

Decarbonize Captive Power Market for Industrial Decarbonization (Indonesia)



Terms of Reference | 15 February 2024

This initiative addresses Indonesia's reliance on coal-based captive power and aims to reduce carbon emissions by examining emissions profiles and proposing decarbonization pathways. By focusing on decarbonization strategies and renewable energy options, the project contributes to environmental sustainability in industrial activities. The project additionally seeks to facilitate the creation the Net Zero Industrial Park (NZIP) by proposing potential site and identifying suitable industrial sectors for it. Key deliverables encompass the mapping of the captive power market, identification of suitable sites and industrial sectors for the NZIPs, and competitive procurement framework for the NZIP's electricity supply. These key deliverables integrate technical, legal, financial, social, and environmental considerations.

Table of Contents

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| I. Introduction | 3 |
| II. Summary | 3 |
| III. Project Details | 3 |
| A. Rationale | 3 |
| B. Impact | 4 |
| C. Objectives, Outcomes and Outputs | 5 |
| D. Sustainability, Gender Equality and Social Inclusion Mainstreaming | 5 |
| IV. Project Deliverables | 6 |
| Deliverable 1: Inception Report | 7 |
| Deliverable 2: Mapping the national captive power market and its economic impact | 9 |
| Deliverable 3: Site selection for Net Zero Industrial Parks (NZIPs) and identifying suitable industrial sectors. | 11 |
| Deliverable 4: Competitive procurement framework for the electricity supply to the NZIP. | 12 |
| Deliverable 5: Sectoral and regional challenges and opportunities: assessment of industrial processes and energy options across different sectors and regions. | 13 |
| Deliverable 6: Contribute and Provide Feedback on the Industrial Subsectors Decarbonization Roadmap | 14 |
| Deliverable 7: Final Report: | 14 |
| Monthly Progress Report: | 15 |
| Other key information: | 16 |
| V. Timeline for the Project | 17 |
| VI. Key Beneficiaries | 18 |
| VII. Results-Based Monitoring Framework | 20 |
| VIII. Qualification and experience of the service provider and evaluation criteria | 21 |
| A. Qualification and Experience of the Service Provider | 21 |
| B. Evaluation Criteria | 22 |
| Eligibility and Formal Criteria | 22 |
| Qualification Criteria | 23 |
| Technical Criteria | 23 |
| Section 1: Offeror’s qualification, capacity and expertise | 24 |
| Section 2: Proposed Methodology, Approach and Implementation Plan | 24 |
| Section 3: Key personnel proposed and Sustainability Criteria | 26 |

I. Introduction

1. The Southeast Asia Energy Transition Partnership ([ETP](#)) brings together governments and philanthropies to work with partner countries in the region. ETP supports the transition towards modern energy systems that can simultaneously ensure economic growth, energy security, and environmental sustainability. To contribute to the achievement of the UN's Sustainable Development Goals (SDGs) and the Paris Climate Agreement objectives, ETP works in Southeast Asia, with a focus on three priority countries, namely Indonesia, the Philippines, and Vietnam. ETP works through four interrelated Strategic Objectives. These are (i) policy alignment with climate commitments, (ii) de-risking energy efficiency (EE) and renewable energy (RE) investments, (iii) extending smart grids, and (iv) knowledge, awareness, and capacity building.

II. Summary

2. This project aims to address the environmental challenges posed by Indonesia's captive power sector while promoting sustainable industrial development. This initiative responds to the urgent need to address captive coal power, exploring decarbonization strategies and renewable energy options. The project's key outputs involve mapping the captive power market, analyzing emissions profiles, and proposing decarbonization strategies. It also includes site selection for the Net Zero Industrial Park (NZIP), incorporating technical, legal, financial, social, and environmental considerations for sustainable and socially responsible development. Additionally, a competitive procurement framework for NZIP's electricity supply will be developed, ensuring criteria such as price, reliability, and sustainability are prioritized in the bid solicitation, evaluation, and contract finalization processes. These outputs align with Indonesia's energy transition goals, contributing to economic and environmental sustainability.

III. Project Details

A. Rationale

3. Indonesia's captive power capacity stands at over 23 GW,¹ with more than half sourced from coal-fired power plants. In the absence of a shift in current patterns, this captive power sector is predicted to expand significantly to meet rising demand with 21.5 GW of new coal plants proposed.² Captive coal is proving a significant sticking point in reducing Indonesia's GHG emissions, and addressing alternative energy sources to address the captive is critical.
4. Indonesia's economic objectives are tied to downstream industrialization, particularly in critical minerals, aiming to leverage local resources and enhance global value chain participation. However, current plans to expand energy-intensive industries rely heavily on emissions-intensive off-grid coal assets. Without managing energy demand and transitioning to low-carbon options, this approach risks significant CO₂ emissions growth, posing market and

¹ JETP's CIPP, https://jetp-id.org/storage/official-jetp-cipp-2023-vshare_f_en-1700532655.pdf

² Ibid

financing risks amidst global sustainability concerns. Conversely, accelerating renewables adoption could position Indonesia as a leader in clean industrial products.

5. The Just Energy Transition Partnership (JETP) was launched by the Government of Indonesia and the International Partners Group (IPG) during the 2022 G20 Summit in Bali, with a secretariat established in February 2023. The governance structure consists of three levels: the Indonesian Government Decarbonization Task Force, the IPG Task Force, and the JETP Secretariat. The JETP encompasses various types of projects such as coal-fired power plant retirements, renewable energy deployment and energy efficiency. The JETP Secretariat plays a crucial role in producing the Comprehensive Investment and Policy, as well as coordinating with the IPG Task Force and the Government's Task Force.
6. As part of the JETP, Indonesia has committed to set on-grid power sector emissions peaking by 2030 with an emission target of no more than 250 Mt CO₂ by 2030 as stated in the Comprehensive Investment of Policy Plan (CIPP), which involves reducing the use of coal-fired power plants (CFPPs) and increasing the generation share of renewable energy to 44% by 2030³. The CIPP also mentioned the plan to address the off-grid power/captive coal emissions for the updated CIPP in 2024 by developing a roadmap for decarbonizing captive coal.
7. This initiative will complement a roadmap prepared by the JETP, an addendum to the JETP CIPP, which aims to align off-grid industrial sectors with low-carbon pathways. It underscores collaborative efforts for a just energy transition, emphasizing policy and financial conditions. The Roadmap recommends shifting captive power users from unabated fossil fuels to renewables, aligning with affordability and net zero emissions goals.
8. This initiative aims to closely examine the coal-based captive power landscape, enhancing understanding of emissions profiles and potential pathways for decarbonization. By focusing on decarbonization strategies and renewable energy options, the project contributes to environmental sustainability by reducing carbon emissions associated with industrial activities. Additionally, proposing NZIPs are necessary to demonstrate a commitment to mitigating climate change and minimizing environmental impact in industrial sectors.

B. Impact

9. The impact of this project would contribute to Indonesia's energy transition goals, fostering environmental sustainability, and promoting the development of a greener and more resilient industrial sector. Decarbonizing the industrial sector will systematically reduce greenhouse gas (GHG) emissions, which not only aligns with global climate agreements but also secures Indonesia's economic growth and job creation in a sustainable energy future.

³ source: <https://jetp-id.org/cipp>

C. Objectives, Outcomes and Outputs

10. The objective of this project is to accelerate Indonesia's energy transition by analyzing decarbonization strategies for captive power and supporting the establishment of a Net Zero Industrial Park (NZIP), including the development of a procurement framework for renewable energy to supply the NZIP.
11. The anticipated outcome is a set of actionable strategies, roadmaps, and frameworks designed to facilitate the transition towards a more sustainable, low-carbon industrial sector, while also addressing economic competitiveness and social responsibility concerns. The outcome contributes to Indonesia's energy transition goals, fosters environmental sustainability, and promotes the development of a greener industrial sector.
12. The primary outputs of this project are:
 - a. **Mapping the captive power market and its economic impact.** The project involves mapping and analyzing the captive power market, proposing decarbonization strategies, and examining economic impacts, including implications for industrial competitiveness, public finances, employment, and international supply chains.
 - b. **Sectoral and regional challenges and opportunities: assessment of industrial processes and energy options across different sectors and regions.** It describes key features of different off-grid industries, including their industrial processes, demand profiles (power and heat), opportunities for industrial clustering, grid connection and onsite renewables. Additionally, identifying viable renewable energy by assessing resource availability, technical feasibility, economic viability, environmental impact, and regulatory compliance.
 - c. **Site selection for the Net Zero Industrial Park (NZIP) includes identifying suitable industrial sectors.** The process integrates technical, legal, financial, social, and environmental considerations throughout, ensuring the NZIP's development is sustainable, socially responsible, and economically viable.
 - d. **Competitive procurement framework for the electricity supply to the NZIP.** This encompasses bid solicitation, evaluation, supplier selection, and contract finalization, with clear criteria for factors like price, reliability, sustainability, and regulatory compliance. Defined contractual terms cover pricing, service levels, and dispute resolution.

D. Sustainability, Gender Equality and Social Inclusion Mainstreaming

13. ETP is committed to promoting and supporting gender equality and social inclusion (GESI) through its project implementation. Groups that will be impacted by the project activities shall be identified. The Project shall be inclusive of the invited stakeholders during the consultation and seek a balanced representation of women and other identified groups in project activities. The implementing partner should identify the implications, its outputs and contributions to

gender equality and social inclusion in the project activities. This task shall be accomplished through a clear methodology and approach which must be identified as part of the inception report.

IV. Project Deliverables

14. In line with the outputs and outcomes expected from this project (see Project Background), this section provides additional information on specific deliverables that will be required to accomplish the above project outputs.
15. Table 1 outlines the key deliverables that are expected in this project. Additional details on associated activities for each deliverable follow Table 1.

Table 1. Key deliverables

| Milestone | Deliverables | Target delivery and payment date | % of payment |
|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--------------|
| 1 | Inception Report including a communications plan and outline of all main reports | Month 1 | 10% |
| 2 | Mapping the national captive power market and its economic impact | Month 5 | 25% |
| 3 | Site selection for Net Zero Industrial Park (NZIP) and identifying suitable industrial sectors. | Month 10 | 20% |
| 4 | Competitive procurement framework for the electricity supply to the NZIP | Month 11 | 5% |
| 5 | Sectoral and regional challenges and opportunities: assessment of industrial processes and energy options across different sectors and regions | Month 16 | 25% |
| 6 | Contribute and provide feedback on the Industrial Subsectors Decarbonization Roadmap | Month 17 | 5% |
| 7 | Final Report | Month 18 | 10% |
| Continuous -Contract Monitoring Reporting Schedules | Contract monitoring monthly progress report: In addition to the listed deliverables, the consultant will need to provide monthly progress reports as per the provided template. Failure to submit this report will result in the payments being withheld. | Monthly | N/A |

Deliverable 1: Inception Report

16. The consultant must develop and submit a detailed inception report detailing the work plan and organize an inception workshop, ensuring the expectations of ETP are aligned with the understanding of the project from the consultant.
 - a. **The inception report: The report** should contain, as a minimum:
 - i. Introduction and project background
 - ii. Scope of Services
 - iii. Methodology and Workplan, with details on the approach and Gantt chart for project implementation and outline/table of contents of all deliverables
 - iv. A detailed approach as to how each deliverable will be met and what each submission will contain, including how gender equality and social inclusion will be mainstreamed throughout the project
 - v. Audience mapping and analysis and communication/ outreach plans
 - vi. Identification of suitable media channels to be used for communicating the project and rationale for choosing them
 - vii. A donor coordination strategy, including a plan to reach out to the organisations listed in 16. Viii. Literature Review
 - viii. Literature review that includes an analysis of existing research and activities conducted by other development partners, multilateral development banks (MDBs), civil society organizations (CSOs), and relevant stakeholders in the field of industrial decarbonization. This review aims to identify gaps and potential alignments that can maximize the impact of our project, among others:
 - Institute for Essential Services Reform (IESR), Industry Decarbonization Roadmaps for Indonesia: Opportunities and Challenges to Net-Zero Emissions
 - World Resources Institute (WRI), Industrial Sub Sector Decarbonization Roadmap.
 - Organisation for Economic Co-operation and Development (OECD), Framework for industry's Net-Zero Transition in Indonesia's Iron and Steel Sector.
 - ix. Project management section inclusive of organisational chart detailing key personnel, their roles, and responsibilities, as well as their locations (strong in-country team and project management is expected)
 - x. Risks, mitigations, and assumptions
 - xi. Monitoring and Evaluation Framework, presented in the form of the ETP Results Based Monitoring Framework (RBMF)
 - xii. Communications Plan as described in the below table.
 - xiii. The consultant is responsible for drafting a detailed communications plan which will be embedded in the Inception Report. The minimum requirements for the communications materials are as below, with the consultant being responsible for the production and publication of each item after approval from ETP:

Table 2: The Minimum Requirements of the Communications Plan

| Item | Communications materials | Quantity (minimum) |
|------|----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Social media posts (liaising with ETP) | 5, spread throughout the duration of the project linked to various key milestone events |
| 2 | Press releases | 1 per public workshop/ event published in at least 5 publications |
| 3 | Newspaper articles (online) | 1 per public workshop/ event in 5 publications |
| 4 | Policy briefs | 4, one for each deliverable 2-5 |
| 5 | Opinion Editorial (Op-Ed) | At least 2 publications |
| 6 | Online presentations of project progress and highlights to the ETP Secretariat, ETP Funders, and/or ETP Stakeholders | 2 (1 hour maximum/ each) |
| 7 | Maintain/develop a database of photographs/ videos/ vox pops from events/ activities | 4 high-quality images per workshop/event Minimum 2 high-quality short raw video footage (2-3 mins) per workshop/event (ideally, key speeches and/or highlights reel) |

b. **Inception Workshop:** Organize an inception workshop to gather insights from relevant stakeholders, particularly focusing on refining the methodology and work plan to enhance understanding and gather valuable input for improvement. The detailed agenda for the inception workshop needs to be discussed with ETP prior to the workshop. Gender and social inclusion considerations have to be taken into consideration (see details in para. 13). All key stakeholders related to the topic, particularly governmental entities, should be engaged. Journalists should be invited also to promulgate the findings of the workshop. The consultant shall prepare the logistics of the consultation workshop⁴ following the details below:

- I. hybrid, with live interpretation through Zoom or other software
- II. one full-day workshop with 2 coffee breaks and lunch
- III. workshops will be located in Greater Jakarta
- IV. minimum 50 offline participants per workshop

⁴ The consultant shall handle all tasks related to the workshop including organising the logistics, inviting participants and speakers, booking the venue, and executing the actual workshop. Bidders shall provide a breakdown of all non-personnel cost **per workshop** in the financial proposal. The payment for logistical arrangements for the workshop will be released as a lumpsum together with corresponding deliverable. **A prorated payment will be made if the actual number of participants or the days do not fulfill the minimum requirements stipulated in the TOR.**

- c. **Post workshop Report:** One week after the workshop, the consultant is required to submit a post-workshop report that includes the following components:
- I. Description of the workshop (e.g., background, objective, organisation)
 - II. Workshop agenda and participant components
 - III. Workshop proceedings (e.g., summary of presentations, key points raised, important insights, significant outcomes or decisions)
 - IV. Gender considerations and gender-disaggregated data on workshop participants
 - V. Stakeholder engagement
 - VI. Monitoring and implementation
 - VII. Media and communication
 - VIII. Conclusion and next steps
 - IX. Annexes (supporting materials e.g., slides of the presentations, workshop handouts, participant list, list of comments)

Deliverable 2: Mapping the national captive power market and its economic impact

17. The consultant is required to deliver an analysis of the captive power market, focusing on industries' internal power generation facilities, their scale, geographical distribution, and energy needs. It also includes devising decarbonization strategies to reduce emissions from captive power. This deliverable report is required to have, at minimum, the following components:
- a. Mapping the Captive Power Market: This involves analyzing and mapping the current captive power market, encompassing factors such as emission profile, size, location, financier and sector/product produced including market destination.
 - b. Macro-economic development:
 - I. An economic model tailored to capture the specific impacts of the decarbonization pathways on industries utilizing captive power. This model will offer projections for industrial value-added (VA) and employment shifts within these sectors across various time horizons, providing a nuanced understanding of how decarbonization influences economic metrics.
 - II. An industry-specific analysis focusing on sectors that rely on captive power, as well as those using associated industrial products. This analysis will assess impacts of the decarbonization pathways on production costs and pricing power (margins) for different industries and highlight the opportunities and challenges these sectors face as they transition towards low-carbon energy sources, emphasizing the preservation or enhancement of industrial value-added and their broader contribution to Indonesia's GDP growth.
 - III. Cost-benefit analysis for Government of Indonesia from low-carbon transitions for captive power and associated industries, including fiscal impacts from revenues and spending on subsidies and incentives.
 - IV. Estimating employment impacts, both direct, indirect, and induced, within the framework of the captive power sector's transition. Development of a strategic framework that outlines actionable steps for policymakers and industry stakeholders to

- support workforce adaptation and job transitions for industries shifting from captive coal power usage.
- V. A set of indicators to evaluate and monitor the alignment of economic development goals with sustainable energy practices within industries using captive power. These indicators will benchmark Indonesia's progress in embedding low-carbon practices and its position in the global supply chain for sustainable industrial products.
- c. International supply chain opportunities and development of clean products markets:
- I. Trade policy and standards analysis: An analysis of current and emerging international trade policies and industry procurement standards, including environmental regulations, carbon tariffs, and sustainability standards, and their implications for Indonesia's trade opportunities.
 - II. Global market trend analysis of current and projected demand for sustainably produced goods and how this trend impacts Indonesia's critical minerals industries and related final products.
 - III. Highlight Indonesia's role in meeting global demand for transition materials, such as minerals by considering projected demand scenarios from major economies like the EU, US, China, and Australia over the next 5-15 years.
 - IV. Supply chain integration analysis on how Indonesia's industrial sector, especially the strategic mineral industries, can integrate more effectively into global supply chains by adopting decarbonization strategies. This includes identifying key areas where Indonesia can add value and meet international sustainability standards.
 - V. Analysis of the potential impacts on trade patterns for Indonesia's industrial output, based on the energy pathways. Assessment of competitive advantage, diversification and resiliency benefits of more sustainable industrial supply chains for Indonesia, including enhanced market access and improved cost of financing.
 - VI. Policy and strategic recommendations: measures that would help to promote the international development of clean industrial products markets, emphasizing the balance between domestic and international changes and ensuring consistency in promoting and implementing green trade and procurement practices. This includes actionable recommendations for aligning Indonesia's trade and industrial policies with global sustainability trends to maximize benefits.
- d. Pipeline of New Captive Coal Operations: This pipeline is dedicated to establishing captive coal operations specifically aimed at powering a range of investment projects, spanning diverse manufacturing endeavours.
- e. The challenges and features of different off-grid industries in shifting from captive coal to renewables and other emission reduction technologies.
- f. High level ESG assessment to evaluate the environmental, social, and governance practices of industries with captive power, focusing on their adherence to sustainable and

responsible business practices. This assessment will encompass factors such as environmental impact mitigation measures, social responsibility initiatives, and governance structures related to transparency, accountability, and ethical business conduct.

- g. At least one consultation workshop⁴ and one post-workshop report to disseminate the outputs delivered by the consultants following the detailed requirements as Deliverable 1b&c.
- h. In fulfilling this deliverable, the consultant must regularly collaborate with the JETP Secretariat to ensure alignment, prevent overlapping efforts, and maximize impact.
- i. In addition to the deliverable report, **a policy brief**, as a standalone document, is to be prepared for policymakers highlighting recommendations and suggested policy actions.

Deliverable 3: Site selection for Net Zero Industrial Parks (NZIPs) and identifying suitable industrial sectors.

18. This deliverable reflects a concerted effort to support the development of a sustainable industrial park, with a focus on site selection, sector alignment, investor engagement, and renewable energy supply to achieve net zero carbon emissions. This deliverable report is required to have, at minimum, the following components:

- a. Map similar initiatives by relevant stakeholders, such as Renewable Energy Based Industrial Development (REBID) by the Ministry of Energy and Mineral Resources and Green Industrial Area (Kawasan Industri Hijau) by the Ministry of Industry, and identify gaps in the existing initiatives.
- b. Site Selection: This involves proposing two locations for the industrial park that optimizes factors such as renewable energy potential, access to sustainable transportation, and overall environmental impact. This task requires visiting at least two potential locations.⁵
- c. Identifying the Industrial Sector: In this context, identifying the industrial sector would likely involve selecting industries or businesses that align with the goals of the NZIP, such as those focused on renewable energy, green manufacturing, or sustainable technologies.
- d. Identifying Potential Investors: The focus here would be on identifying investors who are committed to sustainability and interested in supporting the development of a net zero industrial park.
- e. Supply of Renewable Energy: In choosing the site for the NZIP, it's essential to consider nearby renewable energy sources that can supply the NZIP's energy needs, as well as assessing the existing electricity system and market.
- f. When conducting site selection, sector identification, and renewable energy supply, it must conduct technical, financial, legal, social, and environmental assessments. Addressing these

⁵ Bidders shall provide financial proposal for site visits including travel and accommodation to Aceh and Papua. However, the given location should not be the limiting factor in the implementing partner's choice of site selection. The logistical costs associated to site visit will be paid on a reimbursable basis against the actual expenses with supporting documents. The actual locations for the site visits should be approved by ETP prior to the visits. The bidder is requested to propose the ceiling price for 3pax/4nights for each site visit.

aspects ensures the NZIP's development is environmentally sustainable, socially responsible, and economically viable.

- g. At least one consultation workshop⁴ and one post-workshop report to disseminate the outputs delivered by the consultants following the detailed requirements as Deliverable 1b&c.
- h. In addition to the deliverable report, the consultant is required to prepare a policy brief for policymakers highlighting recommendations and suggested policy actions.

Deliverable 4: Competitive procurement framework for the electricity supply to the NZIP.

19. This deliverable serves as a proposal for the establishment of a structured and transparent competitive procurement framework for securing electricity supply to the NZIP, aimed at ensuring cost-effectiveness, reliability, and sustainability in meeting the park's energy needs. This framework document is required to have, at minimum, the following components:

- a. **Framework Development:** This involves designing and developing a framework for the competitive procurement of electricity supply to the NZIP. The framework outlines the rules, procedures, and criteria for soliciting bids from potential electricity suppliers, evaluating proposals, and selecting the most suitable supplier(s) to meet the NZIP's electricity needs. This framework must also consider the current existing market and regulation.
- b. **Procurement Process:** Focuses on defining the procurement process within the framework. It includes detailing the steps involved in issuing requests for proposals (RFPs), evaluating bids, conducting negotiations with suppliers, and finalizing contracts for the provision of electricity supply to the NZIP.
- c. **Competitive Evaluation Criteria:** Establishing clear and transparent criteria for evaluating bids from electricity suppliers. The criteria may include factors such as price competitiveness, reliability of service, environmental sustainability, energy efficiency, and adherence to regulatory requirements.
- d. **Contractual Arrangements:** Defining the contractual arrangements between the NZIP and the selected electricity supplier(s). This includes specifying terms and conditions related to pricing, service levels, performance guarantees, dispute resolution mechanisms, and any other relevant contractual provisions.
- e. **Compliance and Monitoring:** Implementing mechanisms for performance monitoring, conducting periodic reviews, and addressing any issues or concerns that may arise during the procurement process or contract execution.
- f. At least one consultation workshop⁴ and one post-workshop report to disseminate the outputs delivered by the consultants following the detailed requirements as Deliverable 1b&c.
- g. As a standalone document, a policy brief is to be prepared for policymakers highlighting recommendations and suggested policy actions.

Deliverable 5: Sectoral and regional⁶ challenges and opportunities: assessment of industrial processes and energy options across different sectors and regions.

20. This deliverable describes key features of different off-grid industries, including their industrial processes, demand profiles (power and heat), opportunities for industrial clustering, grid connection, onsite renewables and fuel supply availability. This deliverable is required to have, at minimum, the following components:
- a. High-level descriptions of the industrial processes involved in each off-grid industry, including manufacturing, production, and any other relevant activities.
 - b. Analysis of the power and heat demand profiles of each off-grid industry, including peak demand periods, seasonal variations, and overall consumption patterns.
 - c. Assessment of potential opportunities for industrial clustering among off-grid industries, considering synergies, resource sharing, and collaborative initiatives to improve efficiency and sustainability.
 - d. For points (a), (b), and (c), the consultant must provide detailed analyses that take into account both geographical conditions and sector-specific characteristics. At a minimum, the site selection for this analysis should encompass:
 - i. Site visits at least in eight islands/ areas with the largest industrial activities: Sulawesi, Maluku, Java, Sumatra, Kalimantan, Riau Island, Papua, Nusa Tenggara⁷
 - ii. Representation of each sector in each island/area, offering an overview of the geographical conditions specific to the industry. For example, the smelter/pulp and paper industry, typically located near mining/forestry areas with limited access to the grid and renewable energy potential, could be represented by one or two biggest sites/companies in the island/area rather than analysing all sites.
 - e. Decarbonization Strategies: This component focuses on devising strategies to diminish carbon emissions linked with captive power generation. Strategies may involve enhancing energy efficiency, transitioning to cleaner energy sources, integrating renewable energy technologies, and optimizing energy management systems.
 - f. Viable Renewable Energy Options: This entails identifying and assessing renewable energy alternatives suitable for captive power generation while aligning with decarbonization objectives. Evaluation factors include resource availability, technical feasibility, economic viability, environmental impact, and regulatory compliance.
 - g. Required enabling policies and financing strategies to make the captive decarbonization pathways achievable, including domestic and international policies, permitting and licensing, economic incentives, including carbon pricing, trade policies and technology innovation, both from the energy supply and industrial demand perspective.

⁶ Definition of the “region” is described in paragraph 20 (d.i and d.ii)

⁷ Bidders must provide non-personnel cost breakdown for site visit activities including transportation and daily subsistence allowance for a maximum 3 PAX and 4 nights per visit. This will be paid as a lumpsum after the submission and acceptance of deliverable 5.

- h. At least one consultation workshop⁴ and post-workshop report to disseminate the outputs delivered by the consultants following the detailed requirements as Deliverable 1b&c.
- i. In addition to the deliverable report, As a standalone document, the consultant is required to prepare a policy brief to be prepared for policymakers highlighting recommendations and suggested policy actions.

Deliverable 6: Contribute and Provide Feedback on the Industrial Subsectors Decarbonization Roadmap

21. WRI, in collaboration with the Ministry of Industry, is currently developing an Industrial Subsectors Decarbonization Roadmap scheduled for completion in October 2025. The consultant will contribute and provide constructive feedback on the roadmap, covering the following components:
- a. Contributing insights, suggestions, and recommendations to enhance the effectiveness and feasibility of the decarbonization measures outlined in the roadmap.
 - b. Participating in discussions and workshops to refine and finalize the decarbonization roadmap.
 - c. Ensuring alignment with broader energy transition goals and regulatory frameworks.
 - d. Providing constructive feedback of the draft of the decarbonization roadmap for each industrial subsector, examining the content, methodology, and alignment with established goals and objectives.
 - e. Evaluate proposed policy and regulatory measures outlined in the roadmap, considering their feasibility, alignment with national and international standards, and potential impact on industrial operations.
 - f. In fulfilling this deliverable, the consultant must regularly collaborate with WRI and the Ministry of Industry.

Deliverable 7: Final Report:

22. This report serves as a comprehensive summary of the entire project. It provides stakeholders with a detailed account of the project's objectives, processes, outcomes, and recommendations. It should be well-structured, evidence-based, and accessible to a wide range of stakeholders to ensure its impact and usefulness. The final report also provides a roadmap for future initiatives in decarbonizing captive power for industrial decarbonization.
23. At a minimum, the final report should encompass:
- a. Executive Summary: A concise overview of the project, highlighting its purpose, key findings, and recommendations. This section should provide a quick understanding of the project's significance.
 - b. Project Background and Rationale:

- i. **Background:** A detailed description of the project's background, including the context in which it was initiated, the need it addresses, and the goals it aims to achieve.
- ii. **Rationale:** An explanation of why the project is essential, focusing on its alignment with national energy transition goals, the Just Energy Transition Partnership target, and the Indonesian Net Zero Emissions (NZE) target by 2060.
- c. **Methodology:** A description of the methodologies, tools, and approaches used during the project's execution. This should include information on data collection, analysis, and stakeholder engagement.
- d. **Stakeholder Engagement:** An overview of how stakeholders were engaged throughout the project, including their roles and contributions.
- e. **Findings and Recommendations:**
 - i. **Key Findings:** A presentation of the project's key findings, including insights gained from training sessions, stakeholder feedback, and data analysis.
 - ii. **Recommendations:** Concrete recommendations for further actions, improvements, or policy changes based on the project's findings. These recommendations should be actionable and specific.
- f. **Impact Assessment:** A comprehensive evaluation of the project's influence on Indonesia's energy transition, particularly within the context of the decarbonize captive power for industrial decarbonization. This entails analyzing the project's role in advancing Indonesia's climate commitments, fostering sustainable economic growth, facilitating job creation in the context of a sustainable energy future, and methodically reducing GHG emissions.
- g. **Lessons Learned:** Reflection on the lessons learned during the project's execution, including what worked well and areas for improvement in future initiatives.
- h. **Sustainability and Future Steps:**
 - i. **Sustainability Plan:** A discussion of how the project's outcomes and initiatives will be sustained beyond its completion.
 - ii. **Future Steps:** Recommendations for the next steps or follow-up actions that can build upon the project's achievements.
- g. At least one consultation workshop⁴ and post-workshop report to disseminate the outputs delivered by the consultants following the detailed requirements as Deliverable 1b&c.
- h. As a standalone document, a policy brief is to be prepared for policymakers highlighting recommendations and suggested policy actions.

Monthly Progress Report:

27. In addition to the listed deliverables, the consultant will need to provide monthly progress reports as per the provided template which will be shared during the kick off stage. Failure to

submit this report may result in the payments being withheld. The monthly progress report includes a concise narrative of the activities completed and next steps.

28. The monthly progress report serves as the mentoring report and is an internal facing between the consultant and the ETP team. The monthly progress report must also include the following standard items:
 - a. Updated Gantt Chart
 - b. On a quarterly basis, the consultant is required to provide the updated results against the Results Based Monitoring Framework (RBMF) in a provided template. The data must be gender-disaggregated, where applicable
 - c. Risks and mitigations
 - d. Minutes of meetings, if relevant
 - e. Minutes of interviews and consultations, if relevant
29. The final monthly progress report will include the above items and the following:
 - a. Summary of lessons learned from the project
 - b. Recommendations on the project's next steps

Other key information:

- All public-facing deliverables are expected to be professionally formatted after the content is approved. It is therefore required that the project team contain the skills of graphic design, copy editing, and desktop publishing.
- A public-facing, publishable Executive Summary (approximately 2 pages) in professional English must be submitted with each deliverable.
- Consultants will be required to deliver and record presentations on the outputs for communications purposes.
- Consultants will be expected to engage with various technical working groups and represent ETP as and when required.
- A public-facing, catchy PowerPoint presentation highlighting key information must be submitted with each deliverable.
- All project deliverables and presentations must be submitted in English and Bahasa Indonesia.
- All deliverables are subject to review by ETP, and beneficiary entity(ies) where applicable, before approval. If there are comments and suggestions, the deliverables need to be revised accordingly before payment is released.
- The consultant is required to update, on a quarterly basis, the results and achievements of the project in accordance with the project-level project Results-Based Monitoring Framework, as per provided template. All results, where applicable, must be gender disaggregated

- The consultant is required to organize and execute all aspects of the workshops, including organisation and logistics.
- The consultant must consider and highlight specific gender considerations in their proposal.
- The consultant must be available to attend 1 in-person workshop with the ETP secretariat in the region. The bidders are not required to budget this component in the current submission as the detailed requirement will be communicated to the selected contractor during the implementation stage.
- The consultant, or an active organization within the applying consortium, must have a full-time in-country presence.

V. Timeline for the Project

30. The project will require 18 months. The actual project timeline will be presented by the consultant and agreed upon in the Inception Report.

Table 3. Proposed timeline of the project's deliverables

| DELIVERABLES | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|
| 1. Inception Report including the outline of all main reports | | | | | | | | | | | | | | | | | | |
| 2. Mapping the national captive power market and its economic impact | | | | | | | | | | | | | | | | | | |
| 3. Site selection for Net Zero Industrial Parks (NZIPs) and identifying suitable industrial sectors. | | | | | | | | | | | | | | | | | | |
| 4. Competitive procurement framework for the electricity supply to the NZIPs | | | | | | | | | | | | | | | | | | |
| 5. Sectoral and regional challenges and opportunities: assessment of industrial processes and energy options across different sectors and regions. | | | | | | | | | | | | | | | | | | |
| 6. Contribute and Provide Feedback on the Industrial | | | | | | | | | | | | | | | | | | |

| | | |
|-------------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Coordinating Ministry of Economic Affairs</p> | <p>Streamlined industrial growth and increased competitiveness</p> | <p>The project's deliverables, such as mapping the captive power market and developing decarbonization strategies, contribute to industrial growth and enhance competitiveness by promoting sustainable practices and attracting investments.</p> |
| <p>Ministry of National Development Planning (Bappenas)</p> | <p>Enhanced Policy Development</p> | <p>The project provides valuable insights and data for evidence-based policymaking, empowering Bappenas to craft effective policies aligned with Indonesia's energy transition goals and sustainable development objectives.</p> |

VII. Results-Based Monitoring Framework

32. The Results of the Project are monitored through the following Framework in Table 5. All reports will update the achievement of the indicators.

Table 5. Results-Based Monitoring Framework Outline

SDecarbonize Captive Power Market for Industrial Decarbonisation

IMPACT

- GHG Emissions avoided or reduced – estimates of fossil fuel mix replaced in % (Coal, Natural Gas, Oil)
- Share of renewable energy (RE) in the total final energy consumption (TFEC)

OUTCOME

1. Policy alignment with climate commitments
2. De-risking EE and RE Investments
4. Knowledge and Awareness Building

OUTPUT

- 1.1 National RE and EE policies, regulations, standards, and energy plans reflect a clear commitment to Energy Transition agenda and integrated into sectoral plans to contribute to the achievement of Paris Agreement
- 2.2 De-risked project finance is accessible via financial institutions generating a pipeline of large-scale EE/RE projects
- 4.1. Stakeholders (relevant Government entities, Public sector companies, Financial institutions, Private entities, Academia, and Consumers) involved in the RE/EE value chain, are knowledgeable and better informed to advance the energy transition agenda⁸

| INDICATOR | TARGET |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IN 1.1-02.1 - No. of RE and EE policies, laws, regulations, and/or technical standards developed/ revised and presented to the government entities | At least 1 policy related to electricity procurement is developed and presented to the government entities |
| IN 2.2-01 - No. of new and existing, national and international, financing options / instruments de-risked and opened for private and blended financing | At least 2 site assessment reports for Net Zero Industrial Park, complemented by a renewable energy supply are prepared for potential investors. |
| IN 4.1-01 – No. of studies, research, new evidence gathered and published, for raising awareness, improving knowledge base, driving decisions, and dissemination | 4 studies will be published, covering the mapping and economic impact of captive power, two NetZero Industrial Parks (NZIPs), a competitive procurement framework for NZIP, and an assessment of industrial processes and |

⁸ Government entities, Public sector companies, Financial institutions, Private entities, Academia, and Consumers.

| | |
|--|----------------------------------------------------|
| | energy options across various sectors and regions. |
|--|----------------------------------------------------|

ACTIVITIES

- Comprehensive analysis of Indonesia's captive power market, including current capacity, sources (coal-fired power plants), and future growth projections.
- Evaluate emissions profiles of individual coal-based captive power plants.
- Develop strategies and pathways for decarbonization, considering alternative energy sources.
- Facilitate consultation workshops, and capacity building programs throughout the project with relevant stakeholders, including interviews, and Focus Group Discussions (FGD), to gather insights and feedback, especially with Indonesian Industrial Park Association (HKI), business association, MEMR, MoI, PLN, and local government.
- Perform thorough assessments of NZIP and RE supply options, including technical feasibility, financial viability, and environmental impact.
- Design and establish a competitive procurement framework for the electricity supply to NZIP.

33. The results are reported with additional supporting information and evidence where applicable and necessary.

VIII. Qualification and experience of the service provider and evaluation criteria

A. Qualification and Experience of the Service Provider

34. The consultant's project team should demonstrate the capacity to execute the work and should include all essential roles filled with personnel with relevant experience. CVs of the personnel proposed should be used to verify this information.
35. The following are the **minimum positions** that should be included on the team. Bidders should make an assessment of the additional positions needed (if any) to complete the assignment as per the Terms of Reference:
- a. Team Lead (1 member)
 - b. Coal Power Plant Specialist (minimum 1, maximum 2 members)
 - c. Energy Efficiency Specialist for Industry (1 member)
 - d. Investment Specialist (1 member)
 - e. Economist (1 member)
39. The minimum requirements per position are stated in the Evaluation Criteria, under Technical Criteria section 3.
40. Additional positions such as the ones suggested below, may be proposed to effectively implement and execute the work plan. While these additional positions do not have assigned scores under the Key Personnel evaluation section, having these positions included in the

proposal as the team composition may be considered as strength in the technical evaluation section 2, the implementation of the workplan and methodology.

- a. *Public Policy Specialist*
- b. *Energy Modeler*
- c. *Environmental Impact Specialist*
- d. *Gender and Social Inclusion Specialist*
- e. *Communication Specialist*

40. Considering the importance of close coordination with stakeholders in Indonesia, it is expected that the team proposed consists of consultant(s) who understand the local context in Indonesia.

41. The bidder should also assign a Contract Manager who would liaise on the non-technical part of the contract implementation, including coordination, liaising with key counterparts, liaising with UNOPS on the submission of invoice and payment-related documents.

B. Evaluation Criteria

Eligibility and Formal Criteria

42. The criteria contained in the table below will be evaluated on **Pass/Fail** basis and checked during Preliminary Examination of the proposals.

| Criteria | Documents to establish compliance with the criteria |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Offeror is eligible as defined in Instructions to Offerors, Article 4. In case of JV, all JV members should fulfill this requirement | <ul style="list-style-type: none"> ● Form A: Joint Venture Partner Information Form, all documents as required in the Form, in the event that the Proposal is submitted by a Joint Venture. ● Form B: Proposal Submission Form |
| 2. Completeness of the Proposal. All required Questionnaires (if any), Returnable Bidding Forms, and other documentation requested under the Document Checklist section have been provided and are complete | <ul style="list-style-type: none"> ● All documentation as requested under Instructions to Offerors Article 10, Documents Comprising the Proposals |
| 3. Offeror accepts UNOPS General Conditions of Contract as specified in Section IV: Contract Forms | <ul style="list-style-type: none"> ● Form B: Proposal Submission Form |

Qualification Criteria

43. *The criteria contained in table below will be evaluated on **Pass/Fail** basis and checked during Qualification Evaluation of the proposals.*

| Criteria | Documents to establish compliance with the criteria |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1. The company should have a minimum of 5 years of continuous experience in delivering similar projects in the past with a track-record of success.</p> <p>In case of JV, at least one of the JV members should fulfil this criteria</p> | <ul style="list-style-type: none"> ● Certification of incorporation of the Offeror ● Form F: Performance Statement Form |
| <p>2. Offeror must provide a minimum of two (2) customer references from which similar services have been successfully provided, within any of the last 5 years.</p> <p>In case of JV, the customer references of JV members can be combined</p> | <ul style="list-style-type: none"> ● Form F: Performance Statement Form |
| <p>3. Financial Capacity/financial stability: Bidder should have a minimum annual turnover of 350,000 USD in any of the past 2 years.</p> <p>In case of a joint venture, annual turnover is calculated based on the total annual turnover of the JV members.</p> | <ul style="list-style-type: none"> ● Audited Financial statements or documents authorised by the local government authorities of the country of registration of the bidder. |

Technical Criteria

44. Technical evaluation will be carried out to bids that pass the eligibility, formal and the qualification criteria, with requirements as follows:
- a. The maximum number of points that a bidder may obtain for the Technical proposal is 80. To be technically compliant, Bidders must obtain a minimum of 56 points
 - b. Minimum pass score: 70% of maximum 80 points = 56 points

45. Technical proposal points allocation

| <i>Section number/description</i> | | <i>Points Obtainable</i> |
|----------------------------------------|---------------------------------------------------------------|--------------------------|
| 1. | <i>Offeror's qualification, capacity and expertise</i> | 20 |
| 2. | <i>Proposed Methodology, Approach and Implementation Plan</i> | 30 |
| 3. | <i>Key Personnel proposed and Sustainability Criteria</i> | 30 |
| <i>Total Technical Proposal Points</i> | | 80 |

Section 1: Offeror's qualification, capacity and expertise

| Section 1: Offeror's qualification, capacity and expertise | | Points | Sub-points |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|
| 1.1 | Brief description of the organization, including the year and country of incorporation, and types of activities undertaken, including relevance of specialized knowledge and experience on similar engagements done in the past. | 16 | |
| | Bidders partnering up with a local entity to provide for the strategic consultation, translations; as well as the communications expertise is considered a valuable asset. | | |
| | 1. Experience in projects of comparable size, type, complexity and technical specialty | | 6 |
| | 2. Experience in providing similar services in the region, especially Indonesia | | 5 |
| | 3. Understanding of local context, and partnering up with an Indonesian entity to provide for the strategic consultation, translations; as well as the communications expertise | | 5 |
| 1.2 | General organizational capability which is likely to affect implementation: management structure, and project management controls. (Max 4 pages written text) | 4 | |
| | 1. Management structure, management controls, and extent to which any part would be subcontracted | | 4 |
| Total points for section | | 20 | |

Section 2: Proposed Methodology, Approach and Implementation Plan

| Section 2: Proposed Methodology, Approach and Implementation Plan | | Points | Sub-points |
|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|-------------------|
| 2.1 | Description of the Offeror's approach including risk(s) and mitigation measure(s), and methodology for meeting or | 27 | |

| Section 2: Proposed Methodology, Approach and Implementation Plan | | Points | Sub-points |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------|
| | exceeding the requirements of the Terms of Reference | | |
| | 1. Description of the offeror's approach to identification of data sources, scenarios, issues for the deep-dive in the analysis and providing guidance to the government policy makers. | | 5 |
| | 2. Description of the offeror's approach to mapping and analyzing the captive power market, proposing decarbonization strategies, and assessing economic impacts, including their effects on industrial competitiveness, public finances, employment, and international supply chains. | | 6 |
| | 3. Description of the offeror's approach to NZIP involves site selection, identification of suitable industrial sectors, and competitive procurement framework for electricity supply. This integrates technical, legal, financial, social, and environmental considerations to ensure sustainable, socially responsible, and economically viable development. | | 6 |
| | 4. Description of the offeror's approach to assessing sectoral and regional challenges and opportunities, analyzing industrial processes and energy options across various sectors and regions. It entails identifying viable renewable energy sources by assessing resource availability, technical feasibility, economic viability, environmental impact, and regulatory compliance. | | 7 |
| | 5. Description of the offeror's approach to review and provide feedback on the industrial subsectors decarbonization roadmap | | 3 |
| 2.2 | Quality Assurance Plan | 2 | |
| | 1. A plan outlining how the bidder intends to ensure oversight and quality assurance throughout the assignment. Quality Assurance plan should include discussion on risk-assessment and its mitigation plan | | 2 |
| 2.3 | Implementation Timeline | 1 | |
| | 1. Bidder submits a detailed implementation timeline which includes detailed activities to be undertaken during this assignment, and is completed with Gantt chart | | 1 |

| Section 2: Proposed Methodology, Approach and Implementation Plan | Points | Sub-points |
|-------------------------------------------------------------------|-----------|------------|
| Total points for section | 30 | |

Section 3: Key personnel proposed and Sustainability Criteria

| Section 3: Key personnel proposed and Sustainability Criteria | | Points | sub-points |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------|
| 3.1 | Qualifications of key personnel proposed aligned with the Terms of Reference | 28 | |
| | <p><u>Team Lead</u></p> <p>Education: A Master's Degree in Electrical Engineering, Energy, Engineering, Economics, Climate Change, Development or related field.</p> <p>A Bachelor's Degree with 2 years of relevant experience is considered as an equivalent.</p> <p>Experience:</p> <ul style="list-style-type: none"> • A minimum of 10 years of relevant experience in similar role, with a minimum 2 years of leadership experience • Proven expertise in managing complex projects, particularly those related to the power system, renewable energy, industrial park development, and industrial sector decarbonization. • Proven experience working on projects encompassing energy systems, renewable energy technologies, captive power markets, and decarbonization strategies.. • Demonstrable history of competitive procurement frameworks, including experience in developing and implementing such frameworks for energy supply projects. • Experience in stakeholder management and engagement skills, including working with governmental entities, industry stakeholders, and local communities. • Experience as advisor in international development cooperation projects (i.e. GIZ, WB, ADB, UNDP, etc.). • Experience in policy advocacy and policy brief preparation for policymakers in the energy and industrial development sectors. • Proven experience dealing with multi-stakeholder projects encompassing public and private sector stakeholders | 8 | <p>Education: 2</p> <p>Experience: 6</p> |
| | <p><u>Coal Power Plant Specialist</u></p> <p>Education:</p> | 6 | Education: 1 |

| | | | |
|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------------|
| | <p>Master's Degree in Mechanical Engineering, Electrical Engineering, Energy Engineering, Power/Energy Systems, or a related field.</p> <p>A Bachelor's Degree with 2 years of relevant experience is considered as an equivalent.</p> <p>Specialized training or certification in coal-fired power plant operations and management is preferred.</p> <p>Experience:</p> <ul style="list-style-type: none"> • A minimum of 5 years of experience in the design, operation, maintenance, or management of coal-fired power plants. • Experience working with coal-based power generation technologies, including boiler systems, steam turbines, and environmental control systems. • Proven experience in overseeing the construction, commissioning, and optimization of coal power plants. • Familiarity with regulatory requirements and environmental standards related to coal power generation, including emissions controls and ash disposal. • Expertise in performance monitoring, reliability assessment, and efficiency optimization of coal power plant operations. <p>Additional requirement:</p> <ul style="list-style-type: none"> • Considered an asset if based in Indonesia but not strictly required. | | <p>Experience: 5</p> |
| | <p><u>Energy Efficiency Specialist (Industry)</u></p> <p>Education:</p> <p>A Master's Degree in Energy Management, Mechanical Engineering, Industrial Engineering, or a related field is required.</p> <p>A Bachelor's Degree with 2 years of relevant experience is considered as an equivalent.</p> <p>Experience:</p> <ul style="list-style-type: none"> • A minimum of 3 years of experience in energy efficiency, with a specific focus on the industrial sector. • Proven expertise in identifying,, and assessing energy efficiency projects and solutions within industrial facilities. • Proven expertise with energy management systems and tools for industrial energy optimization. • | <p>5</p> | <p>Education: 1</p> <p>Experience: 4</p> |

| | | | |
|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------------------------------|
| | <ul style="list-style-type: none"> • Experience to develop and implement energy efficiency strategies tailored to industrial processes. • Experience in project management and overseeing energy efficiency initiatives in industrial settings. • Knowledge of Indonesian industrial practices and regulations. <p>Additional requirement:</p> <ul style="list-style-type: none"> • Considered an asset if based in Indonesia but not strictly required. | | |
| | <p><u>Investment Specialist</u></p> <p>Education:</p> <p>A Master's Degree in Finance, Accounting, Business Administration, or a related field.</p> <p>A Bachelor's Degree with 2 years of relevant experience is considered as an equivalent.</p> <p>Professional certifications such as Chartered Financial Analyst (CFA) or Certified Public Accountant (CPA) are considered an asset.</p> <p>Experience:.</p> <ul style="list-style-type: none"> • A minimum of 5 years of experience in investment analysis, portfolio management, or strategic financial planning, preferably in the renewable energy or industrial sector. • Experience in evaluating investment opportunities, conducting due diligence, and recommending investment strategies. • Proficiency in financial analysis, valuation techniques, and risk assessment. • Experience in identifying and analyzing potential investment risks and opportunities in various sectors. • Demonstrable knowledge of regulatory requirements and compliance standards related to investment activities. • Understanding of sustainable investment principles and the integration of environmental, social, and governance (ESG) factors into investment decision-making. <p>Additional requirement:</p> <ul style="list-style-type: none"> • Considered an asset if based in Indonesia but not strictly required. | 5 | <p>Education: 1</p> <p>Experience: 4</p> |
| | <p><u>Economist</u></p> <p>Education:</p> | 4 | <p>Education: 1</p> |

| | | | |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------|
| | <p>A Master's. degree in Economics, Econometrics, or a related field.</p> <p>Specialized coursework or training in energy economics, industrial economics, or environmental economics is preferred.</p> <p>A Bachelor's Degree with 2 years of relevant experience is considered as an equivalent.</p> <p>Experience:</p> <ul style="list-style-type: none"> • A minimum of 5 years of experience in economic analysis, preferably in the energy sector or related industries. • Proven expertise in conducting economic impact assessments, cost-benefit analyses, and market studies. • Experience in developing economic models and forecasting techniques to evaluate the potential impacts of energy projects or policies. • Knowledge of regulatory frameworks and policy implications related to energy markets and industry dynamics. • Experience in using econometric methods and statistical software for data analysis. • Experience in presenting economic findings and recommendations to diverse stakeholders, including policymakers, industry partners, and community groups. | | Experience: 3 |
| | The bidder shall provide a clear statement, approach and methodology that demonstrates its commitment to support and mainstream gender equality and social inclusion through its operations and project implementation activities. | 2 | |
| Total points for section | | 30 | |

a. Financial Criteria (20 maximum points)

The financial part of those proposals that are found to be technically compliant will be evaluated as follows.

The maximum number of points that a bidder may obtain for the Financial Proposal is 20. The maximum number of points will be allocated to the lowest evaluated price bid. All other prices will receive points in reverse proportion according to the following formula:

Points for the Financial Proposal of a bid being evaluated =

$$\frac{[\text{Maximum number of points for the Financial Proposal}] \times \{\text{Lowest price}\}}{[\text{Price of proposal being evaluated}]}$$

Financial proposals will be evaluated following completion of the technical evaluation. The bidder with the lowest evaluated cost will be awarded (20) points. Financial proposals from other bidders will receive prorated points based on the relationship of the bidder's prices to that of the lowest evaluated cost.

Formula for computing points: Example

| |
|-------------------------------------------------------------------------------------------------|
| Points = (A/B) Financial Points |
| Bidder A's price is the lowest at \$20.00. Bidder A receives 20 points |
| Bidder B's price is \$40.00. Bidder B receives $(\$20.00/\$40.00) \times 20$ points = 10 points |

The total score obtained in both Technical and Financial proposals will be the final score for the proposal, with 80% allocated to the Technical proposal and 20% to the Financial proposal. The proposal obtaining the overall highest score will be considered as the winning proposal. This proposal will be considered to be the most responsive to the needs of UNOPS in terms of value for money.

The selection of the preferred bidder will be based on a cumulative analysis, analyzing all relevant costs, risks and benefits of each proposal throughout the whole life cycle of the services and in the context of the project as a whole. The lowest priced proposal will not necessarily be accepted.