



2018 OVO Group Ltd Scope 3 carbon emissions Basis of Preparation

1. Overview

1.1. Context

This document outlines the OVO Group (“OVO”) Scope 3 carbon emissions reporting criteria. Specifically, this includes Scope 3 emissions from OVO’s two main products; electricity and gas sales. This includes:

- the carbon emissions associated with the electricity purchased from a third party for resale to customers¹; and
- the carbon emissions that arise when customers use the gas that OVO has sold to them².

1.2. Metrics and targets

We collect and report the following metrics and are in the process of setting emissions reductions targets:

- 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. Geographic and operational boundaries

Figure 1: Geographic and operational boundaries

	Included in scope	Excluded from scope
Geographic	<ul style="list-style-type: none"> • UK and Germany (where all OVO Group operations are based) 	<ul style="list-style-type: none"> • N/A
Operational	<ul style="list-style-type: none"> • 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”) 	<ul style="list-style-type: none"> • Emissions from entities where OVO has no operational control including associates • Emissions from entities that are dormant or have no office headcount • Emissions from unidentified gas (see Assumptions section below).

¹ WRI Corporate Value Chain Scope 3 Accounting and Reporting Standard: Scope 3 Category, ‘Fuel-and-energy-related activities’.

² WRI Corporate Value Chain Scope 3 Accounting and Reporting Standard: Scope 3 Category, ‘Use of sold products’.



2.2. Reporting period

Reporting is aligned to the calendar year (i.e. 1 January 2018 - 31 December 2018).

2.3. Carbon emissions sources

Figure 2 details which emissions are included and excluded from scope:

Figure 2: constituent indicators

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 (excluding losses) split by fuel type (Coal, Natural gas, Nuclear, Hydro, Wind, Geothermal, Biomass, Solar, Energy from Waste and Landfill Gas)
		Volume of electricity line and transmission losses
11. Use of sold products	Upstream and 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

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.

The following calculation is applied to calculate Scope 3 carbon emissions intensity relative to customer numbers: Scope 3 carbon emissions (tCO₂e)/monthly average customer numbers.

3.2. Emissions factors

Emission factors are sourced to 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.

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

Figure 3: emissions factor sources



Scope 3 category	Activities	Accounting approach	Emission factor Source
3. Fuel- and energy-related activities	Emissions associated with electricity delivered by OVO	Location	Department for Business, Energy & Industrial Strategy: Greenhouse gas reporting: conversion factors 2018
		Market	Carbon Trust modelling: Organisational Footprinting Tool 2018*
11. Use of sold products	Emissions associated with gas delivered by OVO	Location	Department for Business, Energy & Industrial Strategy: Greenhouse gas reporting: conversion factors 2018
		Market	Carbon Trust modelling: Organisational Footprinting Tool 2018*

*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 2018 carbon reporting will be based on the Ofgem compliance period 17 Fuel Mix Disclosure as this covers April 2018 to March 2019.

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.

The following calculation is applied to convert activity data into carbon emissions: activity data x emission factor = carbon emissions.



3.3. 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.

3.4 Assumptions

For unidentified gas, it is assumed that the gas is leaked and not combusted. Therefore, there are no emissions associated with unidentified gas.

It is assumed that the upstream emission factor of natural gas is not significantly different between UK and Germany, and therefore an emission factor from BEIS is used to calculate the upstream impacts of natural gas consumed in Germany.

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 German energy supplier, therefore the German national average for transmission and distribution losses from the International Energy Agency was applied.

4. Data reporting frequency

4.1 Reporting frequency

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