



Royal Academy  
of Engineering

Green Future  
Fellowships 

# **Green Future Fellowships 2024/25**

## **Invited Application guidance notes**

Application deadline:  
20 May 2025, 4pm GMT

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## Introduction

The purpose of this document is to guide applicants in completing and submitting their invited application for the Green Future Fellowships. The invited application forms the second stage of the application process with successful applicants from the expression of interest stage required to submit a more detailed application.

## Programme overview

Climate change presents not only a national but a global challenge. To meet the UK's targets of reducing carbon emissions by 77% by 2035, there is a critical need to support and develop climate solutions that address adaptation and mitigation. The next decade is a crucial period where innovation can make a significant difference in achieving these targets.

Announced in 2023 and supported through a £150 million long-term endowment investment from the Department for Science and Innovation and Technology, the Green Future Fellowship is a unique new programme to support scientists, researchers and innovators to develop and scale up their breakthrough climate solutions.

The programme will support at least 50 exceptional scientists, researchers and innovators (10 a year for five years) to transform their pioneering engineering innovations into climate solutions with real-world impact. Individuals will receive a 10-year award with funding of up to £3 million.

The programme is open to anyone with a transformative idea that has the potential to make a significant and lasting impact on global climate resilience.

The novel technologies supported by the Green Future Fellowship programme will:

- be practical and scalable
- reduce greenhouse gas emissions
- help the UK adapt sustainably to the impacts of climate change.

Innovations at all stages of development are eligible, from basic principles to proof of concept, demonstration, and application.

As well as funding for their fellowship, Green Future Fellows will also be provided with:

- mentorship from an Academy Fellow with relevant expertise to their programme of work, to provide independent advice and guidance throughout the duration of the award
- bespoke support package, including training opportunities
- Global Talent visa support for applicants based outside the UK
- access to the Academy's [Awardee Excellence Community](https://raeng.org.uk/about-us/awardee-excellence-community) (<https://raeng.org.uk/about-us/awardee-excellence-community>).

## Diversity and inclusion

The Royal Academy of Engineering is committed to diversity and inclusion and welcomes applications from all underrepresented groups across engineering. It is the Academy's [policy](https://raeng.org.uk/media/flghp4gn/rae005-diversity-and-inclusion-policy-2024.pdf) (https://raeng.org.uk/media/flghp4gn/rae005-diversity-and-inclusion-policy-2024.pdf) to ensure that no applicant is disadvantaged or receives less favourable treatment because of age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex, or sexual orientation.

Before you commence your application, you will be asked a few diversity monitoring questions to help the Academy monitor and assess our progress on diversity and inclusion in Academy programmes. It will only be used for statistical purposes with access restricted to staff involved in processing and monitoring the data. No information will be published or used in any way that identifies individuals. The Academy will retain personal information as per our [Data Retention Policy](https://raeng.org.uk/media/duhjwap2/raeng-privacy-policy-grant-or-award.pdf) (https://raeng.org.uk/media/duhjwap2/raeng-privacy-policy-grant-or-award.pdf) in line 102 pt with the General Data Protection Regulations 2018.

The information will be treated as strictly confidential, nonattributable and will not be seen by anyone involved in any selection processes. You will need to complete the diversity monitoring section before you can submit the grant application form, but can choose “prefer not to say” as responses.

## Grant programme details

### Eligibility criteria

- Awards must be held at a UK-based organisation. This may be a university, research institute or company. For for-profit organisations, special rules on the types of application and funding allowed will apply and are set out below. If you are in doubt over whether an organisation is eligible, please contact the team to discuss. Applicants may propose hosting the award within a new startup company that will be created for the project. In this case, additional financial and reporting requirements will apply.
- There are no limitations on the career stage of applicants. Applicants are not required to hold a PhD.
- Applications are welcome for innovations at all stages of development, from basic principles to proof of concept, demonstration and application with no restrictions based on Technology Readiness Level (TRL). Applications must be centred around enabling and driving scalability of the proposed climate technology solution and demonstrate excellence or the potential for excellence in engineering or technology.
- Proposed projects must demonstrate the potential to deliver impact that benefits the UK, alongside any global impact.
- The Green Future Fellowship should be the applicant's primary source of employment. Applicants are eligible to hold other awards but must be able to

dedicate the majority of their working time to Green Future Fellowship programme of work.

- Green Future Fellowships can be led by individuals from non-engineering backgrounds or disciplines, but they must provide clear evidence of how their research or innovation promotes engineering excellence and supports engineering outcomes.
- There are no nationality or age restrictions for applicants. Applicants based outside the UK are eligible to apply. If successful, non-UK-based applicants will need to find a suitable UK-based host organisation.
- There are no restrictions on the number of applications an organisation can submit.

## **Non-UK-based applicants**

Green Future Fellowships must be held at a UK-based organisation, but the Academy welcomes applications from applicants based outside of the UK. Non-UK-based applicants do not need to have secured a UK-based host organisation at the application stage.

If successful, non-UK-based applicants would be required to find a suitable UK-based host organisation and relocate to the UK. The expectation is for non-UK-based applicants to secure a UK-based host organisation and start their award within one year of receiving the offer in principle.

## **Part-time and flexible working**

The Academy is keen to support applicants to achieve a balance between their personal and work demands. We are happy to discuss individual requirements and consider part-time and other flexible working arrangements.

The Green Future Fellowship should be the applicant's primary source of employment. Green Future Fellowships can be held parttime, and applicants are eligible to hold other awards, but applicants must be able to dedicate the majority of their working time to the Green Future Fellowship programme of work.

Applicants with multiple sources of employment or those unsure if they meet the criteria should contact the Academy for guidance before completing the application.

Green Future Fellows should be entitled to maternity, paternity, adoption and sick leave under the host organisation's normal conditions of employment. The Academy will extend the duration of the Green Future Fellowship pro-rata to take into account such periods of leave.

## **Mentoring and monitoring**

Awardees will receive mentorship from an Academy Fellow throughout the award's duration. The mentor will provide independent advice and guidance.

Awardees will be required to comply with the monitoring requirements for the programme as stated by the Academy. Monitoring requirements will be dependent on the nature of the project, but all awardees will be required to update the Academy promptly on significant developments and submit an annual report and expenditure statement to the Academy.

## **Funding guidelines: universities/not-for-profit organisations**

We will fund projects in not-for-profit organisations at 100% of eligible costs (including a suitable contribution to overheads) or Full Economic Costs (for university recipients or other organisations that have a [TRAC](https://www.trac.ac.uk/) (<https://www.trac.ac.uk/>) approach to costing), except where there is one or more specific for-profit beneficiary of the project identified, such that the funding risks becoming a subsidy to that beneficiary organisation under the terms of the UK subsidy control regime.

In the case where the funding might be considered a subsidy, then we will pay at a lower portion of the eligible costs of the project as a whole (where this includes costs both within the not-for profit organisation and the collaborating enterprise). The portion offered will be similar to those ratios within the Research, Development and Innovation Streamlined Route – see here for [guidance](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128060/research-development-innovation-streamlined-route-guidance.pdf) ([https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/1128060/research-development-innovation-streamlined-route-guidance.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1128060/research-development-innovation-streamlined-route-guidance.pdf)).

Due to the very wide range of projects that can be supported under the Green Future Fellowship programme, we will advise applicants ahead of invitation to the assessment day of the required subsidy ratio (or the ratios that would apply dependant on the confirmation of collaborators). The ratio will depend upon on the size of the partnering enterprise(s), the nature of any partners and their publication rights, and whether the project is best considered as a feasibility study, industrial research, or experimental development under the definitions within the route.

As general guidance, we expect that most projects hosted by not-for-profit organisations will be considered as either basic research (funded at 100%) or industrial research with a research organisation that has the right to publish its own research results. In that case the ratios in the table below will apply (noting that they apply to the project as a whole, not the portion undertaken within the university), but we will confirm whether they apply to a particular proposal ahead of invitation to the assessment day:

<b>Size of benefitting enterprise</b>	<b>Subsidy ratio</b>
Small	85%
Medium	75%
Large	65%

Note also that where a collaborating company is engaged in supplying goods in Northern Ireland, there will be additional need to consider the implications of EU State Aid rules. Where these apply, they will be discussed with applicants at the point of award and may mean that different conditions apply to such awards.

Applicants are encouraged to get in contact with the Academy if they have any questions in relation to these funding guidelines: [gff@raeng.org.uk](mailto:gff@raeng.org.uk)

## Funding guidelines: for-profit organisations

Green Future Fellowships aim to accelerate the benefits of technologies at all stages of development, including those that are best led within commercial organisations. Profit-making organisations are eligible to apply for Green Future Fellowships but are subject to additional requirements on the kinds of projects that are eligible and the nature of the funding that can be provided.

The Royal Academy of Engineering is a UK-based charity and therefore complies in full with the [Charity Commission guidance on grants to non-charities](https://www.gov.uk/guidance/grant-funding-an-organisation-that-isnt-a-charity) (<https://www.gov.uk/guidance/grant-funding-an-organisation-that-isnt-a-charity>). This means that our funding must have a significant different character from innovation grants from government or contracts between companies with which companies will be familiar.

We offer three routes for funding businesses in this first round.

- university partnership
- convertible loan
- grant requiring full public access to IP.

We do not expect to cover the full range of potential business-based climate innovation projects with these three routes. For most businesses, there are opportunities from government grant funders, such as Innovate UK or the European Commission Horizon Europe programmes, or commercial funding terms that can support their proposed projects without the restrictions that our charitable status requires. However, we hope to offer a distinctive opportunity to some inventions that would otherwise miss out on those more mainstream routes because of the other flexibilities the Green Future Fellowship programme offers.

**University partnership:** in this route a university (or similar not-for-profit) research organisation acts as the organisational recipient of the grant, with an individual being seconded from the business to the university for the duration of the work before returning to the company. In this case, the grant works in a similar way to that for a university with an industrial collaborator described above, but with the additional requirement of a formal agreement between the university and the business over the management of the secondment, intellectual property, and any financial benefits resulting from the application will be necessary before the fellowship commences. Note also the guidance on subsidy control arrangements above. While there is no formal requirement for the university and company to have an existing partnership, we expect this approach to be most attractive where the company and university have an existing research partnership.

**Convertible loan:** on this route, successful applicants will be offered a commercial loan agreement for a loan of up to £3 million convertible to equity in the relevant company at suitable fundraising events, along the lines of commercially available investments in startup companies. In making this offer, the Academy will be pursuing in a balanced way, both an expectation of financial return to the Academy and furthering the charitable purpose of engineering excellence to address climate challenges. Hence the loan will be on broadly commercial terms and the loan funds must be used for a project which (at least in part) advances that charitable purpose. We will share further information on the loan agreement with those invited to the assessment day. Applicants

should note that although only projects judged excellent and with suitable impact will be offered, the loan is a commercial agreement to be negotiated with expectations of a suitable likelihood and scale of financial return to the Green Future Fellowships Fund and will require approval from a decision group considering this return on investment. The requirements of the subsidy control regime also apply to loan offers and will limit the difference between the terms the Academy is able to offer and those that might be available on the market to those proportionate to the policy objectives being pursued by the Green Future Fellowship.

**Grant requiring full public access to intellectual property:** a company can receive a grant from the Academy directly provided that useful results of the research and development work are placed promptly in the public domain (typically through publication in a disciplinary journal or similar although alternative arrangements may be proposed). The company may retain ownership of the intellectual property but must make it available under strong open licence terms for others to benefit from it without compensation or other non-incidental benefit to the company. Additional conditions will be placed on the offer of the grant to ensure that these requirements are met in a proportionate manner. We anticipate that these will be negotiated at grant offer stage on a case-by-case basis because the range of potential circumstances is so large that a proportionate regime cannot be specified in the abstract.

## Intellectual Property and revenue changes

The Royal Academy of Engineering is making several changes to its Grant Terms and Conditions, as they apply to Intellectual Property (IP) and resulting revenue.

The first of these changes applies to all Academy grants. The second applies to all Green Future Fellowship awards to universities and other not-for-profit recipients. The third applies only to those Green Future Fellowship awards to universities and other not-for-profit recipients that are eligible for 100% of Full Economic Cost (fEC) or eligible costs.

These new policies are required to ensure that the Academy, as a charity, complies with the laws and guidance for UK charities around ensuring that their resources are used for their charitable purpose. However, in all aspects of their implementation we are seeking minimal intervention to manage the risk and to avoid any barriers to achieving the maximum benefit to society of the innovations that may be created.

### **1. For all Academy grants: revenue to charitable recipients from commercialisation of outcomes of Academy grants must be used for the Academy's charitable purpose**

In general, we require that all the financial benefits to charitable grant recipients that result from our grants should be used within our charitable purpose. (Note that only financial benefits that the charity has discretion over their use fall within this requirement – any cost to generate those benefits or obligation to other parties is excluded.) However, since we know that in general our recipients invest much more than any such revenues into engineering excellence, we do not seek any evidence of compliance with this requirement or require charities to track the revenues generated by our grants to them except in particular circumstances.

The Academy may in certain circumstances require charitable recipients of Academy grants to report on revenues generated from the commercialisation of



outcomes of Academy grants and evidence that they are used within the Academy's charitable purpose of Engineering Excellence for the benefit of society.

There are two cases where evidence of meeting this requirement will be needed:

- a) In any case where a recipient organisation decides to close its engineering activity, then it must, from the point of that decision, commit to sending all future such revenues to the Academy or another charity that supports engineering excellence for the benefit of society. It must provide the Academy with evidence of compliance with this requirement.
- b) If the Academy formally writes to request it on reasonable grounds, then a recipient charity must from that point begin reporting to the Academy both its revenue from such sources and its investment in engineering excellence. Such a formal request from the Academy will usually only be issued in a circumstance where we become aware of an unusually large revenue or a seriously dropping investment in engineering within the recipient charity. Where the revenue exceeds the investment over a sustained period (usually several financial years), then the Academy may further notify the recipient that it must in future, send such excess to either the Academy or another charity that supports engineering excellence for the benefit of society.

- 2. For all university and not for profit recipients of Green Future Fellowship awards: all university recipients of Green Future Fellowship awards are mandated, unless explicit written permission has otherwise been granted by the Academy, to:**
  - a. Claim no more than 21.5% equity in any spin-out company resulting from the GFF work**
  - b. To all relevant spinouts, apply TenU University Spin-out Investment Terms (USIT) Guide or the USIT for Software Guide**

The UK government's Independent Review of Spinouts recommended that all parties, including investors, should adhere to innovation-friendly university policies underpinned by guidance co-developed between investors, founders, and universities. This guidance is embodied in the TENU USIT Guides, and many UK universities already fully adhere to it. Because we seek for easy spin-out processes for any potential spin-outs that arise from Green Future Fellowships, we are mandating that the TENU USIT Guides are complied with where applicable, unless the university seeks and is granted, in advance of any commitment being made, written permission from the Academy to adopt another approach. In all cases, including those that lie outside the scope of the USIT guides, we require that university equity stakes be no more than 21.5% unless permission otherwise is given by the Academy in writing in advance. (This figure is chosen as the average equity taken by universities in spinouts in 2023, although that average has dropped since then and is expected to drop further.) Note that in this case "university" stakes includes all component parts of the university, such as departments, faculties and colleges, as well as central university authorities.

Such permission for exemption from these conditions, will usually only be granted where compliance with them would somehow hinder the realisation of social benefit from the particular Green Future Fellowship award – for instance if it somehow interferes with agreements with industrial collaborators to share IP or if

the realisation of social benefit requires an unusual level of commitment from the host organisation that will not be possible without a higher equity share.

To seek permission to deviate from the TENU guidance or maximum equity share, the host university is required to write explaining the reason for the variation from TENU expectations to the contact named within their award letter.

Any organisation found to have not followed TENU guidelines or the maximum equity share without permission in advance will be required to rectify any issues that result. This may leave the organisation liable for the repayment of all GFF funds they had received to date, and to support the transfer of the individual recipient to an organisation compliant with the TENU guidance.

**3. For all charity recipients of Green Future Fellowship awards that are eligible for the award on a 100% fEC (or eligible costs) basis: recipients of such Green Future Fellowship awards (whether or not they accept the 100% funding) will be subject to a requirement to account for large revenues and potentially return a portion of them to the Academy. This requirement applies if:**

- **Commercial revenue raising activities related to the grant raise more than £3 million that is returned to the host organisation for its use (once any costs of commercialisation, obligations to investors, inventors or similar are deducted).**

**In this case:**

- **The recipient will be required to share 50% of the excess above £3 million with the Academy. These funds will be invested by the Academy to maximise the impact of the Green Future Fellowship portfolio. The recipient organisation can seek permission from the Academy to retain these funds in order to maximise the impact of the Green Future Fellowship(s) that they are hosting by making a written submission of how they propose to use the funds. The Academy will then assess against the benefits possible for impact of the wider Green Future Fellowship portfolio through reinvestment.**

In general, the Academy has a policy of assigning all ownership and rights for projects supported to the host organisation, with the expectation that if in realising the benefit of any research and innovation they generate a financial benefit, then it will be used to promote engineering excellence for the benefit of society within that organisation. However, we believe that the potential for large financial benefits to host organisations from Green Future Fellowship commercialisations is significant enough that we have to make provisions for exceptional cases of very large financial returns for those benefits to be shared more widely than the original host organisation. This is done so that we can meet the expectation that the charitable funds of the Green Future Fellowship will be used for maximum impact on the purposes that they were intended. We believe that for returns that are larger than the value of the original grant provided, then the Academy must review whether there would be greater impact towards the goals of the fund through wider distribution than is possible within the host organisation.

This revenue sharing review applies only to revenues returned to the host organisation (including its constituent elements such as departments and colleges) that are flexible

for their use, so no claim is placed on any costs of commercialisation or payments due to inventors, investors or others.

A host organisation may apply to the Academy at any time to be exempt from this requirement if it is impeding the realisation of societal benefit from the grant. This might occur for instance because of obligations to other partners or because it is becoming impractical to manage the assessment of what return is arising from the Green Future Fellowship funds without impact on the societal benefit.

Where a host organisation is a smaller charity that does not yet have in place approaches to managing commercial returns, then it can apply to the Academy for bespoke guidance and additional financial support to enable the development of capacity to maximise the benefits of the Green Future Fellowship that it hosts.

Full guidance on the revenue sharing process will be shared with recipients at grant offer stage, but broadly once revenues (less any deductions that are not truly at the host organisations discretion as to use) exceed £3 million in total, then the host organisation should provide an annual statement to the Academy detailing the scale of revenues and explaining what it would propose to do with the 50% of the excess to promote impact on Green Future Fellowship goals. The Academy will then decide what portion of those revenues between 50% and 100% to allow the recipient to retain. This will be done by a comparison of the benefits to the societally beneficial impact of the overall Green Future Fellowship portfolio between the scenario proposed by the hosting organisation and the known opportunities to invest for impact across the wider group of Green Future Fellowships.

## **Relevant grant policies**

### **National Security**

The Academy is the UK's National Academy for engineering and technology and seeks to increase the potential positive benefit that innovations can have for society, whilst reducing the risks of harm. Hence, in all our activities, we seek to minimise the risk that technology developed as part of work that we support could be misused by a foreign state to build a capacity to target UK interests in a hostile fashion or to control or repress their population. There is a risk that for some grant activities, failure to protect IP and a lack of due diligence into collaborators could result in sensitive technology being transferred to and misused by a hostile or repressive foreign state. As such all applicants should ensure they are familiar with the Academy's [Policy on National Security-Related Risks](https://raeng.org.uk/policies) (<https://raeng.org.uk/policies>).

### **Use of generative AI tools in funding applications and assessment**

The Academy has aligned with other UK funders around the use of generative AI tools in funding applications through the Research Funders Policy Group [joint statement](https://wellcome.org/what-we-do/our-work/joint-statement-generative-ai) (<https://wellcome.org/what-we-do/our-work/joint-statement-generative-ai>).

Regarding the use of AI, applicants are fully responsible for all the content presented in their grant applications. The grant process does not penalise the use of generative AI tools, but it is imperative to ensure that the application reflects the applicant's own voice

and ideas. It is not acceptable to solely rely on generative AI tools to write the entire grant application from start to finish. While these tools may be used to assist in various aspects, the application must primarily represent the applicant's own work.

Applicants must provide clear acknowledgement if they have used generative AI tools in the process of writing their grant applications. This includes disclosing the name of the tool used and describing how it was utilised. The following style should be employed for referencing:

I acknowledge the use of [insert AI system(s), version number and link] to generate materials for background research, styling, proofreading, etc.

Or,

I acknowledge the use of [insert AI system(s), version number and link] to generate materials that were included within my final assessment in modified form.

## **Sustainability assessment**

The Academy [acknowledges its responsibility](https://raeng.org.uk/media/vdnl2cm4/environmental-sustainability-policy.pdf) (https://raeng.org.uk/media/vdnl2cm4/environmental-sustainability-policy.pdf) to minimise the impact of its activities on the environment as an intrinsic part of its ambition to harness the power of engineering to build a sustainable society. As part of that commitment, we are requiring all Green Future Fellowship host organisations and collaborators to provide information on their carbon emissions commitments.

Applicant's and collaborators will be reviewed against the Academy's sustainability framework which requires host organisations and collaborators to have carbon emissions plans that include meaningful and public targets for emissions reduction across scopes 1 and 2 and regular reporting on progress.

## **Human participants, materials and personal data in Research, Development, and Innovation**

Research, development and innovation involving human participants, human material or personal data can contribute to a better understanding of human health and disease as well as the technological efficacy of new and evolving innovations. The Academy will fund research, development and innovation involving the use of human participants, human material or personal data which complies with our [Humans in RD&I Policy](https://raeng.org.uk/media/4qmhhqf4/human-participants-in-research-development-and-innovation-policy.pdf) (https://raeng.org.uk/media/4qmhhqf4/human-participants-in-research-development-and-innovation-policy.pdf). If your proposal includes the use of human participants, human materials or personal data you will be asked to provide details of your work at the invited application stage.

Please note: applicable regulatory approval and licenses are not required to be in place at point of application, but all necessary approvals must be in place before the work begins and a clear plan to achieve this at the invited application stage.

## **Animals in research, development and innovation**

The Academy acknowledges that, at present, the use of animals remains the only way for some areas of research to progress. Research involving animals is regulated by comprehensive and strict legislation in the UK and must be conducted with a high regard for animal welfare. The Academy will fund research involving the use of animals in the UK which complies with our [Animals in RD&I Policy](https://raeng.org.uk/media/ctelvlvi/animals-in-research-innovation-and-development-policy.pdf) (<https://raeng.org.uk/media/ctelvlvi/animals-in-research-innovation-and-development-policy.pdf>). If your proposal includes the use of animals, you will be asked to declare this at the initial application stage and provide further details at the invited application stage.

If your proposal involves the use of animals and takes place outside of the UK, the Academy will generally not fund this work. Please contact the Academy before proceeding with your application.

Please note: applicable regulatory approval and licenses are not required to be in place at point of application, but all necessary approvals must be in place before the work begins.

## **Subsidy control**

The UK subsidy control regime began on 4 January 2023. As part of this regime, the Academy is required to report to the UK Government on how award funding is being used when applications collaborating with commercial enterprises are awarded. The regime determines the lawfulness of monetary awards made using public sector resources when given to businesses and other organisations that are engaged in economic activity.

## **Export control rules**

As part of the application process, we ask that you ensure compliance with UK laws and regulations relating to export control rules.

For further information on export controls, including how they apply to military and dual-use items, please refer to the [Government Export Control Joint Unit \(ECJU\)](https://www.gov.uk/government/organisations/export-control-joint-unit) (<https://www.gov.uk/government/organisations/export-control-joint-unit>) who administer the UK's system of export controls and licensing.

If you are unsure whether your research, product, or technology may be subject to export control, it is essential to seek clarification from the ECJU.

We encourage applicants to take the necessary steps to confirm whether export control rules are relevant to their application before submission. If your application response includes a “don't know” answer regarding export control, please be aware that this may result in a delay in processing your application until such time as we have clarified this position.

## Application process

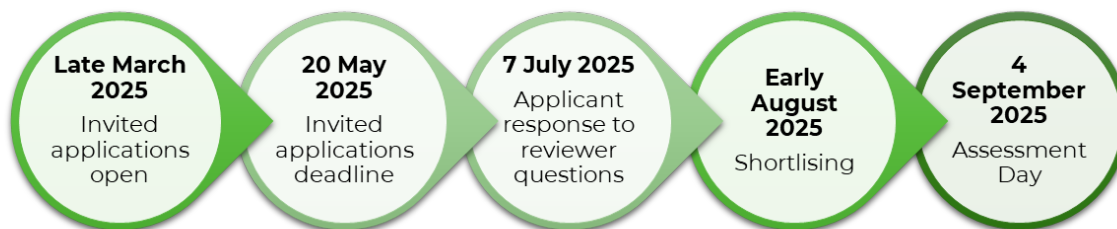
The invited application requires applicants to elaborate on the information provided in the expression of interest and provide more comprehensive information on the proposed project.

At this stage, it is particularly important that the application clearly describes the final product or solution that is being proposed and its potential impact. Applicants are also asked to provide a critical assessment of their project. This should include an assessment of the wider relevant research field or state of the art, including a competitor analysis, as well as highlighting any limitations or negative effects of the proposed project. For more details on all the required information, please refer to the section on [Completing the invited application](#).

**The deadline for the submission of the invited application is 20 May 2025, 4pm GMT.**

Invited applications will be assessed by three expert reviewers who will be asked to provide comments, a score and any questions that require clarification from the applicant based on the novelty of the innovation and the candidate's ability to carry out the technical aspects of the project. Please refer to the [Assessment Criteria](#) for full details.

Applicants will be given the opportunity to respond to the reviewer questions in early July 2025. The Steering Group will then consider the expert reviewer comments and scores along with the applicant response to the questions and confirm which applications will be invited to attend an assessment day on 4 September 2025.



**For the invited application stage, applicants can only access the application via a personalised link. This link will be sent directly to applicants via an email from the Academy.**

All applications must be submitted via the Academy's online grants system available here: <https://grants.raeng.org.uk>.

Please use the same login details that you used when you submitted your expression of interest. If you need to update your contact information, please contact [gff@raeng.org.uk](mailto:gff@raeng.org.uk).

The application should be submitted by the applicant. We recommend leaving plenty of time to complete the application form ahead of the deadline and thoroughly going through your application prior to submission. While the guidance notes are embedded within the system itself, we recommend you keep this document to hand when

completing the application form. All of the questions have prescribed word limits which are designed to keep your answers focused and indicate the level of detail we require. The number of words you have used will be displayed beneath the question and updated in real time.

## Completing the invited application

After logging into the online grants system using the link emailed to you, you should be presented with the 'Instructions' screen.

Here you will see some general instructions on how to use the system, as well as links to each of the eleven sections of the application form given below:

1. Applicant and host details
2. Project details
3. Candidate experience and wider support
4. Novelty and innovation
5. Collaborations and partnerships
6. Routes to success
7. Intended impact
8. Long-term vision and sustainability
9. Funding requested
10. Responsible research
11. Letters of support and declaration

At any stage in the application process, you can save your work and return to it later. You can answer the questions in any order you like, so you may skip some sections to return to later if you wish. We recommend viewing the application early on to understand what is required.

In certain sections of the application form, the answers you gave in the expression of interest will be pre-filled. For these sections, please build on your previous answers, while also addressing any new questions.

### 1. Applicant and host details

#### **Q. Applicant name and contact details**

Please confirm your name and preferred contact details. Please ensure that the contact email address is correct and will be valid for the entirety of the application process.

#### **Q. Host organisation status**

Please confirm your host organisation status.

**For UK-based applicants** please provide details of the host institution where the Green Future Fellowship will be held.

**For non-UK-based applicants** you will be required to indicate whether you have a confirmed UK based host organisation.

For applicant's intending to **set up a new organisation to host the fellowship** you will be required to answer the following additional question:

### Q. Overview of new host organisation (optional)

For applications that will be hosted in a new organisation, specifically created to host the fellowship, please provide details on the following:

- **Core vision and strategy:** describe the core vision and strategy for the organisation. Explain how this vision and strategy align with the broader aims of the Green Future Fellowship.
- **Challenges addressed:** identify the specific challenges your organisation aims to address. Discuss the significance of these challenges and their impact.
- **Market position:** provide an analysis of the market position of your organisation. Include information on market size, growth potential, and competitive landscape.
- **Unique selling point (USP):** clearly articulate your organisation's unique selling point. What are the benefits and advantages of creating a new organisation, as opposed to taking this project forward within an established organisation.

### Maximum 1000 words

**Please note:** this question is only applicable to applicants proposing to host the fellowship in a newly created organisation. The response to this question will only be seen by the Green Future Fellowship Steering Group and will not be shared with expert reviewers. Applicants invited to the Assessment Day should be prepared to discuss this area in more detail.

## 2. Project details

### Q. Project title

Please confirm your project title. The title should be **no longer than 15 words** and should be understandable to a non-specialist reader. The essence of the project should be captured in the title, and it should be as informative as possible.

### Q. Short synopsis

Describe your project and the key objective(s). If needed, the short synopsis can be updated from the version given in the expression of interest. **Maximum 250 words**

### Q. Subject category

Please check that the subject category selected at the expression of interest is still the most applicable for your project. Select one single broad engineering category that best aligns with your project. The category selected will be used to help identify reviewers. If your project fits into several categories, please pick the category that is most applicable to your project. [Please refer to Annex A for further information.](#)

### Q. Keywords

Please provide a maximum of **10 keywords** that describe your project. These will be used to help identify reviewers. Keywords can be modified from those provided in the expression of interest if needed.



### Q. Proposed start date

Please provide an indicative start date for your project, this date is subject to change. The expectation is that awards will start within 6 months of receiving the funding offer but there is flexibility if needed. Please enter an indicative start date. The date entered must be after 6 October 2025, and ideally no later than 31 March 2026. If you are a [non-UK-based applicant](#), please refer to this section for more information.

**Please note:** this information is for administrative purposes only and will not form part of the assessment process.

## 3. Candidate's experience and wider support

Applicants should respond to the below questions in a manner that best fits their specific project, technology, or innovation.

### Q. Candidate's most significant achievements

Describe three of your most significant achievements. We would like to emphasise that all achievements and outputs are welcome and considered valuable to the Academy. Achievements can include, and are not limited to code, patents, innovations, spin-out companies, events, public engagement and policy impact including achievements outside your career which you feel are relevant to your application/chances of success. Please briefly explain the significance of the achievement. **Maximum 300 words.**

### Q. Fellowship relevance

Please explain why this fellowship is the most suitable opportunity for your project, and how your project aligns with the objectives for the Green Future Fellowship programme. **Maximum 200 words.**

### Q. Candidate's other commitments

The Green Future Fellowship should be the applicant's primary source of employment and successful applicants will be required to devote the majority of their working time to the Green Future Fellowship programme of work.

Please declare any other commitments you have and explain how these complement your proposed programme of work and how you will manage the delivery of these activities. **Maximum 250 words.**

### Q. Wider team contributions

Describe the current team supporting your project. What are their roles and areas of expertise? How has the existing team contributed to the development and progress of your innovation so far? How will their expertise, roles and skills complement the proposed project?

What are your plans for building and expanding your team if awarded the fellowship? What key skills and expertise are you looking to add to your team to ensure the success of your project? How will you support the career development of your team members? **Maximum 350 words.**

### Q. Diversity and inclusion

The Royal Academy of Engineering strives to create cultures in which everyone can thrive, and we believe that diverse perspectives enrich our collective performance. What does diversity and inclusion mean to you? How will you embed equity, diversity and inclusion into your project design and your project team to mitigate the risk of bias in the proposed project? **Maximum 250 words.**

### Q. Choice of host organisation

Provide justification for your choice of host organisation. Why is your proposed host the most appropriate for your project? You may wish to comment on the facilities and expertise that will be available to you.

For non-UK based applicants where the host organisation is not confirmed, please indicate whether you have been in contact with any UK-based organisations regarding the hosting of this Fellowship or which organisation would be the preferred UK host and why. **Maximum 200 words.**

### Q. Candidate's CV

The format and content of your CV is left to your discretion. You do not need to include contact details here again as these are included earlier in the application. Please include details that evidence your ability to deliver the project you are proposing including:

- Qualifications and/or experience (listed in reverse order)
- Track record
- Any patents
- Details of successful or pending funding applications

The CV should be uploaded as a single PDF. **Maximum 2 pages.**

## 4. Novelty and innovation

### Q. Case for support

Please build on the answer you provided in your expression of interest.

Please provide a comprehensive overview of your project with consideration for the following points:

**Overview:** Provide an overview of the methodology and design of your project, including key aims and objectives over the ten-year work programme. Detailed technical specifications should be included and any relevant diagrams or models should be uploaded as key supporting documents.

**Current landscape:** Describe the current innovation landscape related to your project. How does your proposed innovation stand out from existing technologies? How is it different/better than other work in the field, why will it be more successful? Address any pre-existing technologies that may compete with your idea.

**What:** What are the key scientific, technical and/or societal challenges you aim to address? What are the broader system implications of your proposed technology? What are the key milestones achieved to date?

**How:** How will your project overcome the scientific, technical and/or societal challenges identified? How will you ensure the rigour and validity of your work? How do you see your proposed innovation progressing through the Technology Readiness Levels (TRL) over the next 10 years?

**Maximum 2500 words.**

#### Q. Key supporting documentation (optional)

Please use this section to provide any relevant supporting images/diagrams related to your project. Any images and diagrams provided must be referenced in the case for support. **The images/diagrams must be uploaded as a single PDF document with the documents in the order you would like them viewed.**

#### Q. Reference list

Please attach a list of all references cited in your application. Where possible, include web links to any open access articles to help reviewers access the sources. You may want to highlight the most relevant references. **The reference list should be updated as a single PDF document, limited to a maximum of two pages.** Please ensure the references are formatted clearly and concisely.

#### Q. Project timeline

Please upload a Gantt chart or equivalent, outlining the plan and timeline for the project over the ten-year period. Please ensure major milestones are clearly plotted. There are no restrictions on how the funding should be distributed across the duration of the award. **The chart must be uploaded as a single PDF.**

#### Q. Identification and mitigation of risks

What are the potential risks associated with your project, particularly related to innovation and commercialisation? What are the main reasons why your technology may not achieve the intended impact and/or commercial success? How do you plan to mitigate these risks to ensure the successful execution and impact of your project? Include any risks related to the transition from development to adoption and how you will manage this transition. **Maximum 400 words.**

## 5. Collaborations and partnerships

#### Q. Identification of collaborators and partners

Identify all current or potential collaborators and partners. **Maximum 200 words**

#### Q. Role of collaborators and partners

Please provide details on how these collaborators and partners have already contributed to the impact of your innovation's development. How will these collaborations continue to contribute to your project? **Maximum 350 words.**

## 6. Routes to success

#### Q. Regulatory approval

Are there any regulatory approvals or certifications required for your innovation? If so, what is your plan for obtaining them? **Maximum 200 words.**

### **Q. Commercialisation strategy**

Please build on the answer provided in your expression of interest. Outline your commercialisation strategy. What are the key milestones, and how will you achieve them? Please outline the role you will play in bringing the innovation to market.

**Maximum 400 words.**

## **7. Intended impact**

### **Q. Climate impact**

Please build on the answer provided in your expression of interest.

Describe and, where possible, quantify the benefits of your innovation, as well as any potential negative impacts. Please include details of the potential impact in terms of emissions reduction and/or removal. Additionally, estimate the adaptation and/or mitigation value of your project. This should be expressed in terms of potential avoided costs. Please note that you are not required to address both adaptation and mitigation if not applicable to the proposed project. **Maximum 300 words.**

### **Q. Market value**

Provide a clear numerical estimate of the likely market value of your proposed technology or solution, including the specific time frame. Additionally, include any market analysis or projections and explain the assumptions and methodology used.

**Maximum 500 words.**

### **Q. Beneficiaries and impact**

Describe the expected outcomes of the Fellowship if your project is successful. What will the final product or solution look like? Who are the intended beneficiaries of your innovation, and how will you ensure that they receive the intended benefits? What are the plans for public engagement and outreach? **Maximum 500 words.**

## **8. Long-term vision and sustainability**

### **Q. Long-term vision and sustainability**

Please build on the answer you provided in your expression of interest.

Provide estimates or projections, if possible, of the economic impact your project could generate. Please include not only revenue but also broader factors such as jobs created, gross value added, and other relevant metrics. What are the export benefits of the technology/innovation? How will your innovation contribute to economic growth, job creation, or competitiveness? How will you attract and secure further financial support to achieve your project goals? **Maximum 400 words.**

## **9. Funding requested**

### **Q. Funding requested**

The total value of each Green Future Fellowship award is up to a maximum of £3 million for the ten-year award duration.

The Academy expects Green Future Fellows to use their award to gain funding/support from other sources.

Please use the table provided to enter the anticipated costs against the below headings. Costs should be provided as specific amounts (in pounds sterling) over the following periods: years 1-2, 3-5, 6-10. There are no restrictions on how the funding should be distributed across these periods. Successful applicants will be required to provide a more detailed costing breakdown.

- Employment costs inc. Green Future Fellow, research staff, support staff, students
- Equipment or consumables costs inc. software licenses (note that for any equipment worth over £138,000 funded by the award, the Academy must give permission for any disposal or change of use outside of the proposed programme of work)
- Indirect costs
- Other costs inc. travel and subsistence (excluding costs related to relocating to the UK), patent costs and other IP related costs

Non-eligible costs:

- Apprenticeship levy

Please refer to following sections on funding guidelines for more details:

- [Universities/not-for-profit organisation](#)
- [For-profit organisations](#)

Please note costings may need to be revised to apply with UK subsidy control requirements as applicable to the proposed project and partners in it.

### **Q. Justification of costs**

Provide a justification for the costs requested and why they are needed to deliver the project and the anticipate profile of the fellowship. If relevant, please confirm what costs will be covered by other sources, for example industry or existing grants, so are not being requested as part of the application. **Maximum 500 words.**

## **10. Responsible research**

The Academy aims to uphold the highest standards of ethical conduct and responsible research. Please refer to [Relevant Grant Policies](#) for further details on our grant policies.

### **Sustainability assessment**

Please refer to the information on the sustainability assessment in the section on relevant grant policies.

### **Q. Please provide a link to the carbon emissions reduction plan for your host organisation and any confirmed collaborators.**

The review of your carbon emissions reduction plan(s) will consider the following:

- Does the plan include meaningful targets for emissions reductions?
- Are the targets covering Scope 1 and 2 at a minimum?
- Are you reporting progress on the target?

For applications where the host organisation is not confirmed at the application stage, the carbon emission plan must be shared with and reviewed by the Academy once a host organisation is approved and before funding is received.

## **Animals in research, development and innovation**

### **Q. Does your proposal involve the use of animals or animal tissue?**

This is a multiple-choice question and requires you to declare if your proposal includes research involving animals or animal tissue and whether that research is conducted within the UK and the UK's regulatory regime or outside the UK. If your research is going to be conducted outside of the UK, you must speak to an Academy staff member to assess whether we would be able to fund this type of research before beginning your application. If we are able to fund it, we will also ask you where it will take place and to provide details of the local legislation and ethical review procedures.

### **Q. Why is animal use necessary; are there any other possible approaches?**

We require sufficient details to enable us to ensure that you have aligned your research with the NC3Rs and our Academy policy, particularly that you are able to explain why there is no alternative to using animals in the research and the ethical implications of the planned experiments.

### **Q. Do your experiments involve the use of non-human primates (NHPs), cats, dogs or equines, which are specially protected species under the Animals (Scientific Procedures) Act 1986**

This is a yes or no question. If your experiment does involve the use of non-human primates we may send your application to additional independent experts for review.

### **Q. Please provide details of the animal species and number(s) to be used?**

This and the following question require you to justify the number, species and sex of animals you are planning to use, clearly describing how the planned experimental design is appropriate to give robust results.

### **Q. Why is the species/model to be used the most appropriate?**

Please discuss the relevance of your model(s) along with any limitations and how you have accounted for this within your study design.

### **Q. Please explain how you have considered the NC3Rs in your research design? You may also upload any supporting documents (ie the Experimental Design Assistant or power calculations) however this is not required at this stage.**

This question allows us to assess if your research complies with the principles of Replacement, Reduction and Refinement and that you will ensure distress and pain are minimised and the severity level for all procedures is the lowest possible.

### **Q. Please provide information on your plan and the timeline to acquire all relevant ethical approval and licenses.**

### **Q. Please upload any supporting documentation below (optional)**

We recommend the use of the [Experimental Design Assistant](https://nc3rs.org.uk/our-portfolio/experimental-design-assistant-eda) (<https://nc3rs.org.uk/our-portfolio/experimental-design-assistant-eda>) to help with the design of your proposal

which you can upload here. You may also use this space to upload power calculations, if applicable.

## **Human participants, materials and personal data in Research, Development, and Innovation**

**Q. Does your proposal involve human participants, as according to the WHO definition?**

**Q. Does your proposal involve the use of human tissue or other human material?**

**Q. Does your proposal involve the use of personal data?**

These three questions require you to declare if your proposal involves the use of human participants, human tissue and/or other human material or personal data. The questions are all multiple-choice, and depending on your responses, you will be asked further questions providing details on the location, regulatory regime and research plan.

**(For any proposals involving the human participants or human tissue)**

**Q. Please provide information on your plan and the timeline to acquire all relevant ethical approval and licenses.**

**Q. For proposals involving human participants, please explain you will protect the dignity, rights, safety and wellbeing of all participants, particularly when involving vulnerable groups.**

This question assesses whether your proposed work protects the dignity, rights, safety and wellbeing of all participants, particularly when involving vulnerable groups and avoids exploitation and undue inducement of participants.

**Q. For proposals involving human tissue and/or other human material, please explain how you will safeguard the collection and/or storage of human tissue/other material and comply with all relevant legislation.**

This question seeks to ensure that your proposed work involves the suitable safeguarding or the collection, storage and access of human tissue in compliance with the appropriate legislation (the Human Tissue Act 2004 for England, Wales and Northern Ireland and the Human Tissue (Scotland) Act 2006 for Scotland).

**Q. For proposals involving personal data, please explain how you will safeguard the collection and/or storage of personal data and comply with all relevant legislation.**

This question seeks to ensure that your proposed work involves the suitable safeguarding of personal data and compliance with all relevant legislation, including UK General Data Protection Regulations (UK GDPR) for research conducted in the UK, and the duty of confidentiality and informed consent.



## Export control

### **Q. Is any information contained within your application necessary for the development, production or use of controlled goods and therefore subject to export control rules?**

Please refer to the [Government Export Control Joint Unit \(ECJU\)](https://www.gov.uk/government/organisations/export-control-joint-unit) (<https://www.gov.uk/government/organisations/export-control-joint-unit>) who administers the UK's system of export controls and licensing for military and dual-use items for further information where needed. Please note that a response of 'don't know' may mean we need to delay processing your application until such a time as we have clarified this position.

## 11. Letter of support and declaration

### **Q. Letter of support from the host organisation**

**If you have already secured a UK-based host organisation, a letter of support from the host organisation must be submitted.** Applicants will be prompted to upload the letter of support when “Yes” is selected.

An appropriate representative from the host organisation must provide the letter of support. This could be a pro-vice chancellor, dean, CEO, CTO or equivalent. The letter should be on headed paper, signed by the author and uploaded by the applicant as a PDF document.

The letter should address the following points as appropriate for the host organisation:

- The organisation's commitment to supporting the fellowship. The strategic alignment with the organisation's priorities including details of previous and planned investment and support to facilitate development in this area.
- A clear commitment to ensure the candidate is able to dedicate the majority of their working time to the Green Future Fellowship programme of work. Please note: the Green Future Fellowship should be the candidate's primary source of employment. Candidates are eligible to hold other awards but must be able to dedicate the majority of their working time to Green Future Fellowship programme of work.
- Qualities and capabilities of the department and/or organisation hosting the applicant and how it is able to support the applicant and the proposed Green Future Fellowship programme of work.
- The organisation's approach to commercialisation and intellectual property. Potential pathways to commercialisation for the proposed innovation and the organisation's commitment to supporting commercialisation of the innovation i.e., support provided by the Technology Transfer Office (or equivalent/alternative support).
- Overview of the capabilities and achievements of the applicant, and why they have the appropriate qualities to lead a Green Future Fellowship.



### Q. Host organisation declaration

**If you have already secured a UK-based host organisation, a declaration from the host organisation must be submitted.** The host organisation declaration should be completed by an appropriate individual from the host organisation. The letter must be on headed paper and should carry the signatory's name, position, contact details, with correct date/year, programme name (Green Future Fellowship) and the organisation's official stamp (if applicable). The declaration must be uploaded as a PDF by the applicant.

The purpose is to check that the host organisation is in principle willing to host a Green Future Fellowship, subject to contract. The letter must contain the wording provided below, as well as any further remarks the organisation wishes to make. **The submission deadline will not be extended due to an individual's unavailability.**

**On behalf of the host organisation, I can confirm that I have read and accept the application guidance and other information regarding this programme, which is provided on the Royal Academy of Engineering's website, and I also confirm that:**

- The indicative costs provided in this application are correct and sufficient to complete the project as envisioned.
- Any shortfall in funding discovered after the award has been made will be covered by the host organisation, potentially through other grants.
- If successful, the applicant will be given full access to the necessary facilities, equipment, personnel and funding as required for the proposed project.
- The applicant will be released from other duties as applicable to ensure they are able to dedicate the majority of their working time to the Green Future Fellowship programme of work.
- The adjusted approach regarding intellectual property (IP) as outlined in the applicant guidance for the Green Future Fellowship programme has been read and understood.
- I am authorised to approve the submission of applications for funding and confirm this application has successfully any internal approval procedures.

### Q. Acknowledgment of the use of generative AI tools (optional)

Please provide a clear acknowledgement if you have used generative AI tools in the creation of your application. This should include disclosing the name of the tool used and describing how it was utilised. The following style should be employed for referencing:

I acknowledge the use of [insert AI system(s), version number and link] to generate materials for background research, styling, proofreading, etc.

Or,

I acknowledge the use of [insert AI system(s), version number and link] to generate materials that were included within my final assessment in modified form.

### **Q. Other letters of support (optional)**

You may **provide up to three letters of support** from your key or most relevant collaborators. Please ensure the letters are dated, submitted on headed paper and are signed by an appropriate person. Letters of support should provide details on why the collaborator is interested in the project, the nature of the collaboration and how it will be beneficial to the proposed project. Letter must be uploaded as PDFs.

### **Q. Applicant declaration**

Confirmation that all information submitted is accurate. Please tick the checkbox once you have read and understood the declaration included in the application form.

A 'submit application' button will become available once the application form is completed.

## **Assessment of invited applications**

Invited applications will be assessed by three expert reviewers who will be asked to provide comments, a score and any questions that require clarification from the applicant. Applicants will be given the opportunity to respond to the reviewer questions in early-July 2025.

The Steering Group will consider the expert reviewer comments and scores along with the applicant response to the questions and confirm which applications will be invited to attend an assessment day on 4 September 2025.

Further details about the assessment day will be available in summer 2025.

The Academy requests that anyone involved in reviewing applications to consider them in confidence. The Academy does not contact any third parties listed in the application and all details provided are handled in confidence. When accepting a review, reviewers are required to abide by the Academy's confidentiality and conflict of interest statements below:

### **Confidentiality**

Applications and reviews are submitted to the Academy in confidence and;

- Reviewers should not discuss or share the application with any third party, without prior approval from the Academy.
- Reviewers should not discuss the application or have any contact with the applicant.
- Reviewers should not act upon any of the information they obtain through the applications and should not engage with applicants if approached about their review.
- Reviewers should not retain any copies of application documents once their role as reviewer has been completed.
- Any hard copies of application documents, or any electronic versions of application documents saved locally, must be destroyed/ deleted upon submission of the review.
- The identity of reviewers will not be made known to applicants but may be revealed to other members of the assessment process.

## **Conflicts of interest**

Reviewers should inform the Academy if they believe they have any conflict of interest or could be perceived by others to have a conflict of interest, which may affect their ability to provide a fair and independent review of an application. The Academy will then decide on the appropriate course of action. Conflicts include but are not limited to knowing the applicant outside of or through work, having a working relationship with their organisation, or having a commercial interest relevant to the application.

## **Assessment Criteria**

Invited applications will be assessed against the following criteria:

### **Candidate's experience and wider support**

- The extent to which the candidate's expertise, experience, and ambitions align with the goals of the Green Future Fellowships.
- Clear rationale for why this fellowship is the most suitable opportunity for the proposed project
- Clear consideration for how the candidate plans to manage other commitments to focus on the Green Future Fellowship programme of work.
- Articulation for the wider support for the project and the suitability of the proposed host organisation (if known).
- Appropriate consideration for embedding diversity and inclusion in the project design.

### **Novelty and innovation**

- Clear articulation of the project's methodology and design, including relevant technical specifications, key aims and objectives, and how they align with the goals of the Green Future Fellowship programme.
- Clear understanding of the current innovation landscape and pre-existing technologies, and how the proposed technology is better/different.
- Identification and articulation of key scientific, technical, and societal challenges, broader system implications of the proposed technology, and the significance of milestones achieved to date.
- Strategies for overcoming identified challenges, ensuring the rigour and validity of the work, and the feasibility of progressing the innovation through Technology Readiness Levels (TRL) over the next 10 years.
- Identification and mitigation of potential risks associated with innovation and commercialisation, and the robustness of strategies to ensure the successful execution and impact of the project.

### **Collaborations and partnerships**

- Identification of current and potential collaborators and partners, their contributions to the innovation's development, and how these collaborations will continue to support the project.

### **Routes to success**

- The scalability of the innovation and its potential for adoption, considering factors that may facilitate or hinder integration into current ecosystems and market readiness.
- Appropriate consideration for any regulatory certifications or approvals required.

- Clear plans for commercialisation within the duration of the award.

### **Intended impact**

- Clear articulation of the benefits of the proposed innovation including articulation of the project's potential adaptation and or/mitigation value.
- Appropriate numerical estimations of the likely market value of the proposed technology Understanding of the intended beneficiaries and how they will benefit from the innovation.

### **Long-term vision and sustainability**

- Clear articulation of the long-term vision to sustain and grow the impact of the innovation with an understanding of funding opportunities beyond the Fellowship.
- The potential economic benefits of the project to the UK and beyond.

### **Funding requested**

- Clear rationale provided for the funding requested to deliver the project.

## **Contact details**

If you have any questions about the Green Future Fellowship programme, please contact [gff@raeng.org.uk](mailto:gff@raeng.org.uk).

## **Annex A: engineering category**

### **Civil, construction and environmental**

Including aspects of civil and structural engineering; construction materials; earthquakes; wind and fire engineering; building engineering physics; construction management; numerical modelling; environmental engineering; water resources and flooding; offshore and coastal engineering; hydraulics; climate change and sustainability; waste management; geotechnical engineering; geomatics/surveying.

### **Materials and mining**

Including metallurgy; metal forming; corrosion; failure analysis; structural integrity; non-destructive testing; inspection technologies; failure prevention; fabrication and repair technologies; welding and joining technologies; discovery and development of mineral resources; extraction and processing of minerals; mining engineering; materials performance; materials research; plastics and composites; structural materials (excluding materials specifically covered elsewhere).

### **Chemical and process**

Including all aspects of chemical and process engineering; aspects of fuel technology; oil; coal and gas technologies; carbon; carbon sequestration; clean technology; combustion; catalysis; particulates; food processing; fermentation processes; pharmaceutical engineering; biotechnological processes.

### **Aerospace**

Including all aspects of aeronautical engineering and aerospace manufacturing; turbomachinery and aerothermal engineering; avionics; radar systems; antennae; satellite systems; autonomous systems; aspects of systems engineering; airlines; materials for aerospace.

### **Transport and mechanical**

Including all aspects of mechanical engineering; automotive; rail and marine engineering; transportation infrastructure; engines; turbomachinery; mechatronics; acoustics and vibrations; ultra-sonics; heat and thermodynamics; fluid dynamics.

### **Manufacturing and design**

Including manufacturing management and manufacturing process innovation; manufacturing business improvement and re-engineering; CAD/CAM; robotics for manufacturing; engineering design.

### **Electrical and electronic**

Including electrical, electronic and control engineering; design for electronics; aspects of nanotechnology and semiconductor engineering; lasers; optoelectronics; photonics; microwave engineering; instrumentation; display technology; solid state electronics.

### **Energy and power**

Including energy technologies; electric power and energy systems engineering; nuclear and renewable energy generation; energy infrastructure; management of energy and energy resources for generation, storage, and transmission; distribution and conversion of electric energy and power; electricity supply and energy conservation; hydrogen power; fuel cells.

### **Medical and bioengineering**

Including all aspects of medical and biomedical engineering; orthotics; prosthetics; ultrasound for medicine; medical scanning and imaging; drug delivery; biomedical materials; tissue engineering; medical devices; medical robotics and computer assisted surgery.

### **Computing and communications**

Including computational and software engineering; informatics; web and data science; telecommunications; mobile telephony; broadband; wireless spectrum; signal processing; television, film, and broadcasting; computer and video games; special effects.