

Greenhouse Gas Accounting Methodology Statement 2023

The GHG accounting methodology is presented for the GHG emissions from Wickes' own operations (which are solely based in the UK) and its value chain. This statement sets out the methodology followed by Wickes when calculating and reporting its greenhouse gas emissions for the 2023 financial year (ending 30 December 2023). The results are reported in the Responsible Business Section of the Annual Report 2023.

Organisational and operational boundary

Organisational boundary

Wickes Group Plc is the parent company of Wickes Building Supplies Limited. Included within this is the operation of 229 stores across the UK, one office in Watford, and two Distribution Centres located in Northampton.

Control Approach

Operational control approach

Operational Boundary

The following Scope 3 categories are out of scope for our 2023 accounting as these were not relevant to the company's activities in 2023:

- Category 8 Upstream leased assets
- Category 10 Processing of sold products
- Category 14 Franchises
- Category 15 Investments

For 2023, we have excluded all emissions in Scope 3 Category 4 Upstream Transportation and Distribution as we have identified opportunities to significantly improve on the previous assumptions made in 2021 and 2022. We will incorporate this methodology change into our 2021 rebaselining exercise that we will carry out in 2024, when we will also recalculate 2022 and 2023 in line with the improvements.

For 2023, we have included emissions from Scope 3 Category 2 Capital Goods with Category 1 Purchased Goods and Services as we have identified opportunities to align with the capitalisation process of purchased goods and services. We will incorporate this methodology change into our 2021 rebaselining exercise that we will carry out in 2024, when we will also recalculate 2022 and 2023 in line with the improvements.

Scope 1 (direct)

Emissions arising from fuel used in stationary equipment, fuel combustion for transportation, and fugitive emissions from refrigerant leaks.

Methodology	Average-data method
	natural gases for space heating and hot water.
	In this assessment, emissions from stationary combustion were mainly from the use of
Boundary	furnaces, burners, turbines, heaters, incinerators, engines, flares etc.
Calculation	Stationary combustion includes combustion fuels in stationary equipment such as boilers,
Category 1.1: Stationary Combustion	

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Calculation	The emissions from stationary combustion were calculated based on the consumed quantities of natural gas using published emissions factors for the UK.
Assumptions	Please note for locations where there was erroneous data, previous year's prorated data or averages were used to extrapolate. For specific examples, please see below: Natural gas usage for December 2023 for all stores was not available in the time frames for reporting, therefore consumption from December 2022 was used as a proxy. The Truro Wickes store consumes LPG which it uses for heating. LPG data was provided based on fill ups over a multiple year period from 2022-2023. The days between fill ups were quantified and adjusted to the period of 2023 to account for estimated usage during that period.
Exclusions	No known exclusions.
Data Sources	Activity data was sourced from utility bills, invoices for energy fill ups with onsite metre readings summary used to verify. Emissions factors originated from the Greenhouse Gas Reporting: Conversion Factors 2023 from the UK Government's Department for Energy Security and Net Zero.

Category 1.2: Mobile Combustion	
Calculation	This category includes emissions from fuel combustion in transportation devices such as
Boundary	automobiles, trucks, forklift trucks, cars etc.
	For this assessment, the emissions from mobile combustion was mainly from the use of
	vehicles that are owned or under operational control of Wickes.
Methodology	Fuel-based and distance-based method
Calculation	The emissions from the mobile combustion were calculated by multiplying the amount of volume consumed of a fuel or the distance travelled with published emissions factors for the UK.
	The emissions factors were determined based on the vehicles' type and fuel characteristics. For goods vehicles, emissions factors for average laden were used in the calculation.
Assumptions	Where data was not available on the laden of the vehicle, average laden was assumed for all kilometres travelled. For all vehicles up to 26 tonnes in weight, it was assumed rigid, and anything above was assumed to be articulated.
	This category also includes company owned cars driven for business purposes. Given that the vehicle and fuel type has not been provided, it has been assumed that it is an average car and diesel as the type of fuel.
Exclusions	No known exclusions.
Data Sources	Activity data was sourced from Wickes' distance travelled records. Emissions factors from the freighting of goods were sourced from the Greenhouse Gas Reporting: Conversion Factors 2023 from the UK Government's Department for Energy Security and Net Zero.

Category 1.3: Fugitive Emissions	
Calculation	This category includes emissions that are intentionally or unintentionally released, as well
Boundary	as fugitive emissions. In this assessment, the fugitive emissions were from refrigerant leakage from the air conditioning systems that were used across Wickes sites.

Methodology	Average-data method
Calculation	Refrigerant fugitive has been determined as the only possible fugitive emissions that Wickes had in 2023.
	The emissions were calculated using the estate cooling inventory for 2022 (i.e. number of air conditioning units in each store), with applied updates for 2023 store estate openings and closures.
	The amount of leakage (kg) was calculated through applying assumptions on the mass of refrigerant that was refilled per unit per year and the percentage of that which was leaked
	The emission factor for R410a was applied, which is the dominant type used within Wickes' stores. This was multiplied by the estimated leaked volume
Assumptions	Assumptions on the amount of refilled refrigerant and leakage have been derived from the IPCC Good Practice Guidelines for Residential and Commercial A/C, including Heat Pumps. It has been assumed that each unit is recharged with 5kg per unit per year with a leakage rate of 3% per year.
	Assumptions on the refill mass and leakage rates have been derived from the GHG Protocol guidance on "Calculating HFC and PFC Emissions from the Manufacturing, Installation, Operation and Disposal of Refrigeration & Airconditioning Equipment (Version 1.0) Guide to calculation worksheets (January 2005)"
Exclusions	No known exclusions
Data Sources	Activity data used was sourced from facilities management store refrigeration ledger. Emissions factors from refrigerants were sourced from the Greenhouse gas reporting: conversion factors 2023 from the UK Government's Department for Energy Security and Net Zero.

Scope 2 (indirect)

Emissions arising from the purchase of electricity.

Category 2.1: P	Category 2.1: Purchased electricity	
Calculation	Scope 2 is an indirect emission category that includes GHG emissions from the generation of	
Boundary	purchased or acquired electricity, steam, heat, or cooling consumed by the reporting company.	
	In Wickes case, only purchased electricity is relevant.	
Methodology	Location-based and market-based	
Calculation	The amount of electricity consumed (in kWh) was multiplied by the appropriate emissions factor (for location and market-based) to determine the amount of tCO₂e generated from	
	purchased electricity.	
Assumptions	Please note for locations where there was erroneous data previous years or averages were used to extrapolate.	
	Electricity consumption for December 2023 for all stores was not available in the time period	
	when the calculation was carried out, therefore consumption from December 2022 was used	
	as a proxy.	
Exclusions	No known exclusions	

Data Sources	Activity data was sourced from utility bills and the onsite metre readings summary provided by
	Wickes.
	Emissions factors for location-based data originated from the Greenhouse Gas Reporting:
	Conversion Factors 2023 from the UK Government's Department for Energy Security and Net
	Zero.
	The market-based emissions factors were sourced from the Association of Issuing Bodies
	2022 for the first quarter of 2023. As Wickes procured renewable energy from a supplier from
	April - December 2023, the market based emissions factor was only applied to the
	consumption data from January - March 2023. The supplier specific emissions factor (i.e. 0
	gCO ₂ e / kWh) was applied to the remaining period of the reporting year.

Scope 3 (indirect)

Emissions that are the result of activities from assets not owned or controlled by Wickes, but that Wickes indirectly impacts in its value chain

Category 1: Pu	rchased Goods and Services
Calculation Boundary	This category includes all upstream (i.e., cradle-to-gate) emissions from the production of products purchased or acquired by the reporting company in the reporting year. Products include both goods (tangible products) and services (intangible products).
Methodology	Average-data method and spend-based method
Calculation	Core goods (Goods for Resale): the amount of each product purchased (in total weight or total units) was multiplied by an industry average, activity-based emissions factor to determine the upstream tCO ₂ e generated. Non-core goods and services (Goods not for Resale): the amount of each goods and services purchased (in £) was multiplied by an industry average, spend-based emissions factor to determine the upstream tCO ₂ e generated. The amount of water consumed (in m³) was
	multiplied by a UK-based water emission factor.
Assumptions	For core goods that had missing weights, an average weight per unit based on that goods product category was applied. For core goods that were missing information on the material or type of the product, the most common material or product type, based on the goods product category, was applied.
	For all non-core goods and services where expenditure was less than £100,000, an average emissions factor based on the industry average, spend-based emissions factors was used. This ensured that all areas of expenditure were covered in emissions calculations. This approach was applied to 9% of total non core-goods and services.
	Water consumption from the 2022 reporting year was used as a proxy for the 2023 reporting year as the consumption data for 2023 returned a negative value (in m³) when summed across all sites.
Exclusions	Core goods with negative total unit values were not included in the data set for 2023 as they did not represent actual purchases. Services supplied by the installer network were not included in the data set for 2023 as the goods they are using and the waste being produced is already accounted for within the footprint.

Data Sources	Activity data:
	Core Goods data was sourced from Wickes' Goods for Resale (GFR) data lake, and weight data
	from Product Information Management System (PIM).
	Non-Core Goods data was sourced from Wickes' Goods not for Resale (GNFR) record.
	Emissions factors for upstream production of core goods were sourced from Ecoinvent v3.10
	(2023), Greenhouse Gas Reporting: Conversion Factors 2023 from the UK Government's
	Department for Energy Security and Net Zero, Agribalyse 3.1.1 (2023), and South Pole derived
	emissions factors from these stated databases.
	Emissions factors for non-core goods and services (excluding purchased water) were sourced
	from Comprehensive Environmental Data Archive (CEDA) 6 Global; the currency, inflation and
	purchasing power have been adjusted to 2023 for the emissions factors derived from CEDA.
	The emission factor for water was sourced from Greenhouse Gas Reporting: Conversion
	Factors 2023 from the UK Government's Department for Energy Security and Net Zero.

Category 2: Capital goods	
Calculation Boundary	This category includes all upstream (i.e., cradle-to-gate) emissions from the production of capital goods purchased or acquired by the reporting company in the reporting year.
Doundary	For 2023, capital goods have been treated as non-core goods in Category 1: Purchased Goods and Services. This is because the source for capital goods and non-core goods provided for the calculation was the same. The capitalisation process of non-core goods is completed by
	the Finance team, and this process will be used in future GHG accounting exercises.
Methodology	For 2023, we have included emissions from Scope 3 Category 2 Capital Goods with Category 1 Purchased Goods and Services as we have identified opportunities to align with the capitalisation process of purchased goods and services. We will incorporate this methodology change into
	our 2021 rebaselining exercise that we will carry out in 2024, when we will also recalculate 2022 and 2023 in line with the improvements.

Category 3: Fue	Category 3: Fuel and energy related activities	
Calculation Boundary	This category includes emissions related to the production of fuels and energy purchased and consumed by the reporting company in the reporting year that are not included in scope 1 or	
	scope 2.	
Methodology	Average-data method	
Calculation	The amount of energy used for each Scope 1 and 2 emissions sources applied the same datasets used in Scope 1 and 2	
	The consumption data was multiplied by an appropriate well-to-tank and/or transmission and distribution (electricity only) emissions factor to determine the tCO ₂ e generated.	
Assumptions	No assumptions were used to calculate the well-to-tank and transmission and distribution loss emissions energy inputs used in Wickes' operations.	
Exclusions	No known exclusions	
Data Sources	Activity data was sourced from energy and fuel consumption records that are used for Scope 1 and 2 accounting. Emissions factors for well-to-tank and transmissions and distribution loss emissions were sourced from the Greenhouse Gas Reporting: Conversion Factors 2023 from the UK Government's Department for Energy Security and Net Zero.	

Category 4: Upstream transportation and distribution	
Calculation	Transportation and distribution of products purchased in the reporting year, between a
Boundary	company's tier 1 suppliers and its own operations in vehicles not owned or operated by the reporting company (including multimodal shipping where multiple carriers are involved in the delivery of a product, but excluding fuel and energy products and third-party transportation and distribution services purchased by the reporting company in the reporting year (either directly or through an intermediary), including inbound logistics, outbound logistics (e.g., of sold products), and third-party transportation and distribution between a company's own facilities.)
Exclusions	In 2023 it was found that data sources used previously to calculate Category 4 Upstream Transportation and Distribution did not represent the transportation and distribution activities of the Wickes supply chain. As such, we are omitting this from our reporting in the current year to avoid stating grossly inaccurate assumptions. We will revisit the methodology when we rebaseline and recalculate the GHG footprint in 2024.

Category 5: Waste generated in operations	
Calculation	Category 5 includes emissions from third-party disposal and treatment of waste generated in
Boundary	the reporting company's owned or controlled operations in the reporting year. This category
	includes emissions from disposal of both solid waste and wastewater.
Methodology	Waste-type specific method
Calculation	The total weight (m³ for water) of each waste type for each disposal method was multiplied by
	an emissions factor to determine the amount of tCO ₂ e generated.
Assumptions	Water consumption from the 2022 reporting year was used as a proxy for the 2023 reporting
	year as the consumption data for 2023 returned a negative value (in m³) when summed across
	all sites.
	Mixed "Commercial and Industrial" was assumed when waste type was unavailable.
	Partner data from the 2022 reporting year was used as a proxy for the split of waste to landfill
	and recycling when 2023 data was unavailable.
	Ceramics, rubble, mixed and general were assumed to be average construction waste.
	Cement was assumed to be concrete waste.
	Canteen waste assumed to be food waste.
	'Flo tubes' were assumed to be glass waste.
Exclusions	Waste disposal of rubble from stores was excluded from the calculation.
Data Sources	Activity data was sourced from Wickes' partners monthly and annual reports on
	the total weight of each waste type as well as the corresponding disposal method.
	Emissions factors for the landfilling, incineration and recycling of waste from Wickes'
	operations were sourced from the Greenhouse Gas Reporting: Conversion Factors 2023 from
	the UK Government's Department for Energy Security and Net Zero.

Category 6: Business travel	
Calculation	This category includes emissions from the accommodation and transportation of employees
Boundary	for business related activities in vehicles owned or operated by third parties, such as aircraft,
	trains, buses, and passenger cars.
Methodology	Average-data, distance-based and spend-based method
Calculation	For accommodation, an average emissions factor was applied on a per-night basis for hotel stays based on the star-rating of the hotel used and the country where the hotel is located.

	For air and rail travel, distances were calculated between airports and train stations with an emissions factor applied based on the mode of the class of transportation and method of
	transportation.
	Where data was calculated from business travel related employee expenses, a spend-based
	method was used to determine the amount of tCO₂e generated.
Assumptions	For all flights taken, where the class of travel was not provided, it was assumed the ticket
	purchased was a business class ticket.
Exclusions	No known exclusions
Data Sources	Activity data was sourced from Wickes' internal travel reimbursement record as well as
	third-party booking records.
	Emissions factors for hotel stays were sourced from Cornell Hotel Sustainability
	Benchmarking Index 2023. For professional services these were sourced from
	Comprehensive Environmental Data Archive (CEDA) 6 Global. For travel by employee owned
	car travel, flights and rail these were sourced from the Greenhouse Gas Reporting: Conversion
	Factors 2023 from the UK Government's Department for Energy Security and Net Zero.

Category 7: Em	ployee commuting
Calculation Boundary	This category includes emissions from the transportation of employees between their homes and their worksites. Emissions from employee commuting may arise from: automobile travel, bus travel, rail travel, air travel, other modes of transportation (e.g., subway, bicycling, walking), and companies may include emissions from teleworking (i.e., employees working remotely) in this category.
Methodology	Distance-based method and average-data method
Calculation	The average commuting distance travelled in the UK, as published by the department for transport here was multiplied by the national commuting patterns (breakdown of transportation method) and then multiplied by the respective emissions factors (per kilometre travelled).
	The breakdown of Wickes employees by casual, part-time and full-time and business unit was used to determine which employees can and cannot work from home. Using this number of employees, it was multiplied by the number of working days per year where Wickes employees can work from home. From this total, all holiday days in the UK were deducted. With this figure, it was then multiplied by the emissions factor for an average day working from home in the UK.
Assumptions	No new employee commuting survey was completed by Wickes in 2023, and therefore it was assumed that Wickes employees follow the commuting trends calculated by the Office for National Statistics. In addition, it is also assumed that Wickes employees who work from the office do so once per working week.
Exclusions	No known exclusions
Data Sources	Activity data was retrieved from Wickes on the headcount, employee split (between full-time, part-time and casual), and company work from home policies. Employee numbers for stores and distribution centres used as recorded on 31 December 2023. Emission factors for respective transportation methods in employee commuting were sourced from the Greenhouse Gas Reporting: Conversion Factors 2023 from the UK Government's Department for Energy Security and Net Zero. For teleworking, South Pole's own calculations based on International Energy Agency, Anthesis and Department for Energy Security and Net Zero 2023 were used.

Category 9: Downstream transportation and distribution	
Calculation	This category includes emissions that occur in the reporting year from transportation and
Boundary	distribution of sold products in vehicles and facilities not owned or controlled by the
	reporting company.
Methodology	Fuel-based method and distance-based method
Calculation	For fuel-based calculations, the amount of fuel consumed by each logistics suppliers' vehicle
	was multiplied by its respective fuel emissions factor to determine the amount of tCO ₂ e
	generated.
	For distance-based calculations, the amount travelled by each logistics suppliers' vehicle was
	multiplied by its respective fuel emissions factor to determine the amount of tCO ₂ e
	generated.
Assumptions	Where data was not available on the configuration or laden of the vehicle, average laden and
	average van size was assumed for all kilometres travelled.
Exclusions	No known exclusions
Data Sources	Activity data was sourced from the distance travelled record by companies completing
	deliveries for Wickes.
	Emissions factors from the freighting of deliveries by vehicles to Wickes' customers were
	sourced from the Greenhouse Gas Reporting: Conversion Factors 2023 from the Department
	for Energy Security and Net Zero were used.

Category 11: Use of sold products	
Calculation	This category includes emissions from the use of goods and services sold by the reporting
Boundary	company in the reporting year. A reporting company's scope 3 emissions from use of sold
	products include the scope 1 and scope 2 emissions of end users. End users include both
	consumers and business customers that use final products. Relevant upstream (i.e.,
	well-to-tank) emissions of end users have also been included.
Methodology	Direct use-phase emissions method - products that directly consume energy (fuels or
	electricity) during use and greenhouse gases and products that contain or form greenhouse
	gases that are emitted during use.
Calculation	The total units of each sold product that directly consumes energy and/ or forms greenhouse
	gases during use were summarised from Wickes' Goods for Resale (GFR) data lake.
	The total expected lifetime of each sold product and electricity and/or fuel consumption per
	use of the product was derived from the products' technical specifications and
	secondary/proxy data sources (including publicly available literature and datasets, content
	from Wickes' website, technical specification of a similar product, etc.).
	Products that form greenhouse gases during use had industry-average formation rates
	applied over their lifetime. The emissions from the use of sold products were calculated by
	multiplying the life cycle fuel/electricity and/or greenhouse gas emissions factor with total
	consumption/formation across the products lifetimes.
Assumptions	For all products purchased and used by Wickes' customers, the calculations in this category
	assume that all products follow the expected lifetime consumption/formation that were
	determined to reflect emissions from their use.
	As total units of each sold product were summarised from Wickes' Goods for Resale (GFR)
	data lake, it was assumed units purchased by Wickes in the 2023 reporting year were equal
	to units sold by Wickes in the 2023 reporting year.

Exclusions	Products with negative total unit values were not included in the data set for 2023 as they did
	not represent actual purchases.
Data Sources	Activity data was sourced from Wickes' Goods for Resale (GFR) data lake.
	Emissions factors were sourced from the Greenhouse Gas Reporting: Conversion Factors
	2023 from the UK Government's Department for Energy Security and Net Zero, except for the emissions factor for fertiliser, which was sourced from a South Pole derived emissions factor
	from Ecoinvent 3.10 (2023).
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Category 12: End of life treatment of sold products	
Calculation	Category 12 includes emissions from the waste disposal and treatment of products sold by
Boundary	the reporting company (in the reporting year) at the end of their life. This category includes
	the total expected end-of-life emissions from all products sold in the reporting year.
Methodology	Waste-type-specific method
Calculation	Products were summarised into waste types based on product composition and type. The waste being treated by each disposal method was apportioned using UK specific data from The World Bank's 'What A Waste Global Database', 2024 (31.4% incineration, 25.1% landfill and 43.5% recycling). The emissions from the end of life treatment of sold products was calculated by multiplying the total weight of each waste type by the proportion of waste being treated by each disposal method, and then multiplying the respective weights by waste-type and disposal method specific emissions factors (kgCO ₂ e/tonne). To calculate emissions from the end of life treatment of products that contain remaining greenhouse gases after lifetime-use, industry-average weights for products were multiplied by the greenhouse gas emission factor.
Assumptions	It is assumed waste-types are disposed of in the proportions derived from The World Bank database. As total units of each sold product were summarised from Wickes' Goods for Resale (GFR) data lake, it was assumed units purchased by Wickes in the 2023 reporting year were equal to units sold by Wickes in the 2023 reporting year.
Exclusions	Products with negative total unit values were not included in the data set for 2023 as they did not represent actual purchases.
Data Sources	Activity data was sourced from Wickes' Goods for Resale (GFR) data lake, and weight data from Product Information Management System (PIM). Emissions factors for the disposal of each waste type under each disposal method was sourced from the Greenhouse Gas Reporting: Conversion Factors 2023 from the UK Government's Department for Energy Security and Net Zero and Ecoinvent 3.10 (2023).

Category 13: Downstream leased assets	
Calculation	Category 13 includes emissions from the operation of assets that are owned by the reporting
Boundary	company and leased to other entities in the reporting year that are not already included in scope 1 or scope 2.
	For Wickes, this includes Distribution Centre property assets which are contracted to its logistics provider, and to other retailers subleasing property.
Methodology	Average-data method

Calculation	Total consumption from leased assets was calculated from Scope 1 and 2 consumption
	information as identified through facilities records and multiplied by the appropriate
	emissions factor to determine the amount of tCO₂e generated.
Assumptions	Please note for locations where there was erroneous data previous year's or averages were used to extrapolate.
	Electricity consumption for December 2023 for all stores was not available in the time period when the calculation was carried out, therefore consumption from December 2022 was used as a proxy.
	Natural gas usage for December 2023 for all stores was not provided, therefore consumption from December 2022 was used as a proxy.
Exclusions	No known exclusions
Data Sources	Activity data was sourced from utility bills, with onsite metre readings summary used to
	verify.
	Emissions factors originated from the Greenhouse Gas Reporting: Conversion Factors from
	the Department for Energy Security and Net Zero 2023 were used.

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