

Basis of Reporting 2021

In 2021, we engaged DNV Business Assurance Services UK Limited (DNV) to conduct an independent limited assurance engagement using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information'. DNV has provided an unqualified opinion in relation to five KPIs that are identified in this Basis of Reporting for performance disclosed in the Annual Report and Accounts 2021, on pages 32, 35, 242 and 244, identified with the symbol '+'.

View centrica.com/assurance or centrica.com/ar21 for more.

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- [Total carbon emissions \(scope 1 and 2 emissions\)](#)
- [Carbon intensity of customer energy use](#) (including Scope 3 Category 3d 'Generation of purchased electricity that is sold to end users'; and Scope 3 Category 11 'Use of Sold Products')
- [Total energy use](#)

Total carbon emissions (scope 1 & 2 emissions)

1. KPI description

The reporting of the company’s total carbon emissions in our Annual Report and Accounts is a legal requirement under The Companies (Directors’ Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018. It also enables us to understand our greenhouse gas (GHG) footprint, a pre-requisite for the successful management of such emissions.

In 2021, we changed our default reporting approach from equity to operational control¹, in order to align with the more commonly used organisational boundary approach. This new approach also enables us to report on the emissions that we have the most influence over and aligns with the approach used for our net zero [People & Planet Plan](#) targets, where we’ve committed to be a net zero business by 2045 (40% carbon reduction by 2034) and help our customers be net zero by 2050 at the latest (28% reduction in carbon intensity of customer energy use by 2030).

We’ve also changed our reporting approach from a scope 2 location-based approach to a market-based approach. This enables us to reflect on our decisions on where we source our imported power.

For completeness, we’ll also report a location-based approach as a secondary methodology.

2. Scope

Table A – Scope overview

	In scope	Out of scope
Geography	<ul style="list-style-type: none"> Global 	<ul style="list-style-type: none"> N/A
Organisational	<ul style="list-style-type: none"> All operated reporting entities across Centrica² irrespective of equity and ownership 	<ul style="list-style-type: none"> Reporting entities where Centrica does not have operational control³ Independent franchisees of Centrica owned franchises
Operational	<ul style="list-style-type: none"> Scope 1 emissions from the combustion of fuels in the premises, vehicles, equipment, and machinery operated⁴ by the reporting entity Combustion of hydrocarbons in flaring Release of unburnt hydrocarbons Scope 2 (market-based) emissions associated with the electricity, heat and steam we import for use in our premises, vehicles, equipment and machinery 	<ul style="list-style-type: none"> Carbon dioxide emissions released during the combustion of biologically sequestered carbon – biomass and biofuels

¹ In accordance with WRI/WBCSD Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.

² We define ‘operated reporting entities/assets’ as those where Centrica has the authority to decarbonise through fuel selection, capital investment, asset wind-down and/or closure. This includes the authority to dictate operating policy and profile, through its own workforce or that of a third party and authority to procure and control fuel sources.

³ Reporting entities where we have equity but do not operate include Spirit Energy, Nuclear and Combined Heat & Power (CHP) units on customer sites. The emissions from our equity in these assets will be included in our Scope 3, Category 15 (Investments) emissions.

⁴ ‘Operated’ includes buildings and vehicles leased by Centrica.

Table B – Scope 1 & 2 emissions

In scope	Out of scope
Offices and other buildings	
Scope 1 Emissions from offices that we wholly or partially own or lease <ul style="list-style-type: none"> • Gas use • Diesel use • Refrigerant loss 	Scope 1 <ul style="list-style-type: none"> • Emissions from offices that we sub-lease to others • Emissions from non-operated customer/supplier properties where we have personnel based • Biofuels used onsite to generate heat and power for on and offsite use (out of scope carbon is reported as a separate indicator)
Scope 2 Emissions from offices that we occupy and own or lease <ul style="list-style-type: none"> • Imported power (whether from Centrica or another supplier) • Imported heat⁵ 	Scope 2 <ul style="list-style-type: none"> • Emissions from offices that we sub-lease to others • Emissions from customer/supplier properties where we have personnel based
Fleet	
Scope 1 Emissions from: <ul style="list-style-type: none"> • Commercial fleet vehicles owned or leased by Centrica • Company cars (business travel only) • Rental cars where the fuel is claimed back as expensed mileage 	Scope 1 Emissions from: <ul style="list-style-type: none"> • Contractor’s vehicles • Personal mileage in company cars, including commuting • Rental car fuel use unless claimed as expensed mileage • Grey fleet (personally owned cars used for company business) • Biofuels in forecourt fuel
Scope 2 Emissions from: <ul style="list-style-type: none"> • Imported power for electric commercial vehicles • Imported power for electric company cars (business travel only) 	Scope 2 <ul style="list-style-type: none"> • Imported power for hybrid electric company cars⁶
Power generation reporting entities	
Scope 1 Emissions from power generating entities where we are the operator: <ul style="list-style-type: none"> • Greenhouse gasses (CO₂e) from fuel combustion • Fugitive GHG (incl. methane (CH₄) from gas turbines, Sulphur Hexafluoride (SF₆) leakage, fugitive natural gas emissions, refrigerant leakage (HFCS and PFCS), emissions of Nitrous Oxide (N₂O) and Nitrogen Trifluoride (NF₃) 	Scope 1 N/A
Scope 2 <ul style="list-style-type: none"> • Imported power for plant consumption (whether from Centrica or another supplier) 	Scope 2 N/A
Hydrocarbon production & storage reporting entities	
Scope 1 GHG emissions from reporting entities where we are the operator: <ul style="list-style-type: none"> • Greenhouse gases (CO₂ e) from fuel combustion (incl. flaring) • Venting and fugitive GHG (incl. methane (CH₄)) from gas turbines, Carbon dioxide (CO₂) from hydrocarbon processing, Sulphur Hexafluoride (SF₆) leakage, fugitive natural gas emissions, refrigerant leakage (HFCS and PFCS), emissions of Nitrous Oxide (N₂O) and Nitrogen Trifluoride (NF₃) 	Scope 1 N/A
Scope 2 Imported power for plant (whether from Centrica or another supplier)	Scope 2 N/A

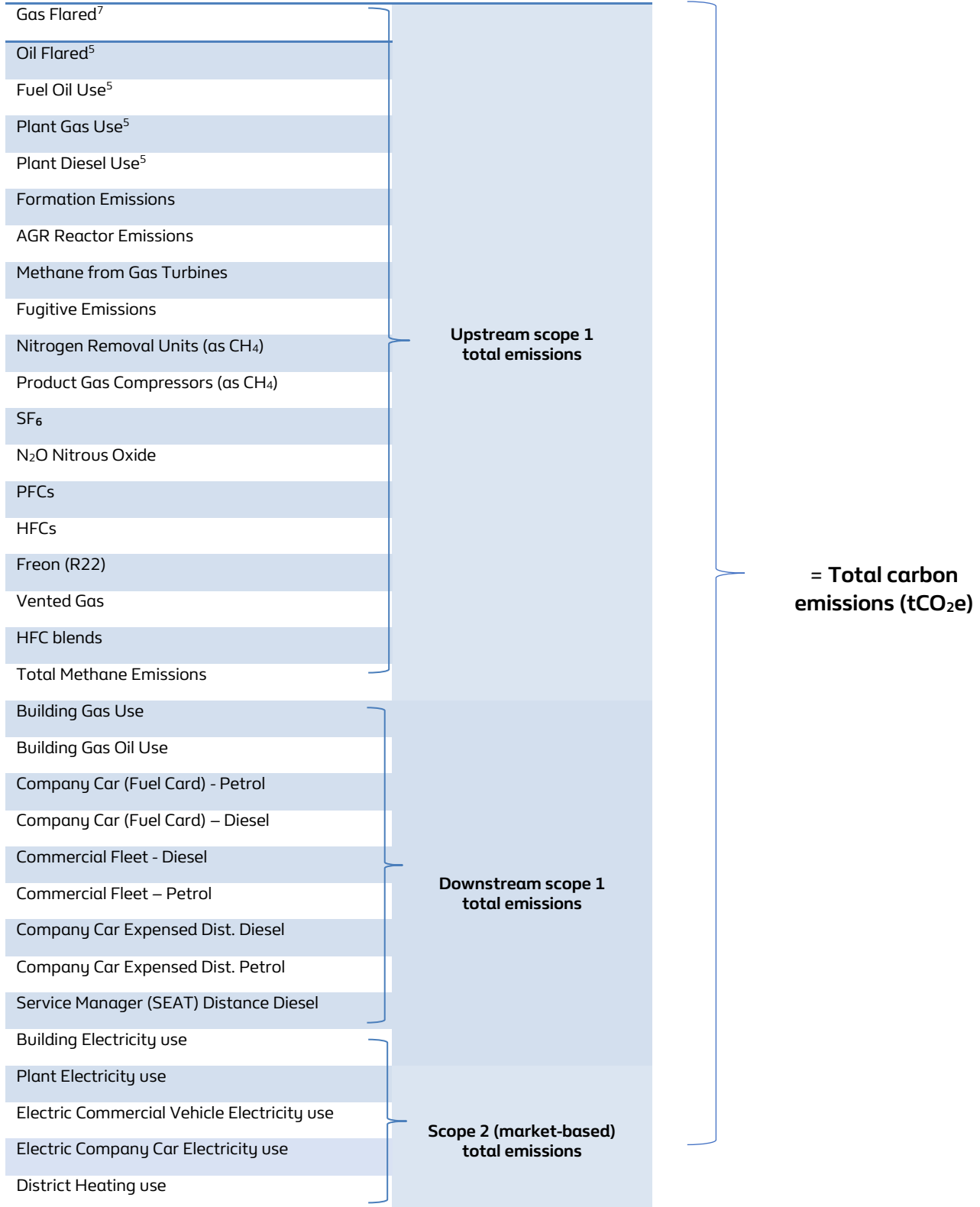
⁵ One office in Denmark has been identified as using district heating.

⁶ Hybrid company cars are a small component of our company car fleet. Their emissions are captured in the scope 1 vehicle emissions.

3. Calculation methodology

3.1 Unit of measure - Tonnes of carbon dioxide equivalent (tCO₂e)

3.2 Calculation: Table C - Constituent indicators



⁷ Where EU ETS data is available, this value will replace: Gas Flared, Oil Flared, Fuel Oil Use, Plant Gas Use, Plant Diesel Use.

4. Data quality, collection, and reporting frequency

Centrica plc HSES Reporting Standard 03 sets out the detailed data collection process and is available internally. Data is collected quarterly and biannually via a global online reporting system.

Imported power market-based emissions are calculated based on the following premise:

- Green tariff at zero emissions
- Supplier specific emission factor
- Residual emission factor where power source is unknown
- Grid average in North America and Israel

5. Assumptions

Site specific emission factors are used where available and when there is site specific variation (e.g. unprocessed natural gas) to convert activity data into GHGs. Where there is negligible site-specific variation, standard emission factors from published sources are applied, including:

- UK Government GHG Conversion Factors for Company Reporting
- United States Energy Information Administration (EIA)
- Egrid Summary Tables
- Environment Canada National Inventory Report
- International Energy Agency (IEA)
- Environmental Protection Agency (EPA)

Where fuel activity data is submitted in energy units (e.g. kWh of gas consumption), the emission factor is based on the assumption that the energy units are the gross calorific value, unless specified otherwise. This is based on natural gas suppliers typically quoting gas consumption in gross energy units and natural gas being the main fuel source used.

Carbon intensity of customer energy use

(including Scope 3 Category 3d 'Generation of purchased electricity that is sold to end users'; and Scope 3 Category 11 'Use of Sold Products')

1. KPI description

The emissions associated with the gas and electricity we sell to our customers equate to around 90% of Centrica's total emissions (scope 1, 2 and 3). Therefore, we can have the greatest positive impact on climate change through committing to reduce these emissions.

As mentioned in the previous section, we therefore launched our [People & Planet Plan](#) in early 2021, committing us to reduce the GHG intensity of the energy our customers use by 28% by 2030 (baseline: 2019), as we work towards net zero customer emissions by 2050 at the latest. We believe the carbon intensity of energy is the best way to track progress in helping our customers decarbonise their energy use, whilst allowing for the natural growth or shrinkage of customer numbers which occurs over time. Our target is aligned to Paris Accord and based on science, corresponding to a well-below 2°C pathway initially and 1.5°C by mid-century.

Assurance over our GHG intensity of customer energy use is delivered every three years with data assured back to the 2019 target base year.

2. Scope

Table A – Scope overview

	In scope	Out of scope
Geography	<ul style="list-style-type: none"> Global⁸ 	<ul style="list-style-type: none"> N/A
Organisational	<ul style="list-style-type: none"> Energy sold from our operated businesses 	<ul style="list-style-type: none"> Energy sold from non-operated operations, including Spirit Energy and UK nuclear
Operational	<ul style="list-style-type: none"> Gas sold to our end-user residential and business customers Electricity sold to our end-user residential and business customers 	<ul style="list-style-type: none"> Traded energy that is not consumed by our customers⁹ Gas produced from Centrica Storage Limited and traded

Table B – Electricity and gas sales

In scope	Out of scope
Gas sales	
Emissions from:	Emissions from:
<ul style="list-style-type: none"> Gas sales to residential customers Gas sales to business customers 	<ul style="list-style-type: none"> Gas losses during transmission and distribution
These include all tariffs	
Electricity sales	
Emissions from:	Emissions from:
<ul style="list-style-type: none"> Electricity sales to residential customers Electricity sales to business customers 	<ul style="list-style-type: none"> Electricity losses during transmission and distribution Electricity consumed by Centrica Contracts where Centrica provides an enabling service, as opposed to selling electricity
These include all tariffs and contracts	

⁸ Energy sales from divested business units (including Direct Energy) are removed from the target scope back to the baseline.

⁹ Traded energy may be sold multiple times before being consumed, meaning if it was in scope, the same energy may be included repeatedly.

Methodology

We will proactively drive the customer carbon reduction by:

1. Helping customers reduce gas consumption through our energy efficiency services and solutions
2. Helping customers fuel switch from fossil fuels¹⁰ to low carbon electricity e.g. gas boilers to air source heat pumps
3. Decarbonising the power we supply by procuring lower carbon electricity for re-sale
4. Supporting and lobbying for the decarbonisation of the grid average gas
5. Procuring biogas for re-sale through green gas tariffs
6. Carbon neutralisation products that remove atmospheric carbon

Note, carbon neutralisation products (e.g. woodland carbon units alongside carbon capture and storage) will not be used as part of the decarbonisation approach until the benefits of the other approaches have been exhausted.

3.1 Unit of measure

Percentage reduction of grams of CO₂e per kWh of energy [% reduction of gCO₂e/kWh].

3.2 Calculation

The target is measured as a percentage reduction in the carbon intensity of the energy sold to our customers, using:

- Total electricity sold
- Total grid gas sold
- Total biogas sold
- Carbon intensity of grid average gas
- Carbon intensity of biogas
- Supplier specific carbon intensity of electricity where applicable (market-based carbon intensity using our supplier Fuel Mix Disclosures (FMD), or alternatively, residual electricity carbon intensity)

3.3 Equation

The carbon intensity (CI) will be calculated as:

$$\frac{(Grid\ Gas\ sold * Grid\ Gas\ EF) + (Biogas\ sold * Biogas\ EF) + (Electricity\ sold * EF)}{(Gas\ Sold + Electricity\ sold)}$$

The reduction in the CI will be calculated as:

$$\frac{(CI\ of\ current\ year - CI\ of\ base\ year)}{CI\ of\ base\ year} * 100$$

¹⁰ Majority of fuel switching will be from gas energy to electricity. However, the switching of vehicles from fossil fuel internal combustion engines to battery electric vehicles, will also occur. While this will increase the volume of electricity we sell, the petrol/diesel consumption will be outside of the calculations, as we do not sell these fuels to end-users.

4. Data quality, collection and reporting frequency

Centrica plc HSES Reporting Standard 03 sets out the detailed data collection process and is available internally. Data is collected quarterly via a global online reporting system. Progress against our People & Planet Plan targets are reported as part of Centrica's external annual reporting with assurance taking place on a triennial approach with data assured back to the 2019 base year.

5. Data sources

The following sources will be used for the KPI:

- Grid gas and biogas carbon intensity: UK Government GHG Conversion Factors for Company Reporting
- Supplier specific electricity carbon intensity:
 - For historical years - published FMD carbon intensity
 - For current year – predicted FMD carbon intensity
- Residual mix carbon intensity: Association of Issuing Bodies (AIB)
- Gas and electricity sales from business unit finance teams and Energy Supply teams

6. Assumptions

It is assumed that all gas sold is combusted.

Total energy use

1. KPI description

The Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018, implements the UK Government's policy on Streamlined Energy and Carbon Reporting (SECR), which requires quoted companies to report the underlying global energy use that is used to calculate their scope 1 and 2 Greenhouse Gas Emissions (GHG) emissions.

Energy consumption is one of the Global Reporting Indicator (G4) core indicators for environmental reporting. The KPI includes the global consumption of all forms of energy products, including fossil fuels, renewable energy, and electricity. The KPI is required to be reported across the following two breakdowns – 'UK and Offshore' and 'Non-UK'.

In 2021, we changed our reporting approach from equity to operational control in order to align with the more commonly used operational boundary reporting approach. This new approach also enables us to report on the energy consumption we have the most influence over.

2. Scope

Table A – Scope overview

	In scope	Out of scope
Geography	<ul style="list-style-type: none"> Global 	<ul style="list-style-type: none"> N/A
Organisational	<ul style="list-style-type: none"> All operated reporting entities across Centrica¹¹ irrespective of equity and ownership 	<ul style="list-style-type: none"> Reporting entities where Centrica does not have operational control¹² Independent franchisees of Centrica owned franchises
Operational	<ul style="list-style-type: none"> Energy consumed as fuel or electricity 	<ul style="list-style-type: none"> Assets sub-leased to a third party Assets where fuel is provided by a third party e.g. offshore helicopters and shipping Flared Gas¹³

3. Calculation methodology

3.1 Unit of measure

Kilowatt hours (kWh) as specified by the Regulations 2018.

3.2 Reporting gas use

In order to ensure consistency in energy consumption reporting, Net Calorific Vale (CV) is used for all energy consumption. The only exception is office gas consumption where Gross CV is used for reporting as this is the form in which consumption data is typically provided.

¹¹ We define 'operated reporting entities/assets' as those where Centrica has the authority to decarbonise through fuel selection, capital investment, asset wind-down and/or closure. This includes the authority to dictate operating policy and profile, through its own workforce or that of a third party and authority to procure and control fuel sources.

¹² Reporting entities where we have equity, but which we do not operate, include Spirit Energy, UK Nuclear and some Combined Heat & Power (CHP) units on customer sites.

¹³ This exclusion is consistent with the Energy Savings Opportunity Scheme (ESOS) regulations, where flared gas is excluded as it is not considered energy consumption but energy disposal.

3.3 Calculation

Table B – Constituent indicators

Feeder Indicator	Calculated indicator	
Commercial Fleet – Diesel	= Total fuel use (All fuel use)	
Commercial Fleet – Petrol		
Company car (expensed) – Diesel		
Company car (expensed) – Petrol		
Company car (fuel card) – Diesel		
Company car (fuel card) – Petrol		
Cash Allowance Grey Fleet Petrol ¹⁴		
Cash Allowance Grey Fleet Diesel ¹⁴		
Grey Fleet (expensed) mixed fuel ¹⁴		
Fuel Oil		
Gas Oil		
Office Diesel		
Plant Diesel		
Building Gas Use		
Plant Gas Use		
Plant landfill Gas Use		
Office Biofuel		Biofuel
Plant Biofuel		
Office Biomass		Biomass
Plant Biomass		
Renewable solar heat generation	= Total heat & power use	
Renewable solar electricity generated on site ¹⁵		
Plant Electricity Use	= Total energy use (All fuel, power & heat use)	
Building Electricity Use		
District Heating energy use		
EV Company Car Energy Use	= Total heat & power use	
EV Commercial Vehicle Energy Use		

¹⁴ESOS and the SECR reporting requirements for large unquoted companies, specifically require the inclusion of grey fleet fuel use and therefore it seems appropriate to include in our wider energy use reporting even though we consider it scope 3 and not scope 1.

¹⁵ Pro-rated to only include the portion of renewable solar electricity that is consumed on site, not exported.

4. Data quality, collection, and reporting frequency

Centrica plc HSES Reporting Standard 03 sets out the detailed data collection process and is available internally. Energy consumption data is collated on a monthly or quarterly basis for fleet and offices, and on a biannual basis for plant and upstream energy consumption. Energy consumption is reported annually as part of Centrica's annual external reporting.

5. Data sources Assumptions

- Fuel properties sourced from UK Government GHG Conversion for Company Reporting
- Road vehicle properties sourced from Department of Transport statistics¹⁶

6. Assumptions

- Net CV assumed for everything excluding office gas use
- Grey fleet (mixed fuel) has an assumed composition of 15% petrol and 85% diesel

¹⁶ Car mileage to fuel volume conversion factors are based on an average of the last four years of Department of Transport's 'new vehicle' conversion factors. This reflects the age range of our car fleet.