



Request for Proposal (RFP)
Consultancy Services for ESG of Battery Supply Chain

Institute for Essential Services Reform

Tebet Timur Raya No. 48b

Jakarta Selatan

Indonesia

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1. BACKGROUND AND PROJECT SUMMARY

Indonesia's National Electricity Plan (RUKN) 2024–2026 projects 443 GW of installed capacity by 2060, with 41.6% from Viable Renewable Energy (VRE). As VRE capacity increases, ensuring power sector reliability through expanding energy storage becomes critical. Additionally, electrification of transport would also accelerate which constitutes potential demand for battery technology. The Draft National Energy Policy (RPP KEN) already targets 178 million EVs by 2060, while RUKN sets a battery energy storage storage goal of 18 GW. Alternatively for a more ambitious energy transition scenario, IESR estimates a higher capacity of battery that up to 300 GW may be needed by 2045 and all road transport electrified by 2050 to meet the 1.5°C climate target.

With the huge potential demand for battery technology in the next few decades, establishing local capacity and supply chain for the technology would be critical to lower the cost and optimize economic benefit for Indonesia. The battery supply chain ecosystem can be categorized into three main segments: upstream, midstream, and downstream. However, the development of the battery supply chain ecosystem across these segments is significantly influenced by the declining cost of battery manufacturing, driven by continuous technological innovation and advancement and evolution of the battery chemistry.

BloombergNEF reports that the price of lithium-ion batteries has dropped to USD 139 per kilowatt-hour as of 2023. Despite this positive trend, several structural challenges remain. Notably, Indonesia currently lacks an operational battery recycling system, limiting the circularity and sustainability of its battery ecosystem. Moreover, there is a disconnect between Indonesia's substantial nickel reserves, accounting for approximately 48% of global production, and the configuration of its electric vehicle (EV) supply chain. While Indonesia holds strong potential to develop a nickel-rich NMC (Nickel Manganese Cobalt) battery industry, most Original Equipment Manufacturer (OEM) facilities serving the domestic EV market are based in China, favoring the assembly of LFP (Lithium Iron Phosphate) batteries. This misalignment presents a strategic challenge for optimizing Indonesia's domestic value creation in the battery sectors.

Given the aforementioned opportunities and challenges, and to explore the current practices of the battery industry ecosystem from upstream to downstream and examine its sustainability aspects, the Institute for Essential Services Reform (IESR) is conducting a study to assess the latest battery technologies, emerging trends, and Indonesia's potential to build a sustainable and competitive industrial ecosystem and supply chain.

2. SCOPE OF WORK

As part of the analysis, the study will incorporate an Environmental, Social, and Governance (ESG) and sustainability assessment of Indonesia's current battery supply chain ecosystem. This assessment will **evaluate the existing conditions and identify gaps between the current practices and internationally recognized sustainable and best practice standards.**

Upon the completion of the project, consultants are expected to conduct analysis on ESG related point, including but not limited to:

Environmental aspects:

1. Life-Cycle Environmental Impact Assessment (EIA) of the Battery Industry in Indonesia

- Identify and map the full process of battery and cell manufacturing across the value chain in Indonesia, from raw material extraction to end-product assembly and recycling.
 - Evaluate the major input and output flows at each stage of the value chain and identify major and critical operational processes and material.
 - Identify the primary chemical inputs used across the value chain, including but not limited to: Sulfuric acid, Ammonium compounds, N-Methyl-2-pyrrolidone (NMP), Lithium salts and other relevant reagents
 - Assess the environmental impact of the battery and cell in each stage value of chain in Indonesia, through a life cycle perspective. Key environmental aspects to be analyzed include:
 - Energy consumption
 - Critical material usage
 - Greenhouse gas (GHG) emissions
 - Hazardous waste
 - Water pollutants
 - Air pollutants
 - Soil pollutants
 - Biodiversity loss
 - Deforestation
 - Analyze the environmental risks associated with the above impacts and propose potential mitigation strategies. This includes:
 - Risk characterization based on severity and likelihood
 - Identification of best practices and technological solutions
 - Policy or regulatory recommendations where applicable
- 2. Resource Efficiency and Water Use**
- Analyze water intensity of extraction and battery processing activities
- 3. Battery Circular Economy Potential in Indonesia**
- Assess the current ecosystem and regulatory readiness for battery reuse, repurposing, and recycling.
 - Identify investment needs to establish local closed-loop systems and avoid waste import dependency.

Social aspects:

1. Employment Quality and Fair Wages

- Assess job creation potential and employment conditions across the value chain.
- Evaluate the use of contract vs permanent labor, fair compensation, and decent work conditions.
- Investigate compliance with international labor standards, particularly for outsourced or subcontracted labor.

2. Training, Education, and Skill Development

- Assess availability of training programs to upskill local workers in battery tech and automation.
- Evaluate gaps in technical education, especially in mining regions and industrial parks.

3. Gender Equity, Disability, and Social Inclusion (GEDSI)

- Review company policies and workplace practices on gender equity, inclusion of local populations, and treatment of migrant or subcontracted labor.
- Assess enforcement of anti-discrimination protections.

4. Freedom of Association and Worker Representation

- Investigate whether workers are free to organize and engage in collective

bargaining.

- Assess potential risks of suppression or undermining of labor rights in private zones or SEZs.

5. Poverty Alleviation

- Economic impact (job creation and income increase) to the surrounding communities
- Human development index (HDI) increase in the surrounding communities
- Investigate inclusivity in job creation, especially for local people and vulnerable groups (indigenous group, women, etc)
- Identify corporate social responsibility (CSR) initiatives that align with community needs and able to reduce poverty

Governance aspects:

1. Labor Conditions in Indonesian Mining and Industrial Zones

- Evaluate employment practices across the supply chain — from mining, smelting, to cell/module assembly.
- Highlight gaps in worker protection, particularly in Special Economic Zones and outsourced operations.

2. Community Rights and Indigenous Peoples

- Examine the process of land acquisition and the application of Free, Prior, and Informed Consent (FPIC) in Indigenous and local communities, particularly in Central Sulawesi, North Maluku, and Papua.
- Evaluate grievance mechanisms and conflict resolution practices related to mining and industrial expansion.

3. Occupational Health and Safety (OHS)

- Review OHS standards in mining, chemical processing, and battery manufacturing facilities, including handling of toxic substances.
- Evaluate adequacy of training, protective equipment, and incident management systems.

The interim report could be in the PPT format, with the final deliverable in both PPT and Word documents supported with visuals.

With this RFP, IESR is soliciting proposals from consultants with extensive experience and portfolios in developing complex and thorough ESG assessment. IESR will evaluate all the proposals submitted. After reviewing all proposals, IESR will select the consultants that bring suitable expertise, most closely align with project objectives, and articulate a clear, achievable research plan to meet those objectives within the required timeframe.

3. PROPOSAL GUIDELINES

All proposals submitted must be signed by an official agent or representative of the company submitting the proposal. Upon receipt of the proposal, IESR will evaluate all the proposals and if clarification is required, a meeting may be held during the evaluation process before the winner is announced.

The main proposals should not be more than 10 pages in length excluding the annex, and should

cover following items;

1. Cover letter
2. The value proposition of your expertise/institution/company
3. A contextual overview of the RFP
4. Methodology (e.g. plan to obtain data and information)
5. A detailed project timeline and work plan
6. Project Management (team organization, man hour details, and proposed budget)
7. Annex
 - Should include the following item:
 - a. Brief company/institution/experts profile
 - b. The latest Curriculum Vitae (CV) of the team leader and the other team members with relevant experience.
 - c. Provide 2-3 examples of previous projects that are similar in scope of nature.

Terms and conditions:

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 the selection of the winning bidder of this RFP.

4. REQUEST FOR PROPOSAL AND PROJECT TIMELINE

Proposal timeline:

- Proposal will be accepted until **23:59 PM** Indonesian Western Standard (WIB, GMT+7) on **July 11, 2025**. Any proposals received after this date and time will be regarded as inadmissible
- The evaluation of proposals will be conducted when the bidders submit their proposal until **July 21, 2025**. Follow-up with the top three candidates will be conducted within this time window to obtain any necessary clarification on items described within the proposals.
- The selection decision for the winning bidder will be made by **July 22, 2025**.

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

Project timeline:

- The research must be commenced on **July 24, 2025** and the results of the project must be finalized no later than **September 18, 2025**, with milestones/progresses as designated below.

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

Deliverables and/or Milestones	Timeline	Payment Terms
<i>Deadline for the proposal submission</i>	<i>11-Jul</i>	<i>-</i>
<i>Clarification meeting between IESR and potential consultants</i>	<i>17 - 21 Jul</i>	<i>-</i>

<i>Winner announcement</i>	<i>22-Jul</i>	<i>-</i>
<i>Project Kick-off with selected bidder</i>	<i>24-Jul</i>	<i>-</i>
Progress 1 <i>Environment aspects (include 1 day of progress meeting)</i>	<i>25 Jul - 8 Aug</i>	<i>30%</i>
Progress 2 <i>Social aspects (include 1 day of progress meeting)</i>	<i>8 - 22 Aug</i>	<i>30%</i>
Progress 3 <i>Governance aspects (include 1 day of progress meeting)</i>	<i>22 Aug - 10 Sep</i>	<i>20%</i>
<i>Project wrap up</i>	<i>11 - 18 Sept</i>	<i>20%</i>

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. The budget ceiling for this proposal is **IDR160.000.000** for all costs required through the study **including tax**.

Any additional cost (travel, FGD) required to complete the work can be identified and estimated in the budget. This information would be treated as additional information for IESR to evaluate the robustness of methodologies. However, these additional costs would be covered by IESR directly and would be excluded from the final contract value

NOTE: 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 ESG analysis, and analysis for similar technology related landscapes in Indonesia is advantageous, especially related to the battery technology industry and ecosystem for both national and global would be beneficial
- Team composition with specification as mentioned in this table:

No	Role	Academic qualifications	Experiences
1	Team Leader	Holds a Master's degree or PhD in a relevant field such as Environmental Science, Sustainability, Industrial Ecology, Engineering, Public Policy, Supply Chain Management, or other disciplines related to ESG and the battery industry.	7–10 years of professional experience for a Master's graduate or 5 years of experience for PhD , including leading multi-disciplinary teams or projects related to sustainable supply chains, ESG assessments, or industrial decarbonization, preferably in the energy, mining, or manufacturing sectors.
2	Team	Holds at least a Master's	Minimum of 3 years of professional



	member(s)	degree in a relevant field such as Environmental Science, Social Sciences, Law, Governance, Public Policy, Sustainability, or a related discipline.	experience relevant to the respective ESG domain. Demonstrated knowledge and practical experience in applying ESG standards in the context of supply chain development, preferably related to battery, mining, or manufacturing sectors.
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- Examples of two 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, and how you will meet the deliverables within the allocated time, including detailed of task descriptions in each deliverable
- A brief description of the methodology and assumptions used

Bidders must submit a digital copy of their proposal via email to to Program Manager Energy Transformation at deon@iesr.or.id and cc to auzora@iesr.or.id, rifki@iesr.or.id, ilham@iesr.or.id and rahmi@iesr.or.id by **23:59 PM**. Indonesian Western Standard Time (WIB, GMT+7) on **Friday, July 11, 2025**, Please include “RFP Response –Consultancy Services for ESG of Battery Supply Chain” in the subject line.