

Carbon Reduction Plan

ABER

Carbon reduction action plan

Statement and scope

Here at ABER Instruments, we are committed to taking meaningful science aligned action, to both reduce our carbon footprint, and operate responsibility within the growing global transition to a low carbon economy. Aber has several short term goals, all helping to lay the foundations for a longer-term journey towards net zero, in line with the Science Based Targets Initiative (SBTi).

Stewardship of the environment is one of our core Guiding Principles, through which we promise 'to promote good environmental practice and minimise the negative effects our business may have on the environment.' This commitment is embedded in both our environmental management system, certified to ISO 14001, and the ongoing work of our Environmental team.

We achieved net zero for virtually all Scope 1 and 2 emissions prior to 2025, through the use of renewable energy, Green tariffs, PV solar power generation, and energy efficient building systems. The final step to become fully Net Zero for Scope 1 & 2, was completed in 2025 by moving to a green tariff for gas used in the US office. ABER Instruments is now focused on advancing Scope 3 emission management - wanting to improve the accuracy and transparency of data in line with SBTi and the GHG protocol, and implementing targeted reduction initiatives.

Rather than a sole focus on longer term net zero targets, short-term ambitions have been prioritised and include:

- Maintaining Zero Scope 1 and 2 emissions
- Enhancing the accuracy and verification of Scope 3 emission calculations
- Implementing effective reduction and offsetting strategies for Scope 3
- emissions to achieve carbon neutrality across the full business footprint.
- Carbon Reduction Action Plan Statement and Scope

This Carbon Reduction Plan covers all operations within ABER Instruments, including our Headquarters and manufacturing site in Aberystwyth, and the U.S. office in Powhatan.

Emission sources are categorized in accordance with the Greenhouse Gas Protocol Corporate Value Chain Accounting and Reporting Standard and include the following:

Scope 1 – Direct Emissions

- No direct emissions from manufacturing processes or company-owned vehicles

Scope 2 – Indirect Energy Emissions

- All electricity and gas used at the Aberystwyth site are from renewable sources.
- Electricity used by the U.S. office is from renewable sources. Gas was moved to a green tariff at the end of 2025.

Scope 3 – Other Indirect Emissions

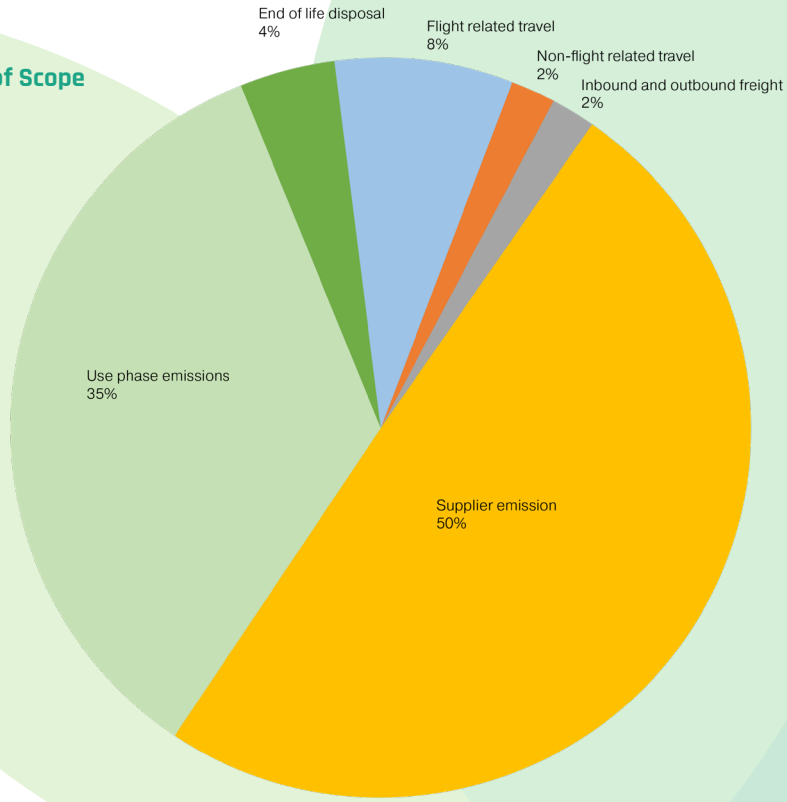
- Business travel and commuting.
- Waste
- Purchased goods and services.
- Inbound logistics.
- Outbound logistics.
- Lifetime use of sold products.
- End-of-life disposal

Baseline scope 1, 2 & 3 emissions 2024

ABER Instruments has identified all sources of greenhouse gas emissions in accordance with the Greenhouse Gas Protocol: Corporate Value Chain Accounting and Reporting Stanadard. Emissions are categorised into Scope 1, Scope 2 and Scope 3, representing direct, indirect and value chain-related emissions.

Baseline year 2024	
Emissions	Total (tCO2e)
Scope 1	0
Scope 2	3
Scope 3 including emissions due to: • Commuting and business travel • Waste • Purchased goods and services • Inbound logistics • Outbound logistics • Lifetime use of Products and services • End-of-life disposal of non-recycled parts	996
Total Emissions	999

Breakdown of Scope 3 emissions



Note: Due to a due a high level of waste recycling (>90%), our waste stream is carbon negative (-1 tCO2e) , so is not shown on the Scope 3 emissions breakdown

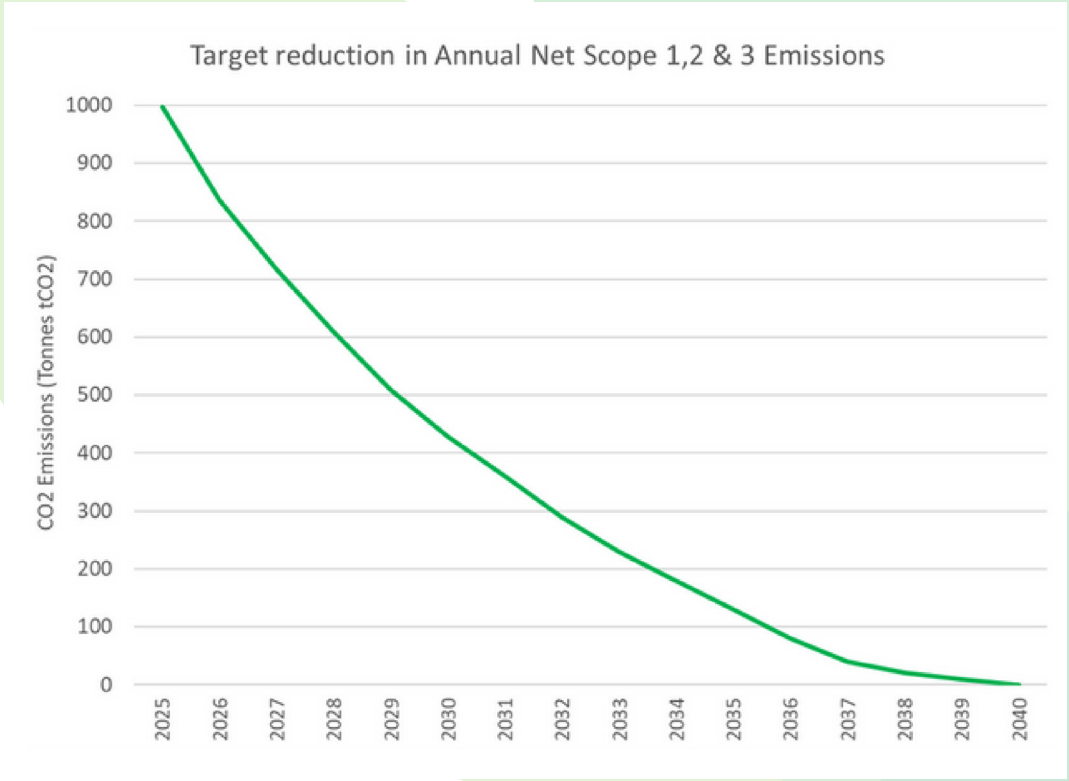
Emissions reduction targets

ABER Instruments is committed to achieving measurable and verifiable reductions in Greenhouse Gas emissions across operations and value chain activities. 2024 will be the baseline year, with calculated emissions of 999 tCO2e, this Carbon Reduction Plan will establish short, medium and long term targets to continuously Improve and align with recognised frameworks such as Science Based Targets initiative (SBTi) and the Greenhouse Gase (GHG) Protocol.

ABER Instruments commitment for Net Zero emissions

ABER Instruments has pledged to meet the UN Climate change race to zero, by signing up to the SME Climate commitment.
We commit to:

- Halve our greenhouse gas emissions before 2030
- Achieve net zero emissions by 2040
- Disclose our progress on yearly basis



Actions towards becoming Carbon Neutral and Net-Zero

2025 and before

- Signed up to UN Climate change Race to Zero
- Scope 1 & 2 Net Zero for UK Operations
- Scope 3 waste stream carbon negative due to high proportion of waste recycling >90%
- Offset for Business travel and Commuting Scope 3 Emissions
- Completion of PV installation on all ABER Instruments buildings in Aberystwyth
- Implementation of energy saving measures across all ABER Instruments buildings - LED lighting, Insulation of buildings, automatic lighting controls, programmable heating controls
- Installed 2 EV charging points

2026

- Scope 1 & 2 fully Net Zero, with all Gas and Electric to on green tariffs
- ABER Instruments to become Carbon Neutral by offsetting 100% of 2025 Scope 1, 2 & 3 emissions
- Improved integrity of scope 3 emissions reporting
- Quarterly internal reporting of overall emissions
- Annual external reporting of carbon emissions in our annual ESG report.
- Cross-company review of potential actions to reduce or eliminate emissions.
- Development of associated action plan to meet the committed 50% reduction of emissions by 2030
- Engagement with critical suppliers on potential actions to reduce the emissions footprint of our purchased products and services
- Installation of further EV Charging points

2027

- ABER Instruments to continue to offset 100% of remaining previous
- year emissions
- Scope 3 emissions calculated in line with SBTi guidelines
- Independent verification of calculated Scope 3 emissions
- Promotion of employee electric vehicle ownership, with electric vehicle salary sacrifice scheme in place
- All logistics transportation to use green tariffs
- Annual carbon reduction awareness training in place for all employees

2030

- Aber Instrument to have reduced our Scope 3 carbon emissions by 50% in line with our UN Climate change race to zero commitment

2040

- ABER Instruments to have achieved Net Zero emissions

Data collection

Emissions data for 2024 has been compiled from a range of internal systems, supplier information and external databases. Calculations are based on activity data combined with appropriate emissions factors sourced from:

- The UK Government GHG Conversion Factors for Company Reporting.
- Google Gemini
- General PO Sources/Destinations

Where direct measurement was not feasible, estimates were made using averaged or proxy data derived from secondary sources, consistent with GHG Protocol.

Scope 1 and 2 emissions

Scope 1: Activity data confirmed through operational records. As Aber doesn't operate any combustion equipment or company vehicles, Scope 1 emissions were verified as zero.

Scope 2: In the U.K., all energy comes from Green tariffs and on site PV solar generation, resulting in zero Scope 2 emissions. In the US Office, electricity is on a Green tariff, only their Gas consumption is counted in Scope 2 emissions.

Scope 3 Emissions

Categories of Scope 3 emissions include:

Business Travel and Employee Commuting

- Data compiled for commuting and business travel, including flights, cars, and
- public transport
- Calculated using emissions factor by mode of transport x mileage

Waste

- Calculated as annual mass of disposed weight x emissions factor by category

Purchased Goods and Services

- Kg CO2 defined by product / service purchased, based on Google Gemini search of Kg CO2 per £ spent, then used that to calculate the Kg CO2 for the top 80% of spend (65 suppliers).
- Then calculated an average Kg CO2 for those suppliers and used that average to calculate the Kg CO2 emissions for the remaining 20% of spend

Inbound and Outbound Logistics

- Kg CO2 / 1Kg package defined as categories by general PO Source / Destination.
- Values determined by Google Gemini search. Values in Kg CO2/Kg parcel
- Average package weight estimated for Inbound and Outbound deliveries
- Then calculated the emissions for all Incoming and outbound deliveries.

Use Phase

- Emissions due to electricity consumed while the equipment is active and on standby over its estimated useful life. Calculated as follows:
  - Total Lifetime Energy (kWh) per unit = Power (kW) * Hours/Year * Lifespan
  - (Years)
  - Use case Scope 3 emissions = Calculated Use Emissions (CO2) per unit *
- Number of systems sold in that calendar year

End-of-Life Disposal

- Disposal: Emissions from landfill or incineration of non-recycled parts.
- Total Scope 3 End of Life emissions = Average mass or system*Number of systems sold in calendar year 2024*Emission Factor for WEE