

Group Greenhouse Gas Emissions Methodology 2023

1. Introduction

This statement summarises the reporting methodology for Persimmon Plc's greenhouse gas (GHG) emissions for the financial reporting year 1st January 2023 to 31st December 2023, and that are considered material and relevant. This methodology is in line with Persimmon's requirements to report on operational greenhouse gas emissions including mandatory carbon reporting requirements of the Companies Act 2006 (Strategic and Directors' Reports) Regulations 2013 and the Streamlined Energy and Carbon Reporting (SECR) regulations. The Group reports its GHG emissions and scope 1 and 2 energy usage, and its Scope 3 category 1, 7 and 11 GHG emissions in its Annual Report and Accounts.

2. Reporting approach

The methodology used to calculate our GHG emissions and energy use is the GHG Protocol Corporate Accounting and Reporting Standard (revised edition).

Persimmon Plc report on emissions using a financial control approach. The company has financial control over the operation if the former has the ability to direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities. For example, financial control usually exists if the company has the right to the majority of benefits of the operation, however these rights are conveyed. Similarly, a company is considered to financially control an operation if it retains the majority risks and rewards of ownership of the operation's assets.

3. Scope and reporting boundary

Persimmon Plc is the holding company for the Persimmon Group of companies. It operates from 29 regional offices throughout the UK. The Group trades under the brand names of Persimmon Homes, Charles Church and Westbury Partnerships across England, Wales and Scotland.

Persimmon Plc also operates Space4, Brickworks & Tileworks manufacturing sites, Persimmon Direct groundworks contractors, and FibreNest and Horsebridge broadband services.

Scope 1 emissions: Direct greenhouse gas emissions from natural gas consumed, use of fuels (diesel, petrol, LPG, kerosene, biodiesel), occurring from sources that are controlled by Persimmon Homes including offices, show homes, development sites, Space4, Brickworks & Tileworks, FibreNest and Horsebridge; and travel in company owned and company leased vehicles.

Scope 2 emissions: Indirect greenhouse gas emissions from the use of purchased electricity, consumed in offices, show homes, development sites, Space4, Brickworks & Tileworks, FibreNest and Horsebridge office, and business travel in company owned or company leased electric vehicles.

Scope 3 other indirect sources within three categories:

- Category 1; Purchased goods and services – the impact from our supply chain for the provision of goods and services including materials used to build the homes.
- Category 7; Employee commuting
- Category 11; Use of sold good – Greenhouse gas emissions from the use of homes by our customers, applied over the lifetime of the home.

4. Excluded activities

Based on materiality, any joint ventures, part-exchanges, the letting of premises to third parties and emissions occurring from refrigerant losses from air conditioning units from a selection of our regional offices have been excluded from our calculations.

5. Scope 1 and 2 Data collation and methodology**Electricity and gas**

Electricity and gas consumption is provided by our energy suppliers for the following operations:

- Regional offices
- Show homes
- Properties that legally complete in the year
- Brickworks & Tileworks and Space4 manufacturing facilities
- FibreNest broadband services
- Temporary building supplies (e.g. site cabins) and other site related supplies.

Show homes and temporary building supplies

Meters installed within show homes and temporary building supplies use Non Half Hourly electricity meters. The Group's show homes have gas meters installed. Meter readings are provided to our energy supplier during the course of the year. Energy consumption is provided by the energy supplier on a quarterly basis.

Properties that legally complete in the year

The Group's properties have Non Half Hourly electricity meters installed. Final meter readings are taken when the home is handed over to a customer and provided to our energy supplier on a regular basis throughout the year. Energy consumption is provided by the energy supplier on a bi-monthly basis.

For properties with gas, gas meters are installed. Final meter readings are taken when the home is handed over to a customer and provided to our energy supplier on a regular basis throughout the year. Energy consumption is provided by the energy supplier on a bi-monthly basis.

Regional offices

Smart meters have been installed in our offices across the Group, with a combination of Half Hourly and Non Half Hourly electricity meters and gas meters. Energy consumption is provided by the energy supplier on a bi-monthly basis.

Brickworks & Tileworks and Space 4

Half hourly electricity meters are installed within Brickworks & Tileworks and Space4. Energy consumption is provided by the energy supplier on a bi-monthly basis.

Operational fuel

Operational fuel emissions are calculated using the amount of litres/kg purchased for all of the fuel types used across our sites: Diesel, LPG, Petrol and Kerosene. The quantity of fuel is recorded from supplier invoices and received through Persimmon's financial accounting software, COINS, for regional operating businesses and Persimmon Direct. For Space4 and Brickworks & Tileworks, the quantity of operational fuel purchased is provided through individual site's financial team based on supplier invoices.

Any invoices where the quantity of operational fuel has not been inputted correctly, or is not available, a spend-based methodology has been applied using an average price per unit of fuel at a local level.

Business travel in company owned or leased vehicles

The methodology for calculating travel emissions is through employee surveys using a distance-based methodology, which involves determining the distance and mode of business trips, then applying the appropriate emission factor for the mode used.

This information has been extrapolated from a representative sample of employees to the total business travel of all employees.

Persimmon Direct capture the volume of diesel purchased for their van fleet. All travel in Persimmon Direct vans is assumed to be for business purposes. The appropriate diesel emission factor is applied to the total volume of diesel purchased from the reporting year.

Estimations

Where emissions for individual periods that make up the financial year are not available at the time of reporting, the Group applies the use of estimates and pro-rates.

Emissions conversions used

Emissions conversions have been calculated for all carbon streams using 2023 Government conversion factors for company reporting of greenhouse gas emissions from the Department for Business, Energy and Industrial Strategy, which can be found here: [Greenhouse gas reporting: conversion factors 2023 - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2023)

Intensity Metrics

The Group reports both absolute emissions and an intensity metric. The scope 1 and 2 intensity metric is the quantity of greenhouse gas emissions scope 1 and 2, normalised per home completed during the financial year.

Energy Consumption

Energy consumption for scope 1 and 2 greenhouse gases is measured and reported in accordance with the Streamlined Energy and Carbon Reporting (SECR) regulations. The unit kWh is used, and where the energy unit is not in kWh e.g. diesel or LPG, then the appropriate UK Governments conversion factors are used.

Location based emissions

All electricity that the group consumes is multiplied by the UK average grid electricity emission factor for the reporting year. This gives the tonnes of CO₂e emitted.

Market-based emissions

Market based emissions enable recognition of the purchase of electricity which comes from a renewable source, and has either a lower or zero carbon emissions factor. Where the electricity supplier is providing a zero rated emission fuel, the Group receives the appropriate quantity of Renewable Energy Guarantee of Origin (REGO) certificates. Tariffs where the electricity provider isn't providing a zero rated emissions fuel mix the corresponding emission factor has been applied to the portion of supply.

6. Scope 3 Emissions Data collation and methodology

An assessment of the 15 categories of Scope 3 emissions was undertaken in 2023 on data covering our 2023 financial reporting period (1st January 2023 - 31st December 2023). Covering over 95% of the total scope 3 emissions and which are most material and relevant to the business are; category 1 – purchased goods and services, category 7 employee commuting, and category 11 – use of sold product.

Category 1 – Purchased goods and services

Emissions are estimated based on spend on both goods and services from the Group's suppliers. A set of best matching Environmentally Extended Input Output (EEIO) emission factors have been applied to the individual category spends giving the quantity of greenhouse gas emissions. Total spend data from 1st January 2023 to 31st October 2023 was used to perform the calculations, and the emissions were then prorated to 12 months.

Category 2 – Capital Goods is captured in the calculation since any capital goods will be captured in total spend data.

Category 7 – Employee commuting

The employee survey was used to estimate mileage by travel mode, which includes cars, trains and buses. Mileage was calculated for each travel mode based on the responses and split into miles by mode. Average BEIS emission factors for passenger vehicles and land transport were used to convert from miles to emissions. The results are then extrapolated to represent the full population.

Category 11 – Use of sold goods

This is an estimation of the greenhouse gas emissions from homes used by customers over the homes lifetime. SAP certificates from homes sold over the reporting period are used to provide a Dwelling Emissions Rate (DER) for each home which is measured in kgCO₂ per year. Total gas and electricity emissions are calculated and then prorated to the total number of homes sold in the reporting period, to give an annual total. The annual total emissions are then multiplied by 60 years which gives the lifetime impacts (EN 15978 and RICS Whole life carbon assessment for the built environment Nov 2017 recommendation of 60 years for life cycle modelling purposes). The lifetime emissions from electricity takes into account the decarbonisation of the UK electricity grid based on BEIS' 2019 energy and emissions projections.

Average DER Calculation - Sustainability Link Loan

To calculate the average DER for properties handed over in the reporting period each properties DER value was multiplied by the total floor area (m²). The totals were then summed together and divided by the total floor area of all of the properties in the reporting year to generate the average DER for the reporting year.