Sustainability & External Relations Guideline

Greenhouse Gas Emissions Calculation Methodology

MAY 2023

Contents

Overview

This document provides the Greenhouse Gas (GHG) quantification methodology and basis of preparation for Newmont's 2022 Scope 1, 2, and 3 GHG emissions inventory. It defines a methodology consistent with the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) *GHG Protocol: A Corporate Accounting and Reporting Standard* with reference to the additional guidance provided in the *GHG Protocol: Scope 2 Guidance (amendment to GHG Protocol)*, *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Scope 3 Standard)* and *GHG Protocol Technical Guidance for Calculating Scope 3 Emissions (Scope 3 Guidance)* as appropriate.

All information sources and assumptions used to determine energy consumption figures and emissions factors are documented. The calculated inventories and data are reported annually in the *Newmont Climate Report*. Newmont will continuously improve the calculation methodologies each year to enhance accuracy. These methods and resulting GHG emissions inventory will enable tracking towards Newmont's decarbonization targets and guide implementation of the GHG mitigation hierarchy to firstly avoid emissions generation, then minimize and reduce, and finally to offset those residual emissions that are hard-to-abate.

The GHG Protocol provides standards and guidance for companies to voluntarily calculate and report on their GHG emissions. Accounting and reporting coverage includes the following six greenhouse gases identified in the Kyoto Protocol:

- carbon dioxide (CO_2)
- methane (CH_4)
- nitrous oxide (N_2O)
- hydrofluorocarbons (HFCs)
- perfluorocarbons (PFCs)
- sulphur hexafluoride (SF_6)

The GHG Protocol also includes reporting on Nitrogen trifluoride (NF_3) in GHG inventories, however Newmont does not use processes that generate this gas and so it is not considered relevant.

A specific Global Warming Potential (GWP) is applied to GHGs other than CO_2 to account for their higher warming effect, and the result is known as carbon dioxide equivalent (CO_2e). A GWP is a measure of how much energy the emissions of 1 tonne of a gas will absorb over a given period, relative to the emissions of 1 tonne of CO_2[1]. Newmont uses GWPs for different GHGs as defined by the *Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report (AR6)* (Chapter 7, p1017).

[1] US EPA definition, https://www.epa.gov/ghgemissions/understanding-global-warming-potentials

Newmont's GHG emissions inventory has been reviewed and validated by the Science-based Targets Initiative (SBTi) through the setting of 2030 emissions reduction targets. As part of this process, a recalculation of baseline year data will occur if a divestiture/acquisition and/or calculation methodology change results in a cumulative +/- >5% adjustment to the emissions inventory per scope. While this is per scope, it is not per category within Scope 3 but rather Scope 3 as a total of all relevant categories. Organic growth (or decline) or permanent closure of an operation does not trigger rebaselining, including joint ventures that have not operated since the baseline year and then come into operation.

Ongoing improvements to data collection systems and measurement methodologies can result in restatements of previously reported data. Restatements of information will be provided when a change in measurement methodology or error in previously reported information results in the potential to influence a user's decision-making. Such restatements are included as footnotes where applicable. When it is impracticable to adjust comparative information for one or more prior periods, this will be explained.

ORGANIZATIONAL BOUNDARY

Newmont calculates GHG emissions for facilities under its operational control and includes the emissions from contractors working at these facilities. GHG emissions also include those from facilities owned but not controlled by Newmont within Scope 3 Category 15, where an equity share approach is applied.

Newmont's corporate office, regional offices, exploration sites and legacy sites are excluded from the Scope 1 and 2 GHG emissions inventory on the basis of materiality. Scope 3 GHG emissions categories are individually assessed for relevance, with those categories deemed relevant accounted for within the Scope 3 GHG emissions inventory.

CARBON AVOIDANCE AND NEUTRALIZATION

Newmont currently calculates the CO_2e emissions avoided through applying relevant emission factors to waste streams that are recycled or reused rather than being disposed. These are reported separately to the global GHG emissions inventory and do not contribute to achieving decarbonization targets but demonstrate alignment with the mitigation hierarchy and the climate benefit of a circular economy.

Reporting GHG removals will also be separately accounted for and based on their sink process (i.e., biogenic, or technological sinks) and storage pool (i.e., land-based storage, product storage, or geologic storage). Scope 1 and 3 removals (if applicable) would be reported separately and based on annual net carbon stock changes occurring in the reporting year using stock-change accounting methods. Currently, Newmont does not have GHG removals to calculate and report on.

The contribution of carbon offsets or neutralization projects to the global GHG emissions inventory will be calculated based on verifiable monitoring and measurement methods as outlined in the Newmont *Carbon Offsets Strategic Approach*. The values will then be reported separately to show the proportion of these projects to other decarbonization initiatives. Currently, Newmont does not account for any carbon offsets or neutralization projects in the global GHG emissions reporting.

SCOPES

GHG emission sources are divided into three areas or scopes that are emissions either directly attributable to a business and indirectly attributable (Figure 1).

Scope 1: Includes direct GHG emissions from the combustion of fuels and explosives (including for onsite electricity generation), process emissions from the use of carbon-containing reagents such as limestone and fugitive emissions from refrigerants and materials management. For fuel combustion emissions, this is sub-divided into stationary and mobile equipment.

Scope 2: Indirect GHG emissions from electricity and other energy (e.g., steam, heat) provided by third parties, including electricity retailers and/or generators.

Scope 3: Indirect GHG emissions generated because of activities undertaken either upstream or downstream of our operations, other than those accounted for as Scope 2 GHG emissions. Scope 3 GHG emissions are assessed for relevance across fifteen value chain categories, including, but not limited to, purchased goods and services, business travel, employee commuting, processing of sold products, and joint venture investments.

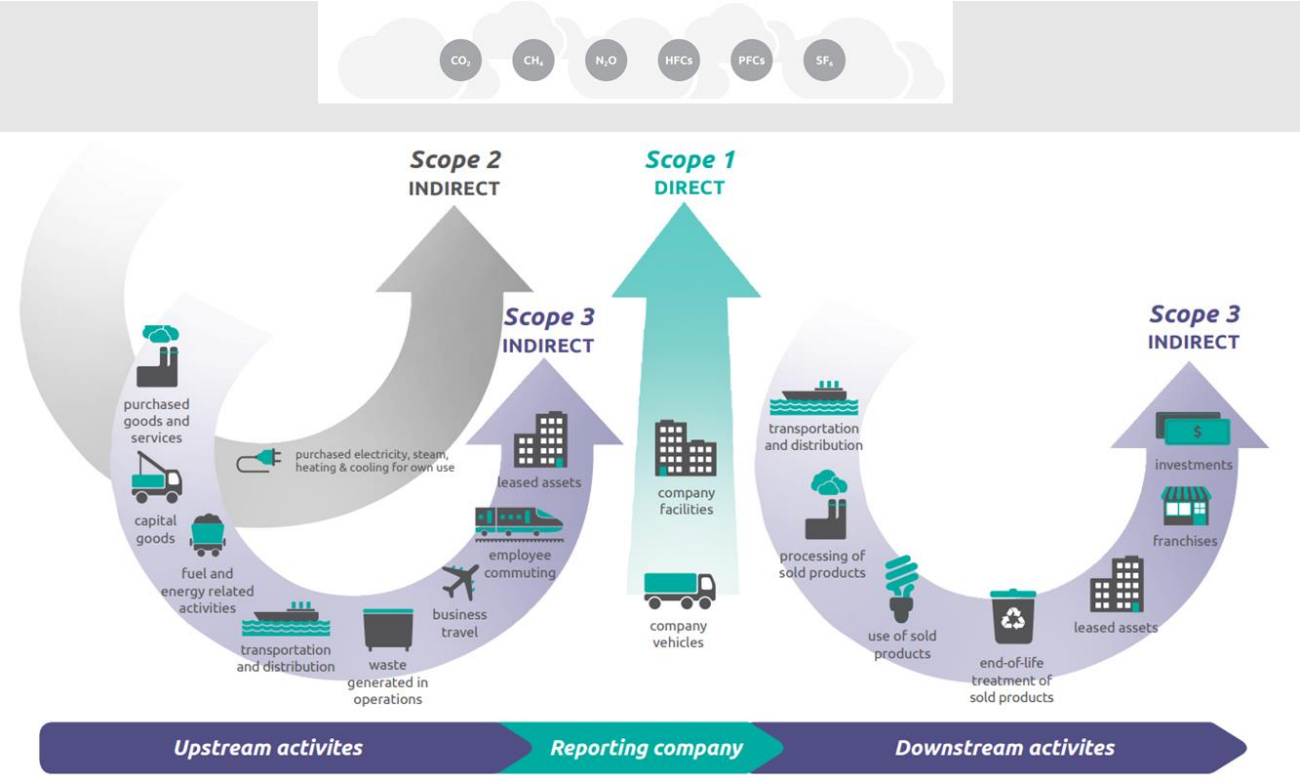

Figure 1: the six gases and three scopes considered in a GHG emissions inventory (source: GHG Protocol)

EMISSION FACTORS

An emission factor is a representative value that relates the quantity of a pollutant, fuel, or energy with an industrial activity into GHGs. To convert energy/fuel/activity quantities to CO_2e, the collected data must be multiplied by defined and consistent emission factors. The specific sources of the emission factors for each Scope of GHG emissions are described in the relevant section of this document, however in general:

- **Scope 1** emission factors are sourced from a variety of reputable public sources. In most instances, these sources include emission factors for CO_2, CH_4 and N_2O which can then be multiplied by the associated GWP and added together to determine the total CO_2e.
- **Scope 2** emission factors are sourced from suppliers for their specific electricity product purchased by the site, or from published regional average factors for the electricity mix. Depending on the data source, these factors may already be represented as CO_2e or broken down by contributing gas.
- **Scope 3** emission factors typically use generic factors from purchased databases, reputable public sources, and customer- and supplier-specific sources and are usually represented as CO_2e. Newmont's intention is to move towards supplier and customer specific emission factors for Scope 3.

Newmont maintains an up-to-date database of country-specific emission and energy content conversion factors to be used in all GHG accounting calculations.

Scope 1

Emission Sources

Consists of direct GHG emissions from sources that are under the operational control of Newmont, including:

- Direct fuel combustion such as diesel, biodiesel, used oil, gasoline, natural gas, propane, heavy fuel oil, and aviation fuel, including the combustion of such fuels for the on-site generation of electricity;
- Fugitive emissions from SF6 and refrigerants use; and,
- Process emissions from lime production.

Measurement and Calculation Methods

Activity data for each emission source is collected using a combination of direct measurement, calculation, estimation, and third-party invoice information.

Direct fuel combustion

The collected activity data is converted from the fuel quantity consumed to an energy equivalent in gigajoule (GJ) units by multiplying it by the relevant energy content conversion factor for the fuel combusted. The equivalent GJ of energy for each combusted fuel type is then multiplied by a relevant emission factor or factors (including associated GWPs) to determine the GHG emissions generated for each fuel type.

The calculation method is represented by the following equation:

Combustion Emissions = Activity Data (Volume/Amount of fuel combusted) x Energy Content of the fuel (GJ) x Emission Factor/s for the fuel (CO_2e/GJ)

Fugitive and process emissions

The collected activity data is multiplied by the GWP for the emissions based on the estimated gas composition of the emission.

Resultant emissions are added to determine total tonnes of CO_2e.

Emission Factors

Established country-specific mobile and stationary combustion emission factors available as at the end of the reporting period are utilized in preference for the calculation of emissions from fuel consumption. Where country-specific factors are unavailable, the most recently available factors (as at the end of the reporting period) from the *GHG Protocol Emission Factor from Cross-Sector Tools (April 2017)* are used.

For Canada, the *Climate Registry 2022 General Reporting Protocol* emission factors are used for all fuel types, except for lubricants and greases where emission factors from the *US EPA Final Mandatory Reporting of Greenhouse Gases Rule* are used.

For Australia, emission factors from the most current compilation of the *National Greenhouse and Energy Reporting (Measurement) Determination 2008* are used for all fuel types.

For the United States, emission factors from the *GHG Emission Factors Hub* are used for all stationary combustion of fuel type, except for the combustion of diesel where the factors from the *GHG*

Protocol Emission Factor from Cross-Sector Tools (April 2017) are used. For mobile combustion fuel types, the *GHG Emission Factors Hub* factor for aviation fuel is used, whereas in all other instances, the *GHG Protocol Emission Factor from Cross-Sector Tools (April 2017)* is used.

Notes and Assumptions

Scope 1 emissions from explosives are calculated by taking the fuel amount used (diesel, used oil, heavy fuel oil) and multiplying by the appropriate fuel emission factor for stationery energy. Fuel oil, typically diesel, is mixed with ammonium nitrate and is the source of GHG emissions from explosives.

Diesel used by contractors, which is measured by sites via either direct measurement, contractor/third party records or management estimate, and the emissions associated with its combustion, are included in Scope 1 GHG emissions from fuel combustion.

Emissions associated with the generation of heating, cooling, and steam consumed are included in Scope 1 calculations if it is self-generated, however no sites currently report consumption.

Direct CO_2 emissions from the combustion of biogenically sourced fuels are not included in Scope 1 calculations but are reported separately in accordance with the GHG Protocol. Newmont's only biogenically sourced fuel is biodiesel. Direct CH_4 and N_2O emissions from the combustion of biogenically sourced fuels are included in Scope 1.

Scope 2

ENERGY ATTRIBUTE CERTIFICATES (EACS)

When power is delivered to a grid, there is no way to physically track where the electrons were generated. To overcome this, EACs, such as Renewable Energy Certificates (RECs), allow allocation of energy attribute information to facilitate product-specific consumer claims.

EACs are a category of contractual instruments that represent certain information about the energy generated, but not the energy itself. This prevents double-counting of emissions claims for green energy. Generally, certificates are produced for one unit of electricity generation (1 MWh).

Renewable power for which the EACs have been sold to third parties is stripped of its emissions intensity factor and referred to as 'null power' which then must take on the residual grid average emissions factor once all RECs have been removed from the grid average (residual mix).

RECs are distinct from carbon offsets as outlined in Table 1.

Table 1: Comparison of RECs and Carbon Offsets

Renewable Energy Certificates	Carbon Offsets
Unit: Each certificate represents 1 MWh of renewable electricity generation	Unit: Each carbon credit represents 1 metric tonne of CO_2e
Source: renewable electricity generators	Source: Projects that avoid or reduce GHG to the atmosphere
Can be used to calculate Scope 2 emissions, and therefore reduce gross GHG emissions	Must be reported separately from Scope 1, 2, and 3 GHG emissions
Does not require additionality requirement to report use of zero-emissions power	Does not reduce gross GHG emissions

LOCATION-BASED AND MARKET-BASED METHODS

Location-based emission factors are based on average energy generation emission factors for defined regions, and do not consider consumer choice of differentiated electricity products. Whereas market-based emission factors do consider consumer choice of electricity products and are useful to reflect corporate procurement actions. Newmont reports GHG inventories based on both methods to enable comparison.

The GHG Protocol provides guidance on how to determine market-based emissions factors as illustrated in Figure 2. Companies are to start at the top of the hierarchy and move down to lower-accuracy data if needed depending on what is available/applicable. GHG Protocol advises that consumers should not attempt to calculate a supplier specific emission rate themselves based on a fuel mix disclosure due to the variations in fuel mix disclosure rules, which may reduce the accuracy of the resulting GHG emission factor. As such, Newmont uses only those supplier specific emission factors that are publicly provided by the generator.

Contractual instruments are used to support Newmont's market-based emission factors. The GHG Protocol 'Scope 2 Quality Criteria' is also used to determine what information is needed within the contract instruments to support claims, such as the GHG emission rate and exclusivity.

METHODOLOGY

Emission Sources

Consists of indirect GHG emissions generated by third parties to provide Newmont facilities with:

- Electricity;
- Heat;
- Steam; and
- Cooling.

No Newmont facilities currently purchase heat, steam or cooling from third parties.

Measurement and Calculation Methods

Activity data is collected from suppliers, or consumption is estimated, and then multiplied by the associated CO_2e emission factor to determine total tonnes emitted.

This calculation method is represented by the following equation:

Scope 2 Emissions = MWh x t CO_2e per MWh

Emission Factors

The primary reporting method for Scope 2 emissions for Newmont is a market-based method, however both market-based and location-based results are reported to enable comparison. For the market-based calculations, electricity generation emission factors or intensities are utilized in accordance with the GHG Protocol's market-based scope 2 data hierarchy, as detailed in Figure 2.

Figure 2: Market-based Scope 2 data hierarchy

For location-based calculations, regional or subnational emission factors are applied in preference to national production emission factors in accordance with the GHG Protocol's Location-based method emission factor hierarchy. The sources of the emission factors applied for each in-scope facility are outlined in Table 2 and it is noteworthy that IEA corrections are not included in these factors since Transmission and Distribution losses are accounted for in Scope 3 category 3.

Table 2: Scope 2 Emission Factor sources

Site	Grid Territory	Location-based Source	Market-based Source
Akyem and Ahafo	Ghana	IEA Emissions Factors	IEA Emissions Factors
Boddington	South-western Australia	National Greenhouse and Energy Reporting (Measurement) Determination 2008	Supplier specific, Bluewaters Power Station and Australian NGA Factors
Tanami	Northern Territory	National Greenhouse and Energy Reporting (Measurement) Determination 2008	Supplier specific
Eléonore	Quebec	Carbon Footprint, Country Specific Electricity Grid Greenhouse Gas Emission Factors	CO_2 Emissions and Hydro-Québec Electricity, 1990-2021
Musselwhite and Porcupine	Ontario	Carbon Footprint, Country Specific Electricity Grid Greenhouse Gas Emission Factors	Supplier specific, Hydro one Sustainability Report
Peñasquito	Zacatecas	IEA Emissions Factors	Supplier specific, Saavi Energia sustainability report
CC&V	Colorado	US EPA - RMPA EGRID SubRegion	Supplier specific, Black Hills Energy Sustainability Report
Yanacocha	Peru	IEA Emissions Factors	Based on PPA and REC purchasing
Cerro Negro	Argentina	IEA Emissions Factors	IEA Emissions Factors
Merian	Suriname	IEA Emissions Factors	IEA Emissions Factors

Scope 3

Of the 15 categories within Scope 3, nine of them are deemed relevant and Newmont calculates and reports on them as outlined in Table 3. The following sub-sections provide the calculation boundary and methodology that is followed, the generalized data sources, and emission factors of the Scope 3 GHG inventory.

Table 3: Scope 3 categories contained in Newmont's GHG emissions inventory

Source	Relevant?	Examples of emissions sources within each category (Note: examples do not include all inputs)
Category 1: Purchased goods and services	Yes	Emissions from production of cyanide which is used by Newmont Emissions from contractors operating their own equipment on site
Category 2: Capital goods	Yes	Emissions from production of mine haul trucks
Category 3: Fuel and energy related activities	Yes	Emissions from production of diesel used by Newmont Emissions from the production of fuel used in the power plant from which Newmont purchases electricity
Category 4: Upstream transport	Yes	Emissions from transport of products for which Newmont is paying for the shipping
Category 5: Waste generated in operations	Yes	Disposed packaging from purchased materials
Category 6: Business travel	Yes	Flights taken by Newmont employees to travel between locations
Category 7: Employee commuting	Yes	Travel by employees from their residence to work location
Category 8: Upstream leased assets	No	Not included – not relevant as Newmont does not operate leased upstream assets
Category 9: Downstream transport	No	Not included – not relevant (Newmont pays for all shipping)
Category 10: Processing of sold products	Yes	Emissions from a downstream copper smelter which processes Newmont copper concentrate
Category 11: Use of sold products	No	Not included – Insufficient data granularity
Category 12: End-of-life of sold products	No	Not included – Insufficient data granularity
Category 13: Downstream Leased Assets	No	Not included – not relevant as Newmont does not operate leased downstream assets
Category 14: Franchises	No	Not included – not relevant as Newmont does not have franchised operations
Category 15: Investments	Yes	Emissions from sites for which Newmont has shared ownership with another company and is not the operational manager

Emission Factors

Newmont utilizes a combination of consumption and spend based activity data to determine Scope 3 GHG emissions for all categories deemed relevant, other than Category 15 which utilizes estimated Scope 1 and 2 GHG emissions for Newmont's investments. The *Newmont GHG Emission Factors Master Database* includes the specific emission factor used and the associated source file.

This activity data is multiplied by relevant emission factors sourced from industry-average databases, except for where there are factors specific to the supplier or customer. Where relevant, the supplier- and customer-specific factors are preferred over industry-average database factors. Emission factors are updated annually based on updates to the industry-average databases and with published emission factors from suppliers and customers.

Inflation and Exchange Rate Adjustment

For all spend-based calculations in the Scope 3 inventory, the emission factors used are based on 2016 US dollars. In alignment with the *GHG Protocol Scope 3 Calculation Guidance* (Section 1, p33), spend values are adjusted to reflect the differences in market values between the year of the spend based factors (2016) and the current period using country-specific inflation and exchange rates so the emission factor can be appropriately applied. The spend values are deflated by multiplying the current year spend by a ratio of the consumer price indices (CPI) of 2016 and the current year. The CPI values are obtained from S&P Global per country that Newmont has operations in, and it was assumed that all spend per site was acquired in, and thus subject to inflation of, the country of the site. The exchange rates are obtained with guidance from Newmont's internal accounting department.

CATEGORY 1: PURCHASED GOODS AND SERVICES

Measurement and Calculation Methods

A combination of the average data and spend-based data methods, as described in the GHG Protocol Scope 3 Calculation Guidance, are used to calculate these emissions. The quantity of relevant goods or services purchased in the reporting year is multiplied by the secondary (e.g., industrial average) emission factors (e.g., average emissions per unit good or service). Cradle-to-gate emission factors of the purchased goods or services per unit of mass are used (e.g., kg CO_2e /kg). The spend-based method was used for expenditures that are categorized as purchased goods and services as well as operating expenditures for consulting and contracted services. All other emissions associated with operating expenditures relevant for Category 1 are calculated using the average-data method.

The average-data method is represented by the following equation:

> CO_2e emissions for purchased goods or services = Σ(mass of purchased good or service (kg) x emission factor of purchased good or service per unit of mass (kg CO_2e/kg))

The spend-based method is represented by the following equation:

> CO_2e emissions for purchased goods or services = Σ(value of purchased good or service (USD) x emission factor of purchased good or service per unit of economic value (kg CO_2e/USD))

Emission and Data Sources

Average-data method

The total tonnage or volume of purchased goods and services during the year is collected from Newmont's business systems. Goods and services considered are selected based on a review of the highest spend items. These are grinding media, sodium cyanide, lime, cement, lubricants, hydrochloric acid, sulfuric acid, nitric acid, tires, cement, tires, ANFO, and emulsion.

Spend-based method

This category also includes capitalized purchased goods and services and consulting and contractor services that are expensed as operational spend captured within Newmont's financial accounting records. The capitalized and operational spend data uses the spend-based data method to calculate emissions. Spend account categories are reviewed and validated each year and include:

- Chemicals and reagents
- Consumables
- Non-capital equipment
- Explosives
- Other operating expenses
- Consulting services (both capitalized and operating spend)
- Other related third-party costs
- Contracted services (both capitalized and operating spend)
- Ground support
- Labor
- Employee administrative costs
- Rents and operating leases
- Safety and environmental
- Travel and entertainment

Certain capitalized spend accounts are not included because they do not generate emissions. These accounts are also below the material level of exclusions. These accounts include:

- Capitalized interest
- Depreciation
- Fees and dues
- Labor tax
- Non-employee related taxes
- Non-tax statutory payments

Emission Factors

A combination of the *Ecoinvent database* (using the *IPCC 2021 GWP100 V1.02* method), the UK BEIS Conversion factors database, and supplier-specific factors are applied. Spend-based emission factors are obtained from the *Quantis Tool* and the *US EPA Supply Chain Dataset*.

In some calculations, general emission factors are used for consumables with similar upstream production processes, due to the lack of specific factors.

Notes and Assumptions

Upstream contractor emissions on-site are calculated using the spend-based data method, using an emissions factor for "miscellaneous professional, scientific, and technical services." This is for all upstream emissions of the service. The combustion of all fuels used by contractors are considered in Scope 1 and the associated upstream emissions in Scope 3, Category 3.

Spend data does not include spend from joint-ventures, as all emissions from joint-ventures are included in Category 15.

CATEGORY 2: CAPITAL GOODS

Measurement and Calculation Methods

The spend-based data method is used to calculate these emissions. The spend on relevant capital goods purchased in the reporting year is multiplied by the spend-based emission factor (e.g., average emissions per unit spent).

The calculation method is represented by the following equation:

> CO_2e emissions for capital goods = Σ (spend on capital goods (USD) x emission factor of purchased capital good per economic value (kg CO_2e/USD))

Emission and Data Sources

Capitalized spend (goods that have an extended useful life) including liners and wear parts, maintenance parts are included in this category and are captured within Newmont's financial accounting records.

Emission Factors

Spend-based emission factors are obtained from the *Quantis Tool*.

CATEGORY 3: FUEL AND ENERGY-RELATED ACTIVITIES

Measurement and Calculation Methods

A combination of the average data and spend-based data methods are used to calculate Category 3 emissions.

Average-data method

The amount of fuel or energy purchased, or the transmission and distribution (T&D) losses in the reporting year are multiplied by secondary (e.g., industrial average) emission factors for upstream emissions per unit of consumption (e.g., kg CO_2e /kWh).

Spend-based method

The spend-based data method is used for capital expenditures that are categorized as fuel and energy-related activities. All other emissions associated with operating expenditures relevant for Category 3 are calculated using the average-data method.

The calculation method is represented by the following equation:

> Upstream CO_2e emissions of purchased fuels = Σ (fuel consumed (m^3) x upstream fuel emission factor (kg CO2e/m^3)) + CO_2e emissions from energy in a T&D system = Σ (electricity consumed (kWh) x (electricity generation emission factor + T&D loss emission factor) (kg CO_2e/kWh))

Emission and Data Sources

Quantity of purchased fuel per supplier, including Diesel, Heavy Fuel Oil, Natural Gas, Propane/ LPG, Biodiesel, Gasoline, Used (Waste) Oil, and Purchased electricity per site captured by Newmont's business systems. Capitalized spend in categories diesel, electric power, fuel gases and other fuels are also included in this category and recorded in Newmont's financial accounting records.

Emission Factors

Emission factors are obtained from *UK BEIS Conversion factors database* and national-level databases for Australia. Spend-based emission factors are obtained from the *Quantis Tool*.

Notes and Assumptions

Compiled fuel emission factors are based on well-to-tank (WTT) conversion factors that include the upstream Scope 3 emissions associated with extraction, refining, and transportation to an organizations site or asset. For all power (renewable and non-renewable), T&D losses are estimated, and relevant generation emissions factors then applied. An average African electricity T&D losses emissions factor is used for the Ghana operations. An average Latin American electricity T&D losses emissions factor is used for Cerro Negro, Merian, and Yanacocha.

The combustion of all fuels used by contractors are considered in Scope 1 and the associated upstream emissions in Scope 3, Category 3.

CATEGORY 4: UPSTREAM TRANSPORTATION AND DISTRIBUTION

Measurement and Calculation Methods

The distance-based and spend-based data methods are used to calculate transportation emissions. For sold products (outbound) and intracompany flows, data is collected on the mass of material, distance transported, and mode of transportation. The mass or volume of goods transported is multiplied by the distance and the relevant mass-distance emission factors that incorporate average fuel consumption, average utilization, average size and mass or volume of goods and the vehicles, and their associated GHG emissions (e.g., kg CO_2e/tonne-kilometer). The spend-based data method was used for capital expenditures that are categorized as upstream transportation. All other emissions associated with operating expenditures relevant for Category 4 are calculated using the distance-based method.

For all sites, the transportation agreements and transportation costs are handled and purchased either directly by Newmont or are passed indirectly to Newmont from the refiner (in the cases where the agreements are between the transportation company and the refiner). Given all transportation services are purchased either directly or through an intermediary of Newmont, these emissions are classified as Category 4 (upstream transportation), instead of Category 9 (downstream transportation).

The calculation method is represented by the following equation:

> CO_2e emissions from transportation = Σ (mass of goods (tonnes or volume) x distance travelled in transportation (km) x emission factor of transport mode or vehicle type (kg CO_2e/tonne or volume-km))

Emission and Data Sources

The wet weight mass / volume, distance and mode for each transportation route is compiled and each route is divided into the different modes of transportation using distances calculated online and from internal Supply Chain Management. Relevant downstream and intracompany transportation to buyers is considered in this category.

Gold and silver products sold and zinc, lead, and copper concentrates from Peñasquito and Boddington are considered.

Capitalized spend in categories freight air, freight land, and freight sea are considered in this category.

Emission Factors

The appropriate mass-distance emission factor for transportation method used e.g., CO_2e/t/km, is obtained from the *UK BEIS Conversion factors database*. Transportation emission factors include upstream transportation and well-to-tank factors per mode of transportation.

Ecoinvent market model emission factors are used in Category 1 and thus upstream transportation of consumables is included there.

Spend-based emission factors are obtained from the *Quantis Tool*.

CATEGORY 5: WASTE GENERATED IN OPERATIONS

Measurement and Calculation Methods

The average-data method is used to calculate these emissions. The quantity of relevant waste generated in operations in the reporting year is multiplied by the secondary (e.g., industrial average) emission factors (e.g., average emissions per kg of waste generated). Emission factors of the processing of generated waste per mass of waste are used (e.g., kg CO_2e/kg).

The calculation method is represented by the following equation:

> CO_2e emissions from waste generated in operations = Σ (mass of waste (tonnes or volume) x emissions factor of waste generated (kg CO_2e/kg).

Emission and Data Sources

Tonnage of waste generated by all operations is collected for the following:

- Hazardous waste landfilled
- Hazardous waste incinerated
- Hazardous waste other
- Non-hazardous waste landfilled
- Non-hazardous waste incinerated
- Non-hazardous waste other

Emission Factors

For hazardous waste incinerated the *Ecoinvent 3.9, IPCC 2021 GTP100 V1.02* method is used, and the associated value obtained from Ecoinvent. The hazardous waste incinerated value is used in the absence of an emissions factor for hazardous waste landfilled. For non-hazardous waste landfilled and incinerated an emissions factor for commercial and industrial waste from *UK BEIS* is used. All other types of waste use an emissions factor for hazardous and incinerated waste.

CATEGORY 6: BUSINESS TRAVEL

Measurement and Calculation Methods

The distance-based method is used to calculate transportation emissions. For each trip, data is collected on the distance travelled and mode of transportation. The distanced travelled is multiplied by the distance and the relevant mode-specific distance emission factors that incorporate average fuel consumption, average utilization, average size, and mass of the transport, and their associated GHG emissions (e.g., kg CO_2e/km).

The calculation method is represented by the following equation:

> CO_2e emissions from business travel= Σ (distance travelled (km) x transport vehicle emissions factor (kg CO_2e/km)).

Emission and Data Sources

All business travel booked by each transport category is collected e.g., aircraft, rail, auto (taxi), hotel stays, etc. This is provided by the travel agencies that book Newmont travel.

Emission Factors

Emission factors of each transport mode are used from *UK BEIS Conversion factors*. Travel emission factors include upstream transportation and well-to-tank factors per mode of transportation.

CATEGORY 7: EMPLOYEE COMMUTING

Measurement and Calculation Methods

The distance-based method as described in the GHG Protocol Scope 3 Calculation Guidance is used to calculate transportation emissions. For each trip, data is collected on the distance travelled and mode of transportation. The distanced travelled is multiplied by the distance and the relevant mode-specific distance emission factors that incorporate average fuel consumption, average utilization, average size, and mass of the transport, and their associated GHG emissions (e.g., kg CO_2e/km).

The calculation method is represented by the following equation:

> CO_2e emissions from business travel= Σ (distance travelled (km) x transport vehicle emissions factor (kg CO_2e/km)).

Emission and Data Sources

Newmont Human Resources provides the number of employees per site and those not assigned to a site (e.g., Corporate). Conservative assumptions of 5 working days a week, 52 weeks a year and that all employees drive their own car to work with a total distance commute of 40 km/day.

Emission Factors

Business travel by land emissions factor is used from *the UK BEIS Conversion factors database*. Travel emission factors include upstream transportation and well-to-tank factors per mode of transportation.

CATEGORY 10: PROCESSING OF SOLD GOODS

Measurement and Calculation Methods

A hybrid-data calculation method (average-data and site-specific) is used to estimate emissions for processing of sold intermediate products based on average secondary data, such as average emissions per downstream process by product sourced from lifecycle assessments, and customer-specific factors. Where customer-specific factors are available, the site-specific method is used instead of the average-data method.

The calculation method is:

> CO_2e emissions from processing of sold intermediate products = Σ Quantity/mass of intermediate product sold x the relevant average-data or site-specific emission factor for the intermediate product sold

The emission factors for the processing of sold intermediate products take into consideration emissions related to the fuel, electricity, and waste from processing of these products. Where site-specific or product-specific factors are unavailable, an overall lifecycle emission factor for the sold product is used.

Emission and Data Sources

The mass or quantity of sold intermediate products from operations under Newmont's operational control, including doré and concentrate products, are collected from Newmont's business systems. Products from joint ventures where Newmont does not have operational control are excluded.

Emission Factors

For doré refining, data from the Perth Mint's most recent annual report was chosen as a proxy processing facility to calculate all downstream gold refining emissions. The Scope 1, 2 and downstream Scope 3 emissions of Perth Mint are divided by total gold doré refining throughput to calculate the GHG emissions intensity based on gold doré sold.

For gold and silver in concentrate, it was estimated that 10% of the total lifecycle emissions for gold, silver, zinc, lead and copper mine operation and refining, obtained from Ecoinvent v3, are estimated as attributed to refining, based on a publicly available technical reference paper[2] (Figure 4, Au Secondary, Global Warming Potential).

Downstream processing emission factors for lead exist by processing route (e.g., direct smelting, Imperial Smelt Furnace). The appropriate emission factor was chosen based on the processing route of the customer, otherwise an average or customer-specific factor was chosen.

Other emission factors are obtained from either the customer's publicly available sustainability data or generic factors for the specific processing route of copper concentrate and zinc concentrate sold.

[2] Nuss P, Eckelman MJ. Life cycle assessment of metals: a scientific synthesis. PLoS One. 2014 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4085040/

CATEGORY 15: INVESTMENTS

Measurement and Calculation Methods

This includes Newmont's equity share of joint ventures' Scope 1 and 2 emissions. This includes joint venture management companies with 50/50 ownership. In 2019 and 2020, Scope 2 emissions provided from joint ventures were location-based values. Beginning in 2021, the joint venture partner provided market-based values, and will continue reporting market-based values. Following the *Technical Guidance for Calculating Scope 3 Emissions from GHG Protocol*, Scope 3 emissions generated from joint ventures are excluded. Exclusion was determined following a relevancy and significance test that included criteria of size, influence, business goals, and data availability. Where Newmont does have joint venture operational control, all the associated emissions are calculated and reported in Scopes 1 and 2.

The calculation method is represented by the following equation:

> CO_2e emissions from investments= Σ (Scope 1 and 2 emissions from investments x percentage ownership).

Emission and Data Sources

For the investment-specific method, the Scope 1 and 2 emissions from the investee company are collected.

Investment materiality threshold is an equity share of >5% and those considered are Pueblo Viejo (40% Newmont ownership) and Nevada Gold Mines (38.5% Newmont ownership) and the market-based emissions were used.

Barrick uses GWPs from the *Intergovernmental Panel on Climate Change (IPCC) 5th Assessment Report (AR5)* in the calculation of their inventory, whereas Newmont uses AR6. The difference between AR5 and AR6 is deemed to be not material for this category.

Emission Factors

None are needed for investment-specific methods.