Corporate Carbon Footprint

Documentation for the calculation

Reporting year 2022

about the corporate carbon footprint.

co_2. the currency of our time.

Greenhouse gases are becoming increasingly important, not least due to the **EU Green Deal**. Europe is set to become the world's first climate-neutral continent by 2050. Around **38%** of global CO_2 emissions are caused by the property sector alone - it therefore plays a significant role. UBM therefore sees it as part of its **responsibility** towards the environment and society to play an active role.

the carbon footprint of a company.

The Corporate Carbon Footprint provides an overview of a company's direct and indirect **greenhouse gas emissions** in tonnes of CO_2e along the entire **value chain**.

- According to the **Greenhouse Gas Protocol**, at least Scope 1 and 2 are considered, and relevant Scope 3 categories should also be included.
- The submission of **Science Based Targets** requires the consideration of all Scope 3 categories.

benefits of the corporate carbon footprint.

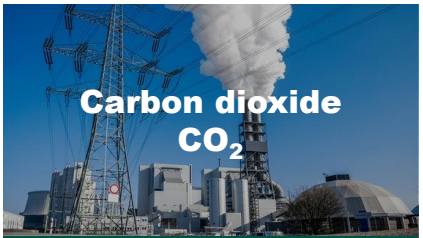
Fulfilment of reporting obligations (CSRD)

Identification of hot spots, target definition

Credible commitment against greenwashing

CO_2e = CO_2 equivalents (i.e. CO2 and other greenhouse gases such as methane, nitrous oxide, fluorocarbons, etc.)

greenhouse gases. warm the earth.

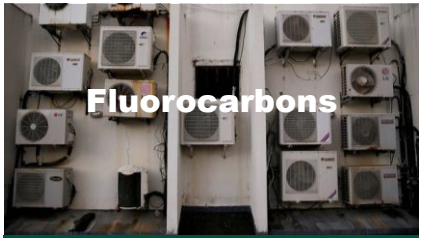


Combustion of fossil fuels, industrial processes

Ruminants, landfills, natural gas extraction

Production of semiconductors, screens, solar cells

Fertiliser, nitrous oxide



Refrigerants, cleaners, aluminium production

Insulating gas in medium and high voltage technology

GHGs have different global warming potentials (e.g. methane is about 28 times more potent than CO_2).

→ Common unit: CO_2 equivalents (CO_2e)

corporate carbon footprint. ubm.

We collected our first complete CCF for the 2022 reporting year. This document provides a transparent explanation of the methodology, system boundaries and results.

Based on the CCF, we can identify **potential for improvement** and measure **progress** in achieving our targets. Details on our targets, measures and key figures in the area of ESG can be found in the ESG report[1].

Furthermore, our ambitious science-based climate targets have been validated by the **Science Based Targets initiative** and we are developing a concrete GHG reduction pathway.

The results are presented in accordance with the requirements of the science-based **Greenhouse Gas Protocol** (GHG Protocol) and the Guide to Scope 3 Reporting in Commercial Real Estate. The entire process of creating the CCF was supported by the denkstatt consultancy, including a review of completeness, correctness and GHG Protocol conformity in accordance with **ISO 14071**.

[1] Download at https://www.ubm-development.com/de/esg-management/

calculation details.

system boundaries.

This CCF covers the issues of UBM Development including its investments.

project development.
Nine projects completed in 2022, including three renovations.

corporate locations.
Nine of the 15 locations in AT, DE, PL and CZ, at which more than 95 % of the employees are employed.[1] One investment (UBM hotels).

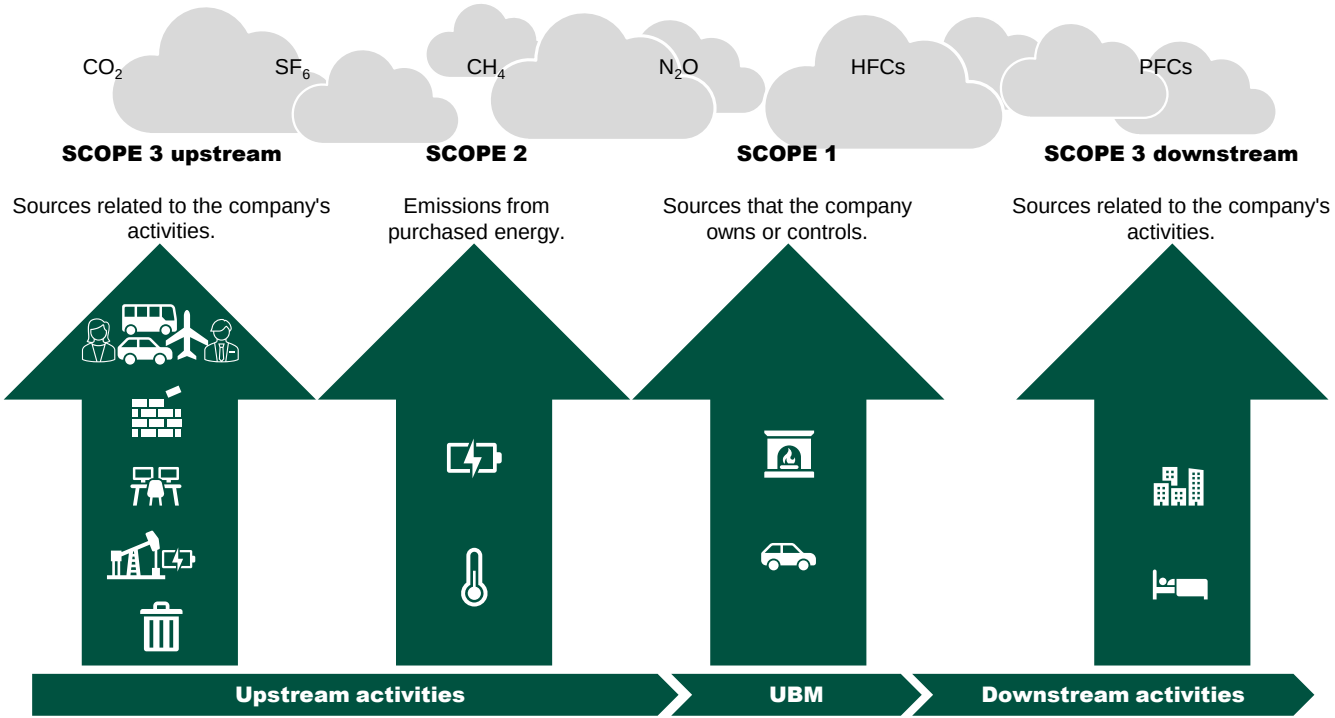
standing assets.
Four buildings in AT and PL. Vacant plots are not relevant for the CCF calculation.

operational control approach.

In Scope 1 and 2, the issues of those companies over which UBM has operational control (i.e. can make operational decisions) are reported. In Scope 3.15, external investments over which UBM has no operational control are reported (with the percentage of the investment).

1 Cut-off threshold per location: at least 5 % of the total workforce must be employed at the location

corporate carbon footprint. ubm.



The Greenhouse Gas Protocol is the most widely used global standard for calculating and reporting emissions.

scope 3. relevance assessment.

Scope 3 category	Relevance assessment Scope 3 Guide[1]		Relevance for UBM
	Entwickler	**Vermieter**	
3.1 Purchased goods & services	low	medium	✓
3.2 Capital goods	**high**	medium	✓
3.3 Energy-related emissions	medium	medium	✓
3.4 Upstream transport & distribution	medium	low	not relevant [2]
3.5 Waste	low	low	✓
3.6 Business travel	low	low	✓
3.7 Employee commuting	low	low	✓
3.8 Leased property, plant and equipment	low	low	✓
3.9 Downstream transport & distribution	n/a	n/a	not relevant [3]
3.10 Further processing of sold products	n/a	n/a	not relevant [3]
3.11 Product use	**high**	low	✓
3.12 End of life of products sold	**high**	low	✓
3.13 Leased property, plant and equipment	low	**high**	✓
3.14 Franchises	n/a	n/a	not relevant [3]
3.15 Investments	low	low	✓

[1] UK Green Building Council (2019): Guide to Scope 3 Reporting in Commercial Real Estate. [2] Transport is commissioned indirectly via subcontractors and is included in 3.1 and 3.2. [3] No downstream transport and no further processing of the products sold (property projects), no franchises

ghg emissions. calculation.

Screening/relevance assessment: significant emission sources

Data collection

Measured data (primary data)
- Meter readings, delivery receipts
- Mileage reports, travel records

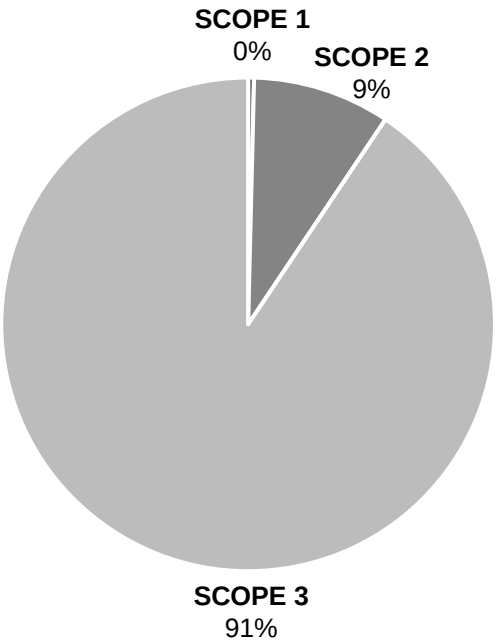
Estimated data (secondary data)
- Spend-based: expense records
- Average data: Extrapolation of partial data

Calculation of emissions

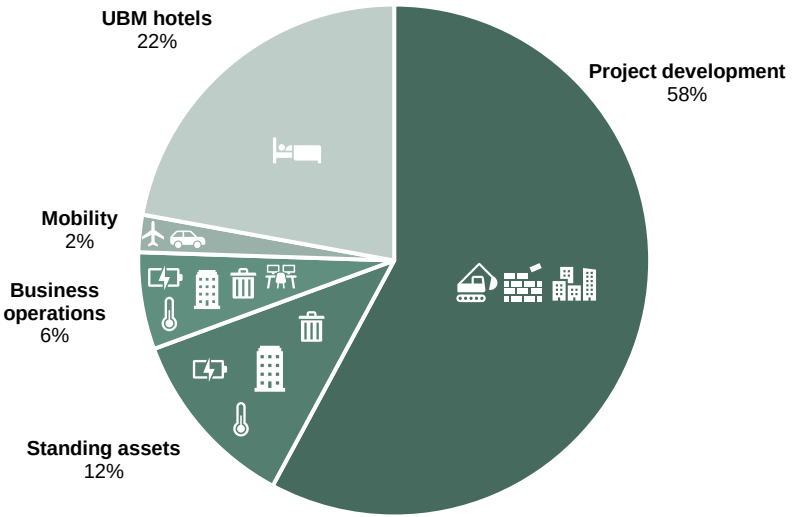
- Emission factors: Selection according to activity, geographical location and time period
- Conversion into CO_2 equivalents

emissions at a glance.

emissions by scope.



emissions by activity of ubm[1].



Total: **26,135 t CO_2e**

[1] Project development: 3.2 Embodied Carbon, 3.11, 3.12; Standing assets: 1, 2, 3.5, 3.13; Business operations: 1, 2, 3.1, 3.2 Rest, 3.3, 3.5, 3.8; Mobility: 1, 3.6, 3.7; UBM hotels: 3.15

way forward.

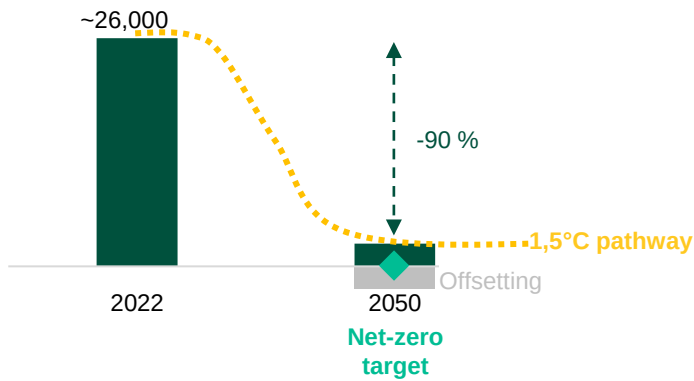
SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

ubm development

Science-based targets

Near-term 2030	**42%** reduction of scope 1+2 emissions (Basis: 2022)
Long-term 2050	**Net-zero:** **90%** reduction of scope 1+2+3 emissions (Basis: 2022) Offsetting of unavoidable emissions from 2050

Scope 1+2+3 emissions (t CO2e)



Implementation

- Increase share of timber construction
- Increase renewable energies
- Increase energy efficiency (BMS)

The detailed catalogue of objectives and measures is described in detail in the current ESG report and is available for download: www.ubm-development.com/de/esg-management/

results in detail.

scope 1 and 2. results.

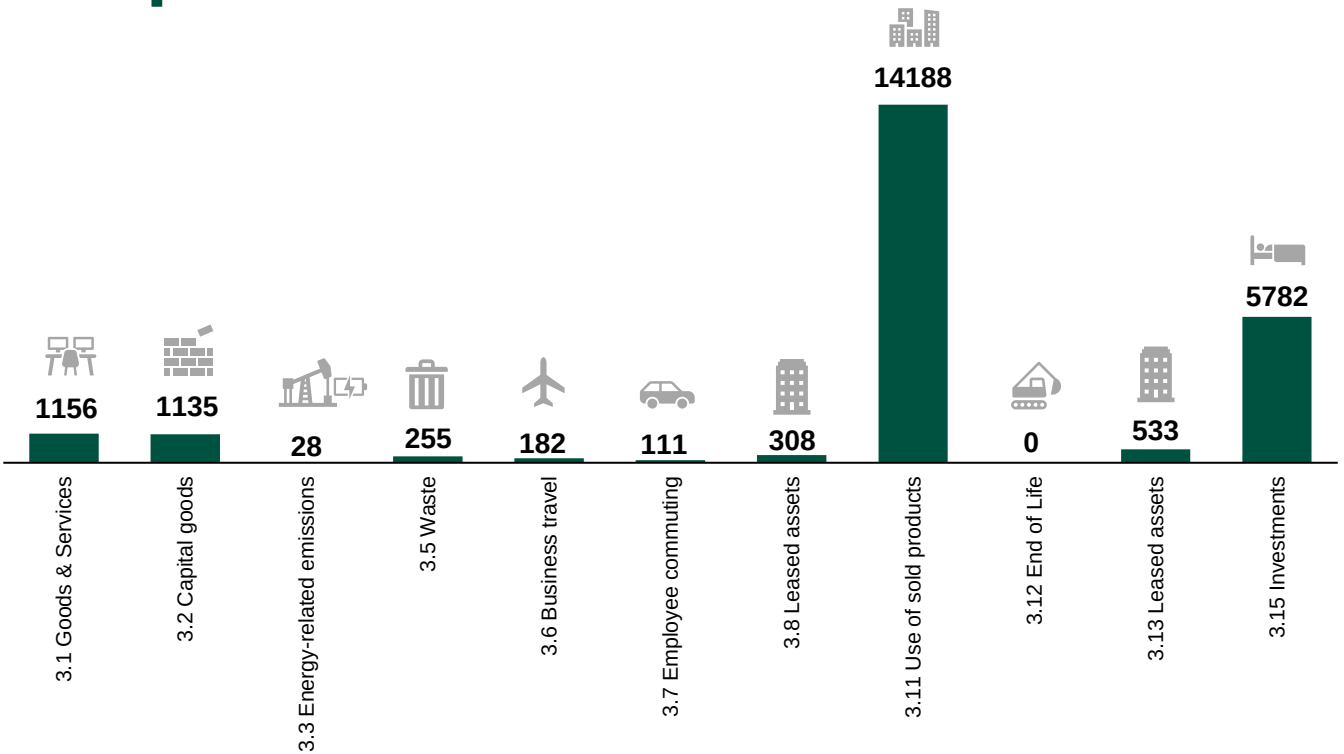
Emissions from sources that the company owns or controls, as well as emissions from purchased energy.

data collection approach.

The emissions associated with the operation of the company's own vehicles (diesel & petrol) are calculated using the CO_2 factors from the manufacturer's specifications and the kilometres driven according to UBM's internal mobility reporting. For energy consumption (electricity, heating & cooling) in corporate locations (offices) and portfolio properties where UBM decides on the energy supplier, the emissions are calculated in the ESG cockpit using the ecoinvent factors (the emissions from offices and portfolio properties for which UBM does not choose the energy supplier are reported in Scope 3.8 and 3.13).

Category	Emissions (t CO_2e)
Electricity consumption of standing assets	1,320
Heating & cooling standing assets	966
Diesel & petrol for company-owned vehicles	101
Electricity consumption corporate locations	50
Electricity consumption corporate locations	19
Natural gas consumption corp. locations & standing assets	0

scope 3. details.



scope 3.1. acquired goods & services.

Emissions from the production or extraction, processing and transport of purchased goods and services purchased in the reference year.

data collection approach.
Expenditure-based assessment of the purchase of goods and services, use of DEFRA emission factors (taking inflation into account).

Category	Emissions (t CO_2e)
Legal services, consulting, financial services	613
Advertising & market research services	317
Other professional, scientific & technical services	159
Real estate services	25
Education services	11
Repair	10
Waste collection, treatment and disposal services	10
Food and beverage serving services	9
Services to buildings and landscape	1
Security and investigation services	1

scope 3.2. capital goods.

Emissions from the production or extraction, processing and transport of purchased capital goods (tangible goods or services) purchased in the reference year.

data collection approach.

Life cycle assessments (where available) or external expert estimates based on life cycle assessments for materials used in projects (embodied carbon). Expenditure-based assessment of other purchases of capital goods, use of DEFRA emission factors (taking inflation into account).

Category	Emissions (t CO_2e)
Materials used in projects	935
Computer programming, consultancy and related	157
Furniture	42

scope 3.3. energy-related emissions.

Emissions associated with the production of fuels and energy purchased and consumed in the reporting year that do not fall under Scope 1 or 2 (extraction, production and transport of fuels and combustibles).

data collection approach.

For corporate locations and standing assets where UBM has the power to decide on the energy supplier, the upstream energy-related emissions are calculated in the ESG cockpit using ecoinvent factors based on the energy consumption entered in the tool.

Category	Emissions (t CO_2e)
Energy-related emissions	28

scope 3.5. waste.

Emissions in connection with the treatment and disposal of waste resulting from our own business activities.

data collection approach.

This is based on the waste analyses that UBM receives from the respective providers or extrapolations of this data (by number of employees for corporate locations and m^2 for standing assets) for those locations and standing assets for which no primary data is (yet) available (this concerns the corporate locations in Germany excluding Berlin). Emissions are calculated in the ESG cockpit using ecoinvent factors.

Category	Emissions (t CO_2e)
Waste in standing assets	191
Waste in corporate locations	64

scope 3.6. business travel.

Emissions from employees travelling on business in vehicles that are not owned or operated by UBM (in particular flights, rail).

data collection approach.

This is based on the evaluation of the flights booked by the travel agency through which the business trips are booked. The emissions associated with the flights are calculated with the support of myclimate.

Category	Emissions (t CO_2e)
Flight emissions	182

Intensive work is being carried out on reporting on train emissions, with the aim of retrospective reporting from the 2022 reporting year.

scope 3.7. employee commuting.

Emissions caused by the transport of employees between their homes and their workplace (in particular private cars, public transport).

data collection approach.

UBM-wide employee survey on commuting behaviour[1], emissions are calculated using factors from the Federal Environment Agency of Germany based on the number of employees, number of commuting days, average commuting distance and choice of means of transport (employees' cars, public transport, bicycle/walking).

Category	Emissions (t CO_2e)
Employees' cars	66
Public transport	45

[1] Survey among all employees, 156 responses

scope 3.8. upstream leased assets.

Operation of buildings, machinery and vehicles that are not owned by the company but were rented or leased by the company in the reference year.

data collection approach.

The emissions associated with the operation of leased company cars (diesel & petrol) are calculated using the CO_2 factors from the manufacturer's specifications and the kilometres driven according to UBM's internal mobility reporting. For energy consumption (electricity, heating & cooling) in rented corporate locations (offices), where the landlords decide on the energy suppliers, the emissions are calculated in the ESG cockpit using the ecoinvent factors (the emissions of the offices for which UBM chooses the energy supplier are reported in Scope 1 and 2).

Category	Emissions (t CO_2e)
Leased company vehicles	222
Heating & cooling rented corporate locations	51
Electricity leased corporate locations	35

scope 3.11. use of sold products.

Emissions caused by the energy input for the proper use of the product during the utilisation phase.

data collection approach.

Emissions from the operation of the projects/buildings sold (no renovations) are calculated over the life cycle in accordance with energy certificates (assumption: linear decrease in annual emissions due to the achievement of climate neutrality by 2050). The values from the energy certificates are entered in the ESG cockpit and the emissions are calculated using ecoinvent factors.

Category	Emissions (t CO_2e)
FAZ-Tower	10,636
Kaufmannshof	1,314
Nordbahnhof Residential	953
Salunerstraße Pendling	604
Satteins	511
Nordbahnhof Office	170

scope 3.12. end of life.

Emissions from the disposal and further processing of products at the end of their life cycle for all products sold in the reporting year.

data collection approach.

In principle, disposal is dealt with in the C1-C4 modules in life cycle assessments.

In the life cycle assessments available to UBM, negative emissions are reported in modules C1-C4, but these may not be included (credited) in the CCF in accordance with the GHG Protocol. UBM is therefore currently reporting zero emissions; data availability is to be improved in future.

scope 3.13. downstream leased assets.

Operation of buildings, machinery and vehicles owned by the company but leased or rented to external companies/individuals.

data collection approach.

Energy consumption (electricity, heating & cooling) in rented standing assets where the tenants decide on the energy suppliers (the emissions of the standing assets for which UBM chooses the energy supplier are reported in Scope 1 and 2). Emissions are calculated in the ESG cockpit using the ecoinvent factors.

Category	Emissions (t CO_2e)
Energy consumption of leased standing assets	533

scope 3.15. investments.

Proportionate emissions from the business activities of investments made by the company.

data collection approach.

UBM has a 50% stake in UBM hotels. Emissions are calculated on the basis of energy consumption (electricity, heating and cooling) in the hotels using the ecoinvent factors. The emissions reported by UBM reflect the percentage shareholding.

Category	Emissions (t CO_2e)
Energy consumption UBM hotels	5,782

review statement.

Review statement of the calculation of the Corporate Carbon Footprint (CCF)

The calculation of the CCF was performed by UBM Development AG using the "ESG-Cockpit" tool and covers 9 out of 15 locations where more than 95% of the employees are employed. The review is based on the following documents provided by UBM Development AG:

- Access to the ESG Cockpit
- ESG report 2022 of UBM Development AG
- Supplementary information on the selected Scope 3 categories
- Excel files of the data used in the ESG Cockpit included
- Manual and information on the function and methodology of the ESG Cockpit

A detailed review of the primary and input data did not take place as part of this review process. In several detailed meetings with the responsible persons, numerous methodological and calculatory adaptations were proposed, which were subsequently implemented by UBM on its own responsibility. The critical review was carried out in accordance with ISO 14071. The reviewer had the task of checking whether the:

- accounting methods used are in accordance with the requirements of the GHG Protocol
- accounting methods used are scientifically and technically valid
- assumptions made and data used (primary data and secondary data) are appropriate in relation to the objective of the study
- documentation is described transparently and consistently

The reviewer confirms on the basis of the audits performed that the results of the CCF of UBM Development AG for the balance year 2022 were calculated in compliance with the provisions and specifications of the GHG Protocol in a standard-compliant manner. The reporting on the analyses performed and their results is described transparently. The data and methods applied appear appropriate and the presentation of the results is in line with the defined objective of the CCF project.

references.

Emission factors

DEFRA (2020). SIC Multipliers 2020.

ecoinvent data base (in ESG Cockpit)

myclimate flight calculator

Federal Environment Agency Germany (2023). Emissions in passenger transport.