

## Notice Inviting Expression of Interest

The Durgapur Project limited is inviting Domestic Expression of Interest from prospective Consultants for ***Empanelling prospective Consultants*** for undertaking Feasibility study and Preparation of Detailed Project report for Installation of Green Ecosystem comprising of Green Hydrogen Plant , Carbon Capture Unit & e-Methanol Production plant at Durgapur Projects Limited ,Durgapur,WB

Durgapur projects Limited is a Government of West Bengal Undertaking engaged in the business of Thermal Power Generation. It has two Pulversied Coal fired Units with total Installed capacity of 550 MW

To fulfill its commitment towards giving clean and green energy , The Durgapur Projects Limited is contemplating development of Green Ecosystem in DPL .

DPL have already initiated process for installation of Megawatt range Ground mounted Solar Plants inside its premises and its Installed Solar capacity is targeted to reach around 25 to 27 MW by 2023.

Eco Island I : Production of Green Hydrogen

Eco Island II : Installation of Carbon capture units to reduce carbon footprint

Eco Island III : Installation of e-Methanol plant by utilizing the Green hydrogen and Carbon dioxide ,so produced.

**Need of the Project:** India has taken bold steps towards meeting its Paris Climate Change (COP21) commitments and exponentially increasing renewable energy capacity.

India ranks fifth globally in installed solar capacity now. Renewable sources contribute one-fourth of the total capacity here.

Green hydrogen, produced from renewable sources, plays a crucial role in **low-carbon development**. As one of the cleanest forms of energy in the world, green hydrogen is one of the ultimate solutions to achieve **net-zero emissions**.

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### **The brief Scope of Work of the Consultant would be:**

- Conducting Feasibility study
- Define scope of Utilization of Green Hydrogen and e-Methanol, so generated
- Exploring possibility of executing the Project through Public-Private partnership
- Define quantum of responsibility to be borne by individual stakeholders in PPP model
- Submit suggestions on arranging Soft Loans for Project execution
- Site survey & selection, requirement of Water, other resources, constrains if any regarding resources
- Undertake Safety studies
- Submit CAPEX & OPEX estimations

- Define Optimal configuration of Proposed Green Hydrogen plant for balanced SPV, Electrolyser and continuous H2 supply
- Define basis of design/concept of Installation
- Type of connection between SPV and Electrolyser so as to minimize Losses
- Storage solutions ,pipings , Layouts etc.
- Technology selection for Carbon capture and e-Methanol plants
- Land requirement of the projects and marking its Location in Plot plan with all interconnections , power supply , storage solutions etc.
- Study Potential demand of Green hydrogen and e-Methanol
- Identify demand from Target Industries for both products.
- Transportation study of Green Hydrogen and e-Methanol.
- Generation of basic data by laboratory tests / analysis, site survey, generation of other site related data, soil investigation, Ground improvement related data, route survey, EIA study
- Any cost/fees towards 'licensor' in the project.
- Any study for storage/transport of Oxygen
- Project implementation strategy and Time frame for Project completion
- Anything else that is not mentioned above

**Eligibility Criteria:**

The Prospective bidders should fulfill the minimum criteria as mentioned below:

1. Should have undertaken EPC project ,either as direct vendor or subvendor in the field of Green Hydrogen or Carbon Capture or e-methanol plant .

**OR**

Should have prepared DPR for project of Green Hydrogen or Carbon Capture or e-methanol plant , either as direct consultant or as sub-consultant.

2. The experience may be in India or abroad.