**Global Centres in clean energy and climate change**

Apply for funding to support new cutting-edge, interdisciplinary, use-inspired research on clean energy and climate change through international partnerships fostering novel breakthroughs or informing policy.

UK Research and Innovation (UKRI) is able to support Global Centres Implementation ‘Track-1’ awards focused on clean energy and climate change topics.

UKRI funding for this opportunity will be utilised to create an ecosystem of global centres which thrive on international partnership. Specifically funding is available for UK based researchers to create partnerships which must contain a partner in the US and could also include partners in Canada or Australia.

You must be based at a UK research organisation eligible for UKRI funding.

The full economic cost of ‘Track-1’ projects can be up to £6,250,000 and can be up to 5 years in duration. UKRI will fund 80% of the full economic cost.

The US’s NSF leads this collaboration which has been developed with:

* UK: UKRI
* Canada: NSERC and SSHRC
* Australia: CSIRO

The UK element of the project is open to research groups and individuals based at [eligible UK organisations](https://www.ukri.org/apply-for-funding/before-you-apply/check-if-you-are-eligible-for-research-and-innovation-funding/).

Eligible organisations are:

* UK higher education institutions
* research council institutes
* UKRI-approved independent research organisations
* eligible public sector research establishments
* eligible research and technology organisations
* NHS bodies with research capacity

[Check if your institution is eligible for funding.](https://www.ukri.org/apply-for-funding/before-you-apply/check-if-you-are-eligible-for-research-and-innovation-funding/who-can-apply-for-funding/#contents-list)

Investigators must be academic employees, lecturer or equivalent, of an eligible organisation and must be resident in the UK. Any fellows holding fellowships aimed primarily at the postdoctoral level are not eligible to apply. [Check if you are eligible for funding.](https://www.ukri.org/councils/epsrc/guidance-for-applicants/check-if-you-are-eligible-for-funding/)

Submissions to this funding opportunity will not count towards any UKRI-specific demand management policies.

Read further information on which countries and funding agencies are participating in this opportunity on the [NSF solicitation web page](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23557).

Please note that UK applicants can be named investigators in a maximum of 2 proposals but named as a principal investigator on only 1 proposal.

NSF principal investigators partnering with UK-based researchers must appoint a UK-based researcher who is eligible to receive funds from UKRI to act as the lead UK investigator (the UK principal investigator) on the UK portion of the grant. Additional UK researchers may join as co-investigators.

Partnerships must be interdisciplinary and can involve researchers who are in any field of the:

* social sciences
* humanities
* natural sciences
* engineering and physical sciences
* biotechnological and biological sciences

A requirement of the UKRI funding for this opportunity is that the UK component of the global centres proposal must be at least 65% focused on delivering clean energy solutions. UK proposals can either focus on clean energy or clean energy and climate change solutions.

Proposals with UKRI as an agency partner must additionally submit an application package to UKRI. This is alongside the NSF package and is purely for administrative purposes to assess the eligibility of the project team and will not be subject to further peer review or other assessment by UKRI.

Irrespective of the composition of the research team, the UK members of the team must submit only 1 package to UKRI.

This opportunity is supported through UKRI’s strategic theme ‘[building a green future](https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/building-a-green-future/)’, through which UKRI is seeking to harness the UK’s research and innovation expertise to unlock solutions essential to achieving net zero in the UK by 2050.

### Overview

The Global Centres programme is an NSF-led effort, implemented in partnership with like-minded international funders. The programme encourages and supports large-scale collaborative research on use-inspired themes in clean energy and climate change which foster solutions to address the global climate crisis.

In this inaugural Global Centres funding opportunity, NSF have partnered with funding organisations in Australia, Canada, and the UK. The international funding organisations partnering with the US’s NSF are:

* Australia: CSIRO
* Canada: NSERC and SSHRC
* UK: UKRI

In terms of this opportunity, ‘use-inspired’ reflects the need for projects to focus on generating outcomes which have clear benefits for society in our efforts to tackle the global climate crisis. These outcomes should seek to generate novel clean energy solutions or help the assessment or mitigation of climate-change impacts on society, people, and communities.

In this opportunity, for UKRI funded projects, the term ‘climate change’ is used to encompass areas such as improving the resilience and sustainability of our natural and physical environment and society to climate change, to biodiversity conservation and protection. It is also used to cover the adaptation of ecosystem services, to the use of innovative artificial intelligence (AI) and data science approaches as well as the development of new technologies for solutions in the face of a changing climate.

More details on the specific areas UKRI considers to be within the ‘climate change’ scope for this funding opportunity is detailed below.

This solicitation launches an ambitious new programme to fund international, interdisciplinary collaborative research centres that will apply best practices of broadening participation and community engagement to develop use-inspired research on clean energy and climate change.

This programme will prioritise research collaborations fostering team science, community-engaged research, and use knowledge-to-action frameworks. The proposed research work should maximise the benefits of international, interdisciplinary collaborations. The proposed research can focus on delivering solutions not just for the countries partnering this opportunity, but which may be applicable at a global level.

This opportunity is supported through UKRI’s strategic theme ‘[building a green future](https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/building-a-green-future/)’, through which UKRI is seeking to harness the UK’s research and innovation expertise. This strategic theme will address environmental challenges, overcoming technological, social and market barriers to deliver business growth, increased productivity and a prosperous green future for all.

UKRI funding for this opportunity will be utilised to create an ecosystem of global centres which thrive on international partnership. Specifically, funding is available for UK based researchers to create global centre partnerships which must contain a partner in the US and could also include partners in Canada or Australia.

A requirement of the UKRI funding for this opportunity is that the UK component of the global centres proposal must be at least 65% focused on delivering clean energy solutions. UK proposals can either focus on clean energy or clean energy and climate change solutions.

### Funding tracks

In the framework of this opportunity, UKRI is currently only able to support Global Centres partnerships which fit within the scope of the NSF solicitation category of ‘Track-1’ awards which will be focused on clean energy and climate change topics. However, subject to budget availability, UKRI may be able to support community-driven Global Centre design ‘Track-2’ awards focused on clean energy and climate change topics.

UK applicants interested in ‘Track-2’ awards should check this page which will be updated periodically to reflect UKRI’s position with this funding route.

#### Track-1: Global Centre implementation

This route will support proposals to advance use-inspired research in climate change or clean energy that involve US teams supported by NSF, in collaboration with research teams supported by funding agencies based in Australia, Canada, or the UK.

UKRI is allocating up to £18 million over 5 years to support activities of eligible researchers across supported projects under this funding route. The UKRI-supported elements of Global Centres implementation ‘Track-1’ awards are expected to be up to 5 years in duration. Number of successful awards are subject to the availability of funds. UKRI expects to support the UK-components of between 3 to 5 Global Centres.

Due to the nature of this investment, additional reporting requirements and conditions may be applied to this investment. This will be reflected in the grant additional conditions, and those funded will need to comply with them.

‘Track-1’ projects can be up to 5 years in duration and must start between 1 October 2023 and 31 December 2023. There will likely be a grant condition on end date to align with the 5-year maximum duration of ‘Track-1’ projects.

#### Track-2: community-driven Global Centre design

Subject to budget availability, UKRI may be able to support community-driven Global Centre design ‘Track-2’ awards focused on clean energy and climate change topics.

Details on ‘Track-2’ can be found on the [NSF solicitation web page](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23557).

UK applicants interested in ‘Track-2’ awards should check this page which will be updated periodically to reflect UKRI’s position with this funding route.

### UKRI scope

UKRI has identified priority areas which it encourages potential participants within the UK research and innovation community to consider.

UKRI is particularly interested in supporting interdisciplinary research and innovation in the solutions which will be needed to overcome the last 20% of emissions we do not yet have a pathway to mitigate.

These solutions must be developed and de-risked now to enable deployment in the 2030s and collaboration internally is key to delivering our outcomes. The UK has enshrined in law a binding target of achieving net zero carbon emissions by 2050 and 78% emissions reduction by 2035.

A requirement of the UKRI funding for this opportunity is that the UK component of the global centres proposal must be at least 65% focused on delivering clean energy solutions. UK proposals can either focus on clean energy or clean energy and climate change solutions.

These themes include cross cutting considerations:

* the sustainability and circularity of the solutions proposed
* solutions need to be able to be implemented in a warmer climate with more extreme weather patterns
* energy demand reduction opportunities as energy efficiency and usage behaviours (green choices and green behaviours) will change as we decarbonise
* systems considerations
* solutions that also secure co-benefits such as enhanced biodiversity, resilient ecosystem services, improved air quality, health, and supply chain resilience for example

### Clean energy theme

UKRI has identified 4 priority areas which we are particularly interested in seeing ideas in:

* negative emission technologies
* systems approaches to tackling the ‘final 20%’
* targeting the difficult to decarbonise
* removing the barriers to uptake of solutions

#### Priority area 1: negative emissions technologies

This priority will focus on the discovery and development of new negative emissions technologies (NETs) which are able to remove harmful pollutants such as greenhouse gases (GHGs) from our atmosphere at low concentrations.

NETs are mechanisms for the absorption and storage of carbon and other atmospheric GHGs. They are considered to be key to attaining net zero carbon emissions by removing GHGs from the atmosphere. It is anticipated that they could play a major role in decarbonising energy-intensive industries, such as agriculture and cement production.

There are uncertainties and concerns regarding the use of NETs, such as the ability to develop and deploy NETs at scale, and the wider ecological impacts of NETs.

This priority will include consideration of the next generation of negative emissions technologies including bioenergy (for example: bioenergy with carbon capture and storage) and direct air carbon capture and storage.

To support NETs development, work will need to be undertaken to understand the efficiency, economics, environmental impacts of NETs, and the public perception around climate change and NETs. Research into new policy, standards and regulatory recommendations will be needed to support the advancement of this area. It will also be important to explore the interactions between nature-based solutions and NETs.

For instance, this priority could address the development of new negative emissions technologies (across the spectrum of biosciences, engineering and physical sciences disciplines) which would provide a suite of options for deployment. Through the development, the environmental impacts and the economics would be considered and be a key part in the development of a suite of solutions that could be deployed.

#### Priority area 2: systems approaches to tackling the ‘final 20%’

This priority will ensure the adoption of a systems approach, whereby technologies, behaviours and interactions are at the forefront of achieving the final 20% of emission reduction.

Whole system modelling is key to enable informed decisions to optimise the system which has benefits in terms of resilience, sustainability, and both environmental and economic outcomes (to varying degrees) through the consideration of social, environmental, economic, technological, regulatory, political, and legal factors.

There is potential to focus on:

* consumer acceptance and behavioural practices of net zero solutions
* design approaches to net zero
* development of circular systems and industrial symbiosis and understanding of the benefits and trade-offs they bring
* exploring the unintended consequences of deployment plans and the impact on the wider system, which can inform the research needed to tackle the last 20%
* infrastructure planning to avoid baking in further patterns resulting in future emissions
* new policy, standards and regulatory solutions
* systems integration considerations, considering the solutions in the context of the wider systems
* the role of local in terms of communities driving change
* the role of local in terms of local energy systems, local manufacturing etc.
* the role of local in terms of local reuse and local remanufacturing reducing consumption and embodied emissions
* the technology coupling requirements based on the solutions currently being developed
* understanding of sustainable and equitable low-carbon behavioural practices for sustainable living and a just transition

For instance, this priority could see activities focused on considering the system requirements for tackling the last 20% of emissions, considering the social, environmental, economic, technological, regulatory, political, and legal factors. Activities could consider existing and proposed solutions and the impact of deployment at scale, and the system implications and trade-offs based on the options identified.

#### Priority area 3: targeting the difficult to decarbonise

This priority will focus on the hardest to abate areas (heavy industry and heavy-duty transport, and the agri-food system) and securing decarbonisation and emissions reduction in the critical industries.

There are still significant research challenges in these areas. There is established need to work on the gaps in existing research to tackle the hardest challenges where finding value for money solutions or alternatives that work at scale is vital to achieving net zero. These challenges include aviation and maritime, emissions from the agri-food system, chemical production, manufacture of cement, steel, glass, paper, and heating and cooling of buildings.

There are also opportunities to consider other GHG reduction or removal approaches that could deliver the lowering of emissions needed to reach the UK’s net zero 2050 target.

Research opportunities to consider include:

* addressing consumer acceptance and behavioural practices of net zero solutions
* design approaches to net zero
* green choices and green behaviours
* land-based decision making
* new technological solutions for the heating and cooling of buildings, maximising the value of existing building stock
* new policy, standards and regulatory solutions
* novel materials discovery, transforming existing approaches and industries
* reducing consumption and increasing resource efficiency through circular approaches and more sustainable manufacturing
* reducing food waste
* reducing land-based and agricultural emissions
* substituting petrochemical process and products with those derived from biotechnology, covering the concept of ‘biorefining’ for the manufacture of materials, chemicals and energy carriers
* understanding of sustainable and equitable low-carbon behavioural practices for sustainable living and a just transition

For instance, this priority could see sector-specific activities focused on identifying the research challenges that need to be addressed to reach decarbonisation targets and lowering of emissions needed to meet global targets.

For example, focusing on emissions from meat and land food production, could see suggestions for changes in approaches to production that would reduce embodied emissions. There may be activities focused here on capturing and creating value from emissions from current production approaches such as those covered by ‘biorefining’.

#### Priority area 4: removing the barriers to uptake of solutions

This priority will ensure we focus on addressing the barriers to uptake through green choices and green behaviours, to technological and scientific solutions to barriers to current approaches which require further scientific exploration to maximise the potential value and impact of deployment of these interventions.

The majority of the technical solutions for achieving net zero are already available but they are expensive or deliver poor performance. Work is needed to improve the uptake of existing technologies through research and development to improve efficiency and reduce costs.

This could focus on improving efficiency of heat pumps, developing low-powered computing solutions, and investigating business models including life-cycle analysis and techno-economic analysis, alongside policy, legislative and regulatory drivers to increase uptake of existing solutions.

For instance, this priority could see activities focused on understanding the adoption and uptake of existing solutions and understanding the barriers that need to be addressed. This could also see consideration of small-scale demonstration activities such as living labs which see solutions being used in public to explore social patterns and the impacts.

### Climate change theme

In this opportunity, for UKRI funded projects, the term ‘climate change’ is used to encompass areas such as improving the resilience and sustainability of our natural and physical environment and society to climate change, to biodiversity conservation and protection. It is also used to cover the adaptation of ecosystem services, to the use of innovative (AI) and data science approaches as well as the development of new technologies for solutions in the face of a changing climate.

This will have an emphasis on ‘use inspired research’ and foreseeable benefits to society resulting from the project outcome. It will support international interdisciplinary collaborations to improve the resilience and sustainability of our natural and physical environment and society to climate change.

These ‘use inspired’ challenges recognise that our environment is both a source and a sink of GHG and our ecosystems are highly vulnerable to climate change and extreme weather events, leading to land degradation and loss in biodiversity and ecosystem services.

There is a need for integrated solutions in the face of a changing climate and we encourage the use of innovative AI and data science approaches as well as the development of new technologies.

As such, we are keen to encourage UK participation in the following areas listed in the NSF solicitation:

* biodiversity protection, conservation, restoration
* building knowledge and guidance into best practice and policy
* circular bioeconomy for food, feed, energy, and products
* climate ready, resilient agriculture, aquaculture, fisheries
* climate-ready resilient cities and infrastructures
* food and water resources and security on the changing planet
* economics, policy, social sciences for climate-resilience solutions
* ecosystem health and restoration
* engineered and nature-based contributions to reducing and repairing the impact (past and future) of human activities on the natural environment
* green or blue infrastructures
* interplay of engineered solutions to natured based solutions
* sustainable and resilient solutions to complex physical systems coupled with digital systems
* transport resilience in the changing planet

### Project teams

Please note that UK applicants can be named investigators in a maximum of 2 proposals, but named as a principal investigator on only 1 proposal.

NSF principal investigators partnering with UK-based researchers must appoint a UK-based researcher who is eligible to receive funds from UKRI to act as the lead UK investigator (the UK principal investigator) on the UK portion of the grant. Additional UK researchers may join as co-investigators.

Partnerships must be interdisciplinary and can involve researchers who are in any field of the:

* social sciences
* humanities
* natural sciences
* engineering and physical sciences
* biotechnological and biological sciences

The [UKRI-Research Council of Norway Money Follow Cooperation agreement](https://www.ukri.org/opportunity/collaborate-with-researchers-in-norway/) does not apply to this funding opportunity. As such submissions to this opportunity cannot include a Norway-based co-investigator.

UK awards must report regularly to UKRI according to the reporting requirements, which will be outlined in successful award letters.

### Funding available

UKRI has up to £18 million available to fund a number of projects under this opportunity.

The full economic cost of ‘Track-1’ projects can be up to £6,250,000. UKRI will fund 80% of the full economic cost. ‘Track-1’ projects can be up to 5 years in duration and must start between 1 October 2023 and 31 December 2023.

There will likely be a grant condition on end date to align with the 5-year maximum duration of ‘Track-1’ projects. Number of successful awards are subject to the availability of funds. UKRI expects to support the UK-components of between 3 to 5 Global Centres.

Equipment over £10,000 in value (including VAT) is not available through this opportunity.  Smaller items of equipment (individually under £10,000) should be in the ‘directly incurred: other costs’ heading. [Guidance on equipment funding](https://www.ukri.org/councils/epsrc/guidance-for-applicants/types-of-funding-we-offer/epsrc-approach-to-equipment-funding/).

### Trusted research and innovation

UKRI is committed in ensuring that effective international collaboration in research and innovation takes place with integrity and within strong ethical frameworks. Trusted research and innovation is a UKRI work programme designed to support cross-sector campaigns that protect all those working in our thriving and collaborative international sector.

Our [trusted research and innovation principles](https://www.ukri.org/about-us/policies-standards-and-data/good-research-resource-hub/trusted-research-and-innovation/) set out UKRI’s expectations of organisations funded by UKRI in relation to due diligence for international collaboration.

You are encouraged to read these principles and should familiarise yourself with the resources referenced in our trusted research and innovation guidance, in order to get the most out of international collaboration while protecting intellectual property, sensitive research and personal information.

### Responsible innovation

UKRI is fully committed to develop and promote responsible innovation. Research has the ability to not only produce understanding, knowledge and value, but also unintended consequences, questions, ethical dilemmas and, at times, unexpected social transformations.

We recognise that we have a duty of care to promote approaches to responsible innovation that will initiate ongoing reflection about the potential ethical and societal implications of the research that we sponsor and to encourage our research community to do likewise. Further UKRI guidance can be seen within the [good research resource hub](https://www.ukri.org/about-us/policies-standards-and-data/good-research-resource-hub/trusted-research-and-innovation/).

### NSF submission process

Full information on the submission process can be found on the [NSF solicitation web page](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23557).

The full application package must be submitted to the NSF.

We recommend you start your application early with your non-UK partners and that you check any eligibility queries with the UK contact points.

NSF must receive the full application package by 10 May 2023.

Proposals with UKRI as an agency partner must additionally submit an application package to UKRI. This is alongside the NSF package and is purely for administrative purposes to assess the eligibility of the project team and will not be subject to further peer review or other assessment by UKRI.

Irrespective of the composition of the research team, the UK members of the team must submit only 1 package to UKRI. The lead UK investigator (the UK principal investigator) is responsible for submitting this information on behalf of the UK co-investigators.

### UKRI specifics: ‘Track-1’

In addition to the NSF submission, UK applicants must submit information to UKRI using the [Joint Electronic Submission (Je-S) system](https://je-s.rcuk.ac.uk/JeS2WebLoginSite/Login.aspx).

You can find advice on completing your application in:

* the [Je-S handbook](https://je-s.rcuk.ac.uk/Handbook/index.htm)
* [how to submit your proposal in Je-S](https://www.ukri.org/councils/epsrc/guidance-for-applicants/how-to-submit-your-proposal-in-je-s/)

We recommend you start your application early.

Your host organisation will also be able to provide advice and guidance.

### Submitting your application through Je-S: ‘Track-1’

Before starting an application, you will need to log in or create an account in Je-S.

All investigators involved in the project need to be registered on Je-S.

Any investigators who do not have a Je-S account must register for one at least seven working days before the opportunity deadline.

When applying:

1. Select ‘documents’, then ‘new document’.
2. Select ‘call search’.
3. To find the opportunity, search for: NSF Global Centers.

This will populate:

* council: EPSRC
* document type: standard proposal
* scheme: standard
* call/type/mode: NSF Global Centers

Once you have completed your application, make sure you ‘submit document’.

You can save completed details in Je-S at any time and return to continue your application later.

### Deadline for UKRI submission: ‘Track-1’

UKRI must receive your application by 11 May 2023 at 4:00pm UK time.

You will not be able to apply after this time. Please leave enough time for your proposal to pass through your organisation’s Je-S submission route before this date.

You should ensure you are aware of and follow any internal institutional deadlines that may be in place.

### Attachments for UKRI submission: ‘Track-1’

Your application must also include the following attachments.

You should attach your documents as PDFs to avoid errors. They should be completed in single-spaced Arial 11 font or similar-sized sans serif typeface. UKRI will not accept any other attachment types under this opportunity.

Read UKRI advice on how to write proposals, as an example see [guidance on writing proposals for EPSRC funding](https://www.ukri.org/councils/epsrc/guidance-for-applicants/what-to-include-in-your-proposal/).

Case for support:

* for this attachment, please submit the full application package submitted by the consortium to NSF. This should not be an extract of the application, but all documentation submitted

Justification of resources (2 pages):

* this should provide a full justification of resources requested from UKRI for the UK team only

CVs (up to 2 A4 sides each) for named:

* postdoctoral staff, researcher co-investigators (research assistants who have made a substantial contribution to the proposal and will be employed on the project for a significant amount of time)
* visiting researchers

Letters of support from all project partners included in the Je-S form (no page limit):

* [EPSRC guidance on project partners letter of support](https://www.ukri.org/councils/epsrc/guidance-for-applicants/what-to-include-in-your-proposal/project-partners-letter-of-support/)

Technical assessments for facilities listed as requiring one in the Je-S guidance (no page limit)

Cover letter (optional attachment, no page limit)

### Ethical information

UKRI will not fund a project if it believes that there are ethical concerns that have been overlooked or not appropriately accounted for. All relevant parts of the ‘ethical information’ section must be completed.

[Guidance on completing ethical information on the Je-S form](https://je-s.rcuk.ac.uk/Handbook/pages/GuidanceonCompletingaStandardG/EthicalInformation.htm).

### ‘Track-2’: guidance for UKRI applicants

UK applicants interested in ‘Track-2’ awards should check this page which will be updated periodically to reflect UKRI’s position with this funding route.

### Assessment process

NSF will coordinate and manage the review of proposals in consultation with the participating international funding organisations, according to the respective arrangements with NSF. Full information on the assessment process can be found on the [NSF solicitation web page](https://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf23557).

Following the NSF-led review, UKRI will consider all fundable proposals and assign UKRI funding to meritorious projects as appropriate. The eventual outcome will be subject to a portfolio approach which will consider, in addition to the excellence and potential for impact, the research balance of the portfolio and its geographical distribution.

### Background

This opportunity delivers to UKRI’s 2022 to 2027 strategy transforming tomorrow together, to support world-class ideas, advancing the frontiers of human knowledge and innovation by enabling the UK to seize opportunities from emerging research trends, multidisciplinary approaches and new concepts and markets.

This opportunity will mobilise the UK’s research and innovation strengths to ensure the UK plays its part in addressing global challenges that require a truly global and coordinated response.

This opportunity is supported through one of the 5 strategic themes of UKRI which look to harness the full power of the UK’s research and innovation system to address major national and global challenges, specifically UKRI’s strategic theme ‘[building a green future](https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/building-a-green-future/)’.

Through ‘[building a green future](https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/building-a-green-future/)’, UKRI is seeking to harness the UK’s research and innovation expertise to address environmental challenges, overcoming technological, social and market barriers to deliver business growth, increased productivity and a prosperous green future for all.

Through this strategic theme, UKRI will use our extensive convening power, working across the business, academic, policy and regulatory interfaces to deliver fundamental change in how we tackle the global climate crisis.

UKRI will leverage national and international research and innovation strengths across multiple disciplines and sectors to deliver the new knowledge, technologies, skilled people, and multidisciplinary and interdisciplinary partnerships needed to keep the UK at the forefront of a new, green industrial revolution.

UKRI will target priorities co-designed with government and industry in areas such as:

* targeting the ‘final 20%’ of greenhouse gas (GHG) reductions
* realising a circular economy
* protecting our nature, biodiversity, and agricultural landscape
* developing and deploying net zero technologies

This opportunity speaks directly to targeting the ‘final 20%’ of GHG reductions priority.

### Sustainability

[UKRI’s environmental sustainability strategy](https://www.ukri.org/about-us/policies-standards-and-data/environmental-sustainability/) lays out our ambition to actively lead environmental sustainability across our sectors. This includes a vision to ensure that all major investment and funding decisions we make are directly informed by environmental sustainability, recognising environmental benefits as well as potential for environmental harm.

In alignment with this, UKRI is tackling the challenge of environmental sustainability through our ‘[building a green future](https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/building-a-green-future/)’ strategic theme. This strategic theme aims to develop whole systems solutions to improve the health of our environment and deliver net zero, securing prosperity across the whole of the UK.

Environmental sustainability is a broad term but may include consideration of such broad areas as:

* reducing carbon emissions
* protecting and enhancing the natural environment and biodiversity
* waste or pollution elimination
* resource efficiency and a circular economy

UKRI expects projects to embed careful consideration of environmental sustainability at all stages of the research and innovation process and throughout the lifetime of the project. Projects should ensure that environmental impact and mitigation of the proposed research approaches and hub operations, as well as the associated project outputs and outcomes is considered.

Projects must also seek opportunities to influence others and leave a legacy of environmental sustainability within the broader operations of your academic and industry partners.

### Equality, diversity and inclusion (EDI)

UKRI is committed to achieving equality of opportunity for all and aims to create an inclusive environment that encourages excellence in scientific research through good equalities practice.

Diversity is one of the core UKRI values, and we are working to ensure that the ways in which we fund embrace a diversity of:

* thought
* people
* geographical locations
* ideas

Read more about our [expectations for EDI](https://www.ukri.org/about-us/epsrc/our-policies-and-standards/equality-diversity-and-inclusion/expectations-for-equality-diversity-and-inclusion/). Further UKRI guidance can be seen within the [good research resource hub](https://www.ukri.org/about-us/policies-standards-and-data/good-research-resource-hub/trusted-research-and-innovation/).

### Grant additional conditions

Grants are awarded under the standard [UKRI grant terms and conditions](https://www.ukri.org/manage-your-award/meeting-ukri-terms-and-conditions-for-funding/). The following additional grant conditions will also apply. Please ensure this is resourced for accordingly in the application.

#### Start date

Notwithstanding RGC 5.2 starting procedures, this grant must start between 1 October 2023 and 31 December 2023. No slippage of start date beyond 31 December 2023 will be permitted. Expenditure may be incurred prior to the start of the grant and be subsequently charged to the grant, provided that it does not precede the date of the offer letter.

#### Cost overrun

We will not be responsible for any cost overrun incurred during the course of this grant. You will be required to make up any shortfall from alternative sources.

#### Equality, diversity and inclusion (EDI)

In addition to RGC 3.4, you are expected to prepare a full EDI plan for the duration of this grant to demonstrate best practice in EDI throughout the lifetime of this funding award. This must be recorded through the grant reporting process.

#### Publicity and branding

In addition to RGC 12.4 publication and acknowledgement of support, you must make reference to the UKRI build a greener strategic theme and UKRI funding. You must include the UKRI logo and relevant branding on all online or printed materials (including press releases, posters, exhibition materials and other publications) related to activities funded by this grant.

#### User engagement strategy

You must develop and execute a strategy for engaging with potential users of the research funded in the project. This strategy should be reviewed and updated regularly as part of the formal management and reporting process agreed for this grant.

#### Collaboration agreements

Where the grant is associated with more than 1 research organisation or other project partners, a formal collaboration agreement must be in place with the basis of collaboration between the organisations including the following:

* the process of the flexible allocation of resources throughout the project
* ownership of intellectual property
* rights to exploitation

It is your responsibility to put such an agreement in place by 31 January 2024. The terms of collaboration agreements must not conflict with UKRI terms and conditions.

We must be informed within 3 months of the start of the grant, that the collaboration agreement is in place and has been signed by all partners or the progress made (unless some alternative timeline has been agreed with us beforehand).

If sufficient progress has not been made within 3 months of the start of the grant, we reserve the right the enact RGC 11.1.

Arrangements for collaboration or exploitation must not prevent the future progression of research and the dissemination of research results in accordance with academic custom and practice.

#### Project officer appointment

We will nominate a member of our staff (the project officer) who will be your primary point of contact. The project officer will ensure that the project is being run in accordance with the terms and conditions and in line with financial due diligence.

The project officer should have access to all documentation of governance and reporting bodies, in so far as it relates to the administration and application of the grant. As funding administrators, all UKRI staff have agreed to maintain the confidentiality required by all parties involved in our funded research.

#### Advisory board appointment

This grant must establish and run an independent advisory board, or equivalent body, to oversee the running of the project and provide advice on the strategic direction and activities of the project. The terms of reference and membership of this group (at least 50% independent membership and an independent chair) should be agreed with us.

The project officer will also be expected to attend and participate in advisory board and other appropriate meetings for the duration of the grant.

#### Monitoring and reporting

​You are responsible for providing financial data when requested by us. We expect that the frequency of such financial returns will be bi-annual but reserve the right to request returns more or less often as appropriate to respond to changes in business needs. A template and guidance to complete this will be provided by us in due course. You agree to undertake all reasonable endeavours to comply with these requests in a timely manner.

#### Progress reports

In addition to the requirements set out in the standard UKRI grant condition RGC 7.4.3, you are responsible for providing annual progress reports against non-financial performance metrics. A detailed list of performance metrics and instructions for reporting will be agreed with the grant holder upon commencement of the grant.

#### Partner withdrawal

In line with RGC 13.3, if the funding component from NSF, SSHRC, NSERC, CSIRO is either not agreed or withdrawn after the project has started, we reserve the right to terminate the grant.

#### UKRI building a green future theme

This is a strategic investment led by us on behalf of UKRI in support of UKRI’s [building a green future](https://www.ukri.org/what-we-offer/browse-our-areas-of-investment-and-support/building-a-green-future/) theme. Additional reporting requirements and conditions may be applied to this investment, and to other investments under the theme.