



2018 OVO Group Ltd Scope 1 and Scope 2 carbon emissions Basis of Preparation

1. Overview

1.1. Context

This document outlines the OVO Group Ltd ("OVO") Scope 1 and Scope 2 carbon emissions reporting criteria.

1.2. Metrics and targets

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

Carbon emissions metrics:

- Scope 1 carbon emissions (tCO₂e)
- Scope 2 carbon emissions (Market-based) (tCO₂e)
- Scope 2 carbon emissions (Location-based) (tCO₂e)
- Scope 1 and Scope 2 carbon emissions intensity relative to revenue (Market-based) (tCO₂e/£m)
- Scope 1 and Scope 2 carbon emissions intensity relative to revenue (Location-based) (tCO₂e/£m)

Resource consumption metrics:

- Natural gas (kWh)
- Diesel (litres)
- Refrigerants (kg)
- Purchased electricity (kWh)
- District heating and cooling (kWh)
- Fleet diesel (litres)
- Fleet petrol (litres)
- Fleet electric vehicle (miles)

2. Scope

2.1. Geographic and operational boundaries

Figure 1: Geographic and operational boundaries

	Inclusions	Exclusions
Geographic	<ul style="list-style-type: none">• UK, Germany and Bulgaria (where all OVO operations are based)	<ul style="list-style-type: none">• N/A



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| Operational | <ul style="list-style-type: none"> • All owned reporting entities that are controlled by OVO including: <ul style="list-style-type: none"> • OVO Energy Ltd (trading as “OVO Energy”, “Boost”, and “Lumo”) • 4hundred GmbH • Spark Energy Ltd • Corgi HomePlan Ltd • Intelligent Energy Technology Ltd (trading as “Kaluza”) • Hybrid Energy Solutions Ltd (trading as “ChargedEV”) • We report on emissions for all entities from the date of acquisition to the date of disposal • Scope 1 emissions associated with the combustion of fuels in the premises, vehicles and equipment that we operate • Scope 2 emissions associated with the electricity, heat and steam used in the premises that we operate | <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 |
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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 (below) details which emissions are included and excluded from scope:

Figure 2: Scope 1 & Scope 2 emissions

Inclusions	Exclusions
Offices	
Scope 1 Emissions from offices that OVO wholly or partially owns or leases <ul style="list-style-type: none"> • Gas use • Diesel use • Refrigerant loss 	N/A
Scope 2 Emissions from offices that OVO wholly or partially owns or leases <ul style="list-style-type: none"> • Purchased electricity (whether from OVO or another supplier) • District heating and cooling 	N/A
Fleet	



Scope 1

Emissions from:

- Commercial fleet vehicles that OVO leases

Scope 1

Emissions from:

- Company vehicles
- Grey fleet (personally owned cars used for company business)
- Rental vehicles

3. Calculation methodology

3.1. Unit of measure

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

For reporting Scope 1 and Scope 2 carbon emissions intensity relative to revenue (tCO₂e/£m), we use audited revenue figures (£m) provided by our internal Finance team. Our scope of environmental reporting is in line with the company's financial reporting boundary.

The following calculation is applied to calculate Scope 1 and Scope 2 carbon emissions intensity relative to revenue: Scope 1 and Scope 2 carbon emissions (tCO₂e) / Revenue (£m).

3.2. Emissions factors

Market-based emissions factors are used where available. For market-based emissions reporting, the following hierarchy of emission factors is applied:

1. Emissions factors provided by electricity attribute certificates or equivalent instruments
2. Emissions factors provided by contracts for electricity, such as power purchase agreements (PPAs)
3. Emissions factors provided by energy suppliers
4. Emissions factors provided by the Association of Issuing Bodies (AIB) for the residual mixes in Europe
5. Other grid-average emission factors (subnational or national)
6. Factors provided by the International Energy Agency (IEA).

For location-based emission reporting, the following hierarchy of emission factors is applied:

1. Regional or subnational emission factors
2. National production emission factors
3. Factors provided by the International Energy Agency (IEA).

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

3.3. Constituent indicators

The below indicators constitute our Scope 1 and Scope 2 total emissions metrics:

Figure 3: Constituent indicator scope



Emissions scope	Constituent indicators
Scope 1 emissions	Building gas use Building diesel use Refrigerants Commercial fleet - Petrol Commercial fleet - Diesel Commercial fleet - Electric vehicles
Scope 2 emissions	Building electricity use District heating and cooling

Figure 4: Constituent indicator scope and data source

Emission source	Site	Scope	Data source
Scope 1			
Building gas use	All	Purchased gas for all sites	Gas consumption information is based on supplier invoices provided directly to OVO where OVO holds the contract or to OVO through the respective landlord at the site. Where OVO only occupies part of the site, consumption is apportioned based on the floor area that OVO occupies relative to the rest of the site. For sites where consumption is unknown, the consumption is estimated using the approach outlined in section 3.4 below.
Building diesel use	Rivergate	Diesel fuel consumed from backup emergency generators	Diesel consumption is calculated by the number of hours the generators are used for. The estimation is based on the estimated run time per annum and fuel consumption per hour for the generators at each site.
Refrigerants	All	Refrigerant disposal and leakage from air conditioning systems across all sites	Emissions from refrigerants are calculated using the F-Gas leakage quantities recorded in the maintenance reports issued by our Maintenance and Engineering department and third-party service providers. Total loss of F-gas is equal to the size of the air conditioning unit less the quantity of refrigerant removed.
Commercial fleet	N/A	Commercial engineering van fleet leased by OVO. This includes IHT and Charged EV	Fuel consumption information is gathered from fuel card reports provided by our third-party provider, Allstar. All engineers use Allstar fuel cards to pay for fuel. The Allstar software system automatically collates fuel consumption data when fuel cards are used. A fuel consumption report for the relevant period is pulled from the Allstar fuel card system by a member of the Allstar team and sent to OVO.
Scope 2			



Building electricity use	All	Purchased electricity across all sites	Electricity consumption information is based on half-hourly consumption data or invoices provided from the supplier directly to OVO where OVO holds the contract or to OVO through the respective landlord at the site. Where OVO only occupies part of the site, consumption is apportioned based on the floor area that OVO occupies relative to the rest of the site. For sites where consumption is unknown, the consumption is estimated using the approach outlined in Section 3.4 below.
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District heating and cooling	Munich	District heating	District heating and cooling is based on supplier invoices provided directly to OVO where OVO holds the contract or to OVO through the respective landlord at the site. For sites where consumption is unknown, the consumption is estimated using the approach outlined in Section 3.4 below.
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3.4. Estimations

Where data are unavailable for the full reporting period (for example due to delayed invoices), gaps are plugged by extrapolating primary data for previous months.

To measure fugitive emissions from air conditioning equipment leakage, the following methodology is used to estimate F-gas losses: Total loss of F-Gas = Size of unit – amount removed.

Where fugitive emissions data are unavailable, primary data from other sites are used as a basis for estimating fugitive emissions.

For office sites where consumption is unknown (e.g. serviced or multi-tenanted sites where the landlord has control over utilities), full-year estimates are made by calculating the average consumption per m² (e.g. electricity, natural gas) from sites where primary data are available, and multiplying that to the m² coverage of the sites where consumption is unknown.

3.5. Assumptions

In the case of sites where data are estimated or sites where it has not been possible to obtain the supplier-specific electricity fuel mix for market-based reporting, a hierarchy of emissions factors is applied as outlined in section 3.2.

4. Data reporting frequency

4.1. Reporting frequency

Internal reporting: information is gathered and monitored internally on a quarterly basis.

External reporting: information is reported on an annual basis in the Annual Accounts and on the website.