GIB | ASSET MANAGEMENT

Carbon Emissions Calculation Methodology 2023

1. Introduction

1.1 Purpose

The "Carbon Emissions Calculation Methodology" document has been developed for the purpose of formalising GIB Asset Management's (GIB AM)[1] procedure for the calculation of the organisation's greenhouse (GHG) emissions. The document adheres to the Standards published by The Greenhouse Gas GHG Protocol and represents an advancement on previous iterations.

The procedure shall serve as a comprehensive, detailed step-by-step guide for calculating the carbon emissions from all direct and indirect (scope 1, 2 and 3) emissions sources in GIB AM's operational boundary. The second order benefit of the procedure is it role in facilitating GIB AM to reach its carbon emissions reduction targets by enhancing calculation practices.

The term "carbon emissions" is used interchangeably with "GHG emissions" due to GIB AM's decision to measure and disclose emissions in tonnes of carbon dioxide equivalent (tCO2e). This business decision is reflected in the title and content of this procedure.

Additionally, the document also addresses other areas of significance, including:

- Reporting Standards
- Organisational Boundary
- Operational Boundary
- Data Management

2. Reporting Standards

2.1 The Greenhouse Gas (GHG) Protocol

GIB AM calculates and reports its GHG emissions in accordance with The Greenhouse Gas (GHG) Protocol. The GHG Protocol provides comprehensive global standardised frameworks to allow companies to accurately calculate, account, and report their GHG emissions across scopes 1, 2 and 3. It ensures methodological rigour, enhancing accuracy and consistency in calculating GHG emissions data. Utilising the GHG Protocol Standards strengthens regulatory compliance, climate-related risk management, and enhances companies' credibility.

GIB AM's Carbon Emissions Calculation Methodology procedure has been written in accordance with the following GHG Protocol Standards:

1. The Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard ("the GHG Protocol Corporate Standard") (2015);
2. The Greenhouse Gas (GHG) Protocol Scope 3 Technical Guidance Standard for Calculating Scope 3 Emissions ("the GHG Protocol Scope 3 Technical Standard") (2013); and
3. The Greenhouse Gas (GHG) Protocol Corporate Value Chain Scope 3 Accounting and Reporting Standard ("the GHG Protocol Scope 3 Corporate Value Chain") (2011).

[1]GIB Asset Management is the trading name of Gulf International Bank (UK) Limited
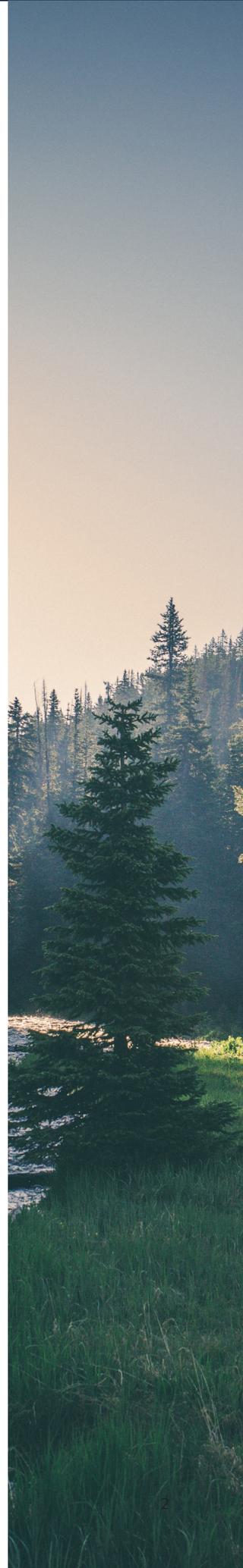
2.2 GHG Accounting Principles

As set out in the GHG Protocol Corporate Standard, GIB AM's calculation procedure adheres to generally accepted financial accounting and reporting principles.

Relevance: The boundaries of GHG emissions accounting and reporting should appropriately reflect the company's emissions and serve the business goals and decision-making needs of the company both internally and externally.

Completeness: The emissions sources within specified organisational and operational boundaries should be reported.

Consistency: To ensure that emission data can be tracked and compared within reporting company over time, consistent application of accounting practices and quantification methodologies is essential.

Transparency: All information regarding the processes, assumptions and limitations of the inventory should be transparent and disclosed.

Accuracy: Data collection should be as accurate as possible, and uncertainties should be avoided as far as practical.

2.3 The GHG Protocol's Definitions of Scopes 1, 2 and 3

The GHG Protocol categorises GHG emissions into three scopes:

Scope 1 emissions: defined as direct GHG emissions that occur from sources that are owned or controlled by a company. According to the GHG Protocol Corporate Standard, the following activities are included as scope 1 emissions:

- **Generation of electricity, heat or steam.** These emissions result from the combustion of fuels in stationary sources, e.g. boilers, furnaces, turbines;
- **Physical or chemical processing**. Most of these emissions result from manufacture or processing of chemicals and materials, e.g. cement, aluminium, adipic acid, ammonia manufacture, and waste processing;
- **Transportation of materials, products, waste and employees**. These emissions result from the combustion of fuels in the company owned/controlled combustion sources (e.g. trucks, trains, ships, airplanes, buses, cars); and
- **Fugitive emissions.** These emissions result from intentional or unintentional releases, e.g. equipment leaks from joints, seals, packaging and gaskets; methane emissions from coal mines and venting; hydro-fluoro-carbon (HFC) emissions during the use of refrigeration and air conditioning equipment; and methane leakages from gas transport.

Scope 2 emissions: defined as indirect GHG emissions generated from purchased or acquired electricity, steam, heat and cooling (i.e. emissions from the generation of purchased electricity that is consumed in its controlled equipment or operations).

Scope 3 emissions: defined as all other indirect emissions (not included in scope 2) that occur in a company's value chain. The GHG Protocol's Scope 3 Technical Standard divides scope 3 emissions into upstream and downstream emissions. This distinction is based on the financial transactions of the reporting company:

'Upstream emissions' are indirect GHG emissions related to purchased or acquired goods and services:

1. Purchased goods and services;
2. Capital goods;
3. Fuel- and energy-related activities (not included in scope 1 or scope 2);
4. Upstream transportation and distribution;
5. Waste generated in operations;
6. Business travel;
7. Employee commuting; and
8. Upstream leased assets.

'Downstream emissions' are indirect GHG emissions related to sold goods and services:

9. Downstream transportation and distribution;
10. Processing of sold products;
11. Use of sold products;
12. End-of-life treatment of sold products;
13. Downstream leased assets;
14. Franchises ; and
15. Investments.

3. Organisational Boundary

Adhering to the GHG Protocol Corporate Standard, GIB AM has determined its organisational boundary. This step allows GIB AM to identify which operations belong in GIB AM's GHG emissions reporting scope, and establishes how the business shall consolidate carbon emissions from these operations. The established organisational boundary ensures a consistent reporting approach is adopted across all levels of the organisation, ensuring uniformity in GIB AM's carbon emissions calculations. The established organisational boundary also forms the basis for the methodological procedures outlined in this document for the calculation of GIB AM's carbon emissions.

Under the GHG Protocol Corporate Standard, two distinct approaches can be used by companies to consolidate GHG emissions:

1. **Equity share approach**: Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation.
2. **Control approach**: Under the control approach, a company accounts for 100% of the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but has no control. When using the control approach to consolidate GHG emissions, companies shall choose between either the financial control or operational control criteria:
   a. **Financial control**: Under the financial control approach, a company accounts for 100% of the GHG emissions over which it has financial control. It does not account for GHG emissions from operations in which it owns an interest but does not have financial control.
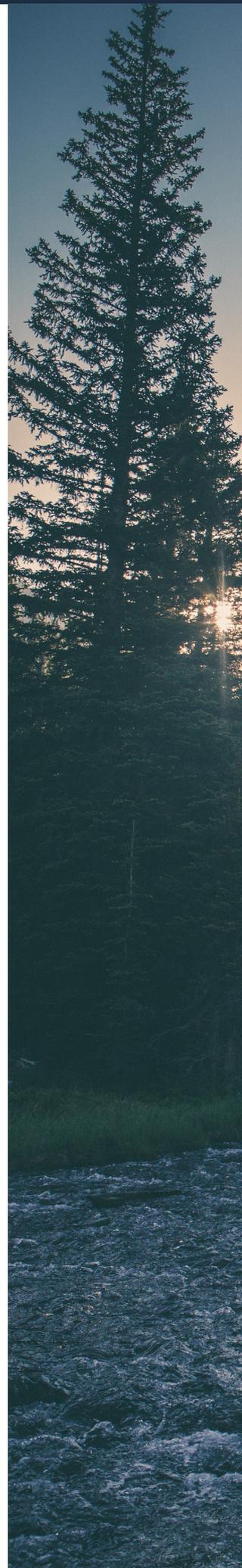
b. **Operational control**: Under the operational control approach, a company accounts for 100% of the GHG emissions over which it has operational control. It does not account for GHG emissions from operations in which it owns an interest but does not have operational control.

Following the GHG Protocol Corporate Standard, GIB AM aligns its organisational boundary with that of Gulf International Bank (GIB B.S.C.) to ensure consistency in GHG emissions data consolidation. As a wholly-owned subsidiary of GIB B.S.C., GIB AM's adoption of its parent company's organisational boundary adheres to the guidance in the GHG Protocol Corporate Standard on organisational boundary setting for subsidiaries. This approach intends to achieve consistency in GHG emissions data between GIB B.S.C. and GIB AM.

GIB B.S.C. applies the operational control approach, thereby accounting for 100% of GHG emissions over which it has operational control. Accordingly, GIB AM shall also apply the operational control approach and account for 100% of GHG emissions over which it has operational control.

4. Operational Boundary

The establishment of GIB AM's organisational boundary is the precursory step in defining GIB AM's operational boundary. The established organisational boundary serves as a basis for determining the operational boundary, which outlines the specific scope of GHG emissions within the organisational boundary. The organisational boundary sets the limits, and the operational boundary determines which GHG emissions sources (scope 1, 2 and 3) will be included in the company's GHG inventory for calculation purposes.

By adopting the operational control approach as its organisational boundary, GIB AM includes emission sources that are directly owned or controlled by GIB AM. This ensures that scope 1 emissions, the direct emissions generated from sources under GIB AM's control, are accounted for within the operational boundary.

GIB AM's operational boundary will include scope 2 emissions, the indirect emissions generated from purchased electricity. While GIB AM might not directly own or control these sources, the indirect emissions are generated from the company's use of purchased electricity in its owned or controlled premises, equipment, etc.

Indirect scope 3 emissions are the result of GIB AM's activity, but they emanate from sources that GIB AM neither owns nor controls. GIB AM calculates indirect scope 3 emissions in its GHG inventory from activities associated with its value chain.

The operational boundary of GIB AM is outlined as follows:

Scope 1 emissions:
- Emissions from the generation of electricity, heat or steam
- Fugitive emissions from refrigerants

Scope 2 emissions:
- Emissions from purchased electricity for 1) GIB AM's London office and 2) GIB AM's primary and secondary Data Recovery sites.[2]

Scope 3 emissions:
- Upstream: Category 1: Purchased goods and services aggregated with Category 2: Capital goods, Category 2, Category 3: Fuel- and energy-related activities, (only transmission and distribution (T&D) losses, Category 5: Waste generated in operations (disposal/recycle of paper and cardboard, disposal of large and small electrical items), Category 6: Business travel (air, train, taxi, and hotel stays), and Category 7: Employee commuting
- Downstream: Category 15: Investments

---

[2]GIB AM on-boarded a new secondary Data Recovery site in 2022. This DR site is unable to provide GIB AM which regular electricity-use data due to infrastructure limitations. Therefore, GIB AM uses the data from the previous DR site as a proxy in the calculations of the scope 2 carbon emissions generated from this site.

GIB AM shall periodically review the indirect scope 3 emissions sources in its operational boundary to ensure it remains responsive to evolving regulatory circumstances and aligned with the carbon reduction targets set for the business.

GIB AM has outlined the justifications for the inclusion or exclusion of each GHG emissions source in its operational boundary, covering scopes 1, 2 and 3. Section 5 outlines the calculation methodologies for each scope.

4.1 Scope 1 Emissions Sources Table

Scope 1 emissions source	Status	Justification
Generation of electricity, heat or steam	Calculated	Included in GIB AM's operational boundary on the basis that GIB AM operates a leased space (13,357 square ft.) in One Curzon Street which is heated by gas boilers owned by the building's landlord. In accordance with the guidance outlined in the GHG Protocol Corporate Standard for companies using the operational control consolidation approach, GIB AM has direct, proportional control over the emissions generated from the gas boilers heating the GIB AM office space.
Physical or chemical processing	Not calculated	Excluded from GIB AM's operational boundary on the basis that GIB AM neither owns nor operates any sources that manufacture chemicals and materials. Therefore, in line with the guidance as set out in the GHG Protocol Corporate Standard for companies using the operational control consolidation approach, GIB AM does not have direct control over emissions generated from these activities.
Transportation or materials, products, waste and employees	Not calculated	Excluded from GIB AM's operational boundary on the basis that GIB AM neither owns nor operates any combustion sources (e.g. trucks, trains, ships, airplanes, buses, cars) for any of the forms of transportation outlined in the GHG Protocol Corporate Standard. Therefore, in line with the guidance as set out in GHG Protocol Corporate Standard for companies using the operational control consolidation approach, GIB AM does not have direct control over emissions generated from these activities.
Fugitive emissions	Not calculated	Included in GIB AM's operational boundary on the basis that GIB AM owns the air conditioning and refrigeration assets installed in the GIB AM office. In accordance with the guidance outlined in the GHG Protocol Corporate Standard for companies using the operational control consolidation approach, GIB AM has direct control over the intentional and unintentional releases of hydrofluoro-carbon (HFC) fugitive emissions from its air conditioning and refrigeration assets.
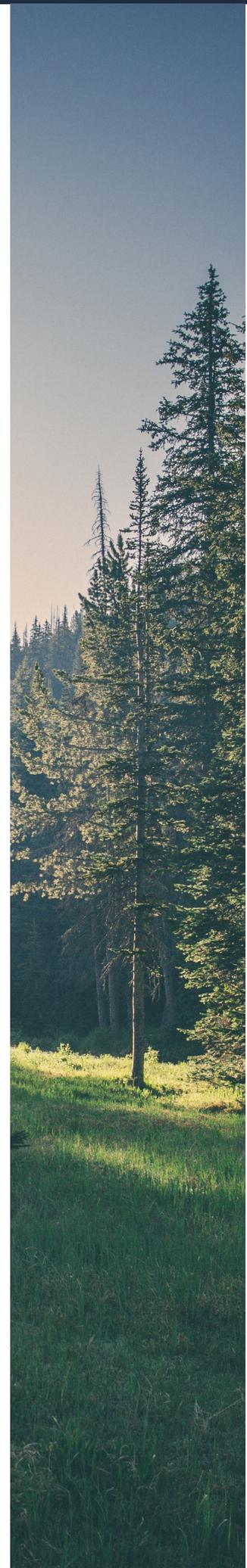
4.2 Scope 2 Emissions Sources Table

Scope 2 emissions source	Status	Justification
Purchased electricity	Calculated	In conformance with the GHG Protocol Corporate Standard, GIB AM shall calculate the indirect GHG emissions associated with the purchase of electricity for: • GIB AM's London office • GIB AM's primary Data Recovery (DR) site • GIB AM's secondary Data Recovery (DR) site Consistent with the GHG Protocol Corporate Standard guidance for companies using the operational control consolidation approach, GIB AM has control over the indirect emissions generated from purchased electricity for the two data recovery sites. This is because according to the GHG Protocol Corporate Standard, the generators installed in the two data recovery sites would be classified as 'controlled equipment' for GIB AM, for the purpose of calculating and reporting its scope 2 emissions.

4.3 Scope 3 Emissions Sources

Scope 3 covers other indirect GHG emissions that occur in the company's value chain and includes both upstream and downstream emissions.

Companies have discretion over which scope 3 categories they choose to report. The GHG Protocol Corporate Standard states accounting for scope 3 emissions need not involve a full-blown GHG life cycle analysis of all products and operations.

Rather, the GHG Protocol Corporate Standard recommends that businesses:

1. Provide a general description of the value chain;
2. Use the Greenhouse Gas Protocol's scope categories as a checklist to identify the associated GHG sources; and
3. Determine which scope 3 categories are relevant.

In addition to the value chain analysis, the GHG Protocol Corporate Value Chain (Scope 3) Standard outlines the following criteria for companies to identify relevant scope 3 categories:

• **Size**: The scope 3 category must contribute significantly to the company's total anticipated scope 3 emissions;
• **Influence**: There are potential emissions reductions that could be undertaken or influenced by the company;
• **Risk**: The scope 3 category contributes to the company's risk exposure (e.g., climate-related risks such as financial, regulatory, supply chain, product and customer, litigation and reputational risks);
• **Stakeholders**: The scope 3 category is deemed critical by key stakeholders (e.g., customers, suppliers, investors, or civil society); and
• **Outsourcing**: The scope 3 category is an outsourced activity previously performed in-house (or activities outsourced by the reporting company that are typically performed in-house by other companies in the reporting company's sector).

These criteria were assessed as part of the analysis in Table 4.3.2

4.3.1 Value Chain Analysis for GIB AM's Scope 3 Emissions

GIB AM is a private limited financial services company that provides financial services. GIB AM has a mature treasury and banking business and a growing asset management business.

Summary of GIB AM's treasury and banking business' value chain:

Primary activities:

- Raising client liabilities (liability management), foreign exchange, short- and medium-term fixed income investing
- Operations and trading
- Sales
- Client relationship management

Secondary activities:

- Technology
- Human resources
- Risk management
- Legal

Summary of GIB AM's asset management business' (GIB AM) value chain:

Primary activities:

- Investing, portfolio management
- Operations and trading
- Marketing and sales
- Product development
- Client relationship management

Secondary activities:

- Technology
- Human resources
- Risk management
- Legal

4.3.2 Scope 3 Emissions Sources Table

Scope 3 emissions souorce	Description	Status	Justification
Category 1: purchased goods and services	This category includes all upstream (i.e., cradle-to-gate) emissions from the production of products purchased or acquired by the reporting company in the reporting year. Products include both goods (tangible products) and services (intangible products).	Calculated	From FY2023, GIB AM will continue to calculate the business' scope 3 emissions from Category 1 Purchased goods and services. However, GIB AM's calculation methodology for Category 1 has been enhanced in line with the GHG Protocol Corporate Standard (see Section 5.3.1), and broadened to include a group of material third-party providers beyond the annual procurement of Paper and Cardboard.

The analysis of GIB AM's value chain revealed that the business relies substantially on the goods and services provided by third-party vendors to operate the value chain. For smaller sized financial services providers such as GIB AM, this is to be expected. Therefore, GIB AM anticipates that the emissions generated from Category 1 Purchased goods and services will represent a large proportion of the business' scope 3 emissions.

Additionally, by calculating the business' scope 3 emissions from Category 1, GIB AM can identify opportunities for emissions reductions. For example, by choosing to on-board third-party vendors with better Environmental, Social, and Governance (ESG) credentials. Not only does this demonstrate GIB AM's commitment to achieving its carbon emissions reduction targets, but is also aligned with the business' sustainable corporate strategy.

GIB AM has not been able to conduct an initial GHG estimate for the business' scope 3 emissions Category 1 Purchased goods and services due to challenges with both accessing and the quality data provided by third-party vendors. To overcome this data barrier, GIB AM will employ the spend-based method when calculating the business' scope 3 emissions from Category 1, in accordance with the guidance as set out in the GHG Protocol Corporate Standard. The GHG Protocol Corporate Standard recommends organisations use the spend-based method when supplier-specific data is difficult to obtain. The spend-based method works by collecting expenditure data related to the procurement of goods and services. This data is then multiplied by industry average emissions factors to provide an estimate of an organisation's Category 1 scope 3 emissions. The methodology relies on the use of secondary Environmentally Extended Input-Output (EEIO) data, which reflects the average emissions (per unit) of a good or service. |

Scope 3 emissions souorce	Description	Status	Justification
Category 2: Capital goods	This category includes all upstream (i.e., cradle-to-gate) emissions from the production of capital goods purchased or acquired by the reporting company in the reporting year. Emissions from the use of capital goods by the reporting company are accounted for in either scope 1 (e.g., for fuel use) or scope 2 (e.g., for electricity use) rather than in scope 3	Not Calculated	Given the limited yearly procurement of capital goods, the calculation of scope 3 emissions generated from Category 2 Capital goods purchases will be aggregated with Category 1 Purchased goods and services. This will include the procurement of Small and Large Electrical items. This decision aligns with reporting best practices.
Category 3: Fuel- and energy-related activities	This category includes emissions related to the production of fuel and energy purchased by the reporting company in the reporting year that are not included in scope 1 or scope 2. a. Upstream emissions of purchased fuels b. Upstream emissions of purchased electricity c. Transmission and distribution (T&D) losses d. Generation of purchased electricity that is sold to end users	Transmission and distribution (T&D) losses calculated	From FY2023, GIB AM will continue to calculate scope 3 emissions from Category 3 Fuel- and energy-related activities. The contribution of transmission and distribution T&D losses to GIB AM's total scope 3 emissions is demonstrated by data from previous reporting years. In 2020, these emissions accounted for 4.82 tCO2e, making them the fourth largest scope 3 emitter. By 2021 and 2022, they had climbed to the position of third largest emitter, accountable for 2.29 and 2.59 tCO2e respectively. Upstream emissions from purchased goods, upstream emissions from purchased electricity and the generation of purchased electricity sold to end users, are excluded from GIB AM's scope 3 emissions calculations. These subcategories were deemed immaterial by the GIB AM value chain analysis. Therefore, no initial assessment was undertaken for these categories due to their negligible impact on GIB AM's overall emissions footprint.
Category 4: Upstream transportation and distribution	Category 4 includes emissions from: ▪ Transportation and distribution of products purchased in the reporting year, between a company's tier 1 suppliers and its own operations in vehicles not owned or operated by the reporting company (including multi-modal shipping where multiple carriers are involved in the delivery of a product, but excluding fuel and energy products) ▪ Third party transportation and distribution services purchased by the reporting company in the reporting year (either directly or through an intermediary), including inbound logistics, outbound logistics (e.g. of sold products) and third-party transportation and distribution between a company's own facilities	Not calculated	From FY2023, GIB AM will exclude Category 4 Upstream transportation and distribution from the scope 3 emissions calculations. A FY2022 sample study showed that most deliveries were personal, not purchases from GIB AM's tier 1 suppliers, suggesting that emissions from upstream transportation and distribution are negligible with respect to GIB AM's total scope 3 emissions. As a financial services provider, GIB AM's service-oriented value chain results in minimal emissions from upstream transportation and distribution. These findings deemed an initial assessment using greenhouse gas (GHG) estimation methods unnecessary.

Scope 3 emissions souorce	Description	Status	Justification
Category 5: Waste generated in operations	Category 5 includes emissions from third-party disposal and treatment of waste generated in the reporting company's owned or controlled operations in the reporting year. This category includes emissions from disposal of solid waste and wastewater.	Calculated	From FY2023, GIB AM will continue to calculate the scope 3 emissions from Category 5 Waste generated in operations. While the data from previous reporting years indicates that category 5 emissions are not a significant contributor to the business' total scope 3 emissions, it does present an opportunity for GIB AM to reduce emissions associated with category 5 through better waste management activities. According to the GHG Protocol Corporate Standard, since category 5 presents potential emissions reductions that could be undertaken or influenced by GIB AM, its inclusion in the business' operational boundary can be justified. Data from previous reporting years shows a decreasing trend in emissions from waste generated in operations. In 2020, it contributed 2.3059 tCO2e to GIB AM's total emissions. Reductions were seen in subsequent years, with contributions of 0.0221 tCO2e and 0.0103 tCO2e to GIB AM's total scope 3 emissions in 2021 and 2022, respectively. From 2022 onwards, emissions from food and drink waste disposal will not be included in GIB AM's Category 5 scope 3 emissions calculations. In the previous reporting years, emissions generated from food and drink disposal were small, amounting to 0.0120 tCO2e in 2020 and 0.0073 tCO2e in 2021. Observing the downward trend and the small absolute values, GIB AM determined that these emissions do not materially contribute to the business' total scope 3 emissions and shall therefore be excluded from calculations in FY2023.

Scope 3 emissions souorce	Description	Status	Justification
Category 6: Business travel	This category includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses and passenger cars	Calculated	From FY2023, GIB AM will continue to calculate scope 3 emissions from Category 6 Business travel. Business travel activities are consistently, and by far, the largest emitter of operational scope 3 emissions for GIB AM, making it essential to continue calculating emissions generated from these activities not only in FY2023, but also in future reporting years.

Data from prior reporting years indicates a rising trend: from 53.38 tCO2e in 2020, the emissions escalated to 189.96 tCO2e in 2021, and further to 435.71 tCO2e in 2022. Additionally, hotel stays associated with business travel contribute to GIB AM's emissions profile, with 6.94 tCO2e emitted in 2020, 4.12 tCO2e in 2021, and a signifi-cant jump to 40.79 tCO2e in 2022. The data indicates that between 2020 and 2022, business travel activities repre-sented, on average, 64.15% of our total scope 3 emissions. The jump in 2022 for tCO2e emitted from both business travel activity and associated hotel stays and can attrib-uted to the relaxation of pandemic-induced travel restric-tions, allowing for a resurgence in business travel activities. As business travel resumed to more normal levels, so did the associated emissions.

In response to this upward trend, GIB AM has piloted quarterly calculations for business travel emissions in Q1 FY2023. This additional level of oversight will support GIB AM to achieve its operational emissions reduction targets, through the implementation of strategies, measures, etc. to help the business to reduce the emissions generated from its business travel activities. Additionally, GIB AM will also calculate emissions from train business travel on a quarterly and annual basis from FY2023 in line with best practice.

As a financial services provider, GIB AM relies heavily on business travel as part of its value chain. This presents a significant trade-off for GIB AM with respect to the meeting of the organisation's carbon emissions reductions targets and its business-as-usual revenue generating activities. Therefore, the focus for GIB AM is on identify-ing solutions to manage the challenge presented by this trade-off. |

Scope 3 emissions sourjce	Description	Status	Justification
Category 7: Employee commuting	This category includes emissions from the transportation of employees between their homes and worksites. Emissions from employee commuting may arise from: • Automobile travel • Bus travel • Rail travel • Air travel	Calculated	From FY2023, GIB AM will continue to calculate scope 3 emissions generated from employee commuting. Consistent with the guidance set out GHG Protocol Corporate Standard for calculation emissions from employee commuting, GIB AM's calculations encompass all modes of transportation (automobile, bus, rail, air, subway, bicycling and walking). Reviewing the previous years' data (FY2019 to FY2022) shows that the tCO2e figures from GIB AM's employee commuting were affected by the COVID-19 travel-related restrictions. In FY2019, the tCO2e figure was 3.12. This figure then dropped significantly to 0.58 tCO2e in FY2020, followed by a small increase in FY2021 to 0.81. This drop can be attributed to the nation-wide application of "remote working", a business continuity measure implemented by GIB AM and organisations across the UK in response to the COVID-19 travel-related restrictions. However, as the UK government eased all COVID-19-related restrictions in Q1 2022, the tCO2e figure for FY2022 was 1.73, almost double the tCO2e emitted from GIB AM's employee commuting in FY2021. It is expected that the tCO2e figure from GIB AM's employee commuting will continue to rise in future reporting years, to near FY2019 levels. Hybrid and remote working have become less necessary and generally discouraged, with organisations recognising the benefits of in-person collaboration and socialisation within and between teams. This does present the risk that GIB AM's carbon footprint will increase, which may have implications for GIB AM achieving its carbon emissions reduction targets. However, in response, GIB AM can encourage its employees to opt for more environmentally friendly modes of commuting transportation, and continue to operate the hybrid working model. Further solutions for reducing emissions from employee commuting can be explored in the future if the tCO2e figures normalise to pre-pandemic levels. On this basis, GIB AM shall continue to calculate and disclose the emissions generated from employee commuting as part of the organisation's operational boundary.
Category 8: Upstream leased assets	Category 8 includes emissions from the operation of assets that are leased by the reporting company in the reporting year and not already included in the reporting company's scope 1 or 2 inventories. This category is applicable only to companies that operate leased assets (i.e., lessees).	Not calculated	From accordance with GIB AM's application of the operational control consolidation approach as the organisation's operational boundary, GIB AM shall exclude Category 8 emissions from upstream leased assets in FY2023. GIB AM sublets a small office space to a lessor. However, GIB AM has no control over the operations undertaken in the sublet space by the lessor. Subsequently (and consistent with conditions set out in the GHG Protocol Corporate Standard for the operational control consolidation approach) GIB AM has no control over the emissions generated from the sublet space's operations. These emissions do not fall within the operational boundary of GIB AM. Therefore, an initial assessment using GHG estimation methods for Category 8 was deemed unnecessary.

Scope 3 emissions souorce	Description	Status	Justification
Category 9: Down-stream transpor-tation and distribu-tion	This category includes emissions that occur in the reporting year from the transportation of sold products in ve-hicles and facilities not owned or con-trolled by the reporting company.	Not Calculated	From FY2023, GIB AM shall exclude Category 9 Down-stream transportation and distribution emissions from its scope 3 calculations. The exclusion was justified on the basis that Category 9 was deemed to be immaterial for GIB AM's service-oriented value chain as a financial servic-es provider. In contrast, Category 9 would be material for companies dealing in physical goods, with transportation and distribution being key components of the value chain. Therefore, an initial assessment using GHG estimation methods for Category 9 was deemed unnecessary due to the immateriality of Category 9 for GIB AM's value chain.
Catego-ry 10: Processing of sold products	Category 10 includes emissions from processing of sold intermediate products by third parties (e.g., manufacturers) subsequent to sale by the reporting company. Intermediate products are products that require further processing, transformation, or inclusion in another product before use, and therefore result in emissions from processing subsequent to sale by the reporting company and before use by the end consumer. Emis-sions from processing should be allocat-ed to intermediate product.	Not Calculated	From FY2023, GIB AM shall exclude Category 10 Pro-cessing of sold products emissions from its scope 3 calculations. The exclusion was justified on the basis that Category 10 was deemed to be immaterial for GIB AM's service-oriented value chain. As a financial services provider, GIB AM does not sell any products that undergo subsequent processing by third-party companies, and the emissions generated from the processing stage of a product's lifecycle are not applicable to GIB AM. Therefore, an initial assessment using GHG estimation methods for Category 10 was deemed unnecessary due to the imma-teriality of Category 10 for GIB AM's value chain.
Category 11: Use of sold prod-ucts	This category includes emissions from the use of goods and services sold by the reporting company in the reporting year. A reporting company's scope 3 emissions from use of sold products in-clude the scope 1 and scope 2 emissions of end users. End users include both con-sumers and business customers that use final products.	Not Calculated	From FY2023, GIB AM shall exclude Category 11 Use of sold products from its scope 3 emissions calculations. The exclusion was justified on the basis that Category 11 was deemed immaterial for GIB AM's service-oriented value chain. In contrast to companies that, for example, manufacture physical products or sell emissions-intensive services and generate emissions from these activities, GIB AM does not engage in these activities as part of its value chain as a financial services provider. Therefore, an initial assessment using GHG estimation methods for Category 11 was not undertaken due to the immateriality of Cate-gory 11 for GIB AM's value chain.
Catego-ry 12: End-of-life treatment of sold products	Category 12 includes emissions from the waste disposal and treatment of products sold by the reporting company (in the reporting year) at the end of their life. This category includes all the total expected end-of-life emissions from all products sold in the reporting year.	Not Calculated	From FY2023, GIB AM shall exclude Category 12 End-of-life treatment from its scope 3 emissions calculations. The exclusion was justified on the basis that "end-of-life treatment", as a concept, is not applicable to GIB AM's ser-vice-oriented value chain as a financial services provider. This is in contrast to companies that, for example, man-ufacture and/or sell physical products that require waste treatment and disposal. Therefore, an initial assessment using GHG estimation methods for Category 12 was not undertaken due to the immateriality of Category 12 for GIB AM's value chain.

Scope 3 emissions souorce	Description	Status	Justification
Category 13: Downstream leased assets	• This category includes emissions from the operation of assets that are owned by the reporting company (acting as lessor) and leased to other entities that are not already included in scope 1 or scope 2. This category is applicable to lessors (i.e., companies that receive payments from lessees).	Not Calculated	From FY2023, GIB AM shall exclude Category 13 Downstream leased assets emissions from its scope 3 emissions calculations. The exclusion was justified on the basis that GIB AM does not own any assets that are subsequently leased to other entities, and the leasing activities (acting as a lessor) is not a component of GIB AM's value chain. Therefore, an initial assessment using GHG estimation methods for Category 13 was not undertaken due to the immateriality of Category 13 for GIB AM's value chain.
Category 14: Franchises	Category 14 includes emissions from the operation of franchises not included in scope 1 or scope 2. A franchise is a business operating under a license to sell or distribute another company's goods or services within a certain location. This category is applicable to franchisors (i.e., companies that grant licenses to other entities to sell or distribute its goods or services in return for payments, such as royalties for the use of trademarks and other services). Franchisors should account for emissions that occur from the operation of franchises (i.e., the scope 1 and scope 2 emissions of the franchises) in this category.	Not calculated	Category 14 includes emissions from the operation of franchises not included in scope 1 or scope 2. A franchise is a business operating under a license to sell or distribute another company's goods or services within a certain location. This category is applicable to franchisors (i.e., companies that grant licenses to other entities to sell or distribute its goods or services in return for payments, such as royalties for the use of trademarks and other services). Franchisors should account for emissions that occur from the operation of franchises (i.e., the scope 1 and scope 2 emissions of the franchises) in this category.

Scope 3 emissions souorce	Description	Status	Justification
Category 15: Investments	This category includes scope 3 emissions associated with the reporting company's investments in the reporting year, not already included in scope 1 or scope 2. This category is applicable to investors (i.e., companies that make an investment with the objective of making a profit) and companies that provide financial services.	Calculated	From FY2023, GIB AM will continue to calculate the financed emissions associated with Category 15 Investments. Category 15 Investments accounts for a significant portion of GIB AM's scope 3 emissions. In FY2022, the financed emissions from GIB AM's Asset Management business was 41,395 tCO2e, representing over 98% of its GIB AM's total scope 3 emissions. This reflects the nature of GIB AM's value chain as a financial services provider, with the Asset Management business being a core component of this. Further, the scope of Category 15 will marginally expand from FY2023 due to GIB AM calculating the financed emissions from the on-balance sheet sovereign debt trading securities associated with the Treasury and Banking business' activities. Category 15 presents GIB AM with opportunities for the reduction of financed emissions, including (but not limited to): • Sustainable product suite • Active management (to select investee companies with superior ESG credentials) • ESG-aligned target-setting The second order benefit will be reduced exposure to various risks, for example, reputational, regulatory, and climate-related risks. Finally, Category 15 is important for GIB AM's stakeholders, specifically GIB AM's clients and regulators. Generally, there is an increasing appetite from asset owners to see the integration of ESG/Sustainability in Asset Manager's investment strategies. Regulators are becoming more focused on financial institutions' sustainability practices and reporting. Therefore, Category 15 is essential for GIB AM's scope 3 emissions calculations.

5. Calculation Methodologies and Emission Conversion Factors

Emission conversion factors are used to convert an activity (such as purchased electricity in kWh) to GHG emissions (in metric tonnes CO2e, or tCO2e). GIB AM utilises the most up-to-date emissions factors available, such as those provided by the UK Government and EPA.

Where the data is not available, a best effort estimate is made by GIB AM to calculate the emissions in its inventory using proxies and EEIO (Environmentally-Extended Input-Out) models.

5.1 Scope 1 Emissions Calculation Methodologies

5.1.1 Emissions Generated from Electricity, Heat or Steam (gas boilers)

Calculation steps:

1. Obtain the gas meter readings in cubic feet (ft³) for the reporting period from the landlord. This is typically done by subtracting the start of period meter reading from the end of period reading.
2. Convert the gas usage from cubic feet to cubic meters (m³) using the conversion factor 1 ft³ = 0.0283168 m³ [3].
3. Identify the most up-to-date UK government conversion factor for natural gas. This conversion factor reflects the emissions intensity of natural gas, expressed in kilograms of CO_2 equivalent (kgCO2e) per cubic meter.
4. Multiply the gas usage (in m³) by the conversion factor to calculate total emissions in kgCO2e.
5. To convert this figure from kgCO2e to metric tonnes CO_2 equivalent (tCO2e), divide the total kgCO2e by 1000.
6. Multiply the tCO2e figure by the percentage value (in decimal form[4]) reflecting the space occupied by GIB AM in the office building. GIB AM occupies 6.58% of the total office building space.

The formula would be: (tCO2e) = [(Gas usage in ft³ * 0.0283168 m³/ft³) * (kgCO2e/m³)] / 1000 * 0.0658

5.1.2 Fugitive Emissions

Calculation steps:

1. Obtain the most recent version of the refrigerant inventory from the Facilities Manager. This inventory should contain details of all refrigeration and air conditioning units, including the type of refrigerant used and the total refrigerant capacity of each unit.
2. Determine the annual leak rate as a percentage of capacity from the refrigerant inventory. This is the percentage of the total refrigerant charge in the unit that is expected to leak out over one year.
3. For each unit in the inventory, multiply the total refrigerant capacity (in kg) by the annual leak rate (as a percentage). This gives the expected annual refrigerant leakage from the unit (in kg).
4. Identify the global warming potential (GWP) of the refrigerant used in each unit. The GWP is a measure of how much heat a greenhouse gas traps in the atmosphere compared to carbon dioxide. The GWP of the refrigerant used should be sourced from the most recent and relevant UK government data.
5. Multiply the expected annual refrigerant leakage (in kg) from each unit by the GWP of the refrigerant used. This gives the fugitive emissions from each unit in terms of CO_2 equivalent (kgCO2e).
6. Sum the fugitive emissions from all units to obtain the total fugitive emissions from refrigerants for the organisation.
7. Divide the total fugitive emissions from all refrigerant units (kgCO2e) by 1000 to obtain the final tCO2e figure.

---

[3]Conversion factors for volume units (cubic feet to cubic meters in this case) which are widely accepted by the scientific community and consistently used across various fields
[4] 0.0658

5.2 Scope 2 Emissions Calculation Methodologies

5.2.1 Indirect Emissions from Purchased Electricity Consumed by GIB AM's London Office

Calculation steps:

1. Obtain the electricity meter utility bills for the reporting period in question from the Facilities Manager. These bills should contain the kilowatt-hours (KWh) of electricity consumed by the London office, excluding the sublet space.
2. Determine the most up-to-date UK government conversion factor for UK electricity. This conversion factor is a measure of the average emissions intensity of the UK grid, expressed in terms of kilograms of CO2 equivalent (kgCO2e) per KWh.
3. For each month in the reporting quarter, multiply the KWh reading from the utility bill by the conversion factor. This gives the kgCO2e figure for that month.
4. Repeat the calculation for each month in the quarter.
5. Add the kgCO2e figures for each month to calculate the total kgCO2e for the quarter.

To convert this quarterly total from kgCO2e to metric tonnes CO2 equivalent (tCO2e), divide the total kgCO2e figure by 1000

5.2.2 Indirect Emissions from Purchased Electricity Consumed by GIB AM's Primary Data Recovery (DR) Site

Calculation steps:

1. Retrieve the quarterly Power Distribution Unit (PDU) data from the quarterly report provided by the Infrastructure team, via the account contact from the primary Data Recovery site. The PDU data, generally provided in kVA, represents the total amount of power supplied to the data centre.
2. The formula for the monthly calculations would be: Monthly Emissions (kgCO2e) = (Monthly PDU in kVA * 0.8 * Hours in Month) * UK Government Conversion Factor
3. Convert the monthly PDU data from kVA to kW by multiplying it with a generally accepted power factor of 0.8. This step is necessary as the electricity is generally billed in kilowatt-hours (kWh), not kilovolt-ampere (kVA).
4. To convert the power (kW) to energy (kWh), multiply the result from step 2 by the number of hours in each month[5] . Repeat this calculation for each of the three months in the reporting quarter.
5. Sum up the monthly kWh figures for the quarter to get the total energy consumption for the quarter.
6. Multiply this total quarterly energy consumption figure by the most up-to-date UK government conversion factor for electricity to obtain the quarterly emissions in kgCO2e.
7. To get the final quarterly emissions in tCO2e, divide the kgCO2e figure by 1000.

---

[5] Ensure the total hourly figure is accurate for the month in question
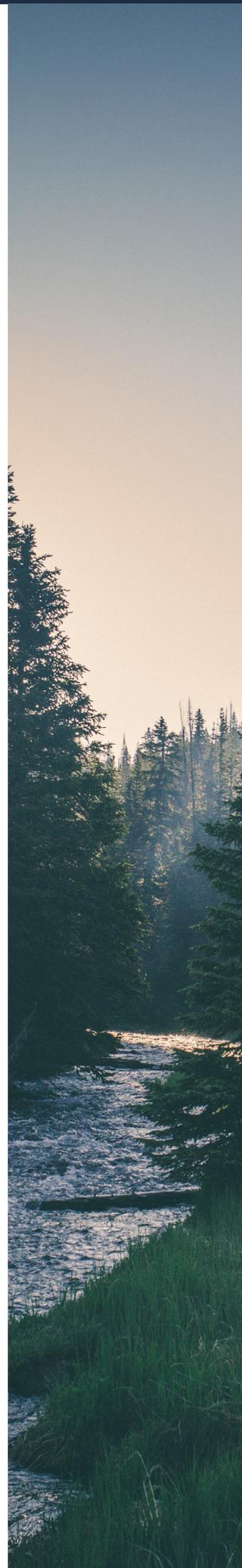
5.3 Scope 3 Emissions Calculation Methodologies

5.3.1 Category 1: Purchased goods and services (excluding Paper & Cardboard, and Small and Large Electrical Items ('Capital Goods'))

Calculation steps:

1. Identify relevant material suppliers: GIB AM will determine the list of suppliers that have a material business relationship with GIB AM, characterised by repeated transactions or where the size of the supplier contract is not less than 25,000 GBP including VAT. The relevant data will be obtained from the operational risk team.
2. Scope 3 Emissions from Purchased Goods and Services (tCO2e) = ∑ (Spend with Supplier i * EEIO or Industry Associations Factor for Supplier i) / 1000
3. Obtain economic data: For each of these identified suppliers, we will collect data on the monetary value of goods and services purchased during the reporting period.
4. Apply the spend-based method: This involves applying a set of environmentally extended input-output (EEIO) emission factors or industry associations' data to the economic data. These emissions factors capture the emissions intensity of a given sector, providing an approximation of GHG emissions associated with a given amount of expenditure. The EEIO emission factors capture the emissions intensity of a given sector, allowing for an approximation of the GHG emissions associated with a given amount of spend. When industry associations' data is available and relevant, it can also be used as emissions factors to reflect more accurately the specific practices of that industry.
5. Calculation: Multiply the total spend with each supplier by the relevant EEIO emission factor to estimate the GHG emissions associated with the purchase of goods and services from that supplier. Then sum the total emissions from purchased goods and services for each supplier.
6. The division by 1000 will convert the total emissions from kgCO2e to tCO2e.

Calculation steps for Paper & Cardboard purchases:

1. Inventory: Compile a detailed inventory of all purchased paper and cardboard items for the reporting year from the paper invoices provided by the Finance team.
2. Weight: Identify the weight (kg) of each individual paper or cardboard item, using reliable online resources (e.g., Amazon) if necessary.
3. Total Weight Calculation: Multiply the number of units of each item by its unit weight (kg) to get the total weight (kg) for each item. Repeat this step for all items, then sum all the total weights to get the combined total weight (kg) for the year. Divide this figure by 1000 to convert it to tonnes.
4. Emission Calculation: Multiply the total weight in tonnes by the appropriate UK government emission factor for paper and cardboard to obtain the final Scope 3 emissions in tCO2e.

Calculation steps for Large Electrical items (Capital goods):

1. Inventory Collection: Obtain both the 1) refrigerants inventory from the Facilities Manager and 2) IT asset log from the Infrastructure team to determine the number of new large electrical items purchased in the reporting year.
2. Weight: Identify the weight (kg) of each individual item, using reliable online resources (e.g., Amazon).
3. Total Weight Calculation: Multiply the number of units of each item by its unit weight (kg) to get the total weight (kg) for each item. Repeat this step for all items, then sum all the total weights to get the combined total weight (kg) for the year. Divide this figure by 1000 to convert it to tonnes.
4. Emission Calculation: Multiply the total weight in tonnes by the appropriate UK government emission factor for large electrical items to obtain the final Scope 3 emissions in tCO2e

Calculation steps for Small Electrical items (Capital goods):

1. Inventory Collection: Obtain data on the quantity of each type of monitor and PC tower purchased in the reporting year from the IT Asset Inventory, owned by the GIB AM Infrastructure team
2. Weight Calculation: For each type of monitor and PC tower, multiply the quantity by the respective unit weight (in kg) obtained from a reliable online source to determine the total weight for each item type in kg. Repeat this step for all monitor and PC tower types
3. Total Weight Calculations: Sum the total weights (in kg) for all types of monitors and PC towers to calculate the combined total weight of small electrical items in kg. Convert this weight to tonnes by dividing the result by 1000.
4. Emissions Calculation: Finally, multiply the total weight (in tonnes) by the most recent UK government conversion factor for small electrical item use to calculate the final tCO2e figure.

5.3.2 Category 3: Fuel- and energy-related activities not included in scope 1 or scope 2 (Transmission & Distribution losses)

Calculation steps:

1. Electricity Consumption Summation: Aggregate the total electricity consumption (in kWh) for the reporting year for both the GIB AM office and the data recovery sites.
2. Emissions Calculation: Multiply the total annual electricity consumption (in kWh) by the most recent T&D conversion factor provided by the UK government. This will yield the emissions resulting from T&D losses in tCO2e for the reporting year.

5.3.3 Category 5: Waste generated in operations

Indirect emissions from waste disposal (or recycle) of paper and cardboard

Calculation steps:

1. Data Retrieval: Retrieve the weight data of paper and cardboard used in the reporting year from the material use calculations. These data are in tonnes and should be used as an input into waste disposal emissions calculations
2. Paper Waste Emissions Calculation: Multiply the total weight of paper waste (in tonnes) by the most recent conversion factor for paper waste disposal or recycling provided by the UK government. This will yield the emissions from paper waste in tCO2e.
3. Cardboard Waste Emissions Calculation: Similarly, multiply the total weight of cardboard waste (in tonnes) by the most recent conversion factor for cardboard waste disposal or recycling provided by the UK government. This will yield the emissions from cardboard waste in tCO2e.
4. Total Waste Emissions: Add the paper waste emissions and the cardboard waste emissions to obtain the total tCO2e from the waste disposal or recycling of paper and cardboard for the reporting year.

Indirect emissions from the waste disposal of fridges

Calculation steps:

1. Data Retrieval: Retrieve the weight data for fridges used during the reporting year from the material use calculations. The data should be in tonnes.
2. Refrigerant Disposal Log: Refer to the Facilities Manager's refrigerant disposal log to identify any recorded disposals of refrigerants during the reporting year.
3. Fridge Waste Emissions Calculation: Multiply the total weight of fridge waste (in tonnes) by the most recent conversion factor for fridge waste disposal provided by the UK government. This will yield the emissions from fridge waste in terms of tCO2e.

Indirect emissions from the waste disposal of large electrical items

Calculation steps:

1. Data Retrieval: Retrieve the weight data for large electrical items used during the reporting year from the material use calculations. This data should be measured in tonnes.
2. IT Asset Disposal Log: Obtain the IT asset disposal log from the Infrastructure Team, which records any disposal of IT assets throughout the reporting year to identify any disposals of large electrical items that occurred.
3. Large Electrical Waste Emissions Calculations: Multiply the total weight of large electrical item waste (in tonnes) by the most recent conversion factor for large electrical item waste disposal provided by the UK government. This calculation will yield the emissions from large electrical waste in tCO2e.

Indirect emissions from the waste disposal of small electrical items

Calculation steps:

1. Data Retrieval: Retrieve the weight data for small electrical items used during the reporting year from the material use calculations. This data should be measured in tonnes.
2. IT Asset Disposal Log: Obtain the IT asset disposal log from the Infrastructure Team, which records any disposal of IT assets throughout the reporting year to identify any disposals of small electrical items that occurred.
3. Small Electrical Item Waste Emissions Calculations: Multiply the total weight of small electrical item waste (in tonnes) by the most recent conversion factor for small electrical item waste disposal provided by the UK government. This calculation will yield the emissions from small electrical waste in tCO2e.

5.3.4 Category 6: Business Travel

Air

Calculation steps:

1. Data Collection: Obtain the quarterly flight data from the third-party provider Business First. This data set should include the kgCO2e figure emitted for each flight taken during the quarter.
2. Quarterly Emissions Calculations: Sum the total kgCO2e emissions for each flight taken in the quarter to calculate the total kgCO2e figure for that quarter.
3. Conversion to Tonnes: Divide the total kgCO2e emissions figure for the quarter by 1000 to convert this figure for tCO2e
4. Annual Emissions Calculation: Repeat steps 2 and 3 for each quarter of the reporting year, and sum these quarterly tCO2e figures to calculate the total tCO2e emissions from air business travel for the reporting year.

Train

Calculation steps:

1. Data Collection: Obtain the total spend on train travel for each quarter of the reporting year from the Finance team. Then, source the price per mile for the reporting year from an online resource relevant to train travel.
2. Quarterly Distance Calculation: For each quarter, divide the total spend on train travel by the price per mile obtained online to estimate the total distance travelled by train in miles.
3. Conversion to Kilometres: Convert the total distance in miles to kilometres using the factor of 1.609344 (1 mile = 1.609344 km).
4. Annual Emissions Calculation: Repeat steps 2 through 4 for each quarter of the reporting year. Sum the tCO2e emissions from each quarter to obtain the total tCO2e emissions from train travel for the reporting year.

Taxi

Calculation steps:

1. Data Collection: Obtain the total spend on taxi travel for each quarter of the reporting year from the Finance team. Then, obtain the price per mile for the reporting year from the UK TFL website.
2. Quarterly Distance Calculation: For each quarter, divide the total spend on taxi travel by the price per mile from the UK TFL website to estimate the total distance travelled by taxi in miles.
3. Conversion to Kilometres: Convert the total distance in miles to kilometres using the factor of 1.609344 (1 mile = 1.609344 km).
4. Quarterly Emissions Calculation: Multiply the total distance travelled in kilometres by the black cab[6] conversion factor provided by the UK government to obtain the tCO2e figure for that quarter.
5. Annual Emissions Calculation: Repeat steps 2 through 4 for each quarter of the reporting year. Sum the tCO2e emissions from each quarter to obtain the total tCO2e emissions from taxi travel for the entire year.

Hotel stays

Calculation steps:

1. Data Collection: Obtain the quarterly data on hotel stays for the relevant teams from the Administrative team. This data should include the number of nights and the location (country) of each stay.
2. Flight Data Analysis: Using the flight data provided by Business First, calculate the number of overnight stays in the relevant country by subtracting the departure date from the arrival date in Excel, to determine the total nights spent in the country during the reporting period.
3. Emission Factor Identification: After calculating the number of nights spent in each location, identify the appropriate country-specific hotel stay conversion factor from the most recent figures provided by the UK government. If a country-specific hotel stay conversion factor is not available for a certain country, use the conversion factor assigned to a country with comparable geographical characteristics or proximity, such as using the conversion factor of Saudi Arabia for Bahrain.

---

[6] Please note that this calculation assumes that all taxi travel was conducted using "black cab" taxis, as it uses the specific conversion factor provided by the UK government for this type of taxi
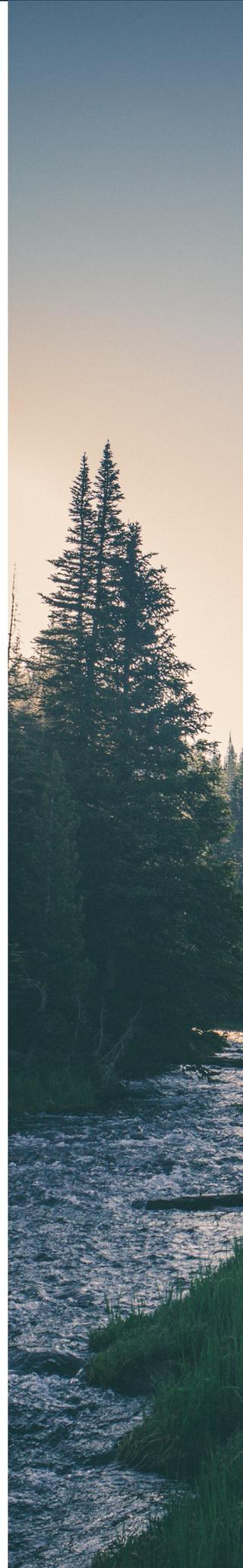
4. Country-Specific Calculations: For each country where a hotel stay was required during the quarter, multiply the number of nights stayed by the corresponding country-specific conversion factor. This will provide a kgCO2e figure for hotel stays in that particular country.
5. Total Emissions Calculation: Sum up all the kgCO2e figures obtained for each country to calculate the total kgCO2e figure for the quarter.
6. Conversion to tCO2e: To convert the total emissions figure from kgCO2e to tCO2e, divide the total kgCO2e figure by 1000.

5.3.5 Category 7: Employee Commuting

Calculation steps:

1. Establish average commuting time per kilometre: Utilize data from Moovit to calculate the average time spent commuting in London (in minutes) per average kilometre commuted.
2. Determine mode of transport distribution: Use the UK government-provided average commute time (in minutes) for each mode of transport (car, bicycle, bus coach, national rail, other rail, and walk). Divide this time by the total average commuting time for all modes to obtain the relative percentage of each mode of transport.
3. Calculate the number of employees using each mode of transport: Multiply the percentage distribution of each mode of transport by the total number of GIB AM employees.
4. Calculate inferred annual travel distance for each mode of transport: First, calculate the average distance travelled per day for each mode of transport by dividing the average commute time (in minutes) for each mode by the minute-per-kilometre figure obtained in step 1. Then, determine the average distance per year (in km) for each mode by multiplying the average daily distance by the average number of days GIB AM employees work in the office (obtained from the HR survey). Repeat this step for all modes of transport.
5. Calculate the total commuting distance per year for each mode of transport: Multiply the annual average distance travelled by each mode of transport (from step 4) by the number of employees using that mode (from step 3).
6. Calculate emissions from each mode of transport: Multiply the total annual commuting distance for each mode of transport by the corresponding UK Government-provided conversion factor, adjusting for the percentage commute time for each mode. This will yield tCO2e emitted for each mode of transport.
7. Sum emissions for all modes of transport: Add up the tCO2e emitted for each mode of transport to get the total Scope 3 emissions from employee commuting for the year.

5.3.6 Category 15: Investments

GIB AM utilises a third-party tool to calculate the financed emissions for its Asset Management business. Given the magnitude of these emissions, their value chain impact, significance to stakeholders, the inherent risk of calculating these emissions internally was deemed significant. Hence, from FY2023 GIB AM will continue to utilise the third-party tool to calculate the financed emissions associated with the Asset Management business.

An assessment was conducted in FY2023 to assess whether the scope of GIB AM's Category 15 financed emissions calculations should be expanded to include the Treasury and Banking business. An evaluated of the on-balance sheet assets associated with the Treasury and Banking business' activities was conducted, in accordance with the methodology set out in the Partnership for Carbon Accounting Financials (PCAF) Standard (2022). The outcome of the assessment was that the on-balance sheet sovereign debt trading securities were determined as in-scope, in line with the PCAF Standard.

Formula[7]:

Total Financed Emissions = Sum (Outstanding Amount[8] / PPP-adjusted GDP[9])* Sovereign Emissions (tCO2e)

Calculation:

1. Outstanding Amount: Determine the financial exposure for each sovereign borrower (USD)
2. Sovereign Emissions: Obtain the annual tCO2e data for the reporting year
3. PPP-adjusted GDP: Obtain the PPP-adjusted GDP figure for the reporting year
4. Attribution Factor: Divide the "Outstanding Amount " by PPP-adjusted GDP to calculate the Attribution Factor
5. Borrower's Financed Emissions: Multiply the Attribution Factor by the Sovereign Emissions (tCO2e)
6. Aggregate by summing the financed emissions to calculate the total financed emissions for sovereign debt

6. Data Management

6.1 Inventory Preparation

GIB AM maintains a Microsoft Office Excel-based inventory, updated quarterly by the Sustainability team. Quarterly GHG emissions calculations include:

- All scope 1 and 2 emissions sources in GIB AM's operational boundary; and
- Scope 3 emissions related to business travel (category 6), due to its significant contribution to GIB AM's total scope 3 emissions.

GHG emissions generated from all other scope 3 categories in GIB AM's operational boundary are calculated on an annual basis.

6.2 Data Veritification

Data verification within GIB AM's calculation procedure adheres to a stringent four to six eye check process. This meticulous practice is intended to identify any mistakes or inconsistencies that might have been missed by an individual reviewer. By engaging multiple individuals to independently verify the information, GIB AM ensures that the data is accurate, consistent, and in compliance with relevant standards and guidelines. The procedure is as follows:

1. **Initial Verification**: The collected data is initially checked by the designated contact person to confirm that it is both logical and accurate.
2. **Four Eye Check**: Performed by GIB AM's Sustainability Team (ST), this step involves a thorough examination to ascertain that the provided data is logical and without input errors in the carbon calculation form, thereby enhancing accuracy and reducing the likelihood of mistakes.
3. **Quality Control Audit**: The ST audits the data in the quality control spreadsheet, which is saved in the folder for the reporting year (e.g., 2023), under the file name "(year) GHG emissions QC log_incl.report".

---

[7] PCAF (2022)
[8] Financial exposure to each borrower (USD)
[9] Purchase Power Parity adjusted GDP, i.e., the value of a country's output as a proxy for the value of the country
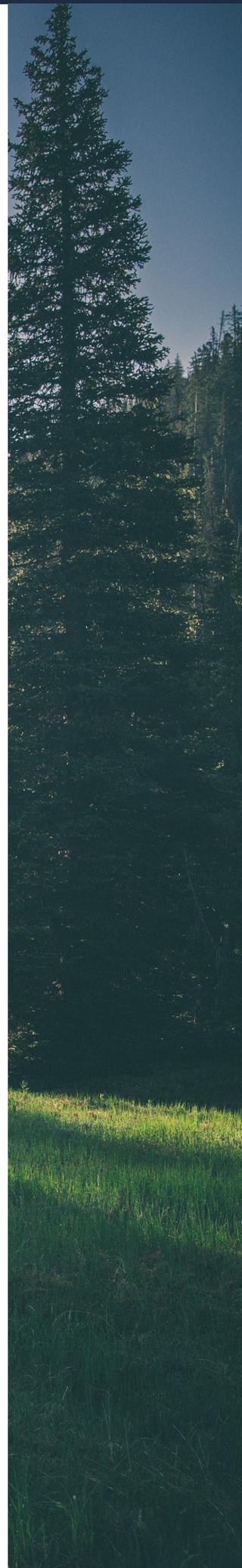
4. Six Eye Check (if applicable): For instances where the collected data has financial implications for GIB AM, such as a utility bill, the GIB AM Finance Department conducts a six eye check to confirm the accuracy of the data provided by third-party providers.

6.3 Risk Management

Under the Spreadsheet Risk Management Policy (2022), "spreadsheet risk" at GIB AM refers to the "collective risk of adverse impacts resulting from the use of spreadsheets by GIB AM". The quarterly and annual carbon emission calculation spreadsheets were deemed critical, meaning errors could have significant financial, reputational or operational consequences for GIB AM.

For GIB AM's Carbon Emissions Calculation Methodology, three main risks tied to carbon emissions calculation have been pinpointed:

1. **Data Deficiencies**: Lack of critical data might lead to incorrect estimations of carbon emissions, potentially affecting the credibility of our reporting.
2. **Data Handling Errors**: Mistakes in data collection, entry, or processing can introduce substantial inaccuracies in the final emissions calculations.
3. **Potential Data Loss**: Risks related to data storage could result in loss of essential data, disrupting the calculation process and possibly leading to inaccuracies.

6.4 Errors Arising from Lack of Data

GIB AM acknowledges the inherent challenges and risks that may arise in sourcing raw data (e.g., recycling data) and obtaining country-specific conversion factors. Such challenges could lead to uncertainties in the calculations. To mitigate these risks and maintain the integrity of our reporting, GIB AM has implemented the following practices:

1. **Difficulty in Sourcing Raw Data:**
   - *Risk:* Difficulty in obtaining or validating raw data may lead to gaps in the required information.
   - *Mitigation Strategy*: In instances where raw data is unavailable or incomplete, GIB AM will utilise a reasonable estimate, such as previous months' or year's averages. This approach enables continuity in reporting while still adhering to a sound methodological framework.
2. **Unavailability of Country-Specific Industry Factors**:
   - *Risk:* Country-specific industry conversion factors may not be available, leading to potential inconsistencies in conversion and calculation.
   - *Mitigation Strategy*: Should specific country industry factors be unavailable, GIB AM will resort to best practice country estimates, aligning with industry standards. Such estimates are not made arbitrarily but are methodically selected to match as closely as possible with the unavailable data.
3. **Oversight and Approval**:
   - *Process:* All estimates, whether for raw data or conversion factors, undergo a stringent review process and are signed off by the Chief Sustainability Officer (CSO) of GIB AM. This ensures that any deviations from the usual data sourcing practices are carefully evaluated and approved at a senior level, providing an additional layer of scrutiny and integrity.
4. **Continuous Monitoring and Review:**
   - *Ongoing Management:* GIB AM commits to continuous monitoring and periodic review of these risk management practices. This ongoing oversight ensures that the strategies remain relevant and effective in managing the uncertainties and risks associated with data sourcing and conversion factors.

6.5 Errors Arising from Data Handling

Some data may be prone to error if handled by staff members unfamiliar with the process. Mistakes in collection, entry, or processing can lead to inaccuracies in the emissions calculations. GIB AM mitigates this risk through a four to six eye check verification process, where multiple individuals verify the information to identify and correct errors. This method enhances the reliability of the data, thereby ensuring accurate emissions calculations.

6.6 Errors Arising from Data Handling

Technology failure can result in data loss, a concern for any technology-based exercise. Data is saved in designated GIB AM folders, and a proficient IT team stands ready to recover any lost information. This approach maintains the integrity of the emissions calculations and minimises potential disruptions.

Technology failure can lead to the risk of data loss within any technology-based exercise. At GIB AM, data is saved in specific folders, and a proficient IT team is in place to recover any lost information if necessary. This ensures the integrity of the emissions calculations and minimises potential disruptions.