6 June 2024

ANNOUNCEMENT OF CALL FOR PROPOSAL

Renewable Energy Science, Technology & Innovation (RESTI)

Dear Research and Partners:

The DOE and DOST-PCIEERD have entered into a cooperation agreement for the implementation of the Renewable Energy Trust Fund (RETF), as guided by the RA 9513 and DOST Grants-In-Aid Program to enhance the development and greater utilization of renewable energy. Under the agreement, the scope of cooperation is focus on the following:

1. Research, development, demonstration, and promotion of the widespread and productive use of renewable energy (RE) systems both for power and non-power applications.
2. Support the development and operation of new RE resources to improve their competitiveness in the market.

For this launching Call for proposal, the Department of Energy, through the RETF Committee, has prioritized the following area to be supported:

Integrated RE Information and Mapping Systems – 50M, 3 years

The Philippines' predicted expansion of the energy sector and its goal to ramp up the use of renewable energy (RE) sources lead to greater requirements for innovation. Advances in this field call for an Integrated RE Information and Mapping System to automate the monitoring, operation, and management of renewable energy projects while fostering public awareness.

In response to the need for immediate action on energy demand and climate change effects, the Information Technology and Management Services (ITMS) of the DOE has envisioned a system that will serve as a centralized platform capable of displaying multiple layers of information, including RE resources and relevant energy infrastructure. This system seeks to deliver a user- friendly experience, promoting collaboration for investment decision-making and simplifying workflows among stakeholders.

By leveraging RE technology and fostering stakeholder engagement, the system can provide enhanced efficiency, increase awareness about renewable energy benefits, mitigate environmental impact by promoting the transition to clean energy sources, and stimulate economic growth through increased investment.

Key components of the system include Interactive Map Viewer and Automated Mapping Services modules. The Interactive Map Viewer provides all users with

the capability to access and explore renewable energy contract maps online and perform various tasks such as layer control, search, information display, overlaying area of interest, distance and area measurements, as well as customization options. Concurrently, the Automated Mapping Services modules (Area of Interest and Site of Interest Verification, Contract Map Preparation, Production Area/ Contract Amendment/Contract Conversion Verification and Area Clearance) enables internal users to carry out their essential tasks within the system, providing features such as automated map generation and an interface for verification report or technical description.

Expected enhancements of the system in Year 2 include:(a) integration and testing of the system with RIS and EVOSS; (b) provision of payment module; and (c) an investor connection platform. For Year 3, the enhancements will include (a) further integration with other DOE systems; (b) use of data analytics in resource assessment, site selection, energy forecasting and user experience enhancement; and (c) provision of additional features that may be identified by the end- users.

Local Market Assessment of Solar PV Systems – 5M, 1 Year

The Lighting and Appliance Testing Division (LATD) of Energy Research and Testing Laboratory Services (ERTLS) of the DOE has envisioned the construction of a Photovoltaic (PV) Module Performance Testing Facility that will serve as a foundation for the establishment of the regulatory requirements for the key components of Solar PV Systems in support of the implementation of the Philippine Energy Labelling Program. To realize this goal, ERTLS-LATD is going to commission a market study to assess the volume of Key Components of Solar PV Systems in the Philippine market. The result of the study is salient to the development of Policies and Regulations for Solar PV components and reference for the establishment of a testing facility.

Currently, the Philippines has no clear policies and regulations on the performance, reliability, and safety of the components of Solar PV systems. This concern may result in unreliable efficiency claims, poor-quality materials, and incompatibility issues. Further, it may cause electric fire hazards and lack of product durability which may lead to system failure and potential safety risk.

Hence, this study will serve as a decision support for the possible establishment of a testing laboratory. The laboratory is expected to provide consumers with transparent information on the performance, safety, and durability of the solar PV system components, and will result in consumer confidence and create a level-playing field for the manufacturers and provide sustainable development of the solar energy sector.

The key deliverables for this study are as follows:

1. Profiling of the Local Supply of Solar PV System Components

   Local profiling of the PV panel products sold in the market, producers, suppliers, sources of imported PV modules, volume of imported PV models. The key components of solar PV systems are solar panels, inverters, and batteries. Detailed technical documentation is expected,

including the product specifications, efficiency analysis, data sheet and comparison and descriptions. Determine the market segments of solar PV systems users and their estimated capacity installations, such as independent power producers, commercial buildings and residential users. Encountered technical concerns on the solar PV systems sold in the local market have to be documented as well.

2. Best Practices of Other Jurisdictions on the Performance Testing of Solar PV System Components including Existing Regulations and Standards

   A comprehensive study on existing performance testing of solar PV system components including existing regulations and standards for product efficiency and certification. The study shall also include a policy landscape that outlines the government agencies and international organizations that set policies for product efficiency and testing. It shall also identify standards like IEC, ASTM, and ISO. Estimation of investment requirements for the different test facilities and standard methods have to be included in the study.

Sustainable Aviation Fuel Production – 35M, 3 years

The International Civil Aviation Organization (ICAO) has a long-term global aspiration goal for international aviation of net-zero carbon emissions by 2050 in support of the UNFCCC Paris Agreement. By 2030, ICAO and its Member States have agreed to achieve a collective global aspirational vision to reduce CO2 emissions in international aviation by 5 percent using sustainable aviation fuels, low-carbon aviation fuels, and other aviation-cleaner energies. This action mandated the local airline companies to use the prescribed fuels for their international operation as governed by ICAO or the local biofuel stakeholders, it has created an opportunity to expand their market.

SAF bench-scale facility of 25 liters/day for Hydroprocessed Esters and Fatty Acid-Carbon Offsetting and Reduction Scheme for International Aviation (HEFA-CORSIA) eligible product process shall be established for the preliminary assessment of techno-economic viability, which is included in the deliverables, using used cooking oil (UCO) as feedstock. The SAF product should at least comply with the CORSIA quality standards. The facility should be able eventually to cater to other HEFA-based feedstocks.

Part of this study should assess the sustainable supply of used cooking oil as SAF feedstock. This includes the determination and estimation of used cooking oil from major producers, such as restaurant chains/franchises, commercial buildings/malls, and hotels, including waste handling providers/aggregators. Determine estimated costs for the UCO feedstocks and integrate costs for aggregators, logistics, and handling.

Other requirements to be included in the proposal

All project proposals to be submitted under the priority areas should include plans for the use of equipment, if included in the budget request, and/or its complete turnover of project output to the intended end-users, including training of end-users within the project implementation period. For technology/product project outputs for

commercialization or public goods for deployment, the commercialization path and/or product deployment plan shall be incorporated in the proposal including sustainability plan, as necessary.

For private company proponent, funded equipment shall be transferred to the intended end-users at the end of the project.

RETF Schedule of Activity

Activity	Target Date	Responsible agency / personnel	Target Outputs
Call for Proposal posting	June 05, 2024	PCIEERD / PCMD	Call Announcement at DOST & DOE website
Submission of Full-blown proposal in the DPMIS	July 15 – Aug 02 (5pm), 2024		Full blown Proposals
Proposal Evaluation (until GC only, then endorse to DOE)	Aug 05 - Sept. 13, 2024	PCIEERD	Proposals w/ Disposition
Notice of endorsed proposals for funding under RETF to DOE		PCIEERD	Endorsed proposals
DOE official approval	Sept 30, 2024		
Preparation of MOA (MOA processing)	Oct 2024		MOA
Signing of MOA			
Fund Release (from DOE to PCIEERD)	1st Week of Nov. 2024		
Fund Release (from PCIEERD to IA)	Nov-Dec. 2024		

Evaluation Guidelines

Proponent eligibility:

- Related expertise, research projects & publications
- R&D institutions, academic, non-profit private or public S&T institutions

- Private company with relevant competency for a particular Call priority* can also be qualified

Proposal eligibility:

- Within priority area determined by the RETF Committee
- Within the scope of the DOST-DOE RETF cooperation area
- 15% counterpart funding (in-kind) from implementing agency

Criteria for Evaluation:

3 stages – PCIEERD Management, Technical Panel & Governing Council

- For R&D projects, same criteria used by PCIEERD Management, Technical Panel and Governing Council
- For Demonstration, Promotion & Operational Support Projects
    - PES Scoresheet – disregarded sub-criteria
        - PMT
            - Marketability (for Operation System Improvement)
        - TP
            - Scientific Merits

Technical Panel Representation

- DOE Representative/s - RETF Com. rep. & concerned Division

PCIEERD GC DOE Representative – lead the RETF proposal discussion in the GC meeting

The complete package of the Call and the Proposal Application Forms is available at the DOST Project Management Information System (DPMIS) website: https://dpmis.dost.gov.ph/ and PCIEERD website at https://pcieerd.dost.gov.ph/.

For inquiries, please email the project manager of the Energy Sector under Energy & Utilities Systems Technology Division (EUSTDD) at energysector@pcieerd.dost.gov.ph.

Thank you.

Very truly yours,

DR. ENRICO C. PARINGIT
Executive Director

/EUSTDD

Funding opportunity title

Call for Proposals for the DOE & DOST-PCIEERD Renewable Energy Science, Technology & Innovation (RESTI) - For CY2024 Funding

Key information

Type of funding	Grant
Funding Agency	DOE- Renewable Energy Trust Fund
Co-funder(s) *External agencies*	Department of Science and Technology of the Philippines (DOST)
Add link to start the application	https://dpmis.dost.gov.ph/

Timeline

Event	Date	Time
Call for Proposal posting	June 05, 2024	
Opening date	July 15, 2024	8:00AM
Closing date	Aug 02, 2024	5:00PM
Submission of Full-blown Proposals through the DPMIS	July 15 – Aug. 02, 2024	
Evaluation of Full-blown Proposals (until GC only, then endorse to DOE)	Aug 05 – Sept. 13 ,2024	
Notice of endorsed proposals for funding under RETF to DOE.		
DOE official approval	Sept. 30, 2024	

Overview

The DOE and DOST-PCIEERD have entered into a cooperation agreement for the implementation of the Renewable Energy Trust Fund (RETF), as guided by the RA 9513 and

DOST Grants-In-Aid Program to enhance the development and greater utilization of renewable energy. Under the agreement, the scope of cooperation is focus on the following:

1. Research, development, demonstration, and promotion of the widespread and productive use of renewable energy (RE) systems both for power and non-power applications.
2. Support the development and operation of new RE resources to improve their competitiveness in the market.

Opportunity summary

This funding opportunity encourages S&T collaboration and applied research among Higher Education Institutes (HEIs), government Research and Development Institutes (RDIs), and non-profit S&T networks and organizations seeking funding for their R&D/S&T initiatives.

Who can apply

Any public and private universities and colleges, Research and Development Institutes (RDIs), R&D Consortia, non-profit laboratories, other public or private non- profit S&T institutions located in the Philippines with proven competence may apply for GIA support of DOST and DOST-PCIEERD and its grant-giving units, provided that projects fall under the specific research areas with overall goal to benefit Filipinos. Non-profit S&T organizations are those, which: (1) are operated primarily for scientific, educational, service, or similar purposes in the public interest; and (2) are not organized primarily for profit. Non-profit organizations engaged in lobbying activities are not eligible to apply.

For a particular Call priority, private company with relevant competency can also submit proposal and qualification requirements*.

What we're looking for

Proposals submitted for funding under this announcement must demonstrate advancements in Science and Technology, alignment with the government's economic policy direction, and relevance to the DOST-RETF Priority Areas below:

1. Integrated RE Information and Mapping System
2. Local Market Assessment of PV Modules
3. Sustainable Aviation Fuel Production

Eligible costs

Except for projects involving public goods, the applicant's organization shall provide at least 15% counterpart funding, in cash or in kind, while the remaining cost shall be covered under the Grant. Only eligible and allowable costs may be used for counterpart fund and/or in-kind contribution (ex. utility costs, office space rental, etc.), as determined by DOST-PCIEERD. The proposal must describe how the applicant will provide the counterpart fund/in-kind contribution and the role that the Grant will play in the overall project.

The requested budget shall be itemized following the DOST Form 4-Project Line-Item Budget. The grant may cover the partial or full cost of the project, both direct and indirect costs which

shall include personnel services, maintenance and other operating expenses, and capital outlay that are an integral part of the project. All expenditure items shall be in accordance with the Unified Account Code Structure (UACS) and relevant provisions as shown in Section IX, B. Line-Item Budget Preparation of AO 011 series of 2020 Revised Guidelines for the Grants-in-aid Program of the Department of Science and Technology and its Agencies.

Capital or infrastructure expenditure is not an eligible cost under the Grant as well as fees and/or stipends associated with Master and PhD studentships. `

How to apply

Applications should be submitted through the DOST Project Management Information System (DPMIS System) https://dpmis.dost.gov.ph/index.php from 8:00 am of July 15, 2024, to 5:00 pm of August 02, 2024.

Proposals submitted after the deadline will not be considered. Applicants are encouraged to leave enough time for proposal inputting in the DPMIS before this date.

When submitting your application, please follow these steps:

1) Register to DPMIS
2) Input your personal information, user, and password.
3) Select your preferred Call for Proposal, Type (R&D Project), and Proposal Classification. Click the Save and Next button
4) Input your proposal details. Read the Notes and Instructions in each field before proceeding. Fill-up the contents as required.
5) Accomplish the Line-Item Budget.
6) Add your project team members.
7) Check the Read Me First section before proceeding. Upload the mandatory (green texts) and additional supplementary files (if needed) by clicking the assigned button at the upper right part of the page.
8) Summary of the encoded details from Steps 3 to 7. Review the contents.
9) Review the DOST Terms and Conditions, if you are satisfied with all the details, click accept, then click the Confirm and Submit button at the bottom of the page.
10) An email notification will be sent upon successful submission. You may use the Proposal Code to track the status of your proposal.

The following will automatically be disapproved:

1) Proposals from organizations that are not qualified to submit during this Call;
2) Proposals outside the priority areas of the Council; and
3) Proposals not submitted through the DOST Project Management Information System

Documents Required

As a summary, your application should include the following documents.

1) Curriculum Vitae
2) Endorsement of the Agency Head
3) Gender and Development (GAD) Score
4) Scientific Basis/Theoretical Framework
5) Workplan

All project proposals to be submitted under the priority areas should include a complete turnover of project output to the intended end-users, including equipment and training of end-users within the project implementation period. For technology/product project outputs for commercialization or public goods for deployment, the commercialization path and/or product deployment plan shall be incorporated in the proposal including sustainability plan, as necessary.

DPMIS User Manual: https://dpmis.dost.gov.ph/index.php/transparency/downloads/category/4-user-manual

How we will assess your application

A. Review and Selection Process

Only applications/proposals form Eligible Entities that meet the Eligibility/Qualification Requirements as stipulated in the PCIEERD Administrative Order No. 2021-008 "Guidelines on Project Proposal Evaluation".

Applicants found ineligible for funding consideration as a result of the threshold eligibility review will be notified within 40 working days of ineligibility determination.

All applications/proposals will be screened and evaluated by the EUSTDD. Only those qualified will be endorsed to the PCIEERD Management Team for final recommendation/approval.

Contact

DOST-PCIEERD Project Managers can provide appropriate assistance to potential applicants interested in competing for this Call for Concept Proposals. This may include assistance to potential applicants in determining eligibility of the applicant or the applicant's proposed concept proposal for funding, questions about administrative issues relating to the submission of a concept proposal, and clarifications on the announcement.

Contacts:
Energy and Utilities Systems Technology Development Division (EUSTDD):
Engr. Nonilo A. Peña, napena@pcieerd.dost.gov.ph
Ms. Rachel R. Habana, rrhabana@pcieerd.dot.gov.ph
Engr. Julius L. Mayorga, julius.mayorga@pcieerd.dost.gov.ph
Engr. Gracelene M. Balverde, gracelene.balverde@pcieerd.dost.gov.ph
Engr. Sheralaine T. Briones, sheralaine.briones@pcieerd.dost.gov.ph

Additional information for the submission of Full-Blown Proposals

PCIEERD Eligibility Criteria Checklist
PCIEERD Technical Panel (TP) Evaluation Criteria/Scoresheet
PCIEERD Management Team (PMT) Evaluation Criteria/Scoresheet
PCIEERD Governing Council (GC) Criteria/Scoresheet

List any supporting documents you will provide

References for PCIEERD-supported projects:
http://projects.pcieerd.dost.gov.ph/
https://pcieerd.dost.gov.ph/library/annual-reports
https://pcieerd.dost.gov.ph/supported-programs-projects/supported-programs-and-projects/on-going-projects
https://pcieerd.dost.gov.ph/supported-programs-projects/supported-programs-and-projects/completed-projects

List any related content links

AO 011 series of 2020 Revised Guidelines for the Grants-in-aid Program of the Department of Science and Technology and its Agencies
PCIEERD AO 008 series of 2021 Guidelines on Project Proposal Evaluation

For Private Company

Additional submission of qualification requirements:

1. Up-to-date Securities and Exchange Commission (SEC) registration or Department of Trade and Industry (DTI) registration, or Cooperative Development Authority (CDA) registration certificate, or other authenticated copy of latest Articles of Cooperation and other related legal documents
2. Co-signer Statement (if applicable)
3. Copy of latest Income Tax Return
4. Mayors permit where the business is located
5. Audited Financial Statement for the past three (3) years preceding the date of project implementation or in case of those with operations of less than 3 years, for the years in operation and proof of previous implementation of similar projects (or in the case of start-ups, at least for one (1) year.
6. Document showing that NGO/PO has equity to 20 percent of the total project cost, which shall be in the form of labor, land for the project site, facilities, equipment and the lake, to be used in the project
7. Disclosure of other related business, if any
8. List and/or photographs of similar projects previously completed, if any, indicating the source of funds for implementation
9. Sworn affidavit of secretary of the NGO/PO that none of its incorporators, organizers, directors, or officers is an agent of or related by consanguinity or affinity up to fourth civil degree to the official of the agency authorized to process and/or approved the proposed MOA, and release of funds.
10. For CSOs, compliance with regulations as required by the General Appropriations Act (GAA) pertaining to fund transfer to Civil Society Organizations.
11. For Foundations, DOST certification as accredited by the Science and Technology Foundation Unit