Funding opportunity: Sustainable Mineral Resources in the Philippines - Strategic Large Grant (invite only)

<table>
<thead>
<tr>
<th><strong>Closing date</strong></th>
<th>20 July 2021 at 16:00 UK time / 17:00 Philippine time</th>
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<tbody>
<tr>
<td><strong>Total fund amount (indicative)</strong></td>
<td>£2,400,000 and 30M Philippine Peso</td>
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<tr>
<td><strong>Maximum amount per application</strong></td>
<td>£1,500,000 FEC (£1,200,000 at 80% FEC) and 15M Philippine Peso</td>
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<tr>
<td><strong>Project duration</strong></td>
<td>Up to 36 months</td>
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<tr>
<td><strong>Start date requirements</strong></td>
<td>By 26 October 2021</td>
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</table>
| **Funders involved** | Natural Environment Research Council (NERC)  
The Philippine Council for Industry, Energy, and Emerging Technology Research and Development (DOST-PCIEERD) |
| **Contacts** | Charlotte Hawkins, Programme Manager, NERC  
Email: charlotte.hawkins@nerc.ukri.org  
Ninaliza H Escorial, Chief Science Research Specialist, PCIEERD  
Email: nhescorial@pcieerd.dost.gov.ph |
| **Links to start application** | UK applicants to submit proposals through JeS  
Philippine applicants to submit proposals through DPMIS |

1. **Timeline**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
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<tr>
<td>10/05/2021</td>
<td>Opening date</td>
</tr>
<tr>
<td>20/07/2021</td>
<td>Closing date</td>
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<tr>
<td>July - Sept 2021</td>
<td>NERC and DOST-PCIEERD eligibility checks, including PCIEERD Governing Council Evaluation</td>
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<tr>
<td>Sept 2021</td>
<td>External Assessment Panel</td>
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<tr>
<td>26/10/2021</td>
<td>Grants start</td>
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2. Summary

- This is an invitation only funding opportunity. You must be in receipt of grant from the ‘sustainable mineral resources in the Philippines partnership and project development’ funding opportunity.
- Apply for funding to generate a whole system view of sustainable mineral resources in the Philippines.
- You must be eligible for NERC funding.
- You must apply in partnership with a research team based in the Philippines. The Philippines team must be eligible for DOST-PCIEERD funding.
- The full economic cost of your project can be up to £1.5 million. We'll fund 80% of this.
- Your project can last up to three years.
- NERC and DOST-PCIEERD will fund up to two strategic large grants.

3. Who can apply

This call is only open to those who are in receipt of funding from the sustainable mineral resources in the Philippines partnership and project development (PPD) grant from NERC and DOST-PCIEERD.

This call seeks applications from teams comprising:

- researchers from the UK who are eligible to hold NERC research grants
- researchers from the Philippines who are eligible to hold DOST-PCIEERD research grants.

All proposals must include both a UK principal investigator and a Philippines principal investigator (named as project partners).

Teams must demonstrate clear UK-Philippines partnerships and collaboration to address the strategic scope and objectives of the call. These must be equal or proportionate participation from UK and Philippines researchers.

DOST-PCIEERD will fund the Philippines component of the successful projects and UK researchers will receive funding from NERC.

3.1. UK researchers

For UK researchers, normal eligibility rules apply. See section C of the NERC research grant and fellowships handbook.

NERC research grants may be held at approved UK:

- higher education institutions (HEIs)
- research council institutes (RCIs)
- independent research organisations (IROs)
- public sector research establishments (PSREs).

**Check if you are eligible for funding.**

IIASA co-investigator eligibility rules also apply to this call. For details, read the [NERC research grant eligibility guidance](#).

### 3.2. Philippines researchers

For Philippines researchers, the eligibility rules are:

- any Philippine public or private entity with proven competence may apply for grants-in-aid support from DOST-PCIEERD, provided projects fall under the specific research areas with an overall goal to benefit the Philippines
- Philippines researchers should be connected with a public or private university or college, or a research and development institute.

The eligibility of the Philippine principal investigator shall be determined by DOST-PCIEERD based on their readiness in terms of technical, managerial, financial and marketing capabilities (if necessary). As such, the proponent shall submit documents or proof of the following:

- credentials or proof of capability
- track record
- endorsement of their institution.

The Philippines principal investigator must possess at least a master’s degree in a relevant field.

Find more information about eligibility criteria for Philippines applicants in the [grants-in-aid program of the Department of Science and Technology and its Agencies](https://example.com) (PDF, 12MB).

### 3.3. Philippines assessment process

The DOST-PCIEERD management team (PMT) will look into the socio-economic and environmental impacts of the proposals and shall determine the overall potential of the proposal.

The PMT shall endorse the proposal to the technical panel (TP) evaluation to assess its technical merits and methodology.

The DOST-PCIEERD governing council (GC) will then examine the proposal’s overall significance and suitability of outputs in the Philippines and will determine the competence of the proponent to undertake the study.

Lastly, the DOST-PCIEERD GC will endorse the proposal for the external NERC-led assessment panel. Only those endorsed by the DOST-PCIEERD GC are eligible for funding under the Council’s grant program.

### 3.4. Other restrictions

In addition to the above, the following restrictions apply.

**Ineligible practices**

Any organizations engaged in lobbying activities, unsafe practices or that have been linked to modern slavery are not eligible to apply. No UK funds can be directed to mining companies and UK
and Philippines researchers involved in this call cannot accept any direct funding from mining companies.

**Maximum number of applications**

UK and Philippines investigators may be involved in no more than two proposals submitted to this call. They may only be named as the principal investigator in one proposal.

**Team and partners**

The UK and Philippines principal investigators should remain the same between the PPD grant and large grant application. However, it is expected that the composition of PPD teams will develop between the PPD and strategic large grant proposals.

All research partners outlined within the project proposal should be fully justified.

**Studentships**

No associated studentships can be requested under this call.

**Start date**

The expected start date for grants and for activities to commence is 26 October 2021.

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### 4. What we’re looking for

#### 4.1. Strategic summary

As one of the world’s most mineral-rich countries, mineral extraction in the Philippines is a critical industry which offers significant potential benefits and returns to both the economy and local livelihoods.

Whilst the global demand for minerals to support clean energy technologies is growing, mining for minerals remains restricted in the Philippines due to past environmental impacts, illegal operations, and mismanagement. This new programme of research is essential to deliver a sustainable pathway for Philippine mineral supplies.

Sustainable production couples benefit to the economy with minimal environmental impact, and subsequent reduced negative impacts on the health and wellbeing of local communities.

#### 4.2. Strategic context

The increased global ambition to meet the climate change goals outlined in the Paris Agreement necessitates a switch towards cleaner energy technologies which are mineral-intensive.

The Philippines has abundant mineral reserves, yet the Philippines government imposed a moratorium on all mining activities between 2016 and 2018 in response to detrimental environmental and social impact. The government continues to restrict mining and impose closures where necessary.

Despite the moratorium, the Philippines government seeks to promote responsible mineral development “where technically feasible, environmentally compliant, socially acceptable and financially viable”. A new approach to the production of minerals in the Philippines is thus needed to inform policy, improve operating standards in local mines, and ensure that the negative impacts of mineral extraction are minimised, whilst continuing to benefit the Philippine economy and local livelihoods.
This requires a better understanding of the impacts of past and future mining practices in the Philippines, and new innovative approaches that are not harmful to the environment and the health, and wellbeing of communities.

4.3. Strategic objectives and scope of the programme

This programme seeks to fund new research that generates a whole system view of sustainable mineral production in the Philippines. Three research themes have been identified to address this overarching objective.

Applicants will be expected to structure their proposals and associated work packages such that they address at least two of the three strategic research themes.

A. Novel technologies

This includes:

- novel technologies for the sustainable extraction of minerals
- novel technologies for understanding of mineral deposition, including understanding of local geology and minerals characterisation (for example, profiling of minerals, ores and their bio-hydro-thermo-chemo-mechanical behaviours and inter-dependencies)
- new approaches to baselining and monitoring (in other words, machine learning, remote data sensors, Lidar or satellites, drones, nanomaterials, automated scanning electron microscope, infrared or X-ray).

Examples of research questions include (but are not limited to):

- can we identify approaches to render mineral deposits more accessible, or accessible through less invasive extraction methods?
- how can improved baseline and monitoring technologies inform sustainable new mining extraction systems, derive better predictions and understanding of mineral deposition (for example, of reserve volume, resource location or seismic risk), and remediate impacts of mining operations (for example excavation)?

B. Legacy mines

Legacy (abandoned) mines and mine tailings including:

- resource recovery
- processing of untapped or unprocessed minerals
- understanding of the impacts of past practices and routes to ecosystem rehabilitation.

Examples of research questions include (but are not limited to):

- can legacy mines be used as natural laboratories to study polluted ecosystems, their restoration, and associated barriers to this?
- what approaches should be used to remediate and rehabilitate habitats and landscapes affected by past mining practice?
• what is the economic potential in using unprocessed mine tailings to recover valuable resources, and would this reduce environmental impact?

• what new methods and approaches can be used to recover mineral resources from mining wastes (including waste rock, tailings, mine water) and/or process ores to maximise economic impact and mineral resource acquisition?

C. Contaminants

Understanding the fate, transport and impact of associated contaminants through the environment.

Examples of research questions include (but are not limited to):

• drawing on existing knowledge, how can we better understand the varying interactions of mine contaminants with different ecological systems in the Philippines?

• what are the impacts of mining on environmental and human health at different spatial and temporal scales?

• how can the impacts of mining be disentangled from other anthropogenic activities (for example, agriculture)?

• can we use integrated life cycle assessments to better understand and predict to mediate the impacts of future mining initiatives?

The funders expect to support a balanced portfolio of awards that address the following research themes.

Coal mining is outside of the scope of this call.

4.4. Other requirements

When developing proposals, it is important that applicants ensure their proposals:

• promote socio-economic development, impact and welfare

• are compatible with the International Development Gender Equality Act 2014, with development impacts contributing to reducing inequalities between persons of different gender

• have no links to any organisations engaged in unsafe practice, lobbying activities or modern slavery.

Applicants should demonstrate innovative solutions to delivering an international programme of work, which ensures activities can be delivered with consideration of any relevant COVID-19 public health measures.
5. How to apply

UK applicants must apply using the Joint Electronic Submission system (Je-S).

When applying select:
- council: NERC
- document type: standard proposal
- scheme: directed international
- call/type/mode: sustainable mineral resources in the Philippines

The call will close on Je-S at 16:00 (UK time) on 20 July 2021 and it will not be possible to submit to the call after this time.

Philippines applicants must apply by 20 July 2021 at 17:00 (Philippines time) using the DOST Project Management Information System (DPMIS).

Please note that the closing times are different in the Philippines and the UK. Applicants must ensure that all documents are uploaded onto the relevant system ahead of the closing times.

NERC is managing the call on behalf of the UK-Philippines (NERC, DOST-PCIEERD) partnership. UK-Philippines partnerships need to be genuine, collaborative and reciprocal, adding value to that which could be achieved by individual partners working on their own.

For each application, a lead principal investigator should be nominated from both the UK and the Philippines. They will act as focal contact points with NERC and DOST-PCIEERD respectively. In Je-S the Philippines principal investigator will need to be listed as a project partner.

Each team needs to develop a single proposal, within the constraints of the NERC and DOST-PCIEERD application systems, that sets out the work to be carried out by the UK-Philippines partnership to address the strategic objectives of the call. UK applicants are expected to include a copy of the final proposal submitted by Philippines applicants (through DPMIS) with their Je-S application. The Philippine principal investigator will need to download and share a PDF copy of the application submitted through DPMIS with the UK principal investigator.

To download a copy of the application in DPMIS, the proponent should do one of the following:
- click the ‘export PDF’ button found under ‘dashboard – details’
- select Print Document and download a PDF copy.

The Philippines principal investigator shall send the PDF version of their proposals to their UK counterpart. UK researchers must then upload this application as a ‘non-UK component’ attachment to the lead proposal component in Je-S.

The UK principal investigator is also requested to download a PDF copy of the application from Je-S and share this with the Philippine principal investigator. To download the application, once the council grant reference number has been issued the UK principal investigator should log back into their document, select ‘document actions’, select ‘print document’ and download a PDF copy. Philippine researchers should then upload the UK application as a single consolidated PDF file attachment through DPMIS.
The costs of UK institutions should be submitted in Je-S and will be met from the UK funds. Costs for Philippines institutions should be submitted in DPMIS and will be met by DOST-PCIEERD.

UK applicants must list the lead Philippine principal investigator and collaborators as project partners on the Je-S form (with each Philippines organisation listed as a separate project partner). The value of the DOST-PCIEERD funding contributions should also be detailed in the project partner in-kind support section of the Je-S proposal form.

For UK applicants, overseas travel and expenses costs incurred by members of UK institutions will be paid at 80% and must be included as costs related to that UK institution.

UK organisations can apply for up to £1.2 million at 80% full economic cost as per standard research council funding rules. If equipment is funded on the grant, the research organisations are expected to fund 50% of the cost. The £1.2 million limit at 80% full economic cost still applies.

Philippine applicants applying through the DPMIS must list the lead UK principal investigator and collaborators as project partners using the DPMIS proposal template. The value of UK funding contributions should also be included in the DOST-PCIEERD application and submitted as part of the project’s line-item budget as “UK-NERC counterpart.

5.1. Completing the UK application

For UK applications, proposals for this call should be submitted in large grant format following the requirements outlined in section F of the NERC research grants handbook, and including specific requirements set out in this funding opportunity.

This includes the following.

- **Proposal form**
  Complete and upload the proposal form.

- **Case for support**
  Include:
  - a common previous track record incorporating all the UK and Philippines organisations involved in the grant application (up to 3 sides of A4)
  - a description of the proposed project which should be the same proposed project as submitted by Philippines principal investigator to DOST-PCIEERD (up to 16 sides of A4)
  - a description of the proposed management structure and plans, participant responsibilities, and scheduling chart. Teams also need to include COVID-19 related contingencies planning (up to 2 sides A4).

- **Justification of resources (up to 4 sides A4)**
  - UK costs for all UK research organisations involved. This includes:
    - all directly incurred costs
    - investigator effort
    - use of pool staff resources
    - overseas travel and expenses (paid at 80%)
- any access to shared facilities and equipment (with equipment funded at 50% FEC).
   - Philippines costs for all Philippines organisations involved. This should justify the:
     - personnel services (PS)
     - materials and other operating expenses (MOOE)
     - equipment outlay (EO).

Further information on what to include in the UK justification of resources is available in section E of the NERC research grants handbook.

- **Outline data management plan (up to 1 side A4)**
  - The NERC Data Policy must be adhered to, and an outline data management plan produced as part of proposal development.
  - NERC will pay the data centre directly on behalf of the programme for archival and curation services, but applicants should ensure they request sufficient resources to cover preparation of data for archiving by the research team.

- **Project partner letter or letters of support**
  - The Philippine research organisation must be listed as a project partner. Je-s requires letters of support to be submitted for all project partners. Please submit blank documents in this instance, as no formal letters of support are required.
  - Letters of support (up to 2 sides A4 each) are required for all other named project partners.

- **CVs**
  - CV for each named UK principal investigator, co-investigators, research staff post and visiting researcher (up to 2 sides A4 for each).
  - Please note, CVs for each of the named Philippines collaborators (maximum 2 pages per person) should be combined into one document as attachment type ‘non-UK components’.

- **Facility form**
  Include if applicable.

- **Technical assessment**
  Include if applicable.
  Principal investigators wishing to use NERC services and facilities will need to include a technical assessment. For further information, see:
  - the ‘additional information’ section
  - paragraph 236 of the NERC research grant and fellowships handbook.

- **Equipment section attachments**
  Include if applicable.

- **Non-UK components**
  Include:
o completed DOST-PCIEERD proposal proforma as attachment type ‘non-UK components’. The Philippine principal investigator will need to share a PDF copy of the application submitted through DPMIS with the UK principal investigator.

o CVs for each of the named Philippines collaborators (maximum 2 pages per person) should be combined into one document as attachment type ‘non-UK components’.

5.2. Requirements for UK applicants

UK applicants must ensure they leave enough time for their proposal to pass through their organisation’s Je-S submission route before this date. Any proposal that is incomplete or does not meet NERC’s eligibility criteria or follow NERC’s submission rules will be rejected. See the NERC grants handbook.

All attachments submitted through the Je-S system, with the exception of letters of support and services, facilities or equipment quotes, must be completed in single-spaced typescript of minimum font size 11 point (Arial or other sans serif typeface of equivalent size to Arial 11), with margins of at least 2cm.

Please note that Arial narrow, Calibri and Times New Roman are not allowable font types and any proposal which has used either of these font types within their submission will be rejected. References and footnotes should also be at least 11 point font and should be in the same font type as the rest of the document. Headers and footers should not be used for references or information relating to the scientific case. Applicants referring to websites should note that referees may choose not to use them.

Applicants should ensure that their proposal conforms to all eligibility and submission rules, otherwise their proposal may be rejected without peer review. More details on NERC’s submission rules can be found in the NERC research grant and fellowships handbook and in the submission rules on the NERC website.

Please note that on submission to council all non-PDF documents are converted to PDF. The use of non-standard fonts may result in errors or font conversion, which could affect the overall length of the document. Additionally, where non-standard fonts are present, and even if the converted PDF document may look unaffected in the Je-S System, when it is imported into the Research Councils Grants System some information may be removed. We therefore recommend that where a document contains any non-standard fonts (scientific notation, diagrams and so on), the document should be converted to PDF prior to attaching it to the proposal.

5.3. Requirements for Philippines researchers

For Philippine researchers, please follow the DOST grants in aid proposal format found in the e-Proposal portal.

All instructions for submission are also available at this portal. All required supplementary files should also be attached through this portal by 17:00 on 20 July 2021, such as:

- workplan
- endorsement of the Head of the Agency
- gender and development scoresheet
- scientific basis or theoretical framework
- letter of intent or letter of cooperation from interested adopters of the project results
- risk management plan.

A copy of the complete proposal in PDF form should then be sent to the UK principal investigator ahead of the Je-S closing time of 16:00 (UK time) on 20 July 2021.

For Philippine applicants, only proposals from eligible entities that meet all of the eligibility criteria as stipulated in the guidelines for the grants-in-aid program of the Department of Science and Technology and its agencies (PDF, 12MB) will be evaluated against the evaluation criteria.

Proposals to be submitted and or funded under this announcement must demonstrate the advancement of science and technology alignment to this call.

Proposals (including all project documents submitted) must be written in English and comply with the proposal submission instructions and requirements set forth in this announcement, otherwise these proposals will be rejected.

Proposals must be received by DOST-PCIEERD on or before the proposal submission deadline specified in this announcement. Applicants are responsible for ensuring that their proposals reach DOST-PCIEERD by the submission deadline. Proposals received after the submission deadline will be considered late and returned to the sender without further consideration unless the applicant can clearly demonstrate that lateness was due to mishandling on the part of DOST-PCIEERD.

6. How we will assess your application

NERC is managing the assessment process on behalf of the NERC/DOST-PCIEERD partnership. Proposals which meet the eligibility criteria of both funders, will be internationally peer-reviewed by an assessment panel of independent experts across the disciplinary breadth of the programme. Feedback will be provided to both successful and unsuccessful applicants.

NERC and DOST-PCIEERD will use the recommendations of the panel along with the overall call requirements and available budget in making the final funding decisions. The Funders are aiming to achieve a balanced portfolio of projects that best address the overarching aims of the programme.

6.1. Assessment criteria
Proposals will be assessed on:

- fit to scheme
- excellence

The assessment panel will consider the appropriateness of the requested resources and the effectiveness of the proposed management structure and plans for proposals.

6.2. Knowledge exchange and impact

Knowledge exchange (KE) is vital to ensure that environmental research has wide benefits for society and should be an integral part of any research. A separate pathways to impact statement is not required, but applicants should still consider how they will or might achieve impact outside the scientific community and include this as part of their case for support.

Impact activities do not have to be cost incurring, but relevant costs can be included and must be fully justified within the justification of resources statement.
7. Additional Information

7.1. Programme funding
NERC is the UK’s main public funder of environmental research, innovation and training. Its aim is to fund excellent, peer reviewed science that helps us understand and predict how our planet works and enables the responsible management of the environment.

NERC funding for this call is available through the Partnerships and Opportunities fund, which enables NERC to respond to timely opportunities in partnership with other research funders (national and international funding bodies and government departments) on small to medium-scale strategic research activities.

DOST-PCIEERD leads the development of national competence in research and development strategic areas of industry, energy and emerging technology sectors in the country. Its mission is to lead and partner with the public and private institutions in generating science and technology policies, strategies and technologies that will contribute significantly to national economic development.

7.2. NERC facilities
Principal investigators wishing to use NERC services and facilities will need to contact the relevant facility at least two months prior to submission of the grant to discuss the proposed work and receive confirmation that they can provide the services required within the timeframe of the grant.

The facility will then provide a technical assessment that includes the calculated cost of providing the service. NERC services and facilities must be costed within the limits of the proposal. The technical assessment must be submitted as part of the Je-S form. On the Je-S proposal proforma, the ‘facility(s)’ box should be ticked and the relevant facility or facilities selected from the drop-down box, along with entering the units and costs field as well. See NERC research grant and fellowships handbook (paragraph 236) for additional information.

The facilities that require a technical assessment are:

- all of those listed on the NERC website
- high performance computing (HPC)
- ship-time or marine equipment (SME)
- large research facilities at Harwell
- Facility for Airborne Atmospheric Measurements (FAAM).

Information about the technical assessment requirements for each of the facilities above can be found by following the links.

7.3. Programme management
A Programme Executive Board (PEB) is providing strategic direction for the programme and acting as the ultimate decision-making authority for the programme. The PEB will be chaired by representatives from NERC and DOST-PCIEERD and may include wider representatives and relevant users or stakeholders as required.

7.4. Reporting requirements
Successful UK principal investigators will be required to report through the UKRI research outcomes reporting system ResearchFish. This is required annually and continues for up to five years post grant.
end. NERC also requires UK principal investigators to submit biannual project reports demonstrating project progress and any associated outputs and may also require principal investigators to respond to specific and other ad hoc queries for information as required. A final expenditure statement will also need to be submitted.

Successful Philippines principal investigators are required to submit quarterly progress and financial reports. The projects will also undertake another set of evaluation for project renewal. The DOST-PCIEERD technical panel (TP), management team (PMT) and governing council (GC) will determine if the project’s yearly outputs and activities will merit another year of funding.

Once the projects are completed, the principal investigators are required to comply with the requirements for completed projects as stipulated in the DOST Administrative Order No. 011 series of 2020 revised guidelines for the grants-in-aid funds of the Department of Science and Technology and its agencies.

8. Links to supplementary information
Presentations from a joint NERC and DOST-PCIEERD led scoping workshop on minerals and mining in the Philippines held in Palawan, Philippines (March 2020)
Sustainable mineral resources in the Philippines PPD funding opportunity
PPD award announcement