AIRTRUNK

FY24 Climate and Nature-related Risks Report

AIRTRUNK.COM

CONTENTS

INTRODUCTION

MESSAGE FROM OUR FOUNDER AND CEO

In recent years, the urgency of addressing climate change and nature loss has become increasingly evident. AirTrunk remains committed to safeguarding and stewarding our critical infrastructure, while also contributing positively to the environment.

This year marks a significant milestone for us. For the first time, we are reporting against the International Financial Reporting Standards (IFRS) S2 and the Taskforce on Nature-related Financial Disclosures (TNFD) requirements. These frameworks provide a comprehensive lens through which we evaluate our exposure and resilience to climate and nature-related risks, ensuring we continue serving our stakeholders, society, and the environment.

As a testament to this commitment, we are proud to share this year's Climate and Nature-related Risk Report. Transparency is key to building trust. We have provided detailed disclosures on our management of climate risk, as we have done since FY22, and continue to strengthen our analysis and reporting practices.

We are also proud to announce that we are the first data centre platform globally to begin adopting the TNFD framework. By integrating nature-related considerations into our reporting and decision-making processes, we aim to set a trailblazing example for future TNFD adopters.

As pioneers in the data centre industry, we recognise that our actions impact far beyond our facilities. By proactively addressing climate and nature risks together, we are not only safeguarding our business but also contributing to a more resilient and sustainable world.

Our commitment extends beyond compliance — we strive to lead by example.

Thank you for your continued support.

Robin Khuda
Founder & Chief Executive Officer

CLIMATE AND NATURE RISKS IN THE DATA CENTRE CONTEXT

Climate change is affecting businesses, governments, and communities worldwide, with altered weather and extreme conditions causing supply issues and infrastructure harm.

The rapid decline of nature is also a key issue, posing risks to business and economic stability. Among the top global risks in the next 10 years (including infectious diseases, cyber insecurity, and geoeconomic confrontation), the top four are climate and nature-related extreme weather events, critical changes to earth systems, biodiversity loss and natural resource shortage.[1]

The digital economy continues to grow at a rapid pace. In the Asia-Pacific region (APAC), the data centre market is forecasted to grow by 12%, reaching US$53 billion by 2028.[2] However, as the digital economy grows and the scale of digital infrastructure expands, so do the vulnerabilities posed by climate change and nature loss. This presents a challenge for businesses to develop resilience strategies that can mitigate and adapt to distinct and often interdependent risks.

Safeguarding our data centres against the impact of climate change and nature loss is not just a necessity but an imperative to ensure business continuity, economic growth, and development.

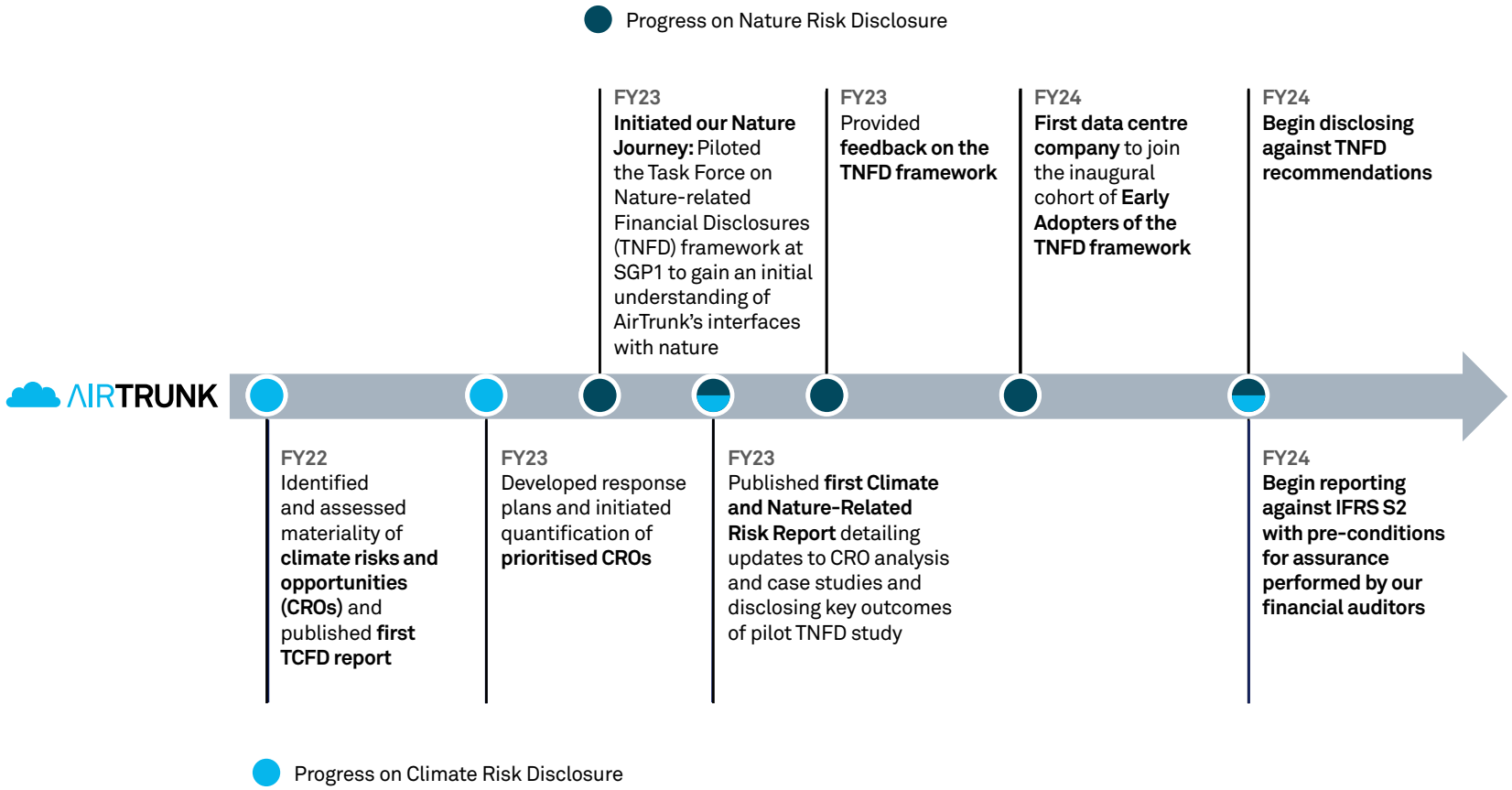
AirTrunk JHB1

1 Based on the World Economic Forum Global Risks Report 2024
2 Research & Markets, Asia Pacific Data Centre Market Report 2023

AIRTRUNK'S CLIMATE AND NATURE JOURNEY

In FY22, AirTrunk committed to the Task Force on Climate-related Financial Disclosures (TCFD) and began disclosing climate risk through our TCFD Commitment Report.

Subsequently, in FY23, we initiated our nature risk journey by piloting the Taskforce on Nature-Related Financial Disclosure (TNFD) on one data centre in our portfolio. This year, we are disclosing against the full TNFD framework.



AIRTRUNK'S CLIMATE AND NATURE JOURNEY (CONT.)

Climate Risk Disclosure

Climate risk is prioritised as one of AirTrunk's top key enterprise risks. Since conducting our first climate risk assessment in FY22, we have made significant progress in defining the impacts of climate risks and opportunities for our company and identifying risk mitigation and adaption measures.

Since FY22 we have:

- Assessed emerging trends and developments affecting our climate risk register;
- Reviewed quantification of prioritised climate-related risks and opportunities;
- Refined and future-proofed our climate mitigation and adaptation measures, as well as our overarching climate transition plan; and
- Transitioned from TCFD disclosure to IFRS S2, including pre-assessment from our financial auditors, to increase transparency with our key stakeholders.

In particular, we strengthened our analysis of water stress to further improve the resilience of our data centres in water stressed regions. We also identified additional risk mitigation measures to meet our Net Zero and renewable energy commitments.

For more information on our commitments and progress on Net Zero, renewable energy, Power Usage Effectiveness (PUE) and other sustainability commitments, refer to our FY24 Sustainability Report.

Nature Risk Disclosure

While the International Sustainability Standards Board (ISSB) has implemented annual reporting guidelines for climate-related disclosures as part of IFRS S2 in 2024, it is also exploring integrating TNFD into its pre-existing standards and initiatives. This marks a promising step towards integrating both climate and nature as part of annual company considerations[3]. We take pride in being early adopters of the recommendations of the TNFD, and in being the only data centre company in the early adopter list[4]. The release of this disclosure in FY24 signifies the commencement of AirTrunk's journey in nature-related disclosures one year ahead of our commitment to TNFD.

In FY24 we:

- Assessed key nature-related dependencies, impacts, risks and opportunities across our portfolio and value chain;
- Identified ecologically sensitive locations across our portfolio;
- Conducted scenario analysis for key nature-related risks, and developed response plans; and
- Began disclosure against TNFD requirements, including key metrics and targets.

The outcomes of our FY24 climate and nature-related risk analysis puts AirTrunk in a good position to capitalise on strategic opportunities while fine-tuning our disclosure practices.

In the coming years, we intend to:

- Increase alignment with IFRS S2 and refresh ratings and scenario analysis for other relevant jurisdictional climate reporting frameworks;
- Further quantify material climate risks and opportunities;
- Establish baseline KPIs for nature and enhance data collection; and
- Implement nature conservation and adaptation initiatives by engaging relevant internal and external stakeholders.

3 Based on ISSB announcement
4 As of January 2024

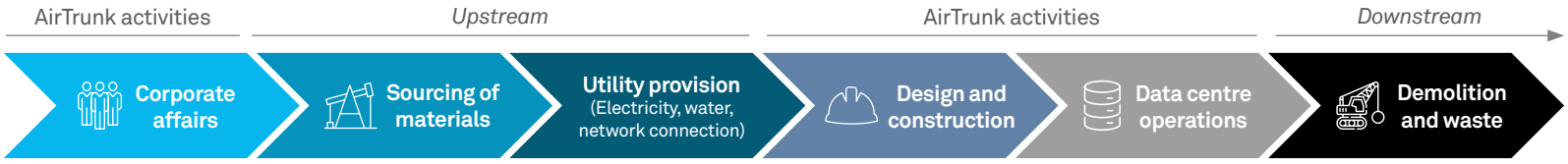
ABOUT THIS REPORT

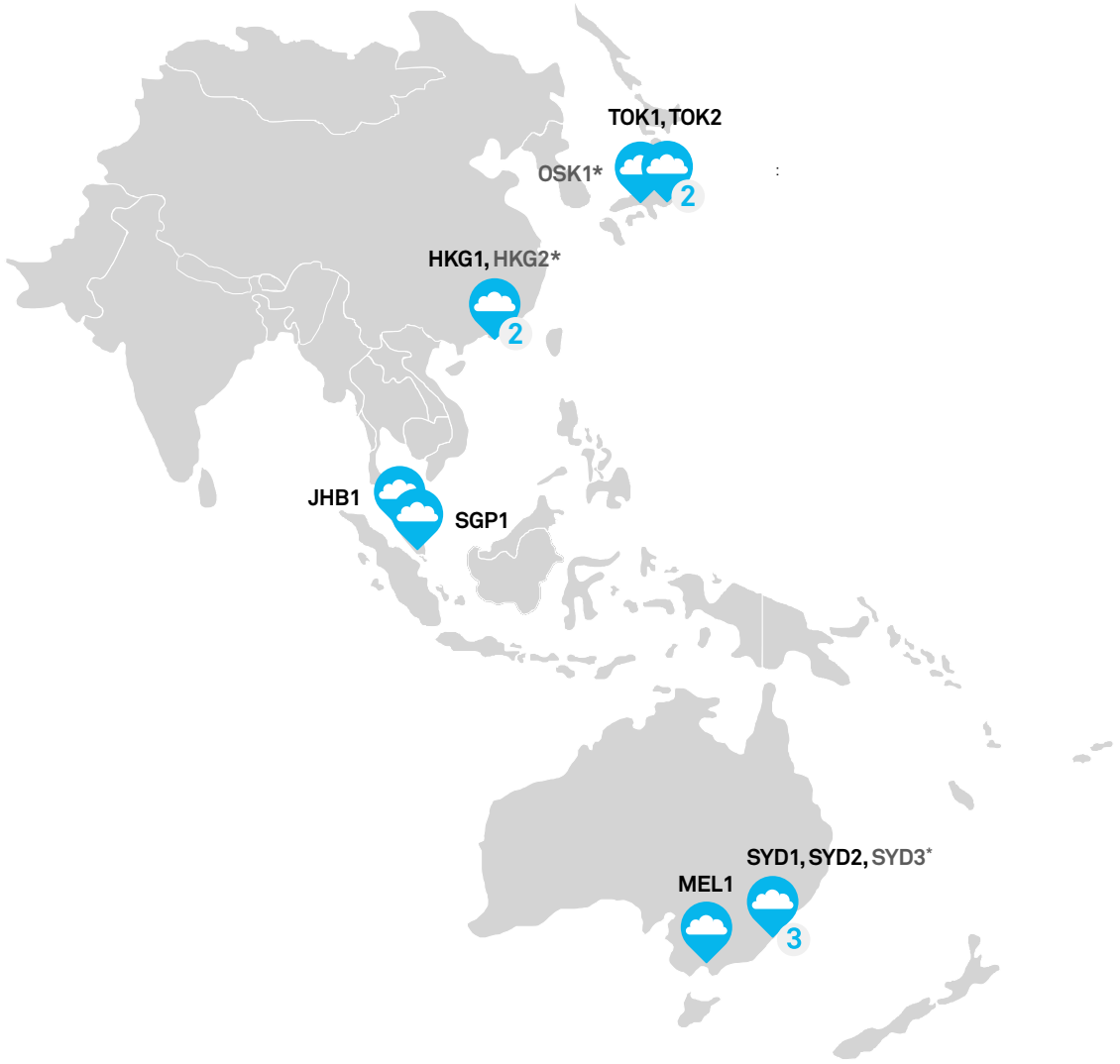
These commitments are jointly made by all entities within AirTrunk Group. Together, these entities are referred to as AirTrunk (we, us, or our). This statement is made in relation to the financial year commencing 1 July 2023 and ending 30 June 2024.

The scope of our climate and nature-related assessments encompass activities and assets within the organisation's direct operations as well as the upstream and downstream aspects of our value chain. This comprehensive approach ensures a holistic understanding of our environmental impact and aids in our commitment to sustainability.

The following data centres were included for asset-specific analyses in the FY24 report.

In the context of the climate and nature report, the following represents AirTrunk's value chain:





* Under development

OUR CLIMATE AND NATURE GOVERNANCE

AirTrunk's risk management approach does not seek to eliminate all risks, but to identify, understand and effectively manage arising risks. AirTrunk has developed a robust risk management framework with clear enterprise risk appetite, parameters and processes. The framework helps identify, assess and manage risks, and ensures continuous monitoring and reporting initiatives.

Climate and nature related risks have been identified as one of the key enterprise risks at AirTrunk. In accordance with the AirTrunk Board Charter, the ultimate responsibility for the oversight of the management of strategic and emerging risks (including climate and nature related risks and opportunities) lies with the Board. To this end, the Board is engaged on a quarterly basis. As part of AirTrunk's risks and opportunities assessment, the Board is presented with educational content necessary to remain adequately informed about climate and nature risk management. All climate and nature risks and opportunities are discussed quarterly at the Executive and Strategic Risk Committee (ESRC) and reported to the Safety, Sustainability and Construction Committee (SSCC).

The ESRC (comprising the Chief Executive Officer, Chief Financial and Commercial Officer, Chief Data Centre Officer, Chief Development Officer, Chief Customer and Innovation Officer, Chief People Officer, and Chief Safety Officer, Vice President (VP), Legal, Associate VP, Risk & Resilience, Associate VP, Sustainability and representatives) oversees, reviews and validates anticipated and existing climate risks and opportunities alongside other enterprise risks. For each priority risk, a member of the ESRC is allocated as the risk owner, and is responsible for managing and monitoring the risk. The Associate VP, Sustainability is the owner for both climate and nature risks.

The risk owners formulate, execute, and monitor risk response measures. The responsibilities of the governance bodies are detailed in the respective charters and broadly apply to all risk categories including climate and nature risk following the Enterprise Risk Management Framework.

All climate-related risks and opportunities, as well as nature-related dependencies, impacts, risks, and opportunities listed in this report, have been validated by the Board.

CLIMATE

CLIMATE METHODOLOGY

Identification and Prioritisation

AirTrunk uses an iterative process to identify climate risks and opportunities (CROs).[5] This involves constant review of various information sources, including external audits, regulatory reviews, and feedback from customers and suppliers. These insights are discussed in workshops with the ESRC to prioritise all identified CROs.

Once CROs are identified, they are rated based on their likelihood and impact on each data centre asset. The scores for likelihood and impact together form a CRO rating for a particular asset. **Subsequently, asset level ratings are reviewed in relation to other assets to derive a composite portfolio score.**

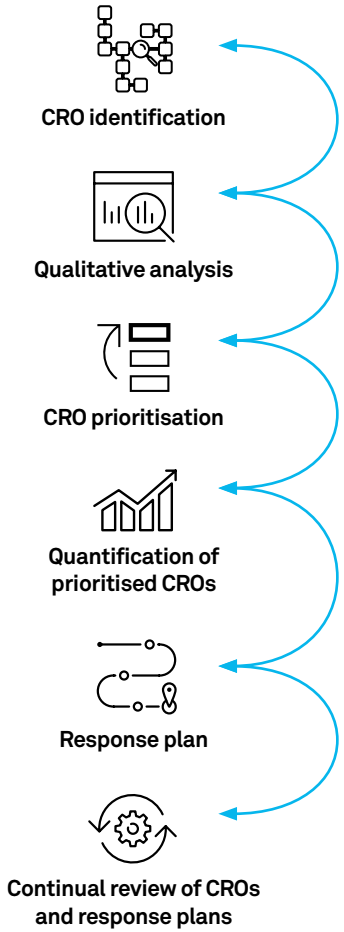
AirTrunk prioritises CROs that have a significant impact on its business model. The threshold for deeming CROs as material is determined through iterative feedback between management, operational teams, and climate risk experts. Material CROs are included in AirTrunk's climate risk register, but not all of them cross the threshold for financial materiality.

In FY22, the AirTrunk Management team identified thirty risks and prioritised seven. The seven prioritised risks represent those that are highly material to AirTrunk's assets at the portfolio level given existing controls in place.

In FY23, AirTrunk initiated in-depth quantification for two risks. These risks were prioritised based on their quantifiability (i.e., the ability to model the risks with clear cause and effect relationships and availability of credible scenario data) and their materiality. For the remaining prioritised risks, AirTrunk will continually assess if quantification is strategically critical and feasible in the coming years. AirTrunk reviews its CROs annually to monitor for any changes to its risk register – including changes to risk ratings, response measures and whether there are any new and emerging risks to be included.

For FY24, AirTrunk focused on reviewing existing material risks, assessing emerging trends affecting them, and updating response plans for quantified risks.

Figure 1: CRO identification and prioritisation process



5 The methodology employed is based on a comprehensive desktop assessment, leveraging internal data alongside climate and nature indicators from reputable external sources. While this approach provides valuable insights, we acknowledge inherent limitations due to the nature of the assessment.

Scenario Analysis

AirTrunk utilises scenario analysis to understand how its risks may manifest under different climate conditions and time horizons. As part of the first scenario analysis exercise in FY22, AirTrunk decided to qualitatively evaluate its risk register under two recognised climate scenarios: Speedy Net Zero (Shared Socioeconomic Pathways (SSP) SSP1-2.6) and Hot House World (SSP5-8.5).

These scenarios were chosen because they are IPCC-aligned and allow for comprehensive analysis across two extremes. As risks tend to manifest over different time horizons, AirTrunk assessed them over the short-term (2030), medium-term (2050) and long-term (2070).

As part of the analysis, specific risk drivers tied to indicators of change within each of the two climate scenarios were identified and assessed for relevancy across risks. This allowed for more precise understanding of the underlying factors that increase or decrease a particular risk's materiality across the two scenarios.

The climate scenarios used in FY22 form the overall basis of AirTrunk's full qualitative analysis. For quantitative analysis conducted in FY23 and FY24, AirTrunk has largely aligned its analysis to these scenarios, with adjustments based on availability of climate data for the prioritised risks.[6]

While the Speedy Net Zero (SSP1-2.6) scenario corresponds to a Paris-compliant below 2°C target, AirTrunk will look to include scenario analysis aligned with a 1.5°C target (SSP1-1.9) from FY25 onwards to comply with possible jurisdictional requirements of the Australian Sustainability Reporting Standards (ASRS).[7] To align with the 1.5°C scenario, AirTrunk will review the likelihood and consequence rating of its climate risk universe to determine if impacts are accelerated when their magnitude is increased.

Table 1: Summary of climate-related scenarios

Our Climate-Related Scenarios		SPEEDY NET ZERO (SSP1-2.6)	HOT HOUSE WORLD (SSP5-8.5)
		Presents the lowest extent of warming in a Paris-compliant well-below 2°C world. The SDGs are prioritised and renewable energy leads the charge to Net Zero.	**In the worst-case scenario for climate outcomes, the world redoubles on socioeconomic development without transitioning from fossil fuels, leading to a warming level of ~4.3°C.**
RISK DRIVER	**Relative price of high-carbon goods and services**	Carbon price is imposed quickly; ramps up steeply through to 2070	Global carbon price inches up until 2040; stopped thereafter
	Renewable energy supply capacity	RE supply expands quickly pre-2050, driving RE costs down	RE capacity is low; minimal acceptance financially and socially
	Investor/financier climate commitments	Growing climate investment volume at low cost of capital; peaks in 2050	Financial markets strongly favour economic growth, not climate
	National climate commitments	Strong commitments; strict climate policy; 2020 peak emissions	Environment policies are localised; no global climate commitments
	Social urgency and climate consciousness	Strong sociopolitical forces for climate action and sustainability	Urgency in climate mitigation escalates only in 2070
	Socioeconomic inequality	SDGs prioritised in development for more equitable growth	Inequality greater than SSP1; highly developed, globalised, market-driven
	Total precipitation[6]	Mild decrease across AU-based sites and increase across Asia (net increase factoring each Asia-based site)	More severe decrease across AU-based sites and more severe increase in Asia (factoring each Asia-based site)
	Water consumption	Consumption intensity decreases; resource-conserving	Consumption intensity increases; resource-intensive
	Innovation in low-carbon cooling technology	High investment in R&D driving availability and cost reduction	R&D adaptive to rising temperature; poor climate mitigation capacity
	Mean temperature	Slower increase in mean temperature; long-term warming limited to <2°C	Steady increase in mean temperature; long-term warming of >4°C
	Temperature exceedances	Mild increase in number of extremely warm days >35°C	Mild increase in 2030-2050 but significant jump by 2070

6 See Deep dive: water stress and Deep dive: lower carbon preferences for more details
7 Analysis performed at city level with on-site nuances factored in

CLIMATE
MATERIAL RISKS AND OPPORTUNITIES

AirTrunk's main climate-related risks are physical risks related to higher temperatures and access to water, and transition risks associated with carbon emissions. Physical risks are medium to long-term and affect utility provision, design, and operations. Transition risks are short-term, in line with AirTrunk's Net Zero 2030 goal, and affect corporate affairs and other segments.

While over 30 risks and opportunities were rated and assessed by AirTrunk, only those deemed as material are disclosed in this report. Materiality of risks and opportunities were determined based on AirTrunk's Enterprise Risk Management Framework thresholds for likelihood and impact, which include both qualitative and quantitative threshold parameters.

Of the material risks, AirTrunk has quantified the impacts of higher water stress and lower carbon preferences (discussed further in the next section).

Risks and Opportunities Analysis

Time horizons are defined as short-term (2030), medium-term (2050) and long-term (2070). The horizons were established with reference to our client and broader policy decarbonisation targets and longer-term horizons to ensure changes to physical risks captured in assessment.

Table 2: Physical risks and opportunities

DESCRIPTION	AREA OF POTENTIAL FINANCIAL IMPACT	MANAGEMENT RESPONSE	TIME HORIZON	MATERIAL SCENARIO
Chronic higher water stress Increased energy, carbon emissions, and upfront costs for water efficient cooling systems in areas with higher water stress levels	▪ Higher capital expenditures (CAPEX) for non-potable water infrastructure upgrade ▪ Higher CAPEX for water efficient heat rejection ▪ Higher OPEX if scarcity increases water prices ▪ Potential penalties for breaching SLAs ▪ Potential penalties for not meeting water KPIs in Sustainability Linked Loans	**Reduce operating costs by building innovative data centres with future-proof cooling and water recycling solutions:** ▪ Procurement of non-potable water ▪ Incorporating water stress as an indicator for water management and cooling solutions ▪ On-site water storage, conservation, and recycling facilities	**Medium- to long-term**	**Both**
Increasing average temperature Increased energy costs for increased cooling needs to cope with higher external temperatures. Risk may necessitate retrofitting cooling systems where possible	▪ Higher operating expenditures (OPEX) costs for cooling ▪ Higher CAPEX for additional cooling equipment retrofits ▪ Potential penalties for breaching SLAs	**Reduce operating costs by building innovative data centres with future-proof cooling solutions:** ▪ Designing data centres with future-proof cooling solutions ▪ Progressive upgrades planned into investment cycles		**Hot House World**
Acute drought events Increased frequency and severity of drought events can increase risk of unplanned data centre downtime event/ failure to uphold contracted PUE/Service Level Agreements (SLAs), due to water rationing/insufficient water supply for cooling	▪ Decreased revenue from suspended operations in worst case	**Increase resilience to downtime and ensure business continuity by building innovative data centres that reduce reliance on water:** ▪ Site level water resilience actions during supply interruptions ▪ Incorporating water stress indicators for water management and cooling solutions ▪ On-site water storage, conservation, and recycling facilities ▪ Exploration of alternative water supply options for increased supply resiliency		**Both**

Table 3: Transition risks and opportunities

DESCRIPTION	AREA OF POTENTIAL FINANCIAL IMPACT	MANAGEMENT RESPONSE	TIME HORIZON	MATERIAL SCENARIO
Lower carbon preferences Shifting customer preference towards sustainable energy sources and/or lower PUE, driven by customers' own climate targets and reputational pressures	▪ Opportunity cost of not providing low carbon data centres ▪ Reduced availability of capital	**Become the preferred solution provider and collaborator for sustainability-conscious customers:** ▪ Ambitious Net Zero strategy and recognised sustainability leader ▪ Proactively engage customers to align on evolving expectations ▪ Monitor energy procured by customers (AirTrunk's Scope 3) ▪ Annual review of low carbon preference and standard trends ▪ Provide low carbon solutions to our customers in the build phase	**Short-term**	**Speedy Net Zero**
Capital availability Assessing and mitigating climate risks is becoming the market standard for financiers and investors to provide access to capital and competitive rates	▪ Increased cost of capital ▪ Lower revenue growth due to limited access to financing/investment for expansion	**Unlock lower cost of capital and gain recognition as a 'Climate Leader' within the investment community by setting industry climate standards:** ▪ Regularly reviewing and updating agreements with financiers/investors ▪ Increasing frequency, rigour and transparency in reporting and disclosures		
Carbon pricing and regulation Increasingly stringent carbon regulations, resulting in moratoriums that delay or prohibitions of planned expansions, higher carbon tax burdens, and/or lower subsidies	▪ Lower revenue growth due to constrained market expansion	**Gain recognition as a partner for informing public policy; generate savings on potential carbon price related costs:** ▪ Delivering on low carbon strategy for assets ▪ Making renewable energy available for customers who require support ▪ Stakeholder engagements including governments and being a catalyst for clean energy transition		
Expectations from broader stakeholders Civil Society, communities, and media may scrutinise energy-consuming tech sector on issues – including but not limited to energy and water use; exacerbated by energy rationing and droughts	▪ Reputational loss	**Become the global leader of corporate sustainability that improves AirTrunk's reputation relative to competition:** ▪ Execution of energy, water efficiency, and low carbon initiatives ▪ Consistent two-way engagement with communities where we operate	**Medium- to long-term**	

Deep Dive: Water Stress

The impact of water stress[8] on data centres can be profound. Cooling systems, essential for maintaining optimal operating temperatures of intricate hardware and lower energy consumption, heavily depend on water. As water availability dwindles in some locations, the efficiency of these cooling mechanisms may diminish, potentially leading to overheating, equipment failures, and limited design options for future campuses that require high density deployments and liquid cooling.

This, in turn, may cause unplanned outages, data loss, and service interruptions, impacting businesses relying on seamless digital operations. Conversely, implementing water-efficient cooling systems that address water stress conditions may come with trade-offs which increase energy use, carbon emissions, and upfront costs.

While disruptions due to water stress are actively mitigated and thus unlikely to occur, it is an indicator that is incorporated by AirTrunk to manage its overall vulnerability to water supply and its impact on local communities' access to potable water.

A key aspect of AirTrunk's water risk management is integrating local water stress indicators as a key criterion for data centre site selection, design, and operations.

Water stress levels, determined by using the Water Resource Institute's Water Risk Atlas, is one decision criteria for the type of heat rejection technology deployed in data centres – an approach aligned with the Climate Neutral Data Centre Pact. Furthermore, the water stress level informs the water management strategy for data centres once they are operational.

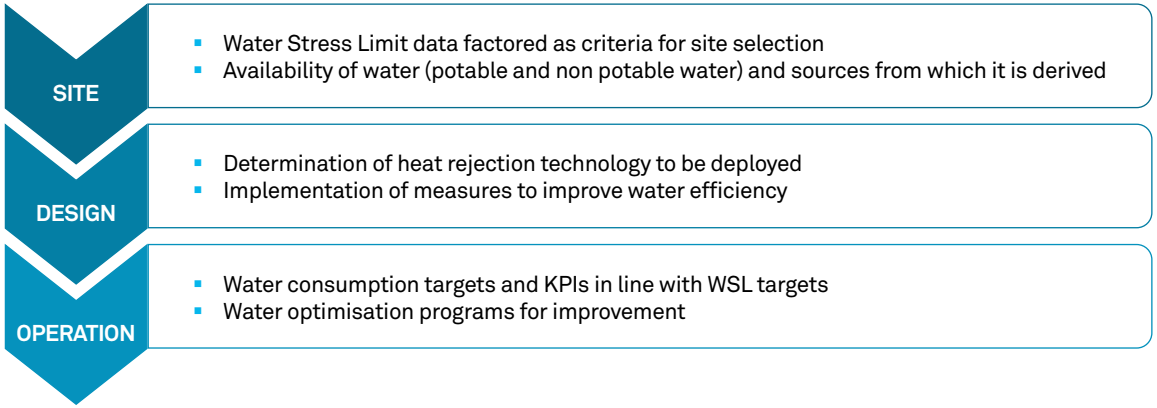
In addition, AirTrunk was the first data centre operator in APJ to commit to an operating Water Usage Effectiveness (WUE) KPI as part of AirTrunk's Sustainability Linked Loan (SLL) – where the WUE commitment directly incorporates limits based on water stress.

Table 4: Water stress and eligible heat rejection systems

Water Stress[9]	Data Centres	MAX. WUE (litres/kWh)	Eligible Heat rejection systems
Extreme (>80%)	-	0.0	Dry rated air-cooled chillers
High (40-80%)	MEL1	0.2-0.6	Adiabatic air-cooled chillers
Medium-High (20-40%)	SYD1, SYD2, TOK1	0.7-1.2	Hybrid dry coolers
Low-Medium (10-20%)	-	1.2-1.9	Indirect evaporative cooling
Low (<10%)	HKG1, SGP1	1.9-2.5	Open circuit cooling towers

Further details of AirTrunk's approach can be found in the FY24 Sustainability Report.

Figure 2: Summary of how Water Stress is factored at AirTrunk



8 Water stress is a measurement of freshwater availability, which is derived from the ratio of water use (e.g., by domestic consumers, industrial purposes, livestock etc.) and water supply (e.g., amount of freshwater available within a water basin).
9 Unless specified, water stress levels are accurate to the time of design consideration; however, the underlying model which indicates water stress levels has and is expected to change every few years. AirTrunk will utilise updated ratings for subsequent planning, but will not change the ratings determined for design specifications for a given year.

AirTrunk's climate risk assessment has led to factoring in a wider range of scenarios and extending the period of analysis to longer time horizons to manage water stress risks.

Climate scenarios come from the Aqueduct Water Risk Atlas (WRA), an industry benchmark used to assess water stress globally.[10] The three scenarios are characterised by: stringent environmental regulations and improved water use efficiencies (Optimistic); weak governance and low investment in environment policy (Business as usual); and fossil-fueled development and lack of global environmental concern (Pessimistic). As the differences across scenario and timelines are not substantial, AirTrunk's quantification primarily focuses on the cost of response to prevent water risk.

The majority of AirTrunk's data centres are located in regions projected to experience medium-high water stress across all future scenarios. Where water stress levels are relatively higher and expected to grow, AirTrunk deploys heat rejection technologies such as adiabatic air-cooled chillers and hybrid coolers to reduce reliance on water. Additionally, AirTrunk is monitoring developments which are expected to increase water resilience in stressed locations like Australia. It is important to note that specific drivers of increasing or static water stress are not disaggregated by the model and AirTrunk will work towards improving certainty of causal factors over time.

Where available, scenario-based plans by water suppliers were also reviewed to understand how the supply system is being future proofed to climate change.

A key factor in lowering water stress levels is the response by water suppliers in developing alternative supplies of water. Suppliers who have assessed conditions under multiple scenarios and developed strategies are expected to improve systemic resilience which AirTrunk can benefit from.

For example, AirTrunk's water suppliers in Australia and Hong Kong have publicly available scenario assessments which plans to manage the risk of decreasing rainfall, higher temperatures, and drought conditions. In Singapore, the Public Utilities Board continues to increase its percentage of water coming from recycled and desalinated water. For locations with less information available, AirTrunk will continue to engage climate risk experts and local stakeholders to monitor upstream water supply risk management.

Table 5: WRA Water stress level projections[11]

Site	Category	Optimistic			Business as usual			Pessimistic		
	Present	2030	2050	2080	2030	2050	2080	2030	2050	2080
MEL1	High		↑				↑			↑
SYD1 & SYD3	High			↑		↑				↑
SYD2	Med. High		↑	↑↑		↑			↑	
TOK1 & TOK2	Med. High									
OSK1	Low Med.									
HKG1	Low		↑			↑			↑	
SGP1	Low									
JHB1	Low									

No change in water stress projection

↑ Upward change in water stress projection

Table 6: Climate change responses by water suppliers

LOCATION	SCENARIO BASED WATER SYSTEM PLAN	CURRENT NON-POTABLE SUPPLY	FUTURE NON-POTABLE SUPPLY
Melbourne[12]	✓	Medium	High
Sydney[13]	✓	Medium	High
Tokyo	-	Low	No projections available
Osaka	-	Low	
Singapore[14]	-	High	High
Hong Kong[15]	✓	Low	Low
Johor Bahru	-	Low	No projections available

10 Different climate scenarios and time horizons used based on third party water risk model. See Climate Appendix for more details.
11 AirTrunk currently utilises 'present' water stress ratings available as of FY23 study; updates to the WRA model occurred which have changed present and projected ratings as of FY24.
12 Melbourne: https://www.melbournewater.com.au/about/what-we-do/publications/greater-melbourne-urban-water-and-system-strategy-water-life
13 Sydney: https://www.sydneywater.com.au/water-the-environment/what-we-are-doing/responding-to-climate-change
14 Singapore: https://www.pub.gov.sg/-/media/Images/Feature/Home/Resources/Publications/PUBOurWaterOurFuture.pdf
15 Hong Kong: https://www.waterconservation.hk/en/at-school/secondary-school/challenges-initiatives-hk/climate-change

Mitigation and Adaptation Measures

In addition to AirTrunk's broader water strategy, AirTrunk is currently implementing measures that respond to potentially higher water stress levels.

Table 7: Current measures to address water stress

ACTION	DIRECT MEASURES	INDIRECT (VALUE CHAIN) MEASURES
Optimising water usage	▪ Embedding of water stress limits (WSL) in site selection by avoiding using water in areas of extreme WSL, whereas for areas of high WSL or lower, identifying existing supply conditions and the sources from which they are derived. ▪ Embedding of WSLs in design and operations of data centres including determination of maximum WUE, eligible Heat Rejection Technologies (HRTs and prioritisation level of non-potable water measures per data centre	
Utilising non-potable water	▪ Utilising on-site rainwater catchments ▪ Exploring investments in water reuse and recycling plants ▪ Procuring non-potable water from water suppliers	▪ Monitoring non-potable water supply project development for potential off-take
Collaboration		▪ Monitoring potential of nascent solutions like water restoration projects for positive impact ▪ Joining the Open Call to Accelerate Action on Water to track our actions against our commitments on water stewardship whilst raising awareness on the urgent need to de-risk water-stressed basins worldwide.

AirTrunk has also identified specific and upcoming action steps until 2030 to ensure that mitigation and adaptation measures are implemented effectively, thereby further increasing resilience to rising water stress.

Table 8: Roadmap of future actions to address water stress

ACTION	2024	2025	2025-2030
REDUCE			
Increase water efficiency	▪ Implement water monitoring and optimisation programs across portfolio to track water use, minimising inefficiencies and looking for opportunities for improvement ▪ To investigate on-site treatment of waste water for reuse		▪ Pursue innovative water technology that can be implemented to increase water efficiency and reduce water withdrawal
REPLACE			
Procure non-freshwater (recycled and/or desalinated) from existing supply system		▪ Engage water suppliers to explore possibility of procuring non-fresh water from grid supply	▪ Where possible, start purchasing non-fresh water from suppliers
Invest in water recycling plants directly connected to data centres for priority locations	▪ Conduct water recycling plant design and feasibility study for two existing data centres in Australia	▪ Conclude feasibility study and finalise investment decision	▪ Potentially implement water recycling plant for two data centres (contingent on feasibility)
	▪ Conduct reclaimed water supply assessment for a new data centre		▪ Conclude feasibility study for a new data centre and finalise investment decision (contingent on feasibility)
REPLENISH			
Identify and procure Water Restoration Certificates			▪ Consider water restoration certificates after efficiency and recycling measures are exhausted and water restoration certificate market is more developed
OTHERS			
Develop holistic water strategy	▪ Conduct detailed review of current water consumption by type across DCs (non-potable water as % of total consumption)	▪ Establish targets for water consumption by type	▪ Develop and implement water strategy to meet water consumption by type
		▪ Factor forward-looking water stress levels, water consumption targets by type and feasibility for procurement of non-freshwater and installation of water recycling plants for site selection and design stages for newer DCs	

Deep Dive: Lower Carbon Preferences

As a sustainability leader, AirTrunk consistently innovates to meet the growing expectation of customers with climate goals to deliver strategies for low carbon data centres.

AirTrunk has committed to achieve Net Zero across its Scope 1 and 2 emissions by 2030, matching 100% of electricity consumption at our sites with renewable energy by 2030 in close cooperation with our customers. As AirTrunk progresses on its low carbon journey, the key risk is no longer in developing a transition strategy. The primary risk, and focus of the FY24 risk assessment, relates to ensuring the successful implementation of AirTrunk's low carbon strategy.

In FY24, AirTrunk identified two trends which may impact its ability to meet targets in the medium- and long-term:

1. The evolution of what renewable energy (RE) solutions are deemed credible by customers and broader standards such as the Greenhouse Gas Protocol (GHGP) and Science-based Targets Initiative (SBTi), and
2. Evolving carbon offset standards such as Verra's new Reducing Emissions from Deforestation and Forest Degradation (REDD) methodology in the voluntary market and greater alignment with Article 6 in the compliance market.

To address these, AirTrunk is fine-tuning its renewable energy and carbon offset strategies to ensure solutions are credible and aligned with investor and customer expectations.

AirTrunk's most recent climate risk analysis was conducted to identify factors which may increase the cost of electricity transition quantified in the previous year.[16] The scenario analysis quantified the costs of procuring extra renewable energy across three scenarios, where the renewable energy premium varied across scenarios. The primary factors influencing the total cost and relative risk were the demand volume of the data centre and the relative cost of renewable energy in each market. The total costs and associated risks inform AirTrunk's approach to engaging and supporting its clients to jointly decarbonise the data centres.

In the Speedy Net Zero scenario, the cost of transitioning is higher than in other scenarios across most markets if governments implement aggressive policies aligned with achieving Paris Agreement goals. As the operating environment to deliver renewable energy solutions and carbon offsets continue to evolve, AirTrunk is focused on developing risk mitigation and monitoring policies to reduce exposure to these evolutions rather than re-quantifying the FY23 scenario analysis.

Figure 3: Key trends impacting implementation of low carbon strategy

Evolving standards determining credibility of RE solutions which may hinder AirTrunk and its customers' ability to meet Scope 2 and RE targets for electricity sourced

Evolving standards determining credibility of carbon offsets which may hinder AirTrunk's ability to meet Scope 1 targets

16 See Climate Appendix for more details

Mitigation and Adaptation Measures

While AirTrunk's broader climate transition strategy charts the pathway to a low carbon future, mitigation and adaptation measures are being implemented to actively manage implementation risk. Specifically, AirTrunk uses renewable energy solutions (e.g., Power Purchase Agreements (PPAs) and Renewable Energy Certificates (RECs)/Virtual PPAs (vPPAs)) and carbon offsets while closely engaging with customers to ensure that AirTrunk's Net Zero and RE targets and customers' ambitions are met collaboratively.

Notable examples of AirTrunk's industry leading RE solutions include the 30MW solar vPPA signed under Malaysia's Corporate Green Power Programme (CGPP) and the first-of-its-kind hourly REC solution in Hong Kong that matches Microsoft's data centre electricity consumption with local RECs.

AirTrunk and Google also announced a long-term PPA and the development of a new solar farm to add 25MW of new renewable energy generation capacity into Australia's energy grid.

Table 9: Current measures to address lower carbon preference

ACTION	DIRECT MEASURES	INDIRECT (VALUE CHAIN) MEASURES
Explore elevated temperatures solutions with tenants	▪ Working with customers to explore higher operating temperatures and reduce cooling requirement	▪ Supporting customers with more sustainable design ▪ Lower PUE resulting in reduced water consumption, embodied carbon and cost
Source renewable energy solutions	▪ Validation and procurement of RE projects that provide RE on an hourly basis	▪ Supporting the energy transition by partnering with projects that provide 24/7 RE capabilities ▪ Doing so, we assist the market to match consumption with clean energy production on an hourly basis rather than annually
	▪ REC and PPA/vPPA for certain customers[17]	▪ Understanding and aligning with customers' RE requirements ▪ Supporting customers on PPA and REC sourcing ▪ Verifying customer matching of electricity consumption with RE through procurement data
Carbon offsets	▪ Procurement of high-quality carbon offsets to cover residual Scope 1 emissions	

17 AirTrunk plans to purchase PPA and REC/vPPA on behalf of customers who do not take ownership of their electricity consumption and/or are unable to decarbonise their consumption by 2030.

Table 10: Roadmap of future actions

ACTION	2024	2025	2025–2030
SUSTAINABLE SOLUTIONS			
Elevated temperature solutions	▪ Explore elevated solutions with customers		
24/7 Clean Energy	▪ Scaling up RE projects to provide offsets on an hourly basis		
Hydrotreated vegetable oil (HVO)	▪ Conduct HVO pilot and explore feasibility at scale		
POWER PURCHASE AGREEMENTS (PPAS)			
Long-term RE procurement through PPAs	▪ Scaling up use of PPAs and supporting customers on PPA sourcing		
RE market study	▪ Study markets at most risk based on availability of PPA options to design potential PPA ramp-up strategy if unbundled RECs are invalidated by frameworks (GHGP, SBTi)		
RENEWABLE ENERGY CERTIFICATES (RECS)			
Monitor frameworks/standards	▪ Monitor outcomes of GHGP and SBTi standards updates regarding unbundled RECs and engage with framework bodies when opportunities for market participation arise		
Internal and investor alignment	▪ Clearly define AirTrunk's position and investor expectations on unbundled RECs considering potential updates to frameworks (SBTi, GHGP)		
Customer engagement and tracking	▪ Track customers RE solutions to assess risk exposure across Scope 2 and 3 if unbundled RECs are invalidated	▪ Engage and document key customers' positions on unbundled RECs and inclinations to align with frameworks (SBTi, GHGP)	
CARBON OFFSETS			
Monitor carbon offset standards	▪ Monitor changes to voluntary market standards (e.g., VCS, Gold Standard, CAR etc.) ▪ Monitor developments in compliance market standards (Article 6 and government offset criteria)		
Update carbon offset procurement strategy	▪ Assess current offset criteria against evolving standards and identify gaps	▪ Determine prioritisation of offsets types that are credible/less volatile ▪ Determine quantum/frequency of offset procurement based on projected higher prices of credible projects	

Financial Implications

As a private company, AirTrunk provides annual financial statements to our investors and Board members. Nonetheless, AirTrunk is able to disclose quantified financial effects of prioritised risks (i.e., water stress and lower carbon preferences) for which the effects have already been observed and recognised in its financial statements.

AirTrunk is currently quantifying anticipated financial effects of prioritised risks and disclosing qualitative information on the areas of financial impact. Assessment and disclosure for other CROs will commence in the coming years.

Current Financial Effects

The current financial effects of CROs on AirTrunk include ongoing mitigation and mitigation measures in line with AirTrunk's water management and low carbon strategy.

Anticipated Financial Effects

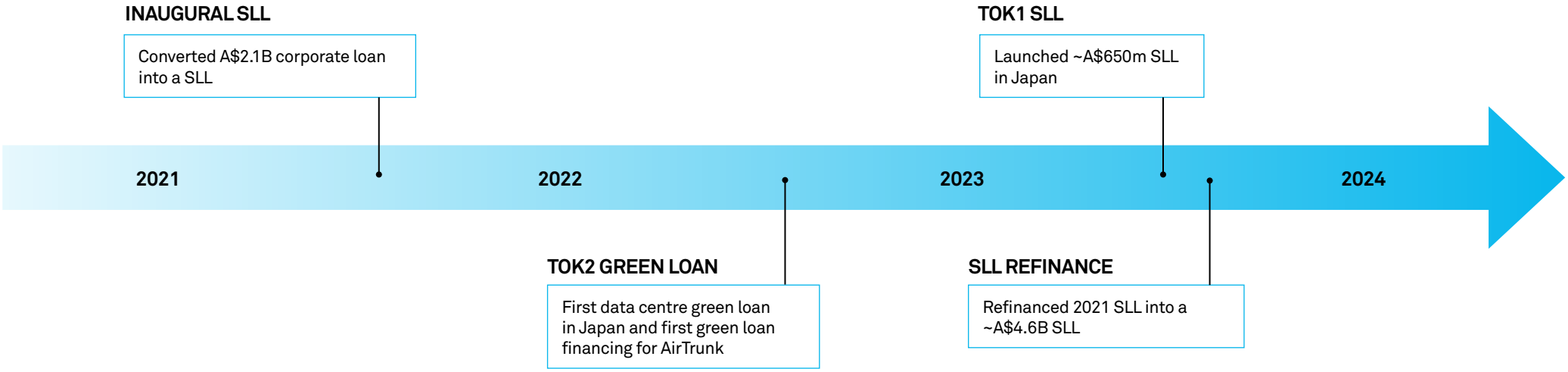
AirTrunk has started quantifying several anticipated financial impacts of water stress and lower carbon preferences, however, costs cannot be disclosed during this reporting period due to current levels of uncertainty and early implementation of certain measures. AirTrunk is progressing on studies to finalise quantification of these effects in the short, medium and long-terms and will report to investors as they become available.

Table 11: Financial effects (not exhaustive)

RISK	TYPE OF FINANCIAL EFFECT	COST
CURRENT FINANCIAL EFFECTS (FY24)		
Water stress	▪ Additional costs for authority-related submissions, consultant engagements, feasibility studies and design-related fees	▪ US$200,000 for feasibility and design-related engagements
Low carbon preference	▪ Cost of offsetting versus deployed capacity/MW	▪ US$84,000 spent to offset Scope 1 residual emissions
	▪ HVO pilot conducted in JHB1	▪ 223% higher than regular cost of diesel, conducted for 24,000L
ANTICIPATED FINANCIAL EFFECTS		
Water stress	▪ Additional CAPEX for water efficient infrastructure, stormwater runoff, consulting fees for recycling plant facilities and risk assessment	▪ Investment costs in terms of production capacity ranges from US$800/m3/day – US$3,100/m3/day, depending on regional development costs and availability.
	▪ OPEX savings from freshwater cost as a baseline due to water efficient technology and on-site water reuse	▪ OPEX savings in term of 24% to 70% possible from lower supply rates, depending on regional water source, scarcity and generation costs.
	▪ Additional costs for procurement of water restoration certificates	▪ Undergoing cost quantification and verification and investment plan still subject to board approval
Lower carbon preferences	▪ Renewable energy procurement requirements to meet 100% renewable energy targets	▪ Quantification is uncertain due to assumptions taken and long-time horizons

Resourcing Activities

While AirTrunk allocates funds and resources for climate initiatives as required or as part of its general budgeting processes, eligible climate initiatives are also financeable by its Sustainability Linked Loans (SLLs) and green loans which provide the needed capital to implement strategic measures.



AirTrunk's Sustainable Financing Journey

As of FY24, AirTrunk's SLLs include a A$4.6 billion corporate SLL and A$650 million SLL for expansion in TOK1. The SLL contains a variety of environmental and social KPIs which are defined in AirTrunk's SLL Framework. The satisfaction of each KPI bilaterally against a predefined target will result in a reduction of interest payable under the financings. AirTrunk intends to amplify the positive impact created through the satisfaction of KPIs by not only taking active measures to ensure the company meets its KPIs but also guaranteeing that any financial benefit received from the satisfaction of the KPI targets is reinvested back towards furthering AirTrunk's broader sustainability agenda including minimising climate impact. The reinvestment will occur via AirTrunk's social impact fund whereby the aggregate value of the interest savings which form the satisfaction of KPI targets are directed towards this fund.

The remit of the social impact fund is to invest proceeds towards four pre-defined focus areas including:

1. Equal digital access;
2. STEM education;
3. Biodiversity and conservation; and
4. Innovation and R&D.

Under pillars 3 & 4, AirTrunk has the ability to form partnerships to support initiatives that are directed towards respecting, protecting and positively impacting local, land habitat and ecosystems (biodiversity and conservation) as well as finance new and innovative climate risk measures (e.g. upgrade assets) under evolving conditions and climate scenarios.

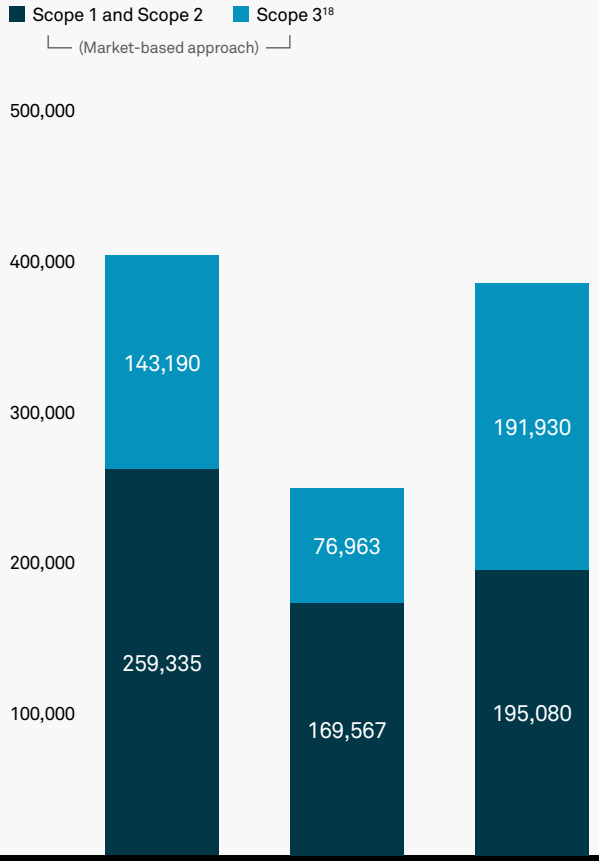
Alongside SLLs, AirTrunk has raised financing via green loans at TOK2 whereby the proceeds must be raised for a pre-defined "green" purpose as stipulated in AirTrunk's Green Financing Framework (GFF). The eligible categories under AirTrunk GFF are all targeted to reduce AirTrunk's climate impact and include green data centres, renewable energy and water efficiency.

OUR NET ZERO ROADMAP

In October 2022, AirTrunk announced its commitment to Net Zero emissions by 2030 (Scope 1 and Scope 2), with a unique approach to emissions reporting developed specifically for hyperscale data centre environments. We have continued to make significant progress towards implementing decarbonisation levers and deepening our roadmap to 2030 and beyond:

OUR NET ZERO ROADMAP TO 2030 AND BEYOND

AirTrunk's Carbon Footprint (tCO_2e)



Innovating to Reach Net Zero[19]
As we approach 2030, our commitment for Net Zero carbon across Scope 1 & 2 drives our investment in innovation and optimisation. These activities ensure that despite our portfolio growth, we can meet our commitment.

SCOPE 1
- Piloting renewable diesel.
- Investing in leak reduction activities including new technology to detect leaks and improved designs for less leakage.
- Deploying new equipment with lower GWP gases.
- Launching chiller-less solutions where possible.
- Exploring generator-less solutions.
- Piloting battery energy storage technologies.
- Continue investing in offsets for residual Scope 1 emissions.

SCOPE 2
- Constantly improving our energy optimisation and PUE reduction activities.
- Sourcing renewable energy and supporting innovative renewable energy projects across our markets.
- Deepening partnerships with customers around ownership and attestation of energy consumption.

SCOPE 3
- Commitment to reducing embodied carbon in our builds by:
  - Implementing a maximum embodied carbon thresholds for each new build.
  - Using Internal Carbon Pricing (ICP) to promote reduction in emissions.
  - Identifying reduction options at design phase.
  - Exploring material reduction, alternative materials, and green processes.
- Reducing business flights where possible.
- Continued education of employees regarding habitual choices that affect their footprint.

Continuous Improvement
We plan to continue to drive down emissions across our value chain, leveraging new technology in materials and energy storage, as well as the regional energy grid.

SCOPE 1
- Exploring SF6 free equipment.
- Continued improvement of energy storage technology.
- Continue investing in offsets for residual Scope 1 emissions.

SCOPE 2
- Supporting the maturing regional energy grid.
- Progressing to 100% hourly matching of renewable energy to consumption.
- Carbon-free backup.

SCOPE 3
- Continued reduction in embodied carbon driven by new technology and low carbon materials.
- Electrification of transport for both employees and logistics.

Our emission reduction efforts will be further supported by improved quality of carbon sequestration projects.

FY22 FY23[20] FY24[21] FY25 2030 2030 onwards

18 Scope 3 indirect emissions covering embodied carbon, business travel, employee commuting and indirect emissions from customer electricity consumption (market-based approach).
19 Net Zero carbon emissions by 2030, covering Scope 1 direct emissions and Scope 2 (market-based approach) indirect emissions from purchased electricity. Baseline year FY22.
20 FY23 numbers are restated based on customer attestations, verified in FY24.
21 FY24 numbers are projected, to be verified in FY25.

CLIMATE
METRICS AND TARGETS

The metrics reported herein have been selected based on guidelines provided by IFRS S2 on cross-industry and industry-based metrics. Additionally, AirTrunk discloses metrics and targets relevant to the data centre industry and proprietary metrics relevant to AirTrunk's business model. For our FY24 disclosure, AirTrunk has strategically focused on industry-based metrics that are most relevant to AirTrunk's business operations and where robust data collection processes are already in place.

Metrics

Table 12: Cross-industry metrics

METRIC	UNIT	FY24	NOTES
Scope 1 emissions	tCO_2e	3,232	Refer to FY24 Sustainability Report for details
Scope 1 carbon offsets acquired	tCO_2e	3,232	
Scope 2 emissions (location-based)	tCO_2e	191,952	
Scope 2 emissions (market-based)	tCO_2e	191,848	
Scope 3 emissions	tCO_2e	594,593	
Embodied Carbon - Building Elements	tCO_2e	57,217	
Embodied Carbon - MEP Systems Specific to Data Centre	tCO_2e	133,104	
Business travel	tCO_2e	1,374	
Employee commuting	tCO_2e	211	
Working from home	tCO2e	24	
Indirect Emissions from Customer Electricity Consumption (Location-based)	tCO_2e	402,663	
Indirect Emissions from Customer Electricity Consumption (Market-based)	tCO_2e	0	
Internal carbon prices	$	See below	
Explanation of whether and how AirTrunk is applying carbon price in decision making (e.g., investment decisions, transfer pricing and scenario analysis)	Qualitative	AirTrunk uses an internal carbon price (ICP) to evaluate initiatives. Projects with unit carbon costs below our ICP are approved, while those exceeding it are further discussed. Our ICP has been calculated using the MACC approach, and against industry benchmarks, and market recommendations. It will be progressively adjusted to align with our climate objectives.	Refer to FY24 Sustainability Report for details
Remuneration			
Description of whether and how climate-related considerations are factored into executive remuneration	Qualitative	AirTrunk has implemented an incentive framework in FY23, covering 100% of employees, including executives, to incentivise progress towards climate-related targets like achieving carbon neutral corporate operations, net zero by 2030 and meet or exceed 100% of our SLL KPIs.	
Percentage of executive remuneration recognised in the current period that is linked to climate-related considerations	%	For the corporate executive team, 80% of their incentive plan is linked to the company's performance which includes achieving these goals.	

Refer to FY24 Sustainability Report for more details on AirTrunk's metrics, including measurement approach and assumptions.

Table 13: Industry-based metrics for the real estate sector

METRIC	UNIT	FY24	NOTES
Energy consumption data coverage as a percentage of total floor area, by property sector	% by floor area	Reported as PUE for the data centre sector; refer to FY24 Sustainability Report for details.	
(1) Total energy consumed by portfolio area with data coverage, (2) percentage grid electricity and (3) percentage renewable, by property sector	GJ, %	Already reported – sector breakdown not relevant.	
Like-for-like percentage change in energy consumption for the portfolio area with data coverage, by property sector	%	Reported as PUE for the data centre sector. Refer to FY24 Sustainability Report for details.	Already reported – sector breakdown not relevant.
Description of how building energy management considerations are integrated into property investment analysis and operational strategy	Qualitative description	Our buildings are designed with energy management and efficient operations from commencement. Please refer to our PUE section in the FY24 Sustainability Report for details.	
Water withdrawal data coverage as a percentage of (1) total floor area and (2) floor area in regions with High or Extremely High Baseline Water Stress, by property sector	% by floor area	Reported as Water Withdrawal and WUE for efficiency metric for the data centre sector. Refer to FY24 Sustainability Report for details.	
1) Total water withdrawn by portfolio area with data coverage and (2) percentage in regions with High or Extremely High Baseline Water Stress, by property sector	Thousand cubic metres (m^3), %	Please refer to our WSL table in the FY24 Sustainability Report for details.	
Like-for-like percentage change in water withdrawn for portfolio area with data coverage, by property sector	%	Reported as WUE for the data centre sector. Refer to FY24 Sustainability Report for details.	
Description of water management risks and discussion of strategies and practices to mitigate those risks	Discussion and analysis	Refer to information in Deep Dive: Water Stress.	
Discussion of approach to measuring, incentivising and improving sustainability impacts of tenants	Discussion and analysis	Refer to information in Deep Dive: Lower Carbon Preferences.	
Area of properties located in 100-year flood zones, by property sector	m^2	Our existing sites are all based in low flood risk zones, which is based off 100-year flood data.	
Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	Discussion and analysis	Refer to information in Climate Material Risks and Opportunities.	
Number of assets, by property sector	Number	Refer to FY24 Sustainability Report for details.	
Leasable floor area, by property sector	m^2	Refer to information in Deep Dive: Lower Carbon Preferences.	

Targets

Table 14: Target information

TARGET	OBJECTIVE	APPLICATION	PERIOD COVERAGE	BASE YEAR	MILESTONES & INTERIM TARGETS	TYPE (ABSOLUTE OR INTENSITY)	BASIS FOR TARGET	NOTES
Maintain annual average operating PUE within the AirTrunk PUE band with long-term goal of 1.23-1.28 annual average operating PUE as AirTrunk portfolio stabilises	Mitigation and adaptation	Data centres	Ongoing	Since inception	Annual portfolio PUE SLL targets	Intensity	Study conducted internally taking into account geographical areas where AirTrunk operates.	Refer to FY22, FY23, and FY24 Sustainability Reports
Net Zero for Scope 1 and 2	Mitigation and adaptation	Data centres and corporate offices	Current – 2030	FY22	Scope 1: Commitment to offset annually since commencement of operations Scope 2: Annual portfolio CUE SLL targets	Scope 1: Absolute Scope 2: Intensity	Study conducted internally for feasibility.	Refer to FY22, FY23, and FY24 Sustainability Reports
100% of electricity consumed at AirTrunk sites is sourced or matched with renewables	Mitigation and adaptation	Data centres	Current - 2030	N/A	Annual portfolio CUE SLL targets	Intensity	Study conducted internally for feasibility taking into account the rate of future suppliers of renewables.	Refer to FY23 and FY24 Sustainability Reports
Reduce upper threshold of water stress limit by at least 0.1 for all water stress classifications	Mitigation and adaptation	Data centres	Current – 2030	2023	N/A	Intensity	Water Stress Classification obtained from the WRI Aquaduct Water Risk Atlas at base year, with target limits aligned with the CNDCP principles on water conservation.	AirTrunk's targeted reduction in upper threshold of water use is aligned with CNDCP's standards and linked to our SLL as a KPI

The above targets are assessed annually and discussed bi-monthly during our Planet Committee. Refer to FY24 Sustainability Report for more information on the methodology and progress for AirTrunk's climate, energy, and water targets. All targets have been audited by a third-party.

NATURE

NATURE METHODOLOGY

Taskforce on Nature-related Financial Disclosures

The Taskforce on Nature-related Financial Disclosures (TNFD) is a global initiative that provides a framework for organisations to assess, report, and act on their nature-related dependencies, impacts, risks, and opportunities. Final TNFD recommendations were launched in September 2023[22], marking a significant milestone in the integration of nature into financial decision-making.

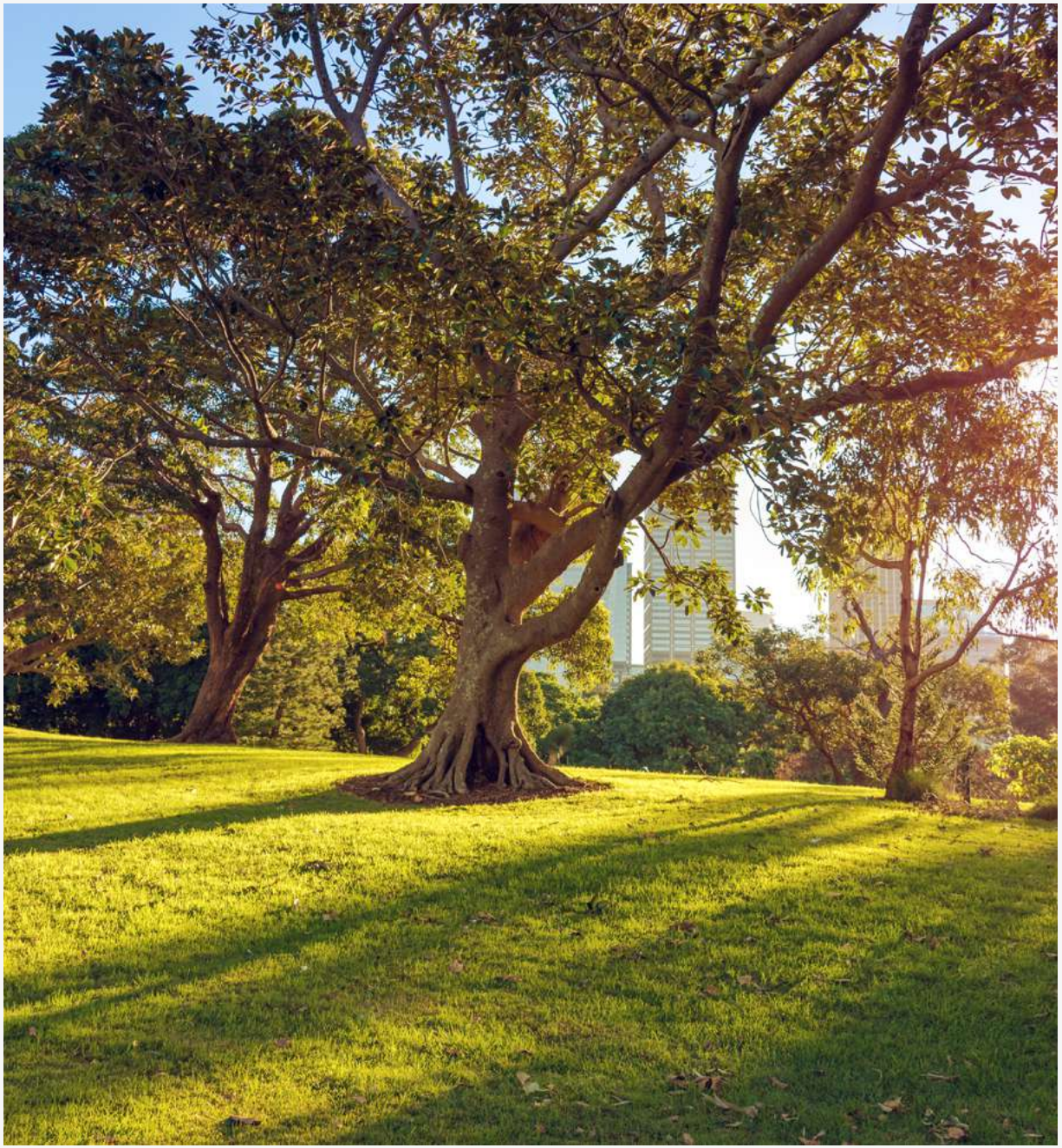
Given the recent release of this framework, disclosing nature-related information is a pioneering effort for market players, and AirTrunk takes pride in being at the forefront of adopting these recommendations.

The insights presented in this section regarding our dependencies, impacts, risks, and opportunities on nature are primarily sourced from our second TNFD study conducted in H1 2024.

Overall Methodology: Using the LEAP Approach

For the report, AirTrunk adopted the Locate, Evaluate, Assess, Prepare (LEAP) approach to ensure a comprehensive and strategic evaluation of its nature-related dependencies, impacts, risks, and opportunities across the value chain.

The leadership of AirTrunk also participated in pinpointing nature-related opportunities to be prioritised in the upcoming years, which was incorporated into the formulation of AirTrunk's nature response plan.



22 Recommendations of the Taskforce on Nature-related Financial Disclosures (2023)

Overview of AirTrunk's Approach for TNFD

Detailed steps taken by AirTrunk to assess dependencies, impact, risks, and opportunities based on TNFD recommendations:[23]

Table 15: Steps taken by AirTrunk within the TNFD's LEAP approach (referenced from TNFD)

L Locate
The interface with nature

L1 Span of the business model and value chain

Established AirTrunk's value chain and direct operations as parameters for TNFD disclosure

L2 Dependency and impact screening

Identified dependencies and impacts along the value chain and direct operations with moderate-high materiality

L3 Interface with nature

Identified specific locations where key dependencies and impacts may occur (i.e., AirTrunk data centres)

L4 Interface with sensitive locations

Determined ecologically sensitive locations within AirTrunk's direct operations (i.e., AirTrunk data centres located in ecologically sensitive areas)

E Evaluate
Dependencies & impacts

E1 Identification of environmental assets, ecosystem services and impact drivers

Identified relevant impact drivers associated with AirTrunk's business activities

E2 Dependency and impact screening

Determined key dependencies and impacts on nature

E3 Dependency and impact measurement

Assigned qualitative scores on the magnitude of dependencies and impacts identified

E4 Impact materiality assessment

Identified the most material dependencies and impacts

A Assess
Risks & opportunities

A1 Risk and opportunity identification

Identified corresponding nature-related risks and opportunities for AirTrunk

A2 Adjustment of existing risk mitigation and risk and opportunity management

Identified risk and opportunity management processes that are currently in place as well as new ones that can be adopted

A3 Risk and opportunity measurement and prioritisation

Rated and prioritised top risks and opportunities

A4 Identified priority risks and opportunities for disclosure

Disclosure of priority risks and opportunities

P Prepare
To respond & report

P1 Strategy and resource allocation plans

Devised strategy and resource allocation for risks and opportunities

P2 Target setting and performance management

Identified targets and relevant metrics

P3 Reporting

Disclosed findings according to TNFD requirements

P4 Presentation

Presented findings and recommendations to stakeholders

Although AirTrunk has not yet formally involved Indigenous Peoples, local communities, and other impacted stakeholders in the current phase, it is actively devising strategies to meaningfully engage with relevant stakeholders, in alignment with the guidelines set forth by the TNFD.

23 The methodology employed is based on a comprehensive desktop assessment, leveraging internal data alongside climate and nature indicators from reputable external sources. While this approach provides valuable insights, we acknowledge inherent limitations due to the nature of the assessment.

NATURE
DEPENDENCIES AND IMPACTS

Overview of Analysis

AirTrunk's nature-related dependencies and impacts were identified by referencing the list of potential impact drivers provided by the Natural Capital Protocol.[24]

Here, 'dependencies' are defined as the environmental assets and ecosystem services required by AirTrunk to function, while 'impacts' refer to the changes in the state of nature and its capacity to provide social and economic functions as a result of AirTrunk's actions.

AirTrunk conducted an analysis of dependencies and impacts at AirTrunk's data centre sites, and across its value chain. This year, AirTrunk performed a qualitative evaluation of key dependencies and impacts, thereby establishing a basis for more quantitative analyses in subsequent years.

On-Site Dependencies and Impacts

The TNFD assessment enabled AirTrunk to understand what interactions its data centres have with nature. While AirTrunk's data centres in different locations shared a similar profile of interface with nature, the magnitude of impact varied across locations depending on surrounding ecosystem conditions. These variations were further explored across each site, with ecologically sensitive locations being shortlisted.

Key dependencies and impacts identified are as follows:

Figure 4: Dependencies and impacts on nature at AirTrunk's data centres

Terrestrial ecosystems

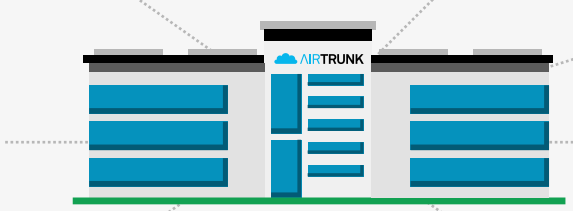
- I Data centre buildings **prevent distribution of flora and fauna** between adjacent nature areas, contributing to habitat fragmentation
- D Shade from trees **help reduce surface temperature** of buildings
- D Vegetation **mitigates soil erosion** and **flooding**

Minerals and metals

- D Equipment is manufactured using **raw minerals** and **metals**
- I Mining of required materials cause **habitat loss** and is highly **pollutive**

Water

- D Large **volumes of water** are required to cool server
- I Water consumption contributes to **water scarcity**
- I Warm water discharged causes **thermal pollution** of water bodies



Air quality

- D Air pollutants (e.g., SO_2) from the surrounding air enters the data centre, **corroding equipment** and **shortening its lifespan**

Soil quality

- I Electronic waste and general waste may leach **chemicals** and other contaminants **into the soil** if not properly collected and treated

Climate change

- I Greenhouse gases released by AirTrunk contribute to **climate change**

Disturbances

- I **Noise** from servers and heating, ventilation, and air-conditioning (HVAC) systems affects wildlife living nearby
- I **Lights** outside the data centre contribute to light pollution, impacting wildlife living nearby

I Impacts D Dependencies

24 Natural Capital Protocol (NCP) published by the Capitals Coalition

Deep Dive: Identifying Ecologically Sensitive Locations

According to TNFD, sensitive locations refer to locations where there are interfaces with nature in:

- Areas important for biodiversity; and/or
- Areas of high ecosystem integrity; and/or
- Areas of rapid decline in ecosystem integrity; and/or
- Areas of high physical water risks; and/or
- Areas of importance for ecosystem service provision, including benefits to Indigenous Peoples, local communities and stakeholders.

Hence, to assess each of AirTrunk's data centre locations, information on the number of protected areas, key biodiversity areas, species on the IUCN Red List, and water stress[25] was gathered for each data centre site location and compared.

Sites which attained relatively high materiality scores for any of the four metrics have been identified as ecologically sensitive. This allows AirTrunk to prioritise actions across different locations.[26]

Table 16: Identification of ecologically sensitive locations[27]

Data centre	Ecologically-sensitive location	No. of Protected Areas within 20km	No. of Key Biodiversity Areas within 20km	Species on IUCN Red List within 50km	Water stress[28]
HKG1	✓	High	High	Medium	Medium
HKG2	✓	High	High	Medium	Medium
SGP1	✓	Low	Low	High	Low
JHB1	✓	Low	Low	High	Low
SYD1	✓	Low	Low	Medium	High
SYD3	✓	Low	Low	Medium	High
MEL1	✓	Medium	Low	Low	High
SYD2	✓	Medium	Low	Low	High
TOK1		Medium	Low	Medium	Medium
TOK2		Medium	Low	Medium	Medium
OSK1		Medium	Low	Medium	Medium

Low Medium High

25 The World Database on Protected Areas, World Database of Key Biodiversity Areas, IUCN Red List of Threatened Species and the World Resource Institute (WRI) Aqueduct Water Risks Atlas were referenced as of May 2024.
26 In addition to the current approach for identifying ecologically sensitive locations, AirTrunk is exploring other methodologies to enhance the assessment of the ecological sensitivity around our data centres and the realistic area of AirTrunk's influence.
27 As of Q1 2024
28 To align with TNFD recommendations on including 'areas of high physical water risks' when identifying sensitive locations, AirTrunk has used the water stress indicator from Aqueduct. We will continue evaluating different water-related indicators to identify those most suitable for nature risks.

Deep Dive: IUCN Red List Species

AirTrunk investigated the presence of threatened International Union for Conservation of Nature (IUCN) Red List Species in regions where the company's data centres operate.

Figure 5: IUCN Red List Categories

From left to right: EX - Extinct; EW - Extinct in the Wild; CR - Critically Endangered; EN - Endangered; VU - Vulnerable; NT - Near Threatened; LC - Least Concern.

In Malaysia and Singapore, species listed as critically endangered on the IUCN Red List include the Raffles' banded langur *(Presbytis femoralis)*, Helmeted hornbill *(Rhinoplax vigil)*, and Sunda pangolin *(Manis javanica)*, which are under threat from human activities. These activities include changes in land use (e.g., deforestation) and poaching. This underscores the urgent need for proactive measures to mitigate these threats and protect these threatened species.

AirTrunk recognises that the identification of threatened species is the first step in understanding potential implications of data centres on its surrounding ecosystems. The presence of such threatened species is considered when prioritising sites for onsite nature screening and will be prioritised for nature conservation initiatives.

Figure 6: Raffles' banded langur

Figure 7: Helmeted hornbill

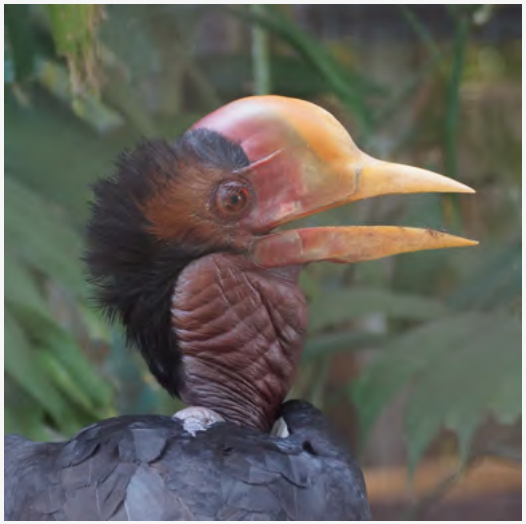


Figure 8: Sunda pangolin

Value Chain Dependencies and Impacts

AirTrunk relies heavily on upstream and downstream companies along its value chain.

- Materials used in data centres, such as data centre racks, equipment and building materials, are attained through an ecosystem of companies that mine, manufacture and transport the materials.
- Utility providers for water, electricity and network connectivity are critical in supporting AirTrunk's day-to-day operations.
- Construction companies and other companies in the real estate sector (e.g., architecture, facilities management companies) help to construct, maintain and eventually demolish AirTrunk data centres and offices.
- Further downstream, waste collectors and waste management companies who collect and treat AirTrunk's general waste, construction waste, and e-waste.

We explored the interactions between each value chain segment and impact driver to identify the most significant dependencies and impacts. Secondary research sources were referenced, as well as the ENCORE[29] database provided by the UN Environment Programme. In the future, AirTrunk may further explore how the effects of each dependency and impact varies across different timeframes.

Our analysis indicates that our highest impact across the value chain is on terrestrial ecosystems and water. While our dependency on nature is generally lower than the impact of our assets, water remains a critical natural resource for us.

Notably, the most significant nature-related impact drivers – (1) pressure on water resources, and (2) impacts on terrestrial ecosystems – have the largest impacts on AirTrunk's business model, value chain, strategy, and financial planning. For instance, the depletion of local water sources from data centre cooling and upstream activities has highlighted the need for efficient water management strategies. Similarly, habitat loss and ecosystem degradation across the value chain necessitate engagement with suppliers and contractors on sustainable land use practices.

Further details on the dependency and impact pathways can be found on the right.

Table 17: Description of key nature-related dependencies and impacts

Dependency	**Dependency on water supply** AirTrunk has a high dependency on water supply both directly (for data centre cooling), and indirectly across the value chain (e.g. manufacturing of materials, data centre construction, and electricity generation). Please refer to the Climate section for specific data on AirTrunk's water consumption.
Impact	**Pressure on water resources** Depletion of local water sources occur both from AirTrunk direct operations (through data centre cooling) and upstream in the value chain from various activities relying on water (e.g., electricity utilities, mining etc.). Impact on water is one of the highest nature-related impacts for data centre activity. Please refer to the Climate section for more details on water-related risks and response measures.
Impact	**Impacts on terrestrial ecosystems** Habitat loss and ecosystem degradation can occur at all stages of the AirTrunk value chain. This includes on-site change in land use during data centre construction but mainly occurs upstream in the value chain (e.g., mining, manufacturing, and transport of materials, etc.). This is due to land use change, reduction in the extent and condition of ecosystems, or reduced connectivity between ecosystems.
Impact	**Disturbances** AirTrunk's data centre operations produce light and noise disturbances from servers and HVAC systems. Collectively, light and noise disturbances may affect local wildlife populations (e.g. induced stress responses, disrupted communication, and hunting, etc.).
Impact	**Impacts on air, water, and soil quality** AirTrunk has minimal direct material impact on air, water, and soil quality. Indirect impacts may occur through upstream value chain activities such as emission of non-GHG pollutants (e.g., manufacturing and construction activities emit air pollutants such as sulfur dioxide, nitrogen oxide, and dust), and contamination from waste (e.g., e-waste, construction waste etc.).

29 ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) is maintained and continuously improved by Global Canopy, UNEP FI and UNEP-WCMC

NATURE
MATERIAL RISKS AND OPPORTUNITIES

Methodology

Nature-related risks that arise from dependencies and impacts on nature can be classified into physical risks, transition risks or systemic risks.[30]

A comprehensive screening of all potential physical and transition risks[31] across the value chain has been conducted to examine how nature can pose threats to AirTrunk's operations and financial performance.

These risks were subsequently evaluated based on their likelihood and severity using AirTrunk's internal risk framework.

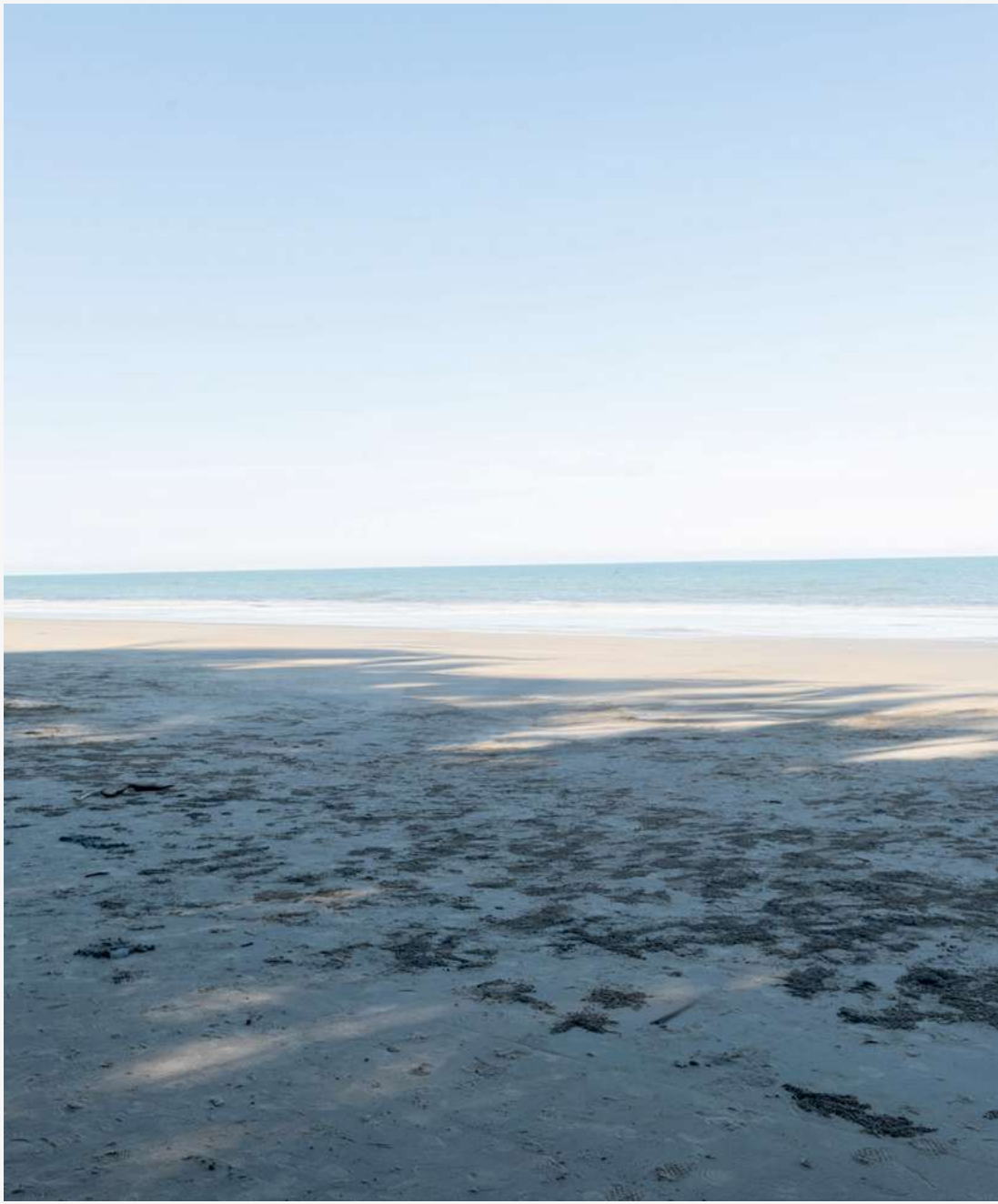
In this context, 'Likelihood' is defined as the probability of a threat materialising, considering both the frequency and timeline (short-, medium-, or long-term). 'Severity' refers to the anticipated magnitude of the risk's impact on the business. This aligns with the magnitude indicators suggested under the TNFD's LEAP approach, which includes costs and potential reductions in revenue.

During the risk assessment process, AirTrunk recognised overlaps with risks that were previously identified in the Climate section, specifically those related to climate change, energy, and water. As a result, these overlapping risks have been intentionally omitted from this section, given that they have already been addressed comprehensively under the Climate section.

Risks and Opportunities Analysis

All identified nature-related risks were found to pose a low to moderate threat to AirTrunk. Given that AirTrunk's dependencies on nature are limited (excluding energy and water, which is already covered under the climate risk register), the overall exposure to physical risk is minimal. With awareness and action towards nature conservation among civil society, governments, and financial institutions continuing to evolve, this resulted in a relatively higher number of transition risks with higher risk levels.

In summary, the most significant risks – constraints on access to land and reputational risks – are assessed to have a medium materiality, with the remaining risks having lower materiality. In general, nature risks are less material for AirTrunk compared to climate risks.



30 Please refer to Glossary of Terms for definitions of nature-related physical, transition, and systemic risks.
31 For this iteration, systemic risks have been excluded due to the sheer number and severity of implications associated, making it unsuitable to qualify.

Table 18: Key nature-related risks and opportunities identified

CATEGORY		NATURE-RELATED RISKS	DESCRIPTION	OPPORTUNITIES IDENTIFIED
TRANSITION	**Policy**	**Constraints on access to land**	Regulatory pressures and societal demands to preserve natural areas **may limit land availability for industrial activities** like data centres, increasing competition for suitable locations.	Become a trusted steward for nature in the data centre sector with **proactive engagement locally**.
	Reputational	**Reputational risks**[32]	**Nature-related incidents**, whether on-site or within AirTrunk's value chain, can trigger scrutiny and attention, potentially damaging reputation. This can further impact customer acquisition, investor interest, talent retention, and regulatory approval.	Become a trusted steward for nature in the data centre sector with all **claims substantiated by reputable bodies and sources**.
	Policy	**Increased nature-related regulations**	**Compliance with new nature-related regulations**[33] (e.g., tariffs, reporting requirements on waste, biodiversity measures, green spaces, etc.) can drive up operational costs as companies work to meet requirements and avoid penalties.	**Promote resource efficiency, environmental responsibility and quality data collection** to improve our nature footprint, enhance operations and ease reporting processes.
	Market	**Nature-related financial instruments**	**Growing investor interest in nature reporting and performance** can impact AirTrunk's future access to capital markets for financial products tied to positive nature impacts.	Unlock lower cost of capital by **positioning AirTrunk favourably for opportunities in Sustainable Finance in APJ** (e.g. sustainability-linked loans, Green Financing Framework)
	Market	**Customer nature-related preferences**	If AirTrunk's customers impose **nature-related supplier targets and disclosure requirements**, failing to meet these standards could strain customer relations.	**Become the preferred solution provider and collaborator** for sustainability-conscious customers.
PHYSICAL	**Chronic**	**Employee well-being**	The quality of the workplace environment, including green spaces and noise levels, directly affects employee well-being, with implications for **productivity, turnover, and talent attraction**.	**Integrate nature into the workplace environment** to enhance employee well-being.
	Chronic	**Increased vulnerability to physical hazards**	**Loss of vegetation** at data centre sites can degrade ecosystem services, such as shading and soil erosion prevention, leading to **increased building maintenance and cooling costs**.	Ensure resilience against physical hazards by **building innovative data centres with future-proof solutions**.

32 Other reputational risks include greenwashing allegations, which is difficult to quantify. However, AirTrunk is aware of such risks and will actively ensure that its nature-related claims are evidence based.
33 Excluding regulations included in CRO analysis (e.g., water, climate, etc.)

Scenario Analysis

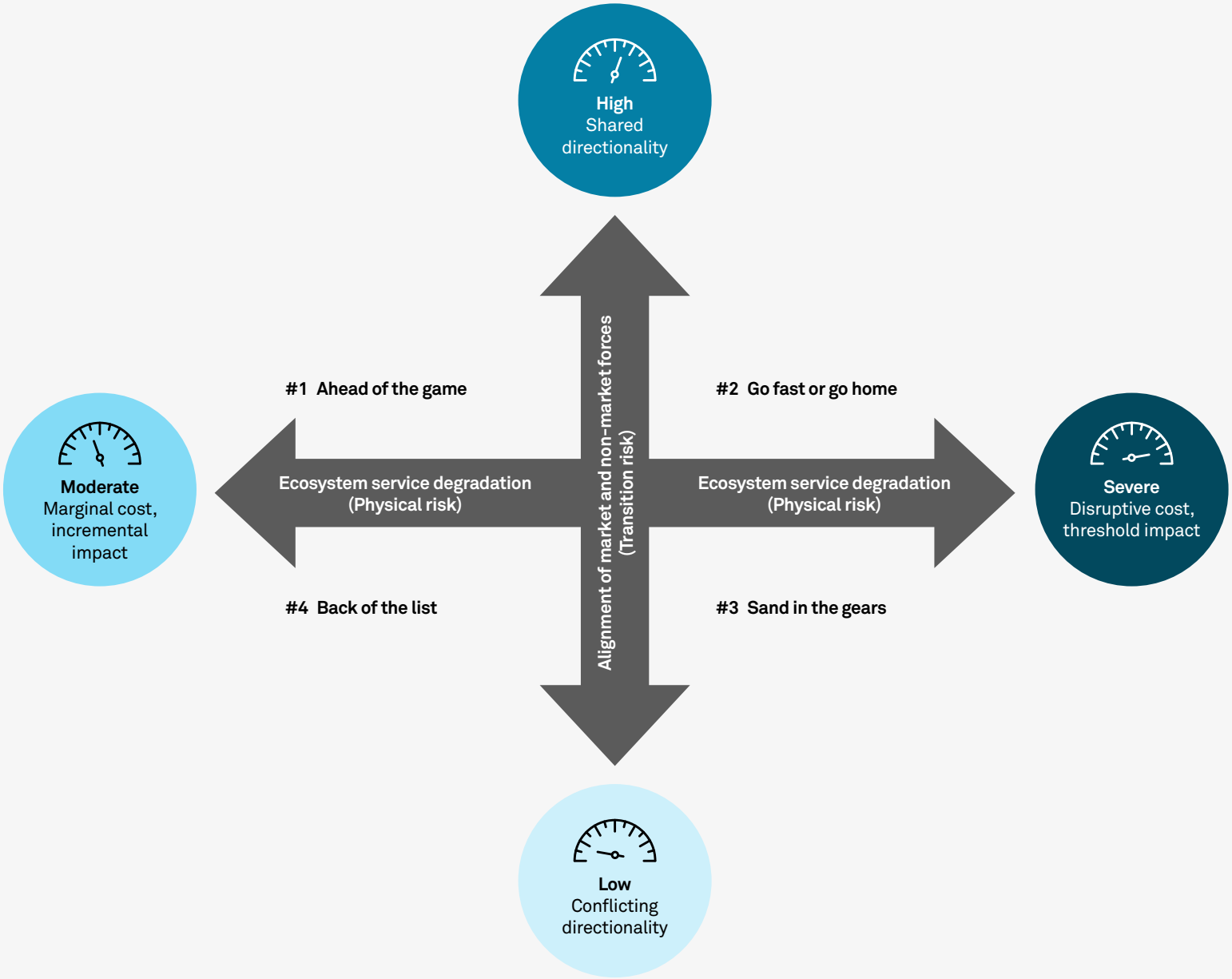
Scenario analysis was conducted to explore the implications of varying nature loss and the responses of governments, markets and society on AirTrunk's business. The severity and magnitude of nature-related risks were assessed in four prospective scenarios recommended by TNFD. Refer to TNFD for details on each scenario.

Scenario analysis shows that AirTrunk's exposure to physical risk remains comparatively low in relation to transition risks. This is attributed to the fact that AirTrunk's data centres are typically located within a relatively controlled urban environment and already exhibit a considerable degree of resilience against physical hazards.

In contrast, transition risks are significantly heightened in Scenarios #1 and #2. These scenarios envisage a future where governments, businesses, and civil society pay greater attention to nature than the current global levels of ambition. In such scenarios, transition risks become more pronounced. This underscores the importance of proactive management and strategic planning in navigating these potential risks.

While AirTrunk encounters only low to moderate levels of nature-related risks, the company recognises the value of extending its efforts beyond merely mitigating risks to actively embracing opportunities in the stewardship of nature.

Figure 9: Nature-risk scenarios outlined by TNFD



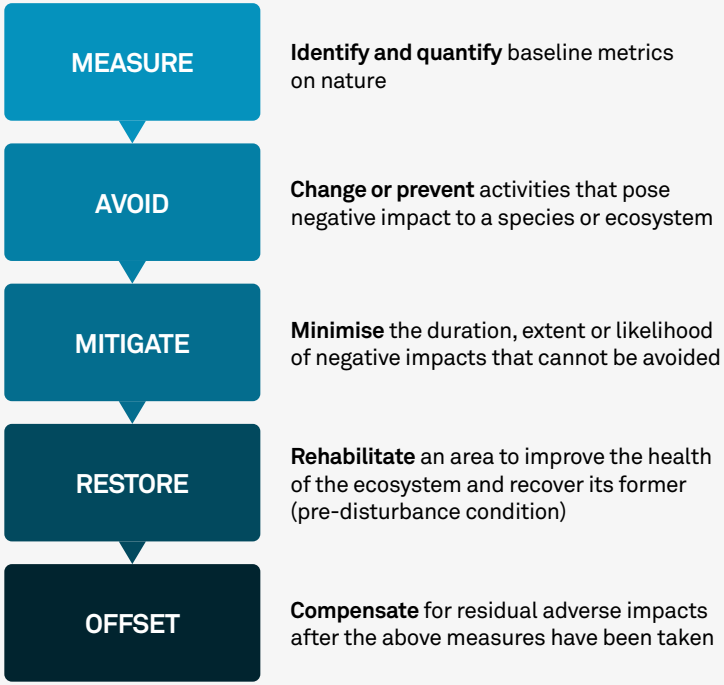
NATURE RESPONSE PLAN

Strategy for Nature and Biodiversity

AirTrunk is committed to deepen assessment of its impacts and dependencies on nature, and responsibly manage its footprint through mitigation and restoration actions. AirTrunk has formulated a response strategy aimed at reducing the probability and impact of nature-related risks while also capitalising on opportunities to improve its business operations and strategic positioning.

AirTrunk has adopted an adaptation of the Global Mitigation Hierarchy for Nature Conservation.[34] This includes the steps of 'Avoid', 'Mitigate', 'Restore' and finally 'Offset', with an added step of 'Measure' at the outset to facilitate AirTrunk's impact baselining efforts. Our aim is to adhere to the principles of halting, and, where feasible, potentially reversing the loss of nature.[35]

Figure 10: Hierarchy of nature-related initiatives



34 Developed by the International Finance Corporation's Performance Standard 6
35 AirTrunk is exploring different methodologies to assess mitigation actions and biodiversity restoration or enhancement based on site-specific biodiversity assessments and detailed ecosystem and species data.

Initiatives

In partnership with the Jacaranda Flame Consulting programme at the University of Sydney, AirTrunk identified 31 initiatives aimed at reducing the likelihood and impact of nature-related risks, while simultaneously harnessing opportunities to enhance business operations and strategic positioning.

From this pool of initiatives, nine were shortlisted based on their feasibility and anticipated positive effects on nature. These nine initiatives have been broadly classified according to the hierarchy of nature-related initiatives, with priority allocated to 'Measure', followed by 'Avoid', 'Mitigate', 'Restore', and finally 'Offset'.

Furthermore, AirTrunk may tap into support from partnerships, sustainable financing, and target-setting exercises, all aimed at expediting progress and ensuring heightened efficacy.

Our partnership with the Foundation for National Parks and Wildlife

AirTrunk is a key corporate partner to the Foundation for National Parks and Wildlife (FNPW), a non-government organisation in Australia with a mission to safeguard our wilderness and wildlife for future generations.

Since FY22, AirTrunk has continued to build on our partnership with FNPW to support biodiversity and protect our local environments.

AirTrunk's continued support of the Lane Cove River regeneration project has seen the removal of invasive species and weeds, returning the river to its natural state, and allowing native biodiversity to flourish.

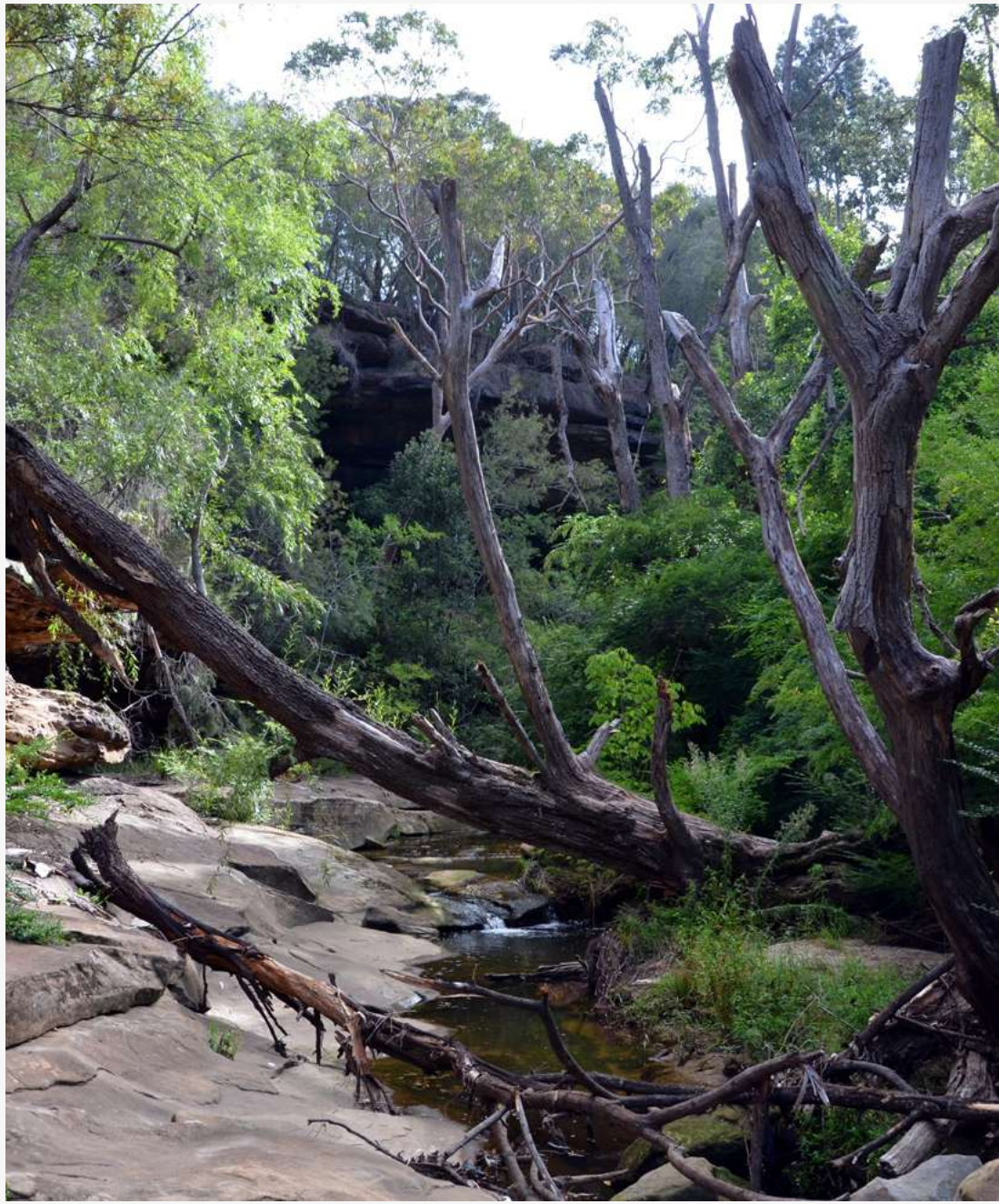
AirTrunk's support of the Western Sydney bushfire and flood recovery program has seen:

- Trees planted in bushfire and flood affected areas;
- Health restored to natural habitats;
- Habitat improvements that support threatened species including koalas; and
- Further protection for local communities and threatened species against extreme weather events.

Engagement with Indigenous Peoples, Local Communities and Affected Stakeholders

AirTrunk recognises that understanding nature and nature-related issues from the perspectives of Indigenous Peoples, local communities and affected stakeholders helps organisations manage and respond to nature-related issues more effectively. By establishing inclusive, respectful and open collaboration with Indigenous Peoples, local communities and affected stakeholders, opportunities become available to collectively restore and protect nature for the benefit of these groups and also support AirTrunk in adopting responsible business practices.

Although AirTrunk has not yet formally involved Indigenous Peoples, local communities, and other impacted stakeholders in the current phase, it is actively devising strategies to meaningfully engage with relevant stakeholders, in alignment with the guidelines set forth by the TNFD.



NATURE
METRICS AND TARGETS

Metrics

The metrics reported herein have been selected based on guidelines provided by TNFD's extensive list of global and sector[36] disclosure metrics. This includes both core and additional metrics.

For our FY24 disclosure, AirTrunk has strategically focused on metrics that are most relevant to AirTrunk's business operations and where robust data collection processes were already in place.

AirTrunk recognises that this is its initial venture into nature metrics disclosure and sees this as an opportunity for further refinement. AirTrunk is committed to enhancing its disclosure in the future, starting from FY25, by striving to incorporate more metrics that reflect our operations and impact on nature.[37] This is part of AirTrunk's ongoing journey towards greater transparency and accountability in our sustainability efforts.

Table 19: Nature-related metrics

TNFD METRIC	UNIT	FY24	NOTES
GHG emissions	tCO_2e	Refer to Climate Metrics and Targets or FY24 Sustainability Report.	
Total spatial footprint	ha	28.55	
Extent of land-use change	ha	AirTrunk mostly purchases land that is already industrial/semi-industrial and ready for development. Hence, minimal vegetation clearing is required. Planted and remnant native vegetation were cleared for one of our Australian site. Biodiversity offsets were purchased in accordance with the Biodiversity Offsets Scheme (BOS), required under Section 7.14 of the BC Act.	
Total extent of land conserved or restored	ha	AirTrunk adheres to land conservation and restoration policies where required. Our data centres tend to be in industrial or semi-industrial areas, therefore activities such as land conservation and restoration, including rehabilitation of degraded ecosystems, may have limited applicability or relevance.	
Extent of land that is sustainably managed	ha	AirTrunk's operations do not impact natural ecosystems through land management practices. Sustainable management practices are less applicable in this context.	
Pollutants released to soil	litres	AirTrunk is currently refining data collection and will provide further information in future reports.	
Wastewater discharged	-	AirTrunk is currently refining data collection of wastewater discharge volume and quality (e.g., temperature, pollutants) and will provide further information in future reports.	
Waste generated	tonnes	Refer to FY24 Sustainability Report for details.	
Plastic pollution	-	AirTrunk is currently refining data collection and will provide further information in future reports.	
Non-GHG air pollutants	-	AirTrunk is currently monitoring non-GHG air pollutants such as PM, NOx, CO and hydrocarbons released from its generator sets and construction works in Sydney, and will provide further information in future reports.	

36 We have referenced draft sector metrics for the Infrastructure sector due to overlaps in key business activities (i.e., building management).
37 AirTrunk is assessing the use of digital tools and other reliable quantification methodologies, such as Ecosystem Intactness Index (EII) and Biodiversity Intactness Index (BII) among others, to establish a baseline for nature and biodiversity metrics, further align with TNFD's recommended disclosures, and enable more accurate tracking of progress over time.

TNFD METRIC	UNIT	FY24 NOTES
Water withdrawal from areas of water scarcity	m^3	Refer to FY24 Sustainability Report for details.
Quantity of high-risk natural commodities sourced	-	AirTrunk uses cement, copper, aluminium, and steel extensively in its data centre buildings and equipment. In addition, iron, lithium, sand, and gasoline are used in moderate quantities, and zinc, silver, and nickel in minimal quantities. AirTrunk is currently mapping out its suppliers and consumption of high-risk natural commodities. It is also developing a supplier engagement plan to evaluate suppliers' sustainable management plans and work with them to reduce consumption of high-risk natural commodities and its associated embodied carbon. Further information will be provided when available.
Vulnerability to nature-related transition risks	-	Nature-related physical and transition risks were assessed qualitatively in the current iteration. Quantitative results will be provided in future reports when available.
Vulnerability to nature-related physical risks	-	
Fines/penalties	USD	AirTrunk has not incurred any fines/penalties
Investment deployed towards nature-related opportunities	USD	257,314
Products and services with positive impacts on nature	-	Currently not relevant for the data centre industry.
Light pollution	-	While AirTrunk does not measure this, we do not anticipate high levels of light pollution from our sites. We will consider minimising light pollution in our designs going forward.
Noise pollution	-	We comply with local noise pollution limits during the construction and operation phases at each data centre.
Proportion of recycled materials used	-	AirTrunk is currently refining data collection and will provide further information in future reports.
Supplier engagement	-	AirTrunk is currently refining data collection and will provide further information in future reports.

Targets

This year marks a significant milestone for AirTrunk as we embark on our first year of reporting for the Taskforce on Nature-related Financial Disclosures (TNFD). We have taken a bold step forward by integrating nature as a target in our corporate strategy, reflecting our commitment to environmental sustainability and corporate responsibility.

Our Commitment	**Deepen assessment of our impacts on nature, and responsibly manage our footprint through mitigation and restoration actions.**
Our Targets	▪ Conduct nature conservation or restoration projects to positively contribute to local biodiversity, ecosystem health and community well-being within 20km of our sites. ▪ Conduct biodiversity assessment for 100% of new sites to understand the local ecosystem and ecological health.

Progressing Towards Our Goals

For our inaugural year of reporting on nature, we have taken steps to ensure alignment with TNFD requirements and are proud to be the first data centre operator to join TNFD Early Adopters. We have conducted a comprehensive analysis of on-site and value chain dependencies, impacts, risks, and opportunities across our portfolio. This has led to the establishment of AirTrunk's nature and biodiversity commitments and marks the first step of our journey. Moving forward, our action plan focuses on the following initiatives:

- Establish AirTrunk baseline in FY25 as a reference point for accurate nature measurement, accountability and progress.
- Assess our nature impact at existing and new sites.
- Partner with suppliers on nature-related measurement and preservation activities to minimise the footprint of our value chain.
- Develop stakeholder map to ensure effective partnerships to address biodiversity knowledge gaps and related regional policies.
- Assess our strategic suppliers on nature-related commitments and performance.
- Further develop and enhance our metrics and tracking processes to improve transparency in our TNFD disclosure.

See our FY24 Sustainability Report to see how nature is integrated into AirTrunk's sustainability strategy.

APPENDICES

CLIMATE

IFRS S2 Q&A

RECOMMENDED DISCLOSURE	REPORT SECTION / PAGE NUMBER
Governance	
6(a) the governance body(s) (which can include a board, committee or equivalent body charged with governance) or individual(s) responsible for oversight of climate-related risks and opportunities. Specifically, the entity shall identify that body(s) or individual(s) and disclose information about:	See sub-sections below
(i) how responsibilities for climate-related risks and opportunities are reflected in the terms of reference, mandates, role descriptions and other related policies applicable to that body(s) or individual(s);	Our Climate and Nature Governance/P.9
(ii) how the body(s) or individual(s) determines whether appropriate skills and competencies are available or will be developed to oversee strategies designed to respond to climate-related risks and opportunities;	
(iii) how and how often the body(s) or individual(s) is informed about climate-related risks and opportunities;	
(iv) how the body(s) or individual(s) takes into account climate related risks and opportunities when overseeing the entity's strategy, its decisions on major transactions and its risk management processes and related policies, including whether the body(s) or individual(s) has considered trade-offs associated with those risks and opportunities; and	
(v) how the body(s) or individual(s) oversees the setting of targets related to climate-related risks and opportunities, and monitors progress towards those targets (see paragraphs 33–36), including whether and how related performance metrics are included in remuneration policies (see paragraph 29(g)).	
6(b) management's role in the governance processes, controls and procedures used to monitor, manage and oversee climate-related risks and opportunities, including information about:	See sub-sections below
(i) whether the role is delegated to a specific management-level position or management-level committee and how oversight is exercised over that position or committee; and	Our Climate and Nature Governance/P.9
(ii) whether management uses controls and procedures to support the oversight of climate-related risks and opportunities, and, if so, how these controls and procedures are integrated with other internal functions.	

Strategy	
Climate-related risks and opportunities	
10. An entity shall disclose information that enables users of general purpose financial reports to understand the climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects. Specifically, the entity shall:	See sub-sections below
(a) describe climate-related risks and opportunities that could reasonably be expected to affect the entity's prospects;	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Deep Dive: Water Stress, Deep Dive: Lower Carbon Preferences/P.13-22
(b) explain, for each climate-related risk the entity has identified, whether the entity considers the risk to be a climate-related physical risk or climate-related transition risk;	Climate Material Risks and Opportunities - Risks and Opportunities Analysis/P.14-15
(c) specify, for each climate-related risk and opportunity the entity has identified, over which time horizons—short, medium or long-term— the effects of each climate-related risk and opportunity could reasonably be expected to occur; and	
(d) explain how the entity defines 'short-term', 'medium-term' and 'long-term' and how these definitions are linked to the planning horizons used by the entity for strategic decision-making.	Climate Methodology - Scenario Analysis/P.12
Business model and value chain	
13. An entity shall disclose information that enables users of general purpose financial reports to understand the current and anticipated effects of climate-related risks and opportunities on the entity's business model and value chain. Specifically, the entity shall disclose:	See sub-sections below
(a) a description of the current and anticipated effects of climate-related risks and opportunities on the entity's business model and value chain; and	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Deep Dive: Water Stress, Deep Dive: Lower Carbon Preferences/P.13-22
(b) a description of where in the entity's business model and value chain climate-related risks and opportunities are concentrated (for example, geographical areas, facilities and types of assets).	Climate Material Risks and Opportunities - Risks and Opportunities Analysis/P.13-15 About This Report/P.8

Strategy	
Strategy and decision-making	
14. An entity shall disclose information that enables users of general purpose financial reports to understand the effects of climate-related risks and opportunities on its strategy and decision-making. Specifically, the entity shall disclose:	See sub-sections below
(a) information about how the entity has responded to, and plans to respond to, climate-related risks and opportunities in its strategy and decision-making, including how the entity plans to achieve any climate-related targets it has set and any targets it is required to meet by law or regulation. Specifically, the entity shall disclose information about:	Climate Material Risks and Opportunities/P.13-25
(i) current and anticipated changes to the entity's business model, including its resource allocation, to address climate-related risks and opportunities (for example, these changes could include plans to manage or decommission carbon, energy or water intensive operations; resource allocations resulting from demand or supply-chain changes; resource allocations arising from business development through capital expenditure or additional expenditure on research and development; and acquisitions or divestments);	
(ii) current and anticipated direct mitigation and adaptation efforts (e.g. through changes in production processes or equipment, relocation of facilities, workforce adjustments, and changes in product specifications);	
(iii) current and anticipated indirect mitigation and adaptation efforts (e.g. through working with customers and supply chains);	
(iv) any climate-related transition plan the entity has, including information about key assumptions used in developing its transition plan, and dependencies on which the entity's transition plan relies; and	Climate Material Risks and Opportunities - AirTrunk's Sustainable Financing Journey/P.25
(v) how the entity plans to achieve any climate-related targets, including any greenhouse gas emissions targets, described in accordance with paragraphs 33–36.	Our Net Zero Roadmap to 2030 and Beyond/P.26
(b) information about how the entity is resourcing, and plans to resource the activities disclosed in accordance with paragraph 14(a).	Climate Material Risks and Opportunities - Financial Implications/P.23-25
(c) quantitative and qualitative information about the progress of plans disclosed in previous reporting periods in accordance with paragraph 14(a).	Refer to FY24 Sustainability Report Climate Risks and Opportunities - Deep dive: water stress, Deep dive: lower carbon preferences/P.16-22 Climate Metrics and Targets/P.27-29

Financial position, financial performance and cash flows	
15. An entity shall disclose information that enables readers of general purpose financial reports to understand:	See sub-sections below
(a) the effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows for the reporting period (current financial effects); and	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Financial Implications/P.14-15, 23 AirTrunk only provided information on effects at a high-level (e.g., available costs and qualitative financial line items) – detailed commentary on financial position and performance will be disclosed when available.
(b) the anticipated effects of climate-related risks and opportunities on the entity's financial position, financial performance and cash flows over the short, medium and long-term, taking into consideration how climate-related risks and opportunities are included in the entity's financial planning (anticipated financial effects).	
16. Specifically, an entity shall disclose quantitative and qualitative information about:	See sub-sections below AirTrunk does not provide quantitative information for certain effects under the following basis: 19. An entity need not provide quantitative information about the current or anticipated financial effects of a climate-related risk or opportunity if the entity determines that: a) those effects are not separately identifiable; or; b) the level of measurement uncertainty involved in estimating those effects is so high that the resulting quantitative information would not be useful.
(a) how climate-related risks and opportunities have affected its financial position, financial performance and cash flows for the reporting period;	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Financial Implications/P.14-15, 23 AirTrunk only provided information on effects at a high-level (e.g., available costs and qualitative financial line items). Detailed commentary on financial position and performance will be disclosed when available.
(b) the climate-related risks and opportunities identified in paragraph 16(a) for which there is a significant risk of a material adjustment within the next annual reporting period to the carrying amounts of assets and liabilities reported in the related financial statements;	N/A AirTrunk does not have readily available information on effects of climate risk on carrying amounts of assets and liabilities.

(c) how the entity expects its financial position to change over the short-, medium- and long-term, given its strategy to manage climate-related risks and opportunities, taking into consideration:	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Financial Implications/P.14-15, 23 AirTrunk only provided information on effects at a high-level (e.g., available costs and qualitative financial line items). Detailed commentary on financial position and performance will be disclosed when available.
(i) its investment and disposal plans (for example, plans for capital expenditure, major acquisitions and divestments, joint ventures, business transformation, innovation, new business areas, and asset retirements), including plans the entity is not contractually committed to; and	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Financial Implications/P.14-15, 23
(ii) its planned sources of funding to implement its strategy; and	Climate Material Risks and Opportunities - Financial Implications/P.24-25
(d) how the entity expects its financial performance and cash flows to change over the short-, medium- and long-term, given its strategy to manage climate-related risks and opportunities (for example, increased revenue from products and services aligned with a lower-carbon economy; costs arising from physical damage to assets from climate events; and expenses associated with climate adaptation or mitigation).	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Financial Implications/P.14-15, 23 AirTrunk only provided information on effects at a high-level (e.g., available costs and qualitative financial line items). Detailed commentary on financial position and performance will be disclosed when available.
21. If an entity determines that it need not provide quantitative information about the current or anticipated financial effects of a climate-related risk or opportunity applying the criteria set out in paragraphs 19–20, the entity shall:	See sub-sections below
(a) explain why it has not provided quantitative information;	Climate Material Risks and Opportunities - Financial Implications/P.23
(b) provide qualitative information about those financial effects, including identifying line items, totals and subtotals within the related financial statements that are likely to be affected, or have been affected, by that climate-related risk or opportunity; and	
(c) provide quantitative information about the combined financial effects of that climate-related risk or opportunity with other climate-related risks or opportunities and other factors unless the entity determines that quantitative information about the combined financial effects would not be useful.	N/A AirTrunk is unable to provide quantitative information about combined financial effects at this time due to current levels of uncertainty.

Climate resilience	
22. An entity shall disclose information that enables users of general purpose financial reports to understand the resilience of the entity's strategy and business model to climate-related changes, developments and uncertainties, taking into consideration the entity's identified climate-related risks and opportunities. The entity shall use climate-related scenario analysis to assess its climate resilience using an approach that is commensurate with the entity's circumstances. In providing quantitative information, the entity may disclose a single amount or a range. Specifically, the entity shall disclose:	See sub-sections below
(a) the entity's assessment of its climate resilience as at the reporting date, which shall enable users of general purpose financial reports to understand:	
(i) the implications, if any, of the entity's assessment for its strategy and business model, including how the entity would need to respond to the effects identified in the climate-related scenario analysis;	Climate Risks and Opportunities - Deep dive: water stress, Deep dive: lower carbon preferences/P.16-22
(ii) the significant areas of uncertainty considered in the entity's assessment of its climate resilience;	Appendices - Climate, Models and Underlying Data for Scenario Analysis/P.57-58
(iii) the entity's capacity to adjust or adapt its strategy and business model to climate change over the short-, medium- and long-term, including:	See sub-sections below
(1) the availability of, and flexibility in, the entity's existing financial resources to respond to the effects identified in the climate-related scenario analysis, including to address climate-related risks and to take advantage of climate-related opportunities;	Climate Material Risks and Opportunities - Financial Implications/P.24-25
(2) the entity's ability to redeploy, repurpose, upgrade or decommission existing assets; and	
(3) The effect of the entity's current and planned investments in climate-related mitigation, adaptation and opportunities for climate resilience; and	Climate Material Risks and Opportunities - Risks and Opportunities Analysis, Financial Implications/P.14-15, 23
(b) how and when the climate-related scenario analysis was carried out, including:	See sub-sections below
(i) information about the inputs the entity used, including:	
(1) which climate-related scenarios the entity used for the analysis and the sources of those scenarios;	Climate Methodology - Scenario Analysis/P.12 Appendices - Climate, Models and Underlying Data for Scenario Analysis/P.57-58
(2) whether the analysis included a diverse range of climate-related scenarios;	
(3) whether the climate-related scenarios used for the analysis are associated with climate-related transition risks or climate-related physical risks;	
(4) whether the entity used, among its scenarios, a climate-related scenario aligned with the latest international agreement on climate change;	

(5) why the entity decided that its chosen climate-related scenarios are relevant to assessing its resilience to climate-related changes, developments or uncertainties;	Climate Methodology - Scenario Analysis/P.12 Appendices - Climate, Models and Underlying Data for Scenario Analysis/P.57-58
(6) the time horizons the entity used in the analysis; and	
(7) what scope of operations the entity used in the analysis (e.g. the operating locations and business units used in the analysis);	About this report/P.8
(ii) the key assumptions the entity made in the analysis, including assumptions about:	See sub-sections below
(1) climate-related policies in the jurisdictions in which the entity operates;	Climate Methodology - Scenario Analysis/P.12 Appendices - Climate, Models and Underlying Data for Scenario Analysis/P.57-58
(2) macroeconomic trends;	
(3) national or regional-level variables (for example, local weather patterns, demographics, land use, infrastructure and availability of natural resources);	
(4) energy usage and mix;	
(5) developments in technology; and	
(iii) the reporting period in which the climate-related scenario analysis was carried out (see paragraph B18).	
Risk management	
25(a) the processes and related policies the entity uses to identify, assess, prioritise and monitor climate-related risks, including information about:	See sub-section below
(i) the inputs and parameters the entity uses (e.g. information about data sources and the scope of operations covered in the processes);	About this report/P.8 Climate Methodology - Identification and Prioritisation/P.11
(ii) whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related risks;	Climate Methodology - Identification and PrioritisationP.11
(iii) how the entity assesses the nature, likelihood and magnitude of the effects of those risks (for example, whether the entity considers qualitative factors, quantitative thresholds or other criteria);	
(iv) whether and how the entity prioritises climate-related risks relative to other types of risk;	
(v) how the entity monitors climate-related risks; and	
(vi) whether and how the entity has changed the processes it uses compared with the previous reporting period;	
25(b) the processes the entity uses to identify, assess, prioritise and monitor climate-related opportunities, including information about whether and how the entity uses climate-related scenario analysis to inform its identification of climate-related opportunities; and	

25(c) the extent to which, and how, the processes for identifying, assessing, prioritising and monitoring climate-related risks and opportunities are integrated into and inform the entity's overall risk management process.	Climate Methodology - Identification and Prioritisation/P.11 Our Climate and Nature Governance/P.9
Metrics and targets	
Climate-related metrics	
29. An entity shall disclose information relevant to the cross-industry metric categories of:	See subsections below
(a) greenhouse gases—the entity shall:	
(i) disclose its absolute gross greenhouse gas emissions generated during the reporting period, expressed as metric tonnes of CO2 equivalent, classified as:	
(1) Scope 1 greenhouse gas emissions;	Climate Metrics and Targets/P. 27
(2) Scope 2 greenhouse gas emissions; and	
(3) Scope 3 greenhouse gas emissions;	
(ii) measure its greenhouse gas emissions in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (2004) unless required by a jurisdictional authority or an exchange on which the entity is listed to use a different method for measuring its greenhouse gas emissions;	Climate Metrics and Targets/P. 27 Refer to FY24 Sustainability Report
(iii) disclose the approach it uses to measure its greenhouse gas emissions (see paragraphs B26–B29) including:	See sub-sections below
(1) the measurement approach, inputs and assumptions the entity uses to measure its greenhouse gas emissions;	Refer to FY24 Sustainability Report
(2) the reason why the entity has chosen the measurement approach, inputs and assumptions it uses to measure its greenhouse gas emissions; and	
(3) any changes the entity made to the measurement approach, inputs and assumptions during the reporting period and the reasons for those changes;	
(iv) for Scope 1 and Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(1)–(2), disaggregate emissions between:	See sub-sections below
(1) the consolidated accounting group (for example, for an entity applying IFRS Accounting Standards, this group would comprise the parent and its consolidated subsidiaries); and	N/A Not relevant to AirTrunk
(2) other investees excluded from paragraph 29(a)(iv)(1) (for example, for an entity applying IFRS Accounting Standards, these investees would include associates, joint ventures and unconsolidated subsidiaries);	

(v) for Scope 2 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(2), disclose its location-based Scope 2 greenhouse gas emissions, and provide information about any contractual instruments that is necessary to inform users' understanding of the entity's Scope 2 greenhouse gas emissions;	Climate Metrics and Targets/P.27
(vi) for Scope 3 greenhouse gas emissions disclosed in accordance with paragraph 29(a)(i)(3), disclose	See sub-sections below
(1) the categories included within the entity's measure of Scope 3 greenhouse gas emissions, in accordance with the Scope 3 categories described in the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (2011); and	Climate Metrics and Targets/P.27
(2) additional information about the entity's Category 15 greenhouse gas emissions or those associated with its investments (financed emissions), if the entity's activities include asset management, commercial banking or insurance (see paragraphs B58–B63)	N /A Not relevant to AirTrunk
(b) climate-related transition risks—the amount and percentage of assets or business activities vulnerable to climate-related transition risks;	N/A AirTrunk will disclose quantified information in subsequent years. In preparing disclosures to meet the requirements in paragraph 29(b)–(d), an entity shall use all reasonable and supportable information that is available to the entity at the reporting date without undue cost or effort.
(c) climate-related physical risks—the amount and percentage of assets or business activities vulnerable to climate-related physical risks;	
(d) climate-related opportunities—the amount and percentage of assets or business activities aligned with climate-related opportunities;	
(e) capital deployment—the amount of capital expenditure, financing or investment deployed towards climate-related risks and opportunities;	Climate Material Risks and Opportunities - Financial Implications/P.23-25 AirTrunk discloses quantified information on capital expenditure where available; total amounts are not available and will be disclosed in subsequent years.
(f) internal carbon prices—the entity shall disclose:	See sub-sections below
(i) an explanation of whether and how the entity is applying a carbon price in decision-making (for example, investment decisions, transfer pricing and scenario analysis); and	Climate Metrics and Targets/P.27
(ii) the price for each metric tonne of greenhouse gas emissions the entity uses to assess the costs of its greenhouse gas emissions	
(g) remuneration—the entity shall disclose:	See sub-sections below
(i) a description of whether and how climate-related considerations are factored into executive remuneration (see also paragraph 6(a)(v)); and	Climate Metrics and Targets/P.27
(ii) the percentage of executive management remuneration recognised in the current period that is linked to climate-related considerations.	

Climate-related targets	
32. An entity shall disclose industry-based metrics that are associated with one or more particular business models, activities or other common features that characterise participation in an industry. In determining the industry-based metrics that the entity discloses, the entity shall refer to and consider the applicability of the industry-based metrics associated with disclosure topics described in the Industry-based Guidance on Implementing IFRS S2.	Climate Metrics and Targets/P.28 AirTrunk currently follows the IFRS S2 Real-estate industry-based metrics.
33. An entity shall disclose the quantitative and qualitative climate-related targets it has set to monitor progress towards achieving its strategic goals, and any targets it is required to meet by law or regulation, including any greenhouse gas emissions targets. For each target, the entity shall disclose:	See sub-sections below
(a) the metric used to set the target (see paragraphs B66–B67)	Climate Metrics and Targets/P.29 Refer to FY24 Sustainability Report
(b) the objective of the target (for example, mitigation, adaptation or conformance with science-based initiatives);	
(c) the part of the entity to which the target applies (for example, whether the target applies to the entity in its entirety or only a part of the entity, such as a specific business unit or specific geographical region);	
(d) the period over which the target applies;	
(e) the base period from which progress is measured;	
(f) any milestones and interim targets;	
(g) if the target is quantitative, whether it is an absolute target or an intensity target; and	
(h) how the latest international agreement on climate change, including jurisdictional commitments that arise from that agreement, has informed the target.	
34. An entity shall disclose information about its approach to setting and reviewing each target, and how it monitors progress against each target, including:	See sub-sections below
(a) whether the target and the methodology for setting the target has been validated by a third party;	Refer to FY24 Sustainability Report
(b) the entity's processes for reviewing the target;	
(c) the metrics used to monitor progress towards reaching the target; and	
(d) any revisions to the target and an explanation for those revisions.	
35. An entity shall disclose information about its performance against each climate-related target and an analysis of trends or changes in the entity's performance.	

36. For each greenhouse gas emissions target disclosed in accordance with paragraphs 33–35, an entity shall disclose:	See sub-sections below
(a) which greenhouse gases are covered by the target;	Climate Metrics and Targets/P.29
(b) whether Scope 1, Scope 2 or Scope 3 greenhouse gas emissions are covered by the target;	Refer to FY24 Sustainability Report
(c) whether the target is a gross greenhouse gas emissions target or net greenhouse gas emissions target. If the entity discloses a net greenhouse gas emissions target, the entity is also required to separately disclose its associated gross greenhouse gas emissions target;	
(d) whether the target was derived using a sectoral decarbonisation approach; and	
(e) the entity's planned use of carbon credits to offset greenhouse gas emissions to achieve any net greenhouse gas emissions target. In explaining its planned use of carbon credits the entity shall disclose information including:	See sub-sections below
(i) the extent to which, and how, achieving any net greenhouse gas emissions target relies on the use of carbon credits;	Refer to FY24 Sustainability Report
(ii) which third-party scheme(s) will verify or certify the carbon credits;	
(iii) the type of carbon credit, including whether the underlying offset will be nature-based or based on technological carbon removals, and whether the underlying offset is achieved through carbon reduction or removal; and	
(iv) any other factors necessary for users of general purpose financial reports to understand the credibility and integrity of the carbon credits the entity plans to use (for example, assumptions regarding the permanence of the carbon offset).	

MODELS AND UNDERLYING DATA FOR SCENARIO ANALYSIS

Water Stress

Models and underlying data for scenario analysis of water stress

Climate-related scenarios come from the Aqueduct Water Risk Atlas (WRA) developed by the World Resources Institute (WRI) to assess water stress risk across all locations in which AirTrunk operates (Melbourne, Sydney, Singapore, Tokyo, Osaka, Hong Kong, and Johor Bahru) and the time horizons cover the short-term (2030), medium-term (2050) and long-term (2080). Scenario analysis from the WRA was carried out in FY23.

These scenarios were chosen because they are the ones used by the WRA, the tool which calculates future projections of water stress. These projections are based on PCR-GLOWB-based hydrological projection of future global water states with Coupled Model Intercomparison Project CMIP) 6 (HYPFLOWSCI6). HYPFLOWSCI6 uses climate forcing data from multiple future scenarios of socioeconomic and climate conditions, which are run through five global climate models (GCMs). The five GCMs (GFDL-ESM4, IPSL-CM6A-LR, MPI-ESM1-2-HR, MRI-ESM2-0, and UKESM1-0-LL) are run through each scenario to account for uncertainty in climate models.

Furthermore, these scenarios were deemed valid for the analysis as they cover two extremes, and are largely aligned with the scenarios analyses conducted for other CROs allowing for consistency and comparison across CROs. Additionally, the WRA is used as an industry benchmark and therefore has greater value in allowing for comparison of water stress across organisations than site-level assessments would.

Uncertainties

The WRA is tailored to compare regions on a larger scale and thus is to be used as a first level prioritisation tool. For greater accuracy, it is recommended to do deeper dive assessments to understand local conditions at a site-level.

The WRA is subject to periodic updates which may change water stress projections and therefore uncertainties in the applicability of water stress indicators in a given point of time. For instance, new ratings were released in August 2023 as the WRA re-ran models to produce new projections, updated its baseline period to 2019, and incorporated newer climate data and inputs. As a result, baseline data had been updated leading to different projections of water stress than previously reported.

Scenario	Description
Optimistic (SSP1-2.6)	Represents a future that limits the rise in average global surface temperatures by 2100 to 1.3°C to 2.4°C and is characterised by sustainable socioeconomic growth: stringent environmental regulations and effective institutions, rapid technological change and improved water use efficiencies, and low population growth.
Business as usual (SSP3-7.0)	Represents a middle-of-the-road future where temperatures increase by a range of 2.8°C to 4.6°C by 2100 and is characterised by regional competition and inequality, including slow economic growth, weak governance and institutions, low investment in the environment and technology, and high population growth, especially in developing countries.
Pessimistic (SSP5-8.5)	Represents a future where temperatures increase up to 3.3°C to 5.7°C by 2100 and is characterised by fossil-fuelled development with rapid economic growth and globalisation powered by carbon-intensive energy, strong institutions with high investment in education and technology but a lack of global environmental concern, and the population peaking and declining in the 21st century.

Lower Carbon Preferences

Models and underlying data for scenario analysis of lower carbon preferences

Scenario analysis for lower carbon preferences is based on a proprietary model made in collaboration with consultants, which uses a combination of internal inputs and external datasets. Internal inputs include AirTrunk's annual DC load, ramp up projections and assumed percentage of MWh, for which RE needs to be procured for customers while external inputs include projected RE prices sold to industry. Scenario analysis for lower carbon preferences was carried out in FY23.

Proxy scenarios were used and broadly align with the IPCC scenarios used for other CROs (e.g., Speedy Net Zero (SSP1-2.6) and Hot House World (SSP5-8.5) while a baseline scenario was also used that falls in between the two extremes. To calculate RE prices, AirTrunk used projections from the POLES-Enerdata model.

Uncertainties

There are inherent challenges to projecting RE costs under longer time horizons. In terms of the current scenario analysis used, there are limitations on its applicability to AirTrunk's broader climate risk strategy as proxy scenarios were used which may not exactly align with SSP1-2.6 and SSP5-8.5. Additionally, RE price projections had to be derived based on related data inputs (grid price and RE premiums) as comparable projected RE price data across all markets was unavailable. Given these limitations, AirTrunk will endeavour to project RE costs across scenarios and time horizons with more precision as more external data becomes available.

Proxy scenario	Definition
EnerGreen - proxied for Speedy Net Zero (SSP1-2.6)	Explores implications of more stringent climate policies, with countries fulfilling or overachieving their NDC commitments and then regularly revising their emissions goals. These changes lead to significant improvements in energy efficiency and strong deployment of renewables. In this cleaner trajectory, global temperature increase is limited to below 2°C.
EnerBlue	Based on successful achievement of current NDCs emission targets for 2030, as well as a continuation of consistent efforts post 2030. Sustained growth in emerging countries is a powerful driver of global energy demand, but policies play a key role in controlling the pace of growth. This leads to a global temperature rise between 2-2.5°C.
EnerBase – proxied for Hot House World (SSP5-8.5)	Describes a world in which existing policies are tendentially continued and trends recently observed are pursued. The lack of support for GHG emission mitigation affects the entire energy systems over a long period, with increasing energy demand and limited fuel diversification. This leads to a temperature rise above 3°C.

NATURE

TNFD Disclosure Requirements

RECOMMENDED DISCLOSURE	REPORT SECTION / PAGE NUMBER
Governance	
A. Describe the board's oversight of nature-related dependencies, impacts, risks and opportunities.	Our Climate and Nature Governance/P.9
B. Describe management's role in assessing and managing nature-related dependencies, impacts, risks and opportunities.	
C. Describe the organisation's human rights policies and engagement activities, and oversight by the board and management, with respect to Indigenous Peoples, local communities, affected and other stakeholders, in the organisation's assessment of, and response to, nature-related dependencies, impacts, risks and opportunities.	Our Climate and Nature Governance/P.9
Strategy	
A. Describe the nature-related dependencies, impacts, risks and opportunities the organisation has identified over the short-, medium- and long-term.	Nature Dependencies and Impacts/P.33-36 Nature Material Risks and Opportunities/P.37-39 Opportunities/P.42
B. Describe the effect nature-related dependencies, impacts, risks and opportunities have had on the organisation's business model, value chain, strategy and financial planning, as well as any transition plans or analysis in place.	Nature Response Plan/P.40-41
C. Describe the resilience of the organisation's strategy to nature-related risks and opportunities, taking into consideration different scenarios.	Scenario analysis/P.39
D. Disclose the locations of assets and/or activities in the organisation's direct operations and, where possible, upstream and downstream value chain(s) that meet the criteria for priority locations. Note: According to TNFD, priority locations refer to material locations and/or sensitive locations. Please refer to the Glossary for the full definition of material locations and sensitive locations.	Deep-dive: Identifying ecologically sensitive locations/P.34 AirTrunk assessed priority locations of its sites based on criteria of sensitive locations recommended by TNFD. Identification of material locations may be conducted in the future as AirTrunk refines its understanding of location-specific dependencies, impacts, risks, and opportunities.

Risk & impact management	
A(i) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its direct operations.	Nature Methodology/P.31-32
A(ii) Describe the organisation's processes for identifying, assessing and prioritising nature-related dependencies, impacts, risks and opportunities in its upstream and downstream value chain(s).	Nature Methodology/P.31-32 Nature Dependences and Impacts - Overview of analysis/P.33
B. Describe the organisation's processes for managing nature-related dependencies, impacts, risks and opportunities.	Nature Response Plan/P.40-41
C. Describe how processes for identifying, assessing, prioritising and monitoring nature-related risks are integrated into and inform the organisation's overall risk management processes.	Our Climate and Nature Governance/P.9
Metrics and targets	
A. Disclose the metrics used by the organisation to assess and manage material nature-related risks and opportunities in line with its strategy and risk management process.	Metrics/P.42-43
B. Disclose the metrics used by the organisation to assess and manage dependencies and impacts on nature.	
C. Describe the targets and goals used by the organisation to manage nature-related dependencies, impacts, risks and opportunities and its performance against these.	Targets/P.44

Glossary of Terms

The following definitions were sourced from the TNFD Glossary.

TERMS	DEFINITION
Dependencies and impacts	
Dependencies (on nature)	Dependencies are aspects of environmental assets and ecosystem services that a person or an organisation relies on to function. A company's business model, for example, may be dependent on the ecosystem services of water flow, water quality regulation and the regulation of hazards like fires and floods; provision of suitable habitat for pollinators, who in turn provide a service directly to economies; and carbon sequestration.
Impacts (on nature)	Changes in the state of nature (quality or quantity), which may result in changes to the capacity of nature to provide social and economic functions. Impacts can be positive or negative. They can be the result of an organisation's or another party's actions and can be direct, indirect or cumulative. A single impact driver may be associated with multiple impacts.
Impact drivers	A measurable quantity of a natural resource that is used as a natural input to production (e.g. the volume of sand and gravel used in construction) or a measurable non-product output of a business activity (e.g. a kilogram of NOx emissions released into the atmosphere by a manufacturing facility).
Risks	
Nature-related physical risks	Nature-related physical risks are risks to an organisation that result from the degradation of nature and consequential loss of ecosystem services. These risks can be acute or chronic. Nature-related physical risks arise as a result of changes in the biotic (living) and abiotic (non-living) conditions that support healthy, functioning ecosystems. These risks are usually location specific.
Acute risks	Occurrence of short term, specific events that change the state of nature. For example, oil spills, forest fires or pests affecting a harvest.
Chronic risks	Gradual changes to the state of nature. For example, pollution stemming from pesticide use or climate change.
Nature-related transition risks	Nature-related transition risks are risks to an organisation that result from a misalignment of economic factors with actions aimed at protecting, restoring and/or reducing negative impacts on nature. These risks can be prompted, for example, by changes in regulation and policy, legal precedent, technology or investor sentiment and consumer preferences. Categories of nature-related transition risks include policy risk, market risk, technology risk, reputational risk and liability risk.
Policy risks	Changes in the policy context due to new (or enforcement of existing) policies to create positive impacts on nature or mitigate negative impacts on nature.
Market risks	Changing dynamics in overall markets, including changes in consumer preferences, which arise from changing physical, regulatory, technological, and reputational conditions and stakeholder dynamics. For example, the market value of a company is affected by assets that have decreased in value because there is insufficient freshwater for the production process, or the value of the business' production process is reduced by the emergence of new technologies that require less water to operate.
Technology risks	Substitution of products or services with a reduced impact on nature and/or reduced dependency on nature. For example, the replacement of plastics with biodegradable containers.
Reputational risks	Changes in perception concerning an organisation's actual or perceived nature impacts, including at the local, economic, and societal level. This can result from direct company impacts, industry impacts, and/or impacts of activities upstream and/or downstream in a value chain.
Liability risks	Liability risks that arise directly or indirectly from legal claims. As laws, regulations, and case law related to an organisation's preparedness for nature action evolves, the incident or probability of contingent liabilities arising from an organisation may increase.

Others	
Ecosystem services	Activities that support the protection, regeneration or restoration of habitats and ecosystems, including areas both within and outside the organisation's direct control.
Habitat loss	The reduction in the amount of space where a particular species, or group of species can survive and reproduce.
High-risk natural commodities	High-risk natural commodities refer to commodities or products where production has significant negative impacts on nature. Organisations should refer to the SBTN High Impact Commodity List. Organisations should also indicate what proportion of these commodities represented are IUCN threatened or CITES listed species.
Priority locations	Locations that are material locations; and/or sensitive locations.
Material locations	Locations where an organisation has identified material nature-related dependencies, impacts, risks, and opportunities in its direct operations and upstream and downstream value chain(s).
Sensitive locations	Locations where the assets and/or activities in its direct operations – and, where possible, upstream and downstream value chain(s) – interface with nature in: ▪ Areas important for biodiversity; and/or ▪ Areas of high ecosystem integrity; and/or ▪ Areas of rapid decline in ecosystem integrity; and/or ▪ Areas of high physical water risks; and/or ▪ Areas of importance for ecosystem service provision, including benefits to Indigenous Peoples, local communities and stakeholders.


AIRTRUNK