



2019 OVO Group Ltd Scope 3 carbon emissions Basis of Preparation

1. Overview

1.1. Purpose of this document

This document outlines the approach used by OVO Group Ltd (“OVO”) to report on Scope 3 tonnes of carbon dioxide equivalent (tCO₂e) emissions. Specifically, this includes Scope 3 emissions from OVO’s two main products: electricity and gas supplied to customers.

1.2. Metrics

This document covers the following metrics:

- Scope 3 emissions from fuel and energy-related activities and use of sold products (electricity and gas) (tCO₂e)
- Scope 3 emissions relative to customer numbers (tCO₂e/customer numbers)

2. Scope

2.1. Organisational boundaries

There are two methods for establishing organisational boundaries that are described in the Greenhouse Gas Protocol standard: the equity share and control (financial or operational) approaches. An operational control consolidation approach was used to account for emissions. Table 1 describes the entities that are within the operational boundary approach.

Table 1: Organisational boundaries

Inclusions	Exclusions
All owned entities that are controlled by OVO that sell gas and electricity to end users including: <ul style="list-style-type: none">• OVO Energy Ltd (trading as “OVO Energy”, “Boost”, and “Lumo”)• 4hundred GmbH (trading as “4Hundred”)• Spark Energy Ltd (trading as “Spark”)• OVO Energy Spain S.L.L. (trading as “OVO Energy Spain”)*• OVO Energy SAS France (trading as “OVO Energy France”)*• OVO Energy Pty Ltd (trading as “OVO Energy Australia”)*	<ul style="list-style-type: none">• Emissions from entities where OVO has no operational control including associates• Entities that are dormant or have no office headcount• Emissions from unidentified gas (see Assumptions section below).

* New legal entity/Brand in 2019.

We report on emissions for all entities from the date of acquisition to the date of divestment.



2.2. Reporting period

Reporting is aligned to the calendar year (i.e. 1st January 2019 - 31st December 2019).

2.3. Carbon emissions sources

Table 2: Scope 3 emissions sources

Scope 3 category	Activities	Description
3. Fuel- and energy-related activities	Upstream emissions of fuel and energy-related activities	Volume of electricity delivered to customers split by fuel type (Coal, Natural gas, Nuclear, Hydro, Wind, Geothermal, Biomass, Solar, Energy from Waste and Landfill Gas)
		Volume of gas delivered to customers (including UIG and Shrinkage) split by fuel type (Natural gas, Biomethane from products/co-products and Biogas from agricultural activities)
11. Use of sold products	Downstream emissions of energy delivered to customers	Volume of gas delivered to customers (excluding UIG and Shrinkage) split by fuel type (Natural gas, Biomethane from products/co-products and Biogas from agricultural activities)

3. Calculation methodology

3.1. Unit of measure

Scope 3 carbon emissions are reported in tonnes of carbon dioxide equivalent (tCO₂e).

For reporting Scope 3 carbon emissions intensity relative to customer numbers (tCO₂e/customer numbers), we use audited customer numbers figures provided by our internal Finance team. Customer numbers are calculated based on an average of monthly customer numbers.

3.2. Emissions factors

Emission factors support both location-based and market-based reporting. For market-based reporting, there are no official sources of emission factors, particularly in relation to the emissions impact specific to the fuel mix of OVO's electricity and gas products.

Table 3 summarises the emission factors used for calculating scope 3 emissions.

Table 3: emissions factor sources

Scope 3 category	Activities	Accounting approach	Emission factor Source
3. Fuel- and energy-related activities	Upstream emissions associated with electricity delivered by OVO	Location	Carbon Trust modelling: Organisational Footprinting Tool 2019* (based on standalone research)
		Market	Carbon Trust modelling: Organisational Footprinting Tool 2019* (based on standalone research)

	Upstream emissions associated with gas delivered by OVO	Location	Department for Business, Energy & Industrial Strategy: Greenhouse gas reporting: conversion factors 2019
		Market	Carbon Trust modelling: Organisational Footprinting Tool 2019* (weighted average of BEIS emissions factors)
11. Use of sold products	Downstream combustion emissions associated with gas delivered by OVO	Location	Department for Business, Energy & Industrial Strategy: Greenhouse gas reporting: conversion factors 2019
		Market	Carbon Trust modelling: Organisational Footprinting Tool 2019* (weighted average of BEIS emissions factors)

*For market-based emissions factors for UK Brands, OVO uses the fuel mix from the Ofgem compliance period which covers the greatest proportion of the reporting period. This means that 2019 carbon reporting will be based on the Ofgem compliance period 18 Fuel Mix Disclosure as this covers April 2019 to March 2020.

Lifecycle emission factors for each type of electricity generation technology were calculated by the Carbon Trust, through a proprietary calculator. The calculator uses data from BEIS and a number of peer-reviewed lifecycle assessment (LCA) papers based on different geographies and relevant to each technology. For each technology (e.g. solar, wind, hydro, nuclear), the following was considered:

- Well-to-tank (WTT) emissions of generation
- Emissions from construction
- Generation
- Transmission and distribution losses
- Well-to-tank (WTT) of transmission and distribution losses
- Transmission and distribution infrastructure
- End of life

By having technology-specific emission factors, this can then be flexibly applied to calculate the market-based scope 3 emissions of OVO's specific fuel mix, both in terms of its own consumption and distribution to customers. The result is a more specific emission factor than using grid average from BEIS, which is based on the overall average UK grid mix.

For gas products delivered by OVO, lifecycle emission factors covering both the upstream and combustion emissions of fuels are applied.

3.3. Calculations

The following calculation is applied to convert activity data into carbon dioxide equivalent emissions:

$$\text{Activity data} \times \text{emission factor}$$

The following calculation is applied to calculate Scope 3 carbon emissions intensity relative to customers:



Scope 3 carbon emissions (tCO₂e) / average customer numbers

3.4. Estimations

Electricity and gas volumes will always be estimated to some extent because final settled industry volumes are not available until two years after the reporting period. OVO will use the settled volumes that were calculated and submitted as part of the relevant Renewables Obligation compliance period to ensure a consistent reporting approach each year. These volumes match what was used to calculate OVO's Fuel Mix Disclosure for Ofgem compliance purposes.

3.5. Assumptions

For unidentified gas, it is assumed that the gas is leaked and not combusted. The upstream emissions have been accounted for. There are no emissions associated with combustion of unidentified gas.

It is assumed that the upstream emission factor of natural gas is not significantly different between the UK and the countries where our international businesses are based (Germany, France, Australia and Spain), and therefore an emission factor from BEIS is used to calculate the upstream impacts of natural gas associated with our international businesses.

OVO supplies both biogas and non-renewable natural gas. Under the market-based approach, a market-specific emission factor is needed for non-renewable gas. For the non-renewable gas, it is assumed that there is no equivalent of the residual mix for the gas market. Therefore, the upstream emission factor for natural gas from BEIS is applied to calculate the upstream emissions of non-renewable gas under the market-based approach.

Transmission and distribution losses were not available for our business units based in Germany, France and Spain, therefore the national averages for transmission and distribution losses from the International Energy Agency was applied.

3.6. Restatements

Every effort is made to ensure that data we report is accurate. However, should more accurate data become available for prior years, we will only restate if it results in a movement of more than 5% in the reported data. When prior year figures are restated, details will be provided alongside the reported data.

4. Data reporting frequency

4.1. Reporting frequency

Internal and external reporting: information is reported on an annual basis.