

DEENDAYAL PORT AUTHORITY
(Erstwhile: DEENDAYAL PORT TRUST)



www.deendayalport.gov.in

ISO 9001-2015 &
ISO 14001-2015 Certified Port

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Civil Engineering/EMC/299/CO2EmissionStudy/2023/310

Dated: 22/05/2023

To,
The Gujarat Environment Management Institute (GEMI),
(An Autonomous Institute of Government of Gujarat)
GEMI Bhavan, 246-247, GIDC Electronic Estate, Sector-25,
Gandhinagar-382025
Tel: (+91) 79-23240964
E-mail: info-gemi@gujarat.gov.in
Website: www.gemi.gujarat.gov.in

Kind Attention: Nitasha Khatri, Sr. Scientific Officer & Lab Head, GEMI, Gandhinagar

Sub: Study of CO₂ Emission Estimation and Reduction Strategy under Maritime India Vision 2030 - reg.

Ref.: Proposal submitted by GEMI, Gujarat vide letter no. GEMI/38/(32)(6/941/2023-24) dated 01/05/2023

Sir,

Your proposal for the subject work submitted vide above referred letter dated 01/05/2023 (**copy attached - Annexure A**) amounting to Rs. 21, 00,000 plus 18% GST (Rupees Twenty One Lakhs plus 18 % GST only), including all terms & conditions mentioned in the proposal, has been accepted by the competent authority in Deendayal Port Authority.

2. Scope of work: The scope of work is as follows:

A. Assessment of CO₂ Emissions

1. Prepare inventory for carbon emissions from all DPA operations (both direct and indirect emissions).
2. Fix operational and organization boundaries.
3. Formulate policy on CO₂ emissions, carbon quantification and prepare database.
4. The assessment should be done in accordance with globally acceptable norms and guidelines.
5. Types of emissions to be incorporated and quantified:

a) Direct or scope 1 emissions: The direct emissions from owned or controlled sources either of the DPA's own operations or of the port operators. Emissions from the day-to-day processes from the combustion of fuel.

-2-

- b) In-direct or scope 2 emissions: The indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the DPA or port operators. This is generally an emission outside the port boundary.

B. Preparation of CO₂ Reduction Strategy

1. Identify green initiatives (renewable sources, shift to cleaner fuels, greenbelt development) regarding aspects which are primarily managed by DPA.
2. Phase-wise plan to reduce CO₂ Emissions in order to achieve the targets.
3. Training and capacity building of staff and stakeholders to aid in the reduction and transition.
4. Design an Energy / Environment policy on emissions reduction.
5. Carry out internal audit training and auditing

3. Terms of Payments:

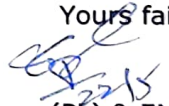
S. No.	Particulars	Rate
1.	Upon submission of the Draft Project Report (50% of the contract value)	10,50,000 + 18% GST
2.	Upon submission of the Final Report after incorporating client's suggestions (if any) (Remaining 50% of the contract value)	10,50,000 + 18% GST

Payment shall be released after successful completion of the above tasks.

- 4. Deliverables:** Final report in line with the agreed scope in 3 hard copies and soft copy.
- 5. Time Schedule:** 12 months from the date of issue of Work Order.
- 6.** Kindly send acknowledgment of this work order.

Thanking you.

Yours faithfully,


Superintending Engineer (PL) & EMC (I/c)
Deendayal Port Authority

- Copy to:**
- 1.A.O (W/A): The proposal has been approved by the Chairperson, under Note No. 1 N/s in the e-office file no. Civil Engineering/EMC/299/CO₂EmissionStudy/2023. The expenditure shall be charged to the Scheme Environmental Services & Clearance thereof (Allocation: 841/587/9744 WC- 5 – 13001).
 - 2.TPA to CE for kind information to the Chief Engineer, please.
 - 3.Concerned Clerk Pipeline Division/ EMC for further necessary action
 - 4.M/s Precitech Laboratories, Vapi, EMC to coordinate with M/s GEMI
 - 5.Sr. ED (EDP) with a request to hoist on DPA Website.
 - 6.R.A.O., DPA.

Ref. No. GEMI/PRI/381(32) (6)/2023-24/06

May, 2023

Study of CO₂ Emission Estimation and Reduction Strategy under Maritime India Vision 2030

Submitted to:

**Deendayal Port Authority,
Kandla**



Gujarat Environment Management Institute (GEMI)
(An Autonomous Institute of Government of Gujarat)

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We Provide Environmental Solutions



Contents

About this Document	2
About GEMI	3
Services offered by GEMI	3
Experience in similar project.....	4
Objective of the Project	4
Scope of Work	4
Project Duration	5
Methodology	6
Deliverables	6
Financial Proposal	7
General Terms & Conditions	7
Confidentiality	7
Expectations from DPA	7
Contact Persons from GEMI	8



About this Document

This Document is a proposal submitted to Deendayal Port Authority (DPA) for "**Study of CO₂ Emission Estimation and Reduction Strategy under Maritime India Vision 2030**"

Name of the Document:	Proposal for " Study of CO₂ Emission Estimation and Reduction Strategy under Maritime India Vision 2030 "
Name of Client:	Deendayal Port Authority
Reference Document:	E-mail dated 26-04-2023
Date of Issue:	01-05-2023
Proposal Ref No.	GEMI/PRI/381(32)(6)/2023-24/06
Version:	1.0
Prepared by:	Ms. Niyati Raval, Assistant Environmental Engineer
Reviewed by:	Dr. Nitasha Khatri, Senior Scientific Officer & Lab Head Mr. Gunjan Gupta, Deputy Environmental Engineer
Approved by:	Dr. Jaipal Singh, IFS, APCCF & Director



About GEMI

The Gujarat Environment Management Institute (GEMI); set up in 1999; is an Autonomous Institute under the aegis of the Forests & Environment Department, Government of Gujarat. The Institute is engaged in carrying out various projects and research activities pertaining to environmental management. This Institute has obtained numerous National and International accreditations/recognitions which are as follows.

1. ISO 9001:2015
2. ISO 14001:2015
3. ISO 45001:2018
4. GEMI's Laboratory recognized as
 - **Environmental Laboratory** under Environment Protection Act, 1986
 - **State Water Laboratory** under Water Act, 1974
 - **State Air Laboratory** under Air Act, 1981
 - **NABL accreditation** under Chemical and Biological disciplines (for air, water, wastewater, soil and noise)
5. **NABET accreditation** as EIA Consultant Organization
6. **National e-Governance award** for its e-LMS software for the year 2015-16
7. **Recognition as 'Scientific & Industrial Research Organization (SIRO)'** by Department of Scientific & Industrial Research, Ministry of Science & Technology, Govt. of India.
8. Centre for organizing in-service **training of IFS officers.**

Over the years, the Institute has established itself as one of the Premiere Institutes in the country in the field of environment management. It has the most modern State- of-the-Art infrastructure and facilities and a team of highly skilled and experienced manpower.

Services offered by GEMI

1. GEMI is a one-stop solution for all kind of environment-related services such as
2. Environmental Monitoring & Audit
3. Laboratory Services
4. Environment Impact Assessment (EIA) & Environment Carrying Capacity
5. Social Impact Assessment
6. Environment Training & Awareness

7. Environmental Education
8. Environmental Management System Design and Consultancy
9. Waste Exchange Centre & Inventorization of Different Types of Waste
10. Accreditation and Rating
11. Development of Environmental Indices

Experience in similar project

- Feasibility study on CO₂ sequestration by afforestation of appropriate floral species.
- Achieving Paris Climate Change Agreement objectives through Reduced Emission through Forests and Afforestation.
- Making Deendayal Port a Green Port – Intended Sustainable Development under the Green Port Initiatives

Objective of the Project

"Study of CO₂ Emission Estimation and Reduction Strategy under Maritime India Vision 2030 and Green Port Initiatives"

Scope of Work

The scope of work is as follows:

A) Assessment of CO₂ Emissions

- 1) Prepare inventory for carbon emissions from all DPA operations (both direct and indirect emissions).
- 2) Fix operational and organization boundaries.
- 3) Formulate policy on CO₂ emissions, carbon quantification and prepare database.
- 4) The assessment should be done in accordance with globally acceptable norms and guidelines.
- 5) Types of emissions to be incorporated and quantified:
 - a) **Direct or scope 1 emissions:** The direct emissions from owned or controlled sources either of the DPA's own operations or of the port operators. Emissions from the day-to-day processes from the combustion of fuel.
 - b) **In-direct or scope 2 emissions:** The indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the DPA or port operators. This is generally an emission outside the port boundary.



B) Preparation of CO₂ Reduction Strategy

- 1) Identify green initiatives (renewable sources, shift to cleaner fuels, greenbelt development) regarding aspects which are primarily managed by DPA.
- 2) Phase-wise plan to reduce CO₂ Emissions in order to achieve the targets.
- 3) Training and capacity building of staff and stakeholders to aid in the reduction and transition.
- 4) Design an Energy / Environment policy on emissions reduction.
12. Carry out internal audit training and auditing.

Project Duration

12 months

Methodology



Deliverables

- Final report in line with the agreed scope in 3 hard copies and soft copy.

Financial Proposal

The financial outlay for this assignment is estimated below:

S.N.	Particulars	Rate (INR)
1.	Lump-sum consultancy charges for: "Study of CO ₂ Emission Estimation and Reduction Strategy under Maritime India Vision 2030".	₹ 21,00,000/-
In words: Twenty one lakh only		
Note: The amount quoted is exclusive of 18% Goods & Services Tax		

Payment Terms:

Particulars	Amount
• Upon submission of the Draft Project Report (50% of the contract value)	₹ 10,50,000 + 18% GST
• Upon submission of the Final Report after incorporating client's suggestions (if any) (Remaining 50% of the contract value)	₹ 10,50,000 + 18% GST

General Terms & Conditions

1. This Proposal is valid till **90 days** from the date of submission
2. The proposal does not include any additional study/monitoring work not specified in the Scope of Work.
3. GEMI shall not be held responsible to complete the assignment within the prescribed time limit in case of any delay in providing data/information by DPA or any other circumstances beyond the control and purview of this Institute including force majeure.

Confidentiality

The Gujarat Environment Management Institute (GEMI) would adhere to the condition of confidentiality of the DPA, unless it is required to be shared with Government or regulatory authorities for specific purpose or reason.

Expectations from DPA

- DPA to depute at least one technically qualified person who shall periodically be in contact with the officials of the GEMI dealing with the project.



- The officials of DPA to fully co-operate with the officials of GEMI during the course of the project.
- The officials of DPA would provide all relevant data, documents, maps to GEMI timely and in prescribed format.
- DPA to facilitate issue of all necessary permits for the uninterrupted movement of men, material and vehicles within DPA premises for the purpose of this assignment.
- Provide accommodation facilities to GEMI's manpower in case required.
- After successful completion of the work, DPA may kindly send its feedback regarding the services rendered by GEMI in the Customer Feedback Form as part of Integrated Management System (ISO 9001:2015) requirements.

Contact Persons from GEMI

S.N.	Name and Designation	Contact Details
1.	Mr. Gunjan Gupta, Deputy Environmental Engineer	+91 9537514488 gunjangupta00@gmail.com
2.	Ms. Niyati Raval Asst. Environmental Engineer	+91 8160223134 niyatiraval.gemi@gmail.com