

Corporate Carbon Footprint

TIER Mobility SE has worked with ClimatePartner to calculate several of their company's carbon footprints: Corporate Carbon Footprints (CCFs).

The CCF is the sum of the CO_2 emissions released by the company within the defined system boundaries over a specified period of time. In this report, the different CCFs are grouped together as **Corporate Carbon Footprint 2020** and include the following individual calculations: **Headquarters & Offices, Operations** and **Scooter Use-phase**.

The calculations were based on the guidelines of the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol).

CCF - the first step to take climate action

Calculate, reduce, offset - these are the crucial steps that should be taken in order to tackle climate change in line with the Paris Agreement.

The foundation for any climate action starts with calculation: a company with a CCF understands which parts of their business are creating the greatest emissions (carbon hotspots). If these emissions are offset the company can credibly claim carbon neutrality.

In addition, having a carbon footprint makes it possible to understand the areas with the greatest potential for avoidance and reduction, to develop and implement appropriate reduction measures, and to set reduction targets. Annual CCF reports allow companies to check their progress against reduction targets and to identify new hotspots that drive further reduction measures.

Overall results

This is the result of the calculation for the group's business activities **Corporate Carbon Footprint 2020**.

CO₂ emissions

Result

| Overall results | 27,840.83 t CO₂ |
|-----------------|-----------------|

For comparison



The emissions correspond to the carbon footprint of 3,205 Europeans. One person in Europe emits an average of 8.7 t of $\rm CO_2$ per year 1

¹⁾ Source: EEA 2019, European Environment Agency: EEA greenhouse gas - data viewer, EU-27 value for total emissions with international transport (CO_2e), https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer (retrieved 01/31/2022.)

Our calculation approach

Principles

In preparing the Corporate Carbon Footprint and this report, five basic principles were observed - in accordance with the GHG Protocol.

Relevance: The calculation should account for all greenhouse gas emissions that are material to the company's carbon footprint. This report is designed to support internal and external decision-making.

Completeness: The report must include all GHG emissions within the selected system boundaries. If any data is excluded, we will document and justify its exclusion.

Consistency: In order to allow a company's footprint to be compared over time, we will use consistent methodologies.

Transparency: All material activities of a company will be recorded and any assumptions, data gaps and resulting extrapolations or data exclusions will be presented clearly and openly in this report.

Accuracy: We aim for this report to be sufficiently accurate so that it gives the reader confidence that they have useful data that will enable them to make good decisions. We aim to calculate footprints that are neither to high nor too low and use approaches that minimise uncertainties.

Data collection and calculation

CO₂ emissions were calculated using the company's consumption data and emission factors researched by ClimatePartner. Wherever possible, primary data were used. If no primary data were available, secondary data from highly credible sources were used. Emission factors were taken from scientifically recognized databases such as ecoinvent and DEFRA.

CO₂-equivalent

The Corporate Carbon Footprint calculates all emissions as CO_2 equivalents (CO_2 e) but refers to as " CO_2 " elsewhere in this report for simplicity's sake.

This means that all relevant greenhouse gases, as stated in the IPCC Assessment Report, were taken into account in the calculations. These include Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorocarbons (HFC/HFC), Perfluorocarbons (PFC/PFC), Sulfur Hexafluoride (SF_6), and Nitrogen Trifluoride (NF_3). Each of these gases has a different ability to warm the Earth's atmosphere and remains in the atmosphere for different lengths of time. To make their effect comparable, they are converted into CO_2 equivalents (CO_2 e) using global warming potentials. The global warming potential describes how strongly a gas can warm the atmosphere compared to CO_2 , and usually refers to a time horizon of 100 years.

For example, methane has a global warming potential of 28, so the warming effect of methane is $28 \text{ times greater than } CO_2 \text{ over } 100 \text{ years.}^2$

Electricity: Market-based and location-based approaches

Emissions for electricity were calculated using both the market-based method and the location-based method as recommended by the GHG Protocol.

For the market-based method, the preferred approach is for the company to provide specific emission factors for the electricity they have purchased. If these specific factors were not available, we would seek to use factors for the residual mix for the country of operation (residual mix is the average emissions released by the country's electricity grid, excluding any renewable energy sources). In some countries, a residual mix factor is not available. If this was the case, the average grid mix (including renewables) of the country was used.

The report also states the location-based method. Here we used the average electricity grid mix for the country.

²⁾ Source: Intergovernmental Panel on climate change, "Climate Change 2021 The Physical Science Basis", S. 1842, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf (retrieved on 31.01.2022)

Operational System Boundaries

Operational System Boundaries indicate which of the company's activities are taken into account for the individual carbon footprints of **Corporate Carbon Footprint 2020**. The various emission sources have been divided into three scopes in accordance with the GHG Protocol:

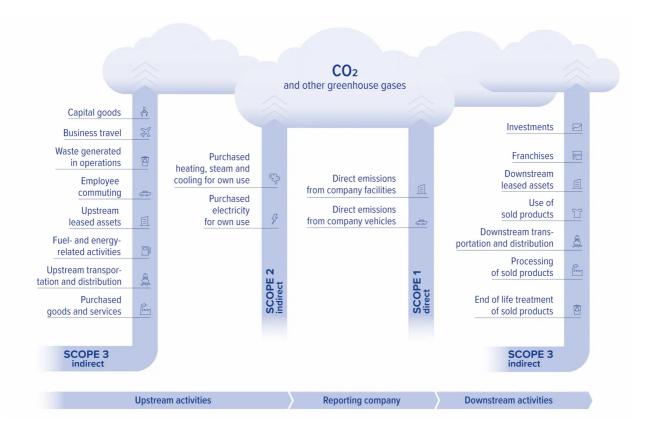
Scope 1 includes all emissions generated directly by **TIER Mobility SE**, for example by companyowned equipment or vehicle fleets.

Scope 2 lists emissions generated by purchased energy, for example electricity and district heating.

Scope 3 includes all other emissions that are not under direct corporate control, such as employee travel or product disposal.

Figure

Activities divided by scope



Largest emission sources - greatest reduction potential

The CCF identifies the largest sources of emissions of the group **Corporate Carbon Footprint 2020**. This is important in driving climate action as it highlights which areas should be prioritised in relation to emission reduction and avoidance.

FigureAllocation of CO₂ emissions to Scope 1, 2 and 3

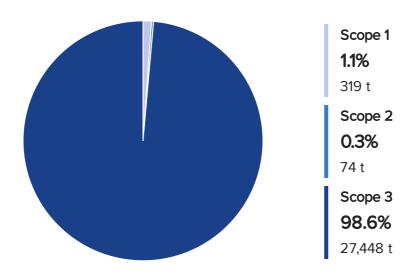
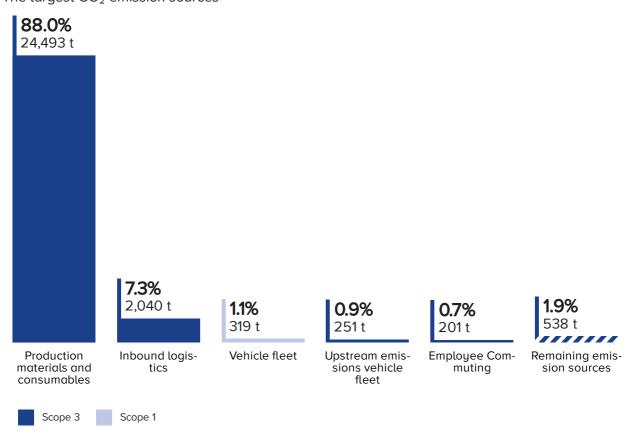


Figure
The largest CO₂ emission sources



Total results for the group Corporate Carbon Footprint 2020

| Emission sources | t CO ₂ | % |
|--|-------------------|-------|
| Scope 1 | 318.80 | 1.1 |
| Direct emissions from company vehicles | 318.80 | 1.1 |
| Vehicle fleet | 318.80 | 1.1 |
| Direct emissions from company facilities | 0.00 | 0.0 |
| Heat (self-generated) | 0.00 | 0.0 |
| Scope 2 | 74.47 | 0.3 |
| Purchased heating, steam and cooling for own use | 74.47 | 0.3 |
| Heat (purchased) | 74.47 | 0.3 |
| Purchased electricity for own use ³ | 0.00 | 0.0 |
| Electricity (stationary) | 0.00 | 0.0 |
| Electricity (vehicle fleet) | 0.00 | 0.0 |
| Scope 3 | 27,447.56 | 98.6 |
| Purchased goods and services | 24,516.55 | 88.1 |
| Production materials and consumables | 24,492.54 | 88.0 |
| Gastronomy | 21.94 | 0.1 |
| Print products | 1.21 | 0.0 |
| Water | 0.86 | 0.0 |
| Upstream transportation and distribution | 2,039.69 | 7.3 |
| Inbound logistics | 2,039.69 | 7.3 |
| Employee commuting | 353.60 | 1.3 |
| Employee Commuting | 201.38 | 0.7 |
| Home office | 152.22 | 0.5 |
| Fuel- and energy-related activities | 334.96 | 1.2 |
| Upstream emissions vehicle fleet | 250.59 | 0.9 |
| Upstream emissions electricity | 73.27 | 0.3 |
| Upstream emissions heat | 11.10 | 0.0 |
| Business travel | 185.54 | 0.7 |
| Flights | 139.45 | 0.5 |
| Rental and private vehicles | 33.68 | 0.1 |
| Rail | 12.41 | 0.0 |
| End of life treatment of sold products | 17.23 | 0.1 |
| Product disposal | 17.23 | 0.1 |
| Overall results | 27,840.83 | 100.0 |

³⁾ Calculated using the market-based method. Emissions calculated using the location-based method are $598.60\,\mathrm{t}$ CO_2 .

For comparison, the total emissions of all individual calculations

| Corporate Carbon Footprint 2020 | t CO ₂ | % |
|---------------------------------|-------------------|------|
| Headquarters & Offices | 655.79 | 2.4 |
| Operations | 635.58 | 2.3 |
| Scooter Use-phase | 26,549.46 | 95.4 |

Results of the individual calculation **Headquarters & Offices**

| Emission sources | t CO ₂ | % |
|--|-------------------|-------|
| Scope 1 | 0.00 | 0.0 |
| Direct emissions from company facilities | 0.00 | 0.0 |
| Heat (self-generated) | 0.00 | 0.0 |
| Scope 2 | 74.47 | 11.4 |
| Purchased heating, steam and cooling for own use | 74.47 | 11.4 |
| Heat (purchased) | 74.47 | 11.4 |
| Scope 3 | 581.32 | 88.6 |
| Employee commuting | 353.60 | 53.9 |
| Employee Commuting | 201.38 | 30.7 |
| Home office | 152.22 | 23.2 |
| Business travel | 185.54 | 28.3 |
| Flights | 139.45 | 21.3 |
| Rental and private vehicles | 33.68 | 5.1 |
| Rail | 12.41 | 1.9 |
| Purchased goods and services | 24.01 | 3.7 |
| Gastronomy | 21.94 | 3.3 |
| Print products | 1.21 | 0.2 |
| Water | 0.86 | 0.1 |
| Fuel- and energy-related activities | 18.18 | 2.8 |
| Upstream emissions heat | 11.10 | 1.7 |
| Upstream emissions electricity | 7.07 | 1.1 |
| Overall results | 655.79 | 100.0 |

Results of the individual calculation **Operations**

| Emission sources | t CO ₂ | % |
|--|-------------------|-------|
| Scope 1 | 318.80 | 50.2 |
| Direct emissions from company vehicles | 318.80 | 50.2 |
| Vehicle fleet | 318.80 | 50.2 |
| Scope 2 | 0.00 | 0.0 |
| Purchased electricity for own use 4 | 0.00 | 0.0 |
| Electricity (vehicle fleet) | 0.00 | 0.0 |
| Electricity (stationary) | 0.00 | 0.0 |
| Scope 3 | 316.78 | 49.8 |
| Fuel- and energy-related activities | 316.78 | 49.8 |
| Upstream emissions vehicle fleet | 250.59 | 39.4 |
| Upstream emissions electricity | 66.19 | 10.4 |
| Overall results | 635.58 | 100.0 |

⁴⁾ Calculated using the market-based method. Emissions calculated using the location-based method are $598.60 \, t \, CO_2$.

Results of the individual calculation **Scooter Use-phase**

| Emission sources | t CO ₂ | % |
|--|-------------------|-------|
| Scope 3 | 26,549.46 | 100.0 |
| Purchased goods and services | 24,492.54 | 92.3 |
| Production materials and consumables | 24,492.54 | 92.3 |
| Upstream transportation and distribution | 2,039.69 | 7.7 |
| Inbound logistics | 2,039.69 | 7.7 |
| End of life treatment of sold products | 17.23 | 0.1 |
| Product disposal | 17.23 | 0.1 |
| Overall results | 26,549.46 | 100.0 |

Next steps

Now **TIER Mobility SE** should use the findings to drive meaningful climate action. This will include finding ways to continuously reduce emissions as well as offsetting any emissions that cannot immediately be reduced. By offsetting, the company becomes carbon neutral and can use the ClimatePartner Carbon Neutral Company label.

Reducing Emissions

The concentration of greenhouse gases in the atmosphere is responsible for global warming so we must reduce our emissions as quickly and broadly as possible. Defining clear and measurable reduction targets are the best way to start. A reduction plan detailing specific actions and team responsibilities will help the organisation to make quick and meaningful progress.

A creative and courageous approach is needed. Reduction targets should be ambitious and reflective of current scientific and technological understanding. ClimatePartner recommends differentiating between short- medium- and long-term reduction targets because some measures can be implemented quickly whilst others take time. Changes to processes, product design and supply chains can be complex and long-term, but often simple changes are possible in the short-term to initiate rapid reductions. Creating reduction plans is a continuous, iterative process which should be an integral part of the corporate strategy.

Reduction Guide

The general rule is that any reduction measures should be relevant to the needs of the company: there are no standard solutions. The Corporate Carbon Footprint enables TIER Mobility SE to understand their reduction potentials and use this knowledge to define individual reduction measures.

At a high level, there are two ways to reduce emissions:

Decrease activities that emit greenhouse gases, for example by reducing energy consumption, use of raw materials or the number of business trips taken by employees.

Reduce the intensity of emissions by selecting services, raw materials and energy products that have lower emission factors e.g. switch to a green electricity tarrif.

See below for a selection of possibilities you could adopt to take climate action. 5

Scope 1+2

- Use renewable energy sources by switching to biogas, green electricity etc.
- Use more climate-friendly refrigerants by switching to ammonia, propane, etc.
- Increase energy efficiency through newer machines etc
- Optimisation of processes and products through new procedures, improved product design, etc.

Scope 3

- Conservation of resources through avoidance, i.e. fewer business trips, less packaging, less printing, etc.
- Use low emission raw materials such as plant-based, regional and recycled raw materials
- Switch everyday actions to low emission options, such as taking the train over flights or choosing digital over print options
- Engage with your suppliers and encourage them to do more to take climate action by sharing best practices, knowledge, and networks etc.
- Partner with your employees by offering incentives to implement low carbon measures and engage them with your climate action journey.

Offsetting emissions

We must act now to limit global warming to 1.5 $^{\circ}$ C. Implementing CO₂ reduction measures usually needs a step by step approach over the long term. ClimatePartner therefore recommends that **TIER Mobility SE** offsets any remaining emissions (those which cannot currently be reduced) immediately by supporting certified climate action projects. In doing so, companies take responsibility for the emissions they are emitting today whilst taking action to reduce their emissions over time.

Why offsets work

Greenhouse gases such as CO_2 are evenly distributed in the atmosphere. The greenhouse gas concentration is therefore similar everywhere on earth. Emissions that cannot yet be avoided at **TIER Mobility SE** can therefore be offset by projects anywhere in the world.

More than just a carbon impact

Offset projects act in different ways. Some remove CO_2 from the atmosphere, for example through reforestation projects, whilst others prevent further CO_2 from being emitted, for example through the expansion of renewable energies.

Our high-quality offset projects also have benefits beyond reducing or avoiding greenhouse gas emissions, though. Each project promotes the economic, social and sustainable development of the region in specific ways. Each of our projects are certified according to international standards which ensures they improve the lives of local communities as well as the global climate.

Verified

The exact amount of CO_2 saved by each project is determined by independent organisations. The project developers can then sell these CO_2 savings in the form of certified emission reductions. The resulting income then finances the project, which would be unable to function without it. Further information is available at: https://www.climatepartner.com/en/carbon-offset-projects

Carbon neutrality

Once **TIER Mobility SE** offsets their emissions, they become carbon neutral.

To ensure that all emissions generated are offset within the system boundaries, a safety margin of 10% is applied to the total footprint. This compensates for uncertainties in the underlying data that naturally arise from the use of database values, assumptions or estimates.

CO2 Offsets

| | t CO ₂ |
|--|-------------------|
| Overall results | 27,840.83 |
| Not yet carbon neutral | 27,840.83 |
| Already carbon neutral | 0.00 |
| CO ₂ emissions to be offset incl. 10% safety margin | 30,624.91 |

Effective climate action

Our ClimatePartner team are happy to help you take further climate action!

Your contact

+49 89 1222875-0 or support@climatepartner.com.

Imprint

Publisher

ClimatePartner Deutschland GmbH St.-Martin-Straße 59 81669 München

+49 89 1222875-0 support@climatepartner.com www.climatepartner.com

On behalf of

TIER Mobility SE Eichhornstrasse 3 10785 Berlin

<u>+49 30 568 38651</u> <u>info@tier.app</u> <u>www.tier.app/de/</u>

Copyright

Copyright is held by the publisher. Reproduction of this report in whole or in part in any other form is permitted only with the written consent of the copyright holder.