

# **CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY**

(Department of Chemicals & Petrochemicals,  
Ministry of Chemicals & Fertilizers, Govt. of India)

CIPET Head Office  
T.V.K. Industrial Estate, Guindy, Chennai: 600 032  
Website: [www.cipet.gov.in](http://www.cipet.gov.in)



## **Expression of Interest (EOI) For Selection of Suppliers for the Supply, Installation, Commissioning and Testing of PYROLYSIS UNIT Equipment/Machinery of Plastics Waste Management System of CIPET Centres**

**Eol. No. CIPET HO/Pur/PWMC/2022/002**

**Date: 10/10/2022**

**EXPRESSION OF INTEREST (EOI)**

Central Institute of Petrochemicals Engineering Technology (CIPET), Head Office invites online Expression of Interest (EOI) from eligible, reputed companies/firms/manufacturers/OEM/Authorized dealers for the Supply, Installation, Commissioning and Testing of Equipment/Machinery for Plastics Waste Management Centres of CIPET as specified in this EOI Document.

The Expression of Interest Document can be downloaded from <https://www.tenderwizard.com/CIPET> OR Central Public Procurement (CPP) Portal <https://eprocure.gov.in> OR the Institute website - <https://www.cipet.gov.in/tender-notice/index.php> or through Gem portal <https://gem.gov.in>

**Schedule of Dates**

Sl. No.	Particulars	Date	Time
1	Date of Online Publication/Download of Eol Document	10/10/2022	16:30 hrs
2	Submission Start Date	10/10/2022	17 :00 hrs
3	Last date for Submission of Eol Response	01/11/2022	10:30 hrs
4	Opening of Eol Responses	01/11/2022	11:00 hrs
5	Preliminary short listed candidates will be called for Technical presentation	Tentatively 02 <sup>nd</sup> week of November	
6	Declaration of Shortlisted Firms	To be updated in website	

No manual document will be accepted. All documents should be submitted online through <https://www.tenderwizard.com/CIPET> using valid DSC key.

Any queries relating to the process of online bid submission may contact to the Helpdesk Support - **Phone No. 044-22254788** between Monday – Friday – 09:00 AM to 05:30 PM and can represent your clarifications in the e-mail id: [purchaseho@cipet.gov.in](mailto:purchaseho@cipet.gov.in)

## EOI NOTIFICATION

### 1. OBJECTIVES OF EOI:

CIPET, Head Office invites (EOI) from eligible, reputed companies/firms/manufacturers/OEM/Authorized dealers for the Supply, Installation, Commissioning and Testing of Equipment/Machinery for Plastics Waste Management Centres of CIPET.

### 2. About CIPET:

Central Institute of Petrochemicals Engineering & Technology (CIPET) is a premier national institution under the aegis of the Ministry of Chemicals & Fertilizers, Govt. of India fully devoted to Skill, Technology Support Services, Academic and Research Development (STAR). CIPET operates on hub & spokes model with 40 locations - Institute of Petrochemicals Technology (IPT), Centre for Skilling and Technical Services (CSTS), School for Advance Research in Petrochemicals (SARP) & Petrochemical Data Services spread across the length & breadth of the country catering to the needs of Polymer and allied industries.

CIPET stands tall not only as a premier institute in the country but also emerged as a global institution renowned for its research & development process and high- quality training in the field of plastics. CIPET has been accredited by ISO/IEC - 17025, ISO/IEC-17020 and ISO9001:2015 certified on Design, Development and Conduct of specialized training courses in Plastics Engineering & Technology and rendering technical/consultancy services in Design, Tooling, Plastics Processing & Testing to the plastics & allied industry. Besides, STAR activities, CIPET also play a pivotal role in developing employment opportunities especially for youth, self-employment and entrepreneur development through various skill development training programs.

Headquartered in Chennai, CIPET has IPT centres at Ahmedabad, Bhubaneswar, Chennai, Lucknow, Kochi, Raipur, Jaipur and Murthal and CSTS centres at Agartala, Amritsar, Aurangabad, Baddi, Balasore, Bhopal, Bhubaneswar, Chandrapur, Dehradun, Guwahati, Gwalior, Hajipur, Haldia, Hyderabad, Imphal, Jaipur, Korba, Madurai, Mysore, Ranchi, Valsad, Varanasi and Vijayawada. All the centres are equipped with excellent infrastructure facilities in the areas of Design, CAD/CAM/CAE, Tooling & Mould Manufacturing, Plastics Processing, Testing and Quality Assurance of India. The infrastructure facilities in terms of Machinery, Equipment and Technology are continuously upgraded and modernized in tune with the global plastics industry.

CIPET is in process of setting up of Plastics Waste Management Centres at 04 locations in India (Varanasi, Ahmedabad, Patna, Bengaluru). **Initially, CIPET plans to implement at Varanasi location in Phase – I.**

### 3. Scope of Work

Supply, Installation, Commissioning and Testing of Set of equipments/machinery as per the package mentioned.

3.1 Detailed Technical specifications is enclosed as Annexure – F.

Sl. no.	Package	Name of Equipment/Machinery intended for EOI	Page no.
1	Package-F	PYROLYSIS UNIT for Plastics Waste Management System	17

Note:

- 1) The Bidders who has applied in earlier EOI no. **Eol Ref. No. CIPET HO/Pur/PWMC/2022/001** dated **03/06/2022** for PWMC equipment's **need not apply again in this EOI.**
- 2) This Eol is for the package - **PYROLYSIS UNIT**. The Bidder can apply for other packages separately as per their expertise and capabilities, please refer to our other EOI published for the same.
- 3) Bidders may attach the details of equipment/machinery with complete specification duly authorized along with documents i.e., Leaflet, catalogue, literature, test reports if any.

### 4. Eligibility Criteria:

1. A registered Company/Manufacturer/OEM or their Authorized Dealers should have similar work experience and annual turnover more than Rs.1.00 Crore during the last three financial years.
2. The Bidder should have a valid License/Registration, GSTIN No., PAN No., Bank Account No. & IFSC Code & registered office in India.
3. The Bidder should not have been blacklisted by any Govt. Dept./Semi-Govt./Dept. or any other organization.
4. Information regarding past experience for Supply & Installation of the same/similar equipment/machinery in India should be furnished as per the form 2 & 3. Documentary Evidence to be supported by Purchase Orders and Project/installation completion certificates.
5. Bidders shall have sufficient manufacturing capacity /tie-ups and should have the after sales support infrastructure.
6. In case, the Bidder offers to supply machines / equipments, which are not manufactured by them, the Bidder should be duly authorized by the Principal/OEM as authorized dealer to supply the machines / equipments. Relevant document to be submitted and also as per CIPET format form no 4 (page no -11) need to be submitted.
7. Preference will be given to the Manufacturers/ their authorized dealers having more than 3 years of association with same manufacturers to ensure effective after sales service

support.

8. If the Bidder has already supplied / received order to supply any similar equipment / machine to CIPET or any Government organization, the performance, timeline and quality of supply and services will be considered as qualifying criteria.
9. Bidders should provide relative supporting documents to support all claims/information provided in Vendor evaluation format as per Annexure – II – page no. 24 to 28. **If, Bidder is not an OEM then the Authorized Dealers should submit the OEM documents/information for the Vendor evaluation format.**

### **General Terms & conditions**

10. The Bidder can apply for one full package or more than one package as per their expertise and capabilities. However separate EOI has to be submitted for each package
11. The Technical specifications of the offered equipment/machinery should be of recent model & make and its spares should be available in the market for minimum 6 years.
12. Details of product offered shall be supported with complete specification duly authorized along with documents i.e., Leaflet, catalogue, literature, test reports etc.
13. The following information/ documents should be part of the proposal
  - a) Copies of audited balance sheet of last three consecutive years/ CA certificate certifying annual turnover & financial status.
  - b) Copies of Permanent Account Number (PAN) and latest Income Tax Return (ITR).
  - c) GST Registration and copy of latest GST return file for last three consecutive years
14. Technical/Commercial Bids shall be called through GeM portal from technically qualified and shortlisted bidders at later stage.
15. Govt. of India guidelines in Make in India policy, Relaxation of Norms for Startup and Micro & Small Enterprises in Public Procurement will be followed.
16. Relaxation in Prior Turnover and Experience:  
CIPET reserves its right to relax the condition of prior turnover and prior experience for start-up enterprises subject to meeting of quality & technical specifications. The decision of the CIPET in this regard shall be final.

## **5. Amendment of Bidding Documents:**

At any time prior to the deadline for submission of EOI, CIPET may, for any reason, whether at their own initiative or in response to a clarification requested by a prospective bidder, modify the EOI \_ Technical Specifications by amendment.

## **6. EMD**

Nil

## **7. Submission of Bid:**

Prospective parties may submit their “Expression of Interest (EOI) for Supply, Installation, Commissioning and Testing of Set of equipment/machinery along-with relevant details through online, by uploading scanned copy (signed & stamped by the authorized signatory) in pdf format through portal <https://www.tenderwizard.com/CIPET>

No manual document will be accepted.

The bidder is expected to examine all instructions, terms & conditions, specifications in the EOI form. Failure to furnish information required in every respect will be the Bidders risk and may result into rejection of the bid(s).

Any EOI received after the scheduled date & time or incomplete in any manner will not be accepted.

## **8. Process:**

Preliminary Shortlisted bidders/suppliers, who qualifies as per Eligibility Criteria will be invited for a technical presentation as part of the technical evaluation. The date for presentation will be intimated later. During the presentation, Bidders should present the equipment/machinery offered as per technical specifications and packages.

Technical committee will visit to verify the capacity and capability of the bidders to assess the performance of similar equipments/machinery supplied by them.

The Bidders will be evaluated as per the evaluation criteria & as per the Vendor evaluation format given in the Annexure -II (refer page no. 24 to 28) .So Bidders should provide relative supporting documents to support all claims/information provided in Vendor evaluation format.

## **9. Prospective Bidders / Parties acknowledge and agrees that:**

CIPET has issued this Expression of Interest with the best intention to explore the market for eligible and interested Bidders and has no compulsions to enter into definitive contractual agreements.

Prospective Bidders / Parties acknowledge and agree that response to the EOI is purely voluntary action on their part and for any expenditure on this account by them, CIPET will have no obligation or liability to the prospective bidders / parties in the event of cancellation of EOI.

## **10. CIPET is the final authority and the decision will be final and binding on the supplier for any disputes. All legal disputes will have the jurisdiction of Chennai only.**

**Form 1**

Eol. No.- \_\_\_\_\_

Date: \_\_\_\_\_

**Covering Letter on Letterhead of the Bidder with Correspondence Details**

To  
 The Principal Director (T)  
 CIPET Head office,  
 TVK Industrial Area, Guindy, Chennai- 600032.  
 Tamil Nadu.

**Sub: Expression of Interest for Supply, Installation, Commissioning and Testing of  
 PYROLYSIS UNIT equipment / machinery of Plastic Waste Management System for CIPET**

Dear Sir,

This is with reference to your advertisement inviting Eol for Supply, Installation, Commissioning and Testing of equipment/machinery of Plastic Waste Management System for CIPET. We, the undersigned, provide the below details for your kind consideration.

S.No.	Description	Firm's Response
1.	Name and complete address of the firm	Name: Address: Email Id: Contact no: Month & Year of Establishment:
2.	Name of the Proprietor/Partner/Director and complete address	Name: Designation: Address: Email Id: Contact no:
3.	Type of the Organization & Legal Status (Whether Company, Proprietorship, Partnership, Society/Trust/MSJE or any other)	
4.	Name and contact details of the Authorized person/Supplier/Manufacturer	Name: Designation: Address: Email Id: Contact number:
<b>5.</b>	<b>Mandatory Documents:</b>	<b>Attached (Yes or No)</b>
	Profile of their company with area, man power details & the manufacturing facilities	
A)	Copy of Registration of GST	
B)	Copy of PAN Card	
C)	Certificate of Registration for NSIC / MSME / Startup / Others	

D)	Bank account details:	
E)	Authorization certificate from OEM ( If not a Manufacturer for the machine / equipment) as per Form 4	
F)	Financial status of the firm (audited balance sheet & Profit and loss statement of last three consecutive Financial Years) along with CA Certifying Annual turnover.	
G)	Latest IT returns of the firm	
H)	Experience of the last three years (attach proof) as per Form2& Form3	
I)	Blacklisting An Declaration to be given by the authorized signatory	
j)	Technical Leaflet, catalogue, literature, test reports etc. for packages	

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading, we are liable to be disqualified from the EOI selection process.

We agree to abide by the conditions set forth in this EOI.

We hereby declare that our proposal submitted in response to this Eoi is made in good faith and the information contained is true and correct to the best of our knowledge and belief.

Sincerely,

**Signature of Bidder**

**Name:**\_\_\_\_\_

**Designation:**\_\_\_\_\_



## Form 2

**List of Government Organizations/Dept./Private sector or any other for whom the Bidder has Supplied and Installed the same / similar equipments during last three years(must be supported with work/Purchase orders)**

<b>Name of the organization</b>	<b>Name of Contact Person</b>	<b>Contact No./email id</b>

**Signature of the Bidder**

Name \_\_\_\_\_

Designation \_\_\_\_\_

### Form 3

#### **PREVIOUS SUPPLY ORDER DETAILS**

(for Similar/Same Goods/Equipment for a period of last three years)

**Name of the Firm**\_\_\_\_\_

Order placed by (Full address of Purchaser)	Order No. and Date	Description and quantity of ordered equipment	Value of order	Date of Completion of delivery as per contract	Has the equipment been installed satisfactorily(Atta ch a Certificate from the Purchaser/Consi gnee)	Contact person along with Telephone No. , Fax No. and email id )

Signature and Seal of the Manufacturer / Bidder

Place\_\_\_\_\_

Date: \_\_\_\_\_

**Form 4**  
ORIGINAL EQUIPMENT MANUFACTURER (OEM)  
Manufacturing authorization form (MAF)  
**(On Letter Head of Manufacturer)**

EOI No.:-.....

Date:-.....

To  
The Principal Director (T)  
CIPET Head office,  
TVK Industrial Area, Guindy, Chennai –  
600032.  
Tamil Nadu.

Dear Sir,

We manufactures of original equipment at (.....address  
factory.....) do here by authorize M/s (Name and address of Authorized Dealer)  
to submit technical offer against the **EOI for Package (F) PYROLYSIS UNIT equipment / machinery  
of Plastic Waste Management System for CIPET**

M/s.....is authorized to Submit the bid and conclude the contract in  
regard to this business.

We here by extend our full guarantee and warranty for the goods offered by the above firm. The dealer  
is associated with us from the period \_\_\_\_\_ to \_\_\_\_\_ (DD/MM/YYYY)

Yours Faithfully,

(Sinature)

(Name & Seal of Manufactures)

**Format of Vendor Evaluation Report & Mark sheet**  
**Vendor Evaluation Report to be submitted by evaluation committee**

<b>PART A</b>			
1		Name Of Vendor	
	1.1	Registered Office Address	
		Telephone No	
		Fax No	
		Email Address	
		Website	
	1.2	Manufacturing Site Address	
		Telephone No	
		Fax No	
		Email Address	
		Website	
	1.3	Nature Of The Company	
	1.5	NAME & DESIGNATION OF HEAD OF ORGANISATION With Contact No.	
<b>Part B</b>			
1		Survey Advice Ref	
2	2.1	Item For Which Survey To Be Carried	
	2.2	Date Of Survey	
3		Office Works Visited	
4		Persons Contacted	
5		Design Facilities:	
	5.1	Engineers	
	5.2	Specialists	
	5.3	No Of Working Level Personal	
	5.4	Drafting Facility	
	5.5	Experiences In Design	
	5.6	Familiarity & Availability Of Codes/ Specs.	
	5.7	R&D Facilities	
	5.8	Technical Collaboration If any	
6		Quality Control Facilities	
	6.1	Qc Setup Engineers / Inspectors	

		Adequacy Of Experience	
	6.2	Qc Manual/ Written Procedures	
	6.3	Extent of application Of Qc	
		Procedures At Shop Floor	
	6.4	Availability Of Gauges/Fixtures	
	6.5	Periodical Calibration Of	
		Equipments/ Instruments	
	6.6	Qc Records/ Documents	
	6.7	ISO Accreditation For Quality	
		Systems	
7		Testing Facilities	
	7.1	In House	
	7.2	Testing Facilities Dependent On	
		External Agencies	
	7.3	Adequacy Of Testing	
8		Performance Reliability	
	8.1	Satisfactory Execution Of Similar	
		Orders	
	8.2	After Sales Services	

<b>PART C</b>			
1		<u>SURVEY CONCLUSION-</u>	
2		<u>RECOMENDATION-</u>	
		Signature	Signature
		Name of committee member:	Name of committee member:
		Designation:	Designation:
		Signature	Signature
		Name of committee member:	Name of committee member:
		Designation	Designation
		Signature	Signature
		Name of committee member:	Name of committee member:
		Designation	Designation

VENDOR EVALUATION REPORT – (For Office Use Only )					
VENDOR'S NAME:					
LOCATION/ADDRESS:					
PRODUCT NAMES:					
Sr. No	TITLE	POINTS ALLOTTED Maximum	SURVEYOR'S RATING		
<b>1</b>	<b>Over all facilities</b>		<b>12</b>		
1.1	Registration as Micro, Small, Medium or Large Enterprise with in India.	2			
1.2	ISO 9001:2008 certificate Quality management system	2			
1.3	Income tax filing details.	1			
1.4	Import & Export license.	2			
1.5	National level quality awards, research & development award or outstanding entrepreneurship award from government.	2			
1.6	R&D facilities.	1			
1.7	Technical collaboration with international reputed firm.	1			
1.8	GEM registration	1			
<b>2</b>	<b>Manufacturing facilities</b>		<b>25</b>		
2.1	Open space within factory premises with respect to manufacturing items.	2			
2.2	Buildup space within factory premises with respect to manufacturing items.	2			
2.3	Shop layout and defined areas/sheds for separate production activities with respect to Manufacturing items.	2			
2.4	Storage area/shed for raw material	1			
2.5	Storage area/shed for finished product.	1			
2.6	Production planning/application	2			
2.7	Raw material/component procurement	2			

2.8	Production staff like engineers, supervisors, skilled workers, other workers.	3			
2.9	Plant & machinery necessary for production of the listed items.	4			
2.1	Machinery & equipments for material handling	2			
2.11	Automation and process controls.	2			
2.12	Packing, marking, dispatching facilities.	2			
<b>3</b>	<b>Testing facility</b>				
3.1	Tests carried out on raw material.	1	<b>10</b>		
3.2	In-house testing facilities, testing equipments available as per relevant BIS code.	2			
3.3	Available gauges, measuring device, testing equipment, meters, inspection aids, instrument of Standard makes with NABL accredited laboratory calibration report.	2			
3.4	In process checks.	1			
3.5	Laboratory facilities.	2			
3.6	Finished product tests/checks.	1			
3.7	Special / type test	1			
<b>4</b>	<b>Quality control &amp; quality assurance plan</b>		<b>7</b>		
4.1	QC manual, written procedures, quality assurance plan etc.	1			
4.2	Quality control staff like engineers, supervisors, skilled workers.	1			
4.3	Documentation/procedures	1			
4.4	Traceability	1			
4.5	Calibration records	2			
4.6	Extent of supervision	1			
<b>5</b>	<b>Design facility</b>		<b>12</b>		
5.1	Design staff like engineers, specialists, technologists, draft mans.	5			
5.2	Designing facility available.	5			
5.3	Availability of codes/specification/ R&D	2			

<b>6</b>	<b>Experience for particular item, equipment, machinery, product etc.</b>				
6.1	3 to 5 years	2	<b>14</b>		
6.2	5 to 7 years	3			
6.3	7 to 10 years	4			
6.4	Above 10 years	5			
<b>7</b>	<b>Turn over</b>				
7.1	0.5 to 1 crore	2	<b>10</b>		
7.2	1 to 5 crore	3			
7.3	Above 05 crore	5			
<b>8</b>	<b>After sales services</b>				
8.1	Satisfactory execution of similar supply orders to government department.	2	<b>10</b>		
8.2	Satisfactory execution of similar supply orders to reputed non-Governmental organization.	2			
8.3	State level network of service after sales in State where equipment to be supplied.	4			
8.4	Customer complaints, resolution, promptness.	2			
		Total	<b>100</b>		
<b>Note:</b>	<b>1. The minimum rating required for Manufacturing Facility is 19 out of 25.</b>				
	<b>2. The minimum rating required for testing facility is 7 out of 10.</b>				
	<b>3. The minimum rating required for after sales services is 6 out of 10.</b>				
	<b>4. The minimum rating required for design facility is 8 out of 12.</b>				
	<b>5. Vendor over all qualifying marks should be 60%</b>				

**Vendor should provide relative supporting documents to support all claims/information provided in format. Authorized Dealers should submit their OEM documents/information for the above.**



**PYROLYSIS UNIT**  
**of Plastic Waste Management System for CIPET**

<b>Sr. No.</b>	<b>Parts/components/parameters of the unit</b>	<b>Specifications</b>
1	Make	To be specified by bidder
2	Model	To be specified by bidder
3	Waste plastics pyrolysis unit with set of accessories for recovery of pyrolysis oil, produced gases and solid materials	<p>Pyrolysis with environmental friendly closed loop thermal breaking reaction of the high molecular weight plastics in an oxygen free environment producing small molecular weight molecules.</p> <p>(a) Quantity: 01 (b) Pyrolysis capacity of 1000 kg per batch (c) Catalytic pyrolysis</p>
4	Applications	<p>(a) Production of quality pyrolysis oil (b) Pyrolysis unit should be capable of pyrolyzing carry bags, mixed plastic scrap, laminates, packing material waste, multilayered plastic etc. (c) Recover produced pyrolysis gases and solid residue i.e., charcoal of high quality</p>
5	Pyrolysis reactor	<p>(a) MOC: SS 316 with wall thickness of minimum 8 mm. (b) Pressure gauge(s), safety valve(s) and automatic pressure release valve (c) Reactor capacity 1000 kg or better (d) Jacketed reactor with thermal insulating materials (e) Thermocouple(s) for temperature measurement at reactor door and furnace (f) Should be capable of feeding Nitrogen / CO<sub>2</sub> Purging for safety purpose (g) Appropriate plastic waste feeding system to reactor (h) Gas purging and pressure dial gauge should be fitted to top of the reactor along with outlet gaseous fume (i) Each item should be specified by bidder.</p>
6	Pyrolysis heating system	<p>(a) Gas heaters and electric heaters. Both the heaters should be operated simultaneously as well as independently as per the requirement.</p> <p>(b) Dual: Electrically fired and gas fired system, having provision for feeding produced pyrolysis gas for heating purpose with close loop (produced gas &amp; pyrolysis oil /LDO burners with pumping unit and appropriate capacity oil tank)</p>