

Request for Proposal (RFP) Development of Integrated Solar PV Supply Chain Roadmap for Indonesia

Institute for Essential Services Reform

Tebet Timur Raya No. 48b South Jakarta Indonesia April, 2025



1. BACKGROUND AND PROJECT SUMMARY

Indonesia's energy transition is a national priority, marked by a pledge to achieve net-zero emissions (NZE) by 2060 or earlier. This commitment is reinforced through Presidential Regulation No. 112/2022, the Just Energy Transition Partnership (JETP), and updated Nationally Determined Contributions (NDCs) that target an emission reduction of 31.89% (unconditional) and 43.2% (conditional on international support) by 2030.

Solar energy has emerged as the cornerstone of Indonesia's pathway toward decarbonization. Analyses from IESR and other institutions, including the Ministry of Energy and Mineral Resources (MEMR) and the International Energy Agency (IEA), project solar photovoltaic (PV) to hold the largest share in Indonesia's future energy mix. In the IESR Deep Decarbonization Study (2021), solar accounts for 88% of electricity generation by 2045, while the government's NZE 2060 scenario includes 462 GW of solar PV capacity—making it the dominant technology in Indonesia's long-term strategy.

However, as of August 2024, Indonesia's installed solar PV capacity stands at 717.71 MW (Ministry of Energy and Mineral Resources, 2024), highlighting a significant gap between current deployment and future targets. To close this gap and realize the potential of solar energy as the backbone of the transition, a comprehensive, integrated roadmap is urgently needed; one that aligns near-, mid-, and long-term renewable energy targets with industrial readiness and evolving global dynamics.

In addition to domestic challenges, the landscape is further shaped by global trade disruptions such as the ongoing US–China trade tensions, carbon border taxes, and shifting investment flows. These dynamics pose both risks and opportunities for Indonesia's energy transition, particularly in the development of a competitive domestic renewable energy industry, including solar PV manufacturing and associated supply chains.

In 2024, IESR has conducted a landscape assessment of existing solar PV manufacturing industries and the supporting supply chain in Indonesia; including analysis on the country's competitiveness to seize the industrial opportunities. Built upon this study, IESR will develop an industry roadmap of integrated solar PV supply chain with considerations of government targets, country's competitiveness, and opportunities to contribute to the establishment of a regional solar PV hub. This roadmap is divided into three stages: short-term (2025–2030), medium-term (2030–2040), and long-term (2040–2060), while also addressing policy coherences needed.

2. PROJECT DELIVERABLES AND DESCRIPTION

The selected consultant or research institution is expected to deliver the following:

- Updated assessment of current conditions
 - Adding more information and brief analysis based on new policy direction, newly released regulations, and other external factors.
- Industry mapping and competitiveness



Detailed assessment (based on previous analysis) on industrial readiness and competitiveness across solar PV supply chain including supply chain capacity, technology access, investment trends, and skills availability.

• Trade war and geopolitical impact assessment

Identification of key risks and opportunities from global trade dynamics (e.g., US-China trade war, critical minerals export bans, carbon border taxes) affecting the development of solar PV supply chain.

• Roadmap development:

A three-phase roadmap (short-term: 2025–2030, medium-term: 2030–2040, long-term: 2040–2060) aligning Indonesia's renewable energy ambition with industrial development strategy and external risk mitigation.

• Policy recommendations

Practical and evidence-based recommendations for policymakers, covering industrial policy, incentives, regulatory improvement, green trade strategy, and workforce development.

3. REQUIRED DOCUMENTS

Proposals must not exceed 10 pages (excluding annexes) and must include:

- 1. Cover letter
- 2. Statement of institutional/team expertise
- 3. Understanding of project context
- 4. Research methodology and workplan
- 5. Timeline and milestones
- 6. Budget breakdown (in IDR)
- 7. Team composition & key personnel resumes (in Annex)
- 8. Relevant experience or portfolio (in Annex)

Terms and conditions;

- If the 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 describe the limitations and assumptions potentially used in the work.
- Please itemize all costs and include a description of associated services. Contract terms and conditions will be negotiated upon the selection of the winning bidder for this RFP.

4. REQUEST FOR PROPOSAL AND PROJECT TIMELINE

RFP Timeline:

• Proposals and all required documents will be accepted until **10:00 p.m.** Indonesian Western



Standard Time (WIB, GMT+7) on Tuesday, **29 April 2025.** Any proposals received after this date and time will be regarded as inadmissible. An expert, official, or company representative who submits the proposal must sign it.

- The evaluation of proposals will be conducted from the time of submission up until 1 May 2025. Follow-up discussions with shortlisted candidates will be conducted during this period to obtain any necessary clarification on the items described within proposals.
- The selection decision for the winning candidate will be made by **2 May 2025**.

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 will run from **5 May** to **30 June 2025**. A draft timeline is presented below. Internal changes may be made if mutually agreed upon:

Deliverables and/or Milestones	Timeline
Project kick off, methodology presentation	5 May 2025
Deliverable 1 – Landscape assessment, industry competitiveness, trade war and geopolitical impact assessment	5 – 16 May 2025
Deliverable 2 – Initial result of roadmap development	17 - 30 May 2025
Deliverable 3 – Final roadmap and policy recommendations	31 May - 30 June 2025

A regular (approximately biweekly) coordination and report meeting would be conducted between IESR and the selected consultant. Unless otherwise noted, work should be completed by the date 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). A more detailed proposal is encouraged to ease the selection process.

All costs and fees must be clearly described in each proposal and should be separated into each item and scope of work.

6. **BIDDER QUALIFICATIONS**

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

• A description of experience in renewable energy planning, roadmap development, or energy transition policy



- Examples of two or more similar projects conducted by you/your organization
- Anticipated resources you will assign to this project (total number, roles, titles, experience)
- Confirmation of the timeframe for completion of the project
- A brief description of the methodology and assumptions used

Bidders must submit a digital copy of their proposal and all required documents via email to:

- Marlistya Citraningrum, Sustainable Energy Access Program Manager (citra@iesr.or.id)
- Agung Marsallindo, Coordinator for Southeast Asia Energy Transition Project (agung@iesr.or.id)
- Turas Nur V., Sustainable Energy Access Program Officer (turas@iesr.or.id)

Please include "*RFP Response - Development of Integrated Solar PV Supply Chain Roadmap for Indonesia*" in the subject line.