
Greenhouse Gas

Evotec Inventory Methodology 2023

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1. About

1.1 Introduction

The purpose of this document is to provide additional details on the calculation methodology for Scope 1, 2, and 3 greenhouse gas (GHG) emissions of Evotec SE as communicated in the 2023 Annual Report.

1.2 GHG reporting standards

The GHG Protocol Corporate Standard is the most widely accepted standard for reporting an accurate and transparent account of a company's GHG emissions. Evotec uses the guidelines outlined by the GHG Protocol to calculate the most precise account of its calendar year emissions.

The GHG Protocol Corporate Standard outlines three emissions sources (referred to as "scopes") that provide the framework for operational boundaries. They are:

- Scope 1, "Direct Emissions," represent emissions from combustible fuels and other sources that occur directly on site (e.g., refrigerants) and mobile emission sources;
- Scope 2, "Indirect Emissions," represent emissions that occur off site to produce electricity or steam purchased for use at a company's locations; and
- Scope 3, "Other Indirect Emissions," represent emissions from activities upstream or downstream from a company's core business such as product use, waste disposal, commuting, and business travel.

2. Inventory scope and boundaries

2.1 Reporting year

The GHG inventory was calculated for calendar year 2023 (1st January – 31st December 2023). The GHG inventory is calculated on an annual basis for the calendar year.

Evotec's target base year is 2021 (1st January 2021 – 31st December 2021). Evotec follows the guidelines in the GHG Protocol Corporate Standard for adjusting the GHG inventory base year.

2.2 Adjustments

Evotec follows the guidelines in the GHG Protocol Corporate Standard for adjusting the GHG inventory base year.

2.2.1 Significance threshold

The base year inventory 2021 will be adjusted in response to any structural or methodology changes if the resulting adjustment is more than 5% of base year emissions. Adjustments below this threshold are considered insignificant and will be decided on a case-by-case basis.



2.2.2 Adjusting for structural changes

In the case of a merger or acquisition, the emissions from the facilities of the acquired entity will be added to the base year inventory. Base year emissions for acquired vessels and facilities will ideally be calculated using actual consumption data for the base year. If this is unavailable, the earliest year of data will be used and held at constant intensity per m² back to the base year.

When developing each annual inventory, the Inventory Manager will evaluate whether any structural changes have occurred. The Inventory Manager will identify the new vessels and facilities added during the previous year and will determine whether any of the new vessels or facilities are the result of acquisitions.

2.2.3 Adjusting for methodological changes and corrections

The base year inventory will also be adjusted in response to any errors discovered or changes in quantification methodologies or emission factors. For a change in calculation methodology, the GHG inventory base year, and current year will be updated. For a data source methodology change, the GHG inventory from the base year will be updated if the emissions effect of the said change is more than 5% of the total scope 3 emissions, (see data collection section below).

3. Emission sources and methodology

3.1 Greenhouse gases

Emissions from carbon dioxide (CO₂), methane (CH₄), hydrofluorocarbon (HFCs) and nitrous oxide (N₂O) are tracked in Evotec's GHG Inventory and reported as overall CO₂ equivalency (CO₂e). No Evotec sources for emissions from PFCs, SF₆ or NF₃ have been identified to date.

Table 1: Emissions by Greenhouse Gases (Location-based)

Year	CO ₂ (tCO ₂ e)	CH ₄ (tCO ₂ e)	N ₂ O (tCO ₂ e)	HFC (tCO ₂ e)	Total (tCO ₂ e)
2023	34,017	63	72	1,067	35,219
2021	36,115	65	72	445	36,696
% of 2023	97%	0%	0%	3%	100%
% Change	-6%	-3%	-1%	140%	-4%

3.2 Scope 1

Evotec identifies all scope 1 emission sources, including:



- Stationary emissions – Natural gas and diesel consumption
- Fugitive emissions – Carbon dioxide, HFC-134A, HFC-32, R404A, R407C, R410A

At sites where consumption data was not available or partially available estimates with gap fills are used to cover these gaps. This is achieved by using the previous period consumption data (monthly based) to fill on the missing consumption period, proxy site consumption intensity (e.g., kWh/sqm or m3/sqm) estimations, or internal budget planning estimations. Depending on the availability and/or data need, the methods aforesaid are applied. The scope and method of application may differ from one reporting year to another.

3.3 Scope 2

Evotec identifies all scope 2 emission sources, including:

- Purchased electricity
- Purchased heat and steam

At sites where consumption data was not available or partially available estimates with gap fills are used to cover these gaps. This is achieved by using the previous period consumption data (monthly based) to fill on the missing consumption period, internal budget planning estimations, proxy site consumption intensity (e.g., kWh/sqm or m3/sqm) estimations, or energy provider estimations. Depending on the availability and/or data need, the methods aforesaid are applied. The scope and method of application may differ from one reporting year to another.

Emissions are calculated using both the location and market-based accounting methods. Where renewable electricity is purchased, this is accounted for as zero under the market-based method. All remaining consumption is accounted for using residual mix emission factors. For location-based emissions, national or regional emission factors have been used.

3.4 Scope 3

The remaining indirect emission sources identified by Evotec in scope 3 of the 2022 GHG inventory included eight out of the fifteen scope 3 categories defined by the GHG Protocol. The following subsections explain the methodologies used for each category.

3.4.1 *Category 1 and 2, purchased goods and services and capital goods*

Emissions for Purchased Goods and Services and Capital Goods are calculated using the Environmentally Extended Input Output (EEIO) method. For the 2023 spend data, the method is changed from **Purchase Orders placed** to **Actual Orders Received**¹ for the mapping of the emission factors. This change in method became necessary to ensure that data collected represents the period reported. To fulfil the 5% threshold for recalculation, we assessed the effect of the methodological change on the base year

¹ Actual spend that was received in the period reported.



emissions. It turned out that the effect is about 3% which is less than the threshold and so we did not do any recalculation.

3.4.2 Category 3, fuel and energy related activities

Fuel and energy related activities (FERA) includes emissions related to the production of fuels and energy purchased and consumed but excludes the consumption of them covered in scope 1 and 2. Well-to-tank emissions are calculated for fuel consumption. For electricity, emissions for well-to-tank and transmission and distribution losses are calculated.

3.4.3 Category 4, upstream transport and distribution

Emissions from the transport of products from Evotec to its customers that has been paid for by Evotec is included in this category. Emissions have been calculated based on weight and distance by transport mode. Direct and well-to-tank emissions have been included.

3.4.4 Category 5, waste generated in operations

This category includes disposal and treatment of waste that is generated at Evotec controlled sites by third parties. The waste is categorized by waste type including recycled, incinerated, landfill, and composted. The data is converted into metric tonnes and a DEFRA factor related to the disposal method is applied to calculate the emissions.

3.4.5 Category 6, business travel

This category covers emissions related to the transportation of employees for business-related activities in vehicles not owned or operated by Evotec.

For transport data, the provided distance is multiplied by the appropriate Defra emission factor. Direct and WTT emissions are included. Where data was provided by spend, emissions were calculated using Defra transport IO factors.

Hotel stays and taxis have been excluded from category 6 business travel due to immateriality and poor data accessibility and quality. The associated emissions for this exclusion accounts for less than 0.0001% of base year emissions in 2021 (less than 2.5 tCO₂e). If accessibility or materiality of this data significantly increases in the future, they will be added to the scope of this inventory.

3.4.6 Category 7, employee commuting

Category 7 is related to emissions associated with the commuting of full-time employees (FTE) of Evotec. Average emissions per FTE were calculated at country level based on available national statistics. These were multiplied by the number of FTEs per country.

3.4.7 Category 15, investments

This category includes emissions derived from Evotec's investments in 2023, including investments and financial services. Evotec uses the revenue for its investment companies along with the percentage of



equity shares to calculate emissions. All revenues were converted to USD to align with the USEPA IO emission factors. These factors were used over Defra IO ones as they allow to split out emissions by scope, and therefore include only scope 1 and 2 emissions as is required by the SBTi.

The companies' revenue was multiplied by the *Supply Chain GHG Emission Factors for US Commodities and Industries* scope 1 and 2 USEPA IO emission factor and by Evotec's equity share to calculate emissions. Where the investee already reports its GHG inventory, actual scope 1 and 2 emissions were multiplied by the equity share to obtain a more accurate figure.

3.5 Exclusions

Data from mobile emissions has been excluded due to a lack of primary data. Total emissions have been calculated using the information outlined below. Total estimated emissions amount to 60 tCO₂e. Scope 1 and 2 (market-based) emissions for 2021 were 33,320 tCO₂e. Mobile emissions therefore account for 0.2% of the total and are not material.

Scope 3 categories 8-14 have been deemed not relevant as the activities they cover do not apply to Evotec. If in the future significant data related to these categories is collected they will be added to the scope of this inventory.

Hotel stays and taxis have been excluded from category 6 business travel due to immateriality and poor data accessibility and quality. The associated emissions for this exclusion accounts for less than 0.0001% of base year emissions in 2021 (less than 2.5 tCO₂e). If accessibility or materiality of this data significantly increases in the future, they will be added to the scope of this inventory.

If further exclusions are made in the future based on their contribution to the completeness of the overall inventory being negligible, then each inclusion along with the associated scope and description should be included in this section.

4. Emission factors

4.1 Global warming potentials

For ease of reporting and comparing the absolute effects of different gases, all greenhouse gases have a defined global warming potential (GWP). The GWP of a gas defines the contribution to global warming that 1 kg of that gas has compared to 1 kg of CO₂. The effect of a non-CO₂ greenhouse gas is expressed as carbon dioxide equivalent (CO₂e) and typically assessed over a 100-year time period. Therefore, the notation of "GWP100" may be seen.



GWPs for the 2023 inventory have been sourced from the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report² (AR5) for consistency across all available scope emission factors.

4.2 Emission factor sources

Scope 2 emissions are calculated following both the location-based and the market-based methodologies. Location-based factors are taken from US EPA eGRID (US) and IEA (RoW); market-based factors are taken from Green-e (US) and AIB (Europe). The latest datasets available at time of publication are used. Green-e does not provide CH₄ and N₂O factors. It was decided not to combine Green-e CO₂ emission factors with other emission factors for CH₄ and N₂O.

Emission factor sources used to calculate Evotec’s 2023 corporate GHG inventory are documented in the below table.

Table 2: Evotec 2023 GHG inventory emission sources

Emissions Source	Reference
Natural Gas	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors for natural gas (fuels; gaseous fuels). Available here . US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here .
Liquid Fuels	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors for liquid fuels diesel (average fuel blend). Available here . US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here .
Purchased Electricity	Location-based emission factors:

² Source: Intergovernmental Panel on Climate Change (IPCC), Fifth Assessment Report (AR5), 2014. Link [here](#).



Emissions Source	Reference
	<p>US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here.</p> <p>International Energy Agency (IEA), last updated September 2023. Available here.</p> <p>Market-based emission factors:</p> <p>US Green-e Residual Mix Emissions Rate 2022 (2020 data). Available here.</p> <p>Association of Issuing Bodies (AIB) 2022. Available here.</p>
Heat and Steam	<p>UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors for heat and steam (district heat and steam). Available here.</p>
Refrigerants	<p>Intergovernmental Panel on Climate Change (IPCC), Fifth Assessment Report (AR5), 2014. Link here.</p>
Emissions Source	Reference
Natural Gas	<p>UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors for natural gas (fuels; gaseous fuels). Available here.</p> <p>US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here.</p>
Liquid Fuels	<p>UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors for liquid fuels diesel (average fuel blend). Available here.</p> <p>US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here.</p>

**Table 3:** Evotec 2023 GHG inventory emission sources

Scope 3 Category	Reference
1. Purchased goods and services	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .
2. Capital goods	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .
3. Fuel and energy related activities	US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here . International Energy Agency (IEA), last updated September 2023. Available here . UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .
4. Upstream transportation & distribution	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .
5. Waste generated in operations	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .
6. Business travel	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .
7. Employee commuting	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here . US EPA Emission Factors for Greenhouse Gas Inventories, updated September 2023. Available here .



Scope 3 Category	Reference
15. Investments	UK Department of Environment, Food & Rural Affairs (DEFRA) 2023 emissions factors. Available here .

5. Verification

Verification of the 2023 GHG Inventory for the reporting period 1 January 2023 to 31 December 2023 is performed by BDO AG Wirtschaftsprüfungsgesellschaft. For more details regarding the results and verification please refer to Evotec's [Sustainability Report](#).