





Efficiency for Access Research and Development Fund Guidance for Applicants



Table of contents

Efficiency for Access Research and Development Fund: Guidance for Applicants

Gui	dance for Applicants	1
1.	Overview	3
2.	Background	3
3.	Scope	4
4.	Funding	5
5.	Eligibility	6
6.	Key Dates	7
7.	Applying and assessment	7
8.	R&D Categories	9
9.	Contact	. 10

1. Overview

Efficiency for Access invites organisations to apply for the fourth call of the Efficiency for Access Research and Development Fund. Applying for this grant will involve registering your organisation and then completing an application form that provides a comprehensive breakdown of your R&D project. Full due diligence will be conducted on successful applicants, which may involve an interview and site visit. The successful applicants will then be notified and the project milestones and funding agreements will be finalised. The key dates involved are specified further below.

Launching in November 2023, the Efficiency for Access Research and Development (R&D) Fund, with support from the IKEA Foundation and UK aid (from the UK government via the Transforming Energy Access platform), will provide over £1.3million to organisations under the Efficiency for Access R&D Fund's fourth call. Since 2018 the fund has provided over £5million of grant funding, supporting 38 R&D projects to accelerate innovation and address important barriers to access in the off- and weak grid appliances sector. Further information on these projects can be found here.

Under this call, support will be provided to develop agricultural technologies, sometimes known as agritechnologies, that are high performing, energy efficient appliances. These appliance technologies will increase post-harvest resilience and productivity, supporting post-harvest management including harvesting, handling, storage, processing, and transportation, within food systems in horticulture, dairy, fishing and livestock.

2. Background

The global food system accounts for around one-third of global greenhouse gas emissions. Around 1 billion people are employed in the food systems - in production, harvesting, services, processing and distribution, while another 3.5 billion people are dependent on food systems for their livelihoods globally, particularly those living in rural areas which are often home to off and weak-grid populations.²

Key sectors across agriculture, dairy, fishing and livestock are included under this broad definition of food systems and collectively referred to as 'agriculture'. Agriculture is the world's largest economic sector and core to many countries in the Global South, employing a high proportion of populations³. Smallholder farmers play a critical role in Sub-Saharan Africa and Asia's food systems producing approximately 30% of most food commodities.⁴ In 2016, the fishing value chain in Africa constituted more than a \$6 billion market,

¹ https://www.powerforall.org/resources/reports/powering-agriculture-renewable-energy

² https://www.fao.org/documents/card/en/c/cc6325en

³ https://www.powerforall.org/resources/reports/powering-agriculture-renewable-energy

⁴ <a href="https://www.ifad.org/en/web/knowledge/-/rapid-evidence-assessment-the-role-of-smallholder-producers-and-small-and-medium-sized-enterprises-across-the-food-systems-summit-action-tracks?plack url=%2Fen%2Fweb%2Fknowledge%2Fpublications

with more than 5.6 million people involved in fish production activities and Asia providing around 60% of the global fish supply.⁵

Africa's food system is a significant contributor to the continent's total emissions, with nearly 60% of emissions attributed to the food system.⁶ However, 85% of smallholder farmers lack access to energy — providing access to energy is often a prerequisite for reducing emissions and improving livelihoods.⁷ The productive use of energy has the potential to progress livelihoods and economic growth in rural areas,⁸ with smallholder farmers also selling locally, therefore helping to reduce imports. ⁹ Research indicates that access to cooling services such as refrigerators can increase income over a longer period of time. ¹⁰

Food security is a growing challenge in the Global South, with approximately one-third of food produced globally being lost or wasted, resulting in economic losses of an estimated \$1 trillion a year. In Sub-Saharan Africa alone food waste is around 37%, ¹¹ and the first mile between harvesting and processing is a critical point where a disproportionate amount of food is lost. ¹² This is further exacerbated by the impacts of climate change and other global shock events. ¹³ Access to services such as cold storage can support the reduction of food loss.

Innovation and technology are the key drivers for change within the food system. ¹⁴ The Efficiency for Access Research and Development Fund invites proposals that seek to address these challenges. The Fund will support climate-smart agritech solutions that increase productivity, income, and resilience for smallholder farmers, while also helping to create a resilient and productive low-carbon food system. R&D projects funded through the AgriTech call will help advance progress towards multiple Sustainable Development Goals (SDGs), particularly SDG1 (no poverty), SDG2 (zero hunger), SDG7 (affordable and clean energy) and SDG8 (decent work and economic growth).

3. Scope

To be in scope for this call, R&D projects must:

- 1. Develop or improve an innovative electrical appliance technology for use in off- and/or weak grid settings; AND
- 2. Improve post-harvest resilience and productivity of food systems, while reducing their environmental impact. Improved resilience and productivity can be achieved in any of the following ways: ensuring and increasing incomes, expanding access to markets, reducing waste and loss, and improving the operations, service and maintenance of essential equipment within one or more value chains of a food system.

⁵ https://energycatalyst.ukri.org/wp-content/uploads/2023/06/Market-Guide-Fishing.pdf

⁶ https://www.fao.org/documents/card/en/c/cc5768en

⁷ https://www.powerforall.org/resources/reports/powering-agriculture-renewable-energy

⁸ https://www.iied.org/20356iied

^{9 9} https://www.powerforall.org/resources/reports/powering-agriculture-renewable-energy

¹⁰ https://efficiencyforaccess.org/publications/appliance-impacts-over-time

¹¹ https://www.wri.org/insights/3-ways-reduce-food-loss-waste-africa

¹² Technology Case Study: Clean Energy Cold Storage: https://pdf.usaid.gov/pdf docs/PA00WHC6.pdf

¹³ <u>https://www.worldbank.org/en/news/immersive-story/2022/10/17/putting-africans-at-the-heart-of-food-security-and-climate-resilience</u>

¹⁴ https://www.fao.org/3/i7846e/i7846e.pdf

Examples of eligible R&D projects could include, but are not limited to, the development of high performing, energy efficient appliance technologies (agri-technologies) for use in off- and/or weak-grid settings, digital or software solutions enabling agri-technologies, systems and models that:

- Extend the shelf life of food (for example, through cold storage, ice production or drying)
- Process food (for example, by milling, pressing or threshing)
- Sustainably transport food (i.e. e-mobility or temperature-controlled logistics)
- Improve the performance, maintenance or timely service of critical equipment within scope

Projects will need to demonstrate strong affordability, inclusivity, and sustainability considerations in their design, including circularity factors such resource efficiency and environmental factors such as using low Global Warming Potential (GWP) refrigerants. Efficiency for Access has published <u>research</u> in these areas to inform your proposed project. We also encourage projects that incorporate or adopt regenerative agriculture approaches, Efficiency for Access has published case studies that highlights how agri-technologies can be incorporated into value chains.

Technology applied to food systems pre-harvest, such as irrigation, or tilling, will be out of scope for this call. Aquaculture is in scope.

4. Funding

Grants are available from £50,000 to £300,000. Over £1.3 million in funding has been made available for this call.

If your proposed project is focused beyond production innovation, such as testing or scaling a new business model, or testing existing products in different geographies or sectors, then you should apply to the <u>Powering</u> Renewable Energy Opportunities (PREO) programme call for applications.

The proportion of funding you are eligible to receive for your project costs is dependent on the size of your organisation, as defined in the table below. If you apply as a partnership, the organisation size refers to that of the lead partner, who will assume responsibility for the project and be the recipient of the grant funding. At least 50% of the staff budget must be allocated to the lead partner, i.e. staff costs allocated for all other partners and sub-contractors must be less than 50% of the total staff costs. In addition, more than 50% of purchases for capital equipment and other costs must be made by the lead partner.

Organisation size	Staff headcount	Turnover	Or	Balance sheet total	Proportion of funding available for eligible project costs
Micro	<10	≤ £ 2 m	≤	£ 2 m	Up to 90%
Small	< 50	≤£9 m	<u> </u>	£9 m	Up to 70%
Medium-sized	< 250	≤£45 m	<	£ 39 m	Up to 60%
Large	> 250	> £ 45 m	>	-£ 39 m	Up to 50%

Eligible and non-eligible project costs include:

Eligible project costs	Ineligible project costs
Personnel costs	Profit

Services	Bonuses
Direct overheads	Dividend payment
Travel costs — direct	Interest payment/financing costs
Equipment and materials	Currency exchange
Indirect Overheads:	Recoverable VAT/local taxes
	Loss of income/opportunity cost
	Patent costs

You will need to provide a budget detailing your project costs in your application form, which will include the amount of grant funding you require and the amount of match funding you will provide for each project milestone. Please note that value for money is one of the main categories by which your application will be scored. Additionally, VAT will only be reimbursed where you can demonstrate that you cannot reclaim it, so all costs must exclude reclaimable VAT.

When specifying personnel costs in your budget, a maximum overhead rate of 25% may be claimed as project costs. Please be aware, however, that we may ask for evidence of how your overhead rate has been calculated, so please ensure you are able to provide this on request. Additionally, if you are claiming an overhead rate of 25%, you may not charge separately for items that would normally be included in overheads, such as general office costs, etc.

5. Eligibility

The minimum eligibility criteria are:

- Applicants must be a legally registered and physically established business, academic
 organisation, non-profit, public sector organisation, or research and technology
 organisation based in any country in the world. Applicants for funding may also form
 partnerships (such as between academics and businesses, or between entrepreneurs and
 established businesses). However, the lead partner will assume responsibility for the project
 and will be the recipient of the grant funding.
- Your application must demonstrate outcomes linked to both the programme's overall
 objective (of accelerating the availability, affordability, efficiency and performance of a
 range of Low Energy Inclusive Appliances particularly suited to developing country contexts)
 and the R&D scope for this call (as detailed in the Scope section).
- Applicants must demonstrate sufficient match funding for project costs (as outlined in the Funding section).
- Applicants must demonstrate a track record in research and innovation, and/or provide strong evidence of your capacity to successfully implement the R&D project.
- Applicants must be compliant with fundamental in-country and international human rights, labour standards, and environmental management laws. Applicants must not be involved in any act of terrorism or support terrorist activities.
- Applicants must allow regular due diligence.

Please email us at <u>EforAgrants@est.org.uk</u> if you are unsure if you are eligible or if your application is within the scope of this Call.

6. Key Dates

Stage 1

• 15 November 2023 — Registration and Call for applications opens

Stage 2

• 17 January 2024, at 23.59 GMT — Submissions of applications closes

We will not accept late submissions.

Award

- March 2024 Successful applicants that pass due diligence are notified
- 1 April 2024 Projects must start by this date

7. Applying and assessment

Please ensure you have read the full Guidance for Applicants before applying.

The full details of the application process are detailed below.

Stage 1 — Registration

This stage involves initial registration on the Efficiency for Access website. If you have previously registered, you will need to start a new registration as the system has been upgraded and new information is required as part of the registration process. Following registration, you will receive an e-mail confirming your registration has been successful. You will then be able to submit an application once the call is open.

Stage 2 — Applications

The second stage involves submission of an application that provides a comprehensive breakdown of your R&D project, including uploading of supporting evidence such as studies, reports, data, graphs and figures. As part of your application you will need to specify milestones within your project that you will work towards in order to achieve the overall project's aims and objectives. Grant funding amount requests must be specified for each milestone, and the grant amount requested in your final milestone must be at least 10% of your total grant request.

Assessment

Applications will undergo an assessment by up to two Efficiency for Access assessors and independent technical experts, selected from an assessment panel. The assessment criteria is below.

Please note that an additional ~7% in score will be given to projects that implement at least part of the project in a UK aid priority country. The UK aid priority countries are —

Afghanistan, Angola, Azerbaijan, Bangladesh, Benin, Burkina Faso, Burundi, Cambodia, Cameroon, Central African Republic, Chad, Comoros, Congo (Democratic Republic of the), Côte d'Ivoire, Djibouti, Egypt (Arab Republic of), Eritrea, Eswatini, Ethiopia, Gambia, Ghana, Guinea, Guinea-Bissau, Haiti, Iraq, Kenya, Kyrgyz Republic, Lao People's Democratic Republic, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mozambique, Myanmar, Nepal, Niger, Nigeria, Pakistan, Papua New Guinea, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, South Sudan, Sudan, Swaziland, Tajikistan, Tanzania (United Republic of), The Occupied Palestinian Territories, Togo, Turkmenistan, Uganda, Uzbekistan, Venezuela (República Bolivariana de), Yemen, Zambia and Zimbabwe.

Assessment Criteria	Key application questions	Weighting
1) Alignment with Efficiency for Access objectives and scope	1.2, 1.3	2.5
2) Technical evidence	2.1	2
3) R&D project location in at least one UK aid priority country	1.7	+2 (7%)
4) Project stakeholders and impacts	3.1	2.5
5) Innovation and Additionality	3.2	2.5
6) Market for Technology or Product and Scalability	3.3, 3.4	2.5
7) Social Inclusion	4.1	2
8) Circularity, sustainability, and environmental impact	4.2	2
9) Capacity and qualifications	5.1, 5.2, 6.1, 6.2 6.3	2.5
10) Project plan and budget	7.1, 8.1 — 8.4	2.5
11) Value for money	1.5,1.6,7.3,8.1-8.4	2
12) Funding sources	7.3	1
13) Monitoring and evaluation	7.4	1
14) Project management	7.5	1
15) Project Risk Assessment	7.6	1
	Maximum	29

Note: each category will be scored individually from 0 to 5, prior to the weighting being applied.

Once every application has been assessed, the assessment panel will meet to determine the applications to be funded based on the assessment scores and potentially applying a 'portfolio' approach. A 'portfolio' approach may be used to ensure funding is spread across multiple scope areas, geographic locations, stages of R&D, project durations, project costs, and levels of project risk. We understand the risks involved in R&D and welcome applications for projects that are both high risk and high reward (impact). Unsuccessful applicants will be notified of the outcome of the assessment and may request feedback.

Due Diligence and Award

The successful applicants will undergo technical due diligence, which may involve requests for further information and data, interviews, and a site visit. Applicants that pass technical due diligence will undergo financial diligence, involving the checking of audited accounts, and must complete a due diligence and safeguarding questionnaire. Please note that we understand that some organisations may not be able to answer some due diligence questions affirmatively. Should this be the case for your organisation, please do not let this deter you from applying as we may seek to mitigate these risks in other ways.

Successful applicants that pass due diligence will be notified that they are to be awarded a grant. Discussions will take place with the successful applicant to confirm the start date, project milestones reporting obligations, and other project and applicant details, before finalising a grant agreement. The Efficiency for Access monitoring and evaluation (M&E) team will also work with the applicant to develop an M&E plan using the Efficiency for Access M&E framework, which must be approved before commencing the project.

Once the project commences, awardees will be required to submit a milestone report and supporting documentation, along with a milestone expenditure form, at the end of each milestone before grant funding is disbursed for that milestone. For the final milestone, awardees must complete a final report, which must be reviewed and approved before the final milestone grant disbursement is made. Efficiency for Access will also conduct project verification visits as needed.

8. R&D Categories

Your project should fall under one of the following categories based on the stage of your R&D:

- Early stage for feasibility studies This includes both developing and demonstrating the concept
 for a technology, and analysis and evaluation of a technology's potential, aimed at supporting the
 process of decision making. This is achieved by uncovering its strengths, weaknesses, opportunities
 and threats as well as identifying resources needed and the prospects for success. Feasibility
 studies will usually help businesses decide to work either individually or collaboratively with other
 industrial or research organisations, before conducting a subsequent larger project.
- Mid-stage for industrial research This should be for the purpose of product development,
 processes or services that lead to an improvement in existing products, processes or services. It
 can include the creation of component parts to complex systems and may include prototypes in a
 laboratory or environment with simulated interfaces to existing systems, particularly for generic
 technology validation.
- Late stage for experimental development Experimental development may comprise prototyping, demonstrating, piloting, testing and validation of new or improved products, processes or services in environments representative of real-life operating conditions. The primary objective is to make further technical improvements on products, processes or services that are not substantially set. This may include the development of a commercially usable prototype or pilot which is necessarily the final commercial product, and which is too expensive to produce for it to be used only for demonstration and validation purposes. Experimental development does not include routine or periodic changes made to existing products, production lines, manufacturing processes, services and other operations in progress, even if those changes may represent improvements.

9. Contact

For more information, email us at EforAgrants@est.org.uk





efficiencyforaccess.org



info@efficiencyforaccess.org



@EforA_Coalition

