

# Carbon Reduction Plan

Supplier Name: UK Centre for Ecology & Hydrology (UKCEH)

Publication date: 29th July 2022

## Commitment to achieving Net Zero

The UK Centre for Ecology & Hydrology (UKCEH) is an independent, not-for-profit research institute carrying out excellent environmental science with impact. UKCEH operates from four main sites, undertaking monitoring and research across the UK and at an international scale. UKCEH is committed to achieving Net Zero for greenhouse gas emissions resulting from directly controlled activities by 2040 as set out in our [Environmental Policy](#). We will further seek to reduce greenhouse gas emissions associated with the activities that we can influence, through collaborative working with our partners, suppliers, clients and other stakeholders.

This Carbon Reduction Plan focuses on emissions arising from UKCEH's operational, research and innovation activities. At the same time, our research and innovation strengthen the methodology of national and regional greenhouse gas emission inventories here in the UK and overseas, and enables the development and implementation of sustainable land management and renewable energy interventions across countryside, farmland and offshore. The UKCEH Research & Innovation Strategy: 2025 can be found [here](#).

## Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that have been produced in the past and form the reference point against which emissions reduction can be targeted and measured. UKCEH has operated an environmental management system certified to ISO 14001 since 2010 and achieved substantial reductions to resource use since then.

In December 2019 UKCEH was established as an independent not-for-profit research institute, with full control over purchasing and investment decisions from that date.

<b>Baseline Year: 2021</b>	
<b>Additional Details relating to the Baseline Emissions calculations.</b>	
Due to disruption and transformational changes to working practices from March 2020, through the pandemic, UKCEH's baseline will be established based on 2021 emissions.	
<b>Baseline year emissions:</b>	
<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
<b>Scope 1</b>	<b>849.89</b> - Direct emissions from buildings, fuel use and fleet vehicles
<b>Scope 2</b>	<b>471.81</b> - Emissions from purchased electricity

<b>Scope 3 (Included Sources)</b>	<b>669.04</b> <b>This figure includes the following categories:</b> 428.32 - Employee Commuting 87.97 - Upstream Transportation and Distribution 80.39 - Business Travel 66.68 - Electricity Transmission and Distribution 2.7 - Waste generated in operations 2.27 - Water supply and water treatment 0.71 - Downstream Transportation and Distribution <sup>1</sup>
<b>Total Emissions</b>	<b>1990.74</b>

## Current Emissions Reporting

Reporting Year: 2021	
EMISSIONS	TOTAL (tCO <sub>2</sub> e)
Scope 1	849.89
Scope 2	471.81
<b>Scope 3 (Included Sources)</b>	<b>669.04</b> <b>This figure includes the following categories:</b> 428.32 - Employee Commuting 87.97 - Upstream Transportation and Distribution 80.39 - Business Travel 66.68 - Electricity Transmission and Distribution 2.7 - Waste 2.27 - Water supply and disposal treatment 0.71 - Downstream Transportation and Distribution
<b>Total Emissions</b>	<b>1990.74</b>

## Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted the following carbon reduction targets.

*'Reduce UKCEH reliance on fossil fuels and achieve 'Net Zero' greenhouse gas emissions for directly controlled sources by 2040.'*

As part of this commitment we are currently working to develop a full net zero implementation plan which will identify science based interim targets for achievement towards this goal.

We project that carbon emissions will decrease over the next five years to 1571 tCO<sub>2</sub>e by 2026. This is a reduction of 21%.

<sup>1</sup> We are aware of additional circumstances when this activity occurs but do not yet have complete data to enable accurate calculation of associated emissions. It is known this will not be a substantial increase in activity from that reported so the baseline data will be re-calculated to include this emissions data and the report updated as part of the next CRP update scheduled for April 2023.

## Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed during the baseline year of 2021:

- Improvements to remote data capture for scientific research to reduce field site travel needs.
- On-going replacement of building lighting with LEDs /PIR lighting controls.
- Upgrades to IT infrastructure and individual worker equipment to enable improved remote working and reduced business travel needs.
- Increased segregation of waste streams for plastics recycling; reducing waste sent to incineration or landfill.
- High level decarbonisation survey of our main sites by UKRI to identify future carbon reduction projects.

From 2022 we plan to implement further measures to reduce reliance on fossil fuels including through:

- Upgrades to our site sub-metering and Building Management Systems to better identify energy reduction opportunities on our main sites
- Move to a REGO backed renewable electricity tariff for all UKCEH sites directly purchasing electricity from April 2022.
- Implementation of the Laboratory Efficiency Assessment Framework across the laboratories on our main sites.
- Installation of on-site renewable energy generation infrastructure on our main sites.
- Circulate sustainable business travel guidance to inform decision makers on travel need and low carbon alternatives.
- Installation of electric vehicle charging points at our Wallingford and Edinburgh sites to reduce commuting emissions.
- Move to increased use of electric and ULEV vehicles for business travel requirements, where appropriate to do so.
- Closer working with our key suppliers to identify opportunities to reduce carbon emissions associated with procurement decisions.
- Detailed feasibility studies of decarbonisation recommendations arising from high level report.

### Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans.

Greenhouse gas emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard<sup>2</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>3</sup>.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the

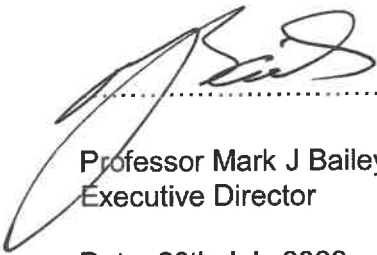
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<sup>2</sup><https://ghgprotocol.org/corporate-standard>

<sup>3</sup><https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard. The Welsh Public Sector Net Zero Reporting Guidance (Version 2.0)<sup>4</sup> has been utilised for calculating public transport and employee commuting emissions. The Defra “Table 13” indirect emissions from the Supply Chain<sup>5</sup> has been utilised for spend calculations of Upstream Transport and Distribution emissions. Well-to-Tank emissions have been included in calculations for Scope 1 and Scope 3 emissions where data is known.

This Carbon Reduction Plan has been reviewed and endorsed by the UKCEH Executive Board.

A handwritten signature in black ink, appearing to read 'Mark J Bailey', is positioned above a horizontal dotted line. The signature is fluid and cursive.

Professor Mark J Bailey FAAM FRSB  
Executive Director

Date: 29th July 2022

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<sup>4</sup> <https://gov.wales/public-sector-net-zero-reporting-guide>

<sup>5</sup> Available from: <https://www.gov.uk/government/statistics/uks-carbon-footprint>