

BERSEKUTUHAN MELAKSANAKAN TRANSFORMASI
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BERSEKUTUHAN
MELAKSANAKAN
TRANSFORMASI

FRONTKEN

FRONTKEN CORPORATION BERHAD

TCFD Report 2024

BERSEKUTUHAN MELAKSANAKAN TRANSFORMASI

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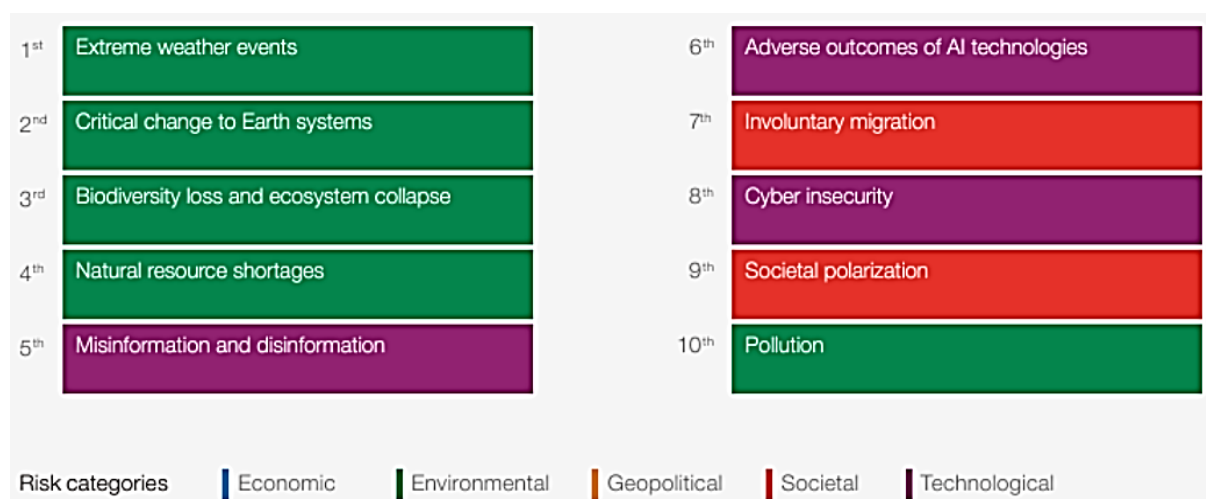
1.0 THE CASE FOR URGENT CLIMATE ACTION

Climate change occurs primarily due to the accumulation of greenhouse gases (GHGs) in the Earth's atmosphere. These gases, including carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O), trap heat from the sun, creating a "greenhouse effect". While this effect is natural and necessary for life on Earth, human activities such as burning fossil fuels, deforestation, industrial processes, and large-scale agriculture have significantly increased GHG concentrations, intensifying the effect and causing the planet to warm. This human-induced warming is referred to as global warming, a key driver of climate change.

Rising global temperatures are leading to more frequent and severe weather events such as heatwaves, hurricanes, droughts, and floods. At the same time, melting polar ice caps and glaciers contribute to rising sea levels, threatening coastal cities and habitats. Climate change disrupts agriculture, reduces crop yields, and increases costs of food production. Extreme weather events damage infrastructure, costing billions annually in repairs and recovery. Climate systems are approaching critical tipping points (e.g., collapse of ice sheets, loss of rainforests), where damage becomes irreversible.

The Global Risks Report, released annually by the World Economic Forum (WEF), consistently highlights climate change-related issues as some of the most pressing global risks. In recent years, climate-related risks such as extreme weather events, climate action failure, and biodiversity loss have ranked among the top five global risks in terms of both likelihood and impact. The WEF's Global Risks Report 2023 showed that climate action failure ranked #1 risk in terms of potential impact over the next decade. The 2024 Global Risks Report said climate-related threats dominate the top 10 risks global populations will face in the longer term. Typically, climate-related risks account for approximately 30-40% of the top global risks in the WEF's annual reports. This underscores the critical need for immediate and collaborative global action to mitigate and adapt to climate change.

Global risks ranked by severity over the long term (10 years)



Source: World Economic Forum Global Risks Perception Survey 2023-2024.

2.0 INTERNATIONAL CLIMATE ACTION INITIATIVES

Considering that climate change will have serious impacts on the environment, resulting in increased economic uncertainty and global security risks. Therefore, the international community has launched various initiatives to address global climate change.

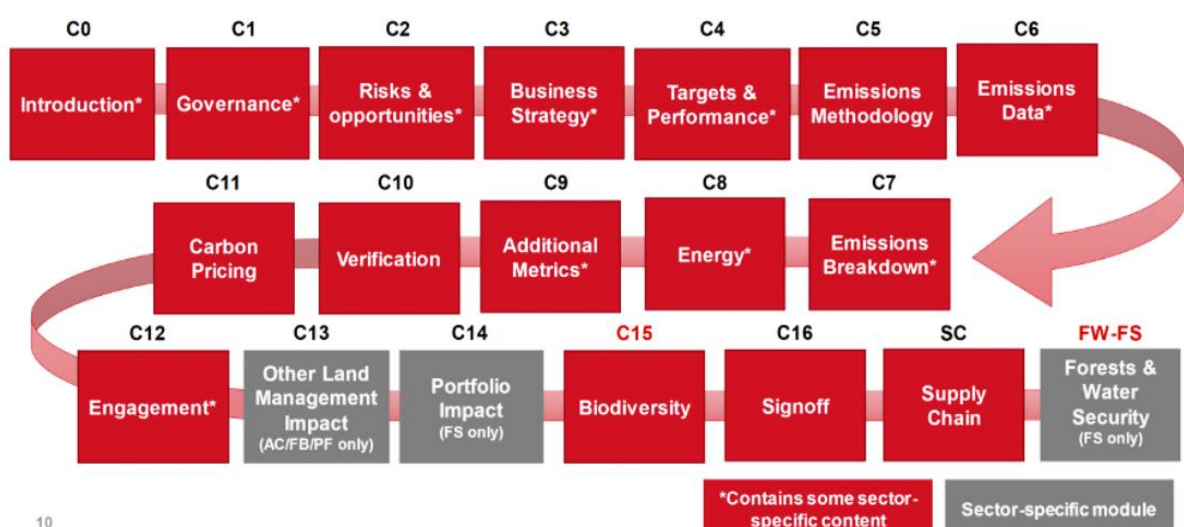
2.1 Carbon Disclosure Project (CDP)

CDP was established as the 'Carbon Disclosure Project' in 2000, asking companies to disclose their climate impact. By shortening its name to 'CDP' in 2013, CDP is an international organization that runs the global disclosure system for investors, companies, cities, states and regions to manage their environmental impacts. The world's economy looks to CDP as the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action.

Benefits of reporting via CDP and its climate change questionnaires



Climate Change Questionnaire Structure



2.2 Task Force on Climate-Related Financial Disclosures (TCFD)

The Task Force on Climate-Related Financial Disclosures (TCFD) was created by the international Financial Stability Board (FSB) to develop consistent climate-related financial risk disclosures for use by companies, banks, and investors. The main objective of TCFD reporting is to disclose the climate-related risks and opportunities of a company as well as the financial impact those might have on the company's business.



TCFD reporting aims to provide consistent and transparent information to all financial actors and global markets. It is not a corporate reporting standard but a way of understanding how firms approach the financial risks and opportunities related to climate change.

The benefits of climate-related financial disclosure for companies:

S/N	<i>Internal benefits</i>	<i>External benefits</i>
1	Cost savings through identify opportunities for resource and energy efficiency	Improved access to capital
2	Improved strategic resilience	Improved engagement with investors
3	Identification of potential climate-related financial opportunities	Ensure preparedness for emerging climate regulation
4	Improved robustness of risk management processes	Improved reputation with customers, employees and wider stakeholders
5	Improved communication between board and management on climate issues	Establishing a leadership position among industry peers

The TCFD's recommendations are based on four thematic areas: Governance, Strategy, Risk management, and Metrics and targets.

- **Governance:** The organization's governance around climate- related risks and opportunities.
- **Strategy:** The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.
- **Risk Management:** The process used by the organization to identify, assess, and manage climate-related risks.
- **Metrics and Targets:** The metrics and targets used to assess and manage relevant climate-risks and opportunities.



2.3 Science-based targets (SBTs)

The Paris Agreement is an international treaty adopted at the 21st Conference of the Parties (COP21) in Paris in December 2015 under the United Nations Framework Convention on Climate Change (UNFCCC). Its primary goal is to address climate change by limiting global warming to well below 2°C above pre-industrial levels, while striving to limit the increase to 1.5°C. The following are its key contents:

- a) Global Temperature Goals – Limit global warming to well below 2°C, with efforts to stay below 1.5°C.
- b) Nationally Determined Contributions (NDCs) – Each country must develop, communicate, and maintain successive NDCs, which outline their plans to reduce greenhouse gas (GHG) emissions.
- c) Global Stocktake – Every five years, progress is assessed to ensure alignment with the goals.
- d) Transparency Framework – Countries must report their emissions and progress transparently.
- e) Adaptation and Resilience – Support for adaptation strategies to help countries cope with the impacts of climate change.

The Science Based Targets initiative (SBTi) is a corporate climate action organization that enables companies and financial institutions worldwide to play their part in combating the climate crisis. SBTi is crucial because it provides organizations with a framework to align their climate goals with the latest climate science and the goals of the Paris Agreement.



The functions of SBTi are as follows:

- a) Set Science-Based Targets – It guides companies in setting GHG reduction targets that align with limiting global warming to 1.5°C or 2°C and reaching net-zero by 2050 at latest.
- b) Validation of Targets – SBTi validates and approves corporate targets to ensure credibility and scientific integrity.
- c) Sector-Specific Guidance – Offers tailored guidance for various industries, including power, transportation, and manufacturing.
- d) Accountability and Transparency – Ensures that companies adhere to clear, measurable goals and regularly report on their progress.

In summary, the Paris Agreement and the SBTi are interconnected mechanisms driving global and corporate climate action. The SBTi enables enterprises to transition toward sustainability while benefiting from long-term resilience and competitiveness. The benefits of using the SBTi for enterprises: Aligns with Global Climate Goals; Demonstrates leadership in sustainability, boosting brand reputation and stakeholder trust; Aligning with climate science makes companies more appealing to ESG (Environmental, Social, and Governance)-focused investors; Encourages companies to adopt energy-efficient processes and sustainable technologies; Prepares businesses for future regulations and market changes driven by climate policies; Improves operational efficiency and early adoption of sustainable practices positions companies as industry leaders.

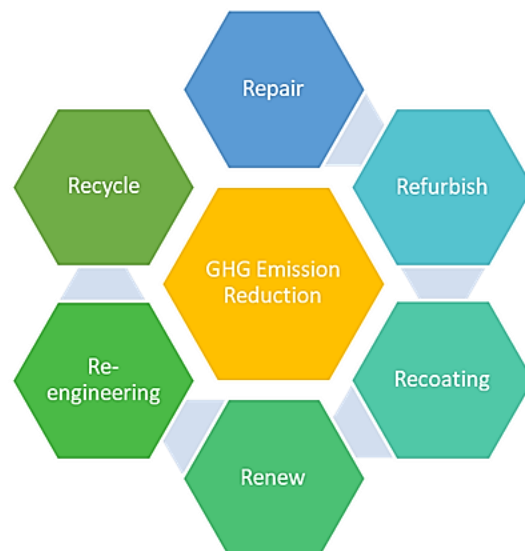
3.0 THE CONTRIBUTION OF OUR INNOVATIVE BUSINESS PHILOSOPHY IN AVOIDING GHG EMISSIONS

Frontken Corporation Berhad (FCB), listed on the Main Market of Bursa Malaysia Securities Berhad, has since its inception in 1996, established itself as a world leading service provider of advanced precision cleaning and surface treatment for semiconductor process chamber parts and repair and maintenance services for the oil and gas industry. We use cutting edge technology to extend the lifespan of the high precision tools/equipment used in the fabrication of wafers, while significantly improving its customer's process efficiency, operating and maintenance costs. Our mission is to serve our customers with complete satisfaction which includes not only the most competitive price and fastest delivery time but also the highest technical performance and reliability for all our services and products.



3.1 Recycling and rejuvenation always result in lower GHG emissions compared to manufacturing new components

In general, recycling a component usually produces significantly lower GHG emissions than manufacturing a new one because recycling requires less energy. For example: Recycling aluminum uses about 5% of the energy needed to produce aluminum from bauxite ore; recycling steel requires about 60-74% less energy than producing new steel from iron ore. However, manufacturing a new component involves extracting raw materials, transporting them, and processing them into a finished product, which is energy-intensive and typically relies on fossil fuels. On average, recycling can reduce GHG emissions by 50% to 95%, depending on the material: Aluminum part's recycling reduces emissions by up to 95% compared to primary production and steel part's recycling can reduce emissions by 50-74%. The following explains why recycling is more effective:



- a) Energy Savings – Recycling materials like metals and plastics typically requires less energy than processing raw materials.
- b) Avoided Extraction Emissions – Extracting raw materials, such as mining and drilling, emits significant GHGs.
- c) Transportation – Recycled materials are often closer to production facilities, reducing emissions from transport.
- d) Byproducts Management – Recycling often generates fewer byproducts compared to raw material extraction.

Hence, recycling almost results in lower GHG emissions compared to manufacturing new components. The percentage difference depends on the material and processes involved but is substantial, often exceeding 50%, and in some cases, like aluminium, reaching 95%.

3.2 Frontken Drives Carbon Neutrality with Innovative Refurbishment Technology: A Scope 4 Emission Perspective

As global industries strive toward carbon neutrality, the focus has predominantly been on Scope 1, 2, and 3 emissions—direct emissions from operations, indirect emissions from purchased energy, and emissions across the value chain. However, a new concept, Scope 4 emissions, is gaining attention. Scope 4 emissions refer to avoided emissions, which are emissions prevented by the adoption of innovative technologies or solutions that improve efficiency, reduce waste, and minimize the carbon footprint.



Our future depends on what we do today

At the forefront of Scope 4 innovation, our company leverages cutting-edge technology to refurbish and recycle critical precision metal components. This process not only extends the service life of these components but also enhances their performance, driving significant environmental and economic benefits. Below, we delve into the significance of our refurbishment technology in advancing carbon neutrality through the lens of avoided emissions.

Manufacturing precision metal components is highly resource-intensive, involving the extraction of raw materials, energy-demanding processes, and significant greenhouse gas (GHG) emissions. Traditional end-of-life practices for these components, such as disposal or complete replacement, exacerbate these environmental challenges and demanding further resource consumption. Refurbishment (the process of restoring and upgrading used components) emerges as a sustainable alternative. By adopting refurbishment instead of replacement, enterprise can avoid the carbon emissions associated with mining, transportation, and the full-scale manufacturing of new components.

3.2.1 Our Technology Achieves Scope 4 Emissions (i.e. Avoided Emissions)

- a) **Extending Component Lifespan:** Our refurbishment technology significantly extends the service life of precision metal components. This reduces the frequency of replacements, thereby preventing the emissions associated with the production of new components. Each refurbished component represents emissions avoided from material extraction, manufacturing, and logistical operations.
- b) **Enhanced Performance:** By improving the performance of refurbished components, our technology ensures greater operational efficiency. Enhanced efficiency often translates to reduced energy consumption during the component's use phase, further avoiding indirect emissions (Scope 2 and 3) for our clients.
- c) **Zero-Waste Innovation:** Our closed-loop process achieves zero waste by recycling all materials involved. This circular approach minimizes the need for raw material extraction, cutting emissions from resource-intensive mining and refining activities. Furthermore, waste elimination contributes to reducing methane emissions from landfills.
- d) **Enabling Downstream Carbon Savings:** Clients who adopt our refurbished components often realize significant energy and cost savings. For example, improved component performance in energy-intensive industries like semiconductor foundry reduces operational emissions, contributing to the broader reduction of GHG emissions across the value chain.

3.2.2 Quantifying the Impact of Avoided Emissions

To further illustrate the impact of our technology implementation on scope 4 emissions as below:

- a) **Assumptions**
 - Emissions for a new component (E_{new}): Producing a new component emits 100% of the emissions baseline per cycle.
 - Emissions for refurbishing a component ($E_{\text{refurbish}}$): Refurbishing a component emits 20-50% of the emissions compared to making a new one, depending on the material and process. Let us assume an average value of 35% for the refurbishing process.
 - Each component is cycled 10 times in total.
- b) **Calculations**
 - **Scenario 1: Using a New Component Each Time**
For 10 cycles, the total emissions would be:
Total Emissions (New) = $10 \times E_{\text{new}} = 10 \times 100 = 1000$ units
 - **Scenario 2: Refurbishing the Same Component for 10 Cycles**
The emissions would include the emissions for manufacturing the original component once and refurbishing it nine times:
Total Emissions (Refurbished) = $E_{\text{new}} + 9 \times E_{\text{refurbish}}$
After substitute $E_{\text{refurbish}} = 0.35 \times E_{\text{new}}$,
Total Emissions (Refurbished) = $100 + 9 \times (0.35 \times 100) = 100 + 315 = 415$ units
 - **Percentage Difference in Emissions**
Percentage Difference = $\frac{Emissions (New) - Emissions (Refurbished)}{Emissions (New)} \times 100$
Percentage Difference = $\frac{1000 - 415}{1000} \times 100 = 58.5\%$
- c) **Conclusion**

- Using a refurbished precision metal component for 10 cycles instead of manufacturing a new one each time reduces GHG emissions by approximately 58.5%. It showcases the substantial environmental benefit of refurbishment technologies.
- By combining these benefits, our technology delivers a tangible contribution to carbon neutrality, positioning refurbishment as a key driver of Scope 4 emissions.

3.2.3 Beyond Carbon Neutrality: Industry-Wide Sustainability

The broader adoption of refurbishment technologies can catalyse a paradigm shift in industrial sustainability. By demonstrating the viability of zero-waste, high-performance solutions, we aim to continuously innovate and advance, leading the practice of circular economy. Our approach aligns with global sustainability goals, including the United Nations' Sustainable Development Goals (SDGs), particularly Goal 12 (Responsible Consumption and Production) and Goal 13 (Climate Action).



In the journey toward carbon neutrality, recognizing and prioritizing Scope 4 emissions is essential. Our innovative refurbishment and recycling technology exemplifies how businesses can drive avoided emissions while delivering economic and performance benefits to their clients. By extending the lifecycle of precision metal components, achieving zero waste, and enhancing efficiency, we not only reduce GHG emissions but also pave the way for a more sustainable industrial future.

Together, through cutting-edge innovation and a commitment to sustainability, we can achieve lasting environmental impact and contribute meaningfully to the fight against climate change.

3.2.4 Our Outstanding Achievements in Climate Change

- Our Scope 4 data from the past three years

Year	FY2022	FY2023	FY2024
Scope 4 – Avoided emissions: They are emissions prevented by the adoption of innovative technologies, and minimize the carbon footprint (Unit: tCO ₂ e).	90,199	94,696	101,562

- Our Innovative projects for better low-carbon production

Year	FY2022	FY2023	FY2024
Total accumulative green power project (KWh) since 2018.	2,245,318	3,151,354	4,663,368
Total accumulative DIW recycling project since 2018 (Ton).	307,623	394,517	492,699
Total accumulative waste recycling project since 2018 (Kg)	281,196	360,807	462,518

— 3,000 Mangrove Tree Planting Program

Employees participated in UMW Green Shoots Initiative event to replant the mangrove tree as an initiative to conserve the coastline at the Sg. Acheh, Penang (Malaysia). Mangroves forest is one of the viable sources of carbon sink, with 5 times more carbon capture than tropical rainforest. By participating and supporting the mangrove tree replantation program, we are contributing in a long-term initiative to reduce the emission carbon dioxide level in the world.



4.0 COMMITMENT TO NET ZERO EMISSIONS

Frontken cares about the impact of climate on the operation of our various bases and the potential issues that it may present to society, as well as any socio-economic issues that may arise from extreme weather. Our climate change management focuses internally on strengthening own capabilities in both mitigation and adaptation capabilities, and externally on both supply chain carbon reduction, and providing customers with low carbon services to form our major management strategies. In order to mitigate the impact of climate disasters, we have developed and published 'E-01 FCB ENVIRONMENT MANAGEMENT POLICY', Declaration on Climate Change attached in 'E-02 FCB CLIMATE CHANGE POLICY', and 'G-12 FCB SUSTAINABILITY DEVELOPMENT POLICY' to guide our company's daily operations. In addition, Frontken is actively planning and taking action to mitigate and adapt to climate change, striving to achieve net zero emissions by 2050.



FTSE4Good



Frontken keeps a close eye on global climate action guiding principles. To ensure the progress and outcomes of action plans, we comply with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and disclose a total of 12 items around the following four pillars. At the same time, we have also joined CDP and FTSE4Good's online disclosure and released our annual sustainability development report in accordance with the GRI framework. We aim to maximize climate opportunities by saving energy, reducing resource consumption, and developing Low-carbon Services to ensure our production resilience, resource resilience, and climate resilience. We also extend these practices to the supply chain to effectively reduce climate risks, collaborate with suppliers to enhance climate adaptation capabilities, reduce operating costs, and strive for net zero transformation.

CLIMATE RESILIENCE

Response with high urgency and commitment to mitigate climate change and protect Frontken Group from its Effects.

RESOURCE RESILIENCE

Secure Frontken Group Critical Resources, such as utilities, water, materials, chemicals, manpower, and supply chain through optimisation, recycle and recovery of treasure from waste

PRODUCTION RESILIENCE

Ensure our Frontken Group can thrive in the future economy in the face of climate change and growing resource constraints.

Four pillars of the Task Force on Climate-related Financial Disclosures (TCFD)

Governance

(The details refer to Page 16 to 22)

- **Board Oversight:** Board oversees climate-related risks and opportunities; Roles and responsibilities of committees (Audit committee, Remuneration committee and Nomination committee) or individual board members in climate governance.
- **Management's Role:** Senior management identifies, assesses, and manages climate-related risks; Integration of climate strategy into business operations; Provide details on cross-departmental collaboration (e.g., procurement, engineering, and operations teams working together to integrate low-carbon technologies).

Strategy

(The details refer to Page 23 to 28)

- **Climate-Related Risks and Opportunities:** Identification of short-, medium-, and long-term climate-related risks; Identification of business opportunities.
- **Impact on Business and Financial Planning:** Climate factors impact revenue, costs, and capital expenditures; Consideration of physical and transition risks.
- **Resilience of Strategy:** Resilience of business strategy under various climate scenarios.

Risk Management

(The details refer to Page 29 to 34)

- **Processes for Identifying Risks:** Climate-related risks are identified across operations and the supply chain.
- **Processes for Assessing and Prioritizing Risks:** Criteria and tools used to evaluate the significance of climate-related risks.
- **Risk Mitigation and Management:** Actions to reduce exposure to climate risks.
- **Integration into Enterprise Risk Management (ERM):** Climate risks are incorporated into the broader ERM framework.

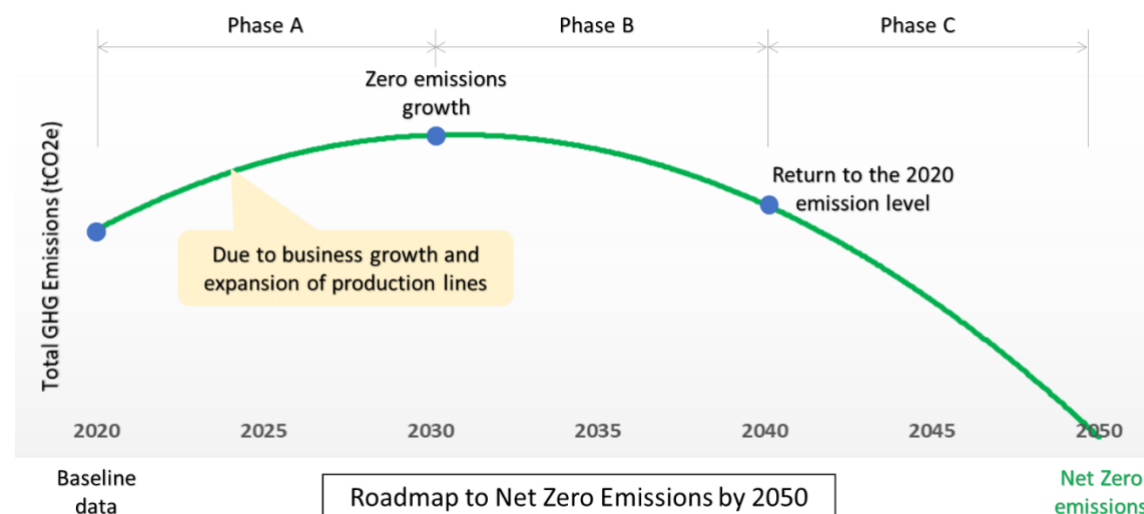
Metrics and Targets

(The details refer to Page 35 to 36)

- **Metrics Used to Assess Risks and Opportunities:** Energy consumption and renewable energy use; GHG emissions (Scope 1, Scope 2, and relevant Scope 3 emissions).
- **Climate Targets:** Specific targets for emissions reduction, energy efficiency, and waste recycling; Alignment with global initiatives (e.g., Science-Based Targets Initiative).
- **Performance Against Targets:** Historical performance and progress toward goals.

4.1 Our Roadmap to Net Zero Emissions

Climate change management is critical to sustainable corporate operations. Frontken has mapped out a Roadmap to Net Zero Emissions, setting the goals of zero emissions growth by 2030 and gradually reducing emissions to return to 2020 emission levels by 2040 and net zero emissions across the value chain by 2050. Due to the continuous increase in the company's business volume and the expansion of production lines to meet market demand, coupled with the increasingly advanced components that require more complex processes for refurbishment, all of these will result in an increase in our carbon emissions during Phase A. In order to achieve net zero emissions, the following table lists the measures taken by the company in various periods to reduce the emissions from scope 1, scope 2 and scope 3.



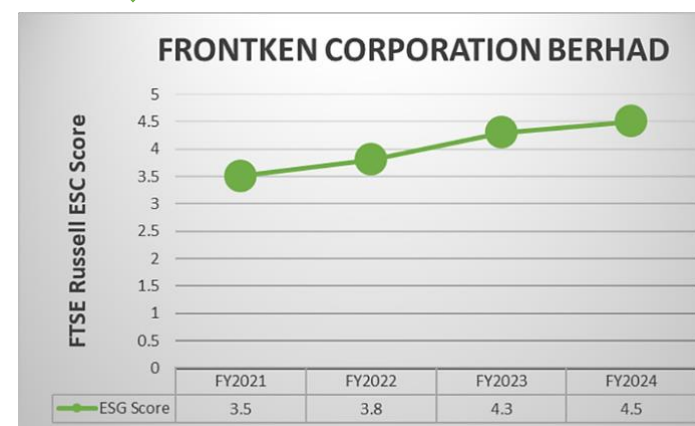
Stage	Phase A	Phase B	Phase C
Scope1 Direct Emissions from Processes	- Reduce the use of fuel; - Optimize the process and reduce the amount of dry ice used.	- Adopt Low-Carbon and Zero-Carbon Fuels our processes and vehicles; - Upgrade equipment and machinery to improve energy efficiency.	Invest in carbon capture, utilization, and storage (CCUS) systems to capture CO₂ from our processes.
Scope2 Indirect Emissions from Energy Usage	- Upgrade to energy-efficient lighting (e.g., LEDs) and appliances; - Use renewable energy.	- Increase use of renewable energy; - Implement energy management systems to monitor and optimize energy consumption.	- Purchase green electricity through Power Purchase Agreements (PPAs); - Utilize our technological advantages, reduce energy consumption.
Scope3 Indirect Emissions from the Value Chain	- Transition corporate travel policies to prioritize low-carbon travel methods; - Optimize shipping routes & consolidate shipments to reduce emissions.	- Collaborate with suppliers to adopt sustainable practices and reduce emissions; - Recycling & reuse of waste materials.	- Request suppliers to use renewable energy and low-carbon raw materials; - Collaborate externally for carbon reduction and carbon negative programs

4.2 Celebrating Milestones in Our Net Zero Transformation Journey

As we continue our mission to achieve net zero emissions, we are proud to highlight the significant milestones we have accomplished along the way. Each step represents our unwavering commitment to sustainability, innovation, and creating a greener future for generations to come.

- a) One of our most transformative achievements is the integration of cutting-edge refurbishment/ recovering technology. By extending the lifecycle of critical precision metal components and enhancing their performance, we have:
 - Avoided over 58% of GHG emissions compared to manufacturing new components;
 - Achieved a zero-waste process, reducing material waste across all operations;
 - Delivered substantial cost savings and energy efficiency to our customers.
- b) Implement various projects to reduce energy use, thereby lowering our utility costs and reducing our environmental footprint.
 - We installed solar photovoltaic systems on the roof of the plant to generate electricity and achieve an average monthly power generation of up to 935,661 kWh
 - To improve our energy conservation transformation of the chiller system, office air conditioning system, dust-collecting and exhaust system and lighting system, including the adoption of frequency conversion technology, the installation of flow monitoring and control system and the replacement of energy-saving lightings.

To that end, we achieved considerable good results.
- c) Transparency and accountability have been cornerstones of our transformation process. We are proud to have:
 - Published our Annual Sustainability Development Report and TCFD Report, detailing our progress and challenges;
 - Regularly communicated progress to stakeholders, ensuring alignment with global standards and best practices;
 - In FY2024, we achieved a fairly good FTSE Russell ESG score of 4.5 out of 5; In addition, we also achieved an overall score of B in the climate aspect of CDP.



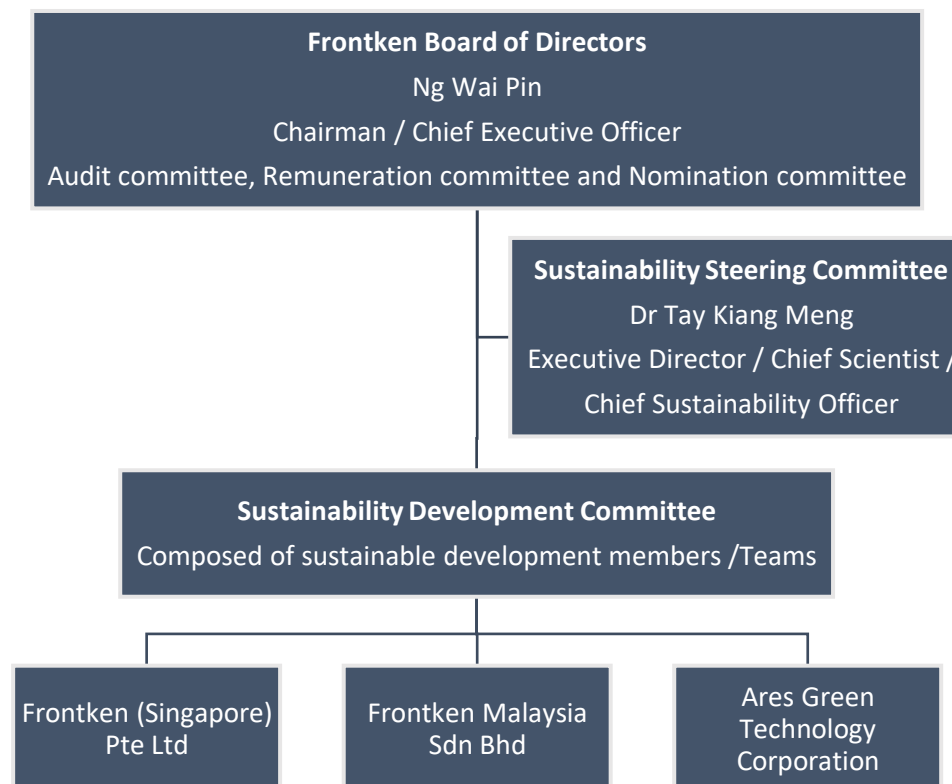
5.0 SUSTAINABLE CLIMATE GOVERNANCE

5.1 Climate Change Governance and Management Framework

The Board of Directors plays the role of overseeing and providing guidance to the Company's comprehensive climate change and sustainable management strategies. At Frontken, the Board is responsible for overseeing climate change governance and the management framework. Frontken Executive Director – Dr Tay Kiang Meng is responsible to Sustainability Steering Committee for formulating mid-to-long term climate change management strategies; identifying our climate risks, formulating annually adaptation and mitigation plans in response to climate change, management the focuses, and countermeasures; integrating interdepartmental resources for climate action; reviewing progress, discussing future plans, and reporting to the Board of Directors every year.

To ensure a focused approach towards sustainability, Frontken has established a dedicated Sustainability Development Committee. This committee plays a pivotal role in providing strategic direction and monitoring the progress of sustainability development activities across the organization. It also leads comprehensive sustainability initiatives and assesses Climate-related risks and opportunities, reporting directly to the Board of Directors every year. They convene regularly to discuss and exchange ideas on emerging social trends, progress in addressing key sustainability themes, and any pertinent Climate Change issues requiring attention. This collaborative approach ensures that Frontken remains proactive in addressing sustainability challenges and aligns with industry best practices.

By having a structured governance framework led by the Board of Directors and supported by the Sustainability Development Committee, Frontken Group demonstrates its commitment to integrating sustainability into core business strategies and operations, driving positive impact across environmental, social, and governance dimensions.



5.2 Board oversees climate-related risks and opportunities

The Board of Directors at Frontken Group assumes responsibility for overseeing the business affairs of the company. A key aspect of their role is providing leadership in defining our overall strategy, which includes a deep consideration of our material sustainability issues. Recognizing the significance of sustainability, the Board integrates environmental, social, and governance (ESG) factors as guiding principles into Frontken Group's business operations to achieve long-term enterprise value creation. In the context of overseeing climate change-related issues within an organization, each governing body—Board of Directors, Audit Committee, Remuneration Committee, and Nomination Committee—plays a specific and interconnected role.

<i>Governing Body</i>	<i>Roles and Responsibilities</i>	<i>Major Decisions Made and Actions Taken</i>
Board of Directors	The Board of Directors has ultimate responsibility for our climate change strategy and ensuring that climate-related issues are integrated into overall governance and business strategy. • Strategic Oversight: Define the organization's long-term climate strategy, ensuring alignment with business goals and regulatory requirements; Approve and monitor the organization's climate-related objectives, such as net-zero targets or energy transition plans. • Risk Management: Ensure that climate risks (physical, transition, and liability risks) are integrated into the enterprise risk management (ERM) framework; Oversee scenario analysis and assess resilience against various climate change scenarios. • Performance Monitoring: Review and evaluate progress toward achieving climate-related targets, such as reductions in GHG emissions or energy efficiency improvements. • Stakeholder Communication: Approve disclosures on climate-related performance, including the TCFD report, sustainability report, and other public statements.	• Established Sustainability Steering Committee; • Approved Energy-saving Program; • Issues FCB Climate Change Policy; • Approved to building solar photovoltaic systems; • Declared Net Zero Emissions by 2050; • Issues FCB Annual Sustainability Development Report; • Issues FCB Annual TCFD Report.
Audit Committee	The Audit Committee ensures that climate-related risks, opportunities, and financial impacts are accurately assessed and disclosed in financial statements and reports. • Financial Oversight: Review the financial implications of climate-related risks and ensure proper accounting practices for climate-related costs or liabilities; Ensure that climate-related risks are integrated into financial risk management processes, including stress testing. • Internal Controls: Oversee the internal controls related to climate-related data collection, measurement, and reporting to ensure accuracy and reliability.	• Audited FCB Annual Financial Statements and Reports; • Audited the integrity of sustainability reports and our Annual TCFD Report; • Audited our climate-related metrics and data, ensure they are accurate and reliable;

	• Assurance Processes: Ensure that climate-related disclosures are verified through internal audits or third-party assurance; Confirm compliance with external standards (e.g., TCFD, GHG Protocol). • Regulatory Compliance: Monitor adherence to evolving regulatory requirements related to climate disclosures.	• Reviewed the effectiveness of climate change related internal controls and risk management processes.
Remuneration Committee	The Remuneration Committee is responsible for ensuring that executive and employee compensation is aligned with the organization's climate goals and performance. • Linking Compensation to Climate Performance: Develop and implement performance-based incentives tied to climate-related metrics, such as emissions reductions, energy efficiency, or renewable energy adoption; Ensure executive bonuses and long-term incentive plans reflect the achievement of climate targets. • Alignment with Stakeholder Expectations: Align remuneration practices with shareholder and broader stakeholder demands for climate accountability. • Monitoring and Reporting: Regularly review and report on the alignment of remuneration policies with climate-related objectives and progress. Further details on the Group's sustainability – linked remuneration policies (such as 'Remuneration Policy and Procedures for Directors and Senior Management' are available on our website at www.frontken.com or https://frontken.com/investor-relations/	• Linked shareholders' interests and ESG (including climate change management) achievements to Frontken corporate executives' compensation by introducing the employee restricted stock awards (RSAs) issuance plan approved by the Board and the Shareholders; • Reviewed our incentives to ensure they are aligned with our climate-related goals and targets.
Nomination Committee	The Nomination Committee ensures that the board and senior leadership have the expertise and diversity needed to address climate-related challenges and opportunities effectively. • Board Composition: Identify and recruit directors with expertise in climate-related areas, such as environmental science, renewable energy, or sustainable business practices; Ensure the board has the skills necessary to oversee climate strategy and risks. • Succession Planning: Develop succession plans for leadership positions with a focus on climate competency and sustainability expertise. • Diversity and Inclusion: Promote diverse perspectives on climate-related issues, including gender, geographic, and industry diversity; • Climate Knowledge Development: Facilitate training programs for directors and senior management on climate-related risks, opportunities, and governance frameworks.	• Regularly (every six months) evaluate the performance of Directors and Senior Management in climate change management.

We advocate and act upon the principles of operational transparency and respects shareholder rights, believing that the basis for successful corporate governance is a sound and effective Board of Directors. The Board of Directors oversees and instructs the Company's climate change and sustainable management strategies, and delegates three Board Committees: Audit committee, Remuneration committee and Nomination committee to supervise corporate sustainability and climate management. Each Committee's chairperson regularly reports to the Board on the activities and resolutions of the relevant committees.

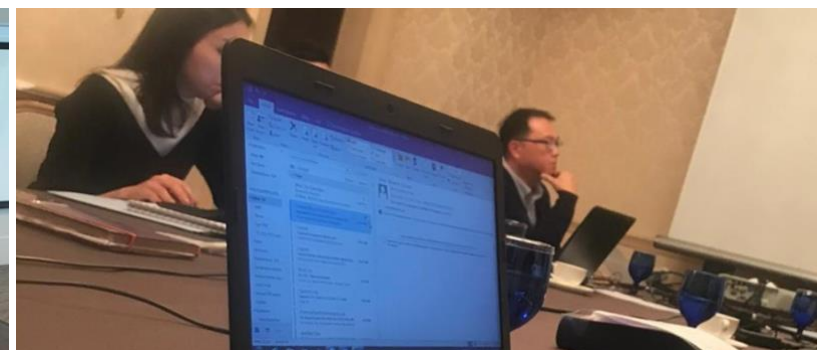
5.3 Responsibilities of Our Management in Implementing and Managing Climate Change

The Sustainability Steering Committee is our top organization of climate change management. The Sustainability Steering Committee is chaired by Executive Director – Dr Tay Kiang Meng. It reviews our climate change strategies and goals and reports quarterly to the Board of Directors. Under the supervision of the Sustainable Development Steering Committee, Frontken manages climate related action plans through the Sustainable Development Committee, which is composed of sustainable development members or teams from all business units. Here are the key management roles which we play in Climate Change Oversight (as shown on the right):

- Chief Financial Officer (CFO): Assesses the financial implications of climate-related risks and opportunities, ensures accurate climate disclosures, and manages investments in sustainability projects.
- Head of Operations: Implements operational changes to reduce emissions and improve resource efficiency in refurbishing and recycling processes.
- Head of Risk Management: Integrates climate risks into the company's risk management framework and collaborates with other departments to mitigate risks.
- Head of R&D: Drives innovation in recycling and refurbishing processes to reduce environmental impacts and enhance operational efficiency.



The company's management plays a critical role in translating the board's strategic direction on climate change into actionable policies, initiatives, and day-to-day operations. Their responsibilities span multiple functions, from strategy execution to stakeholder engagement, ensuring the company effectively manages climate-related risks and opportunities.



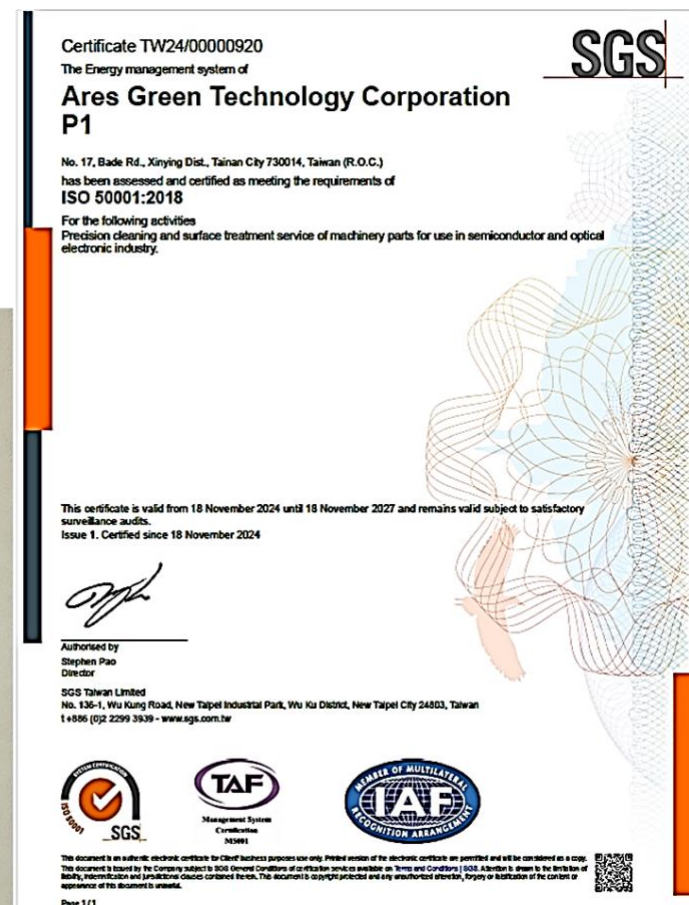
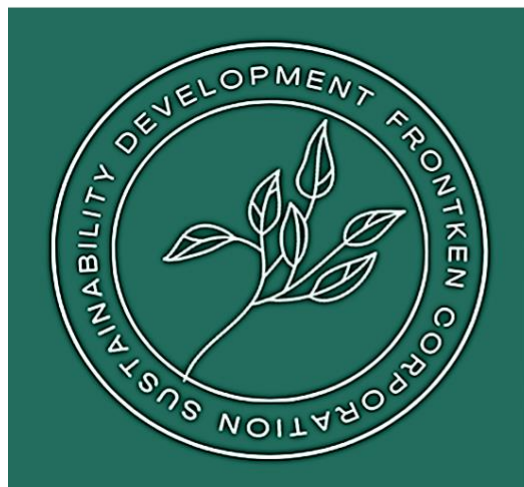
<i>Roles and Functions</i>	<i>Responsibilities</i>	<i>Specific Job</i>
<i>Leadership and Strategy Execution</i>	• Climate Strategy Implementation: Develop and execute detailed plans to meet climate-related targets (e.g., reducing greenhouse gas (GHG) emissions, improving energy efficiency, and increasing material recovery rates); Align the company's operational goals with climate objectives set by the board of directors. • Cross-Functional Coordination: Coordinate across departments (e.g., supply chain, R&D, operations) to ensure climate considerations are embedded into all aspects of the business. • Scenario Planning and Resilience: Conduct climate scenario analyses and ensure business operations are resilient to climate-related risks, including physical risks (e.g., extreme weather) and transition risks.	• Developing a roadmap for achieving a 15% reduction in Scope 1 and 2 emissions by 2030; • Designing a sustainable procurement policy to ensure suppliers comply with the company's environmental standards.
<i>Risk Identification and Management</i>	• Climate Risk Assessment: Identify, evaluate, and prioritize climate-related risks and opportunities at operational, financial, and reputational levels. • Integration into Enterprise Risk Management (ERM): Incorporate climate-related risks into the broader risk management framework and ensure they are addressed in decision-making processes. • Mitigation Strategies: Implement risk mitigation strategies, such as diversifying supply chains, using renewable energy, and adopting sustainable technologies.	• Conducting a vulnerability assessment to identify risks posed by extreme weather events to manufacturing facilities; • Working with the engineering team to adopt energy-efficient equipment in the refurbishment process.

<i>Operational and Technical Implementation</i>	• Sustainable Operations: Embed sustainability into day-to-day operations by improving resource efficiency (e.g., water, energy, and materials) and reducing waste. • Carbon Footprint Management: Track and manage GHG emissions across the value chain (Scopes 1, 2, and relevant Scope 3). • Technology and Innovation: Invest in R&D for new technologies that reduce environmental impact, such as advanced recycling methods or energy-efficient refurbishment processes.	• Monitoring energy usage and implementing on-site solar power solutions to reduce operational carbon intensity. • Extend the lifespan of recycled components to 100% by 2030.
<i>Data Collection, Monitoring, and Reporting</i>	• Data Accuracy and Transparency: Establish systems to collect accurate, reliable, and consistent climate-related data (e.g., emissions, energy use, waste generation). • Performance Tracking: Monitor progress toward climate-related targets and report results to the board and stakeholders. • External Disclosures: Prepare and publish climate-related disclosures, such as TCFD reports, sustainability reports, or CDP submissions, in compliance with regulatory and voluntary standards.	• Implementing system to track energy usage and emissions across facilities; • Preparing the TCFD report and ensuring all climate-related metrics are independently assured.
<i>Stakeholder Engagement</i>	• Internal Engagement: Foster a culture of sustainability within the organization by engaging employees at all levels and providing training on climate-related practices. • External Engagement: Collaborate with suppliers, customers, industry groups, and regulators to drive collective action on climate-related issues. • Reputation Management: Build and maintain the company's reputation as a leader in sustainability and climate action.	• Organizing employee workshops to promote energy efficiency in daily operations; • Partnering with industry associations to develop best practices for recycling and refurbishing semi-con components.
<i>Compliance and Policy Development</i>	• Regulatory Compliance: Ensure adherence to local and international climate-related regulations, such as carbon pricing schemes or recycling mandates. • Internal Policies: Develop and enforce internal climate policies, such as energy usage standards or waste management guidelines.	• Drafting and implementing an internal policy for transitioning to 30% renewable energy by 2035.

<i>Reporting to the Board and Committees</i>	• Regular Updates: Provide periodic updates to the board and relevant committees (e.g., Audit, Remuneration) on the progress of climate initiatives. • Risk Insights: Highlight key climate-related risks, opportunities, and their financial implications to inform strategic decisions.	• Presenting quarterly reports to the Audit Committee on climate-related risks and financial impacts. • Preparing annual updates to the board on the company's progress toward climate-related goals.
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Our certificate of ISO 50001 Energy Management:

To optimise energy performance and reduce GHG emission through the development of an Energy Management System (EnMS).



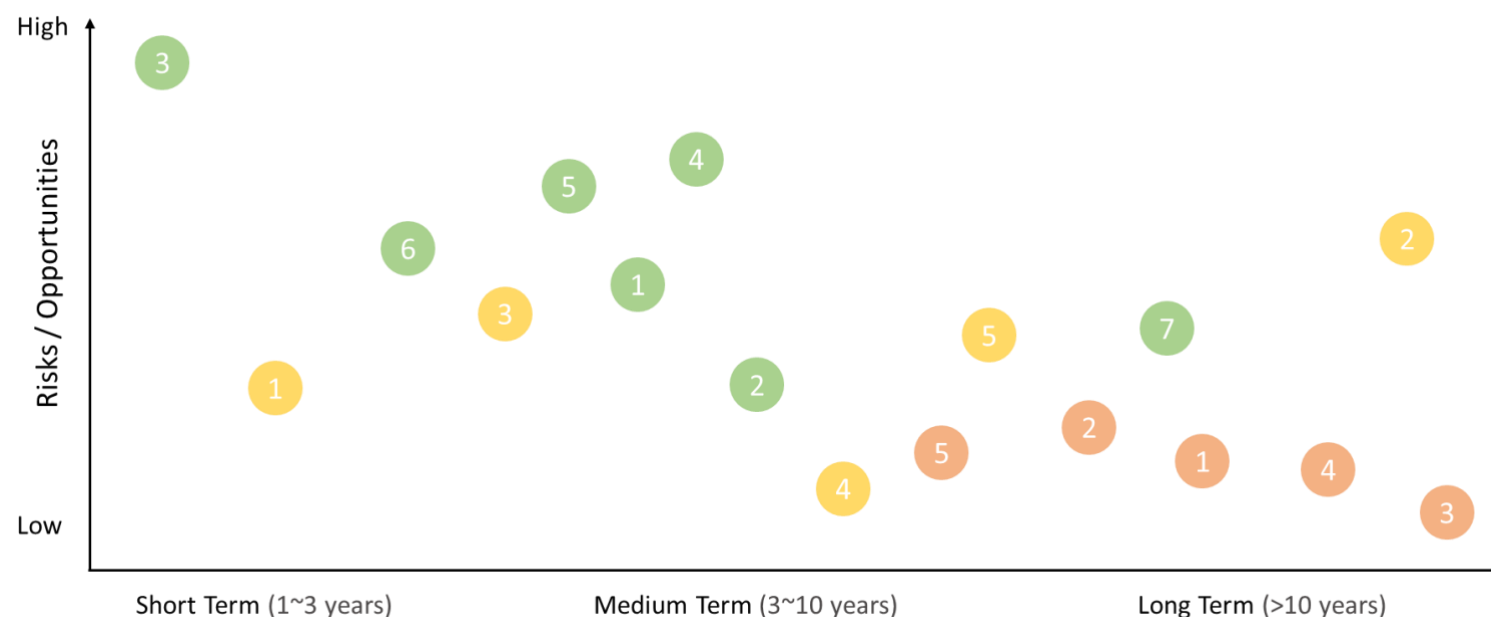
6.0 OUR CLIMATE STRATEGY – COMPREHENSIVE RISK MANAGEMENT AND CONTROL

This chapter outlines our approach to identifying, assessing, and managing climate-related risks and opportunities, as well as their impacts on our business strategy, operations, and financial planning. In alignment with the TCFD framework, we have structured this chapter to address the following key areas:

6.1 Climate-Related Risks and Opportunities

6.1.1 Identification and Assessment of Climate Risks and Opportunities

In compliance with the TCFD framework, Frontken has identified and assessed climate change risks and response measures across the corporation. We hold an internal meeting every six months to fully discuss the risks and opportunities of climate change and review our existing response plans. We also attend various lectures and forums/ workshops related to climate change every year to enrich our understanding on the transition risks, physical risks, and opportunities posed by climate change to our value chain. These risks and opportunities are identified through cross-functional collaboration and regular updates to our risk management framework. The top three risks are net zero emissions, uncertainties in the development of new energy saving/ carbon reduction technologies, and renewable energy regulations and procurement. The top three opportunities are developing low-carbon products and services, improving company reputation, and driving low-carbon green operation. The details refer to our Climate Risks and Opportunities Matrix (as shown on the right):



Opportunities:

- 1 Improve plant energy efficiency
- 2 Develop alternative or renewable energy technologies
- 3 Develop low-carbon products and services
- 4 Improve the reputation of the enterprise
- 5 Drive low-carbon green operation
- 6 Increase resilience against natural disasters
- 7 Participate in renewable energy plans/
Participate in carbon trading market

Transition Risks:

- 1 GHG emissions control and carbon taxes/carbon fee
- 2 Net zero emissions
- 3 Uncertainties in the development of new energy saving/carbon reduction technologies
- 4 Impact on company reputation
- 5 Renewable energy regulations and procurement

Physical Risks:

- 1 Drought (Own Operations)
- 2 Drought (Supply Chain)
- 3 Flood (Own Operations)
- 4 Flood (Supply Chain)
- 5 Rising Temperatures

6.1.2 Impacts on Our Business and Business Strategy Adjustments

The identified risks and opportunities influence our operations and strategic priorities as follows:

- Enhanced R&D investment in recycling and refurbishment technologies to stay ahead of market demands;
- Development of innovative solutions to support customers' sustainability objectives, such as zero-waste and low-carbon product offerings;
- Diversification of energy sources, including a transition to renewable energy, to reduce exposure to energy price fluctuations and meet regulatory requirements;
- Increased focus on supply chain resilience to mitigate physical risks.



To address climate-related risks and capitalize on opportunities, we have integrated sustainability into our core business strategy:

- **Operational Efficiency:** Optimizing refurbishment and recycling processes to reduce energy consumption and waste.
- **Product Innovation:** Developing sustainable solutions tailored to meet the needs of environmentally conscious customers.
- **Strategic Partnerships:** Collaborating with industry peers and partners to advance circular economy initiatives.
- **Regional Adaptation:** Adjusting facility designs and operational processes based on regional climate risks.

6.2 Financial Impact Analysis of Climate Change

Frontken conducts financial impact analysis on the top three physical risks, transition risks, and climate opportunities in compliance with TCFD recommendations to formulate strategies to mitigate risks and explore opportunities for the Company's reference. Financial impact analysis of climate-related risks focuses mainly on market and technology-related costs to remove carbon emissions along the pathway to Net Zero Emissions by 2050. For example, expenses on energy conservation or carbon reduction facilities, paying for more expensive renewable energy or buying carbon credits, and additional expenses on renewable energy or carbon credits because of uncertainties in the development of new energy saving and carbon reduction technologies. Physical risks mainly focus on growing electricity costs because of chronic climate changes from rising temperatures and investments in strengthening the Company's climate resilience.

Financial Impact Analysis of Climate Change

<i>item</i>	<i>Climate Risks</i>	<i>Potential Financial Impact</i>	<i>Climate Opportunities</i>	<i>Potential Financial Impact</i>	<i>Specific actions</i>
Transition Risks	• GHG emissions restriction and carbon taxes/ carbon fee	• Restriction on our production capacity expansion; • Increase renewable energy and carbon credit costs; • Increase in operation costs.	• Select alternative or renewable energy technologies; • Participation in Carbon Trading Market.	• Satisfy customer demands for low-carbon production and realize the win-win goal; • Early purchases of renewable energy may successfully increase operation capacity; • Stock up on required carbon credits for future emissions.	• Improve energy efficiency to reduce the energy used in our operations; • Draw up a company-wide pathway to net zero emissions and plan net zero strategies for executions; • Work with related associations and government agencies to implement green energy technologies such as solar panels and purchase green energy;
	• Net zero emissions	• Increased cost of installation and operation for carbon reduction facilities; • Increased renewable energy and carbon credit costs.	• Develop low-carbon products and services; • Increase energy efficiency in customer products.	• Satisfy customer demands for energy-efficient products and increase revenue.	• Engage with all the stakeholders including the supply chain to minimise the carbon impacts; • Continue carrying out GHG reduction actions and set targets to reduce our carbon emissions; • Continue investing in R&D for

	• Uncertainties in the development of new energy saving/ carbon reduction technologies	• Increased energy consumption in production lines may result in higher operating costs.	• Improve plant energy efficiency.	• Reduce utility costs.	sustainable innovation; • Insist on responsible green production and green innovations and use transparent disclosure to enhance the company's green reputation;
	• Impact on company reputation	• Damage to company image when unable to meet stakeholder expectations.	• Receive rewards for offsetting carbon	• Improving the reputation of the enterprise can greatly increase the company's revenue and profits.	• Continues to promote energy conservation and carbon reduction practices and tracks enforcement across facilities each quarter.
Physical Risks	• Extreme weather caused by climate change, such as flood and drought.	• Production affected (including supply chain), resulting in financial losses and a decrease in revenue.	• Increase resilience against natural disasters.	• Strengthen climate resilience and lower the risk of operation interruption and potential losses.	• Each business unit evaluates the risk level for drought and flood every year and come out risk mitigation measures accordingly; • Implement FCB business continuity plan and update it regularly.
	• Higher Natural Disaster Insurance Premium	• Increase in operation costs.	• Achieve our financial health and organizational health.	• Take precautions to reduce financial risks.	• Same as above.
	• Rising Temperature	• Increase in energy consumption, carbon emissions and production run cost.	• Increase resilience against climate change and drive low carbon green production.	• Save energy and reduce utilities costs; • Greatly mitigate the negative impacts of climate change.	• Strongly support the initiatives of the international community and organizations on climate change, and abide by public policies and local laws and regulations; • Increase innovation and strive to minimize GHG emissions.

6.3 Climate Scenario Analysis

6.3.1 Methodology and Approach

We have conducted climate scenario analysis to evaluate the resilience of our business strategy under different climate futures. The analysis aligns with internationally recognized frameworks, including the Intergovernmental Panel on Climate Change (IPCC) and International Energy Agency (IEA) scenarios, focusing on two key pathways:

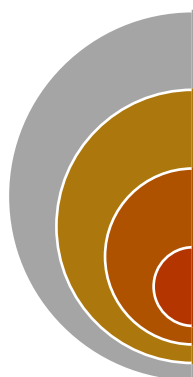


Key pathways	Methodologies applied
Low-Carbon Transition Scenario (aligned with a 1.5°C global warming target): Evaluates the financial and operational implications of stringent regulatory measures and rapid decarbonization.	IEA's Sustainable Development Scenario (SDS): Focus on how transitioning to low-carbon technology impacts demand for refurbished semiconductors.
High-Impact Physical Scenario (aligned with 4°C global warming): Assesses the impacts of severe weather events and long-term climate changes.	IPCC's Physical Climate Models: Assess extreme weather risks to global facilities or critical supply chains.

6.3.2 Key Insights and Actions

In compliance with TCFD recommendations, Frontken has evaluated the impact of various GHG emission controls on our operations and the supply chain for certain transition and physical risks. We have considered the outcomes when determining the resiliency of strategies and has also referred to the latest physical science basis, to develop its own climate scenarios. In addition, Frontken has also included potential growth in carbon emissions from growing our operations and new facilities as well as existing carbon reduction actions into general evaluations to analyse the potential financial impacts of climate risks.

Climate Scenario 1: Transition Risks – Net Zero Emissions



Assessment	Estimated costs for internal carbon reduction and purchasing green energy and carbon credits as company strives for Net Zero Emissions by 2050.
Assumption	Aggressive control of GHG emissions will allow the world to control rising temperatures to below 1.5°C by the end of the century and achieve Net Zero Emissions by 2050.
Risk Quantification	Increased costs in 2050 will account for 1% of annual revenue.
Impact to Decision Making	Internal carbon reduction measure; purchase renewable energy and carbon credits; collaborate with other parties for carbon offset; carbon reduction in the supply chain.

Climate Scenario 2: Physical Risks – Droughts



Assessment	Estimated frequency of future droughts, costs of maintaining alternative water sources, and potential operating losses to Frontken group.
Assumption	GHG emissions continuing as usual will lead to rising temperatures of 4°C.
Risk Quantification	Frontken group has estimated droughts to occur once every ten years and to have an impact of less than 2% of the average annual revenue.
Impact to Decision Making	- Internal water conservation; use of reclaimed water; alternative water sources. - Enhanced supply chain mapping & diversification reduce exposure to regional climate vulnerabilities.

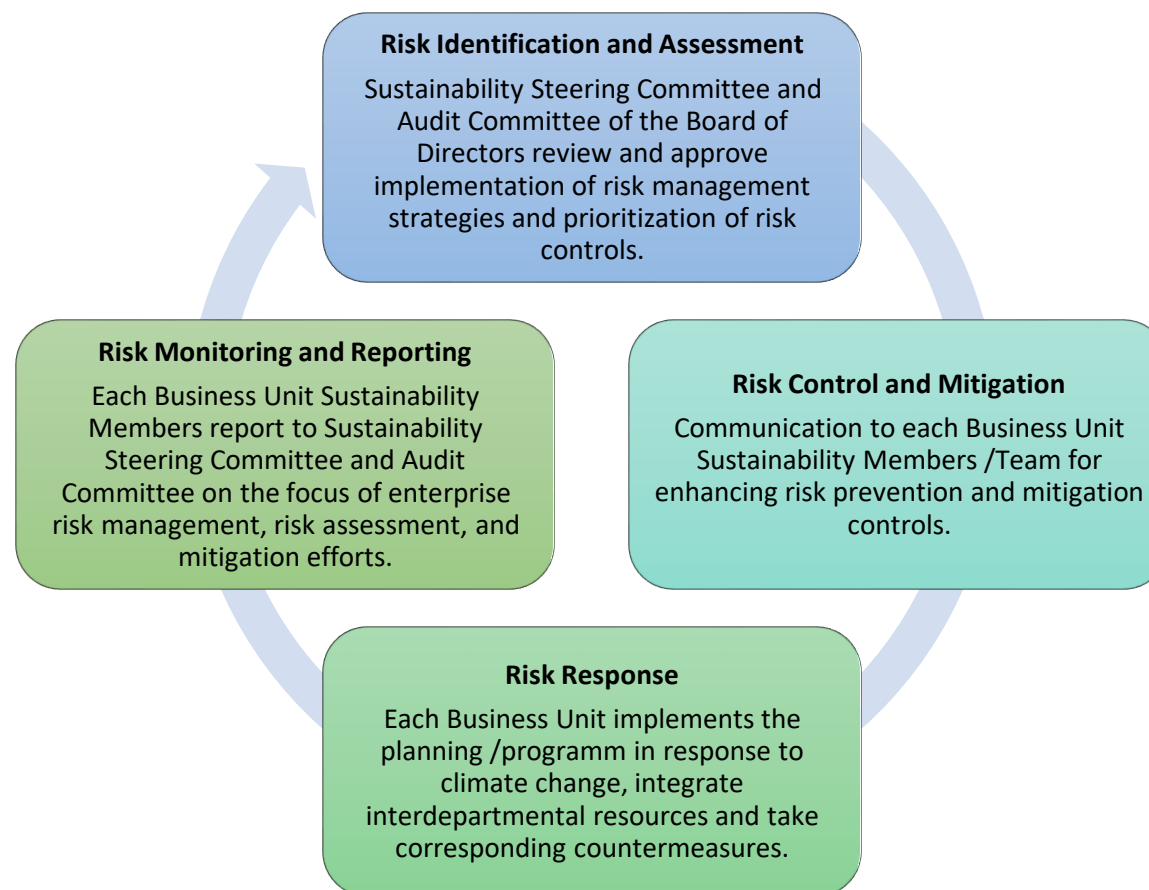
We have evaluated the impact of various GHG emission controls on our operations and the supply chain according to the worst-case scenario possible for transition and physical risks. We have taken the outcomes into consideration when determining the resiliency of strategies. Frontken has established climate indicators for GHG, energy use, and water resources to track management outcomes, and established a cross-functional Climate Task Force to oversee the implementation of climate-related strategies and monitor progress. As a leading provider of support services to the semiconductor industry, surface treatment and mechanical engineering solutions, serving a wide-range of industries in Singapore, Malaysia, Taiwan and other regions, we are deeply aware of our responsibilities toward local and global environments. We strive to realize the sustainable development principle of common good for the ecosystem and continue to promote the four management initiatives of "Mitigation, Adaptation, Carbon Reduction in the Supply Chain, and Low-Carbon Services".

7.0 ENTERPRISE RISK MANAGEMENT

To fulfil long-term sustainability responsibilities, Frontken has developed an Enterprise Risk Management (ERM) Program to integrate and manage potential risks that may affect operational and profitability strategies, operations, finances, and hazards (including climate change, utility supply, earthquake, fire, chemical spill, etc.).

7.1 Our Total Risk Management Framework

To realize Frontken's corporate vision and long-term sustainability value for the stakeholders, we follow our Climate Risks and Opportunities Identification Process (See the table below) to identify and manage key climate-related risks and opportunities which Frontken faces in achieving its strategic objectives. The Audit Committee is authorized by the Board of Directors to review our Enterprise Risk Management (ERM) framework and risk profile to ensure key risks are within the risk appetite. At the management level, the Sustainability Development Committee works with all business teams and Sustainability Members to ensure that climate-related risks across Frontken are assessed, include but not limited to net zero emission, reputation impact, business interruptions potentially resulted from water/energy shortage or disruptions, natural disasters that threatening our business operation and supply chain. Annually, the Sustainability Development Committee reports the assessment results, financial impact and countermeasures against climate-related risks and opportunities to the Sustainability Steering Committee and Audit Committee. All evaluation results undergo thorough cross functional/ departmental discussions before being centrally and uniformly reported. Climate-related risks are also identified across operations and the supply chain. Please refer to our climate related risk management process shown on the right.



Frontken Climate Risks and Opportunities Identification Process

Steps	Collect	Identify	Identify Materiality	Response Measures & Financial Impacts
Process	List related risks/ opportunities	Determine material risks/ opportunities	Develop risk and opportunity matrix	Formulate and review response measures and evaluate financial impacts of material issues
Details	Filter risks and opportunities related to Frontken according to external trends and internal operational changes	Related Frontken business divisions will host group discussions and identify risks and opportunities that need attention	Use ERM impact evaluation framework to calculate probability and impact Note and rank risks and opportunities	List and implement responses to risks and opportunities and continue to monitor performance and outcomes; conduct financial impact analysis for material risks and opportunities.

7.2 Our Climate Change Mitigation Management

At Frontken, climate change management is grounded in strengthening mitigation and adaptation, connecting with external parties to reduce carbon in the supply chain, and delivering low-carbon products and services to customers. By optimizing gas usage in operation processes, fully adopting exhaust gas abatement equipment and decarbonized energy, enhancing energy efficiency, expanding resource recycling, selecting low-carbon-footprint materials, developing energy-efficient equipment, and taking green action, Frontken reduces carbon emissions with utmost efforts. Furthermore, we collaborate with external parties to offset carbon, deliver energy-efficient low-carbon products and services to customers, and strengthen its green competitiveness.

7.2.1 Our Responsible Innovation and Services

Frontken continues to be committed to technological advancement, developing advanced precision cleaning and coating technologies to meet customer needs. In the above chapter 3.0, we have elaborated that the company provides low-carbon services to customers through innovative renovation technology, setting a benchmark for the sustainable development of the industry. Besides, our R&D team also focuses on strengthening the innovation platform, increasing research and development activities, and addressing sustainability challenges such as climate change and pollution control. The team dedicates efforts to develop more specialized capabilities and environmentally friendly methods for chemical management, coating, and cleaning processes.

7.2.2 Our Responsible Green Production

Frontken Group has made significant strides in enhancing its green production methods to address operational challenges posed by global warming. We Plan and implement annual new energy-saving measures to increase energy efficiency, enforce energy-saving practices, and increase energy efficiency. In alignment with our commitment to a low-carbon future, Frontken Group has increased its reliance on renewable energy sources, including on-site generation such as solar power. Initiatives like scrubber overhaul, energy-efficient lighting systems, and chiller system enhancements further contribute to energy conservation and emissions reduction. We continue investment in energy conservation technologies, including frequency conversion and flow monitoring systems. All of these have yielded tangible results, resulting in substantial electricity savings annually. Frontken Group's proactive approach to sustainability underscores its dedication to environmental responsibility and sets a benchmark for industry-leading practices in energy conservation and emissions reduction.



Frontken Group focuses on maximizing energy performance and minimizing consumption across its operations. This involves initiatives such as optimized energy-use monitoring, energy conservation practices, and the purchase of the most energy-efficient equipment and emissions-control technologies available. Additionally, the company invests in improving facility infrastructure with more energy-efficient methods and equipment, further reducing its

environmental footprint. We Continue to use best available technology (BAT) to reduce GHG emissions and become an industry leader in low-carbon manufacturing.

7.2.3 Our Responsible Supply Chain

Frontken is committed to reducing its supply chain's impact on climate change with the core strategies of low-carbon supply chain management. Reducing carbon emissions from the supply chain is a critical part of Frontken achieving Net Zero Emissions. We have reorganized its low-carbon supply chain management to strengthen its actions by focusing on the following five approaches:

- a) Create Transparency: Work with suppliers to increase the quality and transparency of carbon emissions data from the supply chain;
- b) Optimize for CO2: Continue to optimize our manufacturing and procurement strategies to better support carbon reduction;
- c) Engage Suppliers: Include carbon emissions into supplier audit items and worked with suppliers to reduce carbon emissions;
- d) Push Low-carbon Ecosystem: Participate in low-carbon engagement projects and initiatives in the industry;
- e) Establish Internal Carbon Reduction Mechanisms: Establish internal mechanisms to reduce carbon emissions and increase incentives for employees to reduce carbon emissions

Frontken Group actively collaborates with suppliers and partners to minimize carbon emissions embedded in consumables like chemicals and packaging materials. Additionally, efforts are directed towards reducing the carbon footprint of equipment and supply chain suppliers to mitigate overall carbon impacts. We will also continue to optimize management and actions based on our Net Zero Emissions goal and carbon emissions hotspot analysis on the supply chain, helping suppliers allocate resources efficiently, strengthen carbon reduction capabilities, and build a green low-carbon supply chain.



7.3 Our Climate Change Adaptative Management

The impacts of climate change are far-reaching and have extensive, disastrous effects on our environment. These include, but are not limited to, the increasing frequency and intensity of extreme weather events, such as floods and famines. Additionally, climate change contributes to alterations in sea temperature, ocean acidity, and the eventual rise in sea levels. These changes collectively pose significant threats to the delicate balance of our ecosystems and the well-being of communities across the globe.

Frontken uses global warming scenarios provided in the IPCC's latest physical science basis to identify disaster factors introduced by extreme climates in our facilities each year and develops Climate Risk Adaptative Standards to strengthen operational resilience. Till now, Frontken has successfully defended against the potential impact of disasters and potential operating losses caused by climate change to achieve zero production interruption.



Climate Risk Adaptative Standards

Climate Risk	Adaptative Standards	Compliance in 2024
Power Shortage	Contingency measures for power restrictions and backup emergency power generators	✓
Floods	Evaluate external public facilities and major suppliers for potential flooding risks and supervise them to mitigate risks	✓
	For factories with potential flooding risk, complete contingency drills as planned	✓
Drought	Promote water conservation within the Company and increase water recycling rate from manufacturing processes	✓
	Support government policies on reclaimed water; commit to developing and using reclaimed water	✓
	Establish water shortage contingency measures: ensure at least two days of backup water supply at all facilities.	✓
Winds	Strengthen outdoor facilities (water cooling towers, decontamination facilities, etc.) to withstand strong winds up to 17 on the Beaufort scale	✓
Regulations	Participate in regulatory discussions to ensure government regulations are reasonable and viable	✓

	Strengthen mitigation measures and develop the renewable energy market to reduce impacts from carbon taxes and energy taxes	✓
Customer Demands	Participate in customer's carbon credit programs to meet customer expectations with carbon offsetting	✓
Expectations from other Stakeholders	Outline and develop strategies toward carbon neutrality with help and approval from external parties	✓

Resilience against climate disasters is integral to companies. We Develop climate change response and measure to reduce the impact of climate risks to strengthen our climate resilience. Frontken is responding to the urgent challenge of climate change with a strong commitment and a comprehensive approach. Our strategy centres around a meticulous climate change materiality assessment, which identifies critical issues and assesses the greatest impact. This assessment serves as a foundational framework for our initiatives across three strategic pillars: climate resilience, resources resilience, and production resilience.

- a) Climate Resilience: We prioritize building climate resilience within our operations and processes. This involves adopting measures to mitigate and adapt to the impacts of climate change. This may include investments in renewable energy sources, energy efficiency improvements, and other initiatives to reduce our carbon footprint.
- b) Resources Resilience: Ensuring the resilience of resources is a key focus. This entails responsible management of resources, including water, raw materials, and energy. We work towards optimizing resource usage, minimizing waste, and promoting circular economy principles to contribute to the sustainability of resources.
- c) Production Resilience: Our commitment extends to building resilience in our production systems. We strive to enhance the efficiency of our production processes while minimizing environmental impact. This involves incorporating sustainable practices, adopting green innovation, and aligning production with circular economy principles.

By addressing these three pillars, we aim to execute meaningful changes that contribute to a reduction in our environmental footprint. We understand the importance of aligning our business operations with sustainable practices to actively contribute to global efforts in mitigating climate change. Through a combination of strategic planning, innovative solutions, and continuous improvement, we are dedicated to making a positive impact on the environment and ensuring the long-term sustainability of our business.



8.0 OUR MANAGEMENT PERFORMANCE AND GOALS

Frontken is deeply aware of its responsibilities to areas where Frontken operates and the global environment. In addition to setting mid and long-term goals for the four major management initiatives, Frontken also reviews progress each year and makes rolling adjustments based on external landscapes and trends, hoping to mitigate climate impacts through management by objectives and ensure business continuity. In response to rising carbon costs from the global low-carbon transitions, Frontken has started building an internal carbon pricing scheme, considering factors such as regulations, fines, market pricing, and cost of carbon reduction. The carbon pricing scheme reflects carbon costs in impact valuations of daily reduction measures.

8.1 Our Mid or Long-term Targets of Four Management Strategies

<i>Major management initiatives</i>	<i>Indicators</i>	<i>Unit</i>	<i>Mid or long-term targets/ goals</i>	<i>Achievement in 2024</i>
Mitigation	Scope 1: GHG emissions intensity (EI) per revenue in million RM	KgCO ₂ e per revenue in Million	Reduce 25% our Emissions Intensity (EI) by 2035 – the amount of GHGs emitted per dollar revenue in million RM. (Baseline data FY2020).	✓
	Scope 2: GHG emissions intensity (EI) per unit production	KgCO ₂ e per part	Reduce 20% our GHG emissions per unit of production by 2035. (Energy consumption and GHG emissions Baseline data FY2020).	✓
	Waste reduction	Kg per part	Reduce 20% our waste generated in kg per unit of production by 2035. (Waste generated Baseline data FY2019).	✓
Adaptation	Production interruption due to climate disasters	Day	0 day of production interruption due to climate disasters.	✓
	Water conservation	Cubic meter per part	Reduce 20% our water consumption per unit of production by 2035. (Baseline data FY2019).	✓
Low-carbon Products and Services	Energy efficiency (Refer the product equivalent per kWh of power)	Part per kWh	Double energy efficiency by 2035. (Baseline data FY2020).	✓
Supply Chain Carbon Reduction	Provide consultation on energy conservation for key suppliers	Percentage	Provide consultation on energy conservation for 100% key suppliers by 2035	✓
	CDP average score	NA	Suppliers invited to participate in CDP in the year should achieve an average score of 'B' and a response rate of 95%	✓

8.2 Our Eco-efficiency Indicators

Defined as revenue created by each unit of pollutant emissions and resource consumption, eco-efficiency indicators are now used by Frontken as metrics to measure action plans aimed at reducing energy and resource consumption and pollution. We have defined four eco-efficiency indicators: GHG emissions, waste production, energy consumption, and water consumption.

Eco-efficiency Indicators	FY2022	FY2023	FY2024
GHG emissions (RM '000/ton - CO2 equivalent)	39	41	42
Energy consumption (RM '000/MWh)	22	22	25
Water consumption (RM '000/metric tons)	1.79	1.80	1.95
Waste production (RM '000/ton)	536	559	613

All our four eco-efficiency indicators of increased in the past three years, indicating that our energy conservation, carbon reduction, and circular resource measures have yielded outstanding results and effectively increased eco-efficiency.

8.3 Our GHG Emission Scope 1, Scope 2 and Scope 3

Frontken is committed to achieving net zero emissions. Every year, we evaluate progress in carbon reduction through an annual GHG emissions inventory and formulates carbon reduction strategies.

GHG Emissions	FY2022	FY2023	FY2024	Percentage in FY2024
Scope 1: Direct Emissions from company facilities, fleets, etc; (tCO2e)	1,672	1,554	1,637	0.9%
Scope 2: Indirect Emissions from electricity purchased and used by the company; (tCO2e)	10,633	11,365	12,219	6.7%
Scope 3: Other Indirect Emissions from company activities via entities beyond its ownership or control (procurement, shipping, distribution, waste, etc.), as well as business travel and employee commuting; (tCO2e)	44,196	764,554	167,796	92.4%



9.0 PROSPECTS

Frontken is dedicated to fulfilling its commitment of Net Zero Emissions by 2050 and continues to strengthen four major management strategies to achieve that goal: Mitigation, Adaptation, Supply Chain Carbon Reduction, and Low-carbon Products and Services. For Mitigation, we continue to rolling out low-carbon manufacturing and improving energy efficiency. For Adaptation, we continue to identify disaster factors from extreme weather each year and makes rolling updates to its Climate Risk Adaptative Guidelines, successfully defending against potential impacts and damages and strengthening operational resilience. For Supply Chain Carbon Reduction, we assemble Green Supply Chain Management Team, drives suppliers to implement carbon reduction practices from five approaches, and builds a low-carbon supply chain. For Low-carbon Products and Services, we collaborate with partners to fully leverage our technological innovation advantages, reduce the carbon footprint of our products/services, and help customers produce more energy-efficient and environmentally friendly products. This can further promote global energy conservation and enhance sustainable competitiveness.



TCFD offers companies a systematic framework to identify, respond to, and disclose information on climate risks and opportunities. Compiling the TCFD Report gives Frontken the opportunity to dive deep and evaluate climate change's impacts on our operations and the supply chain, formulate and implement related management strategies, and further reduce risks and cultivate climate resilience. It can also enhance transparency of information disclosure and facilitate more effective communication with stakeholders. This Report is not only a vehicle to present Frontken's governance, strategies, risk management, metrics, targets, and performances in climate change topics, but also an opportunity to ask for external suggestions and feedback, which can drive Frontken to continue to improve and fulfil its corporate responsibilities.

Net zero emissions is an inevitable global trend. Over 130 countries have currently announced goals to achieve net zero emissions by 2050. Looking into the future, Frontken will uphold the principle of "minimizing climate risks and maximizing climate opportunities" as it integrates internal and external resources and works with stakeholders to achieve the goal of a net zero value chain and strive toward net zero sustainable development.

10.0 APPENDIX

10.1 About This Report

Frontken has published our TCFD Report to respond to growing stakeholder concerns over climate change and related issues. The TCFD Report observes the framework suggested by TCFD and discloses the Company's climate governance, strategies, risk management, indicators, and targets. The reporting period is from January 1, 2024 to December 31, 2024. The reporting scope covers Frontken facilities in Taiwan, Malaysia and Singapore.

10.2 TCFD Disclosure Index

Core Elements	Recommended Disclosures	Page
Governance	Board's oversight of climate-related risks and opportunities	P15-16
	Management's role in assessing and managing climate-related risks and opportunities	P18-21
Strategy	The climate-related risks and opportunities the organization has identified over the short, medium, and long term	P22-23
	The impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	P23-25
	The Company scenario analysis (including a 2°C or lower scenario)	P26-27
Risk Management	The organization's processes for identifying and assessing climate-related risks	P28-29
	The organization's processes for managing climate-related risks	P28-29
	How processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	P28-29
Metrics and Targets	The metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	P34
	Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks	P35
	Management targets and related performances	P35

10.3 Our Reports and Policies on Climate Change

- FCB Sustainability Development Report;
- G-12 FCB Sustainability Development Policy;
- G-08 FCB Enterprise Risk Management Policy;
- G-09 FCB Business Continuity Plan;
- E-01 FCB Environment Management Policy;
- E-02 FCB Climate Change Policy (including Our Climate Change Statement);
- E-03 FCB Energy Management Policy;
- E-04 FCB Water Management Policy;
- E-05 FCB Waste Management Policy;
- S-05 FCB Supply Chain Management Policy.