Republic of the Philippines
DEPARTMENT OF SCIENCE AND TECHNOLOGY

CALL FOR PROPOSALS FOR CY 2022 FUNDING
Collaborative Research and Development to Leverage
Philippine Economy (CRADLE) Program

under the

SCIENCE FOR CHANGE (S4C) PROGRAM: Accelerated R&D Program for Capacity Building of
Research and Development Institutions and Industrial Competitiveness

About the CRADLE Program

The Collaborative Research and Development to Leverage Philippine Economy (CRADLE) Program of the Department of Science Technology (DOST) encourages synergistic relationships among the academe, research and development institutions and the industry through collaborative Research and Development (R&D) projects. Under the CRADLE Program, a local industry partner determines a problem/need which requires an R&D solution, the partner higher education institution (HEI) or Research & Development Institution (RDI) undertakes the R&D to solve the problem/need, and DOST provides funding support to the project of up to PhP5Million for a period of 1 – 3 years.

Since 2017, the CRADLE Program has funded 65 projects worth 296 Million pesos and partnered with 29 HEIs/RDIs and 63 companies.

The DOST is now ready to accept R&D proposals for 2022 funding from HEIs/RDIs together with their partner company for the CRADLE Program. The R&D proposals to be submitted should provide a solution to the identified needs of the industry and meet the general criteria of the program.

GENERAL CRITERIA

Who may apply?[1]

Any duly recognized HEI/RDI* with a proven track record in R&D <u>in partnership with at least one Filipino-owned company</u> which has been operating for at least 3 years.

Please note that the academic institution prepares and submits the project proposal while collaborating with the partner company.

What are the requirements for eligibility of the industry partner?
To be an eligible industry partner, the company must:
1. Be Filipino-owned
2. Be operating in the Philippines for at least 3 years and be able to provide of active compliance with statutory regulations
3. Provide at least 20% of the project cost as counterpart funding (in cash, in kind, or person-hours)

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[1] For complete details on the eligibility of the proponents, application requirements, general criteria for evaluation, and proposal formats, please refer to the Revised Guidelines For The Grants-in-aid Program Of The Department Of Science And Technology And Its Agencies (DOST AO No. 11 Series of 2020) and the Guidelines for the Accelerated R&D Program for Capacity Building of Research and Development Institutions and Industrial Competitiveness of the Science for Change Program (DOST AO No. 002 Series of 2018).

4. Commit to adopt the output of the research (by signing a technology adoption certificate). Plans for the use of the proposed technology and the mode of technology transfer after the project must be included and clearly discussed in the business plan.
5. Show how the research output will be adopted

What types of proposals may be submitted?

All proposals must be in line with the priority R&D areas and industries identified by the DOST and Department of Trade and Industry (DTI), namely:

1. Agriculture, Fisheries, and Forestry
2. Agri-processing
3. Drug and Herbal Development
4. Food and Nutrition
5. Information and Communications Technology (includes Artificial Intelligence)
6. IC Design
7. Semiconductor and Electronics
8. Infrastructure and Logistics
9. Manufacturing
10. Environment and Climate Change
11. Industrial Waste Treatment
12. Renewable Energy
13. Creative Industries/Knowledge-based Services

APPLICATION REQUIREMENTS[2]

All requirements with prescribed DOST format may be downloaded from S4CP website under "Resources" Section: https://s4cp.dost.gov.ph/resources/

What documents need to be submitted?

Proposal Requirements
1. DOST Form 2B (Full blown proposal)*
2. DOST Form A (LIB)*
3. DOST Form B (Workplan)*
4. Business Plan

Prepared as prescribed in the Revised DOST-GIA Guidelines

Documentary Requirements
1. Joint Endorsement Letter signed by the HEI/RDI and business head of agency
2. Latest Business Registration Certificate (e.g. SEC, DTI or CDA)
3. Business Permit in the last 3 years
4. Technology Adoption Certificate (TAC)
5. Draft Collaborative Research Agreement (CRA)

Supplementary Requirements
1. Curriculum Vitae of the Project Team
2. Company Profile
3. Necessary documents as determined in the Revised DOST-GIA Guidelines for specific circumstances (e.g. approval from the institution's ethics review board for research involving human subjects or in the case of animal subjects, approval from the Bureau of Animal Industry (BAI); clearance from the DOST Biosafety Committee for research proposals involving the use of GMOs under contained use, etc.)

Intellectual Property Concerns

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The HEI/RDI and its partner company are encouraged to start discussions and agree on the IP rights/ ownership as early as the Proposal Writing stage. A Collaborative Research Agreement (CRA) including details on the IP rights and the method of technology transfer must be executed by the HEI/RDI and the partner company to formalize the agreement.

Application Process and Timeline

1. **Proposal Submission:** Proposals must be submitted electronically through the DOST Project Management Information System (https://dpmis.dost.gov.ph/) following the below timeline per sector. The DPMIS will no longer accept proposals submitted after the deadline. Please note: The DPMIS will only receive submissions with complete documents. Incomplete applications will not be considered for further evaluation and funding.

2. **Confirmation of Submission:** After successful submission of the proposal, the proponent will receive an automatic confirmation email. This email can be used as proof that the proposal was submitted on time and correctly. For concerns in the proposal submission, contact the S4C-PMO immediately.

3. **Technical Evaluation:** Proposals that pass the pre-screening are forwarded to the appropriate Council for technical evaluation. Criteria for evaluation are based on the Revised DOST-GIA guidelines.

4. **Endorsement and Deliberation of Evaluation Results:** The results of evaluation will be forwarded to the Office of the Undersecretary for R&D (OUSEC-RD). The S4C Project Management Office (PMO) will inform the proponent of the final results.

Sector	Activity Timeline	Date/s	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan-22
Industry, Energy, and Emerging Technology (IEET); Basic Research	Submission of Proposals	03 May to 03 June (5:00pm)	▓	▓							
	Pre-Evaluation + Endorsement to Councils	04 Jun to 10 Jun		▓							
	Technical Evaluation (Councils)	11 Jun to 27 Jul		▓	▓						
	OUSECRD Deliberation	28 Jul to 02 Aug			▓	▓					
	Release of Final Evaluation Results	from 03 Aug				▓					
	Processing of Approved Projects (Finalize LIB, MOA signing, and Release*)	Approx 1.5 months					▓	▓			
Agriculture, Aquatic, and Natural Resources (AANR)	Submission of Proposals	04 Jun to 05 Jul (5:00 pm)		▓	▓						
	Pre-Evaluation + Endorsement to Councils	06 Jul to 12 Jul			▓						
	Technical Evaluation (Councils)	13 Jul to 26 Aug			▓	▓					
	OUSECRD Deliberation	27 Aug to 03 Sep				▓	▓				
	Release of Final Evaluation Results	from 06 Sep					▓				
	Processing of Approved Projects (Finalize LIB, MOA signing, and Release*)	Approx 1.5 months					▓	▓			

Health	Submission of Proposals	06 Jul to 06 Aug (5:00pm)									
	Pre-Evaluation + Endorsement to Councils	09 Aug to 13 Aug									
	Technical Evaluation (Councils)	16 Aug to 30 Sep									
	OUSECRD Deliberation	01 Oct to 7 Oct									
	Release of Final Evaluation Results	from 08 Oct									
	Processing of Approved Projects	Approx 1.5 months									
	(Finalize LIB, MOA signing, and Release)*										
	Target Start of Implementation (all approved projects under IEET, Basic research, AANR and Health Sector)	Jan 2022									

Subject to availability of funds; target fund release is by early Jan 2022

Contact Us

For any questions or consultations, you may email us at **s4c.ousecrd@dost.gov.ph** or call us at telephone numbers (+632) 8837-2943 / 8837-2930 or 8837-2071 local 2510.

ANNEX 1

WRITING A WINNING PROPOSAL: A CRADLE Tip

This document serves as a guide to help you craft proposals that are aligned to the CRADLE framework. Included are information on how you may start the project ideation, how to establish the R&D need/problem and the proposed solution, the evaluation factors to consider in writing the proposal, and finally tips and reminders during the application process.

Guide for Project Ideation

Ideation[3] is the creative process of generating, developing, and communicating new ideas.[3] Some questions are provided below to help you get started in your CRADLE project ideation.

For the partner industry: The following are some guide questions you may start exploring to determine problems/needs your company experiences. These are focused on products and processes, but you may explore any problem/need anywhere along the supply/value chain. Please note that these are not exhaustive and are only meant to help you start the thinking process.

ON PRODUCTS
1. What are the new/emerging needs in the market? What products can we offer to meet these needs?
2. What solutions can we offer to the public in areas of pressing concern?
3. How can we reformulate existing products to increase competitiveness in the market?

ON PROCESSES
(LOGISTICS, OPERATIONS, AND SERVICE DELIVERY)
1. What problems/needs do I have in my processes? Where is there usually a breakdown of processes? Is there a process that is too complicated/costly/inefficient/wasteful?
2. Is there a way to reduce production inputs without compromising quality of output? How can we reduce energy consumption, raw material input, labor costs?
3. Do we have wastes/by-products which may be re-processed to develop another product? How can we cost-effectively add value to by-products and process wastes?
4. Which part of the processes How can we reduce process time and lessen interruptions/downtime? Which process steps can have less mistakes through automation?
5. How can we lessen dependence on importation of supplies and increase sourcing local materials?
6. What problem is my company experiencing in terms of service delivery?
7. How can we provide alternative work arrangements without compromising efficiency in our operations?

For the HEI/RDI: How can this problem/need be solved through R&D (particularly through S&T)?

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[3] https://en.wikipedia.org/wiki/Ideation_(creative_process)

Rationale of the proposal

Once you have determined a problem/need, it is time to write the rationale of your proposed research. The **rationale** should establish the need to conduct the study. Please be reminded that based on the framework of the CRADLE program, the problem or need must be identified by the partner company. Please be informed that we examine if real collaboration occurred between the academic institution (HEI/RDI) and the company. As the HEI/RDI crafts the proposal, the questions are intended to be answered by them. The following may be helpful in constructing the rationale:

- Who is your Partner Company? – Nature of business, operations, and scope of business
- What problem do they encounter that needs an R&D (specifically in S&T) solution? – nature of problem, effect on the company (be descriptive and quantitative), include pictures as necessary
- What is the proposed S&T intervention? – describe the solution, how will it solve the problem (be descriptive and quantitative), why should this be used as compared to other solutions (if applicable), effect on the company (cost, quality, time)

Evaluation Factors to Consider

Consider the following criteria in building your proposal:

Criteria for Evaluation

- ✔ Alignment to CRADLE Framework
  - ▪ Submitted by a lawfully existing HEI/RDI in collaboration with at least one Filipino owned company
  - ▪ The problem/need was identified by the partner company
- ✔ Workability/Technical Viability
- ✔ Social and Environmental Impacts
- ✔ Commercial Viability
- ✔ Management Capability of the Proponents
- ✔ Availability of Competent and Reliable Workforce and Facilities

Characteristics of Successful Proposals

- ✔ Problem/need-focused
- ✔ Relevant and applicable
- ✔ Cost effective and cost efficient
- ✔ Scientifically-sound and technically feasible
- ✔ Availability of technical manpower (i.e. performed by experts) and capable facilities
- ✔ High buy-in from the industry partner
- ✔ Fast transfer of technology

Tips and Reminders on the Application Process

1. The proponent is encouraged to visit DOST's DPMIS submission portal (https://dpmis.dost.gov.ph/) early on and create an account if not yet registered. Explore and familiar yourselves with the portal. For further assistance, you may email pmis@dost.gov.ph.

2. The proponent must submit properly accomplished all documentary requirements via the DPMIS on or before the deadlines: **3 June 2021, 5:00 PM (IEET and Basic Research), 5 July 2021, 5:00 PM (AANR) and 6 Aug 2021, 5:00 PM (Health).** Requirements as indicated in "Submission Requirements" should follow prescribed format and be duly signed. **Prescribed forms may be downloaded at *https://s4cp.dost.gov.ph/resources/*.**

3. An "Early Bird" benefit shall be enjoyed by those who submit within two weeks from the start of CFP per sector. Proposals submitted in this period will be pre-evaluated by the PMO; comments will be sent to the proponent within a week after submission. The proponent may re-submit proposals until the deadline for application. Beyond this period, evaluation results will be final and resubmission after pre-screening by PMO may no longer be allowed.