

Basis of Reporting 2019

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We engaged PricewaterhouseCoopers LLP (PwC) to undertake a limited assurance engagement using the International Standard on Assurance Engagements (ISAE) 3000 (Revised): 'Assurance Engagements Other Than Audits or Reviews of Historical Financial Information' and ISAE 3410: 'Assurance Engagements on Greenhouse Gas Statements', over the KPIs which are set out in this Basis of Reporting., with performance disclosed in the Annual Report and Accounts 2019. View centrica.com/assurance for further information.

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 Act 2006 (Strategic Report and Directors' Reports) Regulations 2013. It also enables us to understand our greenhouse gas (GHG) footprint, a pre-requisite for the successful management of such emissions.

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 wholly or partially owned reporting entities across Centrica¹ irrespective of operational control² 	<ul style="list-style-type: none"> Reporting entities where Centrica has no equity 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 owned/controlled³ by the reporting entity⁴ Combustion of hydrocarbons in flaring Release of unburnt hydrocarbons Scope 2 (location-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"> Emissions released during the combustion of biologically sequestered carbon – biomass and biofuels

¹ Where Centrica has only part equity in a reporting entity (e.g. joint ventures), the GHG is pro-rated to reflect Centrica's share. Whilst Centrica follows the equity share approach described by the GHG Protocol; we also draw from the IPIECA guidelines, to assist in the application of the GHG Protocol to our complex organisational structures. Accordingly, Centrica applies the company's equity share to the organisation that controls the assets and not the assets themselves.

² 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.

³ Owned can mean owned or exclusively leased by the reporting entity (refer below).

⁴ The equity approach is applied to the reporting entity and does not necessarily reflect the actual ownership of the assets used by that reporting entity. For example, we lease many of the offices and vehicles that we use, but we report them as scope 1 and apportion the emissions based on the equity we have in the reporting entity that uses them.

Table B – Scope 1 & 2 emissions

In scope	Out of scope
Offices and Depots	
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 • Biofuels used onsite to generate heat and power for on and offsite use (sequestered carbon is reported as a separate indicator)
Scope 2 Emissions from offices that we wholly or partially own or lease <ul style="list-style-type: none"> • Imported power (whether from Centrica or a supplier) 	Scope 2 Emissions from offices that we sub-lease to others
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 back as expensed mileage • Grey fleet (personally owned cars used for company business) • Emissions from biofuels in forecourt fuel
Power Generation Reporting Entities	
Scope 1 Emissions from power generating entities where we have equity: <ul style="list-style-type: none"> • Carbon dioxide (CO₂) from fuel combustion & fugitive emissions • 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 Imported power for plant consumption (whether from Centrica or a supplier)	Scope 2 N/A
Hydrocarbon Production & Storage Reporting Entities	
Scope 1 GHG emissions from reporting entities where we have equity: <ul style="list-style-type: none"> • Carbon dioxide (CO₂) 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 a supplier)	Scope 2 N/A

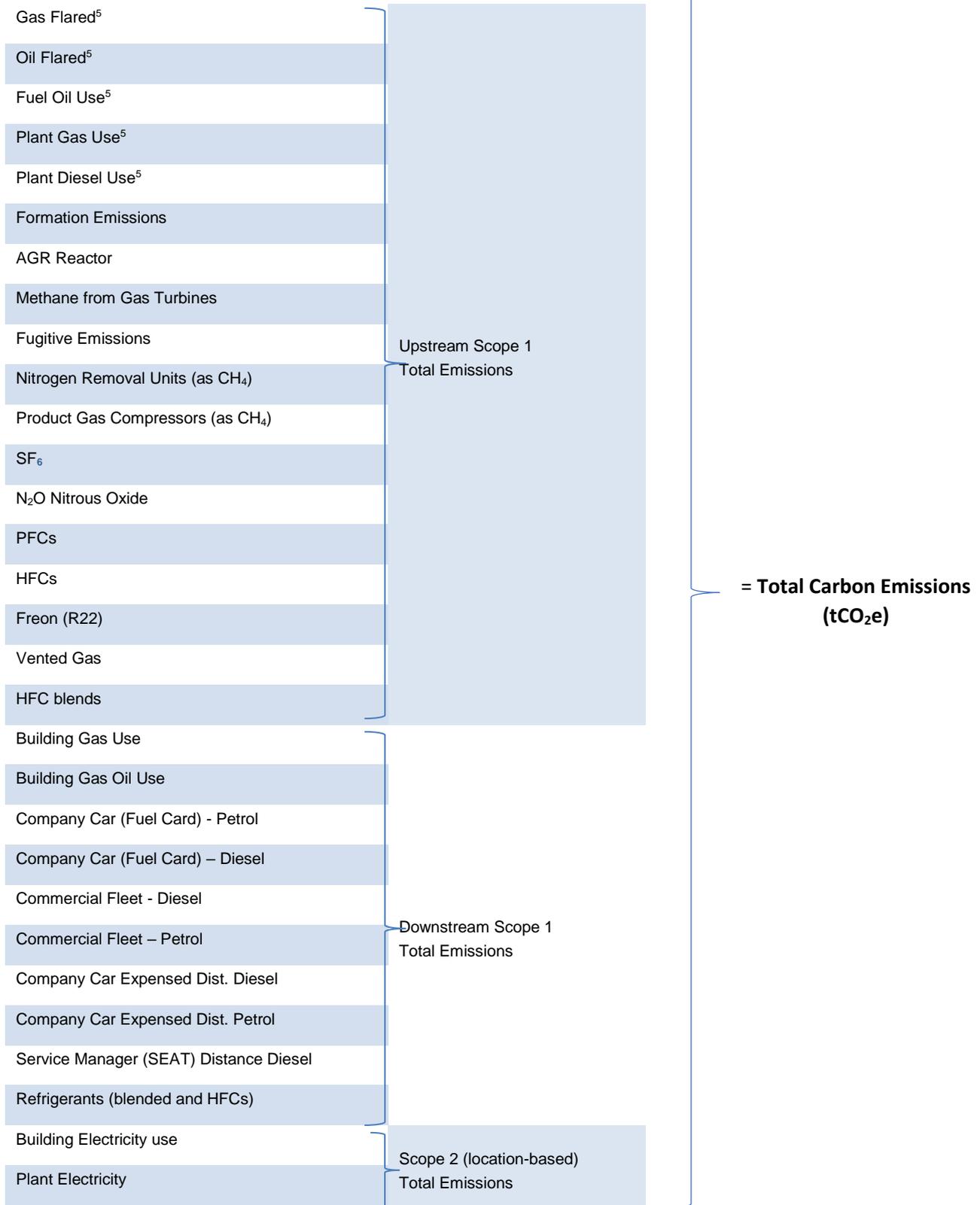
3. Calculation methodology

3.1 Unit of measure

Tonnes of carbon dioxide equivalent (tCO₂e)

3.2 Calculation

Table C - Constituent indicators



⁵ Where EU ETS data is available, this value will replace the individual emission indicators for: 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. Progress against our 2030 Ambitions will be reported annually as part of Centrica's external annual reporting.

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 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.

Internal Carbon Footprint

1. KPI description

As part of Centrica’s 2030 Responsible Business Ambitions, Centrica has committed to reduce its internal carbon footprint by 35% by 2025 based on a 2015 base year. The proposed ten-year target replaces Centrica’s previous eight-year target which was successfully achieved at the end of 2015 (20% reduction by 2015 compared to 2007).

The target encompasses the carbon emissions associated with our offices, commercial vehicles, company cars, air and rail travel.

UK and North America Consumer businesses represent approximately 80% of the target. Accordingly, specific targets apply within those businesses underpinned by detailed planning and governance.

2. Scope

2.1 Period

The KPI uses a 2015 base year against a 2025 target year. All data years are calendar years (January to December).

2015 has been selected as the base year for the 2025 target as it was the end year for the previous target, and as such, it will ensure a continuously targeted drive to reduce our internal carbon footprint emissions over an eighteen-year period.

With a 2025 target end date, emissions associated with the 12 months of 2025 will be compared to those of 2015, to determine the overall reduction.

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 in-scope assets and activities associated with the businesses within Centrica Organic growth of the existing business which do not involve new assets Activities and assets associated with organic growth or new business that cannot be isolated in the financial accounts 	<ul style="list-style-type: none"> Emissions from new businesses⁶ acquired through merger or acquisition (including equity share) and joint ventures since 31 December 2015 Emissions from new assets⁷ since 31 December 2015 that can be isolated in the financial accounts Emissions from business divestments since 2015⁸ Emissions from activities that are outsourced to third parties

⁶ A new line of business that can be individually isolated through the financial accounts, typically through cost codes.

⁷ A new asset is an additional asset, whether additional vehicle or office, which does not replace an existing asset irrespective of whether it’s a result of new business or organic growth.

⁸ Divestment includes the sale of a going concern; as well as the closure of an operation.

Operational	<ul style="list-style-type: none"> Annual emissions associated with energy and fuel consumption from our occupation of offices, our commercial fleet, our company cars and our business travel 	<ul style="list-style-type: none"> Annual emissions from upstream (gas terminals, power stations, etc) assets Annual emissions from assets and activities other than listed opposite
Operational – Buildings	<ul style="list-style-type: none"> Buildings permanently occupied by Centrica personnel, including wholly occupied and partially occupied, owned and leased offices Emissions associated with the use of gas, biodiesel, biomass and electricity for servicing the office 	<ul style="list-style-type: none"> Buildings on sites⁹ and for the express purpose of upstream generation and storage (gas terminals and power stations) Offices and other facilities owned or leased by Centrica but not occupied by Centrica employees Home-worker offices Use of ozone depleting substances (ODS) within office facilities¹⁰
Operational - Commercial fleet	<ul style="list-style-type: none"> Utility vehicles used by Centrica, including downstream service engineers and upstream site-based vehicles Centrica branded vehicles used by long-term contractors working under Centrica management control Shuttle buses¹¹ 	<ul style="list-style-type: none"> Non-road legal vehicles, including heavy plant Franchisee commercial vehicles Vehicles used by contractors that do not meet the criteria opposite Emissions from UK Smart Installations & Metering commercial vehicles¹²
Operational - Company cars	<ul style="list-style-type: none"> Emissions from cars owned, leased or hired by Centrica for use by Centrica employees for business purposes Emissions from ‘cash allowance’ grey fleet¹³ 	<ul style="list-style-type: none"> Emissions associated with personal mileage Emissions from ‘non-cash allowance’ grey fleet Instances where fuel costs are claimed, as opposed to mileage¹⁴
Operational - Business travel	<ul style="list-style-type: none"> Air¹⁵ and rail travel undertaken by Centrica employees booked via corporate travel providers¹⁶ 	<ul style="list-style-type: none"> Air and rail travel undertaken by Centrica employees not booked via corporate travel providers Taxis Buses

New businesses and new assets are excluded to allow for growth whilst allowing for consistency of scope and ongoing comparability with our 2015 baseline business.

⁹ Excluded as the emissions are reported with the operational emissions.

¹⁰ Emissions of ODS are not considered to have a material impact on the total footprint and therefore are not included.

¹¹ Buses used to transport Centrica staff to and from Centrica offices and local public transport/amenity facilities.

¹² UK Smart Installations & Metering vehicles are out of scope as the nature of the business unit means that the number of vehicles will increase and then decrease to zero during the target period, therefore, their inclusion would misrepresent the fleet emission reductions without adding value to the target.

¹³ Grey fleet are privately-owned vehicles used for business purposes. A cash allowance can be offered in lieu of a car in certain circumstances. Historically, where employees have had a ‘cash allowance’ grey fleet vehicle, it has been difficult to differentiate it in the accounts, from the emissions from a company car and hence ‘cash allowance’ grey fleet are included in the scope.

⁸ Claiming fuel costs as opposed to mileage for business purposes is not in line with Centrica’s expenses policy and therefore is a rare occurrence and considered immaterial.

¹⁵ We exclude Radiative Forcing from the air travel emissions as currently there is scientific uncertainty around the magnitude of the additional environmental impacts of aviation.

¹⁶ Bord Gais Energy do not book travel through corporate travel providers although emissions associated with travel are still reported.

Furthermore, we aim to ensure new businesses have best technology applied from the outset (e.g. a low emission vehicle fleet), thus limiting the opportunity for further significant improvement during the target period.

Out of scope assets and activities will be accounted for separately. In only excluding future growth that can be isolated within the accounts, a conservative approach is taken and our ongoing carbon footprint is over-estimated rather than under-estimated.

3. Calculation methodology

3.1 Unit of measure

TCO₂e

3.2 Calculation

Table B: Constituent indicators

Rail
Building Gas Use
Building Gas Oil Use
Office Biofuel (liquid)
Office Biomass (solid)
Building Electricity use
Flights - Short Haul
Flights - Medium Haul
Flights- Long Haul
Company Car (Fuel Card) Volume: Petrol
Company Car (Fuel Card) Volume: Diesel
Company Car Expensed Dist. Petrol
Company Car Expensed Dist. Diesel
Cash Allowance Grey Fleet Petrol
Cash Allowance Grey Fleet Diesel
Commercial Fleet - Volume Petrol
Commercial Fleet - Volume Diesel
Service Manager (SEAT) Distance Diesel
Commercial Fleet - Unspecified Fuel

= ICF (tCO₂e)

3.3 Base year re-calculation

The 2015 base year emissions will not be re-calculated for mergers and acquisitions (outside of scope), but to ensure we do not claim credit for simply down-sizing our business, the base year emissions will be reduced following divestment and outsourcing of any part of the existing business that was in existence during 2015.

This will entail the identification of the in-scope emissions associated with the assets and activities of the divested business and the removal of such, from the 2015 base year emissions.

We recognise that GHG accounting at the individual level can be difficult and that the separation of divested businesses is not always clear cut. Accordingly, to remain credible, a conservative approach will be taken designed to avoid positive bias in the data (e.g. overestimation of the base year footprint) and detailed records maintained for transparency.

Where more accurate data becomes available subsequent to the base year (e.g. a sub-meter is installed in a property), the original estimated data will be reviewed and if appropriate, corrected, back to the base year, based on the more accurate values.

3.4 Base year to end year comparison

The following methodology will be applied to ensure an accurate comparison between the 2015 base year and the 2025 end year.

- The property portfolio, as defined in the boundaries and scope, in existence in 2015 is documented along with the corresponding energy use and GHG emissions. This forms the core property of the 'existing businesses'.
- Should any site close or be vacated, we will cease to account for emissions from the point of vacancy. Historical emissions data will not be removed from the baseline and subsequent years unless the office was vacated due to a divestment. Where vacated sites are directly replaced by a new site(s), the new site(s) will be included in scope from the point of occupation. The replaced site(s) will also stay in scope so that the data during Centrica's occupation is retained.
- The commercial and company car fleet portfolio, as defined in the scope, during 2015 is documented along with the corresponding fuel use and GHG emissions. This forms the core fleet of the 'existing businesses'.
- Business travel is accounted by cost centre. In this way, any travel associated with new, out of scope business can be identified and accounted for discretely.

4. Data quality, collection and reporting frequency

Centrica plc HSES Reporting Standard 03, available internally, sets out the detailed data collection process. Data is collected via a global online reporting system. Progress against the 2030 Ambition will be reported annually as part of Centrica's external annual reporting.

5. Emission factors

Emission factors relevant to each region and year will be applied, recognising that a time-lag may be present. The guidance provided on using the emission factors, in association with the emission factors themselves, will be applied unless specifically stated otherwise.

The 'Total GHG' direct emission factors are used. These include the global warming potential of carbon dioxide, methane and nitrous oxides. This total GHG approach is most reflective of the company's actual in scope carbon footprint.

The emission factors used include Scope 1, 2 and 3, but exclude 'out of scope' emissions.

The emissions factors are drawn from the relevant protocols. These will be dependent on:

- The geography of the asset
- The period of the data set
- The fuel source of the emission

The Protocols used include:

- 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)

Flexible Capacity (Flexible, Distributed and Low Carbon Technologies)

1. KPI description

In support of our 2030 Responsible Business Ambition to enable a decarbonised energy system, Centrica has a system capacity target to demonstrate that we can help the energy system transition to a lower carbon future and also indirectly, help our customers reduce their emissions too.

The target tracks our direct delivery of flexible, distributed and low carbon technologies which enable energy grids to decarbonise.

Our Ambition is that by 2030, we want to deliver 7GW of flexible, distributed and low carbon technologies as well as provide system access and optimisation services. Towards this, we will aim to deliver 4GW of flexible, distributed and low carbon technologies by 2022.

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
Operational	<ul style="list-style-type: none"> Flexible, distributed and low carbon technologies that we own Flexible, distributed and low carbon technologies and services that we provide to our end-use customers 	<ul style="list-style-type: none"> Route-to-Market (RTM) services (gas and electricity)¹⁷ Green tariffs and Time-of-Use tariffs¹⁸

Table B – Scope breakdown operational activity

	In scope	Out of scope
Centrica owned assets	<ul style="list-style-type: none"> Gas generators on ‘peaking’ contracts Open-cycle gas turbine (OCGT) power stations on ‘peaking’ contracts Front-of-meter battery storage 	<ul style="list-style-type: none"> Power stations providing base-load power Behind-meter gas generators, Combined Heat and Power (CHP) and renewables at our offices¹⁹
Customer services and solutions	<ul style="list-style-type: none"> Solar Photovoltaic (PV) installation CHP installation Gas generator installation Behind-the-meter battery installation Optimisation services including Demand Side Response (DSR) Local Energy Market (LEM) product installations 	<ul style="list-style-type: none"> LEM trading services

¹⁷ RTM electricity and gas services could be considered a service that provides grid flexibility, however, we neither own the assets nor provide the service to the end-user and hence, it has been excluded from scope. We will continue to track and report the RTM capacity in addition to the target.

¹⁸ Green tariffs and Time-of-Use tariffs can both assist in the decarbonisation of the energy system, however, they are not a technology nor a service, and are therefore excluded from this technology-based goal.

¹⁹ Where these assets are included in a Demand Side Response (DSR) contract, their capacity will be captured under DSR.

3. Calculation methodology

3.1 Unit of measure

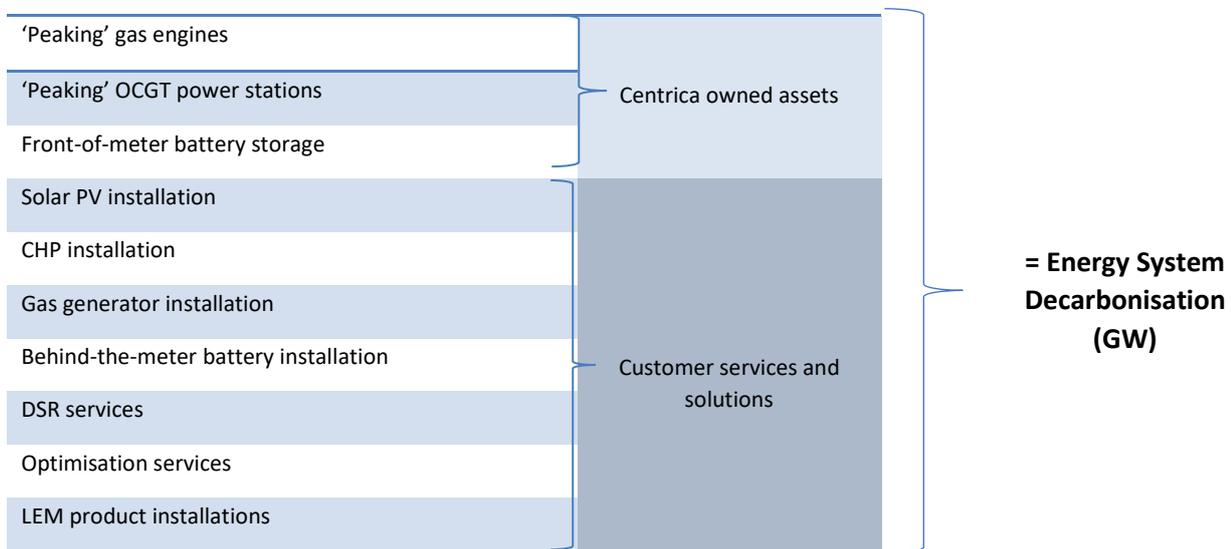
Gigawatt (GW) Capacity

3.2 Calculation

There is no base-year for the goal²⁰. The capacity of flexible, distributed and low carbon technologies delivered is the sum of:

- Capacity of in scope Centrica assets at the time of reporting
- Capacity of in scope customer services and solutions delivered at the time of reporting²¹

Table C: Constituent indicators



3.3 Lifetime of services and solutions

Physical assets will not provide grid flexibility indefinitely; with Centrica assets we know when they cease being active however we do not have this insight with the assets that we install for our customers. For these, we limit their contribution to the typical lifetime of the product type, for example, twenty years for a CHP.

4. Data quality, collection and reporting frequency

This KPI and its associated data collection, has not yet been set up in myHSES, our online reporting tool. The KPI does, however, still follow the principles detailed in Centrica plc HSES Reporting Standard 03 which is available internally. Data is collected biannually by the environmental function via email exchange with the wider business. Where available, we source data from existing business databases and reports, including sales and contract management databases. This maximises efficiency and accuracy of the data.

²⁰ While there is no base year for the goal, the Distributed Energy & Power business was only formed in 2016, so the majority of services and solutions are from this year onwards.

²¹ It is assumed that all customer installed assets are providing energy system decarbonisation.

In instances where there are data gaps in the capacity details for products we have historically installed for customers, we estimate the capacity using the average capacity of similar products installed in that period and geography.

Progress against our 2030 Ambition will be reported annually as part of Centrica's annual external reporting.

4.1 Assumptions

It is assumed that solar PV, battery, CHP and gas generator installations sourced from sales data will have a 12-month lag between the date of sale and the date the product is installed.

It is assumed that all sales are converted into installs with no contracts falling through after the sale²².

²² This assumption is consistent with previous sales.

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 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'.

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 wholly or partially owned reporting entities across Centrica²³ irrespective of operational control²⁴ 	<ul style="list-style-type: none"> N/A
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 Gas²⁵

3. Calculation methodology

3.1 Unit of measure

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

²³ Where Centrica has only part equity in a reporting entity (e.g. joint ventures), the energy usage is prorated to reflect Centrica's share. Centrica applies the company's equity share to the organisation that controls the assets and not the assets themselves.

²⁴ Reporting entities where we have equity, but which we do not operate, include Spirit Energy, UK Nuclear and some Combined Heat and Power (CHP) units on customer sites.

²⁵ This exclusion is consistent with ESOS regulations, where flared gas is excluded as it is not considered energy consumption but energy disposal.

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.

3.3 Calculation

Table B – Constituent indicators

Feeder Indicator	Calculated indicator	
Commercial Fleet – Diesel	Total 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 ²⁶		
Cash Allowance Grey Fleet Diesel ⁴		
Grey Fleet (expensed) mixed fuel ⁴		
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 Electricity use	
Renewable solar electricity generated on site		
Plant Electricity Use		
Building Electricity Use		

= Total Energy Use (kWh)

²⁶ Energy Savings Opportunity Scheme (ESOS) and SECR reporting requirements for large unquoted companies, specifically requires 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.

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 reported on a monthly or quarterly basis for fleet and offices, and on a biannual basis for plant and upstream energy consumption. Energy consumption will be reported annually as part of Centrica's annual external reporting.

5. Assumptions

- Fuel properties sourced from UK Government GHG Conversion for Company Reporting
- Road vehicle properties sourced from Department of Transport statistics
- Net CV assumed for everything excluding office gas use
- Grey fleet (mixed fuel) has an assumed composition of 15% petrol and 85% diesel