

Request for Proposal (RFP)

Research Consultant for Regulatory and Financial Enablers for Indonesia's Green Hydrogen Development and Integration

Institute for Essential Services Reform

Tebet Timur Raya No.48B, Tebet
Jakarta Selatan
Indonesia

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Research Consultant for

Regulatory and Financial Enablers for Indonesia's Green Hydrogen Development and Integration: Lessons Learned

1. Background

<u>Indonesia has an estimated 333 GW of renewable energy potential</u>, offering significant opportunities not only for power generation but also for the production of green hydrogen. Green hydrogen is strategically important to support the decarbonization of hard-to-abate sectors, enhance national energy security, and facilitate renewable energy integration by serving as a flexible load and energy storage medium. Furthermore, it presents opportunities to expand access to clean energy in remote areas.

Indonesia has made early progress in exploring hydrogen's role within its energy transition. The government has published a draft national strategy and roadmap for hydrogen development. Several ministries, state-owned enterprises (SOEs), and private sector actors have initiated feasibility studies, pilot projects, and cross-border collaborations. These efforts mark an important foundation for the growth of a hydrogen economy.

However, the development of hydrogen infrastructure and market systems must be accompanied by timely demand creation and supportive policy instruments. Without a clear and coordinated pathway to scale, there is a risk that the domestic readiness remains limited, while global hydrogen trade and global sustainable product market accelerate. To mitigate this risk and fully realize the potential benefits of a hydrogen economy, Indonesia must urgently establish an enabling policy and incentive ecosystem that ensures both market development and long-term investment certainty. This includes coordinated regulatory frameworks, pricing mechanisms, risk-sharing instruments, and industrial policy support.

To address this need, IESR is inviting qualified experts and organizations to support a structured analysis of international best practices in hydrogen policy and incentives. This initiative will focus on benchmarking successful hydrogen ecosystems in leading and emerging economies and successfully enabling policies and incentives in similar or related sectors or products. The consultant will assess their relevance for Indonesia's hydrogen context and create an aggressive and achievable roadmap of policy and incentives for the hydrogen sector in Indonesia in the next five years to attain the national strategy target and ensure the continuity of the hydrogen technology deployment.

2. Objectives

The consultant is expected to support the IESR team in providing lessons learned and recommendations on sets of policies and regulations to support early deployment of hydrogen. The study aims to support the early development of Indonesia's hydrogen economy and prevent implementation efforts from stalling before reaching commercial scale. The consultant's responsibilities include, but are not limited to, the following:

1. Mapping and analyzing current policy and regulatory, and national planning to support the realization of the hydrogen economy in Indonesia. This mapping is not only limited to the hydrogen



- or energy sector but also includes end-use sectors of hydrogen, including transportation, industry, environment, and trade.
- 2. Identifying gaps, inconsistencies, and overlapping policies, regulations among related ministries in deploying hydrogen technologies.
- 3. Identifying and analyzing how other countries are developing hydrogen and integrating all hydrogen-related sectors in maximizing the benefits of hydrogen in terms of economy, production potential, and environmental impact.
- 4. Identifying and analyzing the best study case from other typical/related new technologies that have developed and used in Indonesia, for example renewable energy technologies, electric vehicles, etc.
- 5. Providing recommendations on sets of policies and regulations in the complete supply chain (production, distribution, storage, end-use) that Indonesia should be done, focusing on the next five years in starting the hydrogen economy.

3. Scope of Work

In this project, the consultant will undertake the following key tasks.

- 1. Policy & Regulatory Assessment
 - a. Analyze Indonesia's national planning framework that is related to hydrogen implementation on how these policies include hydrogen in achieving the NZE goals. The desk-study could include but not limited to RPJPN, RPJMN, KEN, RUEN, RUKN, RIPIN, Green Industry Roadmap, Sustainable Transportation Roadmap, and other related regulations.
 - b. Map regulatory frameworks related to hydrogen development that are available and planned.
 - c. Identifying gaps, inconsistencies, and overlapping policies, regulations among related ministries in deploying hydrogen technologies.
- 2. Global Hydrogen Adoption Best Practices
 - a. A review of best practices and policy instruments from at least five hydrogen-leading or emerging countries (e.g., the EU, UK, Japan, South Korea, Australia, India, Chile, or Nigeria), including at least one country from Southeast Asia. The consultant is expected to provide a clear rationale for the selection of the countries reviewed. The assessment should cover, but is not limited to:
 - i. **National strategy and policy frameworks:** What are the country's hydrogen-related goals and how is it positioned in the global hydrogen economy? What policy frameworks and institutions support their implementation?
 - ii. **Demand-side policies and market formation:** What policies have been introduced to stimulate initial demand and market creation? Are there any mandates, blending requirements, or procurement mechanisms?
 - iii. **Financial incentives and support mechanisms:** What fiscal instruments are used to stimulate investment? What mechanisms are in place to mitigate investment risks?
 - iv. **Infrastructure development:** What policies enable the development of supporting infrastructure such as transport, storage, and hydrogen hubs to support market growth?
 - b. Identification of gaps and opportunities in Indonesia's current regulatory, institutional, and financing environment for accelerating hydrogen project development.
- 3. Other Low-carbon Technologies Adoption Best Practices
 - a. An analysis of how other emerging or low-carbon technologies (e.g., solar PV, electric vehicles, CCS, etc.) have historically entered and developed within the Indonesian market under existing regulatory and financing frameworks. At least three case studies should be included, with one representing each of the following sectors: industry, transportation, and power generation.



- b. This assessment aims to identify lessons learned and explore how hydrogen technologies could achieve market penetration in key sectors. The analysis should include but not limited to,
 - i. **Current adoption status:** What is the current adoption level of utilization and market maturity of the technology?
 - ii. **The policy and regulatory environment:** What policies enabled or hindered the technology adoption?
 - iii. **Market formation and demand drivers:** What sectors or actors created the initial demand? How did pilot projects transition into larger deployment? Which institutions were instrumental in driving or resisting progress?
 - iv. **Incentive mechanisms and financing models:** What types of financial support mechanisms were implemented? Were there issues with bankability, WACC, or tariff certainty? Include an overview of cost-related aspects, such as CAPEX, OPEX, payback period, and competitiveness compared to alternative technologies, to provide the profile of the product's financial viability.
 - v. **Challenges encountered and the measures:** What were the regulatory, financial, or technical roadblocks? What reforms or solutions are implemented to solve the issue?
 - vi. **Application to hydrogen technology:** What lessons are still relevant for early-stage hydrogen markets? What to replicate or avoid? What needs to be adapted due to hydrogen's unique cost and infrastructure profile?

4. Stakeholder Mapping

- a. Map key stakeholders involved in regulatory and incentive efforts within the hydrogen sector, and to gather insights on their expected roles, as well as their current and planned hydrogen-related initiatives. The stakeholder map can be structured in a matrix visualizing stakeholders by level of influence and level of interest, complemented by categorization of their functions and a brief overview of contributions and initiatives. The functional categories should include:
 - i. Policymakers and regulators
 - ii. Financial and Investment Enablers
 - iii. Project Developers and Technology Providers
 - iv. Offtakers or End-Users
 - v. Infrastructure and Logistics Operators
 - vi. Research and Innovation Institutions
 - vii. Certification and Standards Bodies

5. Policy and Incentives Recommendations

- a. Suggest strategic and practical policies and incentives to be implemented within the next five years to support the initiation and early development of Indonesia's hydrogen economy. This section should address not only high-level policies but may also include sectoral or implementing regulations issued by directorate generals, regulatory authorities, state-owned enterprises (SOEs), or private sector actors. Each recommendation should specify the responsible institution for its implementation.
- b. Propose high-level policy solutions for the medium, and long term to support the achievement of the hydrogen economy. The policy recommendations should clearly identify the lead institutions and include examples of successful implementation from other countries.
- 6. Complete all deliverables as specified in Section 5 of this document.



4. Methodologies

The study is open to the methodology proposal proposed by the consultant that will be deeply discussed at the beginning of the study. The consultant hired for this project will work collaboratively with the IESR Team. The expected methodology for the study is included but not limited to:

- 1. Desk-study, and
- 2. In-depth interviews.

5. Deliverables

The consultant is expected to submit the following deliverables throughout the course of the study. All final outputs must be submitted in English, in an editable digital format, and professionally proofread.

Interim Deliverables

To ensure quality control and track progress, the following interim deliverables are expected:

1. Inception Report

Submitted after the kick-off meeting, this report should outline the study methodology, work plan, timeline, and key points of coordination.

2. Progress Report 1

A presentation slide deck summarizing preliminary findings and updates covering Scope 1 and 2, to be presented during the first progress meeting.

3. Progress Report 2

A second presentation slide deck capturing updated insights and draft outputs covering Scope 3 and 4, to be presented during the second progress meeting.

4. Preliminary Report

A draft version of the full report, including Scope 5, early analysis and complete structure for feedback prior to finalization.

Final Deliverables

At the end of the project, the consultant must submit:

1. Database of Collected Information

A structured and organized dataset or spreadsheet compiling key data and references gathered throughout the study.

2. Final Report

A final report covering all components of the scope of work, structured into the following recommended sections:

- a. Introduction
 - Overview of objectives, methodology, and scope.
- b. Policy and Regulatory Assessment
 - Mapping of existing policies and regulations related to the hydrogen sector
 - Analysis of gaps, inconsistencies, and overlaps
- c. Global Best Practices in Hydrogen Adoption
 - Review of five international case studies (e.g., Country 1 to Country 5)
 - Key insights and relevance to the Indonesian context



- d. Lessons from Other Low-Carbon Technology Adoptions
 - In power generation sector (e.g., solar PV)
 - In transport sector (e.g., EVs)
 - In industry sector (e.g., CCS)
 - Summary of applicability to hydrogen case
- e. Stakeholder Mapping
 - Key institutions, their roles, ongoing initiatives, and influence in hydrogen development
- f. Policy and Incentives Recommendations
 - Strategic policy instruments for hydrogen economy development
 - Short-term, medium-term, and long-term high-level policy

The report should use APA 7th edition referencing, with a complete reference list included at the end.

6. Timeline

The project must commence in the 1st week of July 2025, and the results of the project must be finalized no later than 1st week of November 2025 as presented below. To track progress, it is suggested to have biweekly meetings between IESR and consultants. Moreover, consultants could provide a suggested timeline in completing the project as long as it is still in the period mentioned previously.

Activity/Deliverables	Description	Suggested Timeline	Payment Term
Kick off meeting of the project		W1 July 2025	
Inception Report	Outline detailed methodology, work plan, and preliminary desk research.	W2 July 2025	
Progress Report 1	Updated insights and draft outputs covering Scope 1 and 2.	W3 August 2025	
Progress meeting 1		W3 August 2025	40%
Progress Report 2	Updated insights and draft outputs covering Scope 3 and 4.	W3 September 2025	
Progress meeting 2		W3 September 2025	40%
Preliminary Report	Updated insights and draft outputs covering Scope 5. A draft version of the full report.	W4 October 2025	
Finalization meeting of final report		W4 October 2025	
Final report and Handover		W1 November 2025	20%*

^{*}Final payment is subject to acceptance and approval of the final report.

IESR team will be involved in supervision of the project and writing of the report, with some revisions and feedback given for the consultant to perform adjustments according to the contract



7. Required Skills and Experience

The qualifications of team consultant are as follows:

- 1. Lead by A PhD degree in public policy, energy economics, or other related field the energy or renewable energy sector (Master's degree with extensive experience may also be considered).
- 2. A minimum of 5 years of experience for PhD (or 8 years for Master's degree) in related fields.
- 3. Demonstrated track record with energy issues and strategic policy recommendations.
- 4. Working proficiency in English and Bahasa Indonesia.

This opportunity is open to **independent consultants** (with a supporting team) and **consulting firms**.

8. Proposal 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:

8.1 Proposal

The potential service provider has to submit a proposal package, which consists of a technical proposal (background, task to be conducted, methodology, schedule), and a detailed cost proposal.

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 for this RFP.

8.2 Mandatory required documents

- 1. Statement Letter of Compliance with Pre-Qualification Provisions
- 2. Statement Letter of Not Involvement in Prohibited Organizations
- 3. Statement Letter of Not Claiming Compensation
- 4. Business Entity Qualification Form
- 5. Statement Letter Not Under Court Supervision
- 6. Expression of Interest
- 7. Statement of Willingness to Deploy Personnel and Equipment
- 8. Statement of Overall Commitment
- 9. Field Capability Statement Letter
- 10. Statement of Authenticity of the Document
- 11. Integrity Pact

All required documents mentioned above can be downloaded through this link (s.id/documentsrfpcommsiesr).



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. The budget ceiling for this proposal is **IDR 300,000,000** for all costs required during the study period (including tax).

All required documents are expected to be received to IESR before 23:59 p.m. Indonesian Western Standard Time (WIB, GMT+7) on Wednesday, June 18, 2025. Any proposals received after this date and time will be regarded as inadmissible. The selection decision for the winning bidder will be made by Wednesday, July 2, 2025.

Bidders must submit a digital copy of their proposal via email to: Green Energy Transition Indonesia (GETI) Manager at erina@iesr.or.id, and cc to GETI Analyst at rheza@iesr.or.id, IESR Senior Analyst at farid@iesr.or.id, and IESR Research Coordinator at martha@iesr.or.id.

Please include "RFP Response – Regulatory and Financial Enablers for Indonesia's Green Hydrogen Development and Integration" in the subject line.

Contract negotiations with the winning bidder will commence immediately after selection.