

## Municipal Corporation of Delhi

Office of the Executive Engineer (WtE) DEMS
Room No.1901, 19th Floor, Dr. SPM, Civic Centre
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No. EE/WtE/MCD/DEMS/2023-24/D-16

Date: 20/07/2023

## **EXPRESSION OF INTEREST**

Municipal Corporation of Delhi (MCD), invites Expression of Interest (EOI) for setting up "Municipal Solid Waste Processing Facility based on Zero Residue Green Technology through Torrefaction Process" in the jurisdiction of MCD. The EOI is hereby called from the experienced companies/organizations with well-established financial system, sound project management and technical background in designing, constructing and operating Zero Residue Green Technology projects or any similar suitable technology through torrefaction with capacity ranging from 500 – 1000 TPD for processing of mixed MSW and RDF.

The interested companies can visit the MCD's website https://mcdonline.nic.in/portal to check the requirements of the department before submitting the EOI. The sealed proposal superscribed as EOI- for setting up of "Municipal Solid Waste Processing Facility based on Zero Residue Green Technology through Torrefaction Process" should be submitted by 31st August 2023 at 3:00 PM at the address mentioned above in the header through Speed Post/ Registered Post.

A pre-proposal meeting is scheduled for interested parties who have implemented such technology in India and/ or abroad on 10<sup>th</sup> August 2023 at 03:00 PM in the conference room at 4<sup>th</sup> Floor, E-1 Block, Dr. S.P.M. Civic Centre, JLN Marg, New Delhi – 110002.

Executive Engineer (WTE) DEMS

#### Distribution:

1. Director (P&I) for publishing in leading National Newspapers

2. Director (IT) for uploading on MCD's web portal along with attached EOI document

#### **Expression of Interest for Zero Residue Green Technology**

### **Background**

MCD is having a population of approx. 192 Lakhs with an area of 1366.89 sq km which is 94.27% of total area of Delhi. There are 250 wards divided in 12 administrative zones with around 43 Lakhs households. The total waste generation in MCD is 11000 TPD. Currently, MCD has four no. of WTE plants of 6550 TPD which are processing mixed waste and RDF. Now, MCD is planning to setup a waste processing facility based on green fuel technology which is environment friendly and financially sustainable.

#### Scope of Work

MCD has been interested in adopting Zero Residue Green Technology with a capacity ranging from 500-1000 TPD through torrefaction for processing and disposal of mixed waste and RDF to manage municipal solid waste in the city dump. The interested companies/organizations, with well-established financial system, sound project management and technical background in designing, constructing and operating Zero Residue Green Technology based on torrefaction process are required to participate.

Further, the technology to be used by the interested company should be economically viable, suited to the local conditions, and environmentally complaint

Broadly, the tentative scope of the work would include:

- Design, install, commission and operate the Zero Residue Green Technology based on torrefaction process with zero waste at the end of the process that is adequately designed to handle, process and dispose MSW/RDF by torrefaction.
- Handle, manage and dispose any residue, left over, effluents, and emissions in the process in accordance with local and national rules and regulations including CPCB norms. Delivery of MSW/RDF will be provided by the MCD to the company at the facility gate for processing and disposal.

Interested companies/applicants are requested to furnish the following information to MCD along with a signed declaration of intent:

## 1. Details of company/organization

Please provide details of the entity which is/are submitting an Expression of Interest for the project:

Name:

Legal Status (Company: Public/Private, Partnership, Limited Liability Partnership, Sole Proprietorship, Any order):

Country of Incorporation:

Date of establishment in DDMMYY format:

Principal place of business:

Contact details of designed representative

- 1. Name
- 2. Designation
- 3. Address
- 4. Phone No./Fax No./E mail

The company may provide above-mentioned information in a clear tabular form as per the Table given below:

Name of Company with Complete Address	Key Person of the Company	Number of Similar Projects

## 2. Technology proposed and detailed cost analysis

Please provide the details of Zero Residue Green Technology through torrefaction for processing of RDF and mixed MSW

#### 2.1 Technology

- Suitability of treating organic waste/ mixed MSW
- Suitability of treating RDF
- Suitability of treating inerts
- Land requirement for the technology.
- Plan for monetizing of by-products or end products from processing of waste
- Plan for self-sustainable financed technology
- Strategy for managing the technology for Waste Management (repairs, maintenance, patenting, etc.)

- Benefits of using such technology
- Any other issues related to use of technology
- Other requirements (if any)

Note: The Company may provide above-mentioned information in a clear tabular form as per the Table given below:

Technology Used:			
Plant Capacity (TPD)	Type of Technology Proposed for		
	RDF	Inorganic waste/ mixed	Inert/Residue
		MSW	

## 2.2 Capital Cost

<b>Estimated Capital Cost</b>	Funding Structure	Capital Investment by the Company	Time Required for Setting-up the Plant

#### 2.3 O&M cost

Manpower staffing for the project including details of manpower requirements (skilled and semi-skilled) Operational costs (kindly specify actual values for operational requirements)

Total operational cost (monthly)	Daily usage of electricity (avg) in MW	Daily usage of fuel (avg)	Daily usage of water (avg)

#### 3. Credentials/ Experience in handling similar projects

Please provide the details of projects based on the company's Zero Residue Green Technology through torrefaction with a capacity ranging from 500-1000 TPD, that have been completed, or are in the stage of completion by the company. Mention projects in ascending order of capacity, and furnish the following for each project:

Name of the Client / Public Authority awarding the project:

Date of completion of the project (in MMYY format):

Scale of the project (in TPD):

Model adopted:

- 1. Design Build Finance and Operate (DBFO); or
- 2. Design Build Operate Transfer (DBOT); or
- 3. Build Own Operate Transfer (BOOT); or
- 4. Build Own Operate (BOO); or

- 5. Design and Build; or
- 6. Design Build and Operate (DBO); or
- 7. Build Operate Transfer (BOT), or
- 8. Any other: kindly specify

#### Operation Mode:

- 1. Receipt of waste, all 7 days of week, all 365 days (Yes/No):
- 2. Input / Output streams and yields:
- 3. Land requirement including plant footprint area (in Sq Mt):
- 4. Environment management plan Emissions (indicate type of pollutants, emission levels, emission control/ capturing technologies in place):
- 5. Inert waste (indicate quantity generated as % of input stream, composition, on-site/off- site disposal mechanism in place):
- 6. Use of water (indicate quantity used as % of input stream, composition, on-site/off- site disposal mechanism in place):
- 7. Other waste (indicate quantity generated as % of input stream, composition, on-site/off- site disposal mechanism in place):
- 8. Leachate (indicate quantity generated as % of input stream, composition, on-site/off- site treatment mechanism in place):
- 9. Odour (describe odour management plan in place):
- 10. Utilization scale of by-product/end- product including revenue collection and cost recovery:
- 11. Machineries required and their life span (mention in years):
- 12. Operation & Maintenance (O&M) requirements of technology:
- 13. Scope of work of the company
- 14. Scope of work of the Client / Public Authority awarding the project
- 15. Duration of contract
- 16. Any risks perceived for success of the project and risk mitigation mechanisms undertaken

\*\*Please summarize the project; along with any other useful information which is accurate and precise; in Annexure I\*\*

# To: Office of the Executive Engineer (WtE) DEMS Room No.1901, 19th Floor, Dr. SPM, Civic Centre, JLN Marg, New Delhi- 110002 Dear Sir, In response to your invitation towards Expression of Interest for design, installation, commissioning, and operation of Zero Residue Green Technology through torrefaction for the processing of mixed MSW and RDF of 500-1000 TPD, we\_\_\_\_\_ <agency's name> hereby declare our interest to bid for this project, and further declare that: The information provided in this EOI application is true and correct to the best of our knowledge. We will inform MCD immediately, if there is any change in the information provided in this application at any stage during the EOI / tender procedure or during implementation of the project scope. We also understand that if information provided is proved false, the application and any award made on its basis may be considered null and void. Date: Yours faithfully

<Designation

**Applicant's Declaration** 

<Name of authorized signatory>,

Company Name: Address:				Annexure - 1	
Contact no.:					
E-mail id:					
Designed capacity	500 TPD	700 TPD	850 TPD	1000 TPD	
(Mixed waste)					
Method for managing waste:					
Mixed MSW					
• RDF					
• INERT					
• Any other (please mention)					
Method for managing in-organic/					
Inert/ Rejects component:					
• Landfill					
• Any other (please mention)					
Total Capital Cost (INR)					
(Attach separate sheet for splitting					
capital costs components)					
Total Monthly O&M Cost (INR)					
(Attach separate sheet for splitting					
O&M components)					
Any additional cost (INR)					
(Specify the components)					
Total land Requirement for					
handling waste (sq mt):					
Time required in commissioning					
Type of waste required for					
processing					
Availability of onsite segregation					
facilities (Y/N), Please specify					
type					
O&M cost offset criteria through					
sale of end-products					
Total Cost (INR)					

## **General Information for Respondents**

- 1. The purpose of this EOI is to solicit information on waste management technology. At the same time, this EOI provides the opportunity for companies/agencies to assist MCD in gathering technical information pertaining to setting up of Zero Residue Green Technology through torrefaction process in an environment friendly manner.
- 2. This EOI process is undertaken by MCD for the purpose of receiving data and information for planning purposes, and is not a request for competitive proposals; therefore, responses to this notice are not considered offers and shall not be accepted by MCD to form a binding contract
- 3. This EOI does not constitute a solicitation or a promise of a solicitation in the future and shall not be construed under any circumstances as a prerequisite or prequalification procedure. As such, this EOI is not to be considered as a request for proposals or as a tender or any Procurement Action. This EOI shall not, under any circumstances, constitute any commitment on MCD to negotiate with any or all interested parties, nor to enter into any agreement for provision of services at this stage.
- 4. Moreover, to preclude any doubt, it is emphasized that MCD shall have the right to reject, in whole or in part, any opinion, conclusion or information delivered to it through this EOI. MCD shall also have the right to use the information presented and/or submitted to it for the purpose of planning and preparing a tender or any other procedure, should MCD decide to implement one
- 5. MCD shall not be bound to accept and/or consider any response and it does not undertake herein any commitment whatsoever towards any of the interested parties. MCD may ignore any response which lacks information or has unclear details. The firm may be called to give presentations before a committee
- 6. It does not create any obligation on MCD's part to commence, continue or complete any purchase procedure and/or to act in any other method of acquisition, and MCD shall act at its sole and absolute discretion in this respect. This EOI does not commit MCD to contract for any supply or service or to publish any tenders or any other further procedure. MCD will not be obligated to pursue any particular acquisition alternative as a result of this EOI
- 7. MCD shall not be charged in any manner for the submission of information in accordance with this procedure. Respondents are advised that MCD will not pay for any information or administrative costs incurred in response to this EOI. All costs associated with responding to this EOI are solely at the responding parties' expense. Every Respondent shall bear their own costs with respect to this EOI and any information presented and/or submitted to MCD through this EOI is provided voluntarily.
- 8. Depending upon the submissions received, MCD may, as a result of this EOI, approach, at its sole discretion, one or more of the Respondents and/or any other party, in order to obtain additional information. MCD may also decide to set aside a period of time to gain such further information and visit their facilities of any or all the proposers. The meeting would take place in India and the cost shall be borne by each party individually

- 9. MCD may wish to share submitted information with outside technical experts for evaluation assistance in which case they will be informed about the privileged nature of the information. However, if a submitter wishes their information to be made available only to MCD, a prominent label/watermark stating "for MCD" must be placed on each such page and information be specifically marked as confidential
- 10. Respondents are solely responsible for properly marking and clearly identifying any proprietary information or trade secrets contained within their response. MCD will not be liable for, or suffer any consequential damages for any proprietary information not properly marked and clearly identified. Proprietary information received in response to this EOI will be safeguarded and handled in accordance with applicable regulations.
- 11. MCD reserves the right to accept as any commercial proposals from entities which did not participate in this EOI process but submit the bids in response to call for commercial bids in future, arising in whole or in part from the present EOI.
- 12. MCD reserve the right, at any time and at its sole discretion, to amend this EOI or any aspect thereof, as well as to extend the date for submission of the Responses. In addition, MCD reserves the right to cancel this EOI in its entirety at its sole discretion, without providing the Respondent(s) any (or no) reason or explanation
- 13. The decision of MCD shall be final and binding in evaluating and short listing the appropriate technology to be setup in MCD either from among the submissions in response to this EOI or from such source as deemed fit and suitable
- 14. MCD will endeavor to preserve the confidentiality of the information provided if at all.