




Thriving together



2023
Sustainability
Report



OUR BUSINESS

Climate-related financial disclosures

Swire Pacific supports the recommendations of the Financial Stability Board’s Task Force on Climate-related financial disclosures (TCFD) and started producing annual disclosures that consider these recommendations in 2018.

The following statement, structured in line with the recommended disclosures of the TCFD, details the risks and opportunities presented by climate change, their implications for our businesses and actions we are taking to respond.

Further reading

[Task Force on Climate-related financial disclosures](#)

Governance



Describe the organisation’s governance around climate-related risks and opportunities.

- The Swire Pacific (SPAC) Board, led by an Executive Chairman, has ultimate accountability for climate change-related strategies and the decarbonisation performance of all subsidiaries under Swire Pacific.
- The Board is briefed biannually by the Group Head of Sustainability on climate-related issues and our performance against our decarbonisation targets.
- The Group Finance Director of Swire Pacific has responsibility for the Group sustainability strategy (including Climate Change) and the Group Sustainable Development Office.

- The Board is kept informed of climate risks by the GRMC, which reports to the Board via the Audit Committee.
- Swire Pacific maintains a three lines of defence risk governance structure. The first line of defence includes the Swire Group Environment Committee (SGEC) and five subject specific working groups, including the Climate and TCFD working groups. They comprise representatives from our divisions and are responsible for identifying and managing specific areas of risk, proposing policies and reporting performance to the GRMC.
- The Swire Pacific Risk Management Committee (SPACRMC) and four risk forums, including the Environment and Social and Governance Risk Forum, were introduced to strengthen oversight of risks, including climate change-related risks (see ESG risk management).

FIRST LINE

Swire Group Environmental Committee (SGEC)

SwireTHRIVE Working Groups

- Formulate and review climate strategy
- Approve targets and initiatives
- Executive authority over and accountability for the management of climate risk

- Plan and implement climate change mitigation and adaptation policies and measures
- Facilitate the integration of climate-related issues into daily operations

2023 Activity

- The SGEC and Climate Change Working Group both met three times in 2023:
 - Delivering a full scope 3 inventory of the Group
 - Piloting a Group Internal Carbon Pricing mechanism
 - Developing a strategy towards the use of carbon removal projects within our Net Zero Strategy
 - Developing the Group’s Carbon Transition Action Plan
 - Updated the Group Climate Change Policy

Swire Pacific Board of Directors

- The Board is actively engaged in formulating and implementing SwireTHRIVE 2.0
- Accountable for sustainability matters including progress against our 2030 key performance indicators including Carbon

2023 Activity

- Met twice a year to review climate-related risks and to monitor progress against our decarbonization targets
- Approved the pilot implementation of the ICP model

SECOND LINE

Group Risk Management Committee

SPAC Risk Management Committee

Environment and Social Governance Risk Forum

- Oversees the management of risks relating to climate change and to the sustainability of the businesses, products and services of the Company and its business units
- Review any significant climate change risks and opportunities
- Provide objective support, feedback and ultimately assurance to the Group via the GRMC, that all climate risks have been identified and are being managed

2023 Activity

- The Risk Forums and Committee’s meet a total of 9 times annually
- The GRMC reviewed the Group and divisional risk registers and assessed how effectively risks are being managed. It also issued the revised climate change policy to our operating companies
- The Risk Forums advised the GRMC on emerging risks including climate change
- Analysed climate risk events that materialised and developed best practice guidance

THIRD LINE

Group Internal Audit Department

- Provide a second opinion as to whether the internal controls, mitigations and crisis response measures are effective

2023 Activity

- Conducted an audit of sustainability (including Climate Change) policy adoption across the Group



- The GRMC, SPACRMC and the new risk forums form the second line of defence, providing oversight and assurance to the Board and the Audit Committee that risks are being managed effectively.
- The third line of defence is the internal audit function of the Group and the audit functions in our operating companies.
- The Board provides oversight over all the three lines.
- At a Group and operating company level we also conduct regular risk identification and analysis and review management processes throughout the year through the risk forums and our enterprise risk management (ERM) system. We have corporate risk registers, in which climate change has been identified as an emerging risk.
- To provide additional oversight and direction, the Group Head of Sustainability reports periodically to the Board and leadership team on sustainability matters.
- Both the Board and leadership team have sufficient knowledge of climate-related issues and the impacts of such issues on the company's business and operations. Regular training on climate-related issues is provided to ensure that they are kept abreast of the latest developments. In 2023, the Board received training on ESG trends and insights which included climate change and climate-related risks.
- Regarding the financial impact climate change may have on the Company, the Environmental, Social and Governance Risk Forum provides updates to the Group Risk Management Committee and the Audit Committee.
- The Group Head of Sustainability is also required to periodically update the Audit Committee on the governance and oversight of ESG operating and external reporting matters, as well as the assessment and management of material environmental and social risks.
- In 2023, we conducted a double and dynamic materiality review to gather feedback from internal and external stakeholders through qualitative interviews and focus groups. The topics of climate mitigation, climate adaptation, as well as water and waste management were identified as material issues for our business continuity and development. These issues align with the environmental priorities under SwireTHRIVE.

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

- The Chairman, Finance Director and divisional heads meet at least twice a year to consider sustainability matters. These meetings provide direction and oversight to the SGEC, which comprises divisional sustainability heads and is chaired by the Finance Director of Swire Pacific. The SGEC meets three times a year. It has the following responsibilities related to climate change:
 - Oversee and implement SwireTHRIVE (including on climate) and sustainability policies
 - Report on Group sustainability activities and performance to the GRMC (including emissions and energy use) and on compliance with sustainability policies
 - Review and report on legislative, regulatory and other sustainability developments
- Our Climate Change Policy guides our approach to climate change mitigation, adaptation and resilience.
- Climate change and the management of waste and water resources are priorities under the SwireTHRIVE strategy.

Strategy



Describe the climate related risks and opportunities the organisation has identified over the short, medium, and long term.

- Climate change carries risks for our business. Flooding, extreme weather events and increasing temperatures can adversely affect our assets, operations, employees and suppliers. There are also regulatory, market and reputational risks.
- Climate change appears on our risk registers at both Group and operating company levels and is discussed in our 2023 Annual Report and Sustainability Report.
- Climate change also creates opportunities, it stimulates business innovation and facilitates the transition to a lower carbon economy. By developing low-carbon and climate-resilient buildings, products, and services, we can meet increasing market demand and mitigate the potential operational costs from extreme weather conditions, such as maintenance and insurance premiums. We have sustainability-linked loans and are committed to integrating sustainability considerations into our future financing mechanisms.

Explore more

- [ESG risk management](#)
- [Assessing materiality](#)
- [Waste](#)
- [Water](#)

Further reading

- [Swire Pacific Annual Report 2023](#)
- [Climate Change Policy](#)



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

- Analysis of our climate-related risks and opportunities:

Key climate-related physical risks

● Low ● Moderate ● High

Risk category	Risk	Financial implications	Potential impact rating ¹				Mitigation strategies
			Short-Medium term (2030)		Long-term (2050)		
			Low carbon	High carbon	Low carbon	High carbon	
Acute	- Coastal and fluvial flooding	- More spending to improve the adaptive capacity of our assets and to mitigate adverse effects	●	●	●	●	<ul style="list-style-type: none"> - We have identified short and medium-term mitigation measures for individual buildings, including: <ul style="list-style-type: none"> - Upgrading flood protection measures and alert systems - Glass façade inspections - Smart Monitoring Systems
	- Typhoons		●	●	●	●	
Chronic	- Extreme temperatures and heat stress	<ul style="list-style-type: none"> - Lower productivity due to extreme heat - More spending on cooling 	●	●	●	●	<ul style="list-style-type: none"> - Chiller efficiency improvements - Energy Efficiency Policy - Health & Safety Policy
	- Water stress and drought	<ul style="list-style-type: none"> - Decreased production volume due to reduced water supply - More spending to improve water efficiency of our assets 	●	●	●	●	

1. Potential financial impact rating (low, moderate, high) is based on inherent climate risk scores, which are a function of risk and vulnerability scores. We align the modelled financial impacts of physical climate risks with the financial impact dimension of our enterprise risk management process to determine what we consider a high, medium or low financial impact (Low = up to HK\$100m; Moderate = HK\$100m-1bn; High = HK\$1bn+).



Key climate-related transition risks

● Low ● Moderate ● High

Risk category	Risk	Financial implications	Potential impact ²				Mitigation strategies
			Short-Medium term (2030)		Long-term (2050)		
			Low carbon	High carbon	Low carbon	High carbon	
Policy regulations	- Carbon pricing for manufacturing and construction	- Carbon taxes and more spending on offsets	●	●	●	●	- Implementation of internal carbon pricing - Developing Group Carbon Removal Strategy
	- More ambitious national decarbonisation plans and tighter building energy codes	- More spending to improve energy efficiency and to meet compliance	●	●	●	●	- We In-line with the NDCs from Hong Kong and the Chinese Mainland we have committed to achieving Net-Zero by 2050 and on reducing our scopes 1 and 2 emissions by 50% by 2030 - Sustainable Building Design Policy requires all new buildings with construction floor area (CFA) of more than 5,000 m2 to obtain a minimum of the second highest relevant grade or above under an internationally or locally recognised Green Building certification - In 2023, 100% of wholly owned new projects under development achieved the highest green building rating and 94% of wholly owned existing buildings were certified green buildings - Energy Efficiency Policy commits our businesses to adopt industry best practices to improve energy efficiency in their operations
	- Increasing focus on scope 3 emissions	- Increased supply chain costs - Increased reporting and compliance costs	●	●	●	●	- Fully mapped our scope 3 emissions - Piloting the use of the EcoVadis platform to improve visibility of scope 3 emissions - Engaging with key packaging suppliers on use of recycled materials - Setting embodied carbon targets for new developments

2. Potential financial impact rating (low, moderate, high) is based on inherent climate risk scores, which are a function of risk and vulnerability scores. We align the modelled financial impacts of physical climate risks with the financial impact dimension of our enterprise risk management process to determine what we consider a high, medium or low financial impact (Low = up to HK\$100m; Moderate = HK\$100m-1bn; High = HK\$1bn+).



Key climate-related transition risks

● Low ● Moderate ● High

Risk category	Risk	Financial implications	Potential impact ²				Mitigation strategies
			Short-Medium term (2030)		Long-term (2050)		
			Low carbon	High carbon	Low carbon	High carbon	
Reputational damage	<ul style="list-style-type: none"> - Increased reputation and litigation risks - Greenwash accusations 	<ul style="list-style-type: none"> - Less revenue due to changes in what consumers want - Litigation costs 	●	●	●	●	<ul style="list-style-type: none"> - Have short-medium-term targets as well as the longer-term Net Zero commitment - Developing Climate Transition Action Plan to outline our roadmap out to our net zero target - Regularly report on our performance against targets - Both Swire Coca-Cola and Swire Properties decarbonisation targets have been approved by SBTi

2. Potential financial impact rating (low, moderate, high) is based on inherent climate risk scores, which are a function of risk and vulnerability scores. We align the modelled financial impacts of physical climate risks with the financial impact dimension of our enterprise risk management process to determine what we consider a high, medium or low financial impact (Low = up to HK\$100m; Moderate = HK\$100m-1bn; High = HK\$1bn+).



Investments

Due to the high levels of associated emissions in our aviation investments, we have included a summary of their potential climate-related risks.

Risk category	Risk	Financial implications	Time horizon	Mitigation strategies
Physical risks				
Acute	<ul style="list-style-type: none"> Coastal flooding 	<ul style="list-style-type: none"> Flight delays and diversions due to flooding at airports, customer compensation and physical damage to aircraft and other assets 	<ul style="list-style-type: none"> Long-term 	<ul style="list-style-type: none"> Majority of Cathay Pacific flights are to or from the Hong Kong International Airport (HKIA). They work closely with the Airport Authority of the Hong Kong International Airport (AAHK) in assessing medium to long-term climate resilience at HKIA
	<ul style="list-style-type: none"> Tropical cyclones 	<ul style="list-style-type: none"> Flight delays and diversions, customer compensation and physical damage to aircraft and other assets (e.g. hangars at airports) 	<ul style="list-style-type: none"> Long-term 	
Chronic	<ul style="list-style-type: none"> Extreme temperatures and heat stress 	<ul style="list-style-type: none"> Lower productivity due to extreme heat Restrictions on working outside 	<ul style="list-style-type: none"> Long-term 	
Transition risks				
Policy & regulations	<ul style="list-style-type: none"> Carbon pricing for aviation 	<ul style="list-style-type: none"> Carbon taxes and more spending on offsets 	<ul style="list-style-type: none"> Medium – Long-term 	<ul style="list-style-type: none"> Fuel efficiency improvements Fleet Renewal Committed to using Sustainable Aviation Fuel (SAF) for 10% of Cathay Pacific jet fuel consumption by 2030 Invested in SAF manufacturer Fulcrum Bioenergy SAF offtake agreements in place with several suppliers Corporate Sustainable Aviation Fuel Programme
Reputational damage	<ul style="list-style-type: none"> Vilification of aviation – flight shaming 	<ul style="list-style-type: none"> Less demand for and therefore revenue from air travel 	<ul style="list-style-type: none"> Medium – Long-term 	
Markets	<ul style="list-style-type: none"> Changes in demand for products and services 	<ul style="list-style-type: none"> Less demand for and therefore revenue from air travel, particularly from executives doing more video conferencing 	<ul style="list-style-type: none"> Medium – Long-term 	

**Key climate-related opportunities**

Opportunity category	Opportunity	Financial implications	Time horizon	Strategy
Businesses where we have operational control				
Resource efficiency	<ul style="list-style-type: none"> Use of more efficient production and distribution processes 	<ul style="list-style-type: none"> Lower operating costs because of higher energy efficiency 	<ul style="list-style-type: none"> Short – Medium-term 	<ul style="list-style-type: none"> Swire Properties has an Energy Use Intensity target for its operations and provides free energy audits for tenants Swire Coca-Cola has both Water and Energy Use Intensity targets to drive operational efficiencies
Products and services	<ul style="list-style-type: none"> Increased market demand for climate-resilient, green energy efficient buildings 	<ul style="list-style-type: none"> Increased revenue due to potentially higher demand of green buildings Increased revenue due to shifts in market preferences 	<ul style="list-style-type: none"> Medium – Long-term 	<ul style="list-style-type: none"> Sustainable Building Design Policy In 2023, 100% of wholly owned new projects under development achieved green building certification ratings
Markets	<ul style="list-style-type: none"> Sustainable financing (Sustainable Linked Loans and Bonds, Green Bonds) 	<ul style="list-style-type: none"> Diversified financing sources Attract green investment Lower costs of capital 	<ul style="list-style-type: none"> Short – Medium-term 	<ul style="list-style-type: none"> Sustainable finance represented more than 47% of total financing across the Group at the end of 2023 Swire Properties targets for at least 80% of its bond and loan facilities to come from green financing by 2030 Around 60% of Swire Properties' current financing is from green bonds, green loans, and sustainability-linked loans
Investments				
Resource efficiency	<ul style="list-style-type: none"> Use of more efficient modes of transport 	<ul style="list-style-type: none"> Lower operating costs because of higher energy efficiency 	<ul style="list-style-type: none"> Medium-term 	<ul style="list-style-type: none"> Fleet Renewal – adding more fuel-efficient aircraft
Energy source	<ul style="list-style-type: none"> Use of lower-emission sources of energy 	<ul style="list-style-type: none"> Increased revenues from increased demand for products and services 	<ul style="list-style-type: none"> Long-term 	<ul style="list-style-type: none"> Committed to using Sustainable Aviation Fuel (SAF) for 10% of Cathay Pacific jet fuel consumption by 2030
Products and services	<ul style="list-style-type: none"> Development and/or expansion of low emission goods and services 	<ul style="list-style-type: none"> Increased revenues resulting from increased demand for products and services 	<ul style="list-style-type: none"> Short-term 	<ul style="list-style-type: none"> Fly Greener provides their customers an opportunity to offset their carbon emissions from air travel Corporate Sustainable Aviation Fuel Programme

- See the respective 2023 Sustainability Report of Swire Properties, Cathay Pacific and Swire Coca-Cola for details of their climate risk assessments.



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

- We are assessing the implications of different long-term climate scenarios. Our Sustainable Development Office and risk functions are working together to assess the robustness of our climate strategy and the uncertainties associated with its execution.
- Our analysis shows that there is an overall low to moderate risk of physical climate impacts for our global portfolio of assets, in all assessed climate scenarios. This is attributed to the strength of our adaptive capacity and mitigation measures.
- Similarly, the analysis shows our business and sustainability strategies allow us to effectively manage the risks associated with a transition to a net zero economy.

Risk management



Describe the organisation's processes for identifying and assessing climate-related risks.

- We are assessing how vulnerable our businesses are to flood, heat stress, water stress and extreme weather events.
- We are using the Climanomics tool provided by S&P to assess the climate risks to our businesses and the resulting financial implications.
 - We have assessed the physical climate-related risks to and opportunities for over 850 of the Group's most valuable assets (by insured value), under four climate change scenarios (RCP 2.6, 4.5, 6 and 8.5). This data has allowed us to accurately evaluate the exposure of specific assets and operations in selected timeframes, from the intermediate (2030) to the long-term (2050).
 - We have considered the impact of carbon pricing transition risks based on the carbon pricing models included in IPCC Shared Socioeconomic Pathways SSP3-60 and SSP3-45.

- In 2023, via the Climate and TCFD working groups we worked with a consultancy to incorporate the results from the Climanomics assessment into a broader climate scenario analysis. A summary of the results of this exercise can be found in this report. A similar exercise was conducted for our Beverage Division.
- The findings will be incorporated into the Group's ERM system.

- In accordance with the TCFD's recommendations, we have developed two distinct and plausible climate change scenarios to stress test the resilience of our business and strategy to varying future operating environments.
- The scenarios used by Swire Pacific have been informed by several publicly available climate scenarios from recognised authorities including the International Energy Agency ("IEA"), the Network for Greening the Financial System ("NGFS") and the IPCC who developed the Shared Socio-Economic Pathways ("SSPs"). The scenarios incorporate global and local government policies, environmental, economic, social, and technology indicators and market trends. The scenarios are not intended to be predictions of the future; rather, they seek to stress-test our business against several plausible future states. The scenarios look at time horizons, a short-medium term of 2030 and long-term of 2050.

- **High Carbon Scenario:** Represents a 'business as usual' world which does not forcefully pursue decarbonisation, and where no additional action is taken above the current policies that are in place in 2023. Emissions slow to a plateau in the 2030's and fall slightly by 2050. Almost all the net growth in energy demand to 2050 is met by low emissions sources, but this leaves annual emissions at around current levels. As a result, global average temperatures continue to rise, passing the 1.5°C mark around 2030 and expected to hit 2.6°C above pre-industrial levels in 2100. The focus for stakeholders under this scenario is on adaptation as the world fails to transition to a low-carbon economy.

- **Low Carbon Scenario:** Represents a world where global warming is limited to 1.5°C through stringent climate policies, innovation and demand-led change reaching global net zero CO2 emissions around 2050. In addition to meeting all current net zero pledges, additional pledges from countries are met and there is a significant increase in public and private investment into green technologies. The share of renewables in the global electricity supply increases to more than 60% by 2030 and there are much more stringent government policies such as stricter energy efficiency building codes, significant uptake of Sustainable Aviation Fuel and the use of recycled material in packaging. Carbon prices are introduced across all regions and rise on average to USD\$130 per tonne by 2030 and to USD\$250 per tonne by 2050.

- These scenarios together represent balanced science-based scenarios that offer a contrast between the best-case and worst-case scenarios for us to sufficiently consider the risks and opportunities posed by climate change that could potentially impact our business operations and our value chain.
- Swire Properties have conducted detailed asset-level assessments to evaluate the degree of sensitivity and adaptive capacity of individual developments under the potential impacts of climate change. These assessments consider system robustness such as existing flood prevention systems and façade conditions; system redundancy, such as the capacity of chillers and water supply; and susceptibility to past extreme weather events.

Explore more

ESG risk management





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

- Our Climate Change Policy deals with decarbonising our businesses and managing and adapting to climate risk.
- Through the ISO 14001 Environmental Management System and ISO 50001 Energy Management System, we manage our operational risks related to climate change, carbon and energy management. For example, our Property Division manages its daily operational risks related to climate change, carbon and energy management. As of 31st December 2023, approximately 99% of its properties (measured by GFA) in Hong Kong and the Chinese Mainland are certified to the ISO 14001 and ISO 50001 management systems.
- We have set ambitious 2030 decarbonisation targets (see metrics and targets section below). Our goal is to achieve net zero carbon emissions by 2050.
- Our sustainable development fund (SD Fund) makes available up to HK\$100 million per year for sustainable development projects. The money is available for investments in sustainability technologies and solutions that would not otherwise meet our financial targets. In 2023, we funded trials of new technologies intended to help our operating companies meet their carbon, water and waste targets.
- Our business continuity plans cover extreme weather events. We have a Business Recovery Plan in place to ensure that we maintain critical crisis planning and execution capabilities in the event of major incidents, including extreme weather events. Swire Properties has local crisis response plans for all its buildings.
- In 2023, we began piloting the use of internal carbon pricing (ICP) within Swire Properties, Swire Coca-Cola and HAECO. These companies, collectively account for over 96% of our scopes 1 and 2 emissions. We have adopted a hybrid ICP model which includes:
 - **Carbon Fee:** By linking each unit of CO₂ emissions to a fixed cost, our business units will be further incentivised to integrate low-carbon considerations into their business

decisions. Budgets calculated through the fee are set aside for decarbonisation projects that drive or provide additional carbon reduction.

- **Shadow Carbon Price:** Applicable to future investment decisions and planning for future projects. It is a tool used to reveal hidden risks and opportunities throughout our operations and to support strategic decision making related to future capital investments.
- To reduce embodied carbon from its development projects and construction activities, our Property Division has established performance-based targets on embodied carbon for concrete, rebar and structural steel for future projects in Hong Kong. They have also specified that low-carbon materials should be adopted in their projects, such as concrete with pulverised fuel ash or ground granulated blast-furnace slag, rebar and structural steel with recycled content, and the optimisation of structural design to minimise material consumption.
- Swire Properties is a leader in developing certified green buildings that are energy-efficient and low-carbon by design and in operation. In 2023, 100% of its wholly owned new projects under development achieved the highest green building rating, 94% of its wholly owned existing buildings were certified green buildings, and over 97% of its 2023 gross rental income came from certified green buildings.
- Since 2011, Swire Properties have worked with Tsinghua University's Joint Research Centre for Building Efficiency and Sustainability, to develop and test methods to increase energy efficiency and improve environmental performance in our businesses. This collaboration continues to generate substantial energy savings and allows us to communicate and share new ideas and practices with our employees, business partners, industry peers and other researchers.
- Swire Properties integrates sustainability criteria into the risk assessment process for new acquisitions, including climate adaptation and resilience, flood risk assessment, energy efficiency and carbon emissions.

- Swire Coca-Cola has identified a 'next generation' Cold Drinks Equipment (Vending Machines, Fridges etc.) that uses 50% less energy compared with the current equipment. Implementation of this new equipment across the Chinese Mainland, will result in an estimated reduction in scope 3 emissions by 2030 that equates to just over a third of the overall reductions required to meet its Science Based Target (SBT).
- Swire Coca-Cola has committed to sourcing 100% Renewable Energy by 2026. They are investing in solar photovoltaic (PV) systems on their sites and purchasing renewable energy from electricity retailers and utilities. In 2023, 25% of their total electricity use was from renewable sources.
- Swire Coca-Cola uses independent third parties to assess water risk for its bottling plants, so as to form source vulnerability assessments. The findings are integrated into source water protection plans and are regularly reviewed.
- We support the efforts of the Hong Kong Business Environment Council to promote awareness of climate change in the business community through their Net-zero Carbon Charter.

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

- Climate-related risks are identified and managed as part of our ERM system at both a Group and operating company level.
- Climate change has been identified as one of our top ten risks in our Group risk register. Climate risk, along with all other top risks, are reviewed by the Risk Forums and the Group Risk Management Committee on a quarterly basis.
- More details on our approach to risk management can be found in the risk management section of this report and the risk management section of the Annual Financial Report.

Further reading

[Swire Pacific Annual Report 2023 - Risk management section](#)



Metrics and targets



Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.

- We measure:

Metric	Unit of measure	2019	2020	2021	2022	2023 ³
Carbon emissions (scope 1 and 2) – market-based method	Tonnes of CO ₂ e	-	763,000	662,000	569,000	597,000
Carbon emissions (scope 3)	Tonnes of CO ₂ e	-	-	-	7,381,000	10,468,000
Total electricity used by the Group from non-renewable sources	Million kWh	1,409	861	828	755	812
Total renewable electricity generated on our sites	Million kWh	16.2	20.7	20.5	22.0	29.6
Total renewable electricity procured	Million kWh	-	11.5	103.0	126.1	180.3
% of total electricity used by the Group, generated from renewable sources	%	1.1	3.6	13.0	16.4	20.5
Proportion of Group financing from sustainable finance	%	-	14%	18%	35%	47%
Proportion of wholly owned existing buildings which are certified green buildings*	%	97%	97%	96%	95%	94%
Proportion of wholly owned projects under development which are certified green buildings*	%	100%	100%	100%	100%	100%
Gross rental income contributed by certified green buildings*	%	>95%	>98%	>98%	>98%	>97%

*Includes portfolios under Swire Properties only.

- The methodology used to calculate the above KPIs can be found in our Reporting Methodology document.
- The metrics used by our operating companies can be found in their own sustainability reports.

Further reading

[Reporting methodology](#)



[Swire Pacific Group companies' sustainability reports](#)



3. An increase of 42% in value chain emissions was driven by our Aviation division through Cathay Pacific's steady post-pandemic recovery, and inclusion of HAECO's full scope 3 emissions.

**Disclose scope 1, scope 2, and, if appropriate, scope 3 GHG emissions, and the related risks.**

- We measure and report our energy consumption and the scope 1, 2 and some scope 3 carbon emissions from our operations in accordance with the listing rules of The Stock Exchange of Hong Kong Limited and in line with the GHG Protocol.

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

- Our operating companies' targets are science-based targets or are set by reference to Nationally Determined Contributions (NDCs) or, in the case of our aviation businesses, international industry commitments.
- Swire Properties was the first real estate developer in Hong Kong and the Chinese Mainland to set science-based targets. The targets are these:
 - Reduce absolute scope 1 and 2 GHG emissions by 25% by 2025 (compared to a 2019 baseline)
 - Reduce scope 3 GHG emissions from downstream leased assets by 28% per sqm by 2030 (compared to a 2018 baseline)
 - Reduce scope 3 GHG emissions from capital goods by 25% per sqm by 2030 (compared to a 2016-2018 baseline)
- Swire Coca-Cola's science-based targets (approved by SBTi in 2020) are:
 - By 2030, reduce carbon emissions by 70% in its core operations (scope 1 and 2) from a 2018 baseline
 - By 2030, reduce carbon emissions by 30% from its value chain (scope 1, 2 and 3) from a 2018 baseline

- Swire Properties and Swire Coca-Cola have signed up to Business Ambition for 1.5°C.
- We encourage the use of renewable energy. Our Beverages Division have committed by 2026 to have transitioned to electricity derived from 100% renewable energy for core operations. Renewable electricity accounted for 20.5% of the Group's total electricity usage in 2023.
- In 2023, we built on our initial scope 3 mapping exercise, conducted in 2022, in which we identified the material scope 3 emission categories for inclusion in our scope 3 emissions inventory, by incorporating increased levels of primary data. We calculate our scope 3 emissions in alignment with the GHG Protocol Corporate Value Chain (Scope 3) Standard. Please refer to the [Climate Change](#) section for more details.
- Cathay Pacific (our investment in the aviation sector) has set emission reduction targets for 2030 and has the goal of achieving net zero carbon emissions by 2050. It targets for sustainable aviation fuel (SAF) to constitute 10% of its total fuel consumption by 2030.

Explore more

Climate

**Further reading**[Reporting methodology](#)