safety check/inspection to identify potential safety threat and fire hazard areas, and implementation of report findings and corrective/preventive actions	4	Monthly safety inspection to identify safety concern, report findings in monthly safety committee meeting
5	Annual hearing test and chest x-ray for Tuberculosis	5	Health screening to check for occupational disease in new, existing and exiting employees
6	Accident Action Plan to ensure injuries on all employees are taken care of and treated during accident follow by findings of preventive measures	6	Prevention and treatment programmes for major disaster and accidents, and implementation of timely reporting for accident
7	Arson Prevention Plan to identify potential threats and formulate protection measures	7	Work injury treatment and payout covering work-related injury, violence during working hour
8	Fire Emergency Plan for orderly evacuation	8	Display of health hazard warning at hazardous areas
9	Chemical Emergency Plan for safe purchase, handling, storage and use of chemical to safeguard the environment and employees	9	Good ventilation at areas with dust, ink and electric welding
10	In-Place Protection Plan to facilitate an enclosed space in the building to safeguard against hazardous gas release		

SECTION 3: COMMITMENT TO SUSTAINABILITY

Work-related Injuries

[GRI 403-2, 403-9]

The Group remains steadfast in its commitment to ensuring a safe and injury-free workplace for all employees. As part of our ongoing efforts, we prioritise robust safety measures, regular training, and continuous monitoring to mitigate risks and prevent workplace accidents. In this section, we report on the work-related injury statistics for FY2024, reflecting our transparency and dedication to improving safety performance. These statistics serve as a benchmark for evaluating the effectiveness of our occupational health and safety initiatives and identifying areas for further enhancement.

In FY2024, there were 20 reported work-related injuries, all of which were non-fatal. Injuries in the Singapore segment were primarily caused by sprains and lacerations, whereas injuries in the China segment resulted from sprains, traffic accidents, falls, and operational activities.

Across the Group, the rate of recordable work-related injuries fell from 1.64% in FY2023 to 1.61% in FY2024. We continue to monitor risks across our operations and production lines, with the goal of further reducing the rate of work-related injuries for our employees.

Table 21: Disclosure on Work-Related Injury

	FY2023	FY2024
Number of fatalities by work-related injury	0	0
Rate of fatalities by work-related injury	—	—
Number of recordable work-related injuries	20	20
Rate of recordable work-related injuries ¹⁶	1.64%	1.61%
Number of hours worked	2,445,200	2,486,145
Number of lost-workdays (hours) as a result of work-related injuries	4,114	7,318

Work-related Ill Health

[GRI 403-10]

We recognise that work-related ill health can result from or be exacerbated by workplace conditions such as loud noises from machinery. To address this, we are committed to preventing work-related health issues by providing regular health screenings for occupational diseases, equipping employees with appropriate protective gear, and conducting training programs to enhance awareness of occupational health and safety.

In FY2024, there were no reported cases of work-related ill health for both Singapore and China segments. Our last reported incidents of work-related ill health were 4 cases of non-fatal noise-induced deafness (“NID”) within our Singapore segment in FY2023. We recognise that our machinery exposes our employees to hearing impairment, and we continue to implement noise control measures and provide suitable hearing protection. In China, in order to maintain a strong focus on preventing occupational illnesses through vigilant efforts, we consistently monitor and improve our ventilation systems and production line reformation to reduce the risks of NID, chemical burns, heat stroke, and lung disease among our employees. We continue to monitor our performance while reinforcing our OHS system management across the Group.

¹⁶ Rate of recordable work-related injuries = (Number of recordable work-related injuries/Number of hours worked) x 200,000

SECTION 3: COMMITMENT TO SUSTAINABILITY

TRAINING AND EDUCATION

[GRI 404]

Holistic Approach to Employee's Development

[GRI 3-3, 404-2]

Our employees are our most valuable asset and the foundation of the Group's success. We are committed to fostering their growth and development, recognising that investing in our people drives the Group's progress and ensures that our workforce evolves alongside us.

Failing to implement a comprehensive training and career development approach can leave the workforce ill-equipped to adapt to evolving industry demands, reducing productivity, innovation, and competitiveness. It may also lower employee engagement and retention while making talent attraction more challenging, ultimately hindering long-term business growth. Through a comprehensive range of training and career development initiatives, we strive to empower employees with the skills and knowledge needed to excel in their roles and contribute meaningfully to the organisation.

To ensure a structured approach, the management conducts regular training needs analyses to identify development opportunities for employees. Based on these insights, the Human Resources department develops a comprehensive Company Master Training Plan ("CMTP") aligned with departmental inputs. The CMTP is reviewed bi-annually in collaboration with department heads to monitor progress and ensure alignment with organizational objectives.

In addition, employees are encouraged to submit training requests tailored to their roles and career aspirations. These requests are reviewed by Human Resources, with priority given to leveraging internal training resources before engaging external trainers. By embedding continuous learning into our culture, Tat Seng underscores its commitment to nurturing talent and equipping employees to meet evolving business demands.

Table 22: Disclosure on Employee Training Management Approach

Singapore Segment	China Segment
Consists of four training categories: <ul style="list-style-type: none">Academic programme that leads to higher qualificationNon-academic programme that leads to acquisition of more learning experience knowledge of skillsInternal training conducted within internal or external trainersExternal training includes courses, seminars, and workshops conducted by external training providers	Covers internal and external training as planned in prior year based on employees' training requirements, subsidiaries strategic directions and employees' feedback Training in the areas of quality, environmental, FSC and production safety management Vocational and quality management training for new hires in the production department
Covers Forklift Courses, Occupational First Aid, Workforce Skills Qualifications (WSQ), Professional Diploma in Leadership, and Diploma in Business Management. It also includes provisions for training sponsorship and examination leave	Includes training sponsorship and examination leave

SECTION 3: COMMITMENT TO SUSTAINABILITY

Average Training Hours and Appraisal Coverage

[GRI 3-3, 404-1, 404-3]

Due to differing job roles and responsibilities, management-level employees in the Singapore segment received the most average training hours per employee, while general staff in the China segment had the highest average training hours. On average, female employees received more training than male employees. We have conducted full coverage of performance appraisal for all employees across all levels in both FY2023 and FY2024. We continue to monitor our training and education system to ensure every employee is adequately trained for their job roles through our annual revision and improvement of our training plan.

Table 23: Disclosure on Average Hours of Training and Percentage of Employees Receiving Regular Performance and Career Development Reviews in FY2024

		Male	Female
Average hours of training per employee	Board of Directors	—	—
	Management	16	30
	General Staff	17	23
Percentage of employees receiving regular performance and career development review	Board of Directors	100%	
	Management		
	General Staff		

APPENDIX

APPENDIX 1: GRI CONTENT INDEX

Statement of use	Tat Seng Packaging Group Ltd. has reported in accordance with GRI Standards for the period 1 January 2024 to 31 December 2024.
GRI 1 used	GRI 1: Foundation 2021

GRI Standard	Disclosure	Reasons for Omission	Page number(s) and/or URL(s)	SGX Requirement
General Disclosures				
GRI 2: General Disclosures 2021	2-1 Organisational details		About Tat Seng Packing Group Ltd [Page 2] Organisational Details [Page 3-4]	
	2-2 Entities included in the organisation's sustainability reporting		Organisational Details [Page 3-4]	
	2-3 Reporting period, frequency and contact point		Reporting Period and Frequency [Page 5] Feedback [Page 5]	PN7.6-6.1
	2-4 Restatements of information		Restatement of Information [Page 5]	
	2-5 External assurance		External Assurance and Internal Review [Page 5]	PN7.6-5.1
	2-6 Activities, value chain and other business relationships		About Tat Seng Packing Group Ltd [Page 2-3] Organisational Details [Page 3-4]	
	2-7 Employees		Employee Demographics [Page 43]	
	2-8 Workers who are not employees		Employee Demographics [Page 43]	
	2-9 Governance structure and composition		Sustainability in the Board [Page 7]	PN7.6-3.1
	2-10 Nomination and selection of the highest governance body		Board Nomination [Page 7]	
	2-11 Chair of the highest governance body		Sustainability in the Board [Page 7]	
	2-12 Role of the highest governance body in overseeing the management of impacts		Sustainability Governance and Leadership [Page 9] Materiality Assessment [Page 13] Climate-Related Risks and Opportunities, Governance [Page 17]	
	2-13 Delegation of responsibility for managing impacts		Sustainability Governance and Leadership [Page 9] Materiality Assessment [Page 13-16]	
	2-14 Role of the highest governance body in sustainability reporting		Message from the Board [Page 6] Sustainability Governance and Leadership [Page 9] Materiality Assessment [Page 13-16]	
	2-15 Conflicts of interest		Prevention of Conflict of Interest [Page 8]	
	2-16 Communication of critical concerns		Sustainability Governance and Leadership [Page 9] Policies and Practices [Page 10-11]	
	2-17 Collective knowledge of the highest governance body		Sustainability in the Board [Page 7]	
	2-18 Evaluation of the performance of the highest governance body		Evaluation of the Board's Performance [Page 8]	
	2-19 Remuneration policies		Remuneration Policies [Page 8]	
	2-20 Process to determine remuneration		Remuneration Policies [Page 8]	
	2-21 Annual total compensation ratio	Information unavailable for disclosure to prevent upward pressure from market competition		
	2-22 Statement on sustainable development strategy		Message from the Board [Page 6]	PN7.6-4.1.f
	2-23 Policy commitments		Policies and Practices [Page 10-11]	
	2-24 Embedding policy commitments		Policies and Practices [Page 10-11]	

APPENDIX

GRI Standard	Disclosure	Reasons for Omission	Page number(s) and/or URL(s)	SGX Requirement
	2-25 Processes to remediate negative impacts		Policies and Practices [Page 10-11] Stakeholder Inclusiveness [Page 12-13]	
	2-26 Mechanisms for seeking advice and raising concerns		Policies and Practices [Page 10-11]	
	2-27 Compliance with laws and regulations		Policies and Practices [Page 10-11] Anti-Corruption [Page 28-29]	
	2-28 Membership associations		Memberships and Associations [Page 2-3]	
	2-29 Approach to stakeholder engagement		Stakeholder Inclusiveness [Page 12-13] Materiality Assessment [Page 13-16]	PN7.6-3.6 PN7.6-4.35
	2-30 Collective bargaining agreements		Employment Practices [Page 41]	
Material Topics				
GRI 3: Material Topics 2021	3-1 Process to determine material topics		Materiality Assessment [Page 13-16]	PN7.6-4.2 PN7.6-4.35
	3-2 List of material topics		Materiality Assessment [Page 16]	PN7.6-4.1.a
	3-3 Management of material topics		Sustainability Targets and Performance [Page 25-26] Please refer to respective chapters of material topics	
Economic Performance				
GRI 3: Material Topics 2021	3-3 Management of material topics		Economic Performance [Page 27]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed		Economic Performance [Page 27]	
	201-2 Financial implications and other risks and opportunities due to climate change		Climate-Related Risks and Opportunities [Page 18-24]	
	201-3 Defined benefit plan obligations and other retirement plans		Economic Performance [Page 27]	
	201-4 Financial assistance received from government		Economic Performance [Page 27]	
Anti-Corruption				
GRI 3: Material Topics 2021	3-3 Management of material topics		Anti-Corruption [Page 28-29]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	Information Unavailable/Incomplete		
	205-2 Communication and training about anti-corruption policies and procedures		Communication and Training [Page 28-29]	
	205-3 Confirmed incidents of corruption and actions taken		Anti-Corruption [Page 29]	
Materials				
GRI 3: Material Topics 2021	3-3 Management of material topics		Raw Material Management [Page 38]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 301: Materials 2016	301-1 Materials used by weight or volume		Raw Materials Consumed for Production [Page 38-39]	
	301-2 Recycled input materials used	Information not available		
	301-3 Reclaimed products and their packaging materials	Information not available		
Energy				
GRI 3: Material Topics 2021	3-3 Management of material topics		Energy and GHG Emissions Management [Page 29-30]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c

APPENDIX

GRI Standard	Disclosure	Reasons for Omission	Page number(s) and/or URL(s)	SGX Requirement
GRI 302: Energy 2016	302-1 Energy consumption within the organisation		Energy Conservation and Efficiency [Page 29-30] Energy [Page 30]	
	302-2 Energy consumption outside of the organisation	Information Unavailable/ Incomplete		
	302-3 Energy intensity		Energy [Page 30] Performance [Page 31]	
	302-4 Reduction of energy consumption		Energy Conservation and Efficiency [Page 29-30]	
	302-5 Reductions in energy requirements of products and services	Information Unavailable/ Incomplete		
Water and Effluents				
	3-3 Management of material topics		Water and Effluents Management [Page 36]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
	303-1 Interactions with water as a shared resource		Our Interaction with Water [Page 36]	
	303-2 Management of water discharge-related impacts		Management of Our Water Use and Discharge [Page 36]	
	303-3 Water withdrawal		Performance [Page 36]	
	303-4 Water discharge		Performance [Page 36]	
	303-5 Water consumption		Performance [Page 36]	
Emissions				
GRI 3: Material Topics 2021	3-3 Management of material topics		GHG Emissions Management [Page 31]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions		GHG Emissions Sources [Page 32-34]	
	305-2 Energy indirect (Scope 2) GHG emissions		GHG Emissions Sources [Page 32-34]	
	305-3 Other indirect (Scope 3) GHG emissions		GHG Emissions Sources [Page 32-34]	
	305-4 GHG emissions intensity		GHG Emissions and Emissions intensity [Page 32] Performance in Scope 1 & 2 Emissions [Page 34-35]	
	305-5 Reduction of GHG emissions		Reduction of GHG Emissions [Page 35]	
	305-6 Emissions of ozone-depleting substances ("ODS")	Information Unavailable		
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Information Unavailable		
Waste				
GRI 3: Material Topics 2021	3-3 Management of material topics		Waste Management [Page 37]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts		Waste Generation [Page 37]	
	306-2 Management of significant waste-related impacts		Waste Management [Page 37]	
	306-3 Waste generated		Performance [Page 37]	
	306-4 Waste diverted from disposal	Information Unavailable		
	306-5 Waste directed to disposal	Information Unavailable		

APPENDIX

GRI Standard	Disclosure	Reasons for Omission	Page number(s) and/or URL(s)	SGX Requirement
Supplier Environmental Assessment				
GRI 3: Material Topics 2021	3-3 Management of material topics		Sustainability within Our Supply Chain [Page 39-40]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
	308-1 New suppliers that were screened using environmental criteria		Supplier Environmental Assessment [Page 40]	
	308-2 Negative environmental impacts in the supply chain and actions taken		Supplier Environmental Assessment [Page 40]	
Employment				
GRI 3: Material Topics 2021	3-3 Management of material topics		Employment Practices [Page 41]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 401: Employment 2016	401-1 New employee hires and employee turnover		New Hires and Turnover [Page 44]	
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees		Employee Benefits [Page 42]	
	401-3 Parental leave		Parental Leave [Page 44]	
Occupational Health and Safety				
GRI 3: Material Topics 2021	3-3 Management of material topics		Occupational Health and Safety [Page 44]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system		OHS Management System [Page 45]	
	403-2 Hazard identification, risk assessment, and incident investigation		OHS Management System [Page 45] Work-related Injuries [Page 46]	
	403-3 Occupational health services		OHS Management System [Page 45]	
	403-4 Worker participation, consultation, and communication on occupational health and safety		OHS Management System [Page 45]	
	403-5 Worker training on occupational health and safety		OHS Management System [Page 45]	
	403-6 Promotion of worker health		OHS Management System [Page 45]	
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Information unavailable		
	403-8 Workers covered by an occupational health and safety management system		OHS Management System [Page 45]	
	403-9 Work-related injuries		Work-related Injuries [Page 46]	
	403-10 Work-related ill health		Work-related Ill Health [Page 46]	
Training and Education				
GRI 3: Material Topics 2021	3-3 Management of material topics		Training and Education [Page 47]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee		Average Training Hours and Appraisal Coverage [Page 48]	
	404-2 Programs for upgrading employee skills and transition assistance Programs		Holistic Approach to Employee's Development [Page 47]	
	404-3 Percentage of employees receiving regular performance and career development reviews		Average Training Hours and Appraisal Coverage [Page 48]	
Supplier Social Assessment				
GRI 3: Material Topics 2021	3-3 Management of material topics		Sustainability within Our Supply Chain [Page 39-40]	PN7.6-4.1.c PN7.6-4.1.d LR711B-1.b LR711B-1.c

APPENDIX

GRI Standard	Disclosure	Reasons for Omission	Page number(s) and/or URL(s)	SGX Requirement
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria		Supplier Social Assessment [Page 40-41]	
	414-2 Negative social impacts in the supply chain and actions taken		Supplier Social Assessment [Page 40-41]	

APPENDIX 2: SASB CONTENT INDEX

Table A. Sustainability Disclosure Topics & Metrics

TOPIC	METRIC	CODE	PAGE REFERENCE/REMARKS
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	RT-CP-110a.1	GHG Emissions Management [Page 32-33]
	Discussion of long- and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets and an analysis of performance against those targets	RT-CP-110a.2	GHG Emissions Management [Page 31]
Air Quality	Air emissions of the following pollutants: (1) NO _x (excluding N ₂ O), (2) SO _x , (3) volatile organic compounds ("VOCs"), and (4) particulate matter ("PM")	RT-CP-120a.1	Not Available
Energy Management	(1) Total energy consumed, (2) percentage grid electricity, (3) percentage renewable and (4) total self-generated energy	RT-CP-130a.1	Energy [Page 30]
Water Management	(1) Total water withdrawn, (2) total water consumed; percentage of each in regions with High or Extremely High Baseline Water Stress	RT-CP-140a.1	Water and Effluents Management [Page 36]
	Description of water management risks and discussion of strategies and practices to mitigate those risks	RT-CP-140a.2	Management of Our Water Use and Discharge [Page 36]
	Number of incidents of non-compliance associated with water quality permits, standards and regulations	RT-CP-140a.3	Performance [Page 36]
Waste Management	Amount of hazardous waste generated, percentage recycled	RT-CP-150a.1	Waste Management [Page 37]
Product Safety	(1) Number of recalls issued, (2) total units recalled ¹	RT-CP-250a.1	Topics not selected for reporting
	Discussion of process to identify and manage emerging materials and chemicals of concern	RT-CP-250a.2	
Product Lifecycle Management	Percentage of raw materials from: (1) recycled content, (2) renewable resources, and (3) renewable and recycled content	RT-CP-410a.1	
	Revenue from products that are reusable, recyclable, or compostable	RT-CP-410a.2	
	Discussion of strategies to reduce the environmental impact of packaging throughout its lifecycle	RT-CP-410a.3	
Supply Chain Management	Total wood fibre procured; percentage from certified sources	RT-CP-430a.1	Supply Chain Management [Page 39]
	Total aluminium purchased; percentage from certified sources	RT-CP-430a.2	Not Applicable

Table B. Activity Metrics

ACTIVITY METRIC	CODE	PAGE REFERENCE/REMARKS
Amount of production, by substrate ²	RT-CP-000.A	Not Applicable
Percentage of production as: (1) paper/wood, (2) glass, (3) metal, and (4) plastic	RT-CP-000.B	Waste Management [Page 37]
Number of employees	RT-CP-000.C	Employee Demographics [Page 43]

APPENDIX

APPENDIX 3: TCFD CONTENT INDEX

	Details of Four Thematic Areas	Recommended Disclosure	Page number(s) and/or URL(s)
Governance	Disclose the organisation's governance around climate related risks and opportunities	a) Describe the board's oversight of climate-related risks and opportunities.	Page 17
		b) Describe management's role in assessing and managing climate related risks and opportunities.	Page 17
Strategy	Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	Page 18, 20-24
		b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	Page 18-24
		c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	Page 18-24
Risk Management	Disclose how the organisation identifies, assesses, and manages climate-related risks.	a) Describe the organisation's processes for identifying and assessing climate related risk.	Page 18
		b) Describe the organisation's processes for managing climate related risks.	Page 18-24
		c) Describe how processes for identifying, assessing, and managing climate related risks are integrated into the organisation's overall risk management.	Page 24
Metrics and Targets	Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities, where such information is material.	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	Page 17, 24
		b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas ("GHG") emissions, and the related risks.	Page 31-34
		c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets.	Page 25-26

APPENDIX 4: IFRS S2 CONTENT INDEX

IFRS S2 Standard	Disclosure	Reasons for Omission	Page number(s)
IFRS S2-6(a)	The governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. Specifically, the entity shall identify that body(s) or individual(s) and disclose information about:		
	(i) How responsibilities for climate-related risks and opportunities are reflected in the terms of reference, mandates, role descriptions and other related policies applicable to that body(s) or individual(s).		Sustainability in the Board [Page 7] Sustainability Governance and Leadership [Page 9] Climate-Related Risks and Opportunities [Page 17]
	(ii) How the body(s) or individual(s) determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to climate-related risks and opportunities.		Sustainability in the Board [Page 7] Board Nomination [Page 7]
	(iii) How and how often the body(s) or individual(s) is informed about climate-related risks and opportunities.		Sustainability Governance and Leadership [Page 9]
	(iv) How the body(s) or individual(s) takes into account climate-related risks and opportunities when overseeing the entity's strategy, its decisions on major transactions and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities		Message from the Board [Page 6] Sustainability Governance and Leadership [Page 9] Climate-Related Risks and Opportunities [Page 17]
	(v) How the body(s) or individual(s) oversees the setting of targets related to climate-related risks and opportunities, and monitors progress towards those targets, including whether and how related performance metrics are included in remuneration policies.		Sustainability in the Board [Page 7]

APPENDIX

IFRS S2 Standard	Disclosure	Reasons for Omission	Page number(s)
IFRS S2-6(b)	Management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities, including information about:		
	(i) Whether the role is delegated to a specific management-level position or management-level committee and how oversight is exercised over that position or committee		Sustainability Governance and Leadership [Page 9] Climate-Related Risks and Opportunities [Page 22]
	(ii) Whether management uses controls and procedures to support the oversight of climate-related risks and opportunities and, if so, how these controls and procedures are integrated with other internal functions.		Sustainability Governance and Leadership [Page 9] Climate-Related Risks and Opportunities [Page 17]
IFRS S2-9(a)	Climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects.		Climate-Related Risks and Opportunities [Page 17]
IFRS S2-9(b)	The current and anticipated effects of those climate-related risks and opportunities on the entity's business model and value chain.		Climate-Related Risks and Opportunities [Page 18-24]
IFRS S2-9(c)	The effects of those climate-related risks and opportunities on the entity's strategy and decision-making, including information about its climate-related transition plan.		Climate-Related Risks and Opportunities [Page 18-24]
IFRS S2-9(d)	The effects of those climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period, and their anticipated effects on the entity's financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how those climate-related risks and opportunities have been factored into the entity's financial planning		Climate-Related Risks and Opportunities [Page 22]
IFRS S2-9(e)	The climate resilience of the entity's strategy and its business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities.		Climate-Related Risks and Opportunities [Page 18-20]
IFRS S2-10(a)	Climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects.		Climate-Related Risks and Opportunities [Page 17]
IFRS S2-10(b)	For each climate-related risk the entity has identified, whether the entity considers the risk to be a climate-related physical risk or climate-related transition risk.		Climate-Related Risks and Opportunities [Page 18-22]
IFRS S2-10(c)	For each climate-related risk and opportunity the entity has identified, over which time horizons – short, medium or long term – the effects of each climate-related risk and opportunity could reasonably be expected to occur.		Climate-Related Risks and Opportunities [Page 18-22]
IFRS S2-10(d)	How the entity defines 'short term', 'medium term' and 'long term' and how these definitions are linked to the planning horizons used by the entity for strategic decision-making.		Climate-Related Risks and Opportunities [Page 19-20]
IFRS S2-13(a)	A description of the current and anticipated effects of climate-related risks and opportunities on the entity's business model and value chain.		Climate-Related Risks and Opportunities [Page 18-22]
IFRS S2-13(b)	A description of where in the entity's business model and value chain climate-related risks and opportunities are concentrated.		Organisational Details [Page 3-4]
IFRS S2-14(a)	How the entity has responded to, and plans to respond to, climate-related risks and opportunities in its strategy and decision-making, including how the entity plans to achieve any climate-related targets it has set and any targets it is required to meet by law or regulation, including the information about:		
	(i) current and anticipated changes to the entity's business model, including its resource allocation, to address climate-related risks and opportunities.		Climate-Related Risks and Opportunities [Page 21-24]
	(ii) current and anticipated direct mitigation and adaptation efforts.		Climate-Related Risks and Opportunities [Page 22-24]
	(iii) current and anticipated indirect mitigation and adaptation efforts.		Climate-Related Risks and Opportunities [Page 22-24]
	(iv) any climate-related transition plan the entity has, including information about key assumptions used in developing its transition plan, and dependencies on which the entity's transition plan relies.		Climate-Related Risks and Opportunities [Page 22-24] Sustainability Targets and Performance [Page 25-26]
	(v) How the entity plans to achieve any climate-related targets, including any greenhouse gas emissions targets, described.		Sustainability Targets and Performance [Page 25-26] Reduction of GHG Emissions [Page 35]
IFRS S2-14(b)	Information about how the entity is resourcing, and plans to resource, the activities disclosed in accordance with 14(a).	Not Available	
IFRS S2-14(c)	Quantitative and qualitative information about the progress of plans disclosed in previous reporting periods in accordance with 14(a).		Sustainability Targets and Performance [Page 25-26]

APPENDIX

IFRS S2 Standard	Disclosure	Reasons for Omission	Page number(s)
IFRS S2-15(a)	The effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period.		Climate-Related Risks and Opportunities [Page 22] Responsible Business Practices [Page 27]
IFRS S2-15(b)	The anticipated effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows over the short, medium and long term, taking into consideration how climate-related risks and opportunities are included in the entity's financial planning.		Climate-Related Risks and Opportunities [Page 18-22]
IFRS S2-16(a)	How climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period.		Climate-Related Risks and Opportunities [Page 22] Responsible Business Practices [Page 27]
IFRS S2-16(b)	The climate-related risks and opportunities identified in for which there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements.	Not Available	
IFRS S2-16(c)	How the entity expects its financial position to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities, taking into consideration:		
	(i) Its investment and disposal plans, including plans the entity is not contractually committed to.	Not Available	
	(ii) Its planned sources of funding to implement its strategy.		Economic Performance [Page 27]
IFRS S2-16(d)	How the entity expects its financial performance and cash flows to change over the short, medium and long term, given its strategy to manage climate-related risks and opportunities.		Climate-Related Risks and Opportunities [Page 22]
IFRS S2-22(a)	The entity's assessment of its climate resilience as at the reporting date, including:		
	(i) The implications, if any, of the entity's assessment for its strategy and business model, including how the entity would need to respond to the effects identified in the climate-related scenario analysis.		Climate-Related Risks and Opportunities [Page 22-24]
	(ii) The significant areas of uncertainty considered in the entity's assessment of its climate resilience.		Climate-Related Risks and Opportunities [Page 18-20]
	(iii) The entity's capacity to adjust or adapt its strategy and business model to climate change over the short, medium and long term, including:		
	(1) The availability of, and flexibility in, the entity's existing financial resources to respond to the effects identified in the climate-related scenario analysis, including to address climate-related risks and to take advantage of climate-related opportunities.	Not Available	
	(2) the entity's ability to redeploy, repurpose, upgrade or decommission existing assets.		Climate-Related Risks and Opportunities [Page 23]
	(3) the effect of the entity's current and planned investments in climate-related mitigation, adaptation and opportunities for climate resilience.		Climate-Related Risks and Opportunities [Page 23-24]
IFRS S2-22 (b)	How and when the climate-related scenario analysis was carried out, including the information about:		
	(i) The inputs the entity used, including:		
	(1) Which climate-related scenarios the entity used for the analysis and the sources of those scenarios.		Climate-Related Risks and Opportunities [Page 18-20]
	(2) Whether the analysis included a diverse range of climate-related scenarios.		Climate-Related Risks and Opportunities [Page 18-22]
	(3) Whether the climate-related scenarios used for the analysis are associated with climate-related transition risks or climate-related physical risks.		Climate-Related Risks and Opportunities [Page 18-22]
	(4) Whether the entity used, among its scenarios, a climate-related scenario aligned with the latest international agreement on climate change.		Climate-Related Risks and Opportunities [Page 18]
	(5) Why the entity decided that its chosen climate-related scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties.		Climate-Related Risks and Opportunities [Page 18]
	(6) The time horizons the entity used in the analysis.		Climate-Related Risks and Opportunities [Page 18-20]
	(7) What scope of operations the entity used in the analysis.		Climate-Related Risks and Opportunities [Page 17]

APPENDIX

IFRS S2 Standard	Disclosure	Reasons for Omission	Page number(s)
	(ii) The key assumptions the entity made in the analysis, including assumptions about:		
	(1) Climate-related policies in the jurisdictions in which the entity operates.		Climate-Related Risks and Opportunities [Page 18]
	(2) Macroeconomic trends.		
	(3) National- or regional-level variables		
	(4) Energy usage and mix.		
	(5) Developments in technology.		
	(iii) The reporting period in which the climate-related scenario analysis was carried out.		Reporting Period and Frequency [Page 5]
IFRS S2-25(a)	The processes and related policies the entity uses to identify, assess, prioritise and monitor climate-related risks, including information about:		
	(i) The inputs and parameters the entity uses.		Materiality Assessment [Page 13-16]
	(ii) Whether and how the entity uses scenario analysis to inform its identification of climate-related risks.		Climate-Related Risks and Opportunities [Page 18]
	(iii) How the entity assesses the nature, likelihood and magnitude of the effects of those risks.		Climate-Related Risks and Opportunities [Page 18-20]
	(iv) Whether and how the entity prioritises climate-related risks relative to other types of risk.		Materiality Assessment [Page 13-16]
	(v) How the entity monitors climate-related risks.		Climate-Related Risks and Opportunities [Page 22]
	(vi) Whether and how the entity has changed the processes it uses compared with the previous reporting period.		Materiality Assessment [Page 13]
IFRS S2-25(b)	The processes the entity uses to identify, assess, prioritise and monitor climate related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities.		Climate-Related Risks and Opportunities [Page 24]
IFRS S2-25(c)	The extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process.		Climate-Related Risks and Opportunities [Page 17]
IFRS S2-29(a)	Information relevant to the cross-industry metric categories of greenhouse gases, including:		
	(i) disclose its absolute gross greenhouse gas emissions generated during the reporting period, expressed as metric tonnes of CO2 equivalent, classified as:		
	(1) Scope 1 greenhouse gas emissions.		Energy and GHG Emissions Management [Page 32-34]
	(2) Scope 2 greenhouse gas emissions.		
	(3) Scope 3 greenhouse gas emissions.		
	(ii) Measure its greenhouse gas emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) unless required by a jurisdictional authority or an exchange on which the entity is listed to use a different method for measuring its greenhouse gas emissions.		Energy and GHG Emissions Management [Page 32]
	(iii) The approach used to measure its greenhouse gas emissions, including:		
	(1) The measurement approach, inputs and assumptions the entity uses to measure its greenhouse gas emissions.		Energy and GHG Emissions Management [Page 31-32]
	(2) The reason why the entity has chosen the measurement approach, inputs and assumptions it uses to measure its greenhouse gas emissions.		Energy and GHG Emissions Management [Page 32]
	(3) Any changes the entity made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes.		Organisational Details [Page 3]
	(iv) For Scope 1 and Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(1)-(2), disaggregate emissions between:		
	(1) The consolidated accounting group.		Energy and GHG Emissions Management [Page 31]
	(2) Other investees excluded from paragraph 29(a)(iv)(1).	Not Applicable	
	(v) Location-based Scope 2 greenhouse gas emissions, and information about any contractual instruments that is necessary to inform users' understanding of the entity's Scope 2 greenhouse gas emissions.		Energy and GHG Emissions Management [Page 32-33]

APPENDIX

IFRS S2 Standard	Disclosure	Reasons for Omission	Page number(s)
	(vi) for Scope 3 greenhouse gas emissions, disclose:		
	(1) the categories included within the entity's measure of Scope 3 greenhouse gas emissions, in accordance with the Scope 3 categories described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011).		Energy and GHG Emissions Management [Page 32]
	(2) additional information about the entity's Category 15 greenhouse gas emissions or those associated with its investments (financed emissions), if the entity's activities include asset management, commercial banking or insurance.	Not Applicable	
	Climate-related transition risks – the amount and percentage of assets or business activities vulnerable to climate-related transition risks.		Climate-Related Risks and Opportunities [Page 22]
IFRS S2-29(b)	Climate-related transition risks – the amount and percentage of assets or business activities vulnerable to climate-related transition risks.		Climate-Related Risks and Opportunities [Page 20]
IFRS S2-29(c)	Climate-related physical risks – the amount and percentage of assets or business activities vulnerable to climate-related physical risks.		Climate-Related Risks and Opportunities [Page 22-24]
IFRS S2-29(d)	Climate-related opportunities – the amount and percentage of assets or business activities aligned with climate-related opportunities.	Not available	
IFRS S2-29(e)	Capital deployment – the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities.		
IFRS S2-29(f)	Internal carbon prices – the entity shall disclose:		
	(i) an explanation of whether and how the entity is applying a carbon price in decision-making.		Climate-Related Risks and Opportunities [Page 21]
	(ii) the price for each metric tonne of greenhouse gas emissions the entity uses to assess the costs of its greenhouse gas emissions.	Not Available	
IFRS S2-29(g)	Remuneration, including the information about:		
	(i) a description of whether and how climate-related considerations are factored into executive remuneration.	Not Available	
	(ii) the percentage of executive management remuneration recognised in the current period that is linked to climate-related considerations.	Not Available	
IFRS S2 33(a)	The metric used to set the quantitative and qualitative climate-related targets		Sustainability Targets and Performance [Page 25-26]
IFRS S2 33(b)	The objective of the target		Sustainability Targets and Performance [Page 25-26]
IFRS S2 33(c)	The part of the entity to which the target applies.		Sustainability Targets and Performance [Page 25]
IFRS S2 33(d)	The period over which the target applies.		Sustainability Targets and Performance [Page 25-26]
IFRS S2 33(e)	The base period from which progress is measured.		Sustainability Targets and Performance [Page 25-26]
IFRS S2-33(f)	Any milestones and interim targets.		Sustainability Targets and Performance [Page 25-26]
IFRS S2 33(g)	If the target is quantitative, whether it is an absolute target or an intensity target.		Sustainability Targets and Performance [Page 25-26]
IFRS S2 33(h)	How the latest international agreement on climate change, including jurisdictional commitments that arise from that agreement, has informed the target.	Not Applicable	
IFRS S2 34(a)	Whether the target and the methodology for setting the target has been validated by a third party.		Sustainability Targets and Performance [Page 25]
IFRS S2 34(b)	The entity's processes for reviewing the target.		Sustainability Targets and Performance [Page 25]
IFRS S2 34(c)	The metrics used to monitor progress towards reaching the target.		Sustainability Targets and Performance [Page 25]
IFRS S2 34(d)	Any revisions to the target and an explanation for those revisions.	Not Applicable	
IFRS S2-35	An entity shall disclose information about its performance against each climate related target and an analysis of trends or changes in the entity's performance.		Throughout report
IFRS S2 36(a)	Which greenhouse gases are covered by the target.		Sustainability Targets and Performance [Page 26]
IFRS S2 36(b)	Whether Scope 1, Scope 2 or Scope 3 greenhouse gas emissions are covered by the target.		Sustainability Targets and Performance [Page 26]
IFRS S2 36(c)	Whether the target is a gross greenhouse gas emissions target or net greenhouse gas emissions target. If the entity discloses a net greenhouse gas emissions target, the entity has been also required to separately disclose its associated gross greenhouse gas emissions target	Not Applicable	
IFRS S2 36(d)	Whether the target was derived using a sectoral decarbonisation approach.	Not Applicable	

APPENDIX

IFRS S2 Standard	Disclosure	Reasons for Omission	Page number(s)
IFRS S2 36(e)	The entity's planned use of carbon credits to offset greenhouse gas emissions to achieve any net greenhouse gas emissions target. In explaining its planned use of carbon credits the entity shall disclose information:	Not Applicable	
	(i) the extent to which, and how, achieving any net greenhouse gas emissions target relies on the use of carbon credits.	Not Applicable	
	(ii) which third-party scheme(s) will verify or certify the carbon credits.	Not Applicable	
	(iii) the type of carbon credit, including whether the underlying offset will be nature based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal.	Not Applicable	
	(iv) any other factors necessary for users of general-purpose financial reports to understand the credibility and integrity of the carbon credits the entity plans to use.	Not Applicable	

APPENDIX 5: CONVERSION FACTORS FOR ENERGY

- Conversion of diesel from L to GJ is 0.03655, conversion of petrol from L to GJ is 0.03323, and conversion of natural gas from mmbTU to GJ is 1.05505585. 2018 NEA Greenhouse Gas Emissions Measurement and Reporting Guidelines, Part III (Version 2)
- Conversion of all electricity consumption (incl. solar) from kWh to GJ is 0.0036 (<https://www.unitconverters.net/energy/kilowatt-hour-to-gigajoule.htm>)
- Conversion of steam from ton to GJ is 3.897810219, assuming that steam production is using coal, and that 1 ton of coal can produce 6.85 tons of steam on average.

APPENDIX 6: EMISSION FACTORS FOR SCOPE 1 GREENHOUSE GAS EMISSIONS

- Emission factor for diesel is 75.2427 kgCO₂e/GJ, and emissions factor for petrol is 72.12 kgCO₂e/GJ. 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Energy Chapter 3
- Emission factor for natural gas is 56.155 kgCO₂e/GJ. 2019 Refinement to the 2006 IPCC National Guidelines for Greenhouse Gas Inventories, Energy Chapter 2
- Emission factor for steam is 0.38481326 tCO₂e/ton, assuming that steam production is using coal, and that 1 ton of coal can produce 6.85 tons of steam on average.

APPENDIX 7: EMISSION FACTORS FOR SCOPE 2 GREENHOUSE GAS EMISSIONS

- Emission factor for electricity is based on respective location Grid Emission Factor ("GEF"):
 - Singapore 2023 GEF (BM) is 0.394 kgCO₂e/kWh, this is the most up-to-date figure available during this reporting period as the latest GEF was not ready at the time of writing. Energy Market Authority (2024) 2023 Electricity Grid Emission Factor and Upstream Fugitive Methane Emission Factor from Excel titled SES_2024.xlsx, Tab T2.4
 - Nantong, Suzhou, and Hefei GEF is 0.7703 kgCO₂e/kWh. IGES List of Grid Emission Factors, East China Grid 2023
 - Tianjin GEF is 0.935 kgCO₂e/kWh. IGES List of Grid Emission Factors, North China Grid 2023

APPENDIX 8: EMISSION FACTORS FOR SCOPE 3 GREENHOUSE GAS EMISSIONS

- Emission factors for various goods and services:
 - Paper emission factor is 0.889615548 kg CO₂e/2024 SGD, purchaser price. US EPA Supply Chain Greenhouse Gas Emission Factors v1.3 by NAICS-6, Code 322121 Paper (Except Newsprint) Mills
 - Other materials emission factor is 0.52373718 kg CO₂e/2024 SGD, purchaser price. US EPA Supply Chain Greenhouse Gas Emission Factors v1.3 by NAICS-6, Code 325910 Printing Ink Manufacturing
- Emission factors for business travel by different modes of travel:
 - Plane emission factor is 0.950103504 kg CO₂e/2024 SGD, purchaser price. US EPA Supply Chain Greenhouse Gas Emission Factors v1.3 by NAICS-6, Code 481111 Scheduled Passenger Air Transportation
 - Train, bus and car emission factor is 0.835028856 kg CO₂e/2024 SGD, purchaser price. US EPA Supply Chain Greenhouse Gas Emission Factors v1.3 by NAICS-6, Code 485310 Taxi Service, 485312 Commuter Rail System, 485313 Bus and Other Motor Vehicle Transit Systems

APPENDIX

3. Emission factors for employee commute by different modes of travel:
 - a. Walking and cycling emission factor is 0.
 - b. Motorbike (petrol) emission factor is 0.11367 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Motorbike, Average
 - c. E-bike emission factor is 0.0370607 kg CO₂e/km. C.R. Cherry et al./Transportation Research Part D 14 (2009) 281-290, Table 3, East network
 - d. Car (petrol) emission factor is 0.1645 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Car (by size), Average Car, Petrol
 - e. Car (diesel) emission factor is 0.16984 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Car (by size), Average Car, Diesel
 - f. Car (electric) emission factor is 0.04745 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Car (by size), Average Car, Battery Electric Vehicle
 - g. Carpooling (petrol) emission factor is 0.08225 kg CO₂e/km, assuming 2 passenger per car. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Car (by size), Average Car, Petrol
 - h. Train/MRT/LRT emission factor is 0.0278 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Rail, London Underground
 - i. Public bus emission factor is 0.10846 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Bus, Average Local Bus
 - j. Company bus emission factor is 0.021692 kg CO₂e/km, assuming 5 passengers per bus. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Business Travel – Land, Bus, Average Local Bus
4. Emission factors for upstream transportation and distribution processes is 0.87296 kg CO₂e/km. DEFRA UK Government GHG Conversion Factors for Company Reporting v1.1 (2024), Freight Goods, HGC (All diesels), All HGVs, Average Laden