

An aerial photograph of a rural landscape. A tall, dark metal lattice communication tower stands prominently in the center. It has several white spherical antennas attached to its sides. In the background, there is a large, dark blue reservoir or dam. The surrounding terrain is a mix of green fields, some patches of forest, and rolling hills under a blue sky with white clouds.

2025
Greenhouse Gas
Accounting Methodology

Introduction & Standards

This document details the accounting methodology used to generate Arqiva's 2025 Greenhouse Gas (GHG) Inventory.

GHG accounting is carried out in accordance with the following standards developed by the World Resources Institute (WRI) & World Business Council for Sustainable Development (WBCSD):

- The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition).
- The Greenhouse Gas Protocol Scope 2 Guidance.
- The Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.

This methodology is also aligned with the Environmental Reporting Guidelines (Including Streamlined Energy and Carbon Reporting (SECR) Guidance), produced by the government of the United Kingdom.

GHG emissions are reported in tonnes of carbon dioxide equivalent (tCO₂e), the universal unit of measurement used to indicate the global warming potential (GWP) of each of the six greenhouse gases, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different greenhouse gases against a common basis.

Principles

To ensure the accuracy of Arqiva's GHG inventory, the organisation applies the Greenhouse Gas Protocol's GHG accounting and reporting principles, consisting of:

- Relevance
- Completeness
- Consistency
- Transparency
- Accuracy

Business Goals

The design and development of Arqiva's GHG inventory is underpinned by goals, including:

- Managing GHG risks and identifying reduction opportunities, e.g. to meet the requirements of the SBTi net zero target framework.
- Public reporting and participation in voluntary GHG programs.
- Participating in mandatory reporting programs.
- Recognition for early voluntary action.

Boundaries

Arqiva applies the operational control approach to GHG accounting, covering 100% of GHG emissions over which the organisation has operational control.

The organisational boundary encompasses Arqiva Group Ltd, its subsidiaries, and all activities over which these entities hold responsibility in the United Kingdom and France.

Emissions reported in the GHG inventory include:

- Scope 1
- Scope 2
- Scope 3
- Outside of scopes

The reporting period reflects Arqiva's 2025 financial year covering 1 July 2024 to 30 June 2025.

Identifying and calculating GHG emissions

Arqiva prioritises the collection of primary data (e.g. utility invoices and financial transactions) for activities that produce GHG emissions. If primary data is not available, secondary data (e.g. from life cycle databases) is used to calculate GHG emissions.

Selected scope 3 categories are excluded because they are not applicable to Arqiva's operations or are deemed immaterial to the GHG inventory.

An environmentally extended input-output (EEIO) model which utilises industry average data is used to calculate GHG emissions from purchased goods and services (3.1) and capital goods (3.2)

In future, Arqiva plans to reduce reliance on industry average data (secondary data) by increasing the quantity and quality of primary data collected, e.g. by obtaining supplier-specific data relating to products and services.

Emissions factors used to calculate GHG emissions are provided by several sources, including:

- UK Government Greenhouse gas reporting: conversion factors 2025, produced by the Department for Energy Security and Net Zero. (DESNZ)
- Comprehensive Environmental Data Archive (CEDA)
- European Environment Agency (EEA).

Base year

Arqiva has selected the financial year 2023 as its base year, which also serves as the reference point for its science-based targets - now validated by the Science Based Targets initiative (SBTi).

The organisation has defined significance thresholds requiring base year recalculation when any of the following events lead to a change of 5% or more in the total GHG emissions inventory:

- Structural changes to the organisation, such as mergers or acquisitions.
- Outsourcing or insourcing of activities.
- Significant changes in company activities, products, or services.
- Material changes to GHG accounting methodologies.
- Identification of significant errors that have resulted in material distortion of data reported.

Targets

Arqiva is committed to identifying opportunities to reduce GHGs and has set science-based targets aligned to the goals of the Paris Agreement, which aims to limit global warming to 1.5°C above pre-industrial levels.

GHG reduction targets validated by the Science Based Target initiative (SBTi) include:

- **Near-Term Targets:** Arqiva Group Limited commits to reduce absolute scope 1 and 2 GHG emissions 90% by FY2031 from a FY2023 base year. Arqiva Group Limited also commits to reduce absolute scope 3 GHG emissions 42% within the same timeframe*.
- **Long-Term Targets:** Arqiva Group Limited commits to maintain a minimum 90% absolute scope 1 and 2 GHG emissions reductions from FY2031 through FY2040 from a FY2023 base year. Arqiva Group Limited also commits to reduce absolute scope 3 GHG emissions by 90% within the same timeframe*.
- **Overall Net-Zero Target:** Arqiva Group Limited commits to reach net-zero greenhouse gas emissions across the value chain by 2040.

* The target boundary includes land-related emissions and removals from bioenergy feedstocks.

Restatement

The latest available data is used to calculate Arqiva's GHG inventory. In some instances, due to latency in the receipt of invoices, some data may be received after the completion of GHG verification.

In the interest of completeness, Arqiva routinely recalculates GHG inventories following the receipt of all data. In previous years, this has shown additional data received after verification to be insignificant, i.e. well below thresholds that would constitute a material discrepancy.

Verification

Limited assurance over GHG emissions reported in Arqiva's 2025 GHG inventory has been carried out by Lloyd's Register Quality Assurance (LRQA).

Verification is completed to ISO 14064-3:2019: Greenhouse gases - Part 3: Specification with guidance for the verification and validation of greenhouse gas statements.

LRQA's assurance statement can be found here – www.arkiva.com/emissionsreport2025

Scope 1

Direct greenhouse gas (GHG) emissions from sources owned or controlled by Arqiva.

This category includes direct GHG emissions from stationary combustion (fuels used at facilities), mobile combustion (fuels used in the operation of company-controlled vehicles) and fugitive emissions (leaks of gases which have global warming potential (GWP)).

Stationary combustion

Direct GHG emissions from activities involving stationary combustion relate to fuels used in the heating of facilities and electricity self-generation.

Data is collected on the procurement of fuels and used to establish the consumption of gas oil, biodiesel HVO, natural gas and propane. GHG emissions are calculated using the UK government conversion factors (Fuels, Biofuels)

Biogenic CO₂ emissions from stationary combustion are recorded as 'outside of scopes' and are calculated using the UK Government conversion factors (Outside of scopes).

Mobile combustion (company vehicles)

Direct GHG emissions from mobile combustion are generated by vehicles under Arqiva's operational control. Data collected is mostly distance-based with a small proportion being spend-based.

Distance-based data is used to calculate GHG emissions using the UK government conversion factors (Passenger vehicles). Spend-based data is used to estimate fuel consumption based on average fuel prices. GHG emissions are then calculated using the UK government conversion factors (Fuels)

GHG emissions associated with business travel in vehicles not controlled by Arqiva are excluded from scope 1 and are reported in the category for business travel (3.6).

GHG emissions associated with electricity consumption in battery electric vehicles (BEVs) and plug-in-hybrid electric vehicles (PHEVs) are reported under scope 2.

Fugitive Emissions

Fugitive emissions include gases with global warming potential (GWP) leaked during the operation of heating, ventilation and air conditioning (HVAC) systems, as well as discharges of gas from fire suppression systems.

Arqiva adopts a mass-balance approach to accounting for leaks from HVAC equipment, assuming a worst-case scenario, i.e. that refrigerant top-ups during the repair and maintenance of equipment are equivalent to 100% of refrigerant leaked during operation of the equipment.

The quantities of gas discharged during the activation of fire suppression systems is also monitored.

To ensure the completeness of data, Arqiva keeps records of equipment commissioned or decommissioned, and the quantities of gas added or removed during these activities.

Maintenance of systems containing GWP gases is carried out by licensed contractors. Gases removed during maintenance activities are either replaced or disposed of in compliance with local regulations at licensed treatment facilities.

Quantities of gases leaked are used to calculate GHG emissions using the UK government conversion factors (Refrigerant & other).

Scope 2

Indirect greenhouse gas (GHG) emissions generated from purchased energy consumed by Arqiva.

Arqiva's energy purchases relate to electricity only, as the organisation does not import steam or heat, and it does not utilise district heating and cooling systems.

Purchased Electricity

Electricity purchased directly from suppliers by Arqiva is allocated as scope 2 emissions, reflecting the level of control the organisation has over the procurement and use of this energy.

Electricity consumption data is collected from invoices issued to Arqiva and is predominantly based on meter data.

Electricity consumption at sites not controlled by Arqiva is accounted for in the category for upstream leased assets (3.9).

Arqiva reports both location-based and market-based scope 2 emissions in accordance with the Greenhouse Gas Protocol Scope 2 Guidance.

Location-based emissions

The location-based method reflects the average emissions intensity from the grid on which electricity consumption occurs.

GHG emissions from electricity consumption in the United Kingdom are calculated using the UK government conversion factors (UK electricity).

GHG emissions from electricity consumption in France are calculated using the conversion factors provided by the European Environment Agency (EEA).

Market-based emissions

The market-based method reflects contractual instruments and takes account of the emissions from suppliers and products Arqiva has chosen.

GHG emissions are calculated using the most recently available supplier-specific emissions factors produced by suppliers.

If supplier-specific emissions factors are not available, GHG emissions are calculated using either the UK government conversion factors or those provided by the European Environment Agency.

Renewable electricity

Renewable electricity contracts cover 98.8% of Arqiva's scope 2 electricity consumption and can be certified in compliance with the REGO (renewable energy guarantees of origin) scheme.

Company vehicles

Electricity consumed by company-controlled battery electric vehicles (BEVs) and plug-in-hybrid vehicles (PHEVs) is accounted for in scope 2. Distance-based data is used to calculate GHG emissions using the UK government conversion factors (UK electricity for EVs).

Self-generated electricity

Electricity generated by solar panel installations located at Arqiva facilities is retained for use on site and is not exported. This activity is not included in the GHG inventory.

Estimations

Arqiva estimates that less than 0.2% of total scope 2 electricity consumption is unmetered and for which estimates are made using average data.

If electricity consumption data is unavailable at the time of reporting GHG emissions, Arqiva has estimated consumption based on historical averages, to reduce the risk of a material discrepancy occurring.

It is Arqiva's policy to recalculate scope 2 emissions after any latent data is received (typically no more than 6 months from the end of the reporting period) to confirm a material discrepancy has not occurred.

Scope 3

Indirect greenhouse gas (GHG) emissions that occur in Arqiva's value chains both upstream and downstream that are not included in Scope 1 or Scope 2.

Purchased goods and services (3.1) & Capital goods (3.2)

Purchased goods and services include all upstream GHG emissions from the production of products purchased or acquired by Arqiva in the reporting year. Products include both goods (tangible products) and services (intangible products).

Capital goods include all upstream GHG emissions from the production of capital goods purchased or acquired by Arqiva in the reporting year.

Arqiva collects spend-based data to determine GHG emissions for the categories of purchased goods and services and capital goods. Expenditure is assigned a procurement category and the most appropriate emissions factor allocated based on industry type.

GHG emissions are calculated using the Comprehensive Environmental Data Archive (CEDA), which is an environmental multi-region input-output (MRIO) model offering 60,000 emissions factors, covering 400 industrial sectors and 148 countries.

GHG emissions from the supply of water used in Arqiva's operations is included in purchased goods and services and are calculated using the UK government conversion factors (Water supply).

In future, the company plans to reduce reliance on industry average data by collecting supplier-specific GHG emissions data and by completion of product life cycle assessments.

Fuel and energy-related activities (3.3)

This category includes GHG emissions relating to the production of fuels and energy purchased and consumed by Arqiva in the reporting year that are not included in scope 1 or scope 2.

These can be broken down by:

Upstream GHG emissions of purchased fuels:

Upstream GHG emissions from fuels used in stationary combustion are calculated using the UK government conversion factors (WTT - fuels, WTT - bioenergy).

Upstream GHG emissions from fuels used in mobile combustion are calculated using the UK government conversion factors (WTT- pass vehicles & travel - land).

Upstream GHG emissions of purchased electricity:

Upstream GHG emissions from purchased electricity used by facilities are calculated using the UK government conversion factors (WTT – UK electricity)

GHG emissions from electricity used for vehicle charging are calculated using UK government conversion factors (WTT- pass vehicles & travel- land)

Transmission and distribution (T&D) losses:

Calculated using the UK government conversion factors (Transmission and distribution)

Upstream transportation and distribution (3.4)

GHG emissions from this activity are included in the category for purchased goods and services (3.1). Arqiva plans to disaggregate and report these emissions separately in future.

Waste generated in operations (3.5)

Data collected on the type of materials, weights and disposal methods is used to calculate GHG emissions from waste generated in operations using the UK government conversion factors (Waste).

GHG emissions from the treatment of water used in Arqiva's operations is included in this category and is calculated using the UK government conversion factors (Water treatment).

Arqiva aims to continually improve processes used to account for waste, extending data collection to scheduled, non-scheduled waste collections, and waste generated during projects.

Business travel (3.6)

Activity data relating to business travel is collected through Arqiva's travel booking system and personal expense system. Business travel includes hotel lodgings and transport by air, sea and land in vehicles not controlled by Arqiva.

Distance-based data is used to calculate GHG emissions using the UK government conversion factors (business travel – air, land, sea).

A small proportion of data is spend-based. GHG emissions using this data have been calculated using average data from EEIO or estimations based on average fuel costs/distance.

GHG emissions from hotel lodgings are calculated using the relevant UK government conversion factors based on location of the hotel (Hotel stays).

Arqiva has chosen to include upstream GHG emissions (e.g. well-to-tank) associated with business travel in this category. These have been calculated using the UK government conversion factors (well-to-tank – air, land sea, UK electricity T&D for EVs)

Employee commuting (3.7)

An employee survey is used to collect data on commuting distances, modes of transport, and homeworking activities.

A representative sample is extrapolated to account for employees that did not respond to the survey. GHG emissions are calculated using the UK government conversion factors (passenger vehicles, business travel – air, sea, land)

Arqiva has chosen to include GHG emissions associated with homeworking which are calculated using the UK government conversion factors (Homeworking)

Employees commuting in a company-controlled vehicle were excluded.

Upstream leased assets (3.8)

GHG emissions associated with upstream assets are from electricity consumption at sites where Arqiva is not responsible for electricity purchases.

Meter data is used to establish electricity consumption if it is available. Where it is not, an estimation is made based on factors such as historical data, the scale of operations, and the type of activity taking place at site.

GHG emissions from electricity consumption occurring at leased sites are calculated using the UK government conversion factors (UK electricity).

Downstream transportation and distribution (3.9)

GHG emissions from this activity are included in the category for purchased goods and services (scope 3.1). Arqiva plans to disaggregate and report these emissions separately in future.

Processing of sold products (3.10)

This activity is not applicable to Arqiva.

Use of sold products (3.11)

GHG emissions from use of sold products are associated with the energy consumption (during the operational phase) of products sold during the reporting year.

Arqiva estimates the total electricity consumption of all products sold during the reporting period across the complete lifespan of the products, in accordance with Greenhouse Gas Protocol guidance. Anticipated changes in grid intensity over the products lifespan are not accounted for in electricity consumption estimates.

GHG emissions are calculated using the UK government conversions factors (UK electricity).

End-of-life treatment of sold products (3.12)

Data collected on the type of materials, weights and likely disposal methods is used to calculate GHG emissions from end-of-life treatment of sold products using the UK government conversion factors (Waste).

Downstream leased assets (3.13)

Arqiva has chosen to account for GHG emissions associated with electricity consumption by downstream leased assets within scope 2. The organisation considers these emissions to be within its operational control because of the level of control it has over the procurement and use of this energy.

Franchises (3.14)

This activity is not applicable to Arqiva.

Investments (3.15)

This activity is not applicable to Arqiva.

Outside of scopes

Biogenic CO₂ emissions include direct biogenic emissions from consumption of biodiesel HVO. GHG emissions are calculated using the UK Government conversion factors (Outside of scopes).