



Summary of Carbon Footprint for Listed Companies 上市公司碳足跡摘要

| Part 1 Reporting Entity Information 第一部分 報告機構資料 | |
|--|---|
| 1.1 Company information 公司資料 | |
| Name of reporting entity: 報告機構名稱: | Eng: Swire Properties Limited 中文: 太古地產有限公司 |
| Stock code: 股份代號: | 1972 |
| Hang Seng Industry Classification 恆生行業分類 (HSIC) (Please see Appendix / 請參考 附件): | |
| (i) Industry: (e.g. Financials – 50) 行業: (例如: 金融業 – 50) | 60 |
| (ii) Sector: (e.g. Banks – 5010) 業務類別: (例如: 銀行 – 5010) | 6010 |
| 1.2 Basis of information reported in this form (e.g. weblink(s) to the carbon audit report, GHG accounting report, Environmental, Social and Governance report (ESG report) or sustainability report (GHG emission-related chapter) of the reporting entity, etc) 報告內容的基礎 (例如: 報告機構的碳審計報告、溫室氣體排放核算報告、「環境、社會及管治報告」或可持續發展報告(與溫室氣體排放有關的章節)之網絡連結等): | |
| Our Sustainable Development (SD) Report 2020 is publicly available at our sustainable development website: https://sd.swireproperties.com/2020/en/ | |

| Part 2 Greenhouse Gas (GHG) Emissions 第二部分 溫室氣體排放 | | | |
|--|---|--|---------------------------------------|
| 2.1 GHG Emission Data 溫室氣體排放數據 | | | |
| Reporting period (yyyy/m/d): 報告期(年/月/日): | | 2020-01-01 to/至 2020/12/31 | |
| GHG Accounting Standard / Guideline: 溫室氣體核算標準 / 指引: | <input checked="" type="checkbox"/> EPD/ EMSD Guidelines 環境保護署/ 機電工程署指引 <input type="checkbox"/> GHG Protocol 溫室氣體議定書 <input type="checkbox"/> International Organization for Standardization (ISO) 14064 國際標準化組織 (ISO) 14064 <input type="checkbox"/> Others, please specify: (其他, 請說明:) | | |
| Operational boundary 營運邊界 ¹ : | Brief description on emission sources 排放來源簡述 | Emission data 排放數據 | |
| Scope 1 範圍 1: | As per EPD/ EMSD Guidelines | 3,630 | tonnes CO ₂ -e 公噸二氧化碳當量 |
| Scope 2 範圍 2: | As per EPD/ EMSD Guidelines | 112,364 | tonnes CO ₂ -e 公噸二氧化碳當量 |
| Scope 3 範圍 3: | Please refer to "Carbon Emissions - Scope 3 Emissions Inventory and Reporting Methodology" in our SD Report 2020: https://sd.swireproperties.com/2020/pdf/en/SwirePropertiesSDReport2020_Performance-Data-Summary_EN.pdf#page=4 | | tonnes CO ₂ -e 公噸二氧化碳當量 |
| Reported GHG emissions in total: 所報告的溫室氣體排放總和: | | 115,994 tonnes CO ₂ -e / 公噸二氧化碳當量 | |
| 2.2 Company related information 與公司有關的資料 | | | |
| Total number of full-time-equivalent employees of the entity(s) covered in the reported GHG emission data during the reporting period: 報告期內溫室氣體排放數據所涵蓋機構的相等於全職僱員總人數: | | 2,420 | |
| Total gross floor area owned/controlled by the entity(s) covered in the reported GHG emission data during the reporting period (m ²): 報告期內溫室氣體排放數據所涵蓋機構擁有/ 控制的總樓面面積(平方米): | | 1,128,556 | |
| Total revenue of the entity(s) covered in the reported GHG emission data during the reporting period (HK\$ million): 報告期內溫室氣體排放數據所涵蓋機構的總收入(百萬港元): | | 12,355 | |
| Other information which is relevant to the entity's business operations covered in the reported GHG emissions during the reporting period, please specify (e.g., total no. of passengers, total no. of customers, total unit of goods produced, total no. of hotel rooms occupied, total kWh electricity generated, or total measures of freight load, etc.): 報告期內溫室氣體排放數據所涵蓋機構的其他有關營運資料, 請說明 (例如: 乘客總人數、顧客總人數、製成產品總數量、酒店入住房間總數、總發電量(千瓦/小時)或貨運總量等): | | Refer to Annual Report 2020: https://ir.swireproperties.com/en/ir/reports/ar2020.pdf | |
| 2.3. Geographical coverage of reported GHG emission data 所報告的溫室氣體排放數據地域範圍: | | | |
| <input checked="" type="checkbox"/> Operations within Hong Kong 香港以內的營運 <input type="checkbox"/> Operations outside Hong Kong (Please specify city(ies)/country(ies)): 香港以外的營運 (請說明城市/國家名稱): _____ Please also specify the percentage of GHG emissions arising from Hong Kong operations: 請同時說明由香港營運所產生的溫室氣體百分比: _____ | | | |
| <input type="checkbox"/> Subsidiaries 附屬公司 | Please list out the subsidiaries covered in the GHG emission data during the reporting period: 請列出報告期內溫室氣體排放數據所涵蓋的附屬公司: | | |
| Additional information on physical boundary in relation to GHG emission reported (if applicable): 與所報告的溫室氣體排放數據相關之建築物邊界的附加資料(如適用): | | | |



Part 3 GHG Emission Reduction Measures, Future Initiatives and Targets

第三部分 減少溫室氣體排放的措施、未來計劃及目標

3.1 GHG emission reduction measures implemented during the Reporting Period*

在報告期內減少溫室氣體排放的措施*

| No. 列序 | GHG Emission Reduction Measures 減少溫室氣體排放的措施 |
|--------|--|
| 1. | <p>We have adopted our Climate Change Policy since 2019 which outlines our commitment to managing climate risk across our operations and to developing mitigation, adaptation and resilience strategies to address those risks in line with global best practices.</p> |
| 2. | <p>We implemented ISO 14001 Environmental Management System and ISO 50001 Energy Management System so as to help us manage our energy use, reduce energy consumption and monitor energy data in our buildings.</p> <p>In addition, our cloud-based smart energy management platform was launched since 2019 and is being rolled out in phases. Utilising the Internet of Things, big data analysis, artificial intelligence and cloud computing, the platform leverages building operations data to generate energy management and energy saving insights. Collecting data primarily from the building management system of existing buildings, the platform securely connects data to the cloud-based system in real time, processing it and visualising it in various formats – charts, dashboards, reports, and more to deliver various benefits, including:</p> <ul style="list-style-type: none">- Continuing our digital transformation of energy management systems;- Working towards energy saving and decarbonisation;- Enhancing operational efficiency and reducing costs; and- Delivering smart operations. |
| 3. | <p>We strive to continually reduce the energy consumption in our Hong Kong portfolio. In 2020, we used a variety of technologies and strategies to achieve this objective. These include the following:</p> <ul style="list-style-type: none">- monitoring-based commissioning of heating, ventilating and air conditioning ("HVAC") systems to optimise building operation;- implementation of cloud-based smart energy management platforms to track and optimise energy consumption;- retro-commissioning of HVAC Systems and energy audits to improve heating and cooling efficiency;- upgrading of HVAC Air Handling Units; replacement of conventional fans with electronically-commutate motor plug fans to increase efficiency and reliability;- upgrading of carpark ventilation to electronically commutated motor plug fans to increase efficiency and reliability;- installation of high-efficiency oil-free magnetic bearing chillers that use less energy and eliminate handling and disposal of lubricating oil and oil filters;- installation of automatic tube cleaning system to ensure efficient heat transfer in chillers;- installation of high-efficiency chillers containing non-ozone-depleting refrigerants;- installation of variable speed drive condensing water pumps;- installation of a biodiesel Tri-generation and adsorption chiller to supply combined heating, cooking and power generation and a combined green roof and solar photovoltaic ("PV") system;- replacement of lighting with energy-efficient light emitting diodes to improve efficiency and reduce cooling loads;- replacement of split-type air-conditioning units with new models containing non-ozone-depleting refrigerants; and- lift modernisation. |

3.2 GHG emission reduction measures for future initiatives and targets*

為未來計劃及目標而制訂的減少溫室氣體排放措施*

| No. 列序 | Future Initiatives 未來計劃 | Target GHG Reduction (Qualitative/ Quantitative) 減排目標 (性質/ 數量) |
|--------|---|---|
| 1. | Implement carbon reduction measure to meet the long term carbon reduction target under our SD 2030 Strategy | Reduce the carbon intensity (tonnes of CO ₂ e/m ²) for Hong Kong portfolio by 27% by 2020 compared with business-as-usual baseline year of 2008 for our Hong Kong portfolio. By 31st December 2020, we had reduced the carbon intensity in our Hong Kong portfolio by 44.1% and achieved our 2020 reduction target. |
| 2. | Establish long-term decarbonisation goals in line with the Paris Agreement | <p>Our science-based targets (SBTs) were validated and approved by the Science-Based Target Initiative (SBTi) in November 2019. These approved SBTs are:</p> <ul style="list-style-type: none"> - reduce scope 1 and 2 GHG emissions 35% per square meter by 2025 and 52% per square meter by 2030 from a 2018 base year. - reduce scope 3 GHG emissions from downstream leased assets 28% per square meter by 2030 from a 2018 base year and from capital goods 25% per square meter by 2030 from a 2016 – 2018 base year. <p>In 2020, we continued to make progress towards meeting these SBTs, please refer to our Sustainable Development Report 2020 for details: https://sd.swireproperties.com/2020/en/performance-environment/climate-change/making-progress-towards-our-science-based-targets</p> <p>In December 2020, Swire Properties signed on to the Business Ambition for 1.5°C campaign, the first real estate company in Hong Kong to pledge support to the campaign. Led by the Science Based Targets initiative in partnership with the United Nations Global Compact, this commitment requires us to ramp up our previous science-based targets (“SBT”) to align with the 1.5°C pathway and will be critical to supporting the delivery of a “net-zero emissions” economy by 2050.</p> |
| 3. | Conduct climate risk assessments for all portfolios | <p>We have complete a detailed risk and resilience assessments at the asset level to evaluate the potential effects of the identified climate risks. Our analysis identified that overall, there are low to moderate levels of risk for flooding, heat stress, water stress, and extreme wind for our global portfolio in all assessed climate scenarios. These risk levels are attributed to the relatively robust adaptive capacity and mitigation measures we have integrated into our buildings. We also identified short and mid-term measures for individual buildings to mitigate risks and build resilience across our portfolios.</p> <p>Continued to publish climate-related financial disclosures with reference to the recommendations of the Task Force on Climate-related Financial Disclosures (“TCFD”).</p> |

*Please use separate sheet(s) where the space provided in the form is not sufficient 如表格內提供的空位不足夠, 請另加紙張填寫

Part 5 Verification
第五部分 核證

5.1 Verification information 核證資料

| | | |
|---|---|--|
| Has verification² been conducted? 是否曾經進行核證？ | <input checked="" type="checkbox"/> Yes – please fill in the blanks below 是 – 請填寫以下空格 <input type="checkbox"/> No 否 | |
| Verification body 核證機構: | Deloitte Touche Tohmatsu (Deloitte) | |
| Verification standard: 核證標準: | <input type="checkbox"/> International Organization for Standardization (ISO) 14064-3:2006 - Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions 國際標準化組織 (ISO) 14064-3:2006 – 溫室氣體 - 第3部分：溫室氣體確定的證實和驗證的規範與指南 <input checked="" type="checkbox"/> Others, please specify: 其他 (請說明): International Auditing and Assurance Engagements 3410, Assurance Engagements on Greenhouse Gas Statements, issued by the International Auditing and Assurance Standards Board | |
| Date of verification (yyyy/m/d): 核證日期 (年/月/日): | 2021/2/25 | |
| Remarks (e.g. various verification status for different subsidiaries): 備註(例如: 各附屬公司的核證情況): | The GHG emissions in 2020 were verified by external verification body, Deloitte Touche Tohmatsu (Deloitte). The independent assurance report is enclosed in our SD Report 2020: https://sd.swireproperties.com/2020/pdf/en/SwirePropertiesSDReport2020_Assurance-Report_EN.pdf | |

¹ GHG emissions (direct and indirect) and removals in relation to the buildings can be broadly classified into three separate scopes as below –

- Scope 1 – direct emissions and removals;
- Scope 2 – energy indirect emissions; and
- Scope 3 – other indirect emissions.

The definitions of Scopes 1, 2 and 3 emissions can be found in the “Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 Edition)”

與建築物有關的溫室氣體排放 (直接或間接) 及減除，可概括分為以下三個不同的範圍 –

- 範圍 1 -- 直接溫室氣體排放及減除；
- 範圍 2 -- 使用能源間接引致的溫室氣體排放；以及
- 範圍 3 -- 其他間接溫室氣體排放。

有關溫室氣體排放範圍 1、2及3的定義，可參照《香港建築物 (商業、住宅或公共用途) 的溫室氣體排放及減除的核算和報告指引》(2010年版)

² The reporting entity is encouraged to carry out verification of the GHG emissions by an independent verifier. Independent verification of GHG emissions can facilitate the management to have better understanding of the carbon footprint of the company’s operation and identify areas for improvement, provide credibility and quality assurance on the disclosure of carbon footprint, and enhance the corporate image in respect of transparency and accountability. In December 2012, the Hong Kong Accreditation Service (HKAS) introduced accreditation service for ISO 14064 GHG validation and verification for validation/verification bodies’ voluntary application. Accredited validation/verification bodies’ technical competence is rigorously assessed by HKAS, so that the reliability of their results can be assured. Relevant HKAS-accredited validation/verification bodies, once available, will be announced at HKAS’s website at: https://www.itc.gov.hk/en/quality/hkas/conformity_assessment_bodies/hkas.html.

我們鼓勵報告機構聘請獨立核證人核證溫室氣體排放，溫室氣體排放的獨立核證能促使管理層對公司營運引致的碳足跡有更佳的了解，並找出可作改善的地方；此舉亦為所披露的碳足跡資料提供可信性和質量保證，在透明度和問責層面提升企業形象。2012年12月香港認可處就 ISO 14064 審定和核查推出認可服務，供審定/核查機構自願申請。獲認可審定/核查機構的技術能力由香港認可處進行嚴格評審，因此能確保其審定/核查結果更為可靠。當有獲香港認可處認可的相關審定/核查機構，將在香港認可處網站公布：

https://www.itc.gov.hk/en/quality/hkas/conformity_assessment_bodies/hkas.html。

Hang Seng Industry Classification 恒生行業分類**Industry 行業**

| |
|--------------------------------------|
| Energy 能源業 – 00 |
| Materials 原材料業 – 05 |
| Industrials 工業 – 10 |
| Consumer Discretionary 非必需性消費 – 23 |
| Consumer Staples 消費者服務業 – 25 |
| Healthcare 醫療保健業 – 28 |
| Telecommunications 電訊業 – 35 |
| Utilities 公用事業 – 40 |
| Financials 金融業 – 50 |
| Properties & Construction 地產建築業 – 60 |
| Information Technology 資訊科技業 – 70 |
| Conglomerates 綜合企業 – 80 |

Sector 業務類別

| |
|--|
| Oil & Gas 石油及天然氣 – 0010 |
| Coal 煤炭 – 0020 |
| Gold & Precious Metals 黃金及貴金屬 – 0510 |
| Diversified Metals & Minerals 一般金屬及礦石 – 0520 |
| Basic Materials 原材料 – 0530 |
| Industrial Engineering 工業工程 – 1010 |
| Industrial Transportation 工用運輸 – 1020 |
| Commercial & Professional Services 工用支援 – 1030 |
| Automobiles 汽車 – 2310 |
| Household Goods & Electronics 家庭電器及用品 – 2320 |
| Textiles, Clothing 紡織及服飾 – 2330 |
| Travel & Leisure 旅遊及消閒設施 – 2340 |
| Media & Entertainment 媒體及娛樂 – 2350 |
| Support Services 支援服務 – 2360 |
| Specialty Retail 專業零售 – 2370 |
| Food & Beverages 食物飲品 – 2510 |
| Agricultural Products 農業產品 – 2520 |
| Consumer Staple Retailers 消費者主要零售商 – 2530 |
| Pharmaceuticals & Biotechnology 藥品及生物科技 – 2810 |
| Healthcare Equipment & Services 醫療保健設備和服務 – 2820 |
| Telecommunications 電訊 – 3500 |
| Utilities 公用事業 – 4000 |
| Banks 銀行 – 5010 |
| Insurance 保險 – 5020 |
| Other Financials 其他金融 – 5030 |
| Properties 地產 – 6010 |
| Construction 建築 – 6020 |
| IT Hardware 資訊科技器材 – 7010 |
| Software & Services 軟件服務 – 7020 |
| Semiconductors 半導體 – 7030 |
| Conglomerates 綜合企業 – 8000 |

Source: Hang Seng Indexes (<http://www.hsi.com.hk/HSI-Net/HSI-Net>)

來源: 恆生指數 (<http://www.hsi.com.hk/HSI-Net/HSI-Net>)