



Request for Proposal (RFP)
Surveyor for Preliminary Assessment for
Locations of floating PV, Wind, & Pumped Hydro
Storage and Measurement Instrument for Solar
and Wind and Instrument Installation

Institute for Essential Services Reform

Tebet Barat Dalam VIII No. 20A-B

Jakarta Selatan

Indonesia

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OVERVIEW AND BACKGROUND

Institute for Essential Services Reform (IESR), a think tank based in Jakarta, Indonesia, has been working intensively to promote the acceleration of low carbon energy transition in Indonesia, through evidence-based policy advocacy. For the past 5 years, IESR also has been contributing significantly to promoting energy transition discourse in Indonesia and has been working with national and local governments, associations, and civil society organizations.

IESR is currently providing technical assistance to MEMR in developing wind power, floating solar photovoltaics, and pumped hydroelectric energy storage by conducting a pre-feasibility study on the selected areas as an input to the national power sector planning (PLN's RUPTL). As part of the work plan, a survey on the potential locations and installation of measurement instruments (pyranometer and anemometer) in the pre-selected locations is necessary in order to prepare for the upcoming pre-feasibility studies.

This request for proposal is to obtain the best services available to provide IESR with the preliminary survey of the selected locations and installation of measurement instruments.

1. PROJECT SUMMARY

This project will focus on two things:

1. Conducting surveys to the pre-determined areas. Pre-selected areas have been determined from IESR and stakeholder discussion/assessment. Based on the survey results, proposed several land locations specific for power plants and measurement instruments deployment (coordinate & area boundary)
 - a. Provides the latest land use, landform, aerial imagery, and other needed maps in Sumatra, Java, Madura, and Bali
 - b. Support the preliminary location analysis using secondary data (GIS, etc)
 - c. Conducts land surveys for determining locations of:
 - i. **Floating PV:** aerial imagery combined with underwater/lake condition (actual site condition, sedimentation, water depth) and access to locations
 - ii. **Wind plants:** aerial imagery combined with earth's surface condition (slope, clearance, access to location), underground (soil type, other constraints for wind tower)
 - iii. **Pumped hydro storage:** aerial imagery with coordinate for land clearance near the water body for building the upper reservoir, coordinate for low reservoir along the river, slope between the two reservoirs.
 - iv. **Measurement instruments (pyranometer and anemometer):** aerial imagery, and actual site conditions.

All of the information will be used to determine the best location to install new floating PV, wind power, and pumped hydro energy storage with minimal direction/instructions on the assignments and utilizing their own survey instruments. Final output will be recommendations for the final location.

 - d. Accompany the IESR and MEMR team for the site visit at the determined location.
2. Installation of measurement instruments for the candidate/selected locations:
 - a. Support procurement of measurement instruments for gathering primary data on renewable resources e.g. solar irradiation, wind speed/wind rose.
 - b. Install the measurement instruments on the determined location and ensure data logging/monitoring feature functions



IESR has conducted a preliminary assessment on the general locations for building the floating PV, wind power, and PHES. **A total of 5-6 pre-selected areas**, with potential co-location of floating PV, wind power plants, and PHES are already identified and subject to the survey works.

With this RFP, IESR is soliciting proposals from experts, or institutions with extensive experience and portfolios in conducting surveys for renewable energy resources. IESR will evaluate all the proposals submitted. After reviewing all proposals, IESR will select the experts/institutions that bring suitable expertise, most closely aligns with project objectives, and articulates a clear, achievable research plan to meet those objectives within the required timeframe.

2. PROPOSAL GUIDELINES

Proposals will be accepted until 10:00 p.m. Indonesian Western Standard Time (WIB, GMT+0700) on Wednesday, 23 June 2022. Any proposals received after this date and time will be regarded as inadmissible. All proposals must be signed by an official agent or company representative submitting the proposal.

Main proposals should not be more than 10 pages in length. The annex of the proposal should include the following items:

- 1) brief company/institution profile.
- 2) the latest Curriculum Vitae (CV) of the team leader. CV of other team members with relevant experience is optional.

If the individual/organization submitting a proposal must outsource or contract any work to meet the requirements, this must be clearly stated in the proposal. Additionally, costs included in proposals must include any outsourced or contracted work. Any outsourcing or contracting organization must be named and described in the proposal.

Please itemize all costs and include a description of associated services. Contract terms and conditions will be negotiated upon selection of the winning bidder for this RFP.

3. PROJECT PURPOSE AND DESCRIPTION

IESR would like to have a summary of proposed locations (coordinate and area boundary) that have been surveyed based on the pre-selected areas that IESR has identified. IESR plan to develop pre-FS of the wind power plant, floating PV, and PHES further in the proposed locations. In addition, several measurement instruments (up to a total of 10 or the maximum available budget) are to be installed in the selected area to start gathering primary data on wind and solar resources to feed into the pre-FS study. The chosen partner will conduct a survey on the pre-selected area, support the measurement instruments tools procurements (up to three different recommendations and quotations), and propose location for the power plant and measurement instruments, and conduct the installation of the measurement instruments.

Expected deliverables from these exercises are:

- From the total 5-6 (five or six) pre-selected areas, there are up to 2 (two) specific locations for each wind power plant and floating PV, with the possibility of both being located near each other. In addition, three (3) recommended locations for PHES.
- Support the process of procurement (at least three different recommendations and quotations of measurement instruments to be procured). The instruments shall also include a data logger and data monitoring.
- Conduct the preparation and installation of measurement instruments for wind and solar (up to 10 locations in total or based on the maximum available budget).



The identified pre-selected areas from IESR currently consist of the following five locations:

- a. One area in Aceh
- b. One area in North Sumatera
- c. One area in West Java
- d. Two areas in Central Java

A more detailed pre-selected area locations would only be shared with the winning bidder. The study results will be used to support IESR's technical assistance for the MEMR. IESR reserves the right to utilize and own the data and equipment that is part of this project.

4. REQUEST FOR PROPOSAL AND PROJECT TIMELINE

Proposal Timeline:

Proposals will be accepted until 10:00 p.m. Indonesian Western Standard Time (WIB, GMT+0700), 23 June 2021. Kindly address Program Manager Energy Transformation IESR at deon@iesr.or.id and Senior Researcher for Renewable Energy at handriyanti@iesr.or.id for inquiries.

Evaluation of proposals will be conducted from 24 June through 30 June 2022. Follow-up with the top three candidates will be conducted within this window to obtain any necessary clarification on items described within the proposals.

The selection decision for the winning bidder will be made by 30 June 2022.

Upon notification, the contract negotiation with the winning bidder will begin immediately and must proceed extremely quickly to meet the project timeline.

Project Timeline:

The project must commence on 04 July 2022 and the results of the project must be finalized no later than 07 October 2022.

A draft timeline is presented below. Internal changes may be made if mutually agreed.

Activity/Deliverables	Suggested Timeline
<i>Initial/preliminary survey via secondary data (GIS)</i>	4 July - 15 July
<i>Procurement of measurement instruments</i>	4 July - 19 August
<i>Survey to the locations</i>	18 July - 19 August
<i>Recommendation of the power plant and instruments locations</i>	22 August - 26 August
<i>Determining the final locations for power plants and instruments</i>	22 August - 26 August
<i>Installation of measurement instruments on the agreed location</i>	29 August - 23 September
<i>Site visit with IESR and MEMR team</i>	26 September - 7 October

Unless otherwise noted, work will be completed by the end of the month identified above.

5. BUDGET

All proposals must include proposed costs (in Indonesian Rupiah/IDR) to complete the tasks described in the project scope. Costs should be stated as one-time or non-recurring costs (NRC).

Expected cost to be included in the proposal:



- Man-hours or man-day to cover the survey works, support in measurement instruments procurement and installation of the measurement instruments
- Transportation and accommodation needed for surveys and instrument installation (for surveyor only, exclude IESR MEMR cost)
- Measurement instruments installation, including land and roof rent fees (and other relevant costs)

The estimated budget for purchasing the measurement instruments must be mentioned in the proposal but the final purchase will be conducted by IESR. All other costs and fees must be clearly described in each proposal.

6. BIDDER QUALIFICATIONS

Bidders should provide the following items as part of their proposal:

- Description of experience in land use or project surveys as well as experience working in a multi-disciplinary consultancy (5 years experience)
- Good IT skills in commonly used software, such as GIS software
- Examples of three or more similar projects conducted by you/your organization
- Anticipated resources you will assign to this project (total number, role, title, experience)
- Confirmation of timeframe for completion of the project
- Brief description on how you will meet the deliverables within the allocated time

Bidders must submit a digital copy of their proposal via email to Program Manager Energy Transformation IESR at deon@iesr.or.id and Senior Researcher for Renewable Energy at handriyanti@iesr.or.id by 10:00 p.m. Indonesian Western Standard Time (WIB, GMT +0700) on 23 June 2022. Please include "RFP Response – Surveyor" in the subject line.