PHILIPS

Philips' Corporate Emission Accounting Methodology

Scope 3 — Category 6: Business travel

At Philips, while we focus on our purpose to improve health and well-being, we acknowledge that the healthcare industry is a major contributor to climate change and waste. As such we are committed to pave the way for a low-emission future by reducing not only our scope 1 and 2 emissions, but also our indirect scope 3 emissions. This effort is supported and overseen by the Executive Committee, which seeks increased transparency for its stakeholders to ensure accountability.

We account for 100% of scope 1 and 2 emissions from operations over which Philips or one of its subsidiaries has operational control, but not for emissions from operations in which Philips owns an interest but does not have operational control. By contrast, scope 3 emissions are derived from indirect activities outside Philips control, meaning calculations also include non-operated assets.

Of the 15 scope 3 subcategories, we account for Philips' four most material categories, which together make up 95% of our scope 3 emissions. These are: purchased goods and services (category 1), business travel (category 6), downstream transportation and distribution (category 9), and use phase (category 11). The methodology for purchased goods and services will be published in 2023.

Each category is subject to its unique methodology that is elaborated on in its own document. All calculations are in line with the Greenhouse Gas Protocol; used for management purposes; in line with our Science Based Targets initiative submission; and subject to reasonable assurance by the external auditors of Philips.

Scope 3

Category 6
Business travel

Category 9
Downstream transportation and distribution

Category 11
Use phase

Scope 3 — Category 6: Business travel

1) Introduction

Business travel represents any mode of transportation that is used by employees for business purposes and operated by a third party, excluding commuting. As it is directly influenced by our employees' travel choices, we have a high degree of control. By encouraging the use of low-emitting options (e.g., rail travel) or promoting the use of digital alternatives (e.g., Microsoft Teams), emissions can be reduced significantly in a short time.

2) Methodology

To calculate business travel emissions, we distinguish air travel and automobile travel. For automobile travel, we include leased vehicles and rented vehicles. All other modes of transportation are not considered, because of their minimal usage for business purposes and negligible total impact (e.g., trains in the Netherlands run on renewable electricity). In the next section, each subcategory is explored in more detail.

2.1) Air travel

We apply a distance-based method, in which the distance travelled is multiplied with a distance-specific emission factor to estimate total emissions.

$$\textit{Air travel emissions} = \sum_{\substack{i=1 \\ j=1}}^{\textit{All air travel passengers, All haul types}} (P_{ij} \times E_i) \div F + \sum_{\substack{i=1 \\ j=1}}^{\textit{All air private jets flights, All haul types}} J_{ij} \times E_j$$

- P_j = Passenger km (pkm) of passenger i in haul type j
- E_j = Emission factor of haul/plane type j (kg CO_2e/(pkm or km))
- F = Flight coverage factor = percentage in-channel spend
- J_i = Distance (km) travelled with private jet i considering haul type j

The distance between the departure location and destination location is calculated to determine the total kilometers traveled. Each flight is then classified as either short haul (less than 1,500 km), medium haul (between 1,500 and 4,000 km), or long haul (more than 4,000 km). Typically, airplanes require significantly more fuel during takeoff compared with the rest of the journey, which means fuel consumption is not linear. This is why we apply different emission factors depending on the haul type. If a flight also includes a return journey, we use the one-way distance as the base to determine the haul type.

Furthermore, we also consider employees using out-of-channel modes to book their flights by applying a flight coverage factor. This examines the proportion of flights covered by the travel system compared to total flights paid by Philips. Please note that this is determined using a spend-based approach. This analysis is done annually by a central reporting team.

Lastly, in case the C-suite team requires a private jet to quickly and securely move from one location to another, we examine the distance traveled and the airplane-specific emission factor. The main difference compared with other business flights is that we report the emissions caused by the entire plane.

When a flight is cancelled, the emissions previously calculated for that flight are subtracted from the total amount of emissions.

2.1.1) Emission factor

The emission factors from the UK Department for Business, Energy & Industrial Strategy (BEIS) are used, as these are widely applied and updated annually. (The database was formerly managed by the Department for Environment, Food & Rural Affairs.) Although these factors exclude the type of aircraft, class of service, and occupation rate, they are still deemed the most valid and reliable. Cross-sector usage and frequent updates ensure high degrees of comparability and accuracy.

Radiative forcing caused by airplanes is not considered because the science is overly complex and dependent on multiple natural and anthropogenic factors, so including it would greatly decrease reliability in our calculations. We have decided to focus on those factors that are certain and comparable with other market players.

2.2) Leased vehicles

For the leased fleet, we apply a fuel-based methodology: the amount of fuel consumed per vehicle is multiplied by fuel-specific emission factors.

$$\textit{Total emissions from leased vehicles} = \sum_{i=1}^{\textit{All fuel types}} F_i \times E_i$$

- F_i = Estimated fuel i consumed (liter)
- E_i = Fuel j specific emission factor (kg CO^2e/liter)

If no exact fuel consumption amount is known, we estimate this amount using the expertise of our lease partners. The yearly estimated mileage and the manufacturer-specific emission intensities per vehicle type are used as proxies to determine the liters consumed. Multiplying these two variables with each other and dividing them through the liter-specific emission factor allows for inferences to be made on the number of liters consumed per fuel type.

$$\textit{Liters of fuel consumed} = \sum_{\substack{i=1 \\ j=1}}^{\substack{\textit{All Car types} \\ \textit{All fuel types}}} \frac{D_j \times I_{ji}}{E_i}$$

- D_j = Estimated yearly mileage of car type j (km)
- I_{ji} = Emission intensity of car type j consuming fuel i (kg CO_2e/km)
- E_i = Fuel i specific emission factor (kg CO_2e/liter)

The estimated yearly mileage is derived from multiple input sources, applying a process of elimination to get the most accurate data available. If reasonable, we use the kilometers recorded via the fuel card. If these values seem unrealistic, we examine the last known mileage. If this does not align with the lease plan and is not considered valid, we consider the budgeted yearly mileage. The maximum number of kilometers the employees can drive with the lease car is provided in the lease contract. Using this step-by-step approach ensures that we overstate rather than understate our emissions.

The manufacturer-specific emission intensity value, on the other hand, is proprietary knowledge of the car manufacturers based on internal investigations. As this information is not available for each car model, the following logic is applied:

- If available, use the car model (e.g., Honda CR-V, Ford F-Series, BMW 3 Series) specific emission intensity per km per fuel
- If that is not available, use the brand average (e.g., Audi, Mercedes, Ford) emission intensity per km per fuel
- If that is not available, use the world average emission intensity per km per fuel

2.2.1) Emission factor

Similar to air travel, the emission factors from BEIS are used. As previously stated, these are considered valid and reliable. Note that, currently, only the emissions generated during the energy transformation in the vehicle engine are considered. However, from 2023 onward, we will also increase our reporting scope to consider the energy used by electric vehicles and the respective country-specific emission factors.

2.3) Rental cars

Similar to air travel, a distance-based methodology is applied. The number of kilometers per rental car is used as emission proxy, assuming similar fuel efficiencies per car and terrain.

$$\textit{Rental car emissions} = \sum_{\substack{i=1 \\ j=1}}^{\substack{\textit{All fuel types} \\ \textit{All car types}}} D_{ij} \times E_i$$

- D_{ij} = Kilometers travelled in car type j using fuel i (km)
- E_i = Fuel i specific emission factor (kg CO_2e/km)

On a periodic basis, our rental car partner provides us with information on how many cars Philips rented and how many kilometers each car traveled. The kilometer and fuel-specific emission factors are then applied to approximate emissions generated by the rental. .

2.3.1) Emission factor

The emission factors from BEIS per fuel per kilometer traveled are used for rental cars. For the scope of emission calculations, we apply the same logic for rental vehicles as we do for leased ones.