

UK Centre for  
Ecology & Hydrology



ANNUAL  
REPORT &  
ACCOUNTS

2023



## NEW REPORT ON GLOBAL TIPPING POINTS

UKCEH scientists contributed to a major new report, funded by the Bezos Earth Fund, showing that the world is accelerating towards tipping points likely to trigger irreversible environmental changes.

## DEMONSTRATING INNOVATIVE TECHNOLOGY AT AI UK

UKCEH exhibited at AI UK 2023, an event organised by The Alan Turing Institute to showcase the latest innovations in AI. We demonstrated our capability in automated biodiversity monitoring.



## HEAD OF UKCEH WEST AFRICA OFFICE APPOINTED

Adelaide Asante joined us as the head of our new West Africa Office. She has a strong track record in science, technology policy and operations in Ghana.



## UKCEH WELCOMES NEW CHIEF EXECUTIVE

Dr Stuart Wainwright OBE, previously director of the Government Office for Science, took up the role of chief executive.



## GRID-TO-GRID MODEL SUPPORTS RESPONSE TO STORM BABET

In the run up to Storm Babet, our grid-to-grid hydrological model and PREDICTOR tool were used by the Scottish Environment Protection Agency to predict flood impacts and prepare their response.



## POET LAUREATE IN THE ARCTIC

Travelling by boat, Poet Laureate Simon Armitage joined UKCEH scientists investigating how nutrients in polar waters drive the global carbon cycle for a Radio 4 series '*Poet Laureate in the Arctic*'.



## EARTH OBSERVATION EXHIBIT AT COP28

We took part in an interactive Space4Climate exhibition at COP28 in Dubai, showcasing innovative uses of remote sensing to monitor and model the environment.



## PROFESSOR SIR CHRIS WHITTY VISITS UKCEH

Professor Sir Chris Whitty, England's chief medical officer, visited UKCEH to find out about human health impacts related to wastewater in freshwater rivers and lakes.

## PROMOTING SUSTAINABLE AGRICULTURE AT GROUNDSWELL

UKCEH scientists engaged farmers, agri tech companies and others with our sustainable agriculture science and solutions at the Groundswell Regenerative Agriculture festival.



## NEW PARTNERSHIP TO FUND CLIMATE AND BIODIVERSITY START-UPS AND SPIN-OUTS

UKCEH announced a new partnership with Greensphere Capital, a sustainability investor who are raising a £150 million fund, to support spin-out businesses from leading UK science institutes.



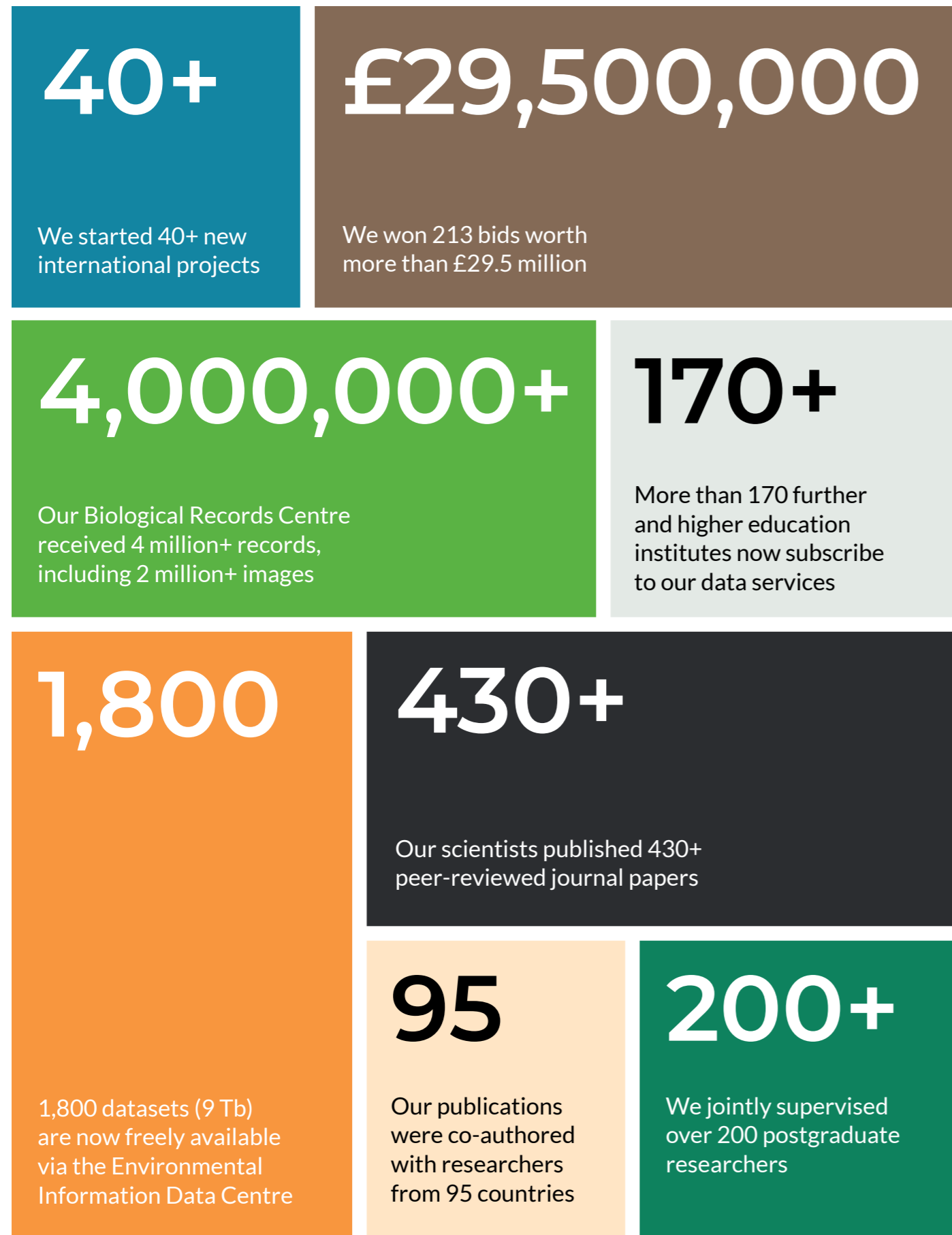
## REPORTING ON THE STATE OF NATURE

Dr Nick Isaac appeared on BBC Countryfile and talked to Tom Heap about how nature is faring, following the publication of the latest *State of Nature* report.



## FORTY YEARS OF THE NATIONAL RIVER FLOW ARCHIVE

We celebrated the fortieth anniversary of the National River Flow Archive. The data in the archive are drawn from 1,600 UK gauging stations and are used to assess climate change impacts and support water availability.



Introduction ..... 8

Strategic report

- Who we are and how we work ..... 10
- Science highlights ..... 14
- Achievements and performance ..... 18
- Governance ..... 30
- Our people ..... 40
- Our stakeholders ..... 46
- Environment ..... 50
- Risk management ..... 54
- Our finances ..... 56
- Our future plans ..... 60

Statement of trustees' responsibilities ..... 62

Independent auditor's report ..... 64

Financial statements ..... 68

Cover photo shows Karen Yeung at the Auchencorth Moss measurement supersite in southern Scotland

# 2023

I AM FILLED WITH IMMENSE PRIDE AT THE REMARKABLE EVOLUTION OF OUR INSTITUTE



**Dr Stuart Wainwright OBE**  
Chief Executive

I am honoured to take on the leadership of an organisation that is actively engaged in tackling some of humanity's most pressing challenges. Since taking on this role in June 2023, I have been profoundly impressed, not only by the breadth and excellence of our environmental science, but also its critical importance in addressing the unprecedented environmental, societal and economic issues we face.

UKCEH's role in safeguarding the land we use, the air we breathe, and the water we drink has never been more relevant. No single organisation or sector can tackle these challenges alone. Therefore, we are building the right partnerships, teams and

approaches to address these complex issues. We are reinforcing our foundational role in UK environmental science, fostering stronger relationships with academia, governments, businesses, and NGOs, and expanding our role as a trusted provider of research of the highest quality and rigour. Our research underpins national and international policy, building resilience, and supporting green growth.

I am constantly amazed by all that is happening to bring our science to where it is needed. From trialling new methods to reduce greenhouse gas emissions in Wales, to driving global action on sustainable nitrogen use with the UN, and using innovative technology to assess the impacts of the destruction of the Kakhovka Dam in Ukraine, I am pleased to report on our achievements and performance in 2023.



**Lord Cameron of Dillington**  
Chair

I first started working with UK Centre for Ecology & Hydrology (UKCEH) in 2015, assuming the role of chair of the advisory committee at a pivotal moment, prior to the organisation's independence from UK Research and Innovation. Reflecting on the eight years that have passed since then, I am filled with immense pride at the remarkable evolution of the institute, reflected in this year's report.

Today, we are realising the power of digital technologies and data to accelerate solutions to environmental challenges. We are forging innovative commercial partnerships and providing new solutions for industry. We have extended our

role as a trusted provider of science for governments; and we are continuing to provide invaluable monitoring, modelling and data to support research worldwide.

In December 2023, I regretfully announced my forthcoming retirement as chair of the board of trustees. Serving in this capacity has been an honour. I have been privileged to collaborate with exceptional colleagues whose expertise has enriched my own understanding immeasurably. I extend my heartfelt wishes for the continued success of the organisation in the years ahead.



Ajinkya Deshpande, Glencorse Woodland Experiment Platform, Edinburgh

### WHO WE ARE

The UK Centre for Ecology & Hydrology (UKCEH) is a leading research institute employing over 500 of the world's best environmental scientists. We solve complex environmental challenges across water, land and air. Our unique data and insights inform global policymaking, innovation, and conservation. We exist to provide the vital environmental science that governments, businesses, NGOs, and researchers rely on to meet the great challenges of our time.

### HOW WE WORK

At the heart of UKCEH's research and innovation are large research infrastructures and our capabilities in monitoring, measurement, observation, experimentation, data science and modelling.

#### Monitoring, measuring and observation

We operate flexible, long-term, large-scale monitoring and surveillance networks essential to identify and quantify environmental changes, and determine the underlying factors that drive that change.

#### Experimental platforms and research facilities

Our experimental platforms and research facilities provide the infrastructure for investigating different drivers of environmental change and assessing the effectiveness of interventions.

#### Data science and modelling

We develop models to forecast and predict aspects of the environment at different spatial and temporal scales.

### PARTNERSHIPS FOR IMPACT

Environmental challenges cannot be solved alone. Our partnerships cross borders, sectors and disciplines and are beneficial for everyone involved.

# WHO WE ARE AND HOW WE WORK

## OUR STRATEGY

In April 2020, we published our *Strategy 2025: Research and Innovation*. The strategy sets out our role in addressing three major challenges:

- Creating and enhancing sustainable ecosystems
- Reducing and preventing pollution
- Mitigating and building resilience to climate and environmental change.



Katrina Sharps and Felicity Hayes recording data at Climate Change Exposure Facility, Aber Solardomes



Michele Brentegani analysing soil at Bangor Analytical Chemistry Laboratory



Alba Gomez Segura, installing an AMI (Automated Monitoring Instrument) system, Panama

## OUR NATIONAL ROLE

As a strategic delivery partner for the Natural Environment Research Council, part of UK Research and Innovation, UKCEH delivers impartial environmental science to benefit the UK research community, governments, businesses, and wider society. Our science infrastructures and national capability programmes enable researchers to observe, experiment, measure, understand and predict environmental processes, inter-connection, status and change.

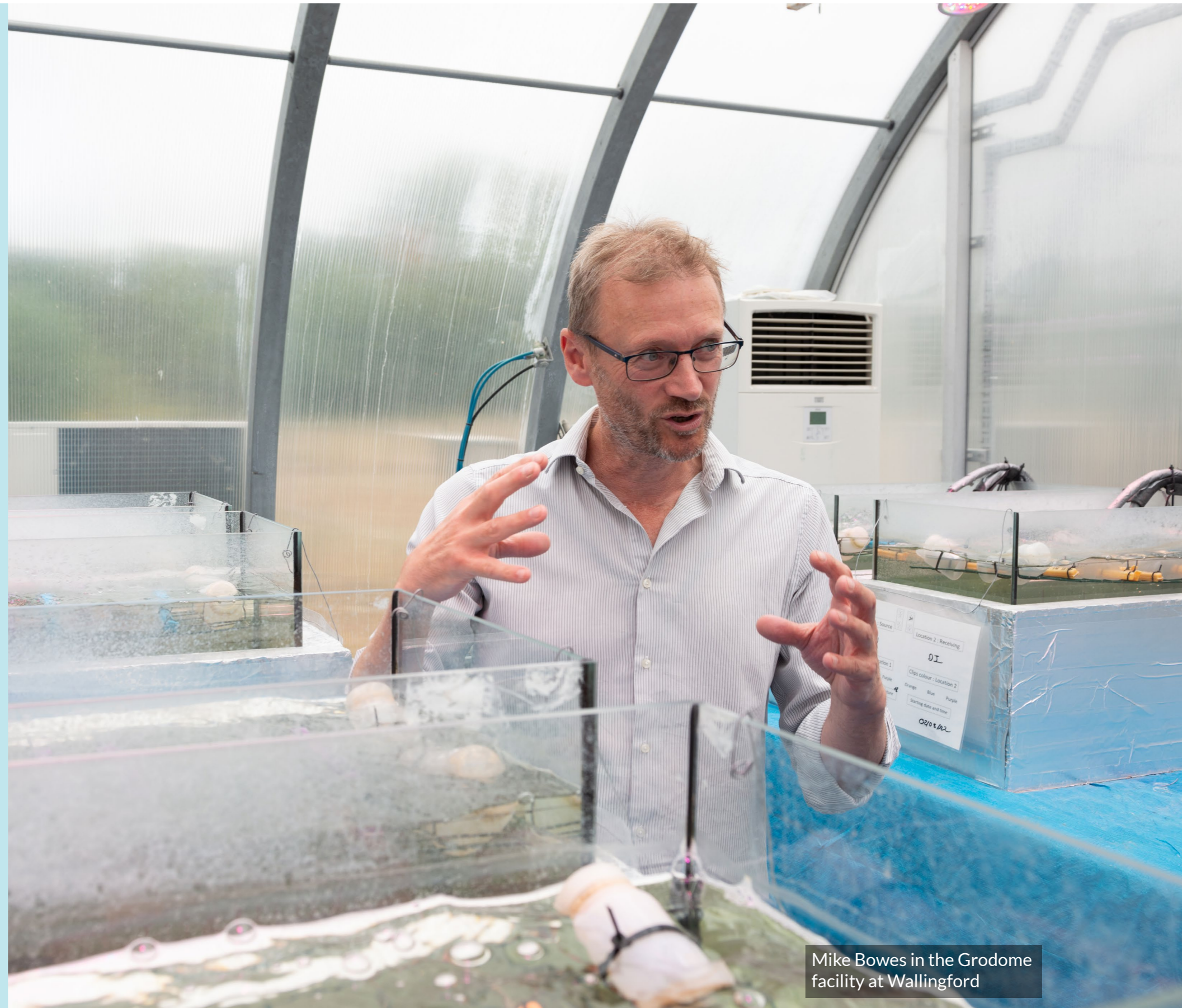
## OUR INTERNATIONAL ROLE

We provide research-based evidence, advice and solutions around the globe, addressing many of the world's most pressing environmental and societal challenges, including those identified by the UN Sustainable Development Goals (SDGs). We do this through international research partnerships, including our work with United Nations agencies and programmes, such as the IPCC, IPBES, UNEP, UNECE, UNESCO and the WMO.

## Research excellence

In 2023, we commissioned Elsevier to review and benchmark our research outputs from 2013 to 2022. The report concludes that UKCEH stands out as a leading organisation in terms of research culture indicators, demonstrating a strong commitment to interdisciplinary research, openness, and academic mentorship. Highlights included:

- Between 2013 and 2022, UKCEH published over 4,300 publications, including articles, reviews, and conference proceedings. Our publication rate grew consistently, at an annual rate of one per cent over this period.
- Our research has global reach, significance, and influence, with 67 per cent of our outputs involving international collaboration. The FWCI (field weighted citation index) for these outputs is more than double the global average.
- Our research has been extensively cited by policy organisations, including the UK Government, European Commission, IPCC, and UNEP, among others, occurring at five times the global average FWCI. This underscores the global impact of our research.
- More than 80 per cent of UKCEH outputs are open access, with nearly half being Gold Open Access, demonstrating our commitment to making our research available to others.
- Our outputs show that a quarter of UKCEH researchers significantly contribute to mentoring the next generation of scientists, surpassing the global average.



Mike Bowes in the Grodome facility at Wallingford



## National capability for UK environmental challenges

UKCEH is a strategic delivery partner for UKRI-NERC and a close partner of UK and devolved governments. In 2023, through our national capability programmes, we continued to support the research community across the four nations. Our work pushed the frontiers of environmental science, informed policy and business decisions, supported rapid responses to crises, and met national needs. For example:

- The SPEED project advanced scenario development, enabling researchers to explore UK futures up to 2100 using a common set of climate, environment, and societal scenarios. These scenarios provide insights into how climate will affect society and how society might respond. UKCEH scientists collaborated widely to maximise usability, and by the end of 2023, other organisations had leveraged over £1.5 million in funding based on SPEED projections.

[www.uk-scape.ceh.ac.uk/sites/default/files/2024-02/UK-SCAPE-SPEED-Case-Study.pdf](http://www.uk-scape.ceh.ac.uk/sites/default/files/2024-02/UK-SCAPE-SPEED-Case-Study.pdf)

- For nearly 50 years, the UKCEH Countryside Survey has been invaluable in understanding how our landscape is changing. The survey continues to adapt to technological developments and evolving stakeholder needs. Between 2018 and 2023, it was cited in 368 articles, informed 22 policy engagements, and was used by other organisations to leverage £29.5 million in funding.

[www.uk-scape.ceh.ac.uk/sites/default/files/2024-02/UK-SCAPE-UKCEHCountrysideSurvey-Case-Study.pdf](http://www.uk-scape.ceh.ac.uk/sites/default/files/2024-02/UK-SCAPE-UKCEHCountrysideSurvey-Case-Study.pdf)

- UKCEH is the only organisation in the world producing annually updated, detailed national land cover maps, enabled by satellite image processing tools and automatic classifier training. These maps are used by environmental charities such as WWF, RSPB, and the Woodland Trust, as well as consultancies and government departments. By the end of 2023, the maps had also been cited in 74 articles.

[www.uk-scape.ceh.ac.uk/sites/default/files/2024-02/UK-SCAPE-LandcoverMaps-Case-Study.pdf](http://www.uk-scape.ceh.ac.uk/sites/default/files/2024-02/UK-SCAPE-LandcoverMaps-Case-Study.pdf)

These are just a few of the examples of the work we have delivered through our national capability funding.



## Essential science for global challenges

We lead efforts to tackle global challenges through our work with United Nations agencies and programmes, including IPBES, UNEP, UNESCO and the WMO. In 2023, we continued to provide scientific evidence and tools to underpin effective responses to global challenges. Examples of our collaborative work included:

- A comprehensive assessment by over 200 researchers warned that the Earth is fast approaching global tipping points, such as major ice sheet collapses and widespread coral reef mortality. These could trigger catastrophic impacts, including mass displacement, political instability, and financial collapse. UKCEH freshwater scientists Professor Bryan Spears and Dr Amy Pickard contributed to the report, focusing on sudden large-scale changes in lakes.
- A new study published in 2023 suggests that nearly all major floods in Europe could be predicted by studying similar events elsewhere on the continent. Megafloods, like those on Germany's Rhine tributaries in 2021, are extreme events that cause significant damage and deaths. A team of European scientists, including UKCEH experts, analysed river discharges from 8,000 stations across Europe between the years 1810-2021. They found that 95.5 per cent of megafloods could have been foreseen based on past events in similar climates.
- New guidelines for the management of Europe's railway network to protect and enhance biodiversity were published. UKCEH worked with the International Union of Railways (UIC) to provide technical recommendations and key design features for enhancing habitats within the existing European rail network and new line upgrades. The UIC European region comprises 118 member companies from 39 countries, amounting to 350,000 kilometres of rail network.



Removal of invasive water hyacinth from the Pa Sak river, Thailand

## Landmark report leads to action on invasive species

Invasive alien species (IAS) pose a significant threat to human health, nature, economies and food security. The global annual cost of IAS to economies has quadrupled every decade since the 1970s, rising to at least \$429bn (US dollars) by 2019.

Responding to this challenge, IPBES (The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services), asked Professor Helen Roy of UKCEH to co-chair a major report. The report set out the best available evidence and policy options to deal with the challenges posed by biological invasions.

The assessment, published during the IPBES-10 Plenary in Bonn in September, brings together the work of 86 experts from 49 countries. It constitutes the most comprehensive evaluation to date of the impacts of IAS and makes recommendations to strengthen the global response.

The report sparked media coverage around the world, generating public debate, and leading to governmental and inter-governmental action.

Notably, Australia pledged \$2.2m (Australian dollars) to combat invasive buffel grass, acknowledging the report's insights into the threat it posed. At a G7 workshop in Japan, ministers committed to enhanced international cooperation based on the report's findings, recognising the urgency of controlling IAS.

### KEY FINDINGS

**37,000 +**

More than 37,000 IAS have been introduced by human activities worldwide.

**218**



218 IAS have contributed to the local extinction of 1,215 native species.

**83%**



83 per cent of countries do not have national legislation to tackle IAS.

**200**



200 new IAS are recorded locally each year.

**36%**

Current trends indicate a 36 per cent increase in IAS by 2050, compared to 2005.

## KEY FINDINGS

**500,000+**

The breach resulted in extensive flooding, affecting over half a million hectares of vital habitats, including those of national and international conservation significance.

**1,087**

Within the flood impact zone, 1,087 potential pollution sources were identified exposing 21 habitats with conservation designation to a wide range of pollutants.

**28,000+**

The Kakhovka Reservoir was almost completely emptied, leaving thousands of fish washed out or stranded, including c 28,000 crucian carp, with an estimated commercial value of \$108m (US dollars).

**567**

The disaster put 567 species at risk, 28 of which are listed as vulnerable or worse on the IUCN European Red List. Threatened species include the harbour porpoise, steppe polecat and slender-billed curlew, which is on the verge of extinction.

## Rapid report on the environmental impact of the Kakhovka Dam collapse supports recovery

The breach of the Kakhovka Dam in southern Ukraine wreaked havoc along the Dnipro River, causing widespread flooding and ecological damage. In response, the UK government commissioned UKCEH and HR Wallingford to carry out a rapid remote assessment of the environmental impact.

With the area in southern Ukraine in a war zone, the contributors used cutting-edge technologies to carry out the first independent assessment of the impacts within weeks of the dam being breached in June. They combined hydrological and digital modelling with satellite imagery and analysis of the region's ecology. This enabled them to identify protected habitats and species likely to be impacted by the breach, and set a precedent for early assessment in future conflicts.

The United Nations Environment Programme (UNEP) used the findings to inform its own evaluation of the disaster. UKCEH scientists contributed their expertise in flood estimations, land use modelling, and environmental hazard assessments to UNEP's work.

The report also played a valuable role in guiding humanitarian response efforts. Information on flooding patterns and pollution risks enabled the Centre for Disease Control to coordinate aid distribution.



Flooding caused by the Kakhovka Dam collapse  
Picture: © REUTERS / Inna Varenysia



### Scientists provide recipe to halve pollution from food production

A new report for the United Nations, published in December, proposes strategies to cut nitrogen pollution from agriculture and food systems in Europe by half. Suggested measures include reducing meat and dairy consumption, optimising fertilizer use, and minimising food waste.

The report, titled *Appetite for Change*, and coordinated by UKCEH for the UNECE Convention on Long-range Transboundary Air Pollution, provides comprehensive insights and recommendations for addressing nitrogen pollution in Europe’s food systems.

It highlights inefficiencies in the agri-food system, where only 18 per cent of nitrogen input ends up in food and other products for consumers. The rest escapes into the environment, contributing to air and water pollution and greenhouse gas emissions.

Aligning with UN goals, the report examined how to achieve a target to halve nitrogen waste by 2030. Scientific analysis of various scenarios found that this target was achieved with highest net societal benefit by combining a halving of meat and dairy consumption (‘demitarian approach’), along with improved agricultural, wastewater and other practices.

### RECOMMENDATIONS

Reduce European meat and dairy consumption, promote plant-based diets to cut pollution and improve health.

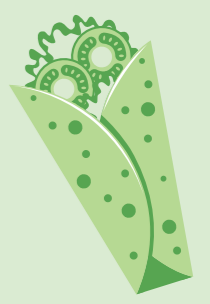


Enhance fertilizer application and manure storage efficiency.

Improve wastewater treatment to capture nitrogen, reducing emissions and enabling nutrient recycling.

Implement comprehensive policies addressing food production and consumption for a transition to sustainable systems.

Encourage balanced diets through financial incentives and sustainable food options in public sector catering.



Mobilise farmers, the water industry, government, and consumers to collaborate on a holistic approach to reducing wasteful nitrogen losses.

## Study reveals 30-year recovery of river invertebrate biodiversity in England

A comprehensive study led by UKCEH reveals a resurgence in river invertebrate biodiversity across England since 1989. The study, involving one of the largest and most wide-ranging analyses of long-term monitoring data in the world, shows significant improvements in invertebrate biodiversity across all English regions and river types.

While English rivers face considerable pressures from wastewater contamination and other pollution sources, the findings suggest a surprising uptick in invertebrate biodiversity. This contrasts with the declining trend in overall species abundance across Great Britain.

Published in the *Science of the Total Environment*, the analysis contributes to mounting evidence of freshwater invertebrate recovery, not only in England but also across Europe since the 1990s.

Researchers examined data from over 223,300 freshwater records collected by the Environment Agency between 1989 and 2018. They assessed the presence and abundance of key invertebrate families like dragonflies, snails, mayflies, shrimp and worms, which are sensitive to water quality changes.

Results showed the average number of invertebrate families per site increasing from 15 to 25 over the study period. However, the rate began to slow for some groups from 2003 onwards.

This improvement was seen across various river types and geographic regions, suggesting a potential link to declines in key chemical pollutants. Notably, families particularly sensitive to river pollution, such as mayflies and stoneflies, recovered strongly, with their diversity soaring by 300 per cent on average.

While there is much room for improvement in river water quality, England's rivers now provide better habitats for invertebrates than they did 30 years ago.



“ It has been excellent to see how the project team used novel methods to examine huge amounts of Environment Agency data and find compelling evidence of some good news within our river systems. This peer-reviewed work will help inform our review of the implementation of the Water Environment Regulations 2017 to improve on-the-ground water outcomes and will help deliver our commitment in the Plan for Water to transform our management of the whole water system. ”

Defra

“ Enhanced rock weathering offers multiple potential wins. Rock dust could play a key role in meeting net zero and Paris Agreement targets.  
Professor Bridget Emmett, UKCEH ”



Rock dust trials in Plynlimon, Powys.

### **Trials explore whether rock dust can combat climate crisis**

UKCEH scientists are trialling an innovative approach to mitigating climate change and boosting crop yield in mid-Wales. Adding crushed rock dust to farmland has the potential to remove and lock up substantial amounts of carbon dioxide from the atmosphere.

In the first trial of enhanced rock weathering on upland grasslands in the world, our scientists applied 56 tonnes of finely ground basalt rock from quarries to three hectares of farmland in Plynlimon, Powys, in 2023. They will repeat this in 2024.

The basalt rock dust particles, smaller than 2mm, absorb and store carbon much faster than natural rock weathering at the sites, reducing the timescale from decades to just months.

Similar trials are also being carried out at lowland grassland in North Wyke, Devon, and arable cropland in Harpenden, field sites owned by Rothamsted Research, as part of a wider study funded by UK Research and Innovation (UKRI).

While studies from around the world suggest enhanced rock weathering could be highly effective in removing greenhouse gases from the atmosphere, there have been no large-scale trials in the UK for our specific land use and soil systems.

Enhanced rock weathering offers several potential benefits. Rock dust could help meet net zero targets, and resulting changes in soil chemistry could boost crop and grass production.

Importantly, the project assesses emissions from supplying and transporting rock dust from quarries. It also seeks to identify potential unintended environmental impacts such as changes in freshwater biodiversity.

## Major review of knowledge about droughts supports water resource management

Predicting and managing droughts and their impacts is vital to protect the environment, safeguard lives, livelihoods and vital infrastructures.

To address this challenge, 20 scientists from UKCEH contributed to the Environment Agency's largest ever review of drought research in England.

The report, published in November, drew on the expertise of 40 academics from 13 institutions. It summarises scientific knowledge about droughts and their impacts on both people and the environment, considering how droughts may alter due to climate change, and the implications for how we manage water resources.

UKCEH scientists led sections on historical river flow trends, future drought projections, and impacts on water quality, vegetation, and soil health.

Using up-to-date climate projections, their analysis suggests a significant increase in drought severity across the UK by 2080, with consequences for river flows and groundwater levels.

The report also identifies areas for future research.

Looking forward, the proposed national Floods and Droughts Research Infrastructure (FDRI) programme, to be led by UKCEH, will produce extensive new measurements across several catchments, adding to our understanding.



“ Recent droughts like 2018 and 2022 have underlined our vulnerability to prolonged periods of dry weather and shown the range of impacts that can occur across ecosystems and different economic sectors. We must re-evaluate our understanding of drought, and how risks may change in future due to climate change.

Jamie Hannaford, UKCEH

”

## GOVERNANCE

The UK Centre for Ecology & Hydrology is a registered Charity in England & Wales (number 1185618) and in Scotland (number SC049849), and a registered Company Limited by Guarantee in England & Wales (number 11314957). The liability of members is limited to a maximum of £1 each.

The registered office of the UK Centre for Ecology & Hydrology is at the Maclean Building, Benson Lane, Crowmarsh Gifford, Wallingford, Oxfordshire, OX10 8BB, UK.

## Our board of trustees

Our board of trustees is responsible for:

- Ensuring that UKCEH has a long-term strategy to address its objectives, and supporting strategic and business plans.
- Reviewing performance in the light of the strategy, objectives, business plans and budgets and ensuring that any necessary corrective action is taken.
- Ensuring UKCEH's financial stability and that there is a sound framework of financial controls.
- Ensuring that UKCEH complies with charity and other law, and with the requirements of regulators.
- Ensuring that UKCEH complies with its charitable objects.
- Ensuring there is an effective risk management and internal control framework.
- Ensuring an appropriate health and safety management framework is in place and operating effectively, through review of quarterly reports.
- Ensuring appropriate safeguarding measures are in place and operating effectively with review of risk and assurance reports.
- Ensuring UKCEH adheres to the principles of the Charity Governance Code to underpin its governance framework and support high standards of governance.



Deborah Low and Melanie Purvey



Rob Bateman, Sarah Franklin, Fay Taylor, Lucy Cobban and Eleanor Dawes



Eleonora Fitos and Alice Deacon



Debbie Guy



Darren Lowther, Tanisha Duncan and Madhvi Mishra



Gbotemi Adediran



## Board members

### Chair announces retirement

Lord Cameron of Dillington has announced that he will retire from his role as chair of the board of trustees, after six years in the role.

Lord Cameron has worked with UKCEH since 2015, when he became chair of the organisation’s advisory committee, prior to its independence from UK Research and Innovation. In 2017, he became chair of the committee overseeing UKCEH’s successful transition to an independent, not-for-profit research institute; and then went on to become the first chair of the board of trustees in 2018.

The process for recruiting a new chair is underway, and Lord Cameron will continue to actively lead the board until a successor is in place.



### New chief executive

Professor Mark Bailey, executive director of UKCEH, retired in June 2023, having led the organisation since 2011. We carried out a targeted recruitment search for a new chief executive, working with an executive search agency. The position was also advertised openly. Dr Stuart Wainwright OBE was selected in December 2022 by a panel comprising our trustees and an independent panel member.

Stuart took up leadership of the organisation from June 2023. He was previously director of the Government Office for Science from 2019, the body responsible for providing science advice to the UK Government on the greatest challenges facing the nation and driving improvements in the way science is used across government.

## Our trustee directors are:



Ewen Cameron  
Lord Cameron of Dillington  
Chair



Professor Mark Bailey  
Executive Director  
(retired June 2023)



Dr Stuart Wainwright  
Chief Executive  
(joined June 2023)



Lynette Eastman



Will Galgey



Professor Iain  
Gillespie



Professor Sir Charles  
Godfray



Linda Naylor



Benet Northcote



Neil Scragg



Alexia Tye

## Board meetings

The board met four times during this accounting period, with attendance as follows:

Trustee director	15/03/23	28/06/23	27/09/23	06/12/23
Ewen Cameron	✓	✓	✓	✓
Mark Bailey	✓			
Stuart Wainwright		✓	✓	✓
Lynette Eastman	✓	Apologies	✓	Apologies
Will Galgey	✓	✓	✓	Apologies
Iain Gillespie	✓	✓	Apologies	Apologies
Charles Godfray	✓	✓	✓	✓
Linda Naylor	✓	✓	✓	✓
Benet Northcote	✓	✓	✓	✓
Neil Scragg	✓	✓	✓	✓
Alexia Tye	✓	✓	✓	✓



Nick Everard with the ARCboat; remote controlled research boat

## Subcommittees of the board

The board delegates some areas of its work to subcommittees. These are:

### The finance and audit subcommittee

The subcommittee oversees and reviews all financial matters and advises the board as needed. They ensure there is a strong framework for financial accountability, risk analysis and risk management. They evaluate the budget before board approval, and they oversee the financial audit and reporting process. The subcommittee met four times during 2023.

### The remuneration and appointments subcommittee

The subcommittee ensures there is an appropriate pay and performance framework for UKCEH employees. They review the remuneration of trustee directors and recommend a level of remuneration for the chief executive. The subcommittee also oversees the recruitment and selection of new trustees and the chief executive. The subcommittee met three times in 2023.

### Remuneration of key management personnel

Remuneration of key management staff is reviewed by the chief executive with the oversight of the board. Benchmarking data from comparable organisations is used when reviewing and setting pay levels.

### Appointment and induction of trustees

Trustee vacancies are openly advertised, with a focus on increasing diversity. New trustee directors are provided with information on their responsibilities and the delegation framework, and the operation of the board and its subcommittees. They receive regular presentations from UKCEH's scientists at board meetings and have opportunities to visit UKCEH's sites to meet with staff.

## How we organise our work

The trustees delegate the day-to-day leadership and operations of UKCEH to the executive committee, led by the chief executive. The executive committee meets formally four times a year to review progress against the organisation's business plan. In addition, the committee meets fortnightly to deal with matters arising from day-to-day operations.

The science leadership committee works collectively, openly and transparently to oversee UKCEH science direction and delivery. The committee is chaired by the science director and includes senior science and innovation staff. It holds quarterly formal meetings and meets informally each week to deal with matters arising from day-to-day operations.

## Key management personnel

The members of the executive committee during 2023 were:

- Professor Mark Bailey (retired June 2023)
- Dr Stuart Wainwright (joined June 2023)
- Sam Bullen
- Professor Harry Dixon
- Professor Bridget Emmett (left December 2023)
- Professor Alan Jenkins (retired April 2023)
- Gill Turner Lay
- Dr Eiko Nemitz
- Professor Richard Pywell
- Professor Gwyn Rees
- Professor Stefan Reis (left March 2023)
- Nick Reynard
- Dr Claus Svendsen
- Dr Nick Wells
- Dr Doug Wilson

## Trading subsidiary

UKCEH has one wholly owned registered trading subsidiary, the UK Centre for Ecology & Hydrology Enterprise, a Company Limited by Shares (number 12251749), which supports our charitable purpose.

The principal activity of UKCEH Enterprise is to increase UKCEH’s social, economic and environmental impact and science excellence through commercial product and service collaborations and commercialisation of UKCEH research outputs and capabilities.

UKCEH’s investment in UKCEH Enterprise Limited is £50,000, being the whole of the issued share capital of that company. The subsidiary donates all profits earned to the charity. The financial statements of UKCEH Enterprise are independently audited and filed at Companies House.

The registered office of the UK Centre for Ecology & Hydrology Enterprise is at the Maclean Building, Benson Lane, Crowmarsh Gifford, Wallingford, Oxfordshire, OX10 8BB, UK.

In 2024, we will establish a second subsidiary, the UK Centre for Ecology & Hydrology International Limited to help us undertake international activities in support of our charitable goals.

## Performance and achievements of trading subsidiary

UKCEH Enterprise optimises the impact of UKCEH research through commercialisation and commercial engagement, facilitating world-class science and generating surpluses for reinvestment in UKCEH innovation, capabilities, and research infrastructure. Our portfolio includes national-scale information products, industry-funded R&D, equipment sales, advanced biological and chemical analytical services, spin-out creation, and researcher-led consultancy.

In 2023, we established a new partnership with Greensphere Capital (see below), to drive greater impact through commercial innovation. This partnership is a key component of our strategic roadmap to 2027. There are immediate opportunities for new ventures in natural capital assessment, opportunity mapping and monitoring, reporting and verification, including AI-enabled automated biodiversity monitoring.

Our broader ambition is to boost private sector engagement beyond spin-out creation. In 2024, we will launch targeted sector-based marketing initiatives in sustainable cities, green finance, and complex environmental forensic analytical services.

After piloting equipment sales in 2022, we saw substantial growth in 2023, particularly in AMI (Automated Monitoring Instrument) system sales. This product enhances cost-efficient and effective biodiversity monitoring around the world, contributing to a better understanding of species trends and environmental quality. To scale this international, research-grade monitoring network, we are planning a manufacturing outsourcing relationship for early 2024.



## New venture

In November, UKCEH announced a new partnership with Greensphere Capital, a sustainability investor. Greensphere is raising a £150 million fund to support start-ups and spin-out businesses from leading UK science institutes, addressing climate change and biodiversity loss in the UK and worldwide.

Launching the partnership, Divya Seshamani, Managing Partner at Greensphere Capital, said: “In the face of the global climate and biodiversity crises, we urgently need more investment into solutions based on the best available science. Mitigating these real risks requires evidence-led, science-based solutions, not anecdotes and spin.”

## Section 172 statement

### Compliance with trustees' duties under Section 172(2) Companies Act 2006

The UKCEH board of trustees have acted in the way they consider to be in good faith, would be most likely to promote the success of the company for the benefit of its members as a whole, and in doing so have regard to the matters set out in s172(1)(a-f) of the Companies Act 2006.

### The likely consequences of any decision in the long term

During the year, the trustees have considered the long-term consequences of their decisions. For example, focuses for this reporting period included the development of a new organisational strategy, and building relationships and reputation to support future income and impact.

### The interests of the charity's employees

In this reporting period, trustees considered updates to the people strategy, and a revised approach to remuneration, reward and recognition. They also considered action plans to create a culture that champions equity, equality, diversity and inclusion (EEDI).

### The need to foster the charity's business relationships with suppliers, customers and others

Collaboration is key to our work. We partner with a wide array of organisations to provide the scientific insights and solutions that society needs, including researchers, governments, NGOs, businesses, and citizens. We build equitable partnerships, focusing on mutual respect and benefit.

Our procurement policy focuses on using preferred and framework suppliers through an open and clear competitive process. We ensure our suppliers are aligned with our values and with our commercial, charitable, environmental and social objectives as far as possible.

### The impact of the charity's operations on the community and the environment

We demonstrate environmental leadership through our own actions; and are committed to carrying out our scientific research in a way that minimises our impact on the environment. In line with our ISO 14001 certified environmental management system, we have set stretching environmental goals as part of our commitment to improving our environmental sustainability.

We foster outstanding public engagement across our research portfolio, with a focus on citizen science, community engagement and informing public debate. We increasingly provide an informed, trusted, evidence-led public voice on the environment.



The restoration of the saltmarsh at Tollesbury Essex, involving UKCEH scientists, was one of the first such projects undertaken in the UK. Credit: Aerial Essex

## How we deliver public benefit

Our charitable objects are:

- To carry out pure and applied scientific research in terrestrial and aquatic environments, including their interactions with the atmosphere.
- To advance education in the environment and environmental sciences, and sustainable development.
- To promote sustainable development for the benefit of the public by promoting the preservation, conservation, protection and improvement of the environment and the prudent use of natural resources.
- To promote sustainable means of achieving economic growth and regeneration.

The ways in which we deliver public benefit are outlined both in the performance and achievements section of this report, and in the people, stakeholder and environment sections.

## Maintaining a reputation for high standards of business conduct

Integrity is one of our core values. We embed this in our everyday activities in a range of ways, including upholding the principles set out in the Concordat to Support Research Integrity and operating to UKRI's Good Research and Trusted Research Policies and Processes. We have established a code of ethics along with relevant policies and procedures for research integrity, research ethics, conflicts of interest, and open science.

The trustees confirm that they have complied with the duty in section 17 of the Charities Act 2011 to have regard to the Charity Commission's general guidance on public benefit, "Charities and Public Benefit".

## OUR PEOPLE

At UKCEH, we are committed to encouraging scientific innovation in an inclusive and equitable environment. In 2023, we continued to expand our team of highly skilled researchers and professionals, and updated our people strategy to 2026, which emphasises the importance of our core values: excellence, integrity and teamwork.

We continued to prioritise the wellbeing of our employees. Our Wellbeing Working Group launched an improved Employee Assistance Programme, complemented by a series of training sessions on important topics such as mental health, imposter syndrome, and financial wellbeing. We also established dedicated wellbeing rooms at two of our sites to support our team members.

We reviewed our approach to remuneration, and successfully introduced a new pay framework that ensures fairness and aligns with industry standards. We launched a recognition scheme, enabling us to thank colleagues, share successes, and reward employees for their hard work, including with monetary vouchers.

Finally, we removed the cap on our cycle-to-work scheme and introduced an electric vehicle car leasing programme. These comprehensive initiatives demonstrate our commitment to creating a workplace that fosters professional growth, personal wellbeing and environmental sustainability.

## Consultation and communication

UKCEH supports trade union membership and recognises Prospect as the employee representative with which it will consult and negotiate, through the Joint Consultation and Negotiation Committee (JCNC).

Furthermore, our People and Communication Team (PACT), made up of representatives from different departments and science areas, serves as an important platform for engaging with colleagues on organisation-wide issues, proposing changes, and discussing topics that are important to our community.

We take a proactive, consultative approach to engagement, and in 2023 increased the frequency of all staff meetings from quarterly to fortnightly. These meetings, chaired by the chief executive, provide regular updates to all staff and students, and provide a platform for sharing achievements.

Leaders run regular one-to-one, team, department, and directorate meetings. These gatherings help individuals and teams understand their contribution to the organisation's work and review progress against agreed plans.

Organisational news is shared through the intranet daily, and a weekly summary newsletter called *The Grapevine* is distributed to all staff and students.



Glenn Rhodes, Kelly Le Quesne and Gareth McShane lake sampling on Windermere

# OUR PEOPLE

## Investors in people re-accreditation

In 2023, we were delighted to be awarded silver accreditation from Investors in People for the second time, with improved employee engagement scores on eight of the nine indicators. Investors in People noted that our people feel empowered, trusted, motivated and autonomous.



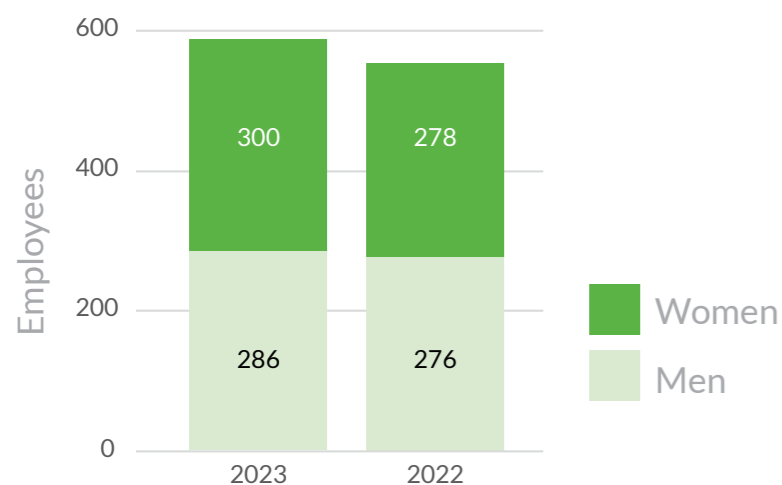
Key highlights from our results include:

- Our people love working for us because their work is interesting, varied and worthwhile.
- Our people share our values and strive to work together to deliver excellence with integrity.
- Our people have numerous opportunities for developing their knowledge and skills and this is increasing their confidence and ability to produce excellent work.

Gill Turner Lay, director for people and operations, said: "UKCEH are proud to have maintained our silver Investors in People accreditation, with a marked increase in score in most areas. We will use the formal feedback report to work in partnership with our union and employee forum to continue to enhance the experience and development for all our people as we aim even higher!"

## Our gender composition

The data provided here represent a snapshot of our gender composition on 5 April 2023 compared to 5 April 2022.



The proportions of men and women within each pay quartile.

	Upper quartile	Upper middle quartile	Lower middle quartile	Lower quartile
2022	33% women 67% men	44% women 56% men	56% women 44% men	66% women 34% men
2023	36% women 64% men	45% women 55% men	58% women 42% men	67% women 33% men

## Equity, equality, diversity and inclusion (EEDI)

At UKCEH, we are committed to creating a culture that champions equity, equality, diversity, and inclusion (EEDI). This not only enriches the organisation but also supports the wellbeing of our people, enabling them to perform at their best.

In 2023, we embarked on a three-year EEDI action plan, focusing on four main themes: ensuring fair and equitable access to opportunities, fostering respect and value for all within our workplace, enabling inclusion and inclusive action, and providing governance, leadership, and accountability.

To deliver this action plan, we formed a dedicated working group, with each member of the executive committee serving as a strategic champion. We ran a series of impactful training and awareness sessions, including 'Being Consciously Inclusive' training, attended by 91 per cent of our organisation, and an 'Introduction to Neurodiversity' session, attended by 44 per cent of our workforce.

We are proud to report that we achieved three quarters of our action plan goals in the first year. These included updating our EEDI policies, enhancing our recruitment processes, resulting in the renewal of our Disability Confident status, providing guidance on using inclusive language, and a sustained programme of awareness events and learning opportunities.



## Health and safety report

In 2023, alongside maintaining our ISO standard, we focused on keeping our people safe, through processes, training and engagement. To help with this, we hired two new team members: a Travel Risk Manager to coordinate travel support services, and an additional SHE adviser to concentrate on safety at our Wallingford site.

We continued to encourage health and wellbeing across the organisation. For the second year running, we offered free flu vaccinations and organised a step count challenge to promote movement and reduce problems related to prolonged sitting. We added to our extensive Health and Safety training programme specific training on chemical risk assessment and how to use respiratory protective equipment to improve chemical safety.

## Accident reporting

Over the course of 2023, there were 40 Accidents (including ill-health), 17 Incidents (including vehicle incidents) and 26 Near Misses reported across UKCEH. There were no RIDDOR reportable accidents or incidents.

## Learning and development

We offer everyone the opportunity to fulfil their potential through personal and professional development. We provide leadership development programmes, line manager training, and workshops on in-demand skills that our scientists need to do their excellent science. In 2023, 325 colleagues used our self-directed e-learning platforms, and 344 colleagues attended additional courses beyond our standard offerings.



Sarah Thacker, Analytical Chemistry Laboratory, Lancaster

### Postgraduate and early career research

We continue to play a prominent role in training the next generation of environmental scientists. In 2023, 106 of our scientists co-supervised 224 masters and doctoral researchers. These students benefited from access to our expertise, laboratory facilities, field sites and data centres. We actively partnered in nine NERC Doctoral Training Partnerships and five NERC Centres for Doctoral Training. At the end of 2023, we had 50 active research associates at UKCEH.

Looking to the future, we are committed to creating a cohesive community of early career researchers and making sure they get the support they need.

### Research integrity

We uphold the principles set out in the Concordat to Support Research Integrity and integrate them into our everyday research practices. We operate to UKRI's Good Research and Trusted Research Policies and Processes and have established a code of ethics along with relevant policies and procedures for research integrity, research ethics, conflicts of interest, and open science.

We have adopted the UK Research Integrity Office template for institutional annual statements on research integrity, which are made publicly available on the UKCEH website. Over the course of the year, we delivered awareness-raising sessions for research staff on research integrity, misconduct, conflict of interest, and research ethics. No formal allegations of scientific misconduct were investigated in 2023. One incident was reported, dismissed after preliminary investigation, with no evidence of misconduct.

# OUR STAKEHOLDERS

## OUR STAKEHOLDERS

### How we work with stakeholders

Complex environmental challenges require collaborative solutions. We and our partners work together to provide the scientific insights and solutions that society needs. Here are some examples of how we work with stakeholders:

- **Researchers:** We play a foundational role in UK environmental science and enable academia to undertake even more excellent science, including through accessing our integrated research infrastructure.
- **Governments and NGOs:** We have strong relationships with governments and NGOs, for whom we are a trusted provider of high quality, rigorous research. Our research underpins national and international policy, strengthens regulation, builds resilience, and supports green growth.
- **Businesses:** We partner with businesses, collaborating on commercial opportunities to tackle environmental challenges and supporting environmental governance and reporting. Our insights help businesses to achieve environmental resilience, compliance and sustainability.
- **International partners:** We play an active role in the global environmental science community, leading coordinated international initiatives and convening scientists across borders to tackle common environmental challenges.
- **Citizens:** We foster outstanding public engagement across our research portfolio, with a focus on citizen science, community engagement and informing public debate. We increasingly provide an trusted and evidence-led public voice on the environment.

### External training

We trained over 250 external learners in 2023 through face-to-face and online courses, on subjects ranging from climate data analysis with python to using drones to map habitats, and from field electronics and sensors to evidence synthesis. We grew our offering to 27 courses, adding more hydrology courses to our portfolio during the year; and we received 95 per cent positive feedback on our courses. We provided bespoke training for partners including Defra, BEIS, the Government Office for Science, Natural England and Lancaster University.

### Complaints and feedback

UKCEH has robust policies and processes in place to address external complaints and ensure customer satisfaction, meeting the requirements of our ISO 9001 certification and promoting good practice. We conduct regular customer satisfaction surveys, which are reviewed by the board of trustees and the executive committee. All external complaints made in 2023 have been successfully resolved.



### How we work with suppliers

We are committed to obtaining value for money in all our procurement activities, ensuring alignment with our commercial, charitable, environmental and social objectives, and complying with relevant legal requirements. We want our key suppliers to mirror our values and goals.

As a charity primarily funded by the public sector, we adhere to the Purchasing Contracts Regulations 2015. Our procurement policy focuses on using preferred and framework suppliers through an open and clear competitive process. This approach offers a secure, cost-effective and efficient route to purchasing, while mitigating risks, providing assurances, and ensuring we get the best value for our money.



# OUR STAKEHOLDERS

## How we engage the public

We carry out effective and impactful public engagement with our research with mutual benefits for our science, our researchers and the public. We strive for excellence in our public engagement, embedding best practice within research projects and programmes across all sites and science challenges, with a focus on citizen science, community engagement and public dialogue. In 2023, we strengthened the way we embed public engagement in our funding bids, and our scientists won four bursaries specifically for public engagement.

### CASE STUDY: Wildlife recording is good for people, as well as for science

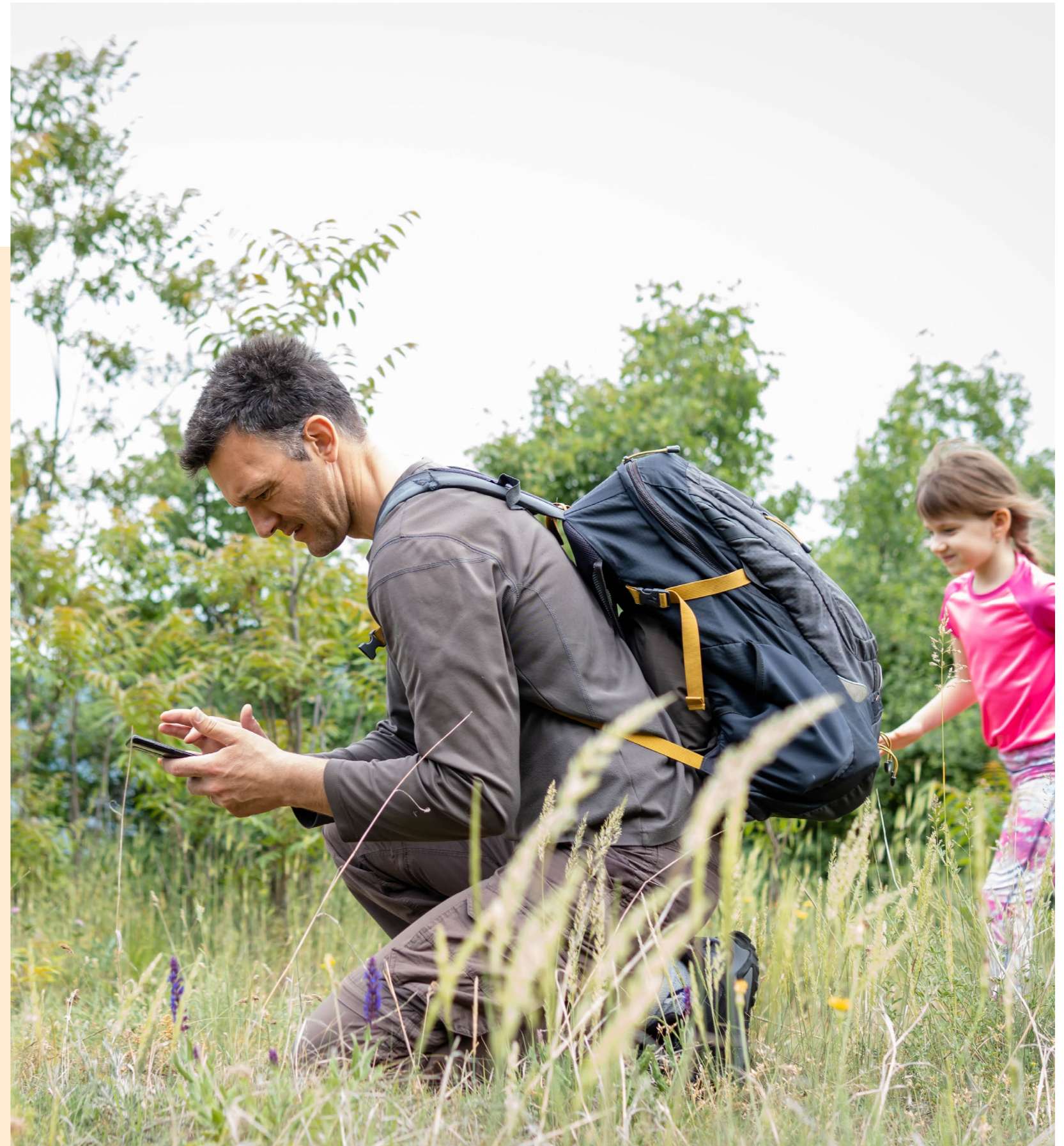
Nature-based citizen science projects not only advance scientific understanding but also enhance participants' well-being and connection to the environment, according to research led by UKCEH and published in the *People and Nature* journal in 2023.

The study, titled 'Nature Up Close and Personal: A Wellbeing Experiment,' was the first extensive investigation into the well-being benefits for volunteers engaged in citizen science initiatives, such as wildlife monitoring, which are crucial for monitoring environmental change. The research was conducted during the 2020 pandemic restrictions by UKCEH, the University of Derby, and the British Science Association.

Five hundred volunteers from across the UK were randomly assigned to undertake ten-minute nature-based activities at least five times over eight days. Activities included pollinating insect surveys, butterfly surveys, nature immersion coupled with noting three good things, or a combination of these activities. Pre and post-participation surveys were conducted to gauge changes in participants' nature connection, well-being, and pro-nature behaviours.

Results revealed heightened well-being and increased nature connection across all participants after completing the activities. In addition, participants who wrote down three good things, alone or combined with nature recording, demonstrated increased intention to undertake pro-nature behaviours outside the project. Behaviour included planting pollinator-friendly flora or constructing wildlife shelters, indicating the broader benefits of citizen science for nature.

Dr Michael Pocock, ecologist and academic lead for public engagement with research at UKCEH, said: "Being in and around nature is good for our wellbeing, and we've shown that focused engagement with nature is just as important. The study demonstrates that the tens of thousands of people engaged with UKCEH citizen science, recording wildlife and water quality, will gain benefits for their wellbeing while they make crucial contributions to environmental monitoring and data."



## ENVIRONMENT

### Environment, energy and carbon reporting

In 2023, we appointed strategic champions at director level for each of our environmental goals and established delivery groups to support these. The goals are listed below against a summary of our performance for the year.

**1. Reduce reliance on fossil fuels and achieve net zero Scope 1 and Scope 2 greenhouse gas emissions by 2040 and associated Scope 3 emissions by 2050**

We undertook extensive decarbonisation and energy saving surveys of our main sites to identify opportunities for improvement. We will continue to work with our landlords to prioritise next steps on our estate decarbonisation pathway.

**2. Demonstrate efficient use of resources and seek to reduce environmental impacts associated with our scientific research**

We continued to implement lab practices aligned with the Laboratory Efficiency Assessment Framework (LEAF) criteria and achieved Silver certification for our Bangor labs and Gold certification for our Lancaster Chemistry labs, Chiltern Wing labs and Edinburgh labs. We also launched our business travel hierarchy in support of lower carbon travel options.

**3. Embed sustainability considerations within UKCEH financial decision-making and procurement processes**

We diversified our cash holdings by creating a £1 million investment fund with Rathbone Greenbank and incorporated ESG criteria within a new capital investment approval process.

**4. Implement improvement measures across UKCEH sites to support biodiversity, enhance ecosystem services and prevent pollution**

We won funding for and completed a full refurbishment of the wildlife pond at our Edinburgh site to improve the open water and marginal habitat on the site.

**5. Deliver the sustainability implementation and engagement plan for UKCEH**

We undertook a comprehensive internal engagement exercise through PACT and launched an internal ECO-HUB detailing our goals, impacts and engagement opportunities for UKCEH people. Our director of people and operations communicated our aims externally in a blog post.



Rebecca McKenzie and Alanna Grant, lake samplers on Loch Leven

# ENVIRONMENT

Energy usage increased slightly in 2023. While a reduction in gas demands was seen, due to reduced demand at our Edinburgh and Lancaster sites, this was offset by an average 9 per cent increase in electricity demands at our Wallingford site. Overall, our greenhouse gas emissions have reduced this year, largely due to the confirmation of all office and field sites now operating on a zero-carbon tariff reducing scope 2 emissions to almost zero.

**Table 1: Summary energy use and associated greenhouse gas emissions for UKCEH calendar year 2023 and 2022.** Please refer to methodology and limitations for supporting guidance on table figures.

Overall UKCEH energy use and associated greenhouse gas (GHG) emissions	Annual figures (1 Jan - 31 Dec 2023)	Annual figures restated <sup>2</sup> (1 Jan - 31 Dec 2022)
UK energy use kWh <sup>1,2</sup>	7,595,144	7,571,245
Associated GHG emissions <sup>2,4,5,6</sup> tonnes CO <sub>2e</sub>	1,318.87 (1,983.38)	1,488.90 (1,881.44)
Energy use intensity ratio kWh per £1k turnover	131.2	148.37
Emissions intensity ratio tonnes CO <sub>2e</sub> per £1k turnover <sup>4,5,6</sup>	0.02 (0.03)	0.03 (0.04)
Energy use intensity ratio kWh per average staff number	11,848.90 (641)	12,986.70 (583)
Intensity ratio emissions tonnes CO <sub>2e</sub> per average staff number <sup>4,5,6</sup>	2.06 (3.09)	2.55 (3.23)

**Table 2: Detail of supporting data which contributes to overall figures presented in Table 1 above.**

Breakdown data contributing to Table 1 figures.	Annual figures (1 Jan - 31 Dec 2023)	Annual figures restated <sup>2</sup> (1 Jan - 31 Dec 2022)
UK gas use <sup>1</sup> - kWh	3,764,697	3,955,961
UK electricity use <sup>1</sup> - kWh	3,320,520	3,230,621
UK energy use associated with transport <sup>3</sup> - kWh	508,678	381,983
Scope 1 GHG emissions <sup>4</sup> - tonnes CO <sub>2e</sub>	823.99	811.86
Scope 2 GHG emissions <sup>5</sup> - tonnes CO <sub>2e</sub>	0.59 (665.09)	216.50 (609.05)
Scope 3 GHG emissions <sup>6</sup> - tonnes CO <sub>2e</sub>	394.36	381.60



## Methodology and limitations

1. UK energy use includes electricity and gas use across UKCEH sites along with mains supplied electricity use on our UK field sites. In addition, energy use includes conversion of km travelled and fuel purchased for fleet vehicles, hire cars and personal vehicles. Solar generation exported to the grid is excluded from electricity use. Where fuel purchase costs are known but not fuel quantities, the litres have been estimated from UK Government average fuel costs data.
2. 2022 has been restated to incorporate confirmed Bangor utility data received from our landlords for that period.
3. Transport emissions relating to fleet vehicles are calculated from km travelled and individual vehicle emission intensity ratios or UK Government 2023 Conversion Factors, where not known. These have been uplifted in line with UK government environmental reporting guidance.
4. Scope 1 emissions includes mains supplied gas use, fugitive refrigerant emissions, fleet vehicle km travelled, and other fuel purchased.
5. Scope 2 emissions have been calculated using emissions factors specified by utility providers. For best practice comparative purposes Scope 2 emissions calculated using mains grid conversion factors as specified by the UK Government are included in brackets.
6. Scope 3 emissions includes hire car and personal km travelled for business purposes; transmission and distribution emissions relating to mains electricity use along with 'well to tank' emissions associated with Scope 1 and Scope 2 reported data. These figures are presented voluntarily.

# RISK MANAGEMENT

## RISK MANAGEMENT

The trustee directors have ultimate responsibility for risk management in the organisation. Our risk strategy outlines the organisation’s approach to risk, while our risk policy and strategy set out responsibilities for managing these risks.

The trustees delegate day-to-day management of risks to the executive committee, who are responsible for identifying, evaluating and monitoring the key risks faced by UKCEH, as well as the controls and actions taken to manage and mitigate them. These encompass organisational level risks as well as risks relating to specific science projects, each of which is subject to individual risk assessment.

On a quarterly basis, both the finance and audit subcommittee and the full trustee board review the risk register, with a focus on the top-level organisational risks and any notable changes that have occurred in the preceding quarter.

UKCEH’s risk management approach is defined within the Quality Management System, certified to the ISO 9001 standard. Mandatory staff training covers subjects such as cybersecurity and anti-bribery, and additional risk training is provided where appropriate.

The highest-rated risks to the organisation are around cybersecurity and data protection, and our approach to these is outlined below. Other significant risks actively managed by the organisation are summarised in the following table:

Risk area	Management of risk
Reputation and relationship management	Communications and media expertise and resource, incident management plan, crisis communications plan.
Serious health and safety incident	ISO45001 accredited management system, policies, procedures, training, and incident planning. See health and safety report above.
Financial sustainability	Good business planning processes and monitoring of our income pipeline and costs to allow early intervention.
AI and large language models	Ensuring understanding of potential benefits and opportunities and well as threats, development of strategy.
Information technology requirements	Investment in IT infrastructure, supported hardware and software, effective change management.
Failure of science provision, planning and delivery	Developing approach to project management, project audits, funder relationship building.
Capability and ability to fully resource	Learning and development plan, student support, strategic focus on people and culture.
Financial controls	Staff training and awareness, internal and external audit schedule, robust policies and procedures, strong internal controls.

## Cybersecurity and data protection

We are vigilant in monitoring cyber threats and trends, especially focusing on critical risks such as ransomware. We use our ongoing surveillance to inform our approach to controls and mitigations. These include targeted investment in cybersecurity infrastructure and improving processes such as online backups.

In addition, we regularly review the effectiveness of our technological defences, reporting and recovery capabilities, and take action to keep our risk exposure to an acceptable level. The measures we take include an extensive third party independent cybersecurity review and subsequent strategy and roadmap reports.

In 2023, we maintained our Cyber Essentials accreditation amidst significant updates to the requirements and recorded no ICO reportable data breaches.

All UKCEH staff take annual mandatory courses in General Data Protection Regulation (GDPR) and cybersecurity awareness, and we provide ongoing advice and communications on these issues. All project audits and UKCEH risk assessments have a standing item to look at how personal data are managed.

Franck Mpinda in the Wallingford server room



# OUR FINANCES

## OUR FINANCES

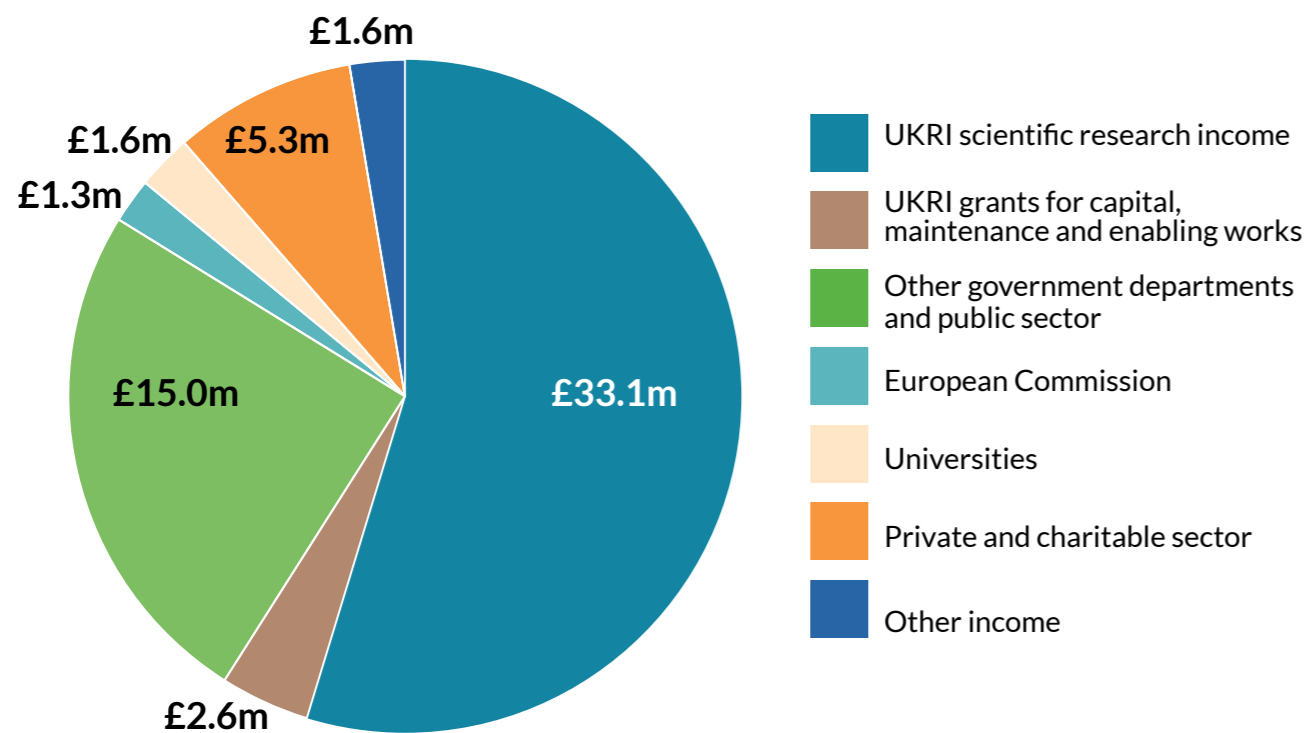
The Statement of Financial Activities on page 68 shows an overall deficit position for the year ended 31 December 2023 of £(1.1)m. This comprises a net movement of funds of £(1.7)m relating to operating activity within our non-capital unrestricted and restricted funds, and a net movement of £0.7m on capital funds. Our capital funds include capital funding income for new assets, and depreciation on existing assets.

We are fortunate to have many opportunities available to us as an organisation and have had sustained success in bidding for funding. However, research grants in the UK usually only cover 80 per cent of the Full Economic Cost (FEC). As UKCEH has grown in recent years, this has led to a larger funding gap to meet from other sources, resulting in a small financial deficit in 2023.

We are working to redress this by seeking more diverse funding sources, being efficient in our operations, and choosing what we bid for to rebalance our portfolio. We plan to move back to a surplus position from 2024.

### Principal funding sources and income

UKCEH's total income for 2023 was £60.5m, an increase on £53.1m in 2022. The majority of this income came from UKRI in the form of awards, grants, and agreements for scientific research activities of £33.1m (2022: £29.7m). Grants for capital, maintenance and enabling work of £2.6m were received from UKRI during 2023 (2022: £2.0m). Other government departments and the public sector accounted for a further £15.0m of research income (2022: £11.4m). In 2023, £5.3m was received for private and charitable sector projects (2022: £4.6m). Other income derives principally from UKCEH's trading subsidiary, UKCEH Enterprise.

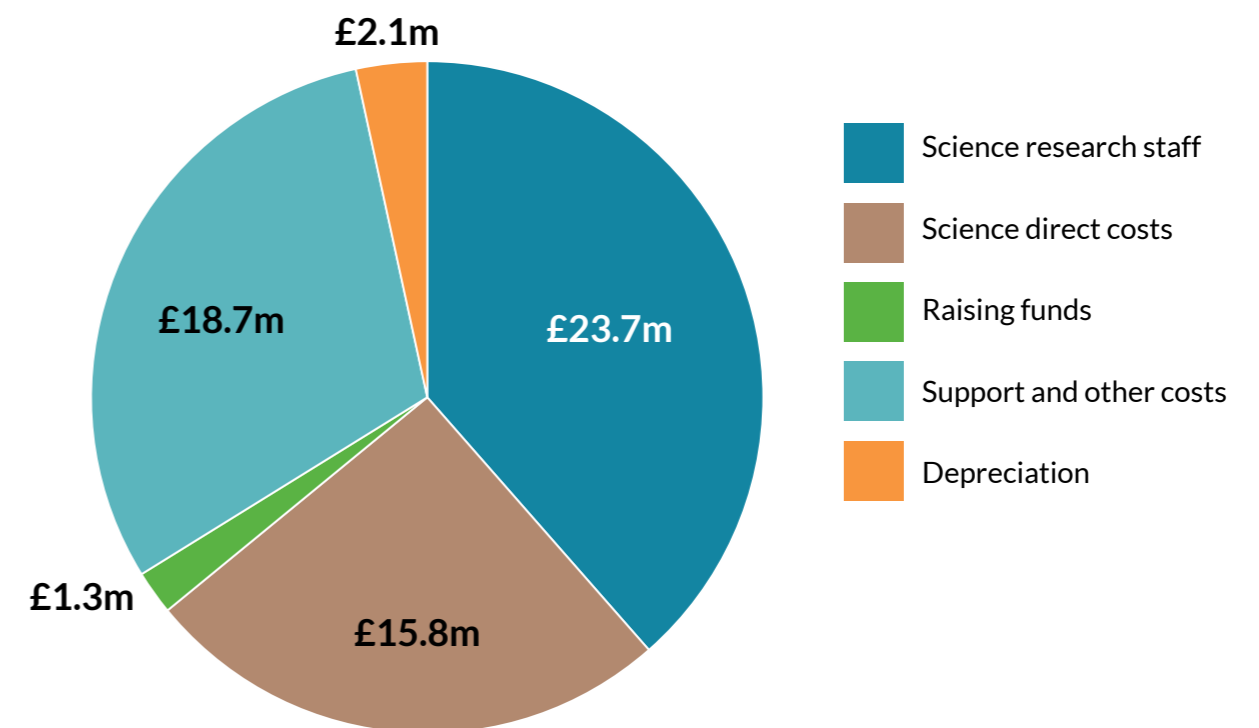


Justine Rogers,  
Finance Department

### Expenditure

The principal cost to the organisation is the remuneration and related staff costs of the scientific research staff, which accounted for £23.7m in the year (2022: £20.4m). Science direct costs of £15.8m (2022: £12.8m) include the subcontracted costs of our partners, where work is delivered in partnership with other institutions.

Support costs include the pay and related costs of professional service teams as well as the premises, information technology, and administrative costs of running the organisation.



# OUR FINANCES

---

## Reserves policy

Reserves consist of restricted funds (capital and non-capital in nature), unrestricted designated funds, and the remainder, unrestricted funds, which we call “general” reserves, an amount available for the furtherance of general charitable objectives at the discretion of the trustees.

UKCEH prices its grant and award-funded research under a methodology that allows it to meet funder requirements, sustainably cover costs, reinvest in capital equipment and infrastructure, and maintain a reserve. This is supplemented by other income, including that generated by the trading subsidiary, UKCEH Enterprise Limited.

The balance of the unrestricted designated capital fund at 31 December 2023 was £3.1m, which largely results from the transfer of assets from UKRI-NERC on independence in 2019, and subsequent internal investment in capital. It will be used for future capital expenditure.

The restricted capital fund had a balance of £8.7m at 31 December 2023, and this represents funding the organisation has received where the use is capital in nature and has been specified by the funder.

The restricted fund had a balance of £nil at 31 December 2023. This fund comprises funding and costs in respect of specific research projects. For some scientifically important projects, closely tied to our charitable goals, the funding does not fully cover the costs of delivering the project. For those projects, we transfer unrestricted funds to restricted funds to enable UKCEH participation. This is done in total, annually, hence resulting in a £nil fund balance at the year end.

In 2023, UKCEH updated its reserve policy. The updated policy replaces the previous general reserve target of £5m with a dynamic reserve range intended to cover operational risk and factoring in both operational costs and income certainty. If the general reserve balance falls below this range, we will focus on rebuilding the reserve, if it goes above the range, we will actively look to invest the reserve in furtherance of our charitable objectives.

The general reserve target range as at 31 December 2023 is between £5.9m and £10.9m, and hence the actual general reserve balance at 31 December 2023, of £6.7m, falls within the range.

## Our approach to investments and cash management

The UKCEH investment policy sets out our approach to financial investment, our objectives, and how we intend to achieve them. UKCEH has a low to medium attitude to risk, with a primary objective being to mitigate erosion of capital by keeping pace with inflation. Commensurate with our organisational objectives, we place ESG (Environmental, Social and Governance) considerations at the centre of our investment decisions. The finance and audit subcommittee is responsible for the overall oversight of financial investments, on behalf of the board of trustees.

During the year ended 31 December 2023, we assessed several investment funds against our investment policy objectives and the board approved the investment of £1m in the Rathbone Greenbank Strategic Growth Portfolio. This fund is considered to have a medium risk profile, targets a return of CPI+3 per cent, and follows a defined sustainable investing approach. As at 31 December the value of our investment was £1.059m.

In order to benefit from high interest rates, during 31 December 2023 we invested £4m in UK Government T-bills of between one- and six-months duration on a rolling basis, managed by Rathbones. The return on these T-bills remained above 5 per cent throughout 2023.

The cash balance for the organisation includes a significant portion of grants and awards received in advance of spend, and hence needs to be readily available. We use a 32- and 95-day notice bank account to maximise interest earned, while ensuring that sufficient cash is available to meet day to day operational commitments.

## Fundraising

The organisation did not carry out fundraising activities with the general public and no donations were sought from the public during this accounting period. The charity had no fundraising activities requiring disclosure under section 13 of the Charities (Protection and Social Investment) Act 2016.

## Going concern

The trustees of UKCEH consider the organisation to be a successful going concern. Since it was established on the 1 December 2019, UKCEH has had a positive net income in aggregate, and has built its reserves to a level well above the minimum target.

We have reviewed our net deficit position for 2023 in the context of increasing income and are taking additional actions to ensure we return to a surplus position from 2024. These actions include a focus on income diversification as well as prioritising the type of work we bid for, balancing income from sources that fully cover costs with research income from funders for which the funding rules do not allow for full cost recovery. We have a robust plan for 2024 based on known activity and our fund balances remain positive.

The board of trustees reviewed and approved the 2024 UKCEH plan in December 2023 and we have a high degree of confidence in future income levels. UKCEH continues to be very successful in bidding for funding and as at April 2024, had secured in excess of 100% of its planned income for 2024. Beyond 2024, our long term plan includes a robust forecast for 2025, and we have already won the majority of the income required to deliver it.

Demand for our environmental science expertise is high and is expected to remain so for the foreseeable future. We believe that there are no known measurable material uncertainties that could call into doubt the ability of UKCEH to continue as a going concern.

## OUR FUTURE PLANS

Since mid-2023, we have been shaping our future strategy to 2030. The new strategy presents our ambition for the future, outlining our commitment to meeting the growing desire for our science, and helping humanity to thrive. Over the next five years, UKCEH will focus on:

- Research excellence: Deepening our understanding of land, water, and air systems through rigorous research.
- Positive impact: Ensuring our science helps governments, businesses and NGOs tackle the great environmental challenges of our time.
- Expanding our partnerships:
  - Enabling and inspiring UK environmental science to research new discoveries.
  - Strengthening our relationships with governments as a key source of reliable environmental science.
  - Expanding our partnerships with businesses and NGOs as the go-to source for the highest quality science and advice.
- Informing public debate: Providing clear and robust environmental research to enrich public debate.

Our work is only possible because of our committed people. We will ensure they get the support, training and resources they need to make a positive difference, and ensure they feel that UKCEH is an inclusive and equitable place to work.



Shankari Anna Balan  
Marie Sklodowska-Curie  
Early Stage Researcher

# STATEMENT OF TRUSTEES' RESPONSIBILITIES

---

The trustees, who are also directors of the UK Centre for Ecology & Hydrology for the purposes of company law, are responsible for preparing the trustees' annual report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

Company law requires the trustees to prepare financial statements for each financial year. Under that law, the trustees must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the charitable company and the group and of the incoming resources and application of resources, including the income and expenditure, of the charitable group for that period.

In preparing these financial statements, the trustees are required to:

- Select suitable accounting policies and then apply them consistently
- Observe the methods and principles in the Charities Statement of Recommended Practice (SORP)
- Make judgments and estimates that are reasonable and prudent
- State whether applicable UK accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements
- State whether FRS 102 "The Financial Reporting Standard applicable in the UK and Republic of Ireland" has been followed, subject to any material departures disclosed and explained in the financial statements
- Prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charitable company will continue in business.

The board of trustees is responsible for keeping adequate accounting records that are sufficient to show and explain the charitable company's transactions, disclose (with reasonable accuracy) at any time the financial position of the charitable company and enable them to ensure that the financial statements comply with the Companies Act 2006, the Charities and Trustee Investment (Scotland) Act 55 Contents 2005, the Charities Accounts (Scotland) Regulations 2006 (as amended) and the provisions of the charity's constitution. They are also responsible for safeguarding the assets of the charity and the group and for taking reasonable steps for the prevention and detection of fraud and other irregularities.

Insofar as each of the trustees is aware:

- There is no relevant audit information of which the charitable company's auditor is unaware
- The trustees have taken all steps that they ought to have taken as trustees to make themselves aware of any relevant audit information and to establish that the auditor is aware of that information.
- The trustees are responsible for the maintenance and integrity of the corporate and financial information included on the company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Approved by the board of trustees of the UK Centre for Ecology & Hydrology on 26 June 2024 including in their capacity as company directors, the strategic report contained therein, and signed on its behalf by:



Ewen Cameron  
Lord Cameron of Dillington  
Chair



# INDEPENDENT AUDITOR'S REPORT

## INDEPENDENT AUDITOR'S REPORT TO THE TRUSTEES OF THE UK CENTRE FOR ECOLOGY & HYDROLOGY

### Opinion

We have audited the financial statements of the UK Centre for Ecology & Hydrology ('the charity') and its subsidiaries ('the group') for the year ended 31 December 2023, which comprise Consolidated Statement of Financial Activities, Consolidated Balance Sheet, Charity Balance Sheet, Consolidated Statement of Cash Flows, Charity Statement of Cash Flows and notes to the financial statements, including significant accounting policies. The financial reporting framework that has been applied in their preparation is applicable by law and United Kingdom Accounting Standards, including Financial Reporting Standard 102 The Financial Reporting Standard applicable in the UK and Republic of Ireland (United Kingdom Generally Accepted Accounting Practice).

In our opinion the financial statements:

- give a true and fair view of the state of the group's and the parent charity's affairs as at 31 December 2023 and of the group's income and expenditure, for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Charities Act 2011 and Regulations 6 and 8 of the Charities Accounts (Scotland) Regulations 2006 (amended).

### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) (ISAs (UK)) and applicable law. Our responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the financial statements section of our report. We are independent of the group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, including the FRC's Ethical Standard, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Conclusions relating to going concern

In auditing the financial statements, we have concluded that the trustees' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the charity's or the group's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

Our responsibilities and the responsibilities of the trustees with respect to going concern are described in the relevant sections of this report.

### Other information

The trustees are responsible for the other information contained within the annual report. The other information comprises the information included in the annual report, other than the financial statements and our auditor's report thereon. Our opinion on the financial statements does not cover the other information and, except to the extent otherwise explicitly stated in our report, we do not express any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If we identify such material inconsistencies or apparent material misstatements, we are required to determine whether this gives rise to a material misstatement in the financial statements themselves. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact.

We have nothing to report in this regard.

### Matters on which we are required to report by exception

We have nothing to report in respect of the following matters in relation to which the Charities (Accounts and Reports) Regulations 2008 and the Charities Accounts (Scotland) Regulations 2006 requires us to report to you if, in our opinion:

- the information given in the financial statements is inconsistent in any material respect with the trustees' report; or
- sufficient and proper accounting records have not been kept by the parent charity; or
- the financial statements are not in agreement with the accounting records and returns; or
- we have not received all the information and explanations we require for our audit.

### Responsibilities of trustees

As explained more fully in the trustees' responsibilities statement set out on page 62, the trustees are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view, and for such internal control as the trustees determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the trustees are responsible for assessing the group and the parent charity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the trustees either intend to liquidate the charity or to cease operations, or have no realistic alternative but to do so.

# INDEPENDENT AUDITOR'S REPORT

## Auditor's responsibilities for the audit of the financial statements

We have been appointed as auditor under section 151 of the Charities Act 2011, and section 44(1)(c) of the Charities and Trustee Investment (Scotland) Act 2005 and report in accordance with the Acts and relevant regulations made or having effect thereunder.

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Details of the extent to which the audit was considered capable of detecting irregularities, including fraud and non-compliance with laws and regulations are set out below.

A further description of our responsibilities for the audit of the financial statements is located on the Financial Reporting Council's website at: [www.frc.org.uk/auditors-responsibilities](http://www.frc.org.uk/auditors-responsibilities). This description forms part of our auditor's report.

## Extent to which the audit was considered capable of detecting irregularities, including fraud

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We identified and assessed the risks of material misstatement of the financial statements from irregularities, whether due to fraud or error, and discussed these between our audit team members including internal specialists. We then designed and performed audit procedures responsive to those risks, including obtaining audit evidence sufficient and appropriate to provide a basis for our opinion.

We obtained an understanding of the legal and regulatory frameworks within which the charity and group operates, focusing on those laws and regulations that have a direct effect on the determination of material amounts and disclosures in the financial statements. The laws and regulations we considered in this context were the Charities Act 2011 together with the Charities SORP (FRS 102) and the Charities Accounts (Scotland) Regulations 2006. We assessed the required compliance with these laws and regulations as part of our audit procedures on the related financial statement items.

In addition, we considered provisions of other laws and regulations that do not have a direct effect on the financial statements but compliance with which might be fundamental to the charity's and the group's ability to operate or to avoid a material penalty. We also considered the opportunities and incentives that may exist within the charity and the group for fraud.

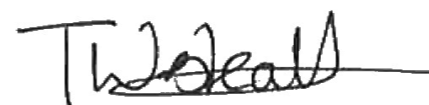
Auditing standards limit the required audit procedures to identify non-compliance with these laws and regulations to enquiry of the trustees and other management and inspection of regulatory and legal correspondence, if any.

We identified the greatest risk of material impact on the financial statements from irregularities, including fraud, to be within income recognition (specifically grant and contract income recognised on a judgemental basis) and the override of controls by management. Our audit procedures to respond to these risks included enquiries of management and the finance and audit subcommittee about their own identification and assessment of the risks of irregularities, designing and performing audit procedures over the income streams noted previously, sample testing on the posting of journals, reviewing accounting estimates for biases, reviewing regulatory correspondence with the Charity Commission, and reading minutes of meetings of those charged with governance.

Owing to the inherent limitations of an audit, there is an unavoidable risk that we may not have detected some material misstatements in the financial statements, even though we have properly planned and performed our audit in accordance with auditing standards. For example, the further removed non-compliance with laws and regulations (irregularities) is from the events and transactions reflected in the financial statements, the less likely the inherently limited procedures required by auditing standards would identify it. In addition, as with any audit, there remained a higher risk of non-detection of irregularities, as these may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. We are not responsible for preventing non-compliance and cannot be expected to detect non-compliance with all laws and regulations.

## Use of our report

This report is made solely to the charity's trustees, as a body, in accordance with Part 4 of the Charities (Accounts and Reports) Regulations 2008 and Regulation 10 of the Charities Accounts (Scotland) Regulations 2006. Our audit work has been undertaken so that we might state to the charity's trustees those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's trustees as a body, for our audit work, for this report, or for the opinions we have formed.



Tara Westcott  
Senior Statutory Auditor  
For and on behalf of Crowe U.K. LLP  
Statutory auditor, Cheltenham

27 June 2024

Crowe U.K. LLP is eligible for appointment as auditor of the charity by virtue of its eligibility for appointment as auditor of a company under section 1212 of the Companies Act 2006.

Crowe U.K. LLP is eligible for appointment as auditor of the charity under regulation 10(2) of the Charities Accounts (Scotland) Regulations by virtue of its eligibility under section 1212 of the Companies Act 2006.

# FINANCIAL STATEMENTS

## Consolidated statement of financial activities for the year ending 31 December 2023 incorporating an income and expenditure account

	Note	Unrestricted funds £000	Restricted funds £000	Unrestricted designated capital funds £000	Restricted capital funds £000	Total 2023 £000	Total 2022 £000
<b>Income from charitable activities</b>							
Scientific research		5,740	49,944	-	-	55,684	48,876
Capital and maintenance grants		-	1,200	-	1,390	2,590	2,044
Education and training		281	338	-	-	619	669
<b>Income from other trading activities</b>							
Trading income		788	-	-	-	788	982
Other income		295	31	-	-	326	352
<b>Income from investments</b>		471	-	-	-	471	150
<b>Total income</b>	2	<b>7,575</b>	<b>51,513</b>	<b>-</b>	<b>1,390</b>	<b>60,478</b>	<b>53,073</b>
<b>Expenditure</b>							
Charitable activities		4,527	34,865	706	1,519	41,617	35,482
Raising funds		-	1,315	-	-	1,315	1,167
Other		810	17,937	-	-	18,747	16,711
<b>Total expenditure</b>	3	<b>5,337</b>	<b>54,117</b>	<b>706</b>	<b>1,519</b>	<b>61,679</b>	<b>53,360</b>
<b>Net income/(expenditure) for the year before transfers</b>		<b>2,238</b>	<b>(2,604)</b>	<b>(706)</b>	<b>(129)</b>	<b>(1,201)</b>	<b>(287)</b>
Gain on fixed asset investment	8	137	-	-	-	137	-
Transfer between funds	14	(4,135)	2,604	-	1,531	-	-
<b>Net movement in funds in year</b>		<b>(1,760)</b>	<b>-</b>	<b>(706)</b>	<b>1,402</b>	<b>(1,064)</b>	<b>(287)</b>
Fund balances at beginning of year		8,415	-	3,758	7,281	19,454	19,741
<b>Fund balances at 31 December 2023</b>	14	<b>6,655</b>	<b>-</b>	<b>3,052</b>	<b>8,683</b>	<b>18,390</b>	<b>19,454</b>

All income and expenditure derives from continuing activities.  
Results of the charitable company for the year were total income £60,176k and deficit £1,064k.

## Consolidated and charity balance sheet as at 31 December 2023 Company Registration No:11314957

	Note	2023 Charity £000	2023 Group £000	2022 Charity £000	2022 Group £000
<b>Fixed assets</b>					
Tangible assets	7	9,740	9,740	9,036	9,036
Investments	8	5,199	5,149	50	-
<b>Total fixed assets</b>		<b>14,939</b>	<b>14,889</b>	<b>9,086</b>	<b>9,036</b>
<b>Current assets</b>					
Debtors	9	10,839	10,606	9,581	9,437
Cash at bank and in hand	10	14,710	15,069	21,413	21,712
<b>Current liabilities</b>					
Creditors falling due in one year	11	(22,098)	(22,174)	(20,626)	(20,731)
<b>Net current assets</b>		<b>3,451</b>	<b>3,501</b>	<b>10,368</b>	<b>10,418</b>
<b>Net assets</b>		<b>18,390</b>	<b>18,390</b>	<b>19,454</b>	<b>19,454</b>
<b>The funds of the charity</b>					
Unrestricted funds		6,655	6,655	8,415	8,415
Unrestricted designated capital funds		3,052	3,052	3,758	3,758
<b>Total unrestricted funds</b>		<b>9,707</b>	<b>9,707</b>	<b>12,173</b>	<b>12,173</b>
Restricted funds		-	-	-	-
Restricted capital funds		8,683	8,683	7,281	7,281
<b>Total restricted funds</b>		<b>8,683</b>	<b>8,683</b>	<b>7,281</b>	<b>7,281</b>
<b>Total charity funds</b>	14	<b>18,390</b>	<b>18,390</b>	<b>19,454</b>	<b>19,454</b>

The financial statements on pages 68-87 were approved by the board and authorised for issue on 26 June 2024 and signed on its behalf by:



Ewen Cameron  
Lord Cameron of Dillington, Chair

# FINANCIAL STATEMENTS

## Consolidated and charity cash flow statement for the year to 31 December 2023

	2023 Charity £000	2023 Group £000	2022 Charity £000	2022 Group £000
<b>Cash flows from operating activities</b>				
Net income/(expenditure) and net movement in funds for the year	(1,064)	(1,064)	(287)	(287)
Interest receivable	(469)	(469)	(150)	(150)
Dividend receivable	(2)	(2)	-	-
Depreciation	2,113	2,113	2,326	2,326
Loss on disposal of fixed assets	112	112	-	-
(Gain)/loss on investments	(137)	(137)	-	-
Capital grants receivable	(1,390)	(1,390)	(478)	(478)
(Increase)/decrease in debtors	(1,258)	(1,169)	(1,089)	(1,151)
Increase/(decrease) in creditors	1,472	1,443	(5,553)	(5,556)
<b>Net cash used in operating activities</b>	<b>(623)</b>	<b>(563)</b>	<b>(5,231)</b>	<b>(5,296)</b>
<b>Cash flows from investing activities</b>				
Interest received	459	459	150	150
Purchase of tangible assets	(2,929)	(2,929)	(3,802)	(3,802)
Purchase of investments	(5,000)	(5,000)	-	-
Capital grants received	1,390	1,390	478	478
<b>Net cash used in investing activities</b>	<b>(6,080)</b>	<b>(6,080)</b>	<b>(3,174)</b>	<b>(3,174)</b>
<b>Change in cash and cash equivalents in the year</b>	<b>(6,703)</b>	<b>(6,643)</b>	<b>(8,405)</b>	<b>(8,470)</b>
Cash and cash equivalents at the beginning of the year	21,413	21,712	29,818	30,182
<b>Total cash and cash equivalents at the end of the year</b>	<b>14,710</b>	<b>15,069</b>	<b>21,413</b>	<b>21,712</b>

## Notes to the consolidated financial statements

### 1. Accounting policies

#### a. Basis of preparation

UK Centre for Ecology and Hydrology (UKCEH) ("the Charity") is a private company limited by guarantee, domiciled and incorporated in England and Wales on 17 April 2018. The Company is registered as a charity in England and Wales and Scotland. The registered trading address and company and charity numbers are on page 30. The Charity began trading on 1 December 2019. The charity is a public benefit entity as defined by FRS102 and part of a public benefit group. Monetary amounts in these financial statements are rounded to the nearest whole £1,000, except where otherwise indicated. Sterling is the Group's functional and presentational currency.

The group accounts have been prepared under the historical cost convention with items recognised at cost or transaction value unless otherwise stated in the relevant note/s to those accounts. The financial statements have been prepared in accordance with Accounting and Reporting by Charities: Statement of Recommended Practice (FRS102) applicable to charities preparing their accounts in accordance with FRS102, the Financial Reporting Standard applicable in the UK and Republic of Ireland issued on 16 July 2014, the Charities Act 2011, the Companies Act 2006, the Charities and Trustee Investment (Scotland) Act 2005, the Charities Accounts (Scotland) Regulations 2006 and UK Generally Accepted Accounting Practice.

The principal accounting policies adopted in these financial statements, which have been consistently applied, are as follows:

#### b. Basis of consolidation

The consolidated financial statements incorporate the financial statements of UKCEH and its subsidiary undertaking in accordance with Financial Reporting Standard ("FRS") 102 "Accounting for Subsidiary Undertakings". The results of the subsidiary are consolidated on a line by line basis. The financial statements of all group undertakings and associates are made up to 31 December 2023. A separate income and expenditure account has not been presented for UKCEH as this is exempted by Section 408 of the Companies Act 2006.

UKCEH has one wholly owned subsidiary undertaking, UK Centre for Ecology & Hydrology Enterprise Limited (Company registration number: 12251749). The principal activity of the subsidiary is to increase UKCEH's social, economic and environmental impact and science excellence through commercial product and service collaborations and commercialisation of UKCEH research outputs and capabilities. The registered office of the subsidiary is Maclean Building, Crowmarsh Gifford, Wallingford, Oxfordshire, OX10 8BB.

#### c. Going concern

The trustees have reviewed whether it is still appropriate for the financial statements to be prepared on a going concern basis. Since it was established on the 1 December 2019, UKCEH has had a positive net income in aggregate, and has built its reserves to a level well above the minimum target.

The net deficit position for 2023 has been reviewed in the context of increasing income and additional actions taken to ensure a return to a surplus position from 2024. These actions include a focus on income diversification as well as prioritisation of the type of work bid for, balancing income from sources that fully cover costs with research income from funders for which the funding rules do not allow for full cost recovery. There is a robust plan for 2024 based on known activity and fund balances remain positive.

The board of trustees reviewed and approved the 2024 UKCEH plan in December 2023 and have a high degree of confidence in future income levels. UKCEH continues to be very successful in bidding for funding and as at April 2024, had secured in excess of 100% of its planned income for 2024. Beyond 2024, the long term plan includes a robust forecast for 2025, with the majority of the income required to deliver it having already been won.

Demand for the environmental science expertise of the Charity and Group is high and is expected to remain so for the foreseeable future. The Trustees believe that there are no known measurable material uncertainties that could call into doubt the ability of Charity and the Group to continue as a going concern.

## d. Income

Grant income is recognised in the statement of financial activities when received or when the charity becomes entitled to receipt. Grants that have been received will be treated as deferred income where there are specific requirements in the terms of the grant that the income recognition is dependent on certain activities being completed in a future accounting period.

Investment income relates to interests receivable from bank accounts and dividends receivable. These are recognised in the year they are earned.

Other income includes property rental income, training income, data licensing income and miscellaneous income. Revenue is recognised when the obligation is fulfilled. Capital grants and Institutional Funding are recognised in the consolidated statement of financial activities ("SoFA") when entitlement passes.

## e. Expenditure

Charitable activity expenditure represents the full cost of the research performed. It includes the cost of direct staff, consumable and indirect costs apportioned on the basis of use. Raising funds represents the cost of business development and communications. Governance costs represent the necessary cost of compliance with statutory and constitutional requirements. Support costs have been allocated to charitable activity expenditure, costs of generating funds and governance costs on a basis consistent with the use of resources.

## f. Restricted funds

Where research at UKCEH is funded by grants with conditions attached to them, these are shown as restricted. Capital grants received and receivable together with other restricted funds received and receivable and used to purchase tangible assets are included within restricted funds. A restricted capital reserve has been established representing the net book value of fixed assets purchased from capital grants and the remaining committed but unspent capital funding.

## g. Unrestricted funds

Research grants that do not contain conditions for the final receipt of funds have been treated as unrestricted. Funds received for non-specified purposes have also been included as unrestricted. The designated capital fund within unrestricted reserves represents the funds that have been set aside by the trustees following transfer of assets from UKRI-NERC on independence and internal investment in capital.

## h. Tangible assets and depreciation

Tangible assets are shown at cost or valuation less accumulated depreciation. The cost of tangible assets is their purchase cost, together with any incidental costs of acquisition. Items over £5,000 are capitalised. Depreciation is calculated using the straight line method to write off the cost or valuation of assets, less any estimated residual value, over their estimated useful lives at the following rates:

- Improvements to buildings - to the lower of the life of the improvement and the term of the associated building lease.
- Plant and machinery - 8 to 10 years
- Fixtures and fittings - 5 to 10 years
- Major equipment - 8 years
- Motor vehicles - 5 years
- IT equipment - 3 years

Assets under the course of construction are included at cost, and will be depreciated to their estimated residual values over their expected useful lives on a straight-line basis once the asset is available for use. An assessment is made at each reporting date of whether there are any indications that a fixed asset may be impaired or that an impairment loss previously recognised has fully or partially reversed.

## i. Fixed asset investments

Investment in the subsidiary undertaking is included at cost. Other investments are stated at fair value which is determined by reference to market value.

## j. Debtors

Debtors are non-interest bearing and are stated at their nominal value, as reduced by appropriate allowances for estimated irrecoverable amounts.

## k. Trade creditors

Trade creditors are non-interest bearing and are stated at their nominal value.

## l. Staff and pensions

UKCEH staff that joined before 1 December 2019 were employed by UKRI-NERC up to 1 December 2019, when they transferred employment to the Institute under TUPE. Transferred employees retain their membership of the Research Councils Pension Scheme (RCPS), where applicable, with UKCEH becoming an admitted employer in the scheme. The RCPS is a defined benefit scheme funded from annual grant-in-aid on a pay-as-you-go basis. The RCPS Pension Scheme is a multi-employer scheme and UKCEH is unable to identify its share of the underlying assets and liabilities. UKCEH therefore accounts for the scheme as if it were a wholly defined contribution scheme. As a result,

# FINANCIAL STATEMENTS

the amount charged to the income and expenditure account represents the contributions payable to the scheme in respect of the accounting period. Liabilities for the payment of future benefits are the responsibility of the RCPS and accordingly are not included in these Financial Statements. UKCEH has recruited all new staff from December 2019 on its own terms and conditions, covering basic pay and allowances, contractual payments, tax, NI, and liabilities for pension contributions and redundancy. Such staff are eligible to join a defined contribution scheme.

## m. Operating leases

Rental costs are charged to the statement of financial activities on a straight line basis over the life of the lease.

## n. Foreign currency transactions

The functional and reporting currency is pounds sterling. Transactions in foreign currencies are recorded at the rate of exchange ruling at the date of the transaction. Assets and liabilities denominated in foreign currencies are translated at year end exchange rates. All gains and losses are taken to the statement of financial activities in the year to which they relate.

## o. Judgements in applying accounting policies and key sources of estimation

Preparation of the financial statements require management to make significant judgements and estimates. The items in the financial statements where these judgements and estimates have been made include:

- Depreciation, which has been charged in line with the accounting policy above. The amount of depreciation charged and net book value of the assets is included in Note 7.
- Grant income is estimated based on future payment profiles and expenditure incurred to date.

## p. Donated goods, services and facilities

These are included at the value to the charity where this can be quantified. In accordance with the Charities SORP (FRS 102), no amounts are included in the financial statements for services donated by volunteers.

## 2. Analysis of incoming resources

	Research activities £000	Education and training activities £000	Other activities £000	Total 2023 £000	Total 2022 £000
<b>Income from charitable activities</b>					
<b>Grant and contract income</b>					
UKRI	32,705	420	-	33,125	29,720
Other government departments and public sector	14,958	39	-	14,997	11,397
European Commission	1,288	-	-	1,288	1,656
Universities	1,436	160	-	1,596	2,123
Charities	1,410	-	-	1,410	798
Private Sector	3,887	-	-	3,887	3,851
<b>Total grant income</b>	<b>55,684</b>	<b>619</b>	<b>-</b>	<b>56,303</b>	<b>49,545</b>
<b>Capital and maintenance grants</b>					
UKRI					
Repairs and maintenance	1,200	-	-	1,200	1,566
Capital expenditure	1,390	-	-	1,390	478
<b>Total capital grants</b>	<b>2,590</b>	<b>-</b>	<b>-</b>	<b>2,590</b>	<b>2,044</b>
<b>Total income from charitable activities</b>	<b>58,274</b>	<b>619</b>	<b>-</b>	<b>58,893</b>	<b>51,589</b>
<b>Income from other trading activities</b>					
Trading income	-	-	788	788	982
Rental income	-	-	97	97	155
Training income	-	107	-	107	134
Other income	-	-	122	122	63
<b>Total income from other trading activities</b>	<b>-</b>	<b>107</b>	<b>1,007</b>	<b>1,114</b>	<b>1,334</b>
<b>Income from investments</b>	<b>-</b>	<b>-</b>	<b>471</b>	<b>471</b>	<b>150</b>
<b>Total income</b>	<b>58,274</b>	<b>726</b>	<b>1,478</b>	<b>60,478</b>	<b>53,073</b>

# FINANCIAL STATEMENTS

## 3. Analysis of resources expended

	Research activities £000	Education and training activities £000	Other activities £000	Total 2023 £000	Total 2022 £000
<b>Direct charitable expenditure:</b>					
Science staff cost	23,024	635	-	23,659	20,405
Science direct costs	15,776	69	-	15,845	12,751
Depreciation	2,113	-	-	2,113	2,326
<b>Expenditure on charitable activities</b>	<b>40,913</b>	<b>704</b>	<b>-</b>	<b>41,617</b>	<b>35,482</b>
Governance costs	-	-	80	80	77
Support costs	18,135	230	-	18,365	16,223
Raising funds	-	-	1,315	1,315	1,167
Trading expenditure	-	-	302	302	411
<b>Expenditure on other activities</b>	<b>18,135</b>	<b>230</b>	<b>1,697</b>	<b>20,062</b>	<b>17,878</b>
<b>Total expenditure</b>	<b>59,048</b>	<b>934</b>	<b>1,697</b>	<b>61,679</b>	<b>53,360</b>

## Allocation of support costs, governance and raising funds

	Research activities £000	Education & training activities £000	Raising funds £000	Governance costs £000	Total 2023 £000	Total 2022 £000	Basis of allocation
Senior management and other central costs	1,091	14	-	80	1,185	936	Chargeable hours
Facilities (including rent and maintenance)	7,688	98	-	-	7,786	6,406	Chargeable hours
Business development and engagement	-	-	1,315	-	1,315	1,167	Activity
Finance, procurement and project support	2,393	30	-	-	2,423	2,030	Chargeable hours
IT	3,867	49	-	-	3,916	4,160	Chargeable hours
People and skills	1,666	21	-	-	1,687	1,476	Chargeable hours
Research contracts, licensing and info services	1,281	16	-	-	1,297	1,063	Chargeable hours
Science support	149	2	-	-	151	229	Chargeable hours
<b>Total support costs</b>	<b>18,135</b>	<b>230</b>	<b>1,315</b>	<b>80</b>	<b>19,760</b>	<b>17,467</b>	

## Analysis of governance costs

	Total 2023 £000	Total 2022 £000
Audit of the financial statements	27	35
Other assurance services	25	17
Trustees remuneration and expenses	28	25
<b>Total governance costs</b>	<b>80</b>	<b>77</b>

# FINANCIAL STATEMENTS

## 4. Employee information

The monthly average number of persons employed by the group and charitable company during the year, analysed by category, was as follows:

Group and Charitable Company	2023 Number	2022 Number
Science	473	428
Infrastructure	168	155
<b>Total</b>	<b>641</b>	<b>583</b>

The aggregate payroll costs of these persons were:

Group and Charitable Company	2023 £000	2022 £000
Wages and salaries	24,980	21,356
Social security costs	2,555	2,261
Pension costs	4,574	4,215
<b>Total</b>	<b>32,109</b>	<b>27,832</b>

An analysis of the number of staff who fall within staff cost bands (excluding employer national insurance and pension cost) from £60,000 upwards is provided below:

Group and Charitable Company	2023	2022
£60,000 - £69,999	24*	14
£70,000 - £79,999	11	10
£80,000 - £89,999	5	1
£90,000 - £99,999	1	2
£100,000 - £109,999	2	-
£110,000 - £119,999	1	2
£130,000 - £139,999	1	-
£150,000 - £159,999	-	1*
<b>Total</b>	<b>45</b>	<b>30</b>

\* The retiring executive director's remuneration package includes an additional allowance on top of base salary instead of an employer's pension contribution

Staff that joined prior to 1 December 2019 were employed by UKRI-NERC, when these employees transferred employment to the charity under TUPE.

Transferred employees retain their membership of the Research Councils Pension Scheme, where applicable, with UKCEH becoming an admitted employer in the scheme.

Staff that joined after 1 December 2019 are employed under UK Centre for Ecology & Hydrology terms and conditions.

The key management personnel are the members of the executive committee, as listed on page 33.

The employment costs (salaries, social security costs and pension costs) of the key management personnel for the group and charitable company were £1,571,732 (2022: £1,695,917).

Redundancy and early termination payments in the year totalled £ nil (2022: £103,550).

## 5. Remuneration of trustees

	2023 £000	2022 £000
Salary	14	13
Expenses	10	10
<b>Total</b>	<b>24</b>	<b>23</b>

Lord Cameron of Dillington received remuneration of £13,539 (2022: £13,004), covering work completed as chair of the board of trustees. The remuneration was agreed and provided under a provision in the governing document of the Charity. Remuneration was provided due to the trustee's role as the chair of the trustees, which requires a range of knowledge and experience and has a remit in terms of the role that the trustee is required to provide. The trustee did not receive any employee benefits or pension contribution.

The chief executive, Stuart Wainwright, appointed on 28 June 2023, is also a trustee. He has received no remuneration for this role in the year. He received remuneration and benefits for his services as executive director of £127,514 including employer's national insurance contribution and employer's pension contribution (2022: nil).

Mark Bailey retired on 28 June 2023 from his roles as executive director and trustee. He received no remuneration for his services as trustee. He received remuneration and benefits for his services as executive director of £81,702 (2022: £171,461) including employer's national insurance contribution. No pension contributions were made by the charity.

UK Centre for Ecology & Hydrology articles of association provide legal authority for these payments to be made.

The total reimbursement of travelling and subsistence expenses incurred by eight trustees amounted to £10,344 (2022: £10,117).



# FINANCIAL STATEMENTS

## 6. Taxation

UK Centre for Ecology & Hydrology is an exempt charity within the meaning of the Charities Act 2011 and as such is a charity within the meaning of section 506(1) of the Income and Corporation Taxes Act 1988 and is not subject to corporation tax in respect of its charitable activities.

The trading activities of the subsidiary company are subject to corporation tax; however profits in the year are gifted to the charitable company resulting in a £nil tax charge payable.

## 7. Tangible assets

Group and charitable company:	Improvements to buildings	Plant equipment	Fixture and fittings	IT equipment	Transport	Assets under construction	Total
<b>Cost</b>							
As at 1 January 2023	767	10,281	255	3,637	187	664	15,791
Additions	-	885	-	304	-	1,740	2,929
Disposals	(35)	(196)	(1)	(400)	-	-	(632)
Transfer	-	664	-	-	-	(664)	-
<b>As at 31 December 2023</b>	<b>732</b>	<b>11,634</b>	<b>254</b>	<b>3,541</b>	<b>187</b>	<b>1,740</b>	<b>18,088</b>
<b>Depreciation</b>							
As at 1 January 2023	(43)	(4,409)	(148)	(1,971)	(184)	-	(6,755)
Charged in the year	(14)	(1,164)	(25)	(907)	(3)	-	(2,113)
Disposals	-	119	1	400	-	-	520
<b>As at 31 December 2023</b>	<b>(57)</b>	<b>(5,454)</b>	<b>(172)</b>	<b>(2,478)</b>	<b>(187)</b>	<b>-</b>	<b>(8,348)</b>
<b>Net book value</b>							
As at 31 December 2023	675	6,180	82	1,063	-	1,740	9,740
As at 1 January 2023	724	5,872	107	1,666	3	664	9,036

## 8. Investments

Group	Cash £000	T Bills £000	Unit Trusts £000	Total £000
<b>Valuation at 1 January 2023</b>	-	-	-	-
Additions	5,000	-	-	5,000
Purchases	(15,409)	14,398	1,011	-
Disposals	10,428	(10,428)	-	-
Interest receivable	12	-	-	12
Dividend receivable	2	-	-	2
Investment management fee	(2)	-	-	(2)
Realised gain/(loss) on maturity/sale	-	51	-	51
Revaluation gain/(loss)	-	38	48	86
<b>Valuation at 31 December 2023</b>	<b>31</b>	<b>4,059</b>	<b>1,059</b>	<b>5,149</b>

The investments have been revalued to reflect their market value at the year end.

Company	Investment in Subsidiary Company £000	Cash £000	T Bills £000	Unit Trusts £000	Total £000
<b>Cost or valuation at 1 January 2023</b>	50	-	-	-	50
Additions	-	5,000	-	-	5,000
Purchases	-	(15,409)	14,398	1,011	-
Disposals	-	10,428	(10,428)	-	-
Interest receivable	-	12	-	-	12
Dividend receivable	-	2	-	-	2
Investment management fee	-	(2)	-	-	(2)
Realised gain/(loss) on maturity/sale	-	-	51	-	51
Revaluation gain/(loss)	-	-	38	48	86
<b>Valuation at 31 December 2023</b>	<b>50</b>	<b>31</b>	<b>4,059</b>	<b>1,059</b>	<b>5,199</b>

# FINANCIAL STATEMENTS

The investment in the subsidiary company is valued at cost. All other investments have been revalued to reflect their market value at year end. The wholly owned subsidiary company is UK Centre for Ecology & Hydrology Enterprise Limited (company no 12251749). The registered office of the subsidiary is Maclean Building, Crowmarsh Gifford, Wallingford, Oxfordshire, OX10 8BB. The results for the year ended 31 December 2023, which are included in the consolidated financial statements, are set out below:

	2023 £000	2022 £000
Turnover	788	982
Expenditure	(535)	(634)
<b>Profit for the year</b>	<b>253</b>	<b>348</b>
Gift aid distribution	(253)	(348)
<b>Retained earnings for the year</b>	<b>-</b>	<b>-</b>
<b>Net assets at 1 January</b>	<b>50</b>	<b>50</b>
<b>Net assets at 31 December</b>	<b>50</b>	<b>50</b>
Being:		
Current assets	501	594
Current liabilities	(451)	(544)
<b>Net assets at 31 December</b>	<b>50</b>	<b>50</b>

UK Centre for Ecology & Hydrology Enterprise Limited's principal activity during the year was commercialisation of UK Centre for Ecology & Hydrology intellectual property and the delivery of research contracts and commercial services in support of UKCEH's ambition and charitable purpose.

## 9. Debtors

	2023 £000	2023 £000	2022 £000	2022 £000
	Charity	Group	Charity	Group
Trade debtors	2,267	2,306	1,737	1,875
Amounts owed from subsidiary undertaking	375	-	435	-
Prepayments and accrued income	8,131	8,234	7,279	7,432
Other debtors	66	66	130	130
<b>Total</b>	<b>10,839</b>	<b>10,606</b>	<b>9,581</b>	<b>9,437</b>

## 10. Cash and cash equivalents

	2023 £000	2023 £000	2022 £000	2022 £000
	Charity	Group	Charity	Group
Cash at bank	4,304	4,663	11,301	11,600
Notice deposits	10,406	10,406	10,112	10,112
<b>Total</b>	<b>14,710</b>	<b>15,069</b>	<b>21,413</b>	<b>21,712</b>

## 11. Creditors

	2023 £000	2023 £000	2022 £000	2022 £000
	Charity	Group	Charity	Group
Trade creditors	1,052	1,052	1,043	1,043
Accruals and deferred income	19,117	19,174	18,757	18,863
Payroll and expense	716	716	600	600
Taxation (VAT payable)	590	609	222	225
Other creditors	623	623	-	-
Amounts owed to subsidiary undertakings	-	-	4	-
<b>Total</b>	<b>22,098</b>	<b>22,174</b>	<b>20,626</b>	<b>20,731</b>

## 12. Deferred income

	2023 £000	2023 £000	2022 £000	2022 £000
	Charity	Group	Charity	Group
Opening balance at 1 January	14,383	14,434	20,398	20,398
Deferred income released from previous year	(10,711)	(10,762)	(17,147)	(17,147)
Amounts deferred in year	10,659	10,659	11,132	11,183
<b>Carried forward at 31 December</b>	<b>14,331</b>	<b>14,331</b>	<b>14,383</b>	<b>14,434</b>

Deferred income relates to grant income, including research grants, which are received in advance of specific conditions being met. The income is shown as deferred until those conditions are fully satisfied.

# FINANCIAL STATEMENTS

## 13. Capital commitments

Group and Charitable Company	2023 £000 Total	2022 £000 Total
Contracted capital commitments at the end of the financial year not otherwise included in these accounts	484	1,376

## 14. Funds

### Analysis of net assets between funds - current year

UKCEH Group	Unrestricted funds £000	Restricted funds £000	Unrestricted designated capital funds £000	Restricted capital funds £000	Total 2023 £000
Fixed assets	5,149	-	1,509	8,231	14,889
Current assets	1,582	22,098	1,543	452	25,675
Current liabilities	(76)	(22,098)	-	-	(22,174)
<b>As at 31 December 2023</b>	<b>6,655</b>	<b>-</b>	<b>3,052</b>	<b>8,683</b>	<b>18,390</b>

### Analysis of net assets between funds - prior period

UKCEH Group	Unrestricted funds £000	Restricted funds £000	Unrestricted designated capital funds £000	Restricted capital funds £000	Total 2022 £000
Fixed assets	-	-	1,892	7,144	9,036
Current assets	8,520	20,626	1,866	137	31,149
Current liabilities	(105)	(20,626)	-	-	(20,731)
<b>As at 31 December 2022</b>	<b>8,415</b>	<b>-</b>	<b>3,758</b>	<b>7,281</b>	<b>19,454</b>

## Analysis of funds movements - current year

UKCEH Group	Unrestricted funds £000	Restricted funds £000	Unrestricted designated capital funds £000	Restricted capital funds £000	Total 2023 £000
At 1 January 2023	8,415	-	3,758	7,281	19,454
Total income and expenditure for the year	2,375	(2,604)	(706)	(129)	(1,064)
Restricted funds transfers	(4,135)	2,604	-	1,531	-
Designated capital transfers	-	-	-	-	-
<b>As at 31 December 2023</b>	<b>6,655</b>	<b>-</b>	<b>3,052</b>	<b>8,683</b>	<b>18,390</b>

## Analysis of funds movements - prior period

UKCEH Group	Unrestricted funds £000	Restricted funds £000	Unrestricted designated capital funds £000	Restricted capital funds £000	Total 2022 £000
At 1st January 2022	9,584	(933)	3,873	7,217	19,741
Total income and expenditure for the year	3,095	(1,534)	(1,140)	(708)	(287)
Restricted funds transfers	(3,239)	2,467	-	772	-
Designated capital transfers	(1,025)	-	1,025	-	-
<b>As at 31 December 2022</b>	<b>8,415</b>	<b>-</b>	<b>3,758</b>	<b>7,281</b>	<b>19,454</b>

Unrestricted funds are available for use at the discretion of the trustees in furtherance of the general objectives of the Group and which have not been designated for other purposes. Designated funds comprise unrestricted funds that have been set aside by the trustees following the transfer of assets from UKRI-NERC on independence and internal investment in capital.

Restricted funds are funds which are to be used in accordance with specific restrictions imposed by donors or which have been raised by the Group for particular purposes. The costs of raising and administering such funds are charged against the specific fund. Restricted capital funds are funds provided from third parties for sole use of purchasing capital items. The expenditure is the subsequent depreciation of these assets. Many projects classified as restricted are not funded at full cost. UKCEH decides to undertake these projects because of their scientific importance and deliberately 'co-fund' them using unrestricted funding. The fund transfer between unrestricted funds and restricted funds represents the allocation of co-funding to support these projects.

# FINANCIAL STATEMENTS

## 15. Pension schemes

UKCEH staff that joined before 1 December 2019 were employed by UKRI-NERC up to 30 November 2019, when they transferred employment to the Institute under TUPE.

Transferred employees retain their membership of the Research Council Pension Scheme (RCPS), which is administered by the Joint Superannuation Services (JSS).

The RCPS Pension Scheme is a multi-employer scheme. UKCEH accounts for the scheme as if it were a wholly defined contribution scheme. As a result, the amount charged to the income and expenditure account represents the contributions payable to the scheme in respect of the accounting period. Liabilities for the payment of future benefits are the responsibility of the RCPS and accordingly are not included in these Financial Statements. The employer contribution rate during the year was 26% (2022: 26%).

UKCEH employees that joined after 30 November 2019 are eligible to join a defined contribution scheme.

The total pension charge for the year was £4,574k (2022: £4,215k). £3,470k (2022: £3,535k) relates to the defined benefit scheme and £1,104k (2022: £680k) relates to the defined contribution scheme.

## 16. Related party transactions

UK Centre for Ecology & Hydrology has one subsidiary: UK Centre for Ecology & Hydrology Enterprise Limited. This is a wholly owned subsidiary with which the following transactions took place during the year:

	2023 £000	2022 £000
<b>Paid to UKCEH:</b>		
Management charge to cover licensing staff costs and intellectual property charge	233	223
Science staff cost for research project	59	308
Gift aid donation	253	348
<b>Total</b>	<b>545</b>	<b>879</b>

At 31 December 2023 UK Centre for Ecology & Hydrology Enterprise Limited owed UKCEH £375k (2022 £435k)

### UKRI-NERC

UKCEH is strategically funded, by UKRI-NERC. UKRI-NERC supports UKCEH via strategic funding programmes, competitively won project grants and capital funding for infrastructure and technology investments.

UKCEH is strategically funded by UKRI-NERC. UKRI-NERC funds scientific research and equipment purchases for the Group. Funding for the year was £35,715k as shown in note 2. (2022: £31,764k)

## 17. Agency arrangements

The charity acts as an agent in performing repairs and maintenance on the buildings leased from UKRI-NERC.

	2023 £000	2022 £000
Amount included in deferred revenue at 1 January	946	1,584
Grants received from UKRI-NERC	1,254	70
Expenditure on repairs and maintenance	(1,200)	(708)
<b>Amount included in deferred revenue at 31 December</b>	<b>1,000</b>	<b>946</b>

## 18. Operating lease obligations

	2023 £000	2022 £000
Less than 1 year	1,594	1,591
1-5 year	6,347	6,309
More than 5 year	23,800	25,409
<b>Total</b>	<b>31,741</b>	<b>33,309</b>

These amounts relate to rent on land and buildings.

	2023 £000	2022 £000
Lease expenditure in the year:		
Hire of equipment	23	16
Rent of land and buildings	1,524	1,584
<b>Total</b>	<b>1,547</b>	<b>1,600</b>

## 19. Events after the reporting period

On 23 April 2024 a second subsidiary, UK Centre for Ecology & Hydrology International Limited (number 15670898) was incorporated to help undertake international activities in support of the Charity's goals. The registered office of the UK Centre for Ecology & Hydrology International Limited is at the Maclean Building, Benson Lane, Crowmarsh Gifford, Wallingford, Oxfordshire, OX10 8BB, UK.



**UNITED KINGDOM**

[enquiries@ceh.ac.uk](mailto:enquiries@ceh.ac.uk)

[www.ceh.ac.uk](http://www.ceh.ac.uk)

[@UK\\_CEH](https://twitter.com/UK_CEH)

**BANGOR**

UK Centre for Ecology & Hydrology  
Environment Centre Wales  
Deiniol Road  
Bangor  
Gwynedd  
LL57 2UW  
United Kingdom  
T: +44 (0)1248 374500

**EDINBURGH**

UK Centre for Ecology & Hydrology  
Bush Estate  
Penicuik  
Midlothian  
EH26 0QB  
United Kingdom  
T: +44 (0)131 4454343

**LANCASTER**

UK Centre for Ecology & Hydrology  
Lancaster Environment Centre  
Library Avenue  
Bailrigg  
Lancaster  
LA1 4AP  
United Kingdom  
T: +44 (0)1524 595800

**WALLINGFORD**

UK Centre for Ecology & Hydrology  
Maclean Building  
Benson Lane  
Crowmarsh Gifford  
Wallingford  
Oxfordshire  
OX10 8BB  
United Kingdom  
T: +44 (0)1491 838800

**WEST AFRICA**

**ACCRA**

UK Centre for Ecology & Hydrology  
CSIR Office Complex  
Council Close  
Agostinho Neto Road  
Airport Residential Area  
Accra  
Ghana

