



Research Fund

**Renewable Energy:
Ensuring a sustainable and fair
transition
Call for proposals**

April 2023

Renewable Energy: Ensuring a sustainable and fair transition

To avert the worst impacts of climate change and preserve a livable planet, global temperature increase needs to be limited. Currently, the Earth is already about 1.1°C warmer than it was in the late 1800s, and emissions continue to rise. To keep global warming lower than 1.5°C – as called for in the Paris Agreement and which seems quite optimistic now¹ – emissions need to be reduced by 45% by 2030 and reach net zero by 2050.² Achieving the 2050 target requires a drastic decrease in greenhouse gases with a focus on carbon dioxide and methane emissions. Given that a predominant part of these emissions is generated through energy production by burning fossil fuels such as oil, gas, and coal, new solutions need to be developed to accompany the transition to a sustainable future.

Investment in renewable energies is one of the primary answers to achieving net zero with **investment in the development of renewable energies reaching a record of USD 0.5 trillion** in 2022.³ However, their development is far from ensuring a just and fair transition with questions such as geographic concentration **towards specific technologies⁴ and geographies⁵** and around 785 million people still having **no access to electricity**. Moreover, the Global North is turning to the Global South **to produce its energy** because of the significant potential for solar energy generation where there is no shortage of sunshine - while this is an opportunity, it may also raise ethical issues when exporting power could drive to global inequalities and asymmetrical power relations.

While renewable technologies bring positive outcomes, they also impact **local livelihoods, and biodiversity** through community dislocation⁶ and biodiversity loss⁷ following the construction of hydro-electrical dams, solar and wind farms for instance. Waste is also an issue with forecasts of 78 million tons of solar panels decommissioned per year by 2050 and wind turbine blades set to account for 43 million tons of **waste**.⁸

The rush toward renewable energy technologies also creates the emergence of **raw material supply concerns** as renewables consume large amount of critical minerals and metals: the total market size of minerals used in the development of renewable energy technology like copper, manganese, cobalt and rare earth minerals is estimated to grow almost sevenfold between 2020 and 2030,⁹ while available quantities are limited.

In this context, **the AXA Research Fund is seeking to support post-doctoral research geared towards building a more sustainable and inclusive route to Net-Zero by 2050 based on renewable energies.**

We shall support innovative and transdisciplinary research projects, at local, regional, or global scale, which will notably focus on:

- **Environmental challenges**
 - **Sustainable vision** of facilities notably to achieve climate neutrality, reduce pollution and **restore biodiversity**.
 - Transformative approaches to **waste management** and development of **circular economy** around renewable energy facilities.

¹[Synthesis Report Of The IPCC Sixth Assessment Report \(Ar6\) - Summary for Policymakers](#)

² [Climate Change 2022: Mitigation of Climate Change \(ipcc.ch\)](#)

³ [Global landscape of renewable energy finance 2023 \(irena.org\)](#)

⁴ In 2020, solar photovoltaic alone attracted 43% of the total investment in renewables, followed by onshore and offshore wind at 35% and 12% shares, respectively

⁵ Developing and emerging countries, which represent about 70% of the world's population, received only 15% of global investments in 2020 - Source: [Climate Change 2022: Mitigation of Climate Change \(ipcc.ch\)](#)

⁶ [Climate Change 2022: Impacts, Adaptation and Vulnerability \(Working Group II- IPCC\)](#)

⁷ [Characterizing the impacts of emerging energy development on wildlife, with an eye towards mitigation \(wiley.com\)](#)

⁸ [End of life management Solar Photovoltaic Panels \(IRENA\)](#)

⁹ [Net Zero by 2050 - A roadmap for the Global Energy Sector \(IEA\)](#)

- Ways to build a resilient and sustainable supply chain around renewable energy including the **impact of metals and minerals** used in facilities with new ways to reduce negative impacts of mining on the planet and people.
- **Socio-economic challenges**
 - Innovative solutions to provide access to **renewable energy for all - emerging countries, lower income communities and indigenous populations.**
 - Long term vision of facilities to **minimize impact on local livelihoods** and populations.
 - **Sustainable and ethical policies** notably regarding trading of energy for instance.
 - The **impact of Net-Zero policies** in local, national, and international economies and society at large.

NB: This call excludes projects focusing on development of engineering/material to harness or stock energy, except if it may help to answer one of the above challenges.

AXA Fellowships Guidelines

AXA Research Fund

The AXA Research Fund's mission is to support outstanding researchers and it is committed to improving peoples' lives through innovative research in areas of Climate & Environment, Health, and Socioeconomics.

AXA Fellowships aim at supporting promising early-career researchers, **defined as no more than five years past the completion of their PhD**,¹⁰ on a topic aligned with AXA's priorities and societal challenges. The support of the AXA Research Fund should be transformative for the researcher and the advancement of their field. To apply for a grant, **researchers must not have a permanent (tenured or tenure-track) position.**

Duration

An AXA Postdoctoral Fellowship is awarded for **a period of 2 years.**

Institution Eligibility

The project calls are global. However, the AXA Research Fund partners with academic institutions only; thus, NGOs, governmental bodies, foundations, independent research centers, cultural institutions (such as museums), and hospitals are not eligible.

Each institution can present at most ONE CANDIDATE (for the entire institution, *not* one per department, faculty, or laboratory).

In case of several Expressions of Interest submitted from a single institution, all applications would be disqualified.

Institutions hosting an AXA Chair cannot request an extra Post-Doctoral fellowship for a researcher working on the AXA Chairholder's team.

No change of host institution will be possible after submission of the application

¹⁰ There is a flexibility of 6 months regarding PhD date (i.e., PhD max 5 full years + 6 months), at the Expression of Interest date (i.e., May 15, 2023) i.e., PhD defended after November 15, 2017

Researcher

Candidates should be of the highest caliber and have demonstrated outstanding research achievements, as evidenced by the usual indicators for assessing academic excellence such as research outputs (e.g., publications, citations), research activities (e.g., organizing networks, being involved in communities) and research impact (e.g., policy reports, specific recognition through awards, etc.).

AXA Fellowships aim at supporting promising early-career researchers who have been holding a PhD no longer than five years.¹¹ **Candidates must be awarded their PhD before they submit their Expression of Interest. Candidates must have already defended their PhD certification before applying.**

Research Program

The research program should demonstrate its scientific originality and innovative nature and have the potential to contribute to a step change in the considered field. It is the applicant's responsibility to demonstrate the relevance of the proposed research topic to the AXA Research Fund.

Engagement and Obligations

Researchers are required to be proactive in engaging science with society when supported by the AXA Research Fund and use an open-data framework when applicable. Our researchers commit to sharing their project and communicating their research to a broad audience, supported by the AXA Research Fund. In addition, funded researchers agree to provide both an annual and a final project report, as well as committing to sharing their research through speaking engagements in collaboration with the AXA Research Fund. Annual and final financial reports will be requested as well.

AXA Support for Dissemination and Career Development

The AXA Research Fund will provide support through proposed training sessions related to science communication, media, finance, and management. Furthermore, attention will be given to the opportunity for the grant to deliver a significant step-change in the career of the grantee.

Diversity

Diversity will be an important criterion in the selection process, as applied to the research topic, gender and geography.

Budget and Grant Allocation

An AXA Fellowship is awarded for a maximum amount of **140,000€ in total, to be spent over two years**. It is the applicant's responsibility to submit a carefully calibrated budget, appropriate for the ambition of the research program and justified in a detailed and coherent manner. The budget will help cover:

- Annual salary of the researcher (based on institution internal policy)
- Equipment/resources (databases, survey costs, consumables, etc.), academic activities (conferences, workshops, fieldwork, etc.)
- Outreach activities (beyond academic audiences).

Any other type of costs not listed above should be justified in the application template. **No overhead costs are eligible**. No additional budget will be granted. Budget reallocation during an ongoing project must be strongly justified.

Host institutions will be expected to participate in the AXA Fellowship's general funding with studentships, PhD support and material resources related to the research program. There is no minimum requirement on the institution's contribution. However, a larger contribution naturally makes the proposal more attractive. The institution's participation should be detailed in the budget section of the application form. Grants should not

¹¹ There is a **flexibility for maternity/paternity leave: 6 months per child**. (For example, a candidate who has three children can consider 18 months).

substitute for the host institution’s responsibilities vis-à-vis its researchers. As a result, the grant cannot be used to procure basic laboratory equipment.

The AXA Research Fund will formalize its support through a **sponsorship agreement to be signed with the host institution.**

Ethics

The AXA Research Fund places extremely high importance on the ethics of the work it supports. Programs are required to comply fully with all relevant ethical review processes and for this compliance to be evidenced. Cases of scientific misconduct (such as fabrication, falsification, plagiarism or inappropriate behavior towards staff or other parties) will be considered as breaches of the AXA ethical principles¹² and will be excluded from funding.

Intellectual Property

The researcher and the host institution remain fully independent to conduct the research project. AXA will not claim any right to the ownership or use of the results.

Timeline & Application process

The AXA Research Fund’s evaluation process has been designed to assess scientific excellence. The evaluations are monitored to ensure transparency, fairness and impartiality in the treatment of proposals.

The AXA Research Fund partners with independent external providers to carry out the peer review process in accordance with criteria defined by the AXA Research Fund, the results of which are submitted to the Scientific Board for final selection. Please note that:

- The complete application must be submitted in English, on time, and online. It must respect the template structure and the page limit.
- The research topic must fall within the scope of the eligible topic focus.
- The candidate must submit a free-standing independent research project involving full-time work for the duration of the fellowship (with the possible exception of up to 20% time dedicated to teaching).

Timeline

Host institutions phase	Step 1 - Registration <i>Only if your institution is not already registered on the AXA Research Fund’s online platform.</i>	April 17th, 2023 – May 5th, 2023 4 PM Paris time
	Step 2 - Expression of interest <i>On the AXA RF platform</i>	April 17th, 2023 – May 15th, 2023 4 PM Paris time

¹² AXA Group Compliance and Ethics Code, 2019: [Compliance and Ethics Code | AXA](#)

Researcher's phase	Step 3 - Research proposal submission <i>On the ESF platform, our partner organization (online link to be provided on due time)</i>	June 1st, 2023 – June 29th, 2023 4 PM Paris time
	Step 4 - Rebuttal <i>On the ESF platform</i>	September 29th, 2023 - October 3rd, 2023 Noon Paris time
AXA Research Fund	Results announcement by email to the candidates	December 2023

Projects selected for funding are expected to start between January 2024 and September 2024.

Application process

Step 1 – Registering

To apply for the AXA Fellowship grants, academic institutions must be registered on our platform: <https://institution.axa-research.org/>. You can check if your institution is already registered in the database via the above link. **If your institution is already on our database, you can skip the registration and your institution's operational contact can log in directly using the login details they defined.**

Institutions should appoint a single point of contact (“Operational Contact”) who will handle relations with the AXA Research Fund and be responsible for candidate's application.

Step 2 – Expression of Interest ON OUR ONLINE APPLICATION PLATFORM

Only host institutions can apply, applications cannot be directly submitted by individual researchers.

To submit an online Expression of Interest, host institutions need to follow the steps below:

- 1. Log onto our online application platform: <https://institution.axa-research.org/>**
- 2. Go to the “Application” tab and click the “Post-doc” link to go to the “Expression of Interest” page**
- 3. Click “New” and fill in the online Expression of Interest form. Attach a short CV (3 pages maximum)**
- 4. Click “Submit”**

At the stage of Expression of Interest, you will be requested to provide the following information:

- About the candidate
 - Name
 - Birth date
 - PhD defense date
 - Current university the candidate is affiliated with
 - Short CV (3 pages maximum)
- About the research program
 - Project's description: 3000 characters including spaces

You will receive an email confirming that your Expression of Interest has been submitted. If you don't receive the email, please check your spam folder, and, if needed, contact fellowships@axa.com.

You will be able to edit your Expression of Interest as long as you have not clicked on “Submit”. Once submitted, your Expression of Interest can no longer be edited. The Expression of Interest will be reviewed by the AXA Research Fund. You will be informed of the decision pertaining to your Expression of Interest by email.

Expressions of Interest received after the deadline, by email, or incomplete will not be considered.

Step 3 – Full Application

Academic institutions will be given access to the dedicated ESF platform to nominate their candidates by entering their name & email address online. Nominated candidates will be invited to submit their research proposals and will be provided with the necessary information to access the application form. Eligibility criteria of the application call will be screened by our partner organization.

Candidates will have 4 weeks to submit their proposals through the ESF platform. Please note that if the host institution doesn't nominate the candidate on the ESF platform, the candidate won't have access to the platform.

Applications received after the deadline, by email, or incomplete will not be considered.

Step 4 – Scientific Assessment

The evaluation of the scientific quality of research proposals is carried out in a fully independent manner by our partner peer-review organization.

Each application is reviewed by two relevant experts who will assess the candidate's excellence and the research program's scientific quality.

Step 5 – Rebuttal

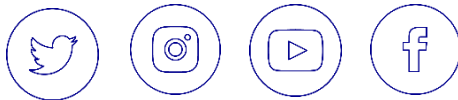
Candidates will have the opportunity to respond online to peer review experts' comments before their applications are reviewed by the AXA Research Fund. The main purpose of the rebuttal is to provide applicants with the possibility to comment on any potential misinterpretations or misunderstandings that may have been made by the experts while initially assessing their proposals.

Step 6 – Selection & Results Publication

The Scientific Board of the AXA Research Fund selects to fund applications based on strength of the scientific case, peer review assessments, the potential of the project, candidate profile and of the institution and overall impact. The AXA Research Fund informs the candidates of the decisions by email. Results will also be made available on the AXA Research Fund's website <https://www.axa-research.org/en>.

The Scientific Board's decision is final and cannot be appealed. It can neither be disputed nor subject to explanations or justifications, no feedbacks will be provided.

Participation in the call for applications implies acceptance of the above-mentioned rules.



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