



Energising today
Advancing tomorrow

Contents

Scope 3 emissions calculation methodology

About this document

This document describes the methodology, organisational and operational boundaries¹, data sources and key assumptions used by Glencore to calculate and report Scope 3 greenhouse gas (GHG) emissions. We have considered the GHG Protocol's Corporate Accounting and Reporting Standard, the Corporate Value Chain (Scope 3) Standard and Technical Guidance for Calculating Scope 3 Emissions, and the ICMM Scope 3 Emissions Accounting and Reporting Guidance in formulating our approach to calculating the Scope 3 emissions we report on.

Our Scope 3 methodology considers the GHG Protocol's guiding accounting principles of relevance, completeness, consistency, transparency, and accuracy. Where there are trade-offs between these principles, we balanced them to generate an emissions inventory that best supports delivery of our climate objectives, namely:

- To provide an accurate assessment of relevant climate-related risks and opportunities that exist both within our business and value chains;
- To identify emission hot-spots and prioritise reduction efforts across our operations and value chains;
- To accurately track performance against our climate commitments over time in a transparent and consistent manner; and
- To enhance information provided to stakeholders through transparent, accurate and consistent reporting of relevant emission sources.

Reference is made to the latest Group Reporting Glossary available at [glencore.com/publications](https://www.glencore.com/publications) with respect to the terms used in this report.

For further information on the detailed calculations we have performed in connection with our emissions and energy consumption disclosures, please refer to our latest Annual and Sustainability Reports and Basis of Reporting, which are available on our website at [glencore.com/publications](https://www.glencore.com/publications).

The matters disclosed in this document are a 'point in time' disclosure only. The information presented is subject to change at any time without notice and we do not intend to update this information except as required. Refer to the Important notice section in our latest Annual Report for further information.

¹ The organisational boundaries determine the operations owned or controlled by the reporting company, depending on the consolidation approach taken. The operational boundaries determine the direct and indirect emissions associated with operations within the organisational boundaries. This assessment allows a reporting company to establish which operations and sources cause direct and indirect emissions, and to decide which indirect emissions to include that are a consequence of its operations within the organisational boundaries.

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Organisational boundary

Glencore uses the organisational boundary of operational control for emissions and energy reporting. Our Scope 3 methodology calculates emissions allocated to the industrial assets where we have operational control, i.e., where Glencore directly or indirectly controls and directs the day-to-day management and operation of the entity engaging in such activity, whether by contract or otherwise. Where we have operational control of industrial assets, we report on Scope 3 emissions on a 100% basis, irrespective of our actual equity share.

Where Glencore's marketing or corporate offices conduct business for or on behalf of our industrial assets, our Scope 3 calculation methodology applies to them in relation to categories 1, 4, 9, 10, and 11 of Scope 3 emissions as outlined in this document. Our methodology excludes Scope 3 emissions associated with third-party volumes traded by our marketing business, with the exception of shipping of third-party traded volumes paid for by our marketing business which is included in category 4.

For industrial assets that extract, produce or process metals, mineral and energy products for sale or further processing but are not under Glencore's operational control, we report our equity share of such industrial assets' Scope 1 and 2 emissions, and, whenever the Scope 3 emissions are greater than Scope 1 and 2 emissions combined, Scope 3 emissions in category 15.

Baseline restatements

Glencore has established a fixed baseline year of 2019 for our industrial asset emissions (Scope 1, 2 and 3) reduction targets. To enable comprehensive and consistent tracking of progress against targets over time, the GHG Protocol requires a restatement of baseline emissions when significant changes in company structure or inventory methodology occur, including:

- Structural organisational changes such as mergers, acquisitions, and divestments (these trigger retroactive recalculation because they merely transfer emissions from one company to the another without any changes in emissions released into the atmosphere);
- Changes in calculation methodologies, improvements in data accuracy, or discovery of significant errors (if these result in significant differences in emission estimates, companies must recalculate baseline emissions applying new data sources and/or methodology retrospectively while changes in emission factors or activity data² that reflect real changes in emissions over time do not trigger a recalculation); and
- Changes in categories or activities included or excluded from the Scope 3 inventory (if the cumulative effect of adding or changing scope 3 categories or activities is significant, companies should include the new categories or activities in the base year).

Glencore's baseline emissions recalculation policy includes a minimum significance threshold³ of 5%. To maintain consistency in our emissions inventory boundary over time, any changes that result in our Scope 3 emissions exceeding the significance threshold require a recalculation of emissions from the baseline and subsequent reporting years.

² Activity data means the quantitative measure of a level of activity that results in CO₂e emissions (for example, litres of fuel consumed, kilograms of material purchased, or quantity of fugitive emissions released from emission points, megawatt-hours of electricity used).

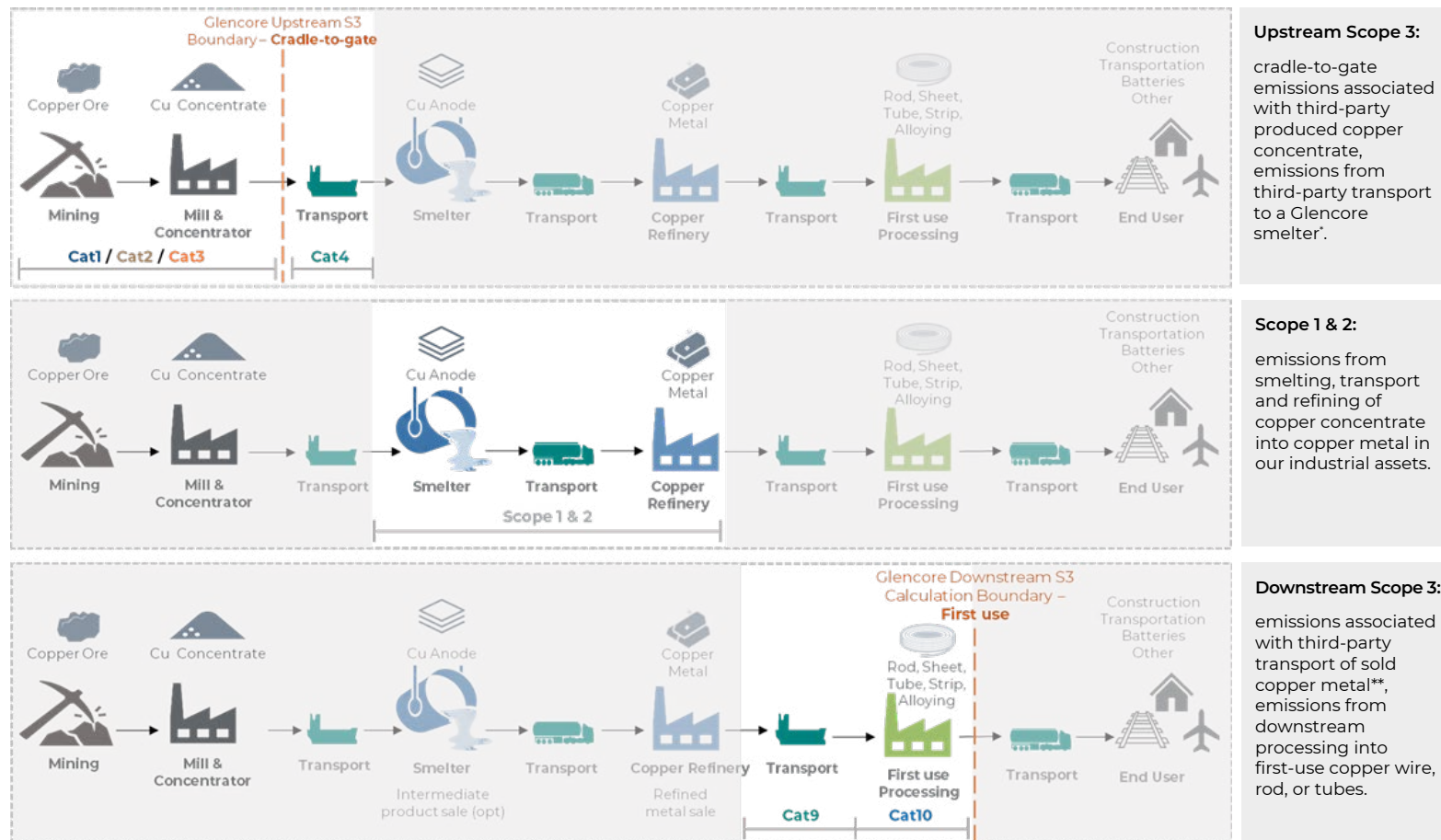
³ Criterion used to determine whether a change is significant enough to warrant the recalculation of baseline emissions. If a restatement is deemed appropriate for other reasons, we may choose to recalculate emissions even if the change does not meet the significance threshold.

Overlap and double counting

The GHG Protocol establishes calculation methodologies and boundaries between Scopes 1 and 2 emissions and Scope 3 categories that are designed to prevent two or more companies double counting the same emissions in the same scope. Due to Glencore's nature as a vertically integrated commodities producer and marketer however, there is a high possibility of overlap in Scope 1, 2 and 3 reporting boundaries. This is due to our direct and indirect involvement at multiple points in the life cycles of the commodities we produce, consume, and trade. As a result, double counting will be inherent in our emissions and energy reporting, inflating the total inventory. These inherent overlaps, particularly impacting Scope 3 emissions, are noted in the GHG Protocol and accepted if removing the double count is not feasible given the nature of the data available.

Where potential double counting is identified, we address it on a case-by-case basis and disclose it in our reported emissions inventory.

An example of Glencore's metals value chain (copper) with emissions measurement boundaries and category mapping



Upstream Scope 3:
 cradle-to-gate emissions associated with third-party produced copper concentrate, emissions from third-party transport to a Glencore smelter*.

Scope 1 & 2:
 emissions from smelting, transport and refining of copper concentrate into copper metal in our industrial assets.

Downstream Scope 3:
 emissions associated with third-party transport of sold copper metal**, emissions from downstream processing into first-use copper wire, rod, or tubes.

This is one example of a commodity value chain to demonstrate processing steps and category mapping. Scope 3 categories identified as immaterial and irrelevant to our Scope 3 inventory are not shown. Scope 3 category 15 (investments) is not shown as it cannot be readily mapped to a specific commodity value chain.

* Emissions related to the transport of products purchased by Glencore are accounted for in category 4 when we pay for transport, or category 1 when our suppliers pay.

** Emissions related to the transport of products sold by Glencore are accounted for in category 4 when we pay for transport, or category 9 when our customers pay.

Scope 3 emissions

Definition of Scope 3 emissions

Scope 3 emissions we report on are our indirect CO₂e emissions that are not Scope 2 emissions and that occur in the value chain of our industrial assets reported within specific Scope 3 categories.

Scope 3 emissions are the result of activities that occur outside our organisational boundary, but that our industrial assets impact in their value chains, such as emissions embedded in purchased goods, downstream customer processing and use of sold products, and third-party logistics and transportation.

Upstream Scope 3 emissions of our industrial assets relate to all relevant third-party goods and services purchased, either directly by our industrial assets or indirectly through Glencore's central industrial asset procurement teams or our marketing business.

Downstream Scope 3 emissions of our industrial assets relate to commodities produced by our industrial assets that are sold to third parties, either directly by the industrial asset or indirectly by our marketing business.

Examples of business activities undertaken by Glencore's marketing business for or on behalf of industrial assets are when our marketing business:

- sources and supplies third-party feedstock to our industrial assets for further processing;
- organises and pays for the third-party transport of feedstock supplied to our industrial assets;
- sells commodities produced by our industrial assets to a third-party customer; or
- charters a vessel to transport commodities produced by our industrial assets to a third-party customer.

The GHG Protocol subdivides Scope 3 emissions into 15 distinct categories that are designed to be mutually exclusive. These are described in the table opposite below.

Scope 3 category descriptions

1: Purchased goods and services	Emissions relating to the extraction, production, and transportation of goods and services purchased or acquired for use or processing in our industrial assets, not otherwise included in categories 2 – 8.
2: Capital goods	Emissions relating to the upstream (cradle-to-gate) emissions of capital goods purchased or acquired by our industrial assets.
3: Fuel- and energy-related activities	Emissions relating to the extraction, production, and transportation of fuels and energy purchased or acquired by our industrial assets, not already accounted for in Scope 1 (use/ combustion) or Scope 2 (generation).
4: Upstream transportation & distribution	Emissions relating to the third-party transport purchased and organised by our industrial assets or marketing business and used to transport goods purchased or acquired by our industrial assets and sold goods produced by our industrial assets. We also include transport emissions associated with third-party traded volumes paid for by our marketing business.
5: Waste generated in operations	No category-relevant data identified – subject to a periodical review.
6: Business travel	Not relevant – subject to a periodical review.
7: Employee commuting	Not relevant – subject to a periodical review.
8: Upstream leased assets	Not applicable – subject to a periodical review.
9: Downstream transportation and distribution	Emissions relating to third-party transport not paid for by our industrial assets or marketing business and used to transport goods produced by our industrial assets to the first-use consumer.
10: Processing of sold products	Emissions relating to the further processing by our customers of sold volumes of intermediate products produced by our industrial assets.
11: Use of sold products	Emissions relating to the use (combustion) of sold coal and refined oil products produced or processed by our industrial assets.
12: End-of-life treatment of sold products	Not relevant – subject to a periodical review.
13: Downstream leased assets	Not relevant – subject to a periodical review.
14: Franchises	Not relevant – subject to a periodical review.
15: Investments	Emissions related to Glencore's equity share of the Scope 1, 2 and, whenever these are greater than Scope 1 and 2 combined, the Scope 3 emissions from JVs we do not control or operate that are commodity producing or processing industrial entities or industrial entities where production of commodities has ceased, and for which we can source or estimate emissions data.

Considering our industrial assets' commodity value chains, the boundaries for Scope 3 emissions measurement are as described in the table below.

Scope 3 boundary definitions

Scope 3	Boundary	Definition
Upstream Categories 1-8	Cradle-to-gate	<p>Upstream emissions are calculated from extraction of third-party raw materials, energy products and electricity sources, transport and processing up to the product purchased for use or processing in our industrial assets.</p> <p>Emissions from use of purchased products, subsequent processing steps or transport in owned or operated vehicles are excluded as these are included in the Scope 1 or 2 emissions of our industrial assets.</p> <p>In terms of purchased services, the upstream value-chain boundary includes third-party transportation paid for by Glencore.</p>
Downstream Categories 9-15	Up to first use	<p>Downstream emissions are calculated up to and including the conversion of sold intermediate products produced by our industrial assets into their first-use state, which forms the basis for subsequent final products. For energy products (e.g., oil and coal), the first-use state is often also the final product.</p> <p>Emissions relating to the use (combustion) of energy products sold to third parties by or on behalf of our industrial assets are measured.</p> <p>In terms of services, the downstream value-chain boundary includes third-party transportation of sold products and investments.</p>

Downstream value-chain boundary product states

There are three product states to consider in the downstream value-chain boundary: intermediate, first use and final products.

Intermediate products are inputs to the production of other goods that require further processing, transformation, or inclusion in another product before use by the end consumer. Intermediate products are not consumed by the end user in their current form.

Most of the metal and mineral products produced by our industrial assets are intermediate products, plus some combustible and non-combustible fossil products that require processing before use.

First-use state is the form of sold intermediate products after conversion into the state which form the basis for subsequent final products. In first-use state, a material does not anatomically change, and must not require further energy-intensive metallurgical processing but may still undergo some mechanical processing when converted into final product.

Final products are consumed by an end user in their current form, without further processing, transformation, or inclusion in another product. Final products include products consumed by end consumers, products sold to retailers for resale to consumers (e.g., consumer products) and products consumed by businesses in their current form (e.g., office supplies).

There are a few products where first use is also considered the final use state. First use for combustible fossil products is a state at which no further processing is required for use (combustion), i.e., jet fuel, diesel, fuel oil, gas, and coal.

Scope 3 category and emission source exclusions

Our industrial assets are required to account for all material and relevant Scope 3 categories and emission sources in their value chain. Category and emission source exclusions are only permitted when a quantitative and qualitative assessment determines them to be immaterial and irrelevant to Glencore's calculated Scope 3 emissions inventory. Any Scope 3 exclusion must be documented, justified, and declared.

Materiality assessments of Scope 3 categories and emission sources are conducted at Group level using the following approach:

For each Scope 3 category, an initial calculation using available spend, revenue or sample data is used to quantify expected emissions. A significance threshold of 2.5% with respect to Glencore's total calculated Scope 3 emissions is applied to determine materiality. If the category surpasses the threshold, it must be included in the reported inventory.

Categories not meeting the quantitative materiality threshold still require inclusion in the reported inventory when this is required under any applicable regulation or sector guidance.

A qualitative filter, which considers whether an exclusion is not warranted for other reasons, is applied as a final relevance check. Categories and emission sources that meet the qualitative threshold must be included in the reported inventory. Those that are not considered material or relevant can be excluded, provided that the appropriate justification and documentation is prepared for internal and external verification.

All Scope 3 exclusions must undergo a periodical review at least every three years:

- To reaffirm the category or emission source as not applicable, immaterial and irrelevant; or
- To identify changes that make the category or emission source applicable, material or relevant

Where a Scope 3 category or emission source is no longer immaterial and irrelevant, associated emissions must be calculated and included in Glencore's Scope 3 inventory retrospectively from the 2019 baseline.

Calculation of Scope 3 emissions

Scope 3 accounting best practice requires that the reported emissions inventory is specific to the products and processes in a company's value chain. This level of granularity necessitates a shift in methodology from spend-based or average-data to value-chain specific emissions monitoring. To facilitate this transition, for selected upstream Scope 3 categories, multiple methods of calculation are provided for:

- A. Primary-data method, typically the value-chain product or activity-specific method;
- B. Secondary-data method, typically the average-data method⁴; and
- C. Tertiary-data method, typically the spend-based method.

Where a commodity value-chain has matured such that quality supplier-, and product-specific emission data is available, can be collected, verified, and recorded, Glencore's upstream Scope 3 reporting within that value-chain will transition from the secondary-data to the primary-data method to better reflect the specific emissions embedded in the third-party products and services purchased or sold. Primary data sourced from value-chain partners is only applicable when an independent third-party verification process has been performed and the data meets Glencore's quality criteria (to be defined during 2024).

Given the current levels of data quality and availability, it is expected that most Scope 3 calculations will initially rely on secondary data and that the transition to the use of the primary-data method will be gradual, initially focused on upstream Scope 3 emission hotspots. The tertiary-data method is only used when quality average data is not available, or the applicability of available data cannot be appropriately verified.

⁴ The average data method means the approach of secondary data calculation of estimating emissions based on the typical average from a sample across an industry or geography, used where activity-specific (primary) data is unavailable or inconsistent.

Upstream Scope 3 categories

Category 1: Purchased goods and services

GHG Protocol description:	Extraction, production, and transportation of goods and services purchased or acquired by the reporting company in the reporting year, not otherwise included in categories 2 – 8.
Minimum activity boundary	<p>Emissions sources in this category relevant and material to our industrial assets have been further sub-divided into third-party produced feedstock (energy products or metals and minerals), production consumables and infrastructure consumables.</p> <p>The reporting boundary includes the cradle-to-gate emissions (Scope 1, Scope 2, and upstream Scope 3) embedded in the relevant purchased or acquired goods and associated transport when paid for by our suppliers.</p>
Inclusions	<p>Third-party feedstock</p> <ul style="list-style-type: none"> Energy products including crude oil purchases for further processing/refining in our industrial assets (i.e., not for own use/combustion), sourced directly by the industrial asset or indirectly through the marketing business. <p><i>N.B.: Upstream emissions associated with fuels purchased for use/combustion are included in category 3A and excluded from category 1.</i></p> <ul style="list-style-type: none"> Third-party primary/secondary metals and minerals purchases for further processing in our industrial assets, sourced directly by the industrial asset or indirectly through the marketing business. <p>Third-party production consumables</p> <p>Emissions embedded in the most relevant materials that are consumed in the production processes of our industrial assets, such as explosives, lime and sulfuric acid, to create intermediate or first-use products.</p> <p>Third-party infrastructure consumables</p> <p>Emissions associated with the production and use of infrastructure consumables like valves, pipes and tyres that are important aspects of the production processes of our industrial assets but not specifically used up within the process.</p> <p>Third-party transport of feedstock paid for by our suppliers and consumables</p> <ul style="list-style-type: none"> Where the transport of purchased feedstock or the most relevant production consumables between supplier and our industrial assets is included in the purchase price and/or paid for by our suppliers, associated emissions are included in category 1; and Emissions associated with the transport of all other production or infrastructure consumables.

Exclusion	<ul style="list-style-type: none"> Internal transfers of commodities produced by our industrial assets (already covered in another industrial asset's emissions inventory); Purchased services other than transport (identified as not material or relevant); Third-party transport paid for by Glencore (included in category 4); and Third-party feedstock used in the production of non-core products, defined as < 50Kmt of products purchased or acquired by our industrial assets (insufficient visibility in product value chains, which limits our ability to estimate emissions). 		
Activity data required	Quantities of goods purchased or acquired in the reporting year (e.g., tonnes of third-party metals and minerals, quantity of consumable items).		
Calculation method	<p>Method A: Supplier specific <i>(Primary data method)</i></p> <p>Calculates emissions embedded in purchased goods by multiplying the mass of goods purchased by the relevant primary cradle-to-gate emission factor (product-specific emissions per unit of mass).</p> <p>Sum across purchased goods: $\sum (\text{quantities of purchased good (e.g., tonne)} \times \text{supplier-specific product emission factor}^5 \text{ of purchased good (e.g., tonne CO}_2\text{e/tonne)})$</p>	<p>Method B: Average data <i>(Secondary data method)</i></p> <p>Estimates emissions embedded in purchased goods by multiplying the mass of goods purchased by the relevant secondary cradle-to-gate emission factor (average emissions per unit of mass).</p> <p>Sum across purchased goods: $\sum (\text{mass of purchased good (tonne)} \times \text{emission factor of purchased good per unit of mass (tonne CO}_2\text{e/tonne)})$</p>	<p>Method C: Spend based <i>(Tertiary data method)</i></p> <p>Estimates emissions embedded in purchased goods by collecting data on their economic value and multiplying these by relevant secondary emission factors.</p> <p>Sum across purchased goods: $\sum (\text{value of purchased good (\\$)} \times \text{emission factor of purchased good per unit of economic value (tonne CO}_2\text{e/\\$)})$</p>
Emission factor sources	Directly sourced from product supplier (e.g., from supplier specific life cycle assessment (LCA) or emissions accounting).	Centrally sourced and maintained from third-party data providers: <ul style="list-style-type: none"> Skarn for feedstock. Ipiecea for crude oil; and Ecoinvent for relevant purchased consumables (includes emissions from transport). 	Centrally sourced and maintained from the USA Environmental Protection Agency (EPA).

⁵ A supplier-specific emission factor is an emission rate provided by a specific supplier to its customers, reflecting the emissions associated with the specific product or service it sells. Suppliers offering differentiated products or services (e.g., a renewable energy product) should provide specific emission factors for each product and service, and ensure they are not double counted.

Double-count mitigation	<ul style="list-style-type: none"> If the purchase of a good is accounted for as operational expenditure, associated emissions are reported in category 1. Any purchased goods accounted for as capital expenditure are reported in category 2. Only goods purchased or acquired from third-party producers are included in Glencore's category 1 Scope 3 inventory. Any emissions associated with goods produced or processed in our industrial assets are excluded from category 1 Scope 3, as associated upstream emissions are already covered in the producing asset's Scope 1, 2 and upstream Scope 3 emissions inventory. In the scenario that our industrial assets acquire goods produced by non-operated JVs that are included in category 15, some double counting across Scope 3 will be inherent. Where removing the double count is not feasible given the nature of the data available, this duplication is accepted under GHG Protocol guidance.
Internal allocation	Upstream emissions associated with third-party goods purchased by the marketing business or central procurement, but internally transferred to our industrial assets are allocated to our industrial assets' emissions inventory.

Category 2: Capital goods

GHG Protocol description:	Extraction, production, and transportation of capital goods purchased or acquired by the reporting company in the reporting year.
Minimum activity boundary	Upstream (cradle-to-gate) emissions associated with capital goods purchased by our industrial assets. Capital goods are final products that have an extended life and are used by our industrial assets to manufacture a product, provide a service, or sell, store, and deliver merchandise, e.g., equipment, machinery, buildings, facilities, and vehicles.
Inclusions	<ul style="list-style-type: none"> Emissions associated with purchased capital goods; and Emissions associated with components used in shut down or re-build projects.
Exclusions	<ul style="list-style-type: none"> Emissions from the use of capital goods that are accounted for in Scope 1 or Scope 2; and Any purchased goods accounted for as operational expenditure (included in category 1 Scope 3).
Activity data required	Amount spent on capital goods by product type, using market values (USD).
Calculation method	<p>Method: Spend based</p> <p>Estimates emissions embedded in capital goods by collecting data on the economic value of goods purchased and multiplying these by relevant secondary emission factors.</p> <p>Sum across capital goods: $\sum (\text{value of capital good (\\$)} \times \text{emission factor of capital good per unit of economic value (tonne CO}_2\text{e/\\$)})$</p>

Emission factor sources	Centrally sourced and maintained from the USA Environmental Protection Agency (EPA).
Double-count mitigation	If the purchase of a good is accounted for as capital expenditure, associated emissions are reported in category 2. Any purchased goods accounted for as operational expenditure are reported in category 1.

Category 3: Fuel and energy-related activities

GHG Protocol description:	Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company in the reporting year, not already accounted for in Scope 1 or Scope 2.	
Minimum activity boundary	Activity	Boundary
	A	Upstream emissions of fuels purchased for own use.
	B	Upstream emissions of purchased electricity for own use.
	C	Transmission & distribution (T&D) losses of purchased electricity for own use.
	D	Generation emissions of purchased electricity that is sold to end users.
	A: The upstream (cradle-to-gate) emissions associated with the extraction, production and transportation of fuels purchased and consumed by our industrial assets.	
	B: The upstream (cradle-to-gate) emissions associated with the extraction, production and transportation of fuels consumed in the generation of energy that is purchased and consumed by our industrial assets.	
	C: Emissions from generation (upstream activities and combustion) of energy that is consumed (i.e., lost) in a T&D system.	
	D: Emissions associated with the generation (Scope 2) of electricity purchased by our industrial assets and sold on to end users.	

Activity A: Upstream emissions of fuels purchased for own use.		
Inclusions	<ul style="list-style-type: none"> Upstream emissions of all gaseous, liquid, and solid fuel sources consumed by our industrial assets. 	
Exclusions	<ul style="list-style-type: none"> Emissions from the use of purchased fuels (included in Scope 1); Upstream emissions of purchased fuels for processing/refining in our industrial assets (i.e., not used/consumed) (included in category 1); and Upstream emissions from fuels which have been produced by our industrial assets (included in Scope 1) 	
Activity data required	Activity data for category 3A are the same as the Scope 1 fuel data: quantities and types of fuels purchased and consumed, excluding intercompany sales of Glencore-produced coal.	
Calculation method	<p>Method A: Supplier specific (Primary data method)</p> <p>Involves calculating emissions by collecting data from fuel suppliers on their cradle-to-gate emissions (extraction, production, and transportation) of fuels purchased and consumed.</p> <p>Sum across each fuel type consumed: $\sum (\text{fuel consumed (e.g., kg)} \times \text{upstream fuel-provider specific emission factor (e.g., (kg CO}_2\text{e)/kg)})$ where: upstream fuel-provider specific emission factor = life cycle emission factor – combustion emission factor.</p>	<p>Method B: Average data (Secondary data method)</p> <p>Involves estimating emissions by using secondary emission factors for upstream emissions per unit of consumption.</p> <p>Sum across each fuel type consumed: $\sum (\text{fuel consumed (e.g., kg)} \times \text{upstream average fuel emission factor (e.g., (kg CO}_2\text{e)/kg)})$ where: upstream average fuel emission factor = life cycle emission factor – combustion emission factor.</p>
Emission factor sources	Directly sourced from fuel supplier. Must include fuel-specific emissions for extraction, production, and transportation of fuels per unit of fuel purchased.	Centrally sourced and maintained from third-party data providers: <ul style="list-style-type: none"> Ecoinvent; and Ipieca.
Double-count mitigation	See Exclusions	

Activity B: Upstream emissions of purchased electricity for own use.		
Inclusions	<ul style="list-style-type: none"> Upstream emissions of purchased electricity consumed by our industrial assets. 	
Exclusions	<ul style="list-style-type: none"> Combustion emissions of fuels for power generation purchased and consumed by our industrial assets (included in Scope 2); and Upstream emissions of self-generated electricity (included in Scope 1). 	
Activity data required	The quantities of purchased and consumed electricity by our industrial assets are the same as the data used for our Scope 2 emissions calculations.	
Calculation method	<p>Method A: Supplier specific (Primary data method)</p> <p>Involves calculating emissions by collecting data specific to electricity providers on their upstream emissions (extraction, production, and transportation) of purchased and consumed electricity.</p> <p>Sum across suppliers: $\sum (\text{electricity consumed (kWh}^6\text{)} \times \text{utility-specific upstream electricity emission factor (kg CO}_2\text{e)/kWh)})$ where: utility-specific upstream electricity emission factor = life cycle emission factor – combustion emission factor – T&D losses.</p>	<p>Method B: Average data (Secondary data method)</p> <p>Involves estimating emissions by using secondary emission factors for upstream emissions per unit of purchased and consumed electricity.</p> <p>Sum across regions, or countries: $\sum (\text{electricity consumed (kWh)} \times \text{average upstream electricity emission factor (kg CO}_2\text{e)/kWh)})$ where: average upstream electricity emission factor = life cycle emission factor – combustion emission factor – T&D losses.</p>
Emission factor sources	Directly sourced from electricity provider. Must include electricity-specific emissions for extraction, production and transportation of fuels consumed per unit of purchased and consumed electricity.	Centrally sourced and maintained from Ecoinvent, covering grid-region, country, or regional emission factors for extraction, production, and transportation of fuels per unit of purchased and consumed electricity.
Double-count mitigation	See Exclusions	

⁶ A kilowatt-hour (kWh) is the unit of electrical energy equal to 3.6 megajoules; energy delivered over one hour by a source with an output of 1 kilowatt.

Activity C: Transmission & distribution (T&D) losses of purchased electricity for own use.			
Inclusions	T&D losses associated with purchased electricity consumed by our industrial assets.		
Exclusions	Combustion and upstream emissions of purchased and consumed electricity (included in Scope 2 and category 3B, respectively).		
Activity data required	The quantities of purchased electricity consumed by our industrial assets are the same as the data used for our Scope 2 emissions calculations		
Calculation method	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Method A: Supplier specific (Primary data method) Involves calculating emissions by collecting data directly from electricity providers on the utility-specific T&D loss rates, specific to the grid where electricity is generated and consumed. Sum across suppliers: $\sum (\text{electricity consumed (kWh)} \times \text{utility specific electricity life-cycle emission factor ((tonne CO}_2\text{e)/kWh)} \times \text{utility-specific T&D loss rate (\%)})$ </td> <td style="width: 50%; vertical-align: top;"> Method B: Average data (Secondary data method) Involves estimating emissions by using average T&D loss rates (e.g., national, or regional). Sum across regions, or countries: $\sum (\text{electricity consumed (kWh)} \times \text{average T&D loss rate (kg CO}_2\text{e / kWh)})$ </td> </tr> </table>	Method A: Supplier specific (Primary data method) Involves calculating emissions by collecting data directly from electricity providers on the utility-specific T&D loss rates, specific to the grid where electricity is generated and consumed. Sum across suppliers: $\sum (\text{electricity consumed (kWh)} \times \text{utility specific electricity life-cycle emission factor ((tonne CO}_2\text{e)/kWh)} \times \text{utility-specific T&D loss rate (\%)})$	Method B: Average data (Secondary data method) Involves estimating emissions by using average T&D loss rates (e.g., national, or regional). Sum across regions, or countries: $\sum (\text{electricity consumed (kWh)} \times \text{average T&D loss rate (kg CO}_2\text{e / kWh)})$
Method A: Supplier specific (Primary data method) Involves calculating emissions by collecting data directly from electricity providers on the utility-specific T&D loss rates, specific to the grid where electricity is generated and consumed. Sum across suppliers: $\sum (\text{electricity consumed (kWh)} \times \text{utility specific electricity life-cycle emission factor ((tonne CO}_2\text{e)/kWh)} \times \text{utility-specific T&D loss rate (\%)})$	Method B: Average data (Secondary data method) Involves estimating emissions by using average T&D loss rates (e.g., national, or regional). Sum across regions, or countries: $\sum (\text{electricity consumed (kWh)} \times \text{average T&D loss rate (kg CO}_2\text{e / kWh)})$		
Emission factor sources	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Directly sourced from utility provider.</td> <td style="width: 50%;">Centrally sourced and maintained from the International Energy Agency (IEA).</td> </tr> </table>	Directly sourced from utility provider.	Centrally sourced and maintained from the International Energy Agency (IEA).
Directly sourced from utility provider.	Centrally sourced and maintained from the International Energy Agency (IEA).		
Double-count mitigation	See Exclusions		

Activity D: Generation emissions of purchased electricity that is sold to end users.			
Inclusions	Emissions associated with the generation of purchased and resold electricity by our industrial assets.		
Exclusions	Generation emissions of purchased and consumed electricity (Scope 2).		
Activity data required	Quantities of purchased electricity that is subsequently resold to third parties.		
Calculation method	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> Method A: Supplier specific (Primary data method) Involves allocating emissions by collecting qualifying market-based emission factors from electricity providers specific to the electricity purchased and resold (aligned with Scope 2 market-based method⁷). Sum across suppliers: $\sum (\text{resold purchased electricity (kWh)} \times \text{market-based emission factor (tonne CO}_2\text{e/kWh)})$ </td> <td style="width: 50%; vertical-align: top;"> Method B: Average data (Secondary data method) Involves allocating emissions by multiplying total resold purchased electricity with grid-average emission factors (aligned with Scope 2 location-based method⁸). Sum across regions or countries: $\sum (\text{resold purchased electricity (kWh)} \times \text{location-based emission factor (tonne CO}_2\text{e/kWh)})$ </td> </tr> </table>	Method A: Supplier specific (Primary data method) Involves allocating emissions by collecting qualifying market-based emission factors from electricity providers specific to the electricity purchased and resold (aligned with Scope 2 market-based method ⁷). Sum across suppliers: $\sum (\text{resold purchased electricity (kWh)} \times \text{market-based emission factor (tonne CO}_2\text{e/kWh)})$	Method B: Average data (Secondary data method) Involves allocating emissions by multiplying total resold purchased electricity with grid-average emission factors (aligned with Scope 2 location-based method ⁸). Sum across regions or countries: $\sum (\text{resold purchased electricity (kWh)} \times \text{location-based emission factor (tonne CO}_2\text{e/kWh)})$
Method A: Supplier specific (Primary data method) Involves allocating emissions by collecting qualifying market-based emission factors from electricity providers specific to the electricity purchased and resold (aligned with Scope 2 market-based method ⁷). Sum across suppliers: $\sum (\text{resold purchased electricity (kWh)} \times \text{market-based emission factor (tonne CO}_2\text{e/kWh)})$	Method B: Average data (Secondary data method) Involves allocating emissions by multiplying total resold purchased electricity with grid-average emission factors (aligned with Scope 2 location-based method ⁸). Sum across regions or countries: $\sum (\text{resold purchased electricity (kWh)} \times \text{location-based emission factor (tonne CO}_2\text{e/kWh)})$		
Emission factor sources	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Market-based emission factors are calculated using emissions attributes from contractual instruments.</td> <td style="width: 50%;">Location-based emission factors are country- or regional-average grid intensities which are centrally sourced and maintained.</td> </tr> </table>	Market-based emission factors are calculated using emissions attributes from contractual instruments.	Location-based emission factors are country- or regional-average grid intensities which are centrally sourced and maintained.
Market-based emission factors are calculated using emissions attributes from contractual instruments.	Location-based emission factors are country- or regional-average grid intensities which are centrally sourced and maintained.		
Double-count mitigation	See Exclusions		

⁷ Scope 2 emissions based on GHG emissions emitted by the generators from which our industrial assets contractually purchase electricity, steam, and heat/cooling, bundled with EAC's, or unbundled electricity with EAC's on their own, and for which a specific emission factor is known.

⁸ Scope 2 emissions based on average energy generation emission factors for defined locations, including local, sub-national or national boundaries (using mostly grid-average emission factors).

Category 4: Upstream transportation and distribution

GHG Protocol description:	Transportation and distribution of products purchased by the reporting company in the reporting year between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company). Includes inbound and outbound logistics (e.g., of sold products), and transportation between a company's own facilities (in vehicles not owned / controlled by the reporting company).	
Minimum activity boundary	Emissions from third-party transport paid for by our industrial assets or marketing business and used to transport goods purchased or acquired by our industrial assets and products produced by our industrial assets (both to and between our industrial assets, on site of our industrial assets, and to third parties). We also include transport emissions associated with third-party traded volumes paid for by our marketing business.	
Inclusions	<ul style="list-style-type: none"> All third-party ocean freight, including voyage charters, time charters, break bulk, and container shipping, paid for by Glencore; and Third-party road and rail transport paid for Glencore where data on fuel use or distance travelled is readily available. 	
Exclusions	<ul style="list-style-type: none"> Emissions associated with transport paid for by third-party suppliers and customers (included in category 1 or 9, respectively); Emissions associated with transport of infrastructure consumables (included in category 1); Operation of third-party distribution facilities (unable to collect data); Refrigerants associated with third-party transportation (unable to collect data); and Transportation in vehicles owned or operated by Glencore (included in Scope 1). 	
Calculation method	<p>Method A: Fuel Based <i>(Primary data method)</i></p> <p>Primarily applicable to full-load cargoes. Involves calculating emissions by determining the total amount of fuel consumed by the transport provider whilst completing its contractual obligations to Glencore and applying the relevant emission factor for that fuel.</p> <p>Sum across fuel types: $\sum \text{quantity of fuel consumed (m}^3\text{)} \times \text{emission factor for the fuel (e.g., tonne CO}_2\text{e/m}^3\text{)}$</p>	<p>Method B: Distance Based <i>(Secondary data method)</i></p> <p>Primarily applicable to part-load cargoes. Involves estimating emissions by determining the total distance between load- and discharge-locations and total mass of goods purchased or sold and applying the relevant emission factor for the transport mode.</p> <p>Sum across transport modes: $\sum \text{mass of goods transported (tonne)} \times \text{distance travelled (e.g., Nm)} \times \text{emission factor of transport mode (e.g., tonne CO}_2\text{e / tonne / Nm)}$</p>

Activity data required	<ul style="list-style-type: none"> Quantities of fuels consumed by transport provider. 	<ul style="list-style-type: none"> Quantities of products purchased / sold; If available: actual distances from transport provider; and If unavailable: estimated distances using published port-to-port travel distances; online maps; calculators.
Emission factor sources	Centrally sourced and maintained from the UK Department for Environment, Food & Rural Affairs (DEFRA).	Centrally sourced and maintained from DEFRA.
Double-count mitigation	<ul style="list-style-type: none"> Review Incoterms to ensure correct allocation and avoidance of double counting between categories 1, 4 and 9. For allocation to category 4, Glencore must pay for third-party transport of goods purchased, acquired, and sold. Emissions associated with transport paid for by third-party suppliers and customers are covered in category 1 or 9, respectively; and Ensure that the transport provider is not owned or operated by Glencore (in which case emissions are accounted for in Scope 1). 	
Internal allocation:	<ul style="list-style-type: none"> Third-party transport emissions associated with goods purchased directly or acquired by of our industrial assets through marketing, are allocated to our industrial assets; and Third-party transport emissions associated with sold goods produced by our industrial assets, be it directly or indirectly through our marketing business, are allocated to our industrial assets. 	

Category 5: Waste generated in operations

Emissions from third-party disposal and treatment of waste generated in our industrial assets. Emissions associated with waste generation, disposal, and treatment in our industrial assets are accounted for in Scope 1 emissions.

Given the variation in third-party waste disposal and treatment, as well as operational and contractual arrangements across commodity departments, accounts for waste treatment or waste spend could not be identified in central or industrial asset-specific financial systems, rather than being included in broader industrial maintenance and service-related spend (for which associated emissions are covered in categories 1 and 2, subject to the spend being operational expenditures or capital expenditures. Consequently, in 2023 conducting a spend-based materiality assessment for category 5 was not feasible, and as a result, it has been excluded from the calculated Scope 3 inventory. This assessment will be periodically reviewed.

Category 6: Business travel

Emissions from the transportation of industrial employees for business-related activities during the reporting period (in vehicles not owned or operated by Glencore).

A 2023 materiality assessment using the sample-based method for rail and road travel and a distance- and spend-based method for air travel identified this category as immaterial and irrelevant to Glencore's calculated Scope 3 inventory. As such, category 6 is excluded. This assessment will be periodically reviewed.

Category 7: Employee commuting

Emissions from the transportation of industrial employees between their homes and their worksites during the reporting period (in vehicles not owned or operated by Glencore).

A 2023 materiality assessment using the sample-based method for commuting by rail and road and a distance- and spend-based method for commuting by air (fly-in fly-out) identified this category as immaterial and irrelevant to Glencore's calculated Scope 3 inventory. As such, category 7 is excluded. This assessment will be periodically reviewed.

Category 8: Upstream leased assets

Emissions from the operation of assets leased by our industrial assets not already included in Scope 1 and 2. This category is applicable only to companies that operate leased assets (i.e., lessees). For companies that own and lease assets to others (i.e., lessors), see category 13 (Downstream leased assets).

Our industrial assets lease third-party assets for transportation (e.g., chartered vessels). As these are paid for and used for transport and distribution, the associated emissions are accounted for in category 4. Emissions generated by the operation of leased buildings are reported under Scope 1 and 2. A review of central financial systems identified no other leased assets in the upstream sector. This makes category 8 not applicable. This assessment will be periodically reviewed.

Downstream Scope 3 categories

Category 9: Downstream transportation and distribution

GHG Protocol description:	Transportation and distribution of products sold by the reporting company in the reporting year between the reporting company's operations and the end consumer (if not paid for by the reporting company), including retail and storage (in vehicles and facilities not owned or controlled by the reporting company).
Minimum activity boundary	Emissions associated with third-party transport not paid for by our industrial assets or marketing business and used to transport goods produced by our industrial assets to the first-use customer (using value-chain mapping and industry-average analysis if the first-use customer is not known).
Inclusions	All third-party ocean freight, including voyage charters, time charters, break bulk, container shipping, etc. as well as road and rail transportation where data on distance travelled is readily available, from point of sale to the first-use customer, inclusive of transport between subsequent downstream processing steps.
Exclusions	<ul style="list-style-type: none"> Transportation in vessels owned or controlled by Glencore (included in Scope 1); Third-party transportation paid for by Glencore (included in category 4); and Operation of third-party distribution facilities (unable to collect data).
Activity data required	<ul style="list-style-type: none"> Quantities of products produced by our industrial assets and sold to third parties; If available: distance to first-use customer or counterparty; and If unavailable or incomplete: Glencore's Scope 3 Reporting Tool⁹ will estimate distances from point of sale to first-use customer using centrally sourced and maintained trade route analysis.
Calculation method	<p>Method: Distance based</p> <p>Sum across transport modes:</p> $\sum \text{mass of goods transported (tonnes)} \times \text{distance travelled (km)} \times \text{emission factor of transport type (tonne CO}_2\text{e/ tonne / km)}$ <p><i>N.B.: as Glencore sells products at different stages of the value chain the calculation is adapted to account for all the transport legs between sold intermediate product to first use.</i></p>
Emission factors sources	Centrally sourced and maintained from DEFRA.

⁹ The software, method, or system in which Glencore collects the data required to calculate Scope 3 emissions. As of the issuance of this document, the tool consists of manual activity data collection via SharePoint using SharePoint lists as the system of record. Data is then loaded using into an Oracle SQL Database using data load tooling. Data is cleansed and transformed with Oracle SQL, then loaded into Power BI via direct connection, and relationships and calculations are embedded into Power BI to calculate and visualise final emissions by category, department, asset, and other dimensions.

Double-count mitigation	<ul style="list-style-type: none"> Review Incoterms to ensure correct allocation and avoidance of double counting between categories 4 and 9. Glencore's customers must pay for the transport of goods sold for associated emissions to be included in category 9. Emissions associated with transport paid for by Glencore are covered in category 4; and Ensure transport provider is not owned or operated by Glencore (in which case emissions are accounted for in Scope 1).
Internal Allocation	<ul style="list-style-type: none"> Third-party transport emissions associated with sold goods produced by our industrial assets, be it directly or indirectly through our marketing business, are allocated to our industrial assets.

Category 10: Processing of sold products

GHG Protocol description:	Emissions from the processing of sold intermediate products by third parties (e.g., manufacturers) subsequent to sale by the reporting company.
Minimum activity boundary	Emissions of further third-party downstream processing steps required to convert sold intermediate products produced by our industrial assets into a first-use product (using value-chain mapping and industry-average analysis if the processing route to first-use processor is not known).
Inclusions	Emissions from third-party downstream processing of sold intermediate products produced by our industrial assets.
Exclusions	<ul style="list-style-type: none"> Processing emissions from non-core products, defined as < 50Kmt of sold products produced by our industrial assets (insufficient visibility in product value chains, which limits our ability to estimate emissions); Transportation between downstream processing steps (covered in category 4 and 9); and Emissions related to final conversion from first use to end-use product (data not available and considered to be immaterial).
Activity data required	<ul style="list-style-type: none"> Quantities of products produced by our industrial assets and sold to third parties; If available: indicative process flow (including geographic region specificity) applicable to converting the sold intermediate product into a first-use product; and If unavailable or incomplete, our Scope 3 Reporting Tool will estimate emissions from downstream processing steps between sale and first-use product using centrally sourced and maintained value-chain mapping and industry-average analysis.

Calculation method	Method: Average data Sum across intermediate products: $\sum (\text{quantities of sold intermediate product (tonne)} \times \text{emission factor of processing of sold products (tonne CO}_2\text{e/tonne of contained metal)})$ <i>N.B.: as Glencore sell products at different stages of the value chain, the calculation is adapted to account for all processing steps from intermediate product to first use.</i>
Emission factors sources	Country or regional industry-average emission factors for downstream third-party processing steps are centrally sourced, maintained and calculated using Skarn data.
Double-count mitigation	<ul style="list-style-type: none"> Intercompany trades and transfers of goods produced by our industrial assets must be excluded (as subsequent processing emissions are covered in Scope 1 and Scope 2 of the receiving industrial asset). Therefore, counterparties must be validated against all our industrial assets; and In the scenario that intermediate goods produced at our industrial assets are sold to non-operated JVs included in category 15, some double counting across Scope 3 categories will be inherent. Where removing the double count is not feasible given the nature of the data available, this duplication is accepted under GHG Protocol guidance.
Internal Allocation	<ul style="list-style-type: none"> Third-party processing emissions associated with sold goods produced by our industrial assets, be it directly or indirectly through marketing, are allocated to our industrial assets.

Category 11: Use of sold products

GHG Protocol description:	This category includes emissions from the use of goods sold by the reporting company in the reporting year. A reporting company's Scope 3 emissions from use of sold products include the Scope 1 and Scope 2 emissions of end users. End users include both consumers and business customers that use final products.
Minimum activity boundary	The direct use-phase emissions of sold fossil fuels produced or processed by our industrial assets (i.e., emissions from combustion by end users of our sold energy products).
Inclusions	Emissions related to the combustion by our customers of sold coal and refined oil products produced or processed by our industrial assets. We assume that 100% of our sold coal and refined oil products are combusted once received by our customers.
Exclusions	<ul style="list-style-type: none"> Processing emissions of sold intermediate energy products (covered in category 10); and Metal and mineral products (non-combustible).

Activity data required	Quantities of fossil fuels produced or processed by our industrial assets and sold to third parties. <i>N.B.: where sold volumes produced by our industrial assets cannot be distinguished from third-party traded volumes, quantities of saleable produced volumes are used.</i>
Calculation method	Method: Direct use-phase Sum across fuels: $\sum (\text{quantity of fuel sold (e.g., tonne)} \times \text{fuel-specific combustion emission factor (e.g., tonne CO}_2\text{e/tonne)})$
Emission factors sources	Fuel-specific combustion emission factors are centrally sourced and maintained using data from the Intergovernmental Panel on Climate Change (IPCC).
Double-count mitigation	<ul style="list-style-type: none"> Intercompany trades and transfers of fossil fuels produced by our industrial assets are to be excluded (as emissions from combustion are covered in Scope 1 of the receiving industrial asset). Therefore, counterparties must be validated against all our industrial assets; and In the scenario that fossil fuels produced by our industrial assets are sold to non-operated JVs included in category 15, some double counting across Scope 3 categories will be inherent. Where removing the double counting is not feasible given the nature of the data available, this duplication is accepted under GHG Protocol guidance.
Internal Allocation	<ul style="list-style-type: none"> Emissions related to the use of sold fossil fuels produced by our industrial assets, be it directly or indirectly through our marketing business, are allocated to our industrial assets.

Category 12: End-of-life treatment of sold products

Emissions from the waste disposal and treatment of sold products produced by our industrial assets at the end of their life. This category includes the total expected end-of-life emissions from metals produced by our industrial assets and sold in the reporting period. The end-of-life emissions of sold fossil fuels relate to their combustion and are fully accounted for in category 11.

A 2023 materiality assessment using the revenue-based method identified this category as immaterial and irrelevant to Glencore's calculated Scope 3 inventory. As such, category 12 is excluded. This assessment will be periodically reviewed.

Category 13: Downstream leased assets

This category covers emissions from the operation of assets that are owned by our industrial assets, acting as a lessor, and leased to third-party entities in the reporting year.

A 2023 materiality assessment using the revenue-based method identified this category as immaterial and irrelevant to Glencore's calculated Scope 3 inventory. As such, category 13 is excluded. This assessment will be periodically reviewed.

Category 14: Franchises

Emissions from the operation of franchises not included in Scope 1 or Scope 2. In scope entities comprise the fuel retail stations that operate under franchise agreements with Astron Energy (South Africa and Botswana) and ALE (Brazil).

A 2023 materiality assessment using the franchise sample method identified this category as immaterial and irrelevant to Glencore's calculated Scope 3 inventory. As such, category 14 is excluded. This assessment will be periodically reviewed.

Category 15: Investments

GHG Protocol description:	Emissions associated with the reporting company's investments in the reporting year, not already included in Scope 1 or Scope 2. Investments are categorized as a downstream Scope 3 category because the provision of capital or financing is a service provided by the reporting company.
Minimum activity boundary	Emissions related to Glencore's equity share of the Scope 1, 2 and, whenever these are greater than Scope 1 and 2 combined, the Scope 3 emissions from JVs we do not control or operate that are commodity producing or processing industrial entities and for which we can source or estimate emissions data. Where we can source the respective data, we also include emissions relating to investments that are industrial projects or conducting exploration activities where production or processing of commodities has not commenced, warehouses, terminals, and ports.
Inclusions	<ul style="list-style-type: none"> Equity share of Scope 1 and Scope 2 emissions from non-operated JVs; and Equity share of Scope 3 emissions from non-operated JVs wherever these are greater than the Scope 1 and 2 emissions combined.
Exclusions	<ul style="list-style-type: none"> Emissions from our industrial assets, which include JVs we control or operate (included in Scope 1, 2 and all other Scope 3 categories); Emissions from non-operated JVs for which no Scope 1, 2 and 3 emission data can be obtained from the non-operated JV or a reputable third-party database (Bloomberg, Skarn); Debt investments linked to commodity offtake agreements for which product embedded emissions are already accounted for in category 1; and Other debt investments (identified as not material or relevant).

Activity data required	<ul style="list-style-type: none"> • Primary data is obtained from the non-operated JV (Scope 1, 2 and 3); • If primary data on Scope 1 and 2 emissions is unavailable, secondary data is sourced from Skarn or Bloomberg; • For non-operated JVs that produce intermediate products, Scope 3 emissions are estimated based on produced volumes using the average-data method (see category 10); • For non-operated JVs that extract or produce fossil fuels, Scope 3 emissions are estimated based on produced volumes using the direct use-phase method (see category 11); and • Glencore's proportional share of equity in the non-operated JVs.
Calculation method	<p>Method: Investment specific</p> <p>Sum across equity investments: $\sum (\text{Scope 1 and Scope 2 emissions of non-operated JV (+ Scope 3 emissions)}) \times \text{share of equity (\%)}$</p>
Emission factors sources	<p>Glencore uses the investment-specific method and collects emissions data from investees or reputable third-party databases. Therefore, no emission factors are required.</p>
Double-count mitigation	<ul style="list-style-type: none"> • In the scenario that our industrial assets purchase or acquire goods produced by non-operated JVs, some double counting across Scope 3 categories will be inherent; • In the scenario that intermediate or first-use goods produced by our industrial assets are sold to non-operated JVs, some double counting across Scope 3 categories will be inherent; and • Where removing the double count in the above scenarios is not feasible given the nature of the data available, this duplication is accepted under GHG Protocol guidance.

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About Glencore

Glencore is one of the world's largest global diversified natural resource companies and a major producer and marketer of more than 60 commodities that advance everyday life. Through a network of assets, customers and suppliers that spans the globe, we produce, process, recycle, source, market and distribute the commodities that support decarbonisation while meeting the energy needs of today.

With over 150,000 employees and contractors and a strong footprint in over 35 countries in both established and emerging regions for natural resources, a global network of more than 50 offices supports our marketing and industrial activities.

Glencore's customers are industrial consumers, such as those in the automotive, steel, power generation, battery manufacturing and oil sectors. We also provide financing, logistics and other services to producers and consumers of commodities.

Glencore is proud to be a member of the Voluntary Principles on Security and Human Rights and the International Council on Mining and Metals. We are an active participant in the Extractive Industries Transparency Initiative.

We will support the global effort to achieve the goals of the Paris Agreement through our efforts to decarbonise our own operational footprint. We believe that we should take a holistic approach and have considered our commitment through the lens of our global industrial emissions. Against a restated 2019 baseline, we are targeting to reduce our Scope 1, 2 and 3 industrial emissions by 15% by the end of 2026, 25% by the end of 2030, 50% by the end of 2035 and we have an ambition to achieve net zero industrial emissions by the end of 2050, subject to a supportive policy environment. For more information see our 2024-2026 Climate Action Transition Plan and the About our emissions calculation and reporting section in our 2023 Annual Report, available on our website at glencore.com/publications.