

CERIE: Ciledug's Environmental Recycling Initiative Empowered by IoT-Driven Pyrolysis and Solar PV for Community Waste Banks - Indonesia

EPICS in IEEE - 2025 Proposals

Indonesia

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FollowUp Form

Project Summary

Project Name*

Please limit your Project Title to 100 characters.

CERIE: Ciledug's Environmental Recycling Initiative Empowered by IoT-Driven Pyrolysis and Solar PV for Community Waste Banks - Indonesia

Project Summary*

Please provide a brief project summary of what has been accomplished so far during this project and how the various students, volunteers, and community members interacted.

In the previous phase, we received the pyrolysis machine we ordered from our partner in Semarang, Indonesia, and focused on initializing the IoT system and solar panels. During this phase, we successfully brought in an expert who played a crucial role in the construction of the pyrolysis machine, which we then handed over to our partner, Bank Sampah Darling. He came to train us on how to operate the machine he had built, which we then continued to teach our partner while also creating a manual. Furthermore, we also invited several other students (outside of our team members and volunteers) to participate in the same training to expand the positive impact of pyrolysis technology. During the training, our team of students and volunteers actively participated in learning how to use the machine and conducting trials on their respective motor vehicles. This included providing a short tutorial on processing pyrolysis oil into ready-to-use fuel. Currently, we have handed over the pyrolysis machine to our partner, Bank Sampah Darling, to prepare for the next agenda, which is to provide a manual and training on how to use the pyrolysis machine. Current pending agendas include completing the installation of the solar panel system, including IoT, and providing training and outreach on the use of the pyrolysis machine at Darling Waste Bank. This report notes that there were delays in our implementation schedule. This was due to several unavoidable circumstances, such as scheduling adjustments between the local workshop partners who built our pyrolysis machines, Bank Sampah Darling's activity on serving their customers, and other unmentionable small factors.

Is the project on and expected to stay on schedule?*

Yes

If not, please explain why it is not on or expected to stay on schedule:

Only answer if you answered "No" to the previous question

Has the scope of this project changed significantly since your last report?*

Includes team composition, community partner change, prototype scope, etc.

No

If yes, please explain how and why:

Only answer if you answered "Yes" to the previous question

Is the EPICS-in-IEEE funded portion of the project on and expected to stay on budget?*

Yes

If not, please explain if you are over or under budget, and why:

Only answer if you answered "No" to the previous question

Support and Future Work

Do you predict any future or possible issues during the project?*

If none, please put NA

NA

Reach out?*

Would you like an EPICS in IEEE committee member or mentor to reach out to you to discuss your project further right now?

No

Is there anything else EPICS in IEEE can support you with?*

If not, please put NA

NA

Are any of the student team members willing to write a thank you letter to our donors?

Please let us know if any student team members are willing to write a letter and/or create a video testimonial thanking the donors who support our program. Please provide the student's email and we will reach out with some guidelines.

2252500018@student.budiluhur.ac.id

Publicity

Has this project been advertised or publicized in any articles or stories?*

Sample publicity may include university-hosted web articles, social media shout-out, local news videos, printed magazine article, etc.

No

If yes, please share the links or upload a copy of the materials with us!

See the upload button below.

NA

Recommendations?

Would you like to recommend or nominate any team members or community partners who could be interviewed to tell their story about your project? If yes, please provide their contact information here:

Rizka Aulia (2252500018@student.budiluhur.ac.id)

Dion Setiawan (diona4.10@gmail.com)

Do you have any photos of your project so far you would like to share with EPICS in IEEE?*

Yes

Photos are a valuable part of our publicity strategy. We prefer to receive photos of the work in progress, technology build, implementation, and community impact. Please minimize formal group photos to one. We would love to see the students working on the build/equipment.

Photos

If yes, please upload any you are permitted to share with us.

Please ensure if any minors (under 18 years old) are present in the photographs, you have obtained and kept the consent forms.

WhatsApp Image 2026-05-29 at 18.48.03.png

Photo 2 (Optional)

PNG or JPG

[Unanswered]

Photo 3 (Optional)

PNG or JPG

Feedback

Do you have any general comments or other feedback on this reporting form?

NA

Please indicate date of submission for this form.*

05/31/2026

File Attachment Summary

Applicant File Uploads

- WhatsApp Image 2026-05-29 at 18.48.03.png

