



TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) INAUGURAL REPORT 2023

VICOM Limited

Task Force on Climate-Related Financial Disclosures Reference Index

VICOM Limited ("VICOM"), a subsidiary of ComfortDelGro Corporation Limited ("CDG"), is Singapore's leading provider in inspection and technical testing services. We provide a comprehensive range of inspection and testing services in several fields including mechanical, chemical, biological and civil engineering testing. SETSCO Services ("SETSCO") forms VICOM's non-vehicular inspection and testing arm, offering services such as, but not limited to, testing, calibration, inspection, consultancy, and training services for numerous industries.

Publicly listed on the Singapore Exchange since 1995, VICOM's operations are headquartered in Singapore, with our operational reach extending to both Singapore and Malaysia¹. Our company consists of the following services: VICOM Inspection Centres, JIC Inspection Services, SETSCO, SETSCO Services (Malaysia) and SETSCO Consultancy International.

This report reflects our current information and data and relates to the scenario analysis performed with the established baseline year of 2022. 2022 is chosen as our baseline year as it better reflects a businessas-usual scenario in a post COVID-19 pandemic world.

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¹For this year, only VICOM's operations in Singapore are included. Malaysia is excluded as it was deemed immaterial for the assessment based on the scale of its operations, and will be considered in future TCFD reports.

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Introduction

VICOM recognises that transparency regarding climate-related risks and opportunities is critical to maintaining the trust of our stakeholders and that it allows our investors to better understand the implications of climate change. Increased uncertainties around the implications of a changing climate have made it crucial for businesses to adapt to, mitigate and, where possible, prevent any negative environmental consequences.

In July 2022, our parent company, ComfortDelGro Group, published an inaugural Task Force for Climaterelated Financial Disclosures ("TCFD") report which identified the relevant physical and transition climate risks and opportunities applicable to the Group's operations. VICOM's business and operations were included as a part of that initial assessment. The groupwide assessment included all ComfortDelGro's operational regions including Singapore where VICOM's operations and assets are located. The potential impacts of these risks and opportunities on VICOM were identified in the first phase of the climate scenario analysis conducted at the CDG Group level. Subsequently, these results were integrated into VICOM's overarching sustainability strategy and into our business units' ("BU") operational strategies for effective management of relevant climate-related risks and opportunities.

This financial year, we furthered our TCFD journey through greater detailing and more comprehensive disclosures and as such, VICOM is pleased to publish our inaugural standalone TCFD report. This report aims to provide stakeholders with deeper insight into how we consider and manage potential climate-related risks and opportunities, and should be read in tandem with our FY2022 Sustainability Report.

With the identification and assessment of climate-related risks and opportunities, VICOM strives to strengthen our climate mitigation and adaptation measures. This includes committing to carbon reduction targets, adopting renewable energies, and investing in green fleets. By actively transitioning our fleet towards cleaner alternatives, we hope to significantly reduce our GHG emissions and minimise the impacts of climate change.

Governance

Disclose the organisation's governance around climate-related risks and opportunities.

a) Describe the Board's oversight of climate-related risks and opportunities.

VICOM has an established governance structure in place to monitor and manage all ESG and climaterelated risks whilst generating sustainability, economic growth, and development for the business. The Board of Directors ("the Board") takes overall responsibility in this regard, with a Board level Sustainability Committee ("SC") specifically established to direct and oversee strategic and investment decisions related to sustainability.

VICOM's SC, chaired by Ms. June Seah, oversees the review, assessment, implementation and rectification of issues, strategies and targets pertaining to sustainability. The SC conducts bi-annual meetings to address ESG matters within the organisation and convenes on an ad-hoc basis during important periods or as and when required. These meetings are held to identify, analyse and review important ESG issues and the relevant actions required to address any gaps for improvement. Moreover, the SC also aids in the roll out of ESG initiatives.

The SC is supported by the VICOM Sustainability Management Committee, a committee chaired by the Chief Executive Officer ("CEO"), Mr Sim Wing Yew, and comprising VICOM's senior management. Under this committee, VICOM's Group Risk & Sustainability Officer ("CRSO") is responsible for reviewing and reporting on the Group's progress against goals to the Board and SC.

The Board and Sustainability Committee currently consider carbon emissions, decarbonisation and climate friendly mobility as material topics to our sustainability focus areas. These topics were identified during the materiality assessment conducted in FY2022 and were subsequently incorporated into our sustainability framework.

As VICOM undertakes more detailed scenario analysis and identifies projected financial implications for its Business Units, the implications of climate-related issues on its business ambition, strategy, management and performance will be investigated.

b) Describe management's role in assessing and managing climate-related risks and opportunities.

At VICOM, the management of climate-related risks and opportunities is led by the Group Risk & Sustainability Officer and executed via four channels:

- 1. Sustainability Management Steering Committee
- 2. Eco-Ambassador and Care & Share Committees
- 3. Intranet
- 4. EDMs

The Sustainability Management Steering Committee, which is chaired by the CEO and managed by the Group Risk & Sustainability Office, assumes overall responsibility in assessing and managing the relevant climate-related risks and opportunities at VICOM. The Sustainability Management Steering Committee helps to apprise the Board of Directors and SC on VICOM's sustainability-related matters, by reviewing VICOM's sustainability performance and reporting its performance against targets to the Board of Directors and SC.

Simultaneously, the implementation of the assessment and management of climate-related risks and opportunities is overseen by the Sustainability Management Steering Committee.

In June 2022, VICOM also formed an Eco-Ambassador committee to facilitate the implementation of its sustainability initiatives, underscoring VICOM's commitment to continuously advance in ESG-related matters.

Additionally, to increase Environmental, Social and Governance ("ESG") related knowledge and awareness throughout the company, electronic direct messages ("EDMs") are sent as and when required throughout the year. This includes, but is not limited to, EDMs on important climate related news or significant ESG matters, such as Intergovernmental Panel on Climate Change ("IPCC") reports and carbon tax announcements made during Budget 2022 announcements. Similarly, VICOM also has an established Intranet portal with relevant ESG newsletters, policies, environmental KPIs and other related information readily available for staff.

At the same time, internal management meetings are held to discuss key topics, including climate-related issues, which are impacting VICOM's operations and business development.

Figure 1. Sustainability Governance Structure



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

In the identification of VICOM's climate-related risks and opportunities, we have undergone a risk and opportunities screening. The table below summarises the parameters and scope of the risk and opportunity screening.

Parameters	Scope		
Country	Singapore		
Baseline year	2022		
Timeframe	Short-term: up to 2030 Medium-term: up to 2040 Long-term: up to 2050		
Scenarios explored	1.5°C warming (NGFS Net-Zero by 2050, IEA NZE 2050 & RCP 2.6) > 3°C warming (NGFS Current Policies, IEA STEPS & RCP 8.5)		
Risks	<u>Transition risks</u> Carbon pricing Changing customer expectations Low carbon economy transition policies and regulations Reputational risks Technology shifts	Physical risks Floods Heatwaves (Rising mean temperatures) Storms and cyclones Wildfires Rising sea levels Droughts (Water scarcity)	

 Table 1. Scope and parameters of climate-related risk and opportunity screening

As part of the identified scope within the chosen parameters, Singapore was selected due to the financial materiality and scale of operations for VICOM. The screening and subsequent scenario analysis were

conducted based on financial and environmental data and business-related information pertaining to 2022 as a baseline year, since it represents the latest year with a business-as-usual operations in a post COVID-19 pandemic world. With respect to the future timeframes for the scenario analysis, VICOM has chosen to align with time horizons discussed in climate science and further aligned with internal strategy considerations, namely:

- Short term: Up to 2030
- Medium term: Up to 2040
- Long term: Up to 2050

The detailed analysis was based on two scenarios, namely a 1.5°C warming scenario and a >3°C warming scenario. The orderly scenario (1.5°C scenario) assumes climate policies are introduced and rapid decarbonisation is undertaken, whereas the hot house scenario (>3°C scenario) assumes that climate policies and action are limited and insufficient for the impacts of climate change (Figure 2). The climate impacts are modelled for these two scenarios for all short, medium and long-term timeframes.





Orderly scenarios display the assumption that climate policies and actions are introduced and adopted early on and become gradually more stringent. In this scenario, according to the NGFS, the physical risks are relatively subdued but the transition risks are expected to be relatively higher.

Physical risks in this scenario are relatively subdued as policies and measures have been introduced to mitigate and adapt to the intensifying climate change. As policies and measures are introduced early, transition risks are expected to be relatively higher.





Hot house world scenarios display the assumption that climate policies are implemented in some jurisdictions, but overall global efforts are insufficient to halt significant global warming. In this case, physical risks are expected to be high whereas transition risks are expected to be lower.

Physical risks are expected to be high as policies and measures are uneven and insufficient to mitigate and adapt to the intensifying climate risks such as increased in frequency of extreme weather patterns. On the other hand, as there are staggered efforts on the policy front, transition risks are expected to be lower. Finally, both transition and physical risks and opportunities were considered in the screening analysis. The long list of potential climate-related risks and opportunities as per the TCFD was consulted and the shortlisted risks and opportunities mentioned in Table 1 are further explored below.

The full process of the climate risk scenario analysis can be summarised in four steps:

Figure 3. Four steps of climate scenario analysis

1. Identify the full list of potential climate-related risks and opportunities as per the TCFD

2. Climaterelated risk and opportunity screening exercise 3. Mapping of potential impacts stemming from the screened and shortlisted risks and opportunties

4. Quantitative and qualitative climate scenario analysis

Figure 4. Four steps of climate scenario analysis

The following section captures the detailing of steps one and two of the full process.

Taking into account the examples of climate-related risks from table 1 of TCFD's Final Recommendations Report², in order to identify and understand the climate-related risks and opportunities in VICOM's operational region of Singapore over the specific time horizons in two climate scenarios, a climate-related risks and opportunity screening exercise was undertaken. This exercise was informed by qualitative desktop research, where we applied TCFD's categorisation of transition and physical climate risks.

Transition risks arise from interventions associated with a transition to a low-carbon economy, such as newly introduced climate policies and regulations, low-carbon technologies, carbon pricing, or changes in consumer preferences and market sentiments. Physical risks are those that arise from the physical impact of climate change, both chronic (impacts that happen over a period of time, such as temperature increase or sea level rise) and acute (impacts that happen as extreme events, such as floods, storms or wildfires). The results of the screening exercise are outlined in Table 2, where we have identified the potential level

² Recommendations of the Task Force on Climate-related Financial Disclosures. https://www.tcfdhub.org/Downloads/pdfs/E08%20-%20Table%201%20&%202.pdf

of risk. Table 2 below only presents the shortlisted climate-related risks for VICOM, which are likely to have a potentially moderate or high impact on our business operations and financials. Based on our research, some of the physical and transition risks that have not been presented below (for example storms and typhoons) were deemed to have a lower or negligible impact on VICOM's operations in Singapore in the scoped timeframes and scenarios. While Table 2 below mostly discusses the risk screening results, the screened opportunities are further discussed in the following section and Table 3.



High risk

Portal.

*Magnitude is determined through well referenced literature and data sets on climate risk indicators and is determined through observed and projected trends in physical risks from the Climate Analytics' Climate Impact Explorer and the World Bank Climate Change Knowledge





To inform the potential magnitude of impacts from the identified climate-related risks to VICOM, the screening exercise references available, appropriate and well referenced literature such as the International Energy Agency ("IEA") World Energy Outlook³, Climate Analytics' Climate Impact Explorer⁴ and the Network for Greening the Financial System ("NGFS")⁵, as well as the latest understanding of climate science from the IPCC Sixth Assessment Report⁶).

After the initial shortlisting enabled by the climate-related risk and opportunity screening exercise, we continued to explore the climate-related risks and opportunities in more detailed and map the associated business and financial impacts to the relevant risks and opportunities. For the ones where available data allowed for quantification of potential impacts, this was done (step three and four). These steps are further explored in the next section. The results from the scenario analysis subsequently aided in the formulation of action plans and responses to guide our climate-related strategies.

b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.

From the climate-related risk and opportunity, we were able to shortlist and further explore the most relevant risk and opportunities for VICOM. These shortlisted risks and opportunities have also been validated with VICOM's management to confirm their relevance and applicability to VICOM's operations. To further analyse the various climate related impacts on VICOM's business, strategy and financial planning, we performed a mapping of potential impacts stemming from the screened and shortlisted risks and opportunities.

The following table summarises the shortlisted climate-related risks and opportunities and their accompanying potential impacts that are pertinent to VICOM, in alignment with step three (Figure 3). In the tables below, where possible, potential financial risks to and opportunities for VICOM which were subsequently quantified in the climate scenario analysis have also been identified. Certain risks and opportunities were not quantified due to several reasons including the lack of available supporting data and information necessary for comprehensive quantification.

Risks and opportunities that have been qualitatively explored will be kept in VICOM's purview and investigated further in the future once more data and information become readily available.

For further detail, please refer to the Risk Management section.

Table 3. Climate-related risks and opportunities identified and accompanying potential impacts

Туре	Climate-related risks	Potential impacts ⁷
ЧЧ	Acute	

³ IEA, 2022, World Energy Outlook 2022. https://www.iea.org/reports/world-energy-outlook-2022

⁴ Climate Analytics, Climate impact explorer. https://climate-impact-explorer.climateanalytics.org/

⁵ NGFS, Scenarios Portal. https://www.ngfs.net/ngfs-scenarios-portal/

⁶IPCC, Sixth Assessment Report, 2022. https://www.ipcc.ch/assessment-report/ar6/

⁷ Taking into account the amount of current data and information available, only some potential impacts were further qualitatively explored or quantified as they were deemed the most relevant to VICOM's business.

 Heatwaves (Rising mean temperatures) Eloods 	Quantified impacts
- Hoods	 Additional business interruption costs due to flash floods
Chronic	Additional operational costs due to flash
Rising sea levels	floods
 Droughts (Water scarcity) 	 Increased costs arising from higher cooling spending
	Qualitatively explored impacts
	 Reduced asset values due to destruction to assets from physical climate risks
	 Liquidation damages if service level agreements with clients not met due to disruption
	 Increased need for business continuity planning Higher insurance costs for buildings due to physical climate risks Highest repair and maintenance costs due to
	 damage from floods Reputational risks if risks are not handled properly Higher capital costs for fleet renewal

Туре	Climate-Related risks	Potential impacts ⁸
Transition risks	 Low carbon economy transition policies and regulations, including emission reduction regulations or policies Achieve carbon-neutrality by a given date set by the local government Services that boost contribution to low-carbon economy can unleash investment demand 	Qualitatively explored impacts

⁸ Taking into account the amount of current data and information available, only some potential impacts were further explored and quantified as they were deemed the most relevant to VICOM's business.

	 Penalties can be faced for not transitioning to low-carbon economy Increased costs of energy and fuel Regulatory and reputational pressures if not in line with the country trends Low carbon transition investment opportunities
Carbon pricing - Carbon taxes & Emission Trading Schemes If a facility's emissions subsequently exceed its allowances, it must either pay a carbon tax or buy more allowances from an exchange Carbon prices are expected to increase over the years 	Qualitatively explored impacts In Singapore, carbon markets are in place and operational in the form of carbon prices and carbon taxes. They are aimed at decreasing carbon emissions. For example, in Singapore, higher carbon pricing mainly arises in the form of higher carbon taxes, with carbon taxes expected to rise to reach a level of \$\$50/tCO2e to \$\$80/tCO2e by 2030 (Budget 2022). The higher carbon tax will impact carbon intensive sectors, such as power generation companies, as more than 95 per cent of Singapore's electricity is currently generated by natural gas – a form of fossil fuel. As a result, these higher costs are likely to be passed onto consumers, leading to the following potential impacts: • Higher energy/fuel costs • Increased expenses to purchase carbon allowances • Higher costs of services due to carbon pricing und fuel price increase from carbon pricing (quantified as an indirect risk impact)
Changing consumer expectations Shift in consumer preference to low-carbon vehicle 	Qualitatively explored impacts
 options Increasing pressure to enable affordability of low- carbon vehicle services 	With government regulations promoting greener transport, there is greater demand for transition towards Electric Vehicles ("EVs") and low emission vehicles in VICOM's countries of operation. This

	 transition would also bring about a greater demand for VICOM's EV testing and certification services. Market capture can decrease if preferences are not addressed, similarly market capture can increase if affordable and efficient solutions to customer preferences are addressed Competitive advantage can be established
 Technological shifts and innovation Changing technologies to address climate related impacts Transition to low-carbon transportation (EV's and hybrid vehicles) and alternative fuels (Hydrogen) Infrastructure changes to accommodate the technological shifts in transportation 	 Qualitatively explored impacts Capital expenses to adopt changing technologies including upskilling Reputational advantages for timely uptake of technology

Туре	Climate-related opportunities	Potential impacts
opportunities	 Markets Access to new market Use of public-sector incentives Access to new assets and locations needing insurance coverage Services that boost contribution to low-carbon economy can unleash investment demand Growing product market for sustainable building materials 	Qualitatively explored impacts
Transition	 Resilience Resource substitutes/diversification Increasing efforts to foster domestic food resiliency 	Qualitatively explored impacts Increased revenue through new products and services related to ensuring resiliency. (E.g. Opportunity for VICOM to build capabilities pertaining to sustainable food services and building systems, generating an additional revenue stream)

c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Based on the mapped risks, we were able to perform a more detailed quantitative climate scenario analysis to identify the potential financial exposure to climate-related risks and opportunities and strengthen our understanding of the expected financial impacts to our business as well as our business' resilience to the identified risks (Step four in Figure 3). It must be noted that the climate scenario analysis results for physical risks were determined on the assumption that no action was undertaken by VICOM to mitigate and adapt to our pertinent climate risks. The results also do not differentiate between business units.

To assess the extent of financial impact of physical climate risks to our business, the scenario analysis modelled how vulnerable VICOM's assets are to extreme weather conditions.

In doing so, this presents an opportunity for VICOM to assess the resilience of our existing decarbonisation strategy and determine if there are any additional areas that require improvement to mitigate future risks. Additional resilience measures will be further evaluated, and may be implemented according to the pertinence and magnitude of risks.

Overall, in the assessment of both physical and transition risk, it was determined that some risks apply directly to VICOM as 'first-order' risks, and other risks have more indirect impact as 'second-order' risks. First-order risks are risks which directly affect VICOM's operations and assets. For instance, physical risks such as floods can cause damage to VICOM's property. On the other hand, second-order risks have a more indirect impact and are experienced by VICOM through cost pass-through. For example, VICOM does not experience direct implications of carbon taxes, due to the nature of operations, however, the indirect impact of increasing carbon taxes may be felt, as the electricity prices continue to rise in the future. As carbon taxes do not directly affect VICOM currently and remain as a second-order risk, the transition risk of rising carbon prices⁹ is excluded from the overall direct financial impact diagram below (figure 3). However, as this risk is relevant when talking about transitioning to a lower carbon economy, it is explored separately under a 'what if' scenario in the 'transition risks' section below.

Through the scenario analysis, it is concluded that unmitigated climate risks result in potential additional financial impact for the respective year.

Among the quantified physical risks, costs of higher cooling spending due to rising temperatures appears to be the most significant¹⁰ 'first-order' risk in terms of potential additional financial impact under all timeframes and scenarios.

Figure 5. Proportion of additional financial impact by climate risk for the respective year¹¹

⁹ Carbon prices is a term that is inclusive of carbon taxes, emissions trading schemes and other related instruments that capture the cost of GHG emissions. However, in the context of VICOM's location of operations - Singapore, the main form of carbon pricing impacting VICOM is carbon tax.

¹⁰ Risk impacts estimated based on our current inputs are considered to be majorly financially material if the financial impact is >5% of VICOM's 3 year average EBITDA (FY2020, 2021 and 2022).

¹¹ Impact from carbon costs is not considered in the total additional financial impacts as it is an indirect impact and is explored separately. The total financial impact thus consists of the physical risk impacts only.

¹² This study **estimates the annual additional and proportionate financial impacts for a single year** and does not model the rate of change of impacts across 2022 and 2050 (i.e., impacts are not cumulative). Therefore, should a physical climate risk event occur, the impact would be larger. Refer to Appendix 2 for more information.



Nevertheless, transition risks are still considered to be impactful. While potential carbon prices in the form of carbon taxes presently remain a 'second-order' risk to VICOM, they may account for a large proportion of the additional financial costs in future. The impact from carbon tax has been modelled on a 'what if' scenario basis, i.e. if carbon taxes were applicable to VICOM, the potential impact was quantified. If left unmitigated, carbon taxes would approximately account for 59%-69% and 35%-40% of VICOM's total financial impact caused by climate-related risk under the 1.5°C and >3°C scenarios respectively (further details on the carbon tax transition 'what if' scenario can be found in the 'transition risks' section below).

Additionally, while climate science is able to more strongly support the quantification of climate risks, there are also business opportunities arising from the increased focus on the changing climate. Opportunities most pertinent to VICOM operations in this regard are sustainable food systems and sustainable building materials. At the moment, the scale of these opportunities is difficult to quantify due to the lack of data. However, they may be quantified in the future when data around these opportunities become available.

Physical risks

More frequent/intense heatwaves and rising mean temperatures

As mentioned above, under both scenarios, increase in mean temperatures and more frequent heatwaves pose the highest risk to VICOM. With increased temperatures and more frequent heatwaves arising from climate change and global warming, higher cooling demand is expected, resulting in additional electricity consumption costs from increased usage of air conditioning and cooling systems. This leads to additional cooling costs for VICOM, particularly in the chemical, biological, calibration and mechanical testing labs where temperatures have to be kept below a certain temperature.

Overall, under both the 1.5°C and >3°C scenarios, VICOM expects additional electricity costs for cooling to increase over time, with financial costs being most pronounced under the >3°C scenario when

compared to the 1.5°C scenario. Additional electricity costs for cooling are also expected to be highest in the long-term timeframe of 2050 under the >3°C scenario, translating to an approximate 33% increase from baseline electricity costs.

More frequent or intense floods (flash floods) and rising sea levels

On the other hand, the expected damage of flash floods on VICOM's revenue overall is deemed to be low relative to other costs. Under the 1.5°C scenario, the costs of damage on VICOM's revenue are expected to remain relatively constant over all three timeframes.

Conversely, under the >3°C scenario, the financial costs VICOM can expect to incur increases over time and are highest under the medium and long-term timeframes of 2040 and 2050, as flash flooding is expected to worsen. Flash floods are projected to only account for a small fraction of financial costs for VICOM at present as the calculation is based on the estimated annual increment and proportional financial impact expected in a single year. Should the physical climate risk event occur, the impact would be larger. Furthermore, it can be expected that the frequency and severity of occurrence¹³ are likely to worsen if climate change remains unmitigated. Not only do heavy rainfall and flooding impede various modes of transport, they may also cause damage to property and even result in power outages. As such, their potential to significantly disrupt VICOM's business operations may change in future.

Resilience measures

Undergoing and conducting a climate scenario analysis serves as the first step to strengthen our understanding of the risks our operations face. In light of the above, VICOM strives to effectively manage, mitigate and adapt to these physical climate risks. We have established standard operating procedures and Business Continuity Plans ("BCPs") in preparation for any potential business disruptions such as flash flood risks and higher mean temperatures.

Our BCPs seek to mitigate the risks of disruption and catastrophic loss to our operations, people, information databases and other assets. These plans include identifying and planning alternative recovery centres, operational procedures to maintain communication, measures to ensure continuity of critical business functions, protection of our employees and customers and recovery of information databases. For example, in the event of power failures potentially caused by floods, VICOM has BCPs to safeguard our employees and ensure business continuity. We also update and test our BCPs regularly to ensure the efficacy of the plan and familiarise our employees with drills and emergency responses to potential climate-related threats and hazards.

In doing so, VICOM hopes to enhance the Group's operational readiness and resilience to potential business disruptions.

Transition risk

¹³ Based on the <u>IPCC AR6 WG1</u>, CMIP5 model simulations show that the frequency for present-day climate 20-year extreme precipitation is projected to increase by 10% at the 1.5°C global warming level and by 22% at the 2.0°C global warming level, while the increase in frequency for present-day climate 100-year extreme precipitation is projected to increase by 20% and more than 45% at the 1.5°C and 2.0°C warming levels, respectively. CMIP6 simulations with SSP scenarios show that the frequency of 10-year and 50-year events will approximately double and triple, respectively, at a very high warming level of 4°C.

Policies and regulations moving towards a low carbon economy

Increased carbon taxes is an impactful 'second-order' risk for VICOM. As mentioned above, while VICOM does not experience direct implications of carbon taxes due to the nature of our operations (we are not a major consumer of energy nor do we emit >25,000 mt of CO_2e), the additional indirect impact of increasing carbon prices may be felt as electricity prices continue to rise in the future. The mitigation of carbon through VICOM's existing decarbonisation measures (e.g. solar panel installations, EV transition plan and heat recycling) thus assists in reducing the impact felt by carbon pricing.

In alignment with our parent company, ComfortDelGro, VICOM has an established vehicle transition plan in place to reduce our carbon emissions. This plan outlines the steps VICOM will take to fully transition traditional Internal Combustion Engine ("ICE") vehicles to electric, hybrid-electric and hydrogen vehicles by 2040. Forming the basis of our carbon reduction targets, our emissions reduction pathway of the transition plan was modelled to align with CDG's Science Based Target Initiative ("SBTi") 1.5°C scenario, which was validated and approved by SBTi in June 2022.

Additionally, we also set carbon emissions targets which are consistent with reductions necessary to limit global warming to 1.5°C above preindustrial levels, aligning with the goal of the Paris Agreement. Further details can be found in our metrics and targets section below and our Sustainability Report 2022.

Taking our existing decarbonisation measures (e.g. solar panel installations, EV transition plan and heat recycling) into consideration, we applied a 'what if' scenario for VICOM in our climate scenario analysis. The 'what if' scenario models the financial implication for VICOM if VICOM was affected by the carbon pricing scheme, providing a financial quantification of the additional impact of carbon taxes. Under this 'what if' scenario, a comparison between an 'unmitigated' option (i.e. no carbon reduction plan, business as usual, no mitigation measures) and a 'mitigated' option (i.e. considering VICOM's current plan to reduce carbon, mitigation measures applied) was explored. To determine the appropriate carbon prices for each scenario and time horizon, we referenced the IEA World Energy Outlook 2021¹⁴.

Overall, under both the 1.5°C and >3°C scenarios, the additional costs incurred in the mitigated option are projected to be significantly lower than the additional costs in the unmitigated scenario across all three timeframes. Under the mitigated scenario, VICOM estimates the range of additional financial carbon costs increases to be 12% - 95% lower than the costs in an unmitigated scenario across all timeframes. This stems from lower projected Scope 1 and 2 emissions over the 2030, 2040 and 2050 timeframes when decarbonisation plans are in place. As a result, this highlighted the importance and benefits of planning and implementing decarbonisation strategies and solutions aimed at reducing VICOM's overall emissions, demonstrating our resilience to the 'second-order' transition risk of increased carbon costs.

Transition opportunities

Based on the climate scenario analysis conducted, we identified two key business opportunities arising from the increased focus on the changing climate. Opportunities most pertinent to VICOM operations in this regard are sustainable food systems and sustainable building materials.

Increasing efforts to foster domestic food resiliency

¹⁴ IEA World Energy Outlook 2021, pg 329.

As Singapore imports over 90% of its food supply, it is vulnerable to supply shocks and disruptions. Thus, under the Singapore Green Plan 2030, the Singapore Food Agency has set a goal of meeting 30% of Singapore's nutritional needs through locally produced food by 2030 to build food resiliency. Consequently, various strategies and significant investments, research and innovation breakthroughs on urban farming methods and alternative protein sources have been made in line with the Singapore Green Plan 2030. For example, the Singapore Government just invested an additional S\$165 million into the Singapore Food Story R&D Programme, a food security programme led by the Singapore Food Agency ("SFA") and the Agency for Science, Technology and Research ("A*STAR"). The funding will go towards projects focusing on the genetics and breeding of agricultural inputs like fish and seeds, to improve the productivity and nutritional qualities of aquaculture and crops.

As a result, the proliferation of local urban farms in Singapore offers VICOM the opportunity to grow our revenue by building on and expanding our capabilities to include certification and testing of urban farming processes. For example, providing the certification "SS 661: Specification for Clean and Green Urban Farms – Agriculture" will expand VICOM's access to the entire farming market in Singapore. This stems from the fact that Singapore is a city state so all local farms are considered urban farms under the definition of this certification.

Similarly, VICOM expects an increase in revenue through the growth of our existing business offerings. Novel foods and alternative proteins are gaining traction in Singapore. For instance, Singapore is one of the first countries to approve the sale of serum-free cultivated meat for consumption, with Californian start-up, Eat Just, attaining SFA approval in January 2023. The development of novel food sources, such as plant-based meats and cultivated meats, creates additional demand for assurance of its safety. VICOM currently offers food, microbiological and chemical testing ranging from pesticides and drug residue testing to nutrient testing. Hence, if VICOM extends our food safety testing services to encompass these novel foods, we anticipate a growing for our service offerings which will lead to increased revenue and business growth over the long run.

Growing product market for sustainable building materials

There is a national goal to enhance Singapore's reputation as a green urban city, with significant investment in built environment innovations and the green building materials industry. This, alongside a burgeoning uptake of solutions seeking to reduce Singapore's carbon footprint whilst advancing sustainability within the country, presents a beneficial impact and opportunity for VICOM.

One of the targets set under the Singapore Green Plan 2030 is to increase solar energy deployment by five-fold to at least 2 GWp. This seeks to meet around 3% of Singapore's 2030 projected electricity demand and generate enough electricity to power more than 350,000 households. In line with this, the Government has increased the deployment of photovoltaic solar panels across the country. For example, in early April 2023, the Government announced plans to install solar panels at 1,075 Housing Development Board ("HDB") blocks in their largest tender under a green push. Another 104 government sites – including 55 primary and secondary schools, Khoo Teck Puat Hospital Tower B and the Ministry of Foreign Affairs headquarters – will also have such panels installed under the latest tender.

As a result, this presents an opportunity to increase our revenue via growth of our existing business offerings. VICOM currently offers certification services of Roof Mounted Photovoltaic ("RMPV") solar panels. With mandatory fire safety rules for solar panels imposed by the Singapore Civil Defence Force,

the rise in solar panel installations directly correlates with the increased demand for solar panel safety certifications. As such, we expect demand for our RMPV services to rise and comprehend that it would also serve us well to expand our certification capabilities to encompass other types of solar panels, such as wall-mounted solar PVs.

Furthermore, there is a growing product market for green building materials. According to the Allied Market Research, the green building materials market size in South East Asia and Australia was valued at \$16.8 billion in 2021, and is projected to reach \$43.3 billion by 2031, growing at a compound annual growth rate ("CAGR") of 9.9% from 2022 to 2031. Products gaining traction include low-carbon concrete made from CCUS ("Carbon Capture, Utilisation and Storage") technology.

The need for assurance of the structural integrity and guarantee of the safety of buildings is essential to ensuring operational integrity for buildings. Hence, the growing demand for green buildings construction in Singapore creates opportunities for VICOM to enter the market of certifying and testing greener construction materials, such as low-carbon concrete made from CCUS technology and other recyclable materials. By leveraging on our existing building construction and consultancy capabilities, VICOM may potentially increase our revenue and generate business growth.

Resilience

Through the climate scenario analysis, we are better able to understand the transition opportunities VICOM can capitalise on in the future to adapt to and mitigate climate-related impacts. Going forward, all the information derived will aid us in refining our business strategies and decisions to ensure the resilience of our business strategy.

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 risks.

The climate risk screening and scenario analysis undertaken sought to identify and assess the most pertinent physical (chronic and acute) risks and transition climate risks applicable to VICOM's operations. This helps to reduce the uncertainty associated with executing its business operations as well as mitigate potential adverse impacts on its businesses. The climate risk screening and scenario analysis were both performed at a country-level.

The risk screening undertaken involved screening VICOM's operations, identifying the material climate risks and opportunities in its operational location (Singapore) and determining what first and second order risks applied to VICOM. This enabled VICOM to pinpoint the quantifiable risks and determine the assumptions necessary for the scenario analysis.

Subsequently, VICOM performed a climate scenario analysis on its first order risks. The modelling approach for each physical and transition risk took into account risk factors within its operational scope, available financial data for VICOM and other scientific research and information available, to quantify potential financial costs VICOM can expect to incur. The risks quantified are also aligned across all entities at VICOM Group level, with flash floods and heatwaves/high temperatures being the risks chosen for quantification. Other risks were not quantified to avoid double counting (i.e. there may be potential

overlaps in the quantification of impacts of cyclones and floods) or because they were deemed to be less material (i.e. droughts/water scarcity) to VICOM's operations.

In modelling the impact of higher mean temperatures on VICOM, we considered factors such as the higher cooling demand, the projected electricity prices and the assumed percentage of electricity for cooling to calculate the additional electricity costs for cooling VICOM can potentially expect to experience.

For flash floods, VICOM took into account factors such as annual estimated GDP loss caused by flash floods and increase in likelihood and severity of flash floods to model the revenue loss under each time horizon and scenario.

For carbon costs, while VICOM does not experience direct implications of carbon taxes due to the nature of our operations, the indirect impact of increasing carbon prices may be felt as electricity prices continue to rise in the future. The mitigation of carbon through a carbon reduction plan may thus assist in reducing the impact felt by carbon pricing. In order to understand the importance of reducing carbon emissions from a business case, a 'what if' scenario was applied for VICOM. The 'what if' scenario models the financial implication for VICOM if VICOM was affected by the carbon pricing scheme. This allows for a financial quantification of the impact of a carbon reduction plan.

Under this 'what if' scenario, VICOM's current carbon emissions, decarbonisation plan and key assumptions were factored in to derive expenses relating to carbon pricing. Subsequently, a comparison between an 'unmitigated' option (i.e. no carbon reduction plan, business as usual, no mitigation measures) and a 'mitigated' option (VICOM's current plan to reduce carbon, mitigation measures applied) was made. In doing so, the importance and benefits of planning and implementing decarbonisation strategies and solutions aimed at reducing VICOM's overall emissions were highlighted.

The significance of the climate-related risks and impacts, as informed by the climate scenario analysis, was previously outlined in the Strategy section.

b) Describe the organisation's processes for managing climate-related risks

The potential financial impacts arising from physical and transition risks were identified during the screening exercise and further refined in the scenario analysis. VICOM also identified potential opportunities which it can capitalise on.

All of the above serve to inform VICOM of different possible climate outcomes so that VICOM can adapt and develop its business strategy and operations accordingly to manage climate-related impacts. This pertains to both risks and opportunities that may arise from climate-related changes. Going forward, VICOM will utilise these results to refine our overarching business strategy, as well as into our Business Unit's operational strategies to promote economic growth and enhance sustainability.

Our SC is responsible for maintaining oversight of VICOM's sustainability ambitions, strategies and performance, including the management of climate-related risks and opportunities. The SC conducts biannual meetings to address ESG matters within the organisation and convenes on an ad-hoc basis during important periods or as and when required.

Likewise, VICOM's senior management works closely with its SC and regularly keeps track of key sustainability issues and performance. Regular meetings between the SC and senior management personnel are held to identify, analyse, and review important ESG issues, and deploy appropriate

responses required to address any gaps for improvement. Additionally, the SC also aids in the roll out of ESG initiatives aimed at managing climate-related impacts.

Climate-related risks are also incorporated in VICOM's Enterprise Risk Management Framework ("ERM") and considered as part of our risk universe. Further details can be found in the next section.

Figure 5. Process for identifying and managing climate risks



To facilitate the mitigation of various climate-related risks, VICOM's Eco-Ambassador committee was established to assist in the roll out of sustainability strategies and initiatives seeking to reduce climate-related impacts.

Additionally, VICOM conducts an annual review of its Enterprise Risk Register, as part of its Risk Management Framework. Climate-related risks will be evaluated on its relative significance in relation to other risks during the review.

c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.

VICOM established a robust ERM framework to identify, control and mitigate key risks in our business operations, with guidance provided by VICOM Group's Risk & Sustainability Office. Under our "Four Lines of Defence" assurance framework in risk management, all risks including climate-related risks are identified, evaluated and integrated into VICOM's risk register.





The Board holds the overarching responsibility of VICOM's risk governance and sets the tone and direction for the Group. It delegates the oversight of risk management and internal control to the Audit and Risk Committee ("ARC") which, in return, informs the Board on climate-related issues. The ARC helps the Board in ensuring that that a robust system and processes are in place to identify and manage risks enterprise-wide via regular tests, controls and audits.

The ERM is also managed by VICOM's Group Risk & Sustainability Office. In the event of a climate-related incident, the respective safety officer and facility managers will manage the situation and report to the CEO. In severe cases, the Crisis Management Team which comprises of top management alongside the Damage Assessment Team will converge to determine the activation of relevant BCP plans.

The VICOM Risk Steering Committee ("RSC") works to implement risk management strategies and internal controls which safeguard the Group's assets and shareholders' interests, while respective BUs are responsible for setting their own respective policy management, risk identification and internal control governance.

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.

VICOM has been committed to providing performance against ESG-related metrics since the start of its sustainability reporting journey. Based on material topics, VICOM has established key metrics to measure and monitor its environmental performance, the details of which can be found in its Sustainability Report 2022. These metrics include but are not limited to:

- GHG emissions (Scope 1, 2 and 3)
- Emission intensities (tCO₂e per S\$M revenue)
- Fuel consumption (litres and %)
- Electricity consumption
- Energy intensity (kWh per S\$M revenue)
- Waste generated (hazardous, non-hazardous, e-waste)
- Waste directed to disposal (hazardous, non-hazardous)
- Waste diverted from disposal (hazardous, non-hazardous)
- Water withdrawn (in Megalitres)
- Water discharged (in Megalitres)
- Water intensity (Megalitres per S\$M revenue)

VICOM reports on these metrics for the performance year, but also includes historical data to provide insights into our performance trends over time. Environmental data for our operations are prepared in accordance with the Global Reporting Initiative ("GRI") disclosure standards and Sustainability Accounting Standards Board ("SASB"): Professional & Commercial Services.

b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks

VICOM calculates our emissions according to the GHG Protocol Corporate Standard. In 2022, it conducted a detailed review of our GHG Inventory and included a more robust assessment of our Scope 3 emissions. This was done in accordance with the GHG Protocol Corporate Standard. 2022 was established as the baseline year for absolute targets to better reflect a business-as-usual scenario in a post COVID-19 pandemic world. This means that the GHG emissions would be a closer representation of our emissions as the global economy recovers and business activities pick up. This baseline year also falls in line with SBTi requirements.

VICOM's Scope 1 emissions are primarily from the fuel used in its fleet while Scope 2 emissions result from electricity consumption across our operations.

For our Scope 3 emissions, VICOM undertook a preliminary screening exercise to determine which of the categories would be most pertinent to our emissions and operations. It then selected the most pertinent categories and undertook detailed emissions calculations based on the requirements stated by the GHG Protocol. Some Scope 3 categories were not investigated as they are not applicable to VICOM's operations. The Scope 3 categories that we addressed in FY 2022 include:

Scope 3 category	Screened or calculated	Total emissions (tCO ₂ e)
Category 1: Purchased goods & services	Calculated	2,352
Category 2: Capital goods	Calculated	1,204
Category 3: Fuel- and energy-related activities	Calculated	1,583
not included in Scope 1 & Scope 2		
Category 5: Waste generated in operations	Calculated	5
Category 6: Business travel	Screened	34
Category 7: Employee commute	Screened	1,282
Category 8: Upstream leased assets	Screened	97
Category 12: End-of-life treatment of sold	Calculated	7
products		
Category 13: Downstream leased assets	Screened	742
Category 15: Investments	Screened	67
Total Scope 3 emissions	-	7,373

Table 4. Scope 3 emissions

Table 5. Total emissions

Emissions (tCO2e)	FY 2019	FY 2021	FY 2022
Direct (Scope 1) GHG Emissions	362	394	368
Indirect (Scope 2) GHG Emissions	1,629	2,747	4,983
Scope 3 GHG Emissions	NA ¹⁵	7,437	7,373

¹⁵ VICOM only started calculating its Scope 3 GHG emissions in 2021.

Total emissions	1,991	10,578	12,724
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For further details on our GHG emissions performance, kindly refer to the FY2022 Sustainability Report (Pages 25-26).

As governments around the world make greater efforts to decarbonise their economies, potential risks related to GHG emissions could adversely affect VICOM's operations. These risks include, but are not limited to, stricter requirements aimed at reducing diesel and petrol use, regulations that limit emissions, volatile fuel and energy costs associated with operations and difficulties in accurate calculations of Scope 3 emissions.

c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.

VICOM has established targets for each one of our key material topics. The key targets relating to climaterelated risks and opportunities primarily focus on emissions reductions as validated by CDG's SBTi. Further information on these targets can be found in its Sustainability Report 2022.

Overall, VICOM aims to uphold the highest standards of road safety whilst limiting emissions.

Торіс	Short-term, medium-term and long-term targets
Climate Friendly Mobility	 Transition towards cleaner vehicle procurement Progressively transition half of VICOM's existing fleet of ICE vehicles to EVs by 2030, with the end goal of an entire green fleet by 2040.
Emissions & Air Quality	 VICOM will set emissions reduction targets for our Scope 1 and Scope 2 emissions. Targets for our Scope 3 emissions will be set once VICOM has comprehensively assessed our Scope 3 emissions. Scope 1: From the newly established emissions baseline of 2022 for the next reporting cycle onwards, VICOM is setting interim targets of a 25% reduction by 2030 and 50% reduction by 2040. Scope 2: From the newly established emissions baseline of 2022 for our next reporting cycle onwards, VICOM is setting interim targets of a 5% reduction by 2025, 10% reduction by 2030 and 15% reduction by 2040.
Energy	 5% energy reduction by 2025 10% energy reduction by 2030 15% energy reduction by 2040 Continue to explore renewable energy options for adoption in our business
Waste	Implement waste reduction initiatives to minimise output of waste

Table 6. Targets

	• VICOM will also continue to commit to recycling or reusing waste wherever possible within our value chain.
Water	Continue to implement water reduction initiatives and also
	continue to commit to recycling or reusing water wherever
	possible within our value chain.

Conclusion and Next Steps

VICOM recognises the importance of identifying and managing the risks and opportunities posed by climate change and the technological, market and policy responses to it. We thus remain committed to the assessment of climate risks and opportunities for the organisation. As VICOM continues to mature in our TCFD reporting journey, we recognise that additional efforts are required to adapt, mitigate and respond to the pertinent climate risks and opportunities.

In the first TCFD report, the screening exercise and scenario analysis that were undertaken considered two climate scenarios alongside both physical and transition risks and opportunities relevant to VICOM's operations. The results derived from the screening exercise and climate scenario analysis provided a more granular analysis and insight into the material risks and opportunities presented by climate change. Going forward, VICOM will utilise the information gathered to enhance our organisational governance, strategy and risk management practices. A core component of our sustainability strategy lies in monitoring our established environmental metrics and ensuring that we are making good progress in regard to our short, medium and long-term targets.

As VICOM move forward, we strive to strengthen our TCFD reporting and align with market practices, regulatory requirements, and peer reporting practices. Additionally, when data becomes more readily available, we aim to improve and expand on our financial inputs for the quantification of our climate risks and opportunities in our climate scenario analysis.

Appendix 1

Metrics currently disclosed

The metrics disclosed can be found in our FY2022 Sustainability Report.

Metric	FY2022
	Sustainability
	Report Page
GHG Emissions (Scope 1, 2 and 3)	25-26
Emission intensity (tCO2e per S\$M revenue)	26
Fuel Consumption (litres)	29
Electricity consumption	29
Energy intensity (kWh per S\$M revenue)	29
Waste generated (hazardous, non-hazardous, e-waste)	31
Waste directed to disposal (hazardous, non-hazardous)	31
Waste diverted from disposal (hazardous, non-hazardous)	31
Water Withdrawn (by Source in Megalitres)	32
Water discharged (by Source in Megalitres)	32
Water intensity (Megalitres per S\$M revenue)	32

Appendix 2

Methodology, assumptions and limitations

Additional financial impact	Additional financial impact represents the additional effects from the
	baseline impacts of climate-related risks and is analysed to
	understand the increasing effects of climate-related risks.
Financial items growth and	The study is aiming to show the isolated effect of climate change on
environmental data changes	VICOM's financials. Thus, no growth rate or inflation rate are factored
	in the results.
	For the same reason, environment data such as energy and emissions
	has also been assumed to be constant in the three future time
	horizons (as compared to 2022).
Macroeconomic impacts	Macroeconomic effects of climate change such as changes to
	consumers demand pattern, transportation patterns or distribution of
	income and industry costs are not quantified in this study, given the
	high uncertainty of the magnitude and timing of these effects.
Legal, reputational risks and	These types of risks are mostly intangible and challenging to quantify
contingent liabilities	with reasonable confidence at this point of time.
Scenario analysis	A scenario analysis describes a path of development leading to a
	particular outcome. As per the TCFD, scenarios are not intended to
	represent a full description of the future, but rather to highlight
	central elements of a possible future and to draw attention to the key
	factors that will drive future developments.

As per the TCFD, scenarios are hypothetical constructs, not forecasts, predictions or sensitivity analyses. A key feature of scenarios is that they should challenge conventional wisdom about the future. In a world of uncertainty, scenarios are intended to explore alternatives that may significantly alter the basis for "business-as-usual" assumptions.
Key features of a scenario analysis:
 Parameters or assumptions, such as carbon price, energy demand and mix, technology, policy etc. Analytical choices, such as the scenarios used, timing, quantitative or qualitative, scope of applications, data set and model etc. Business impacts such as costs, revenues, assets, responses, business interruption due to physical impacts etc.
Sources and literature used:
 The sources used as inputs in the scenario analysis include but are not limited to following recognised sources: The NGFS & Climate Impact Explorer The IEA World Energy Outlook The IPCC AR6 Report The World Bank Climate Change Knowledge Portal Other country specific sources and academic studies