



DEENDAYAL PORT AUTHORITY

(Erstwhile 'Kandla Port Trust')

Chief Mechanical Engineer
2nd Floor, Annexxe, A.O. Building,
Deendayal Port Authority, Gandhidham (Kutch) - 370 203
E-mail – cme@deendayalport.gov.in

Date - 23.05.2025

To,

Subject: Supply of Green Hydrogen 'Methanol Synthesizer' for e-Methanol Production - reg.

Sir,

Deendayal Port Authority (DPA) intends to develop a green e-methanol production facility in Gandhidham (Kutch), Gujarat. As a part of this project, DPA invites Expressions of Interest from experienced and reputable manufacturers for the supply of a Green Hydrogen 'Methanol Synthesizer'.

This unit will be critical in combining green hydrogen (produced via electrolysis) with captured carbon dioxide (CO₂) to produce e-methanol (CH₃OH). DPA invites qualified vendors to submit their Expression of Interest, including preliminary technical specifications and company credentials, demonstrating their capability to supply a system meeting the requirements outlined below:

Technical Specifications for the Methanol Synthesizer:

The proposed Methanol Synthesizer should meet the following minimum specifications:

1. Feedstock:
 - Green Hydrogen (H₂): Input purity ≥99.9%.
 - Carbon Dioxide (CO₂): Input purity ≥99%.
2. Production Capacity: [Specify Target Production Capacity, e.g., 50 tonnes/Day or 5 tonnes/hour] of e-methanol.
3. Product Quality: Output e-methanol purity ≥99.8% (Grade AA or equivalent).
4. Catalyst Type: Specify the type of catalyst preferred (e.g., copper-based). Please indicate the expected lifespan and replacement requirements.
5. Operating Conditions:
 - Temperature range: [Specify range, e.g., 200-300 °C]
 - Pressure range: [Specify range, e.g., 50-100 bar]
6. Energy Efficiency: Provide details on the energy consumption of the synthesis unit.
7. Safety Features: Describe the integrated safety systems and compliance with relevant industrial standards.
8. Control System: Specify the type of control system (e.g., PLC, DCS) and its integration capabilities.
9. Footprint: Provide an estimated footprint of the system.
10. Delivery Timeline: Indicate the typical manufacturing and delivery lead time.

Information to be submitted by interested vendors:

Interested vendors are requested to submit the following information:

- Company profile, including relevant experience in supplying methanol synthesis units, preferably utilizing green hydrogen.
- Preliminary technical specifications of their proposed Methanol Synthesizer, addressing the points mentioned above.
- Indicative timeline for design, manufacturing, and delivery.
- Relevant certifications and standards compliance.
- Component wise costs & Payment Schedule.

Please submit your Expression of Interest and supporting documents electronically to cme@deendayalport.gov.in by 06.06.2025.

This Expression of Interest does not constitute a commitment to purchase, and DPA reserves the right to accept or reject any EOI without assigning any reason whatsoever.

Thanking you,

Yours faithfully,

-sd-

Chief Mechanical Engineer
Deendayal Port Authority