

DEENDAYAL PORT AUTHORITY



www.deendayalport.gov.in

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No.EG/WK/EMC/ACEE/203/2026/ 45

Dated: 09/03/2026

To,

Expression of Interest

Sub: "A Study to Assess Carbon Emission Estimation, Year-on-Year Reduction Performance, and Formulation of Future Reduction Targets for the period 2025 - 28" at Deendayal Port Authority, Kandla, Gujarat - **Inviting Budgetary Offer - Reg.**

Sir/Madam,

Deendayal Port Authority (DPA) intends to appoint a consultant for "A Study to Assess Carbon Emission Estimation, Year-on-Year Reduction Performance, and Formulation of Future Reduction Targets for the period 2025 - 28"

You are requested to submit your Expression (EOI) along with a budgetary offer (Lump - sum charges) for the subject work, based on the tentative scope of work enclosed herewith.

The rates quoted shall be inclusive of all taxes and duties required for performing the enclosed Scope of Work and exclusive of GST. The applicable GST shall be shown separately and shall not be considered for evaluation purposes.

Your Expression of interest along with a budgetary offer for the above work, should reach the following address on or before 18/03/2026.

Address:

Office of XEN (EMC),
Ground Floor, A.O. Building, Annexe
Deendayal Port Authority,
Gandhidham, Kutch -370201
Email ID: kptemc@gmail.com
Mo. No. 09724301528

Thanking you,

Yours faithfully,


XEN (EMC)
Deendayal Port Authority

Enclosed: - As above

SCOPE of Work (Tentative)

Name of work: A Study to Assess Carbon Emission Estimation, Year-on-Year Reduction Performance, and Formulation of Future Reduction Targets for the period 2025 - 28

1. Objective

The primary aim of this study is to create a comprehensive inventory of greenhouse gas (GHG) emissions for the port, determine the carbon intensity per ton of cargo relative to the baseline year, and develop a multi-year plan to meet the reduction targets set by the Ministry of Ports, Shipping, and Waterways (MoPSW). In line with the Harit Sagar Green Port Guidelines, the focus will be on measuring operational efficiency through carbon intensity, which requires analysing both total emissions and cargo throughput.

2. Tentative Scope

A structured scope of study designed (*and not limited to*) to meet the Harit Sagar Green Port Guideline requirements is as follows;

- 2.1. Assessment Framework & Baseline:** The main goal is to assess the port's decarbonization progress compared to the Baseline study.
- **Boundary Setting:** Define Scope 1, Scope 2, Scope 3 emissions, which may include cargo handling equipment, harbor craft, port-owned vehicles, purchased electricity, etc.
 - **Data Inventory:** Collate total cargo tonnage (TEUs, dry bulk, liquid bulk) for the assessment year.
 - **Emission Factor Application:** Define and use the latest and standardized emission factors (e.g., IPCC or CEA for grid power) to convert fuel and energy consumption into tCO₂e.
- 2.2. Component I: Assessment Year Analysis:** This phase involves calculating the Assessment Year footprint for the defined reporting period.
- **Emission Calculation:** Convert all fuel and energy consumption into tons of CO₂ equivalents (tCO₂e) using emission factors.
 - **Energy Assessment:** Conduct a field-level energy assessment of high-consumption areas
 - **Intensity Calculation:** as *Total CO₂ Emissions (Tons) / Total Cargo Throughput (Tons)*
 - **EPI Verification:** Comparing the result against the specific KPI targets listed in Harit Sagar Guidelines

2.3. Component II: Comparative Performance (Year-on-Year): This component measures the velocity of change, defining not just about being "green," but about being "greener" than the previous assessment year.

- **Variance Analysis:** Calculate the current Assessment Year's emissions and determine the % reduction achieved from the previous assessment year.
- **Efficiency Driver Identification:** Determine *why* emissions changed. Was it due to: Technology, Process Optimization, Energy Mix, etc?
- **Normalization:** Adjusting for anomalies (e.g., extreme weather or sudden shifts in cargo types) to ensure a fair comparison.
- **Comparative Performance with Global Ports:** Identify best practices adopted by renowned global ports, and provide a suitability assessment with implementation pros and cons

2.4. Component III: Formulation of Future Reduction Targets: Based on the data, this phase creates a roadmap for alignment with the **Maritime India Vision 2030** and **Net Zero** goals.

- **Scenario Modelling:** Estimate the impact of planned projects
- **Gap Analysis:** Identify the variance between current performance and the Harit Sagar targets (30% reduction by 2030; 70% by 2047).
- **Milestones:** Align targets with the Maritime India Vision (MIV) 2030:
 - o 2025: Achieve 10% reduction.
 - o 2030: Achieve 30% reduction (Mandatory Harit Sagar target).
 - o 2047: Achieve 70% reduction (Amrit Kaal Vision).
- **Intervention Strategy:** i.e., Short-term, Medium-term, and Long-term
- **S.M.A.R.T. Targets:** Formulate a year-by-year reduction trajectory until 2030, including Capital Expenditure (CAPEX) requirements for green infrastructure.

2.5. Summary of Indicators (Annexure-D Style)

Metric Component	Data Required	Unit
Baseline (2023)	Total CO2 / Total Cargo	tCO2/Ton
Assessment Year	Current CO2 / Current Cargo	tCO2/Ton
Reduction %	(Baseline - Current) / Baseline X 100	%
Future Target	Projected Reduction by 2030	%

3. Deliverables and Timeline

Ref	Deliverable	Timeline (T=Date of Award)
D1	Inception Report: Methodology, boundary definition, emission factor source, and data formats.	T + 2 Weeks
D2	Baseline & Assessment Report: Verified Baseline and Current Year Performance.	T + 06 Months

D3	Draft Decarbonization Roadmap: Strategy for future reduction targets.	T + 09 Months
D4	Final Comprehensive Study: Including EPI Dashboard and Annexure-D compliance.	T + 11 Months

4. Compliance and Standards

All calculations and reporting must adhere to:

- Harit Sagar Green Port Guidelines 2023
- GHG Protocol (Corporate Accounting and Reporting Standard)
- ISO 14064-1:2018 (Quantification and reporting of GHG emissions)

EOI PRICE BID

Name of work: "A Study to Assess Carbon Emission Estimation, Year-on-Year Reduction Performance, and Formulation of Future Reduction Targets for the period 2025 - 28".

Description	Amount In Rs.	
	In fig.	In words
Lump-sum charges including all taxes, duties for performing the above said scope of subject work. The amount quoted shall be exclusive of Goods & Service Tax.		
1 st Year		
2 nd year		
3 rd Year		
Total Rs.		

Notes:

1. The aforesaid professional fees, payable to the Consultant in accordance with the Financial Proposal, shall cover the costs of telephone/fax, photocopying, couriers and postage, collections and deliveries, traveling expense, accommodation, stationery, costs of support staff and counsel fee, overheads, etc., including all taxes and duties except service tax. No additional charges in respect thereof shall be due or payable. The fees shall be limited to the amounts indicated above and no escalation on any account will be payable on the above amounts.

2. All payments shall be made in Indian Rupees and shall be subject to applicable Indian withholding taxes if any.

3. GST will be paid extra as applicable by the Authority subject to submission of Tax Invoice.

4. Item rate to be filled in the amount column above.