

2019 Greenhouse Gas Emissions Supporting Information

Reporting boundaries

2019 Annual Report

Reported emissions within the Directors' Report of the Berkeley Group Holdings plc ("Berkeley") 2019 Annual Report include 50% of those resulting from Berkeley's joint ventures on the basis of its equity share.

The emissions disclosed are aligned to Berkeley's financial reporting year (1 May 2018 to 30 April 2019), are considered material to its business and have the following parameters:

- Scope 1: direct emissions from natural gas consumed for office, sales and development site activities; gas oil, petrol, liquefied petroleum gas (LPG) and diesel purchased directly for development site activities; and travel (business and other travel where expensed) in company owned vehicles;
- Scope 2: indirect emissions from electricity and heat consumed for office, sales and development site activities; and,
- Scope 3: other indirect emissions from gas oil, petrol, LPG and diesel purchased by contractors for development site activities; travel (business and other travel where expensed) in company leased and employee owned vehicles; business air travel; transmission and distribution losses of purchased electricity and heat; and upstream emissions.

Emissions from pre-development sites with existing buildings in-situ that are to be demolished or refurbished as part of Berkeley's development works are not included as part of the figures presented until works (e.g. demolition, excavation or construction) begin. Pre-development emissions have been excluded as they are either deemed insignificant (e.g. minimal energy consumed for security and/or health and safety purposes only in unoccupied buildings) or Berkeley is not responsible for the energy consumed (e.g. buildings occupied by tenants).

Emissions from post-development sites where Berkeley has retained the freehold are not included within the scope of reporting as the purchasers or tenants are the consumers of the energy in this instance. During development works, emissions from the commissioning of gas-fuelled plant to be retained on the development have not been included as these emissions are considered to relate to the end use of the development rather than its construction.

Other Berkeley disclosures

Emissions reported outside of the Directors' Report of the 2019 Annual Report (for example, as part of performance reporting under 'Our Vision') are based on Berkeley's operational boundary. This differs to the reporting boundary of the 2019 Annual Report (see above) as follows:

- Reported emissions include 100% of those resulting from the Berkeley's joint ventures; and,
- Travel (business and other travel where expensed) in company leased vehicles is reported as part of Scope 1 emissions as Berkeley has operational control over these vehicles. This is in line with Greenhouse Gas (GHG) Protocol guidance.

Reporting methodology

UK Government GHG Conversion Factors for Company Reporting 2018 have been applied to 2019 data (covering 1 May 2018 to 30 April 2019), as 2018 is the calendar year in which the greatest portion of our data falls. UK Government GHG Conversion Factors for Company Reporting 2017 have been applied to 2018 data (covering 1 May 2017 to 30 April 2018). International Energy Agency 2018 factors have been applied to overseas electricity figures for 2019.

All emissions factors are measured in CO₂e with the exception of overseas electricity factors which are only available on a CO₂ basis. In addition to carbon dioxide, the CO₂ equivalents used include the global warming potential from methane (CH₄) and nitrous oxide (N₂O). Remaining gases (HFC-134a, HFC-143a and sulphur hexafluoride (SF₆)) are believed to be relatively insignificant for reporting on emissions arising from our activities.

Energy data sources

Raw energy data for permanent offices, sites, sales and marketing suites and show homes has been collected on a monthly basis as follows:

Scope 1 (directly purchased)

- Gas oil, diesel and petrol purchased in litres based on delivery notes received from the fuel supplier, or where unavailable, based on informed estimations by site personnel;
- Liquefied petroleum gas (LPG) purchased in litres or kilogrammes based on delivery notes received from the fuel supplier, or where unavailable, based on informed estimations by site personnel;
- Natural gas consumed in cubic metres or hundreds of cubic feet based on monthly meter readings, or where unavailable, estimates based on energy costs or pro-rated calculations of periods with actual consumption.

Scope 2

- Purchased electricity measured in kilowatt hours based on monthly meter readings, or where unavailable, estimates based on energy costs or pro-rated calculations of periods with actual consumption;
- Purchased heat measured in kilowatt hours based on monthly meter readings, or where unavailable, estimates based on energy costs or pro-rated calculations of periods with actual consumption.

Scope 3 (contractor purchased)

- Gas oil, diesel and petrol measured in litres based on declarations from contractors on the amount purchased, supported by delivery notes received by the contractor from the fuel supplier where available;
- Liquefied petroleum gas (LPG) measured in litres or kilogrammes based on declarations from contractors on the amount purchased, supported by delivery notes received by the contractor from the fuel supplier where available.

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Supporting Information continued

Energy data coverage

Data coverage by activity area for 2019 is as follows:

- Permanent offices: annual emissions from 96% of permanent offices reported. Energy data has not been captured for one permanent office which is shared space due to sub-metering not being in place;
- Sites: annual emissions from 98% of development sites reported. Full energy data has not been captured for two development sites; one missing contractor data for a period of two months and one missing contractor data for a period of three months, both during the early stages of work.
- Sales and marketing suites: annual emissions from 97% of sales and marketing suites reported. Two sales and marketing suites have not reported energy consumption data due to a lack of sub-metering.

Travel data

Business road mileage

Business road mileage has been collected on an annual basis from employees in receipt of a company vehicle (owned or leased) or a cash allowance to support the use of a private vehicle as at 30 April 2019.

In 2019, one of our operating companies collated this information on behalf of their employees using monthly expense details. Information for employees from all other operating companies has been collected via a survey. Within this survey, employees were requested to declare business road mileage (which includes other road mileage where expensed), along with basic details for each vehicle used, on a voluntary basis. Vehicle emissions have been calculated using the declared engine size, fuel type and mileage information. The 'average car' emissions factors as outlined in the UK Government's GHG Conversion Factors for Company Reporting have been used for hybrid, plug-in hybrid electric and battery electric vehicles.

Emissions reported cover business road mileage in 78% of company owned vehicles, 90% of company leased vehicles and 85% of private vehicles used by employees receiving a cash allowance. Where mileage data has not been provided, no assumptions have been made to complete the data set.

Air travel

Air travel data is collected on an annual basis via a Business Air Travel Capture Form. Emissions have been calculated using the declared departure and arrival airports to calculate the distance travelled on each flight, multiplied by the passenger class emission factors for domestic, short-haul, long-haul and international flights as applicable. Where passenger class details have not been made available, conversion factors for the 'average' flights have been used. The conversion factors used include an uplift factor of 8% to compensate for planes not flying the most direct route. No aviation radiative forcing factor has been applied.

Scope 3

Transmission and distribution losses

Emissions associated with the transmission and distribution of purchased electricity and heat have been included. For every kilowatt hour of electricity and heat purchased, the energy losses are calculated using the relevant transmission and distribution factor as contained within the UK Government's GHG Conversion Factors for Company Reporting.

Upstream emissions

Upstream emissions from the extraction and production of fuels related to business road mileage, air travel, purchased fuels and production of electricity and heat have been calculated using the relevant well-to-tank conversion factors as contained within the UK Government's GHG Conversion Factors for Company Reporting.

Intensity ratio

The intensity ratio (tCO₂e/person¹) has been calculated using the number of Berkeley employees and the number of contractors working on our sites (2019: 10,804; 2018: 11,305). This is the average figure for the year (covering 1 May 2018 to 30 April 2019) and only includes 50% of direct employees and contractors working in offices, in sales and marketing suites or on development sites of Berkeley's joint ventures.

¹ The tCO₂e/person intensity metric has not been subject to PwC assurance for the 2019 or prior financial reporting years