Request for Proposal (RFP)

Pre-Feasibility Study for Offshore Floating Solar Photovoltaics (FSPV) in Sulawesi

Jakarta, 24 November 2025

Institute for Essential Services Reform

Tebet Timur Raya Nomor 48B, Tebet, Jakarta Selatan

RFP Title	**Pre-Feasibility Study for Offshore Floating Solar Photovoltaics (FSPV) in Sulawesi**
RFP No.	**1554/IESR/XI/PM-EST/ADM-RFP/2025**
Issue date	**November 24th, 2025**
Proposal due date and time	**Dec 3rd, 2025 11.59 PM Western Indonesia Time (GMT+07)**
Anticipated Award Date	**Dec 12th, 2025**
Contact Person/Department	**Dwi Cahya** **dwicahya@iesr.or.id** **Coordinator of Power System Transition**

1. BACKGROUND AND PROJECT SUMMARY

As a tropical country, Indonesia receives year-round solar irradiation distributed relatively evenly across its vast geography. This condition provides Indonesia with an exceptionally large solar energy potential. The Ministry of Energy and Mineral Resources (MEMR) estimates that Indonesia has a total solar energy potential of 3.3 TW, distributed nationwide. This technical potential is based on the land area suitable for ground-mounted solar PV (utility-scale PV) and building rooftops suitable for rooftop PV systems. In addition, there is an estimated 89.37 GW of solar potential from the utilization of water bodies (reservoirs and natural lakes) for floating solar PV installations.

Beyond potential on water bodies, Indonesia also holds substantial offshore solar energy potential. According to IESR's desk study, the technical potential for offshore solar PV reaches approximately 13.3 TW, distributed across Indonesia's major islands, largely in areas located near the coastline. Meanwhile, a study by David, 2023 estimates the offshore floating solar PV potential at around 32 TW.

Despite these vast resources, solar energy deployment in Indonesia remains limited. As of 2024, the total installed capacity of on-grid solar PV reached only 416 MW, including the 145 MW Cirata floating solar PV. In the captive power and off-grid system, installed solar PV capacity has reached 532 MW. Therefore, accelerating the utilization of solar energy in electricity generation is crucial, given that solar PV is expected to become the backbone of Indonesia's future power system and play a key role in expanding electricity access, particularly in the country's frontier, outermost, and remote regions (3T areas).

Considering Indonesia's immense solar potential, IESR has taken the initiative to conduct a preliminary feasibility study on the development of offshore solar PV. This initiative is aligned with Government Regulation No. 27/2021 on the Implementation of Marine and Fisheries Affairs, which outlines the criteria and permitting requirements for offshore installations, including power generation infrastructure.

2. SCOPE OF WORK AND DELIVERABLES

2.1 Detailed Project Description:

IESR is looking for partners with extensive experience and portfolios, capable of carrying out a study on "Pre-Feasibility Study for Offshore Floating Solar Photovoltaic in Sulawesi".

Objectives:

- Conduct a techno-economic analysis to determine the preliminary feasibility of developing offshore floating solar PV in Indonesia, with a specific focus on Sulawesi Island.

- Carry out a comprehensive analysis of relevant regulations and permitting requirements for offshore floating solar PV development.
- Prepare a comprehensive pre-feasibility study (pre-FS) report that includes the recommendations required to enable implementation of offshore floating solar PV development.

2.2 Specific Services/Products Required:

The consultant should conduct the study within the following scope of work:

1. Identify potential sites for offshore floating solar PV development in Sulawesi using a spatial mapping–based approach.
2. Conduct spatial mapping to determine the most plausible interconnection points, including potential interconnection with non-PLN business areas.
3. Assess the latest technological developments, including PV modules, inverters, mounting frames, floaters, anchoring and mooring systems, subsea cables, and other balance-of-system components that support offshore floating solar PV implementation.
4. Prepare a basic engineering design (BED) that includes at least a siting layout (including island design) and a single line diagram.
5. Review Indonesia's regulatory and permitting framework for the use of marine space for offshore floating solar development—covering marine-space utilization permits, environmental permits, building and installation permits, and others—and produce a process flow diagram for the permitting sequence.
6. Conduct energy yield analysis and other analyses necessary to estimate the energy production generated by the FSPV.
7. Review relevant energy storage system technologies and estimate their requirements for smoothing.
8. Carry out a techno-economic analysis, including cost estimation for interconnection, to evaluate the preliminary feasibility of offshore floating solar PV implementation
9. Assess possible business schemes or incentives for the development of offshore FSPV, such as RE power wheeling, carbon tax, or others.
10. Perform sensitivity analysis to test the robustness of the preliminary feasibility results for offshore floating solar PV including the grid connection cost
11. Conduct comparison study to obtain lessons learned from other countries that have developed offshore floating solar PV.
12. Formulate recommendations based on the findings of the preliminary feasibility assessment for offshore floating solar PV development.
13. Prepare a comprehensive report for the preliminary feasibility study.
14. Commit to conducting bi-weekly meeting and delivering weekly progress reports.

2.3 Deliverables and Milestones:

Expected duration of work: 60 days within December 2025 – February 2026 with details can be seen below.

No.	Deliverable	Timeline	Payment terms
1	Deadline for the proposal submission	3 December 2025	-
2	Proposal evaluation, (the process includes clarification meeting, if needed.	4-10 December 2025	-
3	Bid winner announcement	11-12 December 2025	-
4	Contracting finalization and project kick-off	12-18 December	
5	Deliverable-1: Preliminary Study on Offshore FSPV	5 January 2026	30% of the total project cost
6	Deliverable-2: Site Visit Report	21 January 2026	40% of the total project cost
7	Deliverable-3: A Pre-FS Final Report	18 February 2026	30% of the total project cost

The **final report** should be prepared in **English**, including an **executive summary** in **English and Bahasa Indonesia**.

2.4 Performance Standards and Service Level Agreements (SLAs) (if applicable):

Category	Metric/Standard
Timeliness	All deliverables submitted within agreed deadlines
Technical quality (on-site)	The study must be carried out based on appropriate scientific principles, be transparent, and use accountable data. The approach or methodology used in completing the study must be clear, including the stages of collecting primary data and using secondary data.
Third parties involvement	If the consultant plans to involve third parties, including subcontractors, in completing this study, all plans and information related to third-party involvement must be consulted with and approved by the IESR.
Reporting, Data & Compliance	The report must be prepared comprehensively using the principles and rules of scientific writing.

2.5 Roles and Responsibilities:

Procuring Entity (IESR) Responsibilities:

- Receive and review the deliverables prepared by the consultant, including providing feedback if the deliverables do not meet the procuring entity's expectations.
- Work with the consultant to ensure that the timeline is implemented effectively and on time, including providing assistance in administration matters (such as cover letter, etc.) to conduct 1-on-1 interviews or focus group discussions with the relevant stakeholders who are the targets of this study.
- Provide compensation as agreed (in the consulting agreement) based on the deliverables and invoices submitted before the effective contract period ends.
- The procuring entity may reject or cancel a payment request made by the consultant if the

deliverables and invoices are submitted after the effective contract period.

Successful Bidder Responsibilities

- Develop a detailed work plan to complete all deliverables within the agreed timelines.
- Conduct all deliverables in accordance with the scope of work, in a well-organized, dedicated, and responsible manner, adhering to established scientific principles and rules.
- Prepare a weekly report and a bi-weekly coordination meeting with IESR.
- Consultant is allowed to make adjustments to the approach and methodology in
- Prepare and submit the final report, including all data and information collected to complete this work, to IESR within the agreed timelines.
- The consultant may request payment from IESR, in accordance with the consultant agreement, after the deliverable is received in good order by IESR before the effective date of the contract termination.

Section 3: Proposal Requirements and Submission Instructions

3.1 General Instructions:

Item	Requirement
Language	English (all sections, including annexes and supporting documents)
Font	Arial or Calibri, size 11
Line Spacing	1.15 spacing, single-sided
Margins	2.5 cm (1 inch) on all sides
Page Limit	Maximum 15 pages for the main proposal (excluding annexes and CVs)
File Format	PDF (for official submission); Excel for budget details
Number of Copies	1 electronic copy (via email or secure link); hard copy optional upon request
Submission Label	Email subject or file name should read: "RFP Response – Pre-FS Offshore FSPV [Organization Name]"
Proposal Validity Period	Proposals shall remain valid for 60 days from the deadline for the submission of proposal

3.2 Proposal Content Outline:

Follow this outline for the proposal:

- Executive Summary: A high-level overview of bidder's proposed solution.
- Company Profile: Background, experience, additional information on legal structure, financial stability.
- Understanding of the Project: How bidder interprets the RFP's requirements.
- Proposed Solution: Detailed approach, methodology, and proposed technology/tools.
- Project Plan/Timeline: Detailed work breakdown structure, key phases, and milestones.
- Team and Resources: Key personnel, their qualifications, and assigned roles.
- Experience and References: Relevant past projects, client testimonials, and contact information for references.

- Pricing Proposal: Detailed breakdown of costs (see 3.3).
- Assumptions and Dependencies: Any assumptions made.
- Risk Management Plan: How bidder plans to mitigate potential risks.
- Appendices: Supporting documents (resumes, certifications, etc.).

3.2.1 Qualification

- A company or organization with experience in conducting research related to renewable energy, power market, regulatory framework, decarbonization in power sector, environmental issues, or energy transition issues in Indonesia—including desk research and stakeholder engagement activities.
- Experience in collaborating with international and national stakeholders and institutes is highly desirable.
- A company or organization eligible to participate in this bidding must have a business permit in Indonesia, issued by the Indonesian government. If the company consists of experts from outside Indonesia (foreign nationals), the experts registered for this bidding process must have a work permit in Indonesia issued by the Indonesian government.
- Have a team composition that meets the requirements, but is not limited to, the following:
    1. Team leader (1 personnel):
        - Minimum Master's degree required in science, environment, engineering, renewable energy, or other relevant disciplines.
        - Minimum 10 years of experience in research or work related to energy transition, renewable energy, or decarbonization in the power sector.
        - Strong and comprehensive knowledge and experience in power system policy is preferred.
        - Experience in writing reports, white papers, or recommendations for national stakeholders.
        - Strong leadership, organizational, and communication skills.

    2. Research Specialist (3 personnel):
        - Minimum Bachelor's degree required in science, environment, engineering, renewable energy, economy and finance, or other relevant disciplines.
        - Minimum 7 years of experience in research or work related to energy transition, renewable energy, or decarbonization in the power sector.
        - Having knowledge and experience in renewable energy/power system models, spatial analysis, and/or financial models is preferred.
        - Experience in writing reports, white papers, or recommendations for national stakeholders.
        - Ability to work collaboratively in a team environment and have good communication skills.

3.3 Pricing Proposal Requirements:

Please submit a detailed and transparent budget. This should include:

- A breakdown of costs by work package or deliverable

- Estimated personnel work (e.g., by role or seniority level).
- Other costs, such as site visit, 1-on-1 interviews, focus group discussion, etc., if applicable. **Please note that other costs will be paid as at cost.**
- A proposed payment schedule tied to milestone delivery.

Estimated total contract value for personnel work and other costs is IDR 200.000.000 including tax.

3.4 Submission Method:

All proposals must be submitted electronically to the following email address:

- deon@iesr.or.id with cc to dwicahya@iesr.or.id and reananda@iesr.or.id

Kindly ensure that all required documents are complete and submitted as a single email or download link (e.g., Google Drive or Dropbox, with open access settings).

No hard copies are required unless specifically requested by IESR.

Submission deadline: December 3th 2025 11.59 PM Western Indonesia Time (GMT+07)

3.5 Late Submissions:

Late submissions will not be considered. Please confirm receipt by email after submission.

Section 4: Evaluation Criteria and Selection Process

4.1 Evaluation Committee:

All submitted proposals will be reviewed and evaluated by a selection committee appointed by IESR. The committee will assess proposals only if the 11 documents (Consultant Documents, please find in Section 7) along with other administrative documents, such as NIB, NPWP, company deed, and bank statements, are **completely submitted.** Otherwise, the committee **will not** assess the submitted proposal.

The committee will assess proposals based on technical quality, relevance, team qualifications, methodology, and cost-effectiveness. Only shortlisted candidates may be contacted for further clarification or interviews.

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4.2 Evaluation Criteria:

IESR employs multicriteria assessment to evaluate the proposal as follows:

- **Organization profiling (15%)**, including capacity, experience, and past performance with

IESR (if any)

- **The proposed expertise (30%)**, including compliance with the RfP requirements, compliance with the portfolio of work completed with the scope of work, and competencies in the design and engineering, finance and economics, and the environment.
- **Technical proposal (35%)**, including understanding of required services, methodology used, transparent work allocation and timeline, and additional value offered
- **Reasonable and competitive bid price (20%)**, including suitability to team composition, work duration, and competency

4.3 Evaluation Process:

Step	Stage	Description
1	Initial screening	Check for completeness, eligibility, and compliance with formatting and submission requirements.
2	Detailed technical review	Evaluate methodology, technical approach, team qualifications, past experience, and relevance.
3	Shortlisting	Identify top candidates based on technical and strategic fit.
4	Interviews	Invite shortlisted bidders to present proposals and answer questions (if applicable).
5	Final selection	Select the most suitable bidder based on cumulative evaluation scores and notify officially.

4.4 Award Decision:

The contract will be awarded to the most qualified bidder whose submission is deemed to be in the best interest of IESR. The selection will be based on the stated evaluation criteria, considering technical merit, relevance, team capacity, and overall value. The evaluation is **NOT solely** based on the lowest price offered.

Section 5: Terms and Conditions

5.1 Standard Contract Terms:

The selected contractor will enter into a formal agreement with IESR based on standard terms and conditions. The contract will cover the scope of work as outlined in the proposal and agreed upon deliverables. The contract period will run from the commencement date specified in the agreement and continue until project completion, unless terminated earlier by either party with prior written notice.

The contractor will receive payment according to a predefined schedule tied to milestone delivery, as detailed in the payment annex. All outputs and deliverables developed under the contract will be the property of the procuring entity, unless otherwise agreed in writing. Both parties are expected to maintain the confidentiality of sensitive information shared during the engagement.

The contract will be governed by the laws of the Republic of Indonesia, and any disputes will be resolved through amicable negotiation or appropriate legal channels.

5.2 Confidentiality and Proprietary Information:

All proprietary or confidential information submitted by bidders will be treated with strict confidentiality and used solely for the purposes of evaluating the proposal. Such information should be clearly marked as “Confidential” or “Proprietary” in the relevant sections of the proposal.

The procuring entity (IESR) will not disclose any marked proprietary content to third parties without the bidder’s prior written consent, except as required by law or internal audit. Unmarked information may be treated as non-confidential.

5.3 Right to Reject/Modify:

IESR reserves the right to reject any or all proposals, to waive any informalities or minor irregularities in the submission process, and to enter into negotiations with one or more selected bidders as deemed necessary.

5.4 Disclaimers:

This RFP does not commit IESR to award a contract or pay any costs incurred in the preparation or submission of proposals.

5.5 Governing Law:

This Request for Proposal (RFP) and any resulting contract shall be governed by and construed in accordance with the laws of the Republic of Indonesia. Any disputes arising in connection with this RFP or the subsequent contract shall be subject to the exclusive jurisdiction of the courts of the Republic of Indonesia. This RFP is strictly open only to entities that possess a valid work permit in Indonesia.

Section 6: Inquiries and Communications

6.1 Questions and Clarifications:

Prospective bidders may submit questions or requests for clarification regarding this Request for Proposal (RFP) to ensure a clear understanding of the scope, requirements, and expectations. All inquiries must be submitted in writing via email to deon@iesr.or.id with cc to dwicahya@iesr.or.id and reananda@iesr.or.id with the subject line: “RFP Question – Pre-FS Offshore FSPV – [Your Organization Name]”.

To allow sufficient time for review and response, all questions must be received no later than 27 December 2025, 17.00 PM Western Indonesia Time (GMT+0700).

Responses to all inquiries will be compiled and distributed to all parties who have expressed interest in the RFP, maintaining fairness and transparency in the process. Please note that verbal inquiries or questions submitted after the deadline will not be addressed.

6.2 Q&A Session/Conference (if applicable):

N/A.

6.3 Addenda/Amendments:

Any changes, updates, or clarifications to this Request for Proposal (RFP) will be issued as formal addenda. These addenda will be distributed via email to all bidders who have registered their interest or submitted questions and will form an official part of the RFP documentation.

It is the responsibility of all prospective bidders to ensure they have received and acknowledged any such addenda. Failure to do so may result in disqualification due to non-compliance with updated requirements.

Section 7: Appendix

Forms and Certifications:

Bidders are required to sign all necessary documents listed in this link: Consultant Documents

8. Acknowledgement

Reviewed by:	Approved by:
Signed by: Deon Arinaldo 31AFD421-80CA-4550-9306-F3B3576E6E22 **Deon Arinaldo** Program Manager Energy System Transformation	Signed by: Kharina 77ACB4D9-78F2-4431-8689-2FB1FC2C57C3 **Kharina Dhewayani** Operational Manager