

## Enhancing Hydro Energy Storage Viability

### Assessment of Seawater Pump Storage Potential

#### Philippines



#### Terms of Reference | Oct 23, 2023

This technical assistance will support the Philippines Department of Energy in assessing the potential for seawater energy storage systems in the Philippines. **Two work packages are being tendered as part of the overall initiative Enhancing Hydro Energy Storage Viability. The implementing partners of these two work packages are expected to collaborate, where applicable, to deliver the expected project outputs. This Terms of Reference (TOR) document refers to Work Package 2 covering seawater pump storage hydro (PSH).** Work Package 2 focuses on assessing the techno-economic feasibility, viability, and stocktaking of potential seawater PSH areas. Relevant information dissemination activities will be organised. This project is being implemented to maximise the potential of PSH as the long-term and sustainable energy storage solution for the Philippines grid that is expected to take in variable renewable energy capacity. Identifying solutions that would support renewable energy integration into the grid is essential for the Philippines' energy transition.

## Table of Contents

<b>I. Introduction</b>	<b>3</b>
<b>II. Summary</b>	<b>3</b>
<b>III. Project Details</b>	<b>3</b>
A. Rationale	3
B. Impact	5
C. Outcomes and Outputs	5
D. Sustainability, Gender Equality, and Social Inclusion Mainstreaming	5
<b>IV Project Deliverables</b>	<b>6</b>
Other key information:	10
<b>V. Timeline for the Project</b>	<b>11</b>
<b>VI. Key Beneficiaries</b>	<b>12</b>
<b>VII. Results Based Monitoring Framework and Risks</b>	<b>12</b>
A. Results Based Monitoring Framework	12
<b>VIII. Qualification and Experience of the Service Provider and Evaluation Criteria</b>	<b>13</b>
A. Qualification and Experience of the Service Provider	13
B. Evaluation Criteria	13
Eligibility and Formal Criteria	13
Qualification Criteria	14
Technical Criteria	15
Section 1: Offeror's qualification, capacity and expertise	15
Section 2: Proposed Methodology, Approach and Implementation Plan	16
Section 3: Key personnel proposed and Sustainability Criteria	17
<b>Annex 1. Donour Mapping</b>	<b>21</b>

## 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 and renewable energy investments, (iii) extending smart grids, and (iv) knowledge, awareness, and capacity building.

## II. Summary

- 2 ETP in collaboration with the Department of Energy (DOE) will implement two distinct but interrelated projects (referred to as Work Package) on pump storage hydro (PSH) project development. The first project covers non-coastal, non-salinated PSH project development while the second would assess seawater PSH feasibility and viability. The relevant capacity-building and information dissemination activities will be designed and implemented to aid in the sustainability of the project outputs towards achieving its intended outcomes.
- 3 **Work Package 2: Assessment of seawater pump storage potential.** Enhancing hydro storage viability through Work Package 2 will be addressed by assisting the DOE in conducting an assessment of the feasibility and viability of seawater energy storage technology in the Philippines. Depending on the results, a stocktake of potential seawater PSH sites will be conducted complemented with recommendations for its development. Information dissemination activities shall be organised. The expected Project timeline is seven months.

## III. Project Details

### A. Rationale

- 4 The Philippines has set its renewable energy (RE) targets of 35% by 2040 and 50% by 2050 in the power generation mix. While these overarching targets provide a strong case for RE adoption, its integration into the grid remains a challenge. Specifically, variable RE makes it difficult for its intermittent supply to provide a secure and stable power supply.
- 5 These grid integration issues could be addressed by a reliable energy storage system (ESS) such as pump storage hydro (PSH). According to the International Renewable Energy Agency, PSH is a viable long-term energy storage solution for grid systems with high variable renewable energy (VRE) capacity.<sup>1</sup> Moreover, as its operations make up close to 94% of the global energy storage capacity, it has been proven that PSH addresses grid-connection issues resulting from variable

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<sup>1</sup> IRENA (2020), *Innovation landscape brief: Innovative operation of pumped hydropower storage*, International Renewable Energy Agency, Abu Dhabi.

power generation such as RE curtailment and load shifting, frequency problems, black start, and capacity firming.<sup>2</sup> As such, PSH has a significant role as large-scale energy storage to facilitate large fractions of VRE integration while maintaining system reliability and security.

- 6 However, PSH project development is restricted by an unattractive business case and slow deployment. The economic attractiveness of PSH is weakened by a long-term remuneration because of uncertainties over electricity prices and market conditions within this timeframe, the associated environmental and social impact assessments are lengthy and costly, grid integration has no set connection points, and the current regulatory framework perceives impounding with high environmental risks. As such, there is a need to reduce the risks associated with PSH project development to maximise its potential.
- 7 Seawater energy storage is another source of energy storage system that has the potential to support VRE uptake. It is also considered as the potential energy storage solution for offshore wind power generation, which is a priority of the current administration to increase RE share in the power energy mix.
- 8 The concept of ESS has already been recognized by the DOE as an emerging technology that will help improve the electric power industry dominated by renewable energy. As such, it has released Department Circular (DC) 2023-04-0008, which prescribes the policy for energy storage systems (ESS) to ensure the power sector's quality, reliability, security, sustainability, and affordability while supporting the accelerated deployment of renewable energy. Moreover, the Philippine Electricity Market Corporation is preparing for the market integration of battery storage and other ESS into the electricity market.<sup>3</sup>
- 9 The 2022 Marine RE Stocktake Report,<sup>4</sup> developed through ETP support in its response to a request from the DOE to the Rapid Response Facility, presents PSH technology and seawater-based energy storage as suitable solutions to achieving the clean energy targets and national renewable energy program of the Philippines.
- 10 To address the issues presented above and build upon its BESS Report and Marine RE Stocktake, ETP is providing support to the Philippines DOE in its request to support enhancing the viability of PSH in the country.

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<sup>2</sup> International Hydropower Association. (2022). *Pumped hydro*.

<https://www.hydropower.org/factsheets/pumped-storage>

<sup>3</sup> PEMC. (2023). *Downloads: Upgrading Design and Implementation of Energy Battery Storage Market Mechanism of the Philippines Electricity Market Mechanism*.

<https://www.wesm.ph/library/downloads/view-download/documents/renewable-energy-market/bess-fiscal-report>

<sup>4</sup> ETP. (2023). *Marine Renewable Energy in the Philippines: Sustainable Energy from Ocean Spaces and Resources*.

<https://www.energytransitionpartnership.org/resource/marine-renewable-energy-in-the-philippines-sustainable-energy-from-ocean-spaces-and-resources/>

## **B. Impact**

- 11 It is envisioned that this project would result in greenhouse gas (GHG) emissions avoidance and/or reduction from fossil fuel replaced by renewable energy power generation and green jobs in low-carbon industries added.

## **C. Outcomes and Outputs**

- 12 The main objective of this technical assistance is to assess the feasibility of seawater PSH projects in the Philippines.
- 13 The outcomes of this technical assistance are
- a. Increased investments in RE projects, contributing to the projected net capacity addition of 20 GW<sup>5</sup> from PHS between 2026 and 2030 in the Asia Pacific region
  - b. De-risked mechanisms for the environmental and social impacts of and business case for PSH developed to allow for its sustainable development and enhance its viability,
  - c. Enhanced capacity of policymakers to develop and implement PSH energy projects and increased awareness of sustainable alternatives to energy storage systems, thus allowing for quicker and greater uptake of VRE
- 14 The primary outputs of this project are:
- i. Assessment Report on the Potential of Seawater PSH in the Philippines
  - ii. 2 Capacity building sessions for energy policymakers and regulators
  - iii. 1 Information-dissemination event

## **D. Sustainability, Gender Equality, and Social Inclusion Mainstreaming**

- 15 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, 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.

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<sup>5</sup> IEA. (July 2021). *Hydropower Special Market Report: Analysis and forecast to 2030*.  
[https://iea.blob.core.windows.net/assets/4d2d4365-08c6-4171-9ea2-8549fabd1c8d/HydropowerSpecialMarketReport\\_corr.pdf](https://iea.blob.core.windows.net/assets/4d2d4365-08c6-4171-9ea2-8549fabd1c8d/HydropowerSpecialMarketReport_corr.pdf)

## IV Project Deliverables

- 16 In line with the outputs and outcomes expected from this project (see Project Deliverables), this section provides additional information on specific deliverables required in order to accomplish the above project outputs.
- 17 Table 1 outlines the key deliverables, which are expected in this project. Additional details on associated activities for each deliverable follow Table 1.

**Table 1. Key deliverables**

#	Deliverables	Target delivery and payment date	Percentage of Payment
1	Inception Report	Month 1 after contract signing	20%
2	Assessment of seawater energy storage viability and Capacity building*	Month 5 after contract signing	40%
3	Stocktake of potential seawater energy sites, capacity building,* and Information dissemination*	Month 7 after contract signing	40%
4	<b>Contract Monitoring Monthly Progress Report:</b> 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 may result in the payments being withheld.	Monthly	N/A
5	<b>Non-personnel reimbursable costs:</b> <b>Some of the above deliverables (*) contain logistic organisations of capacity-building workshops and information dissemination event.</b>  The consultant is required to propose in their financial proposal a ceiling cost to organise and execute all aspects of the workshops and the event, including organisation and logistics.	As per the deliverables' milestone deadlines.	Budget to be proposed is based on the requirements of the logistic organisations that are listed in the TOR's section IV. Project Activities and Expected Deliverables.

- 18 **Deliverable 1: Inception Report:** The Consultant shall prepare the Project Inception Report based on the agreed timeline of implementation and methodology, and any other agreements

made during the kick-off meeting/s. As a deliverable, the inception report ensures that project expectations are aligned with the understanding of the Consultant. It shall contain, as a minimum:

- a. Introduction and project background
- b. Scope of Services
- c. Methodology and Workplan, with details on the approach and project Gantt chart. The approach shall detail how each deliverable will be met and what each submission will contain including an Annotated Outline for the main deliverables
- d. Stakeholder Analysis, which includes an audience mapping, analysis, and communication/ outreach plan
- e. Gender equality and social inclusion, which details how the project implementation will account for gender equality and social inclusion
- f. A donor coordination strategy, explaining how project outputs will leverage and complement ongoing and planned projects from other development partners
- g. 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 required), and project quality assurance
- h. Risks, mitigations, and assumptions
- i. Monitoring and Evaluation Framework, presented in the form of the ETP Results Based Monitoring Framework (RBMF)
- j. Communications Plan, identifying the suitable media channels for communicating the project and the rationale for choosing them as described in Table 2

**Table 2: The Minimum Requirements of the Communications Plan<sup>6</sup>**

Item	Communications materials	Quantity, minimum
1	Social media posts (liaising with ETP)	3 posts
2	Press release, upon agreement with the DOE or News article	1 per public workshop/ event
3	Information dissemination event of the Assessment and Stocktake Report	1 public event
4	Online presentations of project progress and highlights to the ETP Secretariat and/or ETP Funders	1 (1-hour maximum/ each)
5	Maintain/develop a database of photographs/	4 high-quality images per

<sup>6</sup> The consultant is required to draft and execute a detailed communications plan. The costs to deliver the communication materials will be disbursed against the actual expenses. Apart from the personnel costs to deliver the deliverables, bidders are required to provide financial proposal for these communication-related costs under the non-personnel costs.



Item	Communications materials	Quantity, minimum
	videos/ vox pops from events/ activities	workshop/event Minimum 2 high-quality short raw video footage (2-3 mins) per workshop/event (ideally, key speeches and/or highlights reel)

- 19 **Deliverable 2: Assessment of seawater energy storage viability and Capacity building:** The second deliverable is assessing the feasibility and viability of seawater PSH in the Philippines and conducting related capacity building session for the DOE Renewable Energy Management Bureau (DOE-REMB).
- 20 The Consultant shall propose and detail the industry-best practices to determine seawater energy storage technological and economic feasibility and its eventual viability. The Consultant should consider holding stakeholder interviews with project developers, on top of desk research and analysis. There is currently an initiative to develop seawater PSH projects amounting to 320 MW capacity from several sites in the Philippines.
- 21 The Consultants shall participate in the project's technical working group (TWG) meetings organised by the Work Package 1 Consultant (Project title: De-risking pump storage hydro project development).
- 22 The Consultant shall develop and deliver a capacity-building session on the techno-economic assessment conducted. The objective is to ensure that DOE-REMB is familiarised with the methodology and understands the results of the study. The Consultant shall consider holding the workshop either in the DOE Office or in a conducive venue within Metro Manila for at least 30 government participants.<sup>7</sup>
- 23 For this deliverable, there are two outputs expected to be submitted:
  - a. A draft report DOE-REMB on the techno-economic feasibility and viability of seawater PSH, with an explanation of the methodology employed and assumptions made.
  - b. Post-workshop Report
- 24 **Deliverable 3: Stocktake of potential seawater energy sites, capacity building, and information dissemination:** The third deliverable builds upon the results of the techno-economic assessment by producing a stocktake of potential seawater PSH sites. This

<sup>7</sup> Under Deliverables 2, the associated costs for the logistical organisation of the capacity building workshop will be reimbursed against the actual expenses. The financial proposal must include non-personnel costs expected to be incurred to execute the workshop, separate from the personnel lumpsum costs required to deliver the deliverable. The Consultant should include in the non-personnel costs all associated costs for the workshop including, venue, organisation, and other travel and logistics expected.



deliverable shall also incorporate the conduct of a related capacity-building session for DOE-REMB and the organisation of an information-dissemination event for the general public.<sup>8</sup>

- 25 The stocktaking of seawater PSH sites shall consider, among other areas with potential for seawater PSH and potential capacity. Since pumped storage is an ESS considered to allow for grid stability and security when there will be significant VRE into the power grid, the nearest grid connection point must also be identified. Lastly, criteria for environmental, gender and social implications must be part of the analysis.
- 26 The Consultant shall develop and deliver a capacity-building session on the methodology used for the stocktaking and discuss the key results of the assignment. The objective is to ensure that DOE-REMB gain an understanding of the methodology employed and is able to update the data for future planning activities. The Consultant shall consider holding the workshop either in the DOE Office or in a conducive venue within Metro Manila for at least 30 government participants.
- 27 The Consultant will also plan and design for an information dissemination event, as part of the Communications Plan submitted during project inception. The corresponding coordination and logistical requirements will be part of the Consultant's work and financial scope. The objective is to inform the general public, specifically RE project developers, about the results of this initiative by the DOE. The Consultant shall organise a hybrid information dissemination event, where it will be held in an appropriate venue in Metro Manila. It shall be a half-day event in an appropriate venue in Metro Manila for at least 50 in-person participants.
- 28 For this deliverable, there are four outputs expected to be submitted:
  - a. A publishable report on the Assessment of Seawater PSH in the Philippines, for submission to the DOE and ETP, with details on the following:
    - i. Executive summary
    - ii. techno-economic feasibility of seawater PSH, with an explanation of the methodology employed, and assumptions made
    - iii. a stocktake of potential seawater PSH areas
    - iv. recommendations for the development of seawater PSH industry
  - b. Post-workshop Report on the capacity-building conducted
  - c. Post-event Report on the information dissemination event
  - d. Report and event materials for general public information dissemination event

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<sup>8</sup> Under Deliverables 3, the associated costs for the logistical organisation of the capacity building workshop and information dissemination event will be reimbursed against the actual expenses. The financial proposal must include non-personnel costs expected to be incurred to execute the events, separate from the personnel lumpsum costs required to deliver the deliverable. The Consultant should include in the non-personnel costs all associated costs for the workshop including, venue, organisation, and other travel and logistics expected.

29 For all capacity-building workshops<sup>9</sup> and events, the Consultant is expected to:

- a. handle all tasks related to the workshop including organising the logistics, inviting participants and speakers, booking the venue, and executing the actual workshop;
- b. shall implement gender equality and social inclusivity; and
- c. submit a Workshop Report to ETP ten (10) working days after the workshop and event with the following details:
  - i. Description of the workshop (e.g., background, objective, organisation)
  - ii. Workshop agenda
  - iii. List of participants with gender-disaggregated data
  - iv. Workshop proceedings (e.g. summary of presentations, key points raised, important insights, significant outcomes or decisions)
  - v. Gender and social inclusion considerations
  - vi. Conclusion and next steps
  - vii. Annexes (supporting materials such as slides of the presentations, workshop handouts, participant list, list of comments, etc.)

30 **Contract Monitoring Monthly Progress Report:** In addition to the listed deliverables, the consultant is required to submit monthly progress reports as per the provided template. Failure to submit this report may result in the payments being withheld. Progress Report that includes a concise narrative of the activities completed and next steps. The progress report must also document the capacity building activities covering the time period.

31 The monthly progress report is internal-facing between the consultant and the ETP team. The monthly progress report must include the following standard items:

- a. Updated Gantt Chart
- b. Updated Results Based Monitoring Framework (RBMF) in a provided template
- c. Risks and mitigations
- d. Upcoming workshop agenda

#### **Other key information:**

32 The final version of the Assessment and Stocktake Report shall be of publishable quality. These external-facing documents shall only be published after completion of all project activities and on ETP website, and other channels approved by the DOE.

33 A public-facing Powerpoint presentation highlighting key information on the Assessment and Stocktake Report shall be submitted with Deliverable 3.

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<sup>9</sup> Under Deliverables 2 and 3, the associated costs for logistic organisation of the capacity building sessions and information dissemination event will be reimbursed against the actual expenses. The bidder is expected to propose a ceiling budget to deliver this separately from the personnel lump sum costs.

- 34 All project deliverables and presentations must be submitted in English.
- 35 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.
- 36 The timeline of implementation that is defined in this Terms of Reference could be adjusted by the Consultant. However, the methodology and project workplan should justify the proposed timeline based on actual successful engagements and/ or related experiences, and shall adhere to submitting the defined project deliverables.
- 37 The consultant is required to update the results and achievements of the project in accordance with the agreed project level Results-Based Monitoring Framework, as per the approved template. All results, where applicable, must be gender disaggregated
- 38 The consultant is required to organise and execute all aspects of the workshops, including organisation and logistics.
- 39 The consultant must consider and highlight specific gender considerations in their proposal.
- 40 The consultant must be available to attend one in-person workshop with the ETP secretariat in the region. The costs for this will be covered outside the financial scope of this proposal.
- 41 The consultant, or an active organisation within the applying consortium, shall have an in-country, local partner fully operating in the Philippines through the project timeline. The international experts should be present in person for at least 30% of the contract duration.

## V. Timeline for the Project

- 42 The project will require 7 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**

<b>DELIVERABLES</b>	<b>Proposed implementation timeline</b>
1. Inception report	Month 1
2. Assessment of seawater energy storage viability and capacity building*	Months 2 to 5
3. Stocktake of potential seawater energy sites, capacity building,* and information dissemination*	Months 4 to 7

DELIVERABLES	Proposed implementation timeline
4. <b>Contract Monitoring Monthly Progress Report:</b> 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 may result in the payments being withheld.	Monthly

## VI. Key Beneficiaries

43 The key beneficiaries of this project are provided in Table 4.

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

Beneficiary	Benefit	Explanation
DOE-REMB	Direct	The main government agency in regulating PSH project development, through appropriate policy issuances.

44 A donor mapping was conducted to prevent duplication of efforts between ETP and other development partners in the same areas, as well as to identify areas where ETP could provide support for energy transition that had not yet been addressed. See Annex 1.

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

## VII. Results Based Monitoring Framework and Risks

### A. Results Based Monitoring Framework

46 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**

Indicators	Targets
IN 4.1-01 – No. of studies, research, and new evidence gathered and published, for raising awareness, improving knowledge base, driving decisions, and dissemination	1 report on the assessment of seawater PSH potential with details on (i) Techno-economic viability and (ii) Stocktake of potential sites
IN 4.1-02 - No. of trainings, knowledge sharing	<ul style="list-style-type: none"> <li>At least 2 knowledge-raising workshops</li> </ul>

Indicators	Targets
events, and/or awareness workshops organised at national and regional levels building institutional capacity and knowledge networks	<p>for policymakers / regulators</p> <ul style="list-style-type: none"> <li>• 1 information dissemination event</li> </ul>

- 47 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

- 48 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.
- 49 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:
- Team Lead
  - Industry Expert/ Ocean Energy Specialist
  - RE Project Development Specialist
  - Social Development Specialist
  - Environmental Management Expert
  - Finance Expert
- 50 Considering the importance of close coordination with stakeholders in the Philippines, it is expected that the team proposed consists of consultant(s) who understand the local context in the Philippines.
- 51 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.

### B. Evaluation Criteria

#### Eligibility and Formal Criteria

52 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"> <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> <li>Form B: Proposal Submission Form</li> </ul>
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"> <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: Contract Forms	<ul style="list-style-type: none"> <li>Form B: Proposal Submission Form</li> </ul>

### Qualification Criteria

53 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
1. The company should have a minimum of <b>FIVE (5) years</b> of continuous experience in delivering similar projects in the past with a track-record of success.  In case of JV, at least one of the JV members should fulfil this criteria	<ul style="list-style-type: none"> <li>Certification of incorporation of the Offeror</li> <li>Form F: Performance Statement Form</li> </ul>
2. Offeror must provide a minimum of <b>two (2)</b> customer references from which similar services have been successfully provided, within any of the last <b>FIVE (5) years</b> .  In case of JV, the customer references of JV members can be combined	<ul style="list-style-type: none"> <li>Form F: Performance Statement Form</li> </ul>

## Technical Criteria

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

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

55 Technical proposal points allocation

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

### 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.	15	
	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		5
	2. Experience in providing similar services in the region, especially the Philippines		4
	3. Understanding of local context, and partnering up with a Philippines-based entity to provide for the strategic consultation and,		6



Section 1: Offeror's qualification, capacity and expertise		Points	Sub-points
	translations; as well as the communications expertise		
1.2	General organizational capability which is likely to affect implementation: management structure, and project management controls. (Max 4 pages written text)	5	
	1. Management structure, management controls, and extent to which any part would be subcontracted		3
	2. Financial Capacity/financial stability: Bidder should have minimum annual turnover of 150,000 USD in any of the past 2 years.  In case of a joint venture, annual turnover is calculated based on the total annual turnover of the JV members.		2
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 exceeding the requirements of the Terms of Reference	20	
	1. Description of the offeror's approach to the identification of data sources, scenarios, issues for the deep-dive in the analysis and providing guidance to the government policymakers		3
	2. Description of the offeror's approach to techno-economic assessment of seawater PSH		6
	3. Description of the offeror's approach to the stocktaking of PSH sites		6
	4. Description of the offeror's approach to the development of policy and technical recommendations		5
2.2	Quality Assurance Plan	5	

Section 2: Proposed Methodology, Approach and Implementation Plan		Points	Sub-points
	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		5
2.3	Implementation Timeline	5	
	1. Bidder submits a detailed implementation timeline which includes detailed activities to be undertaken during this assignment, and is completed with Gantt chart		5
Total points for section		30	

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

Section 3: Key personnel proposed and Sustainability Criteria		Points	sub-points
	Qualifications of key personnel proposed aligned with the Terms of Reference	25	
3.1	<p><b>Team Lead</b></p> <p><b>Education:</b> A Master's Degree in Management, Engineering, Energy, Economics, Political Sciences, Development or related fields is required. An additional 10 years of similar experience with a Bachelor's Degree is considered equivalent.</p> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 10 years of relevant experience in similar role, with minimum 2 years of leadership experience</li> <li>• Professional experience in project management of similar scale in Southeast Asia is required</li> <li>• Professional experience in renewable energy project development is preferred</li> <li>• Team Lead based in the Philippines is preferred</li> <li>• Professional experience in marine science is desired</li> <li>• Knowledge of the Philippines energy landscape, RE project development, climate change, environmental management, and social development are desired</li> </ul> <p><b>Other requirement:</b></p> <ul style="list-style-type: none"> <li>• The Team Lead must be based in the Philippines.</li> </ul>		4.5
	<b>Industry Expert / Ocean Energy Specialist</b>		4.5

Section 3: Key personnel proposed and Sustainability Criteria		Points	sub-points
	<p><b>Education:</b> A Master's Degree in Marine Science, Engineering, Energy, Economics, or related fields is required. An additional 5 years of similar experience with a Bachelor's Degree is considered equivalent.</p> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 5 years of relevant experience in similar role is required</li> <li>• Professional experience in ocean energy is required</li> <li>• Knowledge of the Philippines energy landscape, RE project development, climate change, environmental management, and social development are desired</li> </ul>		
	<p><b><u>Renewable Energy Project Development Specialist</u></b></p> <p><b>Education:</b> A Bachelor's Degree in Engineering, Energy, Economics, Management or related fields is required.</p> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 8 years of relevant experience in the same role is required</li> <li>• Professional experience in renewable energy project development, esp. on hydro power is required</li> <li>• Professional experience in pump storage hydro project development is desired</li> <li>• Knowledge of the Philippines energy landscape, RE project development, climate change, environmental management, and social development are desired</li> </ul>		4.0
	<p><b><u>Environmental Management Expert</u></b></p> <p><b>Education:</b> A Master's Degree in Environment Management, Engineering, Physical Sciences, or related field is required. An additional 8 years of similar experience with a Bachelor's Degree is considered equivalent.</p> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 8 years of relevant experience in similar role is required</li> <li>• Professional experience in environmental impact assessments is required</li> <li>• Knowledge of the Philippines' environmental laws, energy landscape, climate change, and social development is required</li> </ul> <p><b>Other requirement:</b></p> <ul style="list-style-type: none"> <li>• The Environment Management Expert should be based in the Philippines.</li> </ul>		4.0

Section 3: Key personnel proposed and Sustainability Criteria		Points	sub-points
	<p><b><u>Social Development Specialist</u></b></p> <p><b>Education:</b> A Master's Degree in Social Sciences, Development Management, Environment Management, or related field is required. An additional 8 years of similar experience with a Bachelor's Degree is considered equivalent.</p> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 5 years of relevant experience in similar role is required</li> <li>• Professional experience in social development and stakeholder engagements in the Philippines is required</li> <li>• Knowledge of Philippine policies, energy landscape, climate change, and environmental management are desired</li> </ul> <p><b>Other requirement:</b></p> <ul style="list-style-type: none"> <li>• The Social Development Specialist should be based in the Philippines.</li> </ul>		4.0
	<p><b><u>Finance Expert</u></b></p> <p><b>Education:</b> A Master's Degree in Finance, Business, Economics, Engineering, or related field is required. An additional 8 years of similar experience with a Bachelor's Degree is considered equivalent.</p> <p><b>Experience:</b></p> <ul style="list-style-type: none"> <li>• A minimum of 10 years of relevant experience in similar role is required</li> <li>• Professional experience in investment financing is required</li> <li>• Knowledge of the Philippines' energy landscape is desired</li> </ul>		4.0
3.2	The bidder shall provide a response that demonstrates its commitment to support and mainstream gender equality and social inclusion through its operations and project implementation activities.	5	
<b>Total points for section</b>		<b>30</b>	

## C. Financial Criteria (20 maximum points)

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

36. 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:

a. Points for the Financial Proposal of a bid being evaluated =

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

37. 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) X 20 points = 10 points

38. 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.
39. 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.

## Annex 1. Donour Mapping

Name of Organization	Topic and Detailed Activity
Japan International Cooperation Agency (JICA)	<p>Estimated start date is March 2024</p> <p>JICA and the Department of Energy are currently developing a program to advance pump storage hydro (PSH) project development in the Philippines. The tentative scope of work includes conducting a pre-feasibility assessment/s of viable PSH sites, updating the Department of Energy's hydro software previously given by JICA, and developing a PSH Roadmap. ETP had initial discussions with JICA and DOE, and has agreed that both development partners could leverage each others' work - JICA will use the outputs of ETP's work, particularly from work package 1 for them to conduct the pre-feasibility assessments and develop the PSH Roadmap.</p>
United Nations Development Programme (UNDP)	<p><b>Development for Renewable Energy Application Mainstreaming and Market Sustainability Project (DREAMS)</b> is being implemented by the DOE-REMB, in partnership with UNDP and the Global Environment Facility to promote and facilitate commercialization of RE markets through removing barriers and increasing RE investments. From 2017 to 2023, the project will deliver a resource assessment of micro hydro facilities in Region 6, install at least 18 RE facilities in off-grid areas, and assist local governments in formulating their RE Development Plans.</p>
Climate Capital Southeast Asia Clean Energy Facility (SEACEF)	<p>SEACEF is an ETP-aligned program whose support is geared towards private sector companies. SEACEF provides catalytic capital and development support to early-stage clean energy projects and businesses in a market-responsive manner. ETP's beneficiaries are government entities while SEACEF beneficiaries are private sector organisations, and we complement each others' work to accelerate the clean energy transition. Currently, SEACEF has in their pipeline to support hydro project developers, and the results of this technical assistance will ensure that the market is ready for SEACEF-backed hydro project developers.</p>