

Extended Deadline

Request for Proposal (RFP)

Consultant for Economic Impact Analysis of Industrial Decarbonization in Indonesia

Institute for Essential Services Reform

Tebet Timur Raya No. 48B, Tebet

Jakarta Selatan

Indonesia

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1. Overview and background

In response to the global consensus under the Paris Agreement, Indonesia has pledged to achieve net-zero greenhouse gas (GHG) emissions by 2060 or sooner, as articulated in its Enhanced Nationally Determined Contribution¹ and the Long-Term Strategy for Low Carbon and Climate Resilience (LTS-LCCR) 2050². These frameworks outline a phased decarbonization process across all major sectors, especially energy and industry, supported by market readiness and competitiveness and its enabling policies.

According to Indonesia's Enhanced NDC¹, the country targets an emissions reduction of 31.89% unconditionally and up to 43.20% with international support by 2030, compared to the business-as-usual (BAU) scenario. The industrial sector plays a key role in achieving this target, as it accounted for around 22% of national energy-related emissions in 2021, with emissions projected to grow significantly without intervention.

The path toward industrial decarbonization involves deploying low-carbon technologies, boosting energy efficiency, and integrating renewable energy sources. This transition is particularly challenging for hard-to-abate sectors such as iron and steel, cement, fertilizer, pulp and paper, and textiles, which are among the top industrial emitters and are foundational to Indonesia's economy. These industries face inherent technological and financial barriers to rapid decarbonization, yet they must adapt to stay competitive and compliant with emerging global norms.

Among the foundational levers for this transition is the development of a green market ecosystem, particularly through green public procurement (GPP), a critical policy instrument to stimulate demand for low-emission goods and services and to accelerate decarbonization in industry. GPP has been used globally to accelerate industrial transformation, as seen in the European Union, Japan, and South Korea ^{3,4}. At present, Indonesia's regulatory and institutional readiness for green public procurement remains limited. While Presidential Regulation No. 16/2018 on Public Procurement provides general guidance on environmentally friendly procurement, implementation is still at a nascent stage. The National Public Procurement Agency (LKPP) has introduced pilot efforts and guidelines for green products, but mainstream adoption across ministries, local governments, and state-owned enterprises (SOEs) is still minimal⁵. Many green products, such as energy-efficient equipment, low-carbon building materials, or certified sustainable inputs, are not yet prioritized in procurement decisions due to a lack of incentives, pricing preferences, technical specifications, or verifiable certification systems. This limits GPP's ability to signal demand and stimulate low-carbon investment across industries. And without targeted support and clear incentives, many companies delay adopting low-carbon technologies that could improve competitiveness and resilience in a global market increasingly shaped by carbon standards and green trade policies (e.g., the EU's CBAM)⁶.

In parallel, the economic impact of industrial decarbonization on national competitiveness is still insufficiently understood. Furthermore, it is important to explore how decarbonization of Indonesia's industrial sector can contribute to its global economic competitiveness. The Global Competitiveness Index (GCI), developed by the World Economic Forum, evaluates a country's long-term economic



productivity through metrics such as energy infrastructure, environmental regulation, innovation capacity, and macroeconomic stability⁷. In 2019, Indonesia ranked 50th of 141 countries. However, it remains unexplored how industrial decarbonization could influence key indicators such as GDP growth, electricity access, clean technology adoption, and innovation ecosystems that directly affect Indonesia's GCI ranking.

Simultaneously, industries are reluctant to invest in green technologies due to perceived high costs and uncertain returns. Addressing these knowledge gaps, the use of **Cost-Benefit Analysis (CBA)** becomes a vital tool to support technology adoption. By quantifying both the economic and environmental trade-offs, CBA enables industries and policymakers to:

- Identify cost-effective decarbonization technologies;
- Compare short-term costs with long-term efficiency gains, risk mitigation, and competitiveness benefits;

CBA also plays a strategic role in aligning supply-side industrial readiness with demand-side market signals. For example, if public procurement processes begin requiring low-carbon construction materials or certified sustainable inputs, industries need a clear understanding of the economic rationale and competitive advantage of meeting those requirements ^{8,9}.

Ultimately, this study aims to provide empirical evidence that industrial decarbonization is not a barrier to business performance or national economic growth. Rather, it can unlock new market opportunities, particularly in the green product segment and strengthen Indonesia's global positioning as a competitive and climate-resilient economy. By analyzing the intersection of policy readiness, economic competitiveness, and technology investment through tools such as GCI benchmarking, investment modeling, and CBA, this study will offer practical insights for government and industry alike. It will also help identify green industrial segments that Indonesia can scale based on domestic resource advantages and global demand trends such as sustainable construction materials, energy-efficient technologies, or low-carbon manufacturing inputs.

1 Indonesia Enhanced NDC 2022

- 2 LTS LCCR 2021
- 3 OECD (2022). Green Public Procurement in the EU: Status and Opportunities
- 4 UNEP (2021). Global Review of Sustainable Public Procurement
- 5 <u>Surat Edaran Kepala LKPP Nomor 16 Tahun 2020. Petunjuk Teknis Pengadaan Produk Ramah Lingkungan</u>
- 6 European Commission (2021). Carbon Border Adjustment Mechanism (CBAM).
- 7 World Economic Forum (2019). Global Competitiveness Report 2019.
- 8 World Bank (2023). Implementing Sustainable Procurement.
- 9 OECD (2020). Integrating Responsible Business Conduct in Public Procurement.



2. Project Summary

The project will focus on 3 things:

a. Industrial market readiness and green public procurement.

The project will assess the current state of Indonesia's industrial sector in meeting market signals for decarbonization, with particular emphasis on the readiness for green public procurement (GPP) and the commitment and interest from private sector for the green product. The analysis will examine regulatory frameworks, institutional capacity, and the availability of certified low-carbon products and services. Insights will help identify policy gaps and opportunities to strengthen GPP as a catalyst for low-emission industry transformation.

b. Economic and competitiveness impact of decarbonization.

The project will explore the broader economic implications of industrial decarbonization for Indonesia's global competitiveness. It will analyze how decarbonization could influence the country's ranking in the Global Competitiveness Index (GCI), including its impact on GDP, industrial productivity, innovation, investment attraction, and energy infrastructure. Key questions include identifying sectors that may lose or gain competitiveness, and the potential for new green industry development based on Indonesia's natural resources. The core objective is to understand the broader economic implications and assess how industrial transformation aligns withs and improves Indonesia's long-term development goals and the Global Competitiveness Index (GCI), developed by the World Economic Forum.

c. Cost-benefit analysis (CBA) of decarbonization strategies.

The project will apply a cost-benefit analysis framework to assess the economic feasibility of decarbonization technologies across selected industrial subsectors. This includes quantifying upfront investments, long-term savings, emissions reductions, and co-benefits such as risk mitigation and market access. The CBA will guide both policymakers and industries in prioritizing technology and financing strategies that balance economic performance with environmental goals.

3. Scope of Work

The selected consultant or consulting firm will be expected to carry out the following tasks:

Task 1: Market Readiness Assessment

- Map existing industrial decarbonization initiatives, technologies, and practices.
- Evaluate institutional, regulatory, and financial readiness for scaling low-carbon industrial practices.



- Identify gaps and barriers across hard-to-abate sectors (iron & steel, cement, fertilizer, pulp & paper, textiles).
- Identify demand-side gaps and barriers preventing the scaling of GPP practices across ministries., SOEs, and local governments. And how to create demand for green product in Indonesia.
- Compare Indonesia's GPP landscape with International best practices to identify actionable pathways for strengthening market readiness and procurement signals for decarbonization and how to adopt that International best practices into Indonesia current systems.

Task 2: Economic and Competitiveness Impact Analysis

- Analyze how industrial decarbonization affects Indonesia's global competitiveness, using relevant indicators from the Global Competitiveness Index (GCI), such as energy efficiency regulation, innovation capability, electricity infrastructure, and trade openness.
- Estimate the required investment for industrial decarbonization, and examine fiscal or policy mechanisms available domestically and internationally to finance it.
- Quantify the potential economic returns, including GDP contribution, job creation, and foreign direct investment (FDI) potential.
- Assess which sectors may face competitiveness risks versus those that could benefit from decarbonization and green industrial development.
- Explore new industry development opportunities that leverage Indonesia's natural resource endowments in the context of a green economy (e.g., green hydrogen, EV batteries, biomass-based materials).

Task 3: Cost-Benefit Analysis

- Conduct a CBA on key decarbonization technologies and investment strategies across selected industrial subsectors.
- Evaluate economic and environmental trade-offs between business-as-usual and decarbonized pathways, including lifecycle costs, operational savings, emission reductions, and risk mitigation benefits.
- Quantify potential co-benefits of alignment with green public procurement requirements and global trade regulations (e.g., EU CBAM).
- Provide recommendations on cost-effective technology options and policy incentives to accelerate industry adoption and maximize long-term economic returns.



4. Deliverables and Timeline

Proposals will be extended and accepted until 17:00 p.m. Indonesian Western Standard Time (WIB, GMT+7) on Wednesday, 11 June 2025. Any proposals received after this date and time will be regarded as inadmissible.

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

• RFP Release Date: 21 May 2025

• Deadline for Submission of Proposals: 11 June 2025 (17.00 p.m.)

Consultant Selection: 16 June 2025Project Duration: 4 June - 29 Aug 2025

Activities	Suggested Timeline
RFP release date	21 May 2025
Deadline for proposal submission	4 Juni 2025
Extended deadline for proposal submission	11 Juni 2025
Consultant selection	16 June 2025
Kick Off	17 June 2025
Inception report	24 June 2025
First drafting of the interim report (Task 1)	15 July 2025
Second drafting of the interim report (Task 2)	29 July 2025
Third drafting of the interim report (Task 3)	12 August 2025
Days of working plan	17 June - 26 August 2025
Draft final report	19 August 2025
Final report/Dissemination	26 August 2025

The consultant is expected to submit the following deliverables:



No.	Deliverable	Description	Timeline
1	Kick off for the study	Outlining the consultant's proposed approach, understanding of the assignment, timeline, and coordination needs.	17 June
2	Inception Report	Detailing methodology, work plan, and stakeholder map, risk mitigation approach, and initial findings or literature review relevant to the three tasks. This report will be reviewed and approved before proceeding to full implementation.	24 June
3	Interim Report Task 1	Presenting the findings of the market readiness assessment.	15 July
4	Interim Report Task 2	Detailing the analysis of how industrial decarbonization affects national competitiveness	29 July
5	Interim Report Task 3	A comprehensive CBA report that includes cost estimates, benefit projections, and co-benefit identification for selected decarbonization technologies across key sectors.	
6	Draft Final Report	Full draft of analysis and recommendations (Tasks 1–3)	19 Aug
7	Final Report	Revised report incorporating feedback and policy brief	26 Aug

5. Required Qualifications

For a Consulting Firm:

• Proven experience in market assessment, demand creation, and economic impact in industrial decarbonization effort in Indonesia



- Demonstrated capacity to conduct cost-benefit analyses and macroeconomic modeling.
- Multidisciplinary team with expertise in industrial policy and technology, economics, finance, and industrial technology.

6. Proposal Submission Guidelines

All the bidding participants will expect to propose their proposals and required documents as part of IESR's commitment to encouraging openness and accountability in the bidding process, as follows:

A. Proposal

The main proposals should not be more than 15 pages in length and should detail the approach and methodology the bidder will use throughout the study. The annex of the proposal should include the following item:

- 1. Brief expert/company/institution profile,
- 2. The latest Curriculum Vitae (CV) of the team leader. CV of other team members with relevant experience is optional,
- 3. Relevant portfolio in conducting similar work or in a similar field

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 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 selection of the winning bidder.

B. Budget Proposal

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 cost is encouraged to ease the selection process.

C. Mandatory required documents

- a. Statement Letter of Compliance with Pre-Qualification Provisions
- b. Statement Letter of Not Involvement in Probitied Organizations
- c. Statement Letter of Not Claiming Compensation
- d. Business Entity Qualification Form
- e. Statement Letter Not Under Court Supervision
- f. Expression of Interest
- g. Statement of Willingness to Deploy Personnel and Equipment
- h. Statement of Overall Commitment
- i. Field Capability Statement Letter
- j. Statement of Authenticity of the Document
- k. Integrity Pact



All documents be downloaded through this required can link (https://s.id/StatementLetterConsultant) and the proposal submissions will be expected to be received until 17:00 Indonesian Western Standard Time (WIB, GMT+0700) on Wednesday, June 11 2025, and should be addressed to faricha@iesr.or.id (Industrial Decarbonization Coordinator for Technology and Policy, IESR) with cc to: juniko@iesr.or.id (Industrial Decarbonization Manager IESR). Please include "RFP Response - Economic Impact Analysis of Industrial Decarbonization in Indonesia" in the email subject line. All proposals must be submitted by an official organization or a designated representative of the organization.

Any proposals received after this date and time will be regarded as inadmissible. Evaluation of proposals will be conducted within a week after the deadline. 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 June 16, 2025.

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

7. Evaluation Criteria

Proposals will be evaluated based on the following criteria:

- Technical Competence (40%): The consultant understanding of the scope, methodology, and proposed approach.
- Relevant Experience (30%):
- Proposed Work Plan and Feasibility (20%): Clarity of the proposed timeline, methodology and deliverables
- Communication and Writing Skills (10%): Ability to present findings effectively through reports and presentations.

Terms and Conditions

- IESR reserves the right to accept or reject any or all proposals without assigning any reason.
- All deliverables and intellectual property developed during the consultancy will belong to IESR.
- The consultant will be required to maintain confidentiality of all sensitive information obtained during the project.
- Any modifications to the scope or timeline must be approved in writing by IESR.