



**British
Antarctic Survey**

NATURAL ENVIRONMENT RESEARCH COUNCIL

Carbon Literacy
Project



From climate research to climate action: Carbon Literacy at the British Antarctic Survey

British Antarctic Survey (BAS) provides the UK's scientific presence in Antarctica. Its research uncovers how changing weather patterns in Antarctica impact all life on Earth.

The Challenge: a unique crossroads

BAS is on the frontline of climate change, witnessing melting glaciers, retreating sea ice and shifting ecosystems in real-time.

Yet delivering world-leading Antarctic science depends on carbon-intensive work, like long-distance travel, energy-intensive operations in extreme environments and complex logistics.

Despite deep scientific understanding, staff faced a core tension: *“We research climate change – but how do we square that with the carbon impact of what we do?”*

BAS needed a way to turn awareness into agency, and values into action.

The Solution: Carbon Literacy as a practical enabler

BAS adopted Carbon Literacy training as a core part of its Net Zero ambition, using it to bridge the gap between research and everyday decision-making.

Before: Climate awareness

After: Climate confidence

1

Bespoke Adaptation

Created specific courses for ship crews and Antarctic station teams, with pilot delivery on the RRS Sir David Attenborough in Antarctica (December 2022).

2

Credible Delivery

Internal trainers, from PhD students to senior scientists, delivered the courses, ensuring peer-to-peer relevance.

3

Flexible delivery

Flexible delivery models (two half-days in person or one day online) widened access.

4

Gamified Learning

Used 'Carbon Literacy Snakes & Ladders' to help staff identify carbon 'wins' (savings) and 'losses' (unnecessary emissions) specific to their unique roles.

Actions: Turning Pledges into Process



Carbon-Aware Research

A BAS geologist introduced **carbon accounting** into a major funding bid – the first time emissions have been formally factored into research planning.



Digital Operations

The Head of IT launched an initiative to cut **unnecessary AI use**, sharing guidance to reduce hidden energy costs in searches and data.



Engineering Shifts

Engineers now build **dedicated Net Zero Time** into departmental meetings to troubleshoot energy use.



IT Infrastructure

An IT trainee has created a **Net Zero intranet hub** and aims to introduce carbon awareness into daily communications – from email signatures to service desk responses.

The Impact: Outcomes from actions

BAS has moved beyond training individuals to embedding Carbon Literacy into how the organisation plans and operates – **in one of the hardest sectors to decarbonise.**

Measurable results



250+ certified

200 BAS staff and 55 partner agency colleagues



Silver Carbon Literate Organisation

Recognition of embedding Carbon Literacy into planning and operations

The Cultural Shift

→ From Awareness to Ownership

Staff shifted from feeling constrained by their work's carbon cost to feeling empowered to mitigate it

→ Redefining Best Practice

Carbon impact is no longer an afterthought; it is now a defining factor in scientific best practice

→ Systemic Influence

BAS has shared Carbon Literacy training resources with the UK Antarctic Heritage Trust and the Government of South Georgia, multiplying their impact across the sector

Maintaining Impact: Sustaining the momentum

From Silver to Gold – and from operational efficiency to influence

1

Continuous Integration: Carbon Literacy is now a standard part of new staff inductions, ensuring **every new colleague is equipped to act from Day 1.**

2

Maintaining Momentum: "**Net Zero Week**" serves as a recurring vehicle to refresh momentum and follow up on action pledges.

3

Growing Certification and Accreditation: Aiming for **80–100% staff certification** in the next couple of years, and working towards **Gold Carbon Literate Organisation** status.

4

External Leadership: Senior leaders now share the BAS journey with global business audiences, using their **unique position to influence high-impact sectors.**

Carbon Literacy has become more than training – it is now a **strategic enabler of change**, helping BAS live the values it researches every day.