

# Enhancing Batteries' Supply Chain for Electric Vehicles, Solar PVs, and Energy Storage Systems (Vietnam)



## Terms of Reference | 28 May 2024

The surge in renewable energy (RE) has brought about technical challenges such as grid congestion, instability, and the risk of RE curtailment. To effectively address these issues, proactive measures are essential. This involves the integration of Distributed Energy Resources (DERs), comprising energy storage systems (ESS), distributed photovoltaics (PVs), and electric vehicles (EVs), to bolster grid resilience and enhance power system reliability. Crucially, successful implementation hinges on supply chain development, ensuring the efficient, cost-effective, and equitable delivery of necessary goods and services.

The project aims to streamline the integration of upstream and downstream batteries' supply chains, including those for EVs, PVs, and BESS and foster the development and resiliency of the localised supply chains while capitalising on the potential of the Viet Nam's economy. To do so, it will review and analyse the current state of batteries' supply chain in Viet Nam, forecast the demand for batteries, map this against Viet Nam's current potential for developing its mining and production sectors versus importing, and develop an implementation plan for battery supply chain optimisation. This project has been developed in collaboration with the Industrial Economy and Service Department of the Ministry of Planning and Investment (MPI). This will not only elevate power systems to meet the heightened service demands of society but also contribute to the expansion of Viet Nam's energy transition supply chain. The dual impact is poised to positively influence Viet Nam's economy by reducing reliance on imports and fostering a more self-sufficient and sustainable energy ecosystem.

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## 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 Viet Nam. ETP's strategy is built around four inter-related pillars of strategic engagement that are squarely aligned to address the barriers to energy transition. These are (i) policy alignment with climate commitments, (ii) de-risking energy efficiency and renewable energy investments, (iii) extending smart grids, and (iv) expanding knowledge and awareness building.

## II. Summary

2. The Power Development Plan (PDP) VIII highlights the priority of developing localised supply chains in Viet Nam to facilitate the energy transition while concurrently improving the economy. Recognising this imperative and Viet Nam's abundant mineral reserves and production capabilities as crucial assets for the energy transition, this project strategically concentrates on innovating the upstream and downstream batteries' supply chains to support the development and integration of key distributed energy resources (DERs), including electric vehicles (EVs), photovoltaics (PVs), and electrical storage systems (ESSs), ensuring their effective contribution to the energy landscape in Viet Nam.
3. The project's methodology aligns with the targets of the Power Development Plan (PDP) VIII<sup>1</sup> and Decision No. 4602/QD-BCT (dated 25 November 2016) approving the comprehensive Smart Grid Development Plan<sup>2</sup>, as well as principles of a Just Transition, focusing on providing employment opportunities, while concurrently addressing concerns about currency outflow by reducing dependence on imports for energy transition goods. The project is in harmony with the government's aspirations outlined in the PDP VIII, aiming to shift from a reliance on coal exports to becoming a producer of clean energy technologies and electric vehicles.
4. The successful implementation of this project holds great importance for Viet Nam's energy transition and economy. By enhancing the supply chains, it could attract investment and

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<sup>1</sup> The PDP VIII mentions the cruciality to "develop a synchronous power transmission system with the progress of power sources and the development needs of local load demand, using modern technology, ensuring compliance with international standards, and readiness for regional interconnections." Important projects highlighted in PDP VIII include those "that play an important role in balancing the national power supply and demand, as well as those in regions, areas, and important load centres, to ensure power supply security and meet socio-economic development needs", "that ensure the safety and security of the national power system between base-load power sources, RE sources, and loads (such as hydroelectric power, energy storage batteries, etc.)", and "that contribute to creating an overall ecosystem for the renewable energy industry and service sectors."

<sup>2</sup> This Decision highlights the needs for commercial demand response or DSM programs.

increase capital flows to the country, while creating job opportunities for local residents. Furthermore, local supply chains are less vulnerable to disruptions caused by global events. This promises not only enhanced resiliency in the power system but also a transformative shift in how electricity is generated, traded, delivered, and consumed to align with the country's evolving needs and preferences. Additionally, it bolsters Viet Nam's position in the global clean energy market by capitalising on domestic resources and capabilities, establishing the nation as a prominent player in renewable energy production.

### III. Project Details

#### A. Rationale

3. Viet Nam's PDP VIII emphasises the need to develop a comprehensive, reliable, and robust ecosystem of renewable energy industry and ancillary services, which will further stimulate Viet Nam's economic development by supporting associated industries, fostering the growth of industry clusters, improving productivity, enhancing grid stability, and generating new employment opportunities. In fact, the country's abundant mineral reserves and production capabilities offer significant potential to strengthen the local battery supply chain that can effectively support and integrate key DERs in Viet Nam, hence addressing many challenges associated with the power system. Notably, Viet Nam possesses substantial nickel resources amounting to an estimated 3.6 million tons of metallic nickel<sup>3,4</sup>. Strategic development in this area can effectively cater to the growing demands of the thriving EV industry<sup>5</sup>, contributing to the production of batteries, components for PV solar cell panels, and other related sectors<sup>6</sup>. This overall promotes Viet Nam's natural resources to foster the growth of the renewable energy sector and to ensure an uninterrupted energy supply.
4. The current global dispersion of the battery supply chain poses challenges, such as supplier delays and increased transportation costs, thereby impeding investments in EVs and solar PVs<sup>7</sup>. Recognising the critical importance of supply chain resilience for national security, energy transition, and energy security, it is essential to de-risk and innovate the supply chains by distributing dependency and sourcing goods sustainably.
5. Acknowledging Viet Nam's potential for green growth and the risks associated with import reliance and supply chain disruptions, this project seeks to support the development of and attract investment in the battery supply chain while promoting innovation. It emphasises the

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<sup>3</sup> Fox, J. 2022. What is Viet Nam's Mining Capacity for EV Batteries. Viet Nam Briefing.

<sup>4</sup> Nguyen, D. 2022. 'Awakening' the potential of nickel in Viet Nam. Government News.

<sup>5</sup> Viet Nam boasts a promising EV market, evident in the production, assembly, and import of over 3,000 electric cars as of August 2022, a twenty-fold increase compared to 2019. Furthermore, the country has nearly 1.8 million electric motorcycles and scooters in operation, serving the daily transportation needs of the population. Source: Viet Namplus. 2023. Viet Nam plugs into promising EV auto sector.

<sup>6</sup> Vuong, Q-H., Nguyen, M-H., and La, V-P. n.d. Nickel and the promise for environmental sustainability: Is it viable?

<sup>7</sup> IEA 2022

importance of domestic mineral reserves and production capabilities for the energy transition. Through comprehensive mapping and analysis of battery technology advancements, the project aims to support the growth and unlock the full potential of EVs, solar PV, and ESS systems. This aligns with national targets outlined in the Power Development Plan (PDP) VIII, Decision No. 4602/QD-BCT, and Just Transition principles to industrial change and the benefits and challenges associated with them. The project aims to expedite the transition toward clean and sustainable energy systems while reducing dependence on imports for energy transition goods. Additionally, it will positively impact Viet Nam's economy by reducing reliance on imports and fostering a more self-sufficient energy ecosystem.

## **B. Impact**

2. By creating a comprehensive roadmap that integrates the upstream and downstream batteries' supply chains to promote the development and integration of EVs, solar PV, and BESS markets, providing policy recommendations, and offering investment guidelines, this project will contribute to the development of and investment in Viet Nam's energy transition supply chain and support Viet Nam in meeting its energy and green growth objectives outlined in the National Action Plan on Green Growth and PDP VIII.

## **C. Objectives, Outcomes, and Outputs**

6. The project aims to understand the upstream and downstream supply chain of batteries, electric vehicles (EVs), and solar photovoltaic (PV) systems to initiate an integrated industrial ecosystem. To do so, the project intends to achieve the following outcomes:
  - i. To comprehensively analyse and evaluate the key actors and development partners involved in the batteries' supply chain globally and in Viet Nam;
  - ii. To evaluate the Viet Nam's existing battery supply chain in the context of developing and integrating EVs, solar PVs, and BESS and assess its readiness level towards national plans' target and MPI's target;
  - iii. To conduct an environmental and social impact assessment of the battery's supply chain;
  - iv. To identify factors and knowledge gaps crucial to the successful implementation of the upstream and downstream supply chain of batteries for EV and solar PV market development;
  - v. To provide guidance and implementation plan for relevant stakeholders, including governmental entities, industry associations, private sector, and so on;
  - vi. To develop a comprehensive roadmap and recommendation for future policies and regulations to address the impediments and to create an implementation plan that will integrate upstream and downstream supply chain of batteries to support the development and integration of EV, and solar PVs.

- vii. To assist stakeholders in gauging financial and operational viability, developing strategies to adapt to the changing market, and exploring opportunities to accelerate energy transition through battery, EV, and solar PV ecosystem development.
7. The specific activities and expected outputs are described in section IV. The primary outputs of this project are
- i. **A literature review of global batteries’ supply chain** to pinpoint best practices for Viet Nam and potential strategic partners for diversifying the supply chain
  - ii. **A comprehensive understanding of the supply chain of batteries, EVs, solar PVs, and other related industries** to justify and drive investments;
  - iii. **An Environmental and Social Impact Assessment (ESIA)** related to the supply chain of batteries, and proposed solutions for social and environmental challenges encountered along the supply chain.
  - iv. **A comprehensive roadmap and guide** to support the potential investors, stakeholders, and the government in accelerating energy transition through batteries for EV, solar PV ecosystem development

#### D. Sustainability and Gender Mainstreaming

8. ETP is committed to promoting and supporting gender mainstreaming in its project implementation. The Project shall be inclusive of the invited stakeholders during the consultation and seek a balanced representation of women. The implementing partner should identify the implications, its outputs and contributions to gender equality in the project activities. This task shall be accomplished through a clear methodology and approach.

### IV. Project Deliverables

9. In line with the outputs and outcomes expected from this project (see Project Background), this section provides additional information on specific deliverables and activities required.
10. Table 1 outlines the key deliverables and associated activities which are expected in this project. Additional details about each deliverable follow Table 1.

**Table 1. Deliverables and Implementation Timeline**

Payment	Deliverables	Target delivery and payment date	% of Payment
1	<b>D. 1 - Inception Report</b>	Month 1	15

Payment	Deliverables	Target delivery and payment date	% of Payment
2	<b>D. 2 - Inception workshop* and workshop report to be submitted after each workshop</b>	Month 1 (D.2. will be paid with together with D.1.)	5
3	<b>D.3 - Phase 1 Report:</b> A review of global batteries' supply chain	Month 3	15
4	<b>D. 4 - Phase 2 Report:</b> A comprehensive understanding of the supply chain of batteries, EVs, solar PVs, and other RE power plants to justify and drive investments	Month 5	20
5	<b>D. 5 - Phase 3 Report:</b> Environmental and Social Impact Assessment (ESIA) Report	Month 8	15
6	<b>D.6 - Phase 4 Report:</b> A Guide and Implementation Plan for Battery Supply Chain Optimisation	Month 12	15
7	<b>D.7 - Final workshop* and workshop report to be submitted after the workshop</b>	Month 15	5
8	<b>D.8 - Final report:</b> Roadmap for Integrated Planning	Month 15 (D.8. will be paid with together with D.7.)	10
<b>Contract Monitoring Requirement</b>	<b>Monthly Progress Report</b>	Monthly submission	N/A

## Deliverable 1: Inception Report

11. The consultant must prepare a detailed work plan and mobilise the necessary resources. As a deliverable, the consultant develops and submits a detailed inception report detailing the plan, ensuring the expectations of ETP are aligned with the understanding of the project from the consultant.
12. The inception report should contain, as a minimum:
  - a. Introduction and project background
  - b. Scope of Services
  - c. Methodology and Workplan, including approach, methodology and project Gantt chart
  - d. A detailed approach as to how each deliverable will be met and what each submission will contain
  - e. Results of the audience mapping and analysis and communication/ outreach plans (See table 2)
  - f. Identification of suitable media channels and rationale for choosing them
  - g. A donor coordination strategy
  - h. Project management 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)
  - i. Gender Equality and Social Inclusion Mainstreaming
  - j. Risks, mitigations and assumptions
  - k. Monitoring and Evaluation Framework, presented in the form of the ETP Results Based Monitoring Framework (RBMF)
  - l. Communications Plan as described in the below table.

The consultant will be required to develop communications and dissemination products from the project. The communications products form the contractual requirements from the ETP for every contract managed. The consultant is responsible for drafting a detailed communications plan which will be embedded in the Inception Report. The consultant is required to submit the communication products along with required deliverables indicated below. The minimum requirements for the project communications materials are as follows:

**Table 2. Project Communication Requirements**

No.	Communications Items	Quantity
1	<b>Social media posts</b> The Consultant will provide texts (approx 100 words) and photos (minimum 2). The ETP team will publish the content on ETP's social media sites ( <a href="#">LinkedIn</a> , <a href="#">Facebook</a> , <a href="#">Twitter</a> ),	1 post per platform per public workshop/event
2	<b>Press Releases</b> The Consultant will compile texts, following which the ETP team will publish the press release on ETP	1 per public workshop/event

	website.	
3	<b>Project wrap-up presentation</b> A 15-20 minute recorded presentation (with slide deck) summarising key highlights of the project. The recording will be featured on the ETP website as a knowledge item.	<b>1</b> upon project completion
4	<b>Database of project photographs from events/activities</b>	<b>A minimum of 10</b> high-quality images per workshop/event/activity, inclusive of 'action shots' capturing key speeches, activities and participant engagement

## Deliverable 2: Inception workshop and workshop report to be submitted one week after

13. The Consultant is required to conduct an inception workshop<sup>8</sup> to introduce the project (e.g., project's background and importance, outcome) and gather feedback from relevant stakeholders.
14. Workshop minimum requirements:
  - i. The workshop will be in hybrid mode and located in Hanoi
  - ii. Duration: Half day
  - iii. The minimum number of participants: 100 (at a minimum 60 in-person)
  - iv. Invitees: Relevant stakeholders including governmental entities, industry stakeholders, businesses, development partners, provincial leaders, etc.
15. Gender consideration needs to be taken into consideration in the workshop. Minimum % of invited women participants is 40%.
16. After the stakeholder workshop, the consultant is required to **submit a post-workshop report** that should contain 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
  - v. Stakeholder engagement
  - vi. Monitoring and implementation
  - vii. Media and communication
  - viii. Conclusion and next steps

<sup>8</sup> Under deliverable 2, the inception workshop will be paid on a lumpsum basis. 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 should assume all participants are already in Hanoi, hence no transportation cost is handled by the bidders. 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 paid together with **deliverable 1. 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.**

- ix. Annexes (supporting materials such as slides of the presentations, workshop handouts, participant list, list of comments, etc.)

### **Deliverable 3: Phase 1 Report: A review of global batteries' supply chain**

17. The consultant will develop an exhaustive report analysing the global battery supply chain but with a heavy emphasis on the key actors and lessons for Viet Nam. This report is aimed at policymakers and actors in the batteries' supply chain, providing them with insights into global trends and how they may be relevant to the Vietnamese context. The report submitted to ETP should include, *at a minimum*, the following components:

- i. **Executive Summary**
- ii. **Introduction and Project Background**
- iii. **Overview of the battery supply chain:** The consultant provides a general overview of the battery supply chain and their role in supporting the development and integration of EVs, BESS, and solar PVs. The Consultant should focus on the downstream and upstream stages.
- iv. **Supply chain dynamics assessment:** The consultant assesses the current state and dynamics of the supply chain, taking into account market trends, technical specifications, demands, and social and environmental aspects impacting the development of battery supply chains. .
- v. **Stakeholder identification and evaluation:** Identify and evaluate key components, actors, and stakeholders within the supply chain to highlight critical nodes that can impact the overall efficiency and resilience of the chain. The consultant should address key aspects such as the sources of battery technologies and the concentration of resources. The consultant should also denote potential strategic collaborations and ecosystems that can enhance Viet Nam's capabilities, mitigate risks, and support the country in diversifying its supply chain.
- vi. **Case studies:** The consultant provides detailed assessment of three case studies with important lessons for Viet Nam.
- vii. **Recommendations:** Provide recommendations for optimising and leveraging the battery supply chain to drive investments in Viet Nam.

### **Deliverable 4: Phase 2 Report: A comprehensive understanding of the supply chain of batteries, EVs, solar PVs, and other RE power plants to justify and drive investments in Viet Nam**

18. The consultant will develop a comprehensive mapping and assessment of the existing supply chain of batteries, particularly for the development and integration of EVs, solar PVs, and BESS. This will be based on deliverable 3 and key regulatory documents including the Power Development Plan VIII and its implementation plan. The areas of focus should include the identification of knowledge gaps and comparison of domestic and imported raw materials for battery production in Viet Nam. It will also focus on stakeholder mapping, reviewing the status quo of the battery upstream and downstream, and the identification of potential partners in

which Viet Nam can diversify its supply chain. The report submitted to ETP should include, **at a minimum**, the following components:

- i. **Executive Summary**
- ii. **Introduction and Project Background**
- iii. **Review and assessment of the batteries' supply chain and particularly battery technologies in Viet Nam:** The consultant should initially discuss the role of the battery supply chain within Viet Nam's energy landscape, particularly concerning the development and integration of DERs and potential support for the power system, including the grid. When discussing and assessing the battery supply chain, the consultant should take into consideration factors such as the availability of raw materials, quality, future demand, and technological advancements to highlight the ideal battery technology for development in Viet Nam.
- iv. **Supply chain and stakeholder mapping:** The consultant is required to identify and map out the various stages and players in the battery supply chain, from raw material extraction to manufacturing, distribution, and end-use.
- v. **Raw Material Analysis:** Evaluating the types and sources of raw materials used in battery production, both domestically and through imports. This includes assessing the availability, quality, cost, and sustainability of these materials.
- vi. **Production Capacity Assessment:** Determining the potential capacity for battery production within Viet Nam, considering factors like existing infrastructure, manufacturing capabilities, and resource availability.
- vii. **Demand Analysis:** Estimating the national demand for batteries, considering the growth of EVs, solar PV installations, and other RE power plants, to justify investments in battery production.
- viii. **Macroeconomic analysis** of the benefits for Viet Nam in developing the battery supply chain.
- ix. **Investment Justification:** Combining the data on capacity, demand, and resource availability (components iii, iv, v, vi, and vii above) to make a case for investments in the domestic battery production, highlighting specific opportunities.
- x. **Strategic partnerships and ecosystems:** The consultant should provide an assessment of the potential strategic partnerships and ecosystems within the supply chain that Viet Nam can explore (based on Deliverable 3, but also with the added inputs from the previous assessment of Deliverable 4) to optimise the opportunities and mitigate potential challenges associated with the country's supply chain.
- xi. **An assessment report for government, investors, and pertinent stakeholders.** This report will provide a detailed understanding of Viet Nam's appealing aspects of the battery supply chain, drawing upon the previously gathered information and outputs from Deliverable 3 (Phase 1 Report).

- xii. As a standalone document, a **policy brief** is to be prepared for policymakers highlighting recommendations and suggested policy actions.

### **Deliverable 5: Phase 3 Report: Environmental and Social Impact Assessment (ESIA) Key Considerations**

19. This deliverable (ESIA) serves to evaluate, address, and improve the environmental and social aspects of the battery supply chain, contributing to more responsible and sustainable supply chain management. It should focus on providing key considerations regarding ESIA. The key audience of this report will be actors in the supply chain and policymakers. The deliverable submitted to ETP for approval should encompass, **at a minimum**, the following components:

- i. **Description of the ESIA:** A detailed description of the ESIA and its purpose. The consultant should also touch upon the economic benefits, financial viability, and potential risks associated with the battery supply chain for DERs based on Deliverables 3 and 4.
- ii. **Baseline Environmental Impact Assessment:** A comprehensive evaluation of the environmental effects associated with battery supply chain activities, including raw material extraction, manufacturing processes, transportation, and disposal.
- iii. **Baseline Social Impact Assessment:** An examination of the social consequences of battery supply chain operations, considering factors like worker conditions, community well-being, land use, and cultural impacts.
- iv. **Identification of Potential Environmental and Social Impacts:** An identification and assessment of potential positive and negative environmental and social impacts that might result from the shift in the battery supply chain ecosystem. The impacts should include both direct/ first order and indirect impacts.
- v. **Proposed Mitigation and Enhanced Measures:** Formulation of strategies and solutions to address identified challenges and mitigate negative social and environmental impacts while enhancing positive ones
- vi. **Stakeholder Consultation and Engagement:** The consultant should collect inputs, concerns, and insights related to social and environmental impacts, along with suitable mitigation measures, from various stakeholders. The consultant is required to detail the relevant stakeholders to achieve this requirement.
- vii. **Environmental and Social Management Plan (ESMP):** Development of plans that outline how proposed solutions will be implemented, monitored, and evaluated over time to ensure that they effectively mitigate social and environmental impacts.
- viii. **Sustainability Metrics for Monitoring and Reporting:** Development of measurable sustainability metrics and indicators to quantify, monitor, and report the impacts of the battery supply chain on the environment and society.
- ix. As a stand-alone document, a **policy brief** is to be prepared for policymakers highlighting recommendations and suggested policy actions

## Deliverable 6: Phase 4 Report: A Guide and Implementation Plan for Battery Supply Chain Optimisation

20. This deliverable provides a strategic framework for potential investors, stakeholders, and the government to enhance the batteries' supply chain to support the development and integration of EVs, BESS, solar PV ecosystems, and other RE power plants. The main focus areas of the report include regulatory environment, financial landscape, operational optimisation, and stakeholder engagement and collaboration. The deliverable submitted to ETP for approval should encompass, *at a minimum*, the following components:

- i. **Executive Summary**
- ii. **Introduction and Project Background**
- iii. **Current State Analysis and Identification of Risks:** The consultant provides a strengths, weaknesses, opportunities, and threats (SWOT) analysis of the existing batteries' supply chain as identified in the deliverables 3 and 4. There should also be an evaluation of the national context and alignment with the energy transition targets.
- iv. **Analysis of Financial Viability, Operational Feasibility, and Strategic Development:** The consultant provides a comprehensive analysis to guide investors and stakeholders in the establishment of a financially viable and operationally feasible battery supply chain
- v. **Investment Procedures and Operations:** The consultant delves into an assessment of existing investment procedures and operations, and proposes a clear and structured process for potential investors in the battery supply chain to navigate regulatory and operational complexities.
- vi. **Incentive Scheme Evaluation:** Assessment of existing or proposed incentive schemes to encourage investments.
- vii. **Stakeholder Engagement:** Strategies for engaging and involving potential investors, stakeholders, and government agencies in the development and implementation of these initiatives.
- viii. **Develop Recommendations for Future Policies and Regulations** to address the impediments and to create an implementation plan that will integrate the upstream and downstream supply chain of batteries for EV, solar PV, BESS, and other RE power plants.
- ix. **Implementation Plan:** Comprehensive and detailed strategies for the government, outlining the step-by-step execution of the supply chain of battery development, encompassing timelines, resource allocation, necessary policies, and significant milestones.
- x. As a stand alone document, a **policy brief** is to be prepared for policy makers highlighting recommendations and suggested policy actions

## **Deliverable 7: Final workshop and workshop report to be submitted one week after**

21. **The consultant organises the final stakeholder workshop<sup>9</sup>** to communicate and discuss the key outcomes of the project and gather feedback and recommendations for upcoming phases/projects. After the workshop, the Consultant will need to revise the final report to incorporate further findings and recommendations.
22. Workshop minimum requirements:
  - i. The workshop will be in hybrid mode and located in Hanoi
  - ii. Duration: Half the day
  - iii. The minimum number of participants: 100 (a minimum of 60 participants should be in-person)
  - iv. Invitees: Relevant stakeholders including governmental entities, industry stakeholders, businesses, development partners, provincial leaders, etc.
23. Gender consideration needs to be taken into consideration in the workshop. The minimum % of invited women participants is 40%.
24. After the workshop, the consultant is to issue a report on the workshop. The post-workshop report should provide a comprehensive summary of the workshop proceedings, discussions, and outcomes. Here are the key elements that the report should contain:
  - i. Description of the workshop (e.g., background, objective, organisation)
  - ii. Workshop agenda and participant components
  - iii. Workshop proceedings (e.g., a summary of presentations, key points raised, important insights, significant outcomes or decisions)
  - iv. Gender considerations
  - v. Stakeholder engagement
  - vi. Monitoring and implementation
  - vii. Media and communication
  - viii. Conclusion and next steps
  - ix. Annexes (supporting materials such as slides of the presentations, workshop handouts, participant list, list of comments, etc.)

## **Deliverable 8: Final Report: Roadmap for Integrated Planning**

25. The Final Report is the document that serves as a comprehensive summary of the entire project and provides an actionable roadmap for actors involved in the supply chain. It provides stakeholders with a detailed account of the project's objectives, processes, outcomes, and

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<sup>9</sup> Under deliverable 7, **the final stakeholder workshop** will be paid on a lump sum basis. 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 should assume all participants are already in Hanoi, hence no transportation cost is handled by the bidders. Bidders shall provide a breakdown of all non-personnel costs **per workshop** in the financial proposal. The payment for logistical arrangements for the workshop will be paid together with **deliverable 7. A prorated payment will be made if the actual number of participants or the days do not fulfil the minimum requirements stipulated in the TOR.**

recommendations. It should be well-structured, evidence-based, and accessible to a wide range of stakeholders to ensure its impact and usefulness.

26. At a minimum, the final report should include:

- i. **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.
- ii. **Project Background and Rationale:**
  - **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.
  - **Rationale:** An explanation of why developing and strengthening the batteries' supply chain is essential, focusing on its role in integrating the DERs, supporting the grid specifically, and contributing to the power system generally. It should also address alignment with national energy transition goals and the Just Energy Transition Partnership target.
- iii. **Viet Nam Battery Growth Scenario:** The consultant explores the anticipated trajectory of the battery industry in Viet Nam and provides a comprehensive overview of the existing landscape and discusses the factors influencing the growth and development of the battery sector in the Vietnamese context. It should highlight the dynamics that shape the industry, which should inform subsequent recommendations and strategies.
- iv. **Viet Nam Upstream Capabilities, Gaps and Opportunities:** The consultant delves into the upstream aspects of the battery industry in Viet Nam and examines the existing capabilities, identifies gaps that may hinder growth, and highlight opportunities for development. This section should set the stage for subsequent recommendations.
- v. **Key Factors for Developing a Battery Industry:** The consultant delves into the essential factors that contribute to the successful development of a robust battery industry. This may include technological advancements, regulatory frameworks, investment climate, and collaborations. The section should highlight insights into the key drivers that can propel the growth of the battery sector within the Vietnamese context.
- vi. **Jobs and Economic Benefits:** The consultant outlines the potential jobs and economic benefits associated with the development of the battery industry. The consultant should consider both direct and indirect impacts, emphasising how the project can contribute to job creation, skill development, and overall economic growth. This section summarises and quantifies the socio-economic advantages tied to the project.
- vii. **Environmental and Social Considerations:** The consultant summarises the environmental and social implications of shifting the batteries' supply chain, focusing on potential positive and negative impacts on the environment and local communities. This section should further discuss strategies and measures to mitigate adverse effects and enhance positive outcomes.

- viii. **Health and Safety:** The consultant emphasises the health and safety considerations associated with the battery industry. The section should address potential risks to workers, communities, and the environment. The consultant should further propose measures and guidelines to ensure the highest standards of health and safety are maintained throughout the industry's development and operation.
  - ix. **Strategies to Enhance the Supply Chain Development and Integration:** The consultant develops specific strategies and recommendations to address the current challenges associated with the batteries' supply chain. Areas that the consultant should consider include standardisation and interoperability, technological integration, capacity planning, logistics optimisation, raw material supply. The consultant should map out key touchpoints for both upstream and downstream processes and also discuss strategic partnerships and ecosystems as a means to mitigate risks associated with a direct approach to vertical integration.
  - x. **Proposed Next Steps/ Roadmap for Integrated Planning:** The consultant provides a set of actionable items derived from the project's findings for effective supply chain planning. There should be a clear outline of the proposed next steps for stakeholders to consider, including responsible entities and a timeline. Furthermore, the consultant should develop a roadmap that delineates the sequential actions required for the successful implementation of these recommendations. This section should serve as a practical guide for decision-makers and project implementers.
  - xi. **Annex:** supporting materials such as stakeholder engagement processes and comments
27. The Final Report serves as a comprehensive document that not only records the project's progress but also provides a roadmap for future initiatives in the supply chain of batteries for energy transition. It should be well-structured, evidence-based, and accessible to a wide range of stakeholders to ensure its impact and usefulness.
28. As a stand-alone document, a **policy brief** is to be prepared for policymakers highlighting recommendations and suggested policy actions. The policy brief should address **at a minimum** the following components:
- i. **Highlights:** Issue statement and recommendations in bullet points.
  - ii. **Introduction of the issue and purpose of the policy brief**
  - iii. **Analysis of challenges**
  - iv. **Policy recommendations**

### Contract Monitoring Requirement: Monthly Progress Report

29. In addition to the listed deliverables, the consultant is required to submit monthly progress reports. Failure to submit this report may result in the payments being withheld.

30. The monthly progress report includes a concise narrative (in short bullet points) of the completed activities contributing towards the milestones and the indicative next steps. It serves as the monitoring report between the consultant and ETP.
31. The monthly progress report includes the following standard items:
  - i. General progress update
  - ii. Updated Gantt chart
  - iii. Risk identification and mitigation
  - iv. Communications activities and materials
32. The final monthly progress report will include the above items and the followings:
  - i. Summary of lessons learned from the project implementation
  - ii. Recommendations on potential next steps to build on this project
33. 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.
34. The templates (Excel spreadsheet) for both the monthly progress report and RBMF will be shared at the project kick-off stage.

**Other key information to be considered:**

- A public facing, publishable Executive Summary (no more than 2 pages) in professional English must be submitted with each deliverable (except workshops - D.2. and D.7)
- 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 Vietnamese. The consultant should ensure communications and visibility requirements of ETP are met.
- 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 submit plans for consultation meetings to the ETP team, and ETP team might attend these.
- The consultant is required to organise and execute all aspects of the workshops including organisation and logistics.
- The consultant, or an active organization within the applying consortium, must have full time in-country presence.
- Any costs associated with workshops, etc. are reimbursable based on actual spending.

- 
- 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 costs for this will be covered outside the financial scope of this proposal.

## V. Timeline for the Project

35. The project will require **15 months**. The actual project timeline will be presented by the consultant and agreed upon in the Inception Report. The proposed timeline of the Project is shown below, with “x” indicating the date to submit the deliverables.

**Table 3.** Proposed timeline of the project’s deliverables

Activities	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Inception report	x														
2. Inception workshop and workshop report to be submitted one week after	x														
3. Phase 1 Report: A review of global batteries’ supply chain				x											
4. Phase 2 Report: A comprehensive understanding of the supply chain of batteries, EVs, solar PVs, and other RE power plants to justify and drive investments					x										
5. Phase 3 Report: Environmental and Social Impact Assessment (ESIA) Report + 10 Half-Day Bilateral Meetings								x							
6. Phase 4 Report: A Guide and Implementation Plan for Battery Supply Chain Optimisation												x			
7. Final workshop and workshop report to be submitted one week after															x
8. Final report: Roadmap for Integrated Planning															x

## VI. Key Beneficiaries

36. The stakeholders in this project are provided in table 4.

**Table 4.** List of beneficiaries of this project

Beneficiary	Benefit	Explanation
MPI	Direct	The Ministry of Planning and Investment was assigned task 5.1.3 of the Prime Minister’s Decision 882 on Approval of the National Action Plan on Green Growth for the Period 2021-2030. The task involves developing and refining policies to promote an innovative and entrepreneurial ecosystem, focusing on green initiatives, and issuing implementation guidelines and encouraging the adoption of advanced supply chain management models that align with green growth targets for manufacturing businesses. This project will support MPI in strengthening the supply chain ecosystem in Viet Nam.
Investors and private sector	Direct	The battery, EV, and solar PV industries are rapidly evolving, and there may be uncertainties regarding technology advancements, market demand, and regulatory changes. This project will analyse and provide strategies to address hurdles regarding financing, market, regulatory, policy, and technology, thus providing the private sector and investors with more assurance. The project will also provide strategies to support the private sector and investors in overcoming any challenges they are facing.
Government of Viet Nam	Indirect	The assistance provided by ETP to both ministries and the private sector is expected to aid the government's endeavours to reach the climate change objectives outlined in the Paris Agreement, as well as achieve the goal of zero net emissions by 2050.

37. The contractor is expected to identify and engage with other relevant stakeholders as part of this project.

## VII. Results-Based Monitoring Framework

38. 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

**Project Name:**

**Integrating the Supply Chain for Batteries, Electric Vehicles, and Solar PV in Viet Nam**

**IMPACT**

Climate action plans w.r.t. climate agreement targets and commitments

**OUTCOME**

Strategic Outcome 2. De-Risking RE and EE Investments

**OUTPUT**

2.2 De-risked project finance is accessible via financial institutions generating a pipeline of large-scale RE/EE projects

INDICATOR	TARGET
IN 2.2-01 - No. of new and existing, national and international, financing options / instruments de-risked and opened for private and blended financing	IN 2.2-01 - 1 x new and existing, national and international, financing options / instruments proposed to the beneficiary with the aim of de-risking and opening for private and blended financing

**ACTIVITIES**

- Map out the supply chain actors involved in battery, EV, and solar PV industries
- Engage relevant stakeholders. .
- Integrate the battery supply chains into a comprehensive roadmap
- Provide a guideline for government incentivizing/subsidy schemes
- Develop a roadmap and recommendation for future policies and regulation
- Assist stakeholders gauge financial and operational viability and strategy development

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

## VIII. Qualification and Experience of the Service Provider

### A. General requirements

40. The consultant's project team should demonstrate the capacity to execute the works and should include all essential roles filled with personnel with relevant experience. CV's of the personnel proposed should be used to verify this information.
41. 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 Terms of Reference:
  - i. Project lead
  - ii. Supply chain management specialist
  - iii. Battery technology expert
  - iv. Financial Specialist
  - v. Government Relation/ Public Policy Specialist
  - vi. Environmental Impact Specialist
  - vii. Social Impact Assessment Specialist
42. Considering the importance of close coordination with stakeholders in Viet Nam, it is expected that the team proposed consists of consultant(s) who understands the local context in Viet Nam.
43. 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 submission of invoice and payment-related documents.

## IX. Evaluation Criteria

### A. Eligibility and Formal Criteria

44. 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	<ul style="list-style-type: none"> <li>● 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.</li> </ul>

	<ul style="list-style-type: none"> <li>• Form B: Proposal Submission Form</li> </ul>
2. Completeness of the Proposal. All documents and technical documentation requested in Instructions to Offerors Article 10 have been provided and are complete	<ul style="list-style-type: none"> <li>• All documentation as requested under Instructions to Offerors Article 10, Documents Comprising the Proposals</li> </ul>
3. Offeror accepts UNOPS General Conditions of Contract as specified in Section IV	<ul style="list-style-type: none"> <li>• Form B: Proposal Submission Form</li> </ul>

## B. Qualification Criteria

45. 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 bidder should have a minimum of 5 years of continuous experience in delivering similar projects in the past with at least 2 similar contracts/ projects within the related sector.</p> <p>What is considered as relevant experience are the following:</p> <ul style="list-style-type: none"> <li>• Experience in battery technologies, electric vehicle systems, solar PV integration, and supply chain management, in Viet Nam preferably</li> <li>• Extensive knowledge in renewable energy supply chain policies and regulatory institutional advisory, in Viet Nam preferably</li> <li>• Proven experience in working with and providing advisory services and capacity building for private sectors and ministries, in Viet Nam preferably</li> <li>• The entity/ JV must have in-country presence in Viet Nam</li> <li>• The entity's experience working with government agencies/ multilateral organizations/ UN organizations will be an asset</li> </ul>	<ul style="list-style-type: none"> <li>• Certification of incorporation of the Offeror including the JV member.</li> <li>• Form F: Performance Statement Form</li> </ul>

<p>In case of JV, at least one of the JV members should fulfil this criteria</p>	
<p>2. Offeror must provide a minimum of two (2) customer references (including name, email address, and phone number of the focal point) within any of the last 5 years. In case of JV, at least one reference from the JV should be submitted. UNOPS may contact the customer reference when the bidder is awarded the contract.</p>	<ul style="list-style-type: none"> <li>• Form F: Performance Statement Form</li> </ul>
<p>3. Financial Capacity/financial stability:</p> <ul style="list-style-type: none"> <li>• Bidder should have a minimum annual turnover of <b>500,000</b> USD in any of the past 2 years. Or the bidder has access to a line of credit or bank overdraft or other financial means to meet a working capital/cash flow requirement of 500,000 USD (should the bidder be selected).</li> <li>• Liquidity: Sufficient liquidity of at least 1 in any of the past 2 years. Demonstrated by current asset divided by current liabilities.</li> </ul> <p>In the case of a joint venture, annual turnover is calculated based on the total annual turnover of the JV members. And at least one of the JV member should have at least 1 of liquidity/quick ratio in any of the past 2 years.</p>	<p>Offeror should submit</p> <ul style="list-style-type: none"> <li>• Audited financial statements confirmed by Chartered/Accountant for the past 02 years</li> <li>• Or any other document/statement Bank Statement / Tax declaration statement to the local government, or any similar local arrangement.</li> </ul>

### C. Technical Criteria

46. Technical evaluation will be carried out to bids that pass the eligibility, formal and the qualification criteria, with requirements as follows:

- 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
- Minimum pass score: 70% of maximum 80 points = 56 points

#### Technical proposal points allocation

Section number/description	Points Obtainable
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1.	Offeror's qualification, capacity and expertise	20
2.	Proposed Methodology, Approach and Implementation Plan	35
3.	Key Personnel proposed and Sustainability Criteria	25
Total Technical Proposal Points		80

### Section 1: Offeror's qualification, capacity and expertise

Section 1: Offeror's qualification, capacity and expertise		Points	Sub points
1.1	<p><b>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.</b></p> <p><b>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.</b></p>	17	
	1. The entity should demonstrate extensive experience of researching and working on the subject matters.		6
	2. Demonstrates significant experience on the subject matters in Viet Nam.		7
	3. Demonstrates an ability to engage locally for stakeholder engagement, information gathering, and information dissemination		4
1.2	<p><b>General organizational capability which is likely to affect implementation: management structure, and project management controls.</b></p> <p>(Max 4 pages written text)</p>	3	
	Management structure, management controls, and extent to which any part would be subcontracted. In case of JV, there is clear designation of roles and responsibilities between the JV members.		3
<b>Total points for section</b>		<b>20</b>	

### Section 2: Proposed Methodology, Approach and Implementation Plan

Section 2: Proposed Methodology, Approach and Implementation Plan	Points	Subpoints
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2.1	<p><b>Description of the Offeror’s approach including risk(s) and mitigation measure(s) and methodoly for meeting or exceeding all the deliverable requirements of the Terms of Reference</b></p> <p>In the description of each deliverable, the offeror is expected to demonstrate a comprehensive understanding of the supply chain landscape in Viet Nam.</p>	25	
	<p>1. Demonstrate an understanding of the current context relevant to the assignment and in Viet Nam, and the overall understanding of this assignment together with an overview of approach to achieve all deliverables.</p>		5
	<p>2. Description of the offeror’s detailed approach to achieve D.3 - Phase 1 Report: A review of global batteries’ supply chain</p>		4
	<p>3. Description of the offeror’s detailed approach to achieve D. 4 - Phase 2 Report: A comprehensive understanding of the supply chain of batteries, EVs, solar PVs, and other RE power plants to justify and drive investments</p>		7
	<p>4. Description of the offeror’s detailed approach to achieve D. 5 - Phase 3 Report: Environmental and Social Impact Assessment (ESIA) Report</p>		4
	<p>5. Description of the offeror’s detailed approach to achieve D.6 - Phase 4 Report: A Guide and Implementation Plan for Battery Supply Chain Optimisation</p>		5
2.2	<p><b>Quality Assurance</b></p> <p>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</p>	5	
2.3	<p><b>Implementation Timeline</b></p> <p>The bidder’s implementation plan will include a Gantt chart that visually depicts the project timeline. The chart will clearly define the start and end dates for each activity, allowing for the measurement of progress and adherence to the planned time frame.</p>	5	
<b>Total points of the section</b>		<b>35</b>	

### Section 3: Key personnel proposed and Sustainability Criteria

Section 3: Key personnel proposed and Sustainability Criteria		Points	Sub points
3.1	<b>Qualifications of key personnel proposed</b>	<b>20</b>	
	a) Project lead		5
	b) Supply chain management specialist		4
	c) Battery technology expert		3
	d) Financial Specialist		2
	e) Government Relation/ Public Policy Specialist		2
	f) Environmental Impact Specialist		2
	g) Social Impact Assessment Specialist		2
3.2	<b>The bidder shall provide a statement or approach that demonstrates its commitment to support and mainstream gender equality and social inclusion through its operations and project implementation activities</b>	<b>5</b>	5
<b>Total points of the section</b>		<b>25</b>	

### The Scoring Matrix for Key Personnel

Title	Minimum requirements for education	Minimum requirements for experience	Max Points
<b>Project Lead</b>	Advanced university degree (Master's degree or higher education) in electrical engineering, renewable energy, supply chain	A minimum of 10 years of relevant experience in electrical engineering, renewable energy, supply chain management, or related field, preferably in Viet Nam. Out of the 10 years of relevant	5

	<p>management, or a related discipline is required.</p> <p>Bachelor's degree in a related field and two years experience are considered equivalent.</p> <p>(0.5 point)</p>	<p>experience, a minimum 2 years of leadership experience is required.</p> <p>Involvement in at least 2 projects on mineral/ renewable energy supply chains, preferably in Viet Nam.</p> <p>Involvement in at least 2 projects advising governments or international organizations in supply chains or renewable energy, preferably in Viet Nam</p> <p>(4.5 points)</p>	
<b>Supply Chain Management Specialist</b>	<p>Advanced university degree (Master's degree or equivalent) in supply chain management, logistics, or a related field.</p> <p>Bachelor's degree and two years experience in a related field are considered equivalent.</p> <p>(0.5 point)</p>	<p>A minimum of 5 years of relevant experience in supply chain management, with a focus on minerals, mining, and battery-related raw materials.</p> <p>Involvement in at least 2 projects on supply chains, preferably in Viet Nam.</p> <p>Involvement in at least 2 knowledge products on mineral supply chains, including the extraction, processing, and transportation of critical minerals to battery production (e.g., lithium, cobalt, nickel) preferably</p> <p>Proven experience working with sustainability standards, responsible sourcing practices, and environmental regulations related to minerals for battery supply chains.</p> <p>(3.5 points)</p>	4
<b>Battery Technology Expert</b>	<p>Advanced university degree (Master's degree or equivalent) in electrical engineering or a related field.</p> <p>Bachelor's degree and two years experience in a related field are considered equivalent.</p>	<p>A minimum of 5 years of professional experience in battery manufacturing processes, battery technology research, development, and implementation, with a focus on renewable energy applications, preferably in Viet Nam.</p> <p>Involvement in at least 2 projects on the following fields: battery chemistry, energy storage systems, and battery management</p>	3

	(0.5 point)	<p>systems, renewable energy technologies, especially in the context of EV, solar PV, other RE power plants.</p> <p>Involvement in at least 2 projects that include environmental impacts associated with battery production and disposal, with a commitment to sustainable practices.</p> <p>(2.5 points)</p>	
<b>Financial specialist</b>	<p>Advanced university degree (Master's degree or equivalent) in finance, economics, or a related field.</p> <p>Bachelor's degree and two years experience in a related field are considered equivalent.</p> <p>(0.5 point)</p>	<p>A minimum of 10 years of experience in financial analysis, financial modelling, investment evaluation, or project finance, preferably in the mining or industrial sector.</p> <p>Involvement in at least 2 projects on financial feasibility of large-scale projects, including considerations for supply chain development and preferably in Viet Nam</p> <p>Involvement in at least 2 projects advising governments and/ or international organizations in supply chains or renewable energy in Viet Nam</p> <p>Involvement in at least 2 projects that contain sustainable finance principles and the integration of environmental and social factors into financial analysis.</p> <p>(1.5 points)</p>	2
<b>Government Relation/ Public Policy Specialist</b>	<p>Advanced university degree (Master's degree or equivalent) in data science, computer science, or a related field.</p> <p>Bachelor's degree and two years experience in a related field are considered equivalent.</p> <p>(0.5 point)</p>	<p>A minimum of 10 years of experience in government relations, public policy, or related roles, with a focus on energy transition and mineral supply chains for battery production.</p> <p>Involvement in at least 2 projects advising governments and/ or international organizations in supply chains or renewable energy in Viet Nam</p>	2

		<p>Strong analytical skills to assess policy implications and recommend strategies for navigating complex regulatory environments.</p> <p>(1.5 points)</p>	
<b>Environmental Impact Specialist</b>	<p>Advanced university degree (Master's Degree or equivalent) in Environmental Science, Environmental Engineering, Sustainability, or a related field.</p> <p>Bachelor's degree and two years experience in a related field are considered equivalent.</p> <p>(0.5 point)</p>	<p>A minimum of 5 years of professional experience in environmental impact assessments (EIA), environmental management, or related roles.</p> <p>Involvement in at least 2 projects on EIA at a large scale.</p> <p>Involvement in at least 2 projects advising governments and/ or international organizations in supply chains or renewable energy, preferably in Viet Nam</p> <p>(1.5 points)</p>	2
<b>Social Impact Assessment Specialist</b>	<p>A Master's Degree in Gender Studies, Social Sciences, Sociology, Anthropology or a related field.</p> <p>Bachelor's degree and two years experience in a related field are considered equivalent.</p> <p>(0.5 point)</p>	<p>A minimum of 5 years of professional experience in gender and social inclusion (GSI) assessments, social impact assessments (SIA), or related roles.</p> <p>Involvement in at least 2 projects on social impact assessment, preferably in Viet Nam or Southeast Asia.</p> <p>Expertise in designing and implementing social inclusion strategies to ensure that the benefits of battery supply chain projects reach all segments of society, including marginalized and vulnerable groups.</p> <p>Experience in identifying and analyzing gender-based and social inequalities and vulnerabilities related to the battery supply chain.</p> <p>(1.5 points)</p>	2

## D. Financial Criteria

47. The financial part of those proposals that are found to be technically compliant will be evaluated as follows.
48. 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:
49. Points for the Financial Proposal of a bid being evaluated =

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

50. 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

51. 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.
52. The selection of the preferred bidder will be based on a cumulative analysis, analysing 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.