



SUCHITWA MISSION
Local Self Government Department
Government of Kerala

No. SM/1249/2024-C4-Part(1)

Date: 28-09-2025

**EXPRESSION OF INTEREST (EoI) FOR INVITING PRIVATE AGENCIES TO
ESTABLISH FACILITIES FOR PROCESSING COMBUSTIBLE NON-
RECYCLABLE REJECT WASTE INTO RDF/SCF AND ENABLING ITS CO-
PROCESSING**

1. INTRODUCTION

Suchitwa Mission invites Expression of Interest (EoI) from registered firms, NGOs, organizations, and experienced and prospective investors for our upcoming Combustible Non-recyclable Reject Waste Management System.

The focus of this endeavor is to establish facilities for processing combustible, non-recyclable reject waste into RDF/SCF and enabling its co-processing through facilities such as cement factories and waste-to-energy facilities, for the efficient management of non-biodegradable waste (NBDW) within local bodies across Kerala. We believe that your expertise and commitment to sustainable practices align perfectly with our mission to address the challenges associated with non-biodegradable waste in our communities.

We invite entities with a proven track record in waste management, as well as potential investors, to submit their Expression of Interest (EoI) for consideration. The submission should include a detailed profile of the entity, a summary of relevant experience, and proposed methodologies that could enhance the efficiency of the Reject Waste Management.

2. DISCLAIMER

1. The information contained in this Expression of Interest (here after expressed as "EoI") document or subsequently provided to agencies, whether in documentary form by SUCHITWA MISSION, is provided on the terms and conditions set out in this EoI and such other terms and conditions subject to which such information is provided.
2. This EoI is not an agreement or an offer by the SUCHITWA MISSION to the prospective agencies or any other person. The purpose of this EoI is to prepare a list of agencies eligible for participating in the provide interested parties with information that may be useful to them in the formulation & submission of their proposals pursuant to this EoI.
3. Modalities of engagement of selected entities will be decided and informed later.
4. This EoI includes statements, which reflect various assumptions and assessments arrived at by the SUCHITWA MISSION in relation to this EoI. Such assumptions,

assessments and statements do not purport to contain all the information that each agency may require.

5. This EoI may not be appropriate for all persons, and it is not possible for the SUCHITWA MISSION to consider the objectives, technical expertise and particular needs of each party who reads or uses this EoI. Information provided in this EoI to the agency may be on a wide range of matters, some of which may depend upon interpretation of law. The information given is not intended to be an exhaustive account of statutory requirements and should not be regarded as a complete or authoritative statement of law. SUCHITWA MISSION accepts no responsibility for the accuracy or otherwise of any interpretation or opinion on the law expressed herein.
6. SUCHITWA MISSION makes no representation or warranty and shall have no liability to any person including any agency under any law, statute, rules or regulations or tort, principles of restitution for unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this EoI or otherwise, and any assessment, assumption, statement or information contained therein or deemed to form part of this EoI or arising in any way in this Selection Process.
7. SUCHITWA MISSION also accepts no liability of any nature whether resulting from negligence or otherwise, however arising from reliance of any agency upon the statements contained in this EoI.
8. SUCHITWA MISSION may, in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumption contained in this EoI.
9. The issue of this EoI does not imply that SUCHITWA MISSION is bound to select an agency or to appoint the selected agency, as the case may be and the SUCHITWA MISSION reserves the right to reject all or any of the Proposals without assigning any reasons whatsoever.
10. The technologies/process proposed by the agency shall be environment friendly and complying with the waste management rules of the country. The proposed technology should be an approved one by the Central Pollution Control Board (CPCB). If suchitwa mission finds that the proposed technology is not compatible with existing rules of the state, the same shall be outrightly disqualified.

Suchitwa Mission is pleased to announce our intention to procure state-of-the-art non biodegradable waste management machineries and technologies to enhance our waste management capabilities. We are inviting expressions of interest from eligible and reputable companies who specialize in innovative solutions for combustible non-recyclable reject waste processing and management.

3. OVERVIEW

Kerala has established an effective waste management system for non-biodegradable waste. Women's self-help groups, known as Haritha Karma Sena, primarily collect segregated waste from households and establishments and transfer it to Material Collection Facilities (MCFs) and Resource Recovery Facilities (RRFs) for further sorting and processing. At these facilities, recyclable waste is sent to recycling units after secondary

segregation, while non-recyclable waste is transported to co-processing facilities, such as cement plants, where it is used as Refuse-Derived Fuel (RDF) for energy recovery. Suchitwa Mission has empanelled experienced private agencies for the management of non-biodegradable waste, and the Clean Kerala Company also actively contributes to this sector. Both government and private agencies work to ensure the safe and accountable transportation of waste.

Despite improvements in traceability and accountability within the state's non-biodegradable waste management process, challenges persist in the interstate transportation of reject waste—the non-recyclable combustible portion intended for co-processing—primarily because all cement kilns are located outside Kerala. In light of recent allegations regarding the dumping of waste in neighbouring states, it has become essential to standardise the form in which reject waste is transported. To address these challenges and ensure uniformity and accountability, Suchitwa Mission has initiated a state-level process to identify and engage agencies with the appropriate infrastructure for processing reject waste in compliance with Ministry of Housing and Urban Affairs (MoHUA) norms to SCF/RDF. This initiative will facilitate co-processing in authorised cement kilns or similar facilities, ensuring that the non-recyclable combustible fraction of waste leaving the state is in a uniform form, thereby enabling the identification of unauthorised waste movement.

The state is also planning to establish a centralised Waste-to-Energy (W2E) plant to scientifically process the reject waste, thereby reducing interstate movement and promoting sustainable waste management. Once operational, the processed waste from these approved facilities can be routed directly to the W2E plant for energy recovery. This approach will not only streamline waste management within the state but also significantly reduce the transportation costs currently incurred.

4. SCOPE OF WORK

The empaneled agencies shall be responsible for end-to-end management of non-recyclable fraction of the nonbiodegradable waste from MCFs to co-processing centres. The key responsibilities are:

- shall facilitate the systematic and timely collection and transportation of the non-recyclable combustible fraction (NRCF) of non-biodegradable waste from the allotted MCF/RRF/ other approved facility. The feedstock will be provided to the facility as per availability.
- The agency shall set up and commence operation of the plant within six months of receiving approval from Suchitwa Mission.
- The catchment area of the collection of waste will be according to the gap in the existing system. (as allotted by the Govt/SM)
- Ensure safe transportation of waste to the agency's KSPCB authorized godown facilities for storage, and further segregation shall be done to ensure maximum resource recovery. Agencies should also be equipped to manage NRCF collected from public bins and other municipal sources, thereby expanding their services beyond just collection from MRF/RRFs and decentralized units.
- The recyclable fraction of the collected non-biodegradable waste recovered from the collected waste shall be baled and forwarded to authorized recyclers for further processing.
- The non-recyclable combustible portion of the collected waste shall be processed

using shredders and other required machinery to comply with the minimum quality standards specified in Table 8 of the “Guidelines on Usage of Refuse Derived Fuel in Various Industries,” issued by the Ministry of Housing and Urban Affairs (see Annexure III) or its amendments from time to time.

- processed RDF/SCF shall be baled and safe transport to authorized Waste to Energy plants/cement kilns for co-processing shall be ensured, adhering to the environmental and safety standards.
- The processing facility designated to receive the RDF/SCF must be submitted to Suchitwa Mission at the time of empanelment, and waste shall be sent exclusively to this approved facility.
- The collected waste shall be processed and removed from the facility regularly, ensuring that it does not accumulate.
- Shall conduct periodic testing of the processed RDF/SCF to confirm the standards, in compliance with the specified quality parameters as per the above guidelines.
- Maintain accurate and up-to-date records detailing the quantities of waste collected, processed, and the SCF/RDF produced and dispatched for co-processing. Submit these records in the format prescribed by Suchitwa Mission on quarterly basis, including the Processing/co-processing certificate.
- The proponent shall be enrolled in the vehicle tracking platforms developed by the Kerala State Pollution Control Board/Suchitwa Mission for monitoring the waste transportation. Must ensure the timely and accurate entry of all relevant data into these platforms as and when requested.
- The list of vehicles designated for waste transportation shall be submitted to Suchitwa Mission, and only those included in the approved list shall be used for transporting waste. The vehicle shall be equipped with a GPS system to enable tracking.

5. ELIGIBILITY

- The applicant shall be an entity engaged in the waste management sector with a registered office in Kerala.
- The applicant shall have an average annual turnover of not less than ₹15.00 Lakhs during the last three financial years. (Not applicable for prospective investors)
- The applicant shall have a minimum of three years’ experience in nonbiodegradable waste management sector. (Not applicable for prospective investors)
- The agency shall not be a blacklisted agency by the Central/ State Government or PSUs.
- The applicant shall be a registered firm with a valid Goods and Services Tax Registration.
- The applicant must own and operate an RDF/SCF processing facility located within Kerala, with the following minimum requirements:

(a) Processing capacity of at least 5,000 kg of non-recyclable combustible fraction (NRCF) of non-biodegradable waste /hr

(b) 40 cents own or long lease land with a godown facility with a minimum plinth area of 5,000 square feet. The godown must possess SPCB approval for waste management.

- (c) All the necessary machinery to process NRCF to RDF/SCF to comply with the minimum quality standards specified in Table 8 of the “Guidelines on Usage of Refuse Derived Fuel in Various Industries,” issued by the Ministry of Housing and Urban Affairs (see Annexure III) or its amendments from time to time.
- (d) The facility must have a weighing mechanism and a proper accounting system in place.
- The applicant must own an adequate number of vehicles with sufficient capacity to transport the waste within the stipulated timeframe.
 - The agency shall have a valid agreement with authorised recyclers for a minimum period of 2 years for the channelization of recyclable waste. (or) The applicant must be a recycler by themselves.
 - The agency shall have a valid direct agreement with cement factories/waste-to-energy Plants for the processing of non-recyclable reject portions of the waste.
 - The agency shall have a firefighting system installed at the godown facility.
 - The agency shall have basic amenities for the workers/staff.
 - The applicant must possess all necessary documents to ensure smooth and unobstructed interstate movement of waste.

6. DOCUMENTS TO BE SUBMITTED

Interested parties are requested to submit their expressions of interest to Suchitwa Mission. The submission shall be made in both electronic and hard copy format. The submission should include required documents to prove the following:

- A brief overview of the proposed/existing facilities.
- Certificate of Incorporation /Registration.
- Machineries required/ installed
- List of vehicles used for waste transportation.
- CA Audited account statement for the last 3 yrs shall be submitted.
- Land details in which the facility will be established/ existing facilities
- Self declaration on agency letterhead duly signed and sealed stating they are not blacklisted by Central/ State Government or PSUs.
- For existing facilities, Consent to Operate certificate received from PCB.
- GST Registration Certificate.
- Copy of the agreement with an authorised recycler valid for a minimum of 2 years, along with an affidavit stating that all recyclable materials will be sent only to the authorised recyclers. (OR) Consent to Operate from KSPCB for the recycling facility, if the applicant is a recycler.
- Copy of direct agreement with cement factory in stamp paper with execution date and validity mentioned.

- GPS enabled Vehicle Tracking System Installation Certificate issued from the Motor Vehicles Department.
- Copies of agreements, work order/ work completion certificate, satisfaction certificates to prove their experience in this sector.
- Affidavit stating that *the Facility will be established as per the norms & within the stipulated time (6 months).*

* All the aforementioned documents must be verified and satisfied to fully meet the eligibility criteria and further advancement of the evaluation process.

The same shall be submitted to suchitwa Mission on or before 22.10.2025, 5.00 PM via E-Mail or by post.

7. EVALUATION PROCESS

The proposals received will be subjected to the following process:

1. The State Suchitwa Mission will conduct a preliminary verification and review of the submitted proposals and supporting documents.
2. Only those agencies that submit complete proposals and meet the eligibility criteria outlined in this guideline will proceed to the next stage.
3. The concerned District Suchitwa Mission (DSM) will be directed to carry out a field inspection to evaluate the applicant's operational capacity and on-ground performance. The DSMs shall verify the location, area and check whether all the machineries listed in accordance with the MoHUA "Guidelines on the Usage of Refuse Derived Fuel in Various Industries" (see Annexure IV) are installed in the facility and have sufficient capacity.
4. Agencies that fully meet the eligibility requirements and receive a satisfactory inspection report from the DSM will be considered further. The final evaluation and decision rest solely with the State Suchitwa Mission/ concerned committees.

8. GENERAL INFORMATION FOR RESPONDENTS

1. The purpose of this EoI is to solicit information on combustible non-recyclable reject waste management. At the same time, this EoI provides the opportunity for companies/agencies to assist Suchitwa Mission in gathering technical information pertaining to setting up of Plants/ Setup for processing of dry waste in an environment friendly manner.
2. This EoI process is undertaken by Suchitwa Mission for the purpose of receiving data and information for planning purposes, and is not a request for competitive proposals.
3. This EoI does not constitute a solicitation or a promise of a solicitation in the future and shall be construed under any circumstances as a prerequisite or pre-qualification 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 Suchitwa Mission to negotiate with any or all interested parties, to enter into any agreement for the provisions of services mentioned above at any stage.

4. Moreover, to preclude any doubt, it is emphasized that Suchitwa Mission shall have the right to reject, in whole or in part, any opinion, conclusion or information delivered to it through this EoI. Suchitwa Mission 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 SUCHITWA MISSION decide to implement one.
5. Suchitwa Mission 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. Suchitwa Mission 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 Suchitwa Mission's part to commence, continue or complete any purchase procedure and/or to act in any other method of acquisition, and Suchitwa Mission shall act at its sole and absolute discretion in this respect. This EoI does not commit Suchitwa Mission to contract for any supply or service or to publish any tenders or any other further procedure. Suchitwa Mission will not be obligated to pursue any particular acquisition alternative as a result of this EoI.
7. SUCHITWA MISSION shall not be charged in any manner for the submission of information in accordance with this procedure. Respondents are advised that SUCHITWA MISSION 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 SUCHITWA MISSION through this EoI is provided voluntarily.
8. Depending upon the submissions received, SUCHITWA MISSION 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. SUCHITWA MISSION 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.
9. SUCHITWA MISSION 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.
10. SUCHITWA MISSION reserves 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, Suchitwa Mission 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.
11. The decision of SUCHITWA MISSION shall be final and binding in evaluating and short listing the appropriate technology provider to be used in local bodies in Kerala either from among the submissions in response to this EoI or from such source as deemed fit and suitable. SUCHITWA MISSION will endeavor to preserve the confidentiality of the information provided if at all.
12. The selected agency shall be liable to contribute to the M.I.S system development and maintenance.

Contact Information

For any inquiries or to submit your expression of interest, please contact:

Executive Director,
Suchitwa Mission,
Fourth Floor, Revenue complex,
Public office Compound,
Palayam - 695 033,
sanitationkerala@gmail.com
0471-2316730

We look forward to receiving your expression of interest and working with innovative partners who share our commitment to environmental sustainability. Together, we can make a significant contribution to combustible non-recyclable reject waste management in the state.

U.V.Jose IAS (Retd)
EXECUTIVE DIRECTOR

Annexure - I

LETTER OF SUBMISSION

(On the Letter head of the agency including full Postal Address, and telephone, facsimile and email address.)

Reference No. _____

Date: _____

The Executive Director,

Suchitwa Mission,

Local Self Government Department

Fourth Floor, Revenue complex,

Public office Compound, Palayam - 695 033

Sir,

SUBJECT: "INVITING EXPRESSION OF INTEREST (EoI) FROM PRIVATE AGENCIES TO ESTABLISH FACILITIES FOR PROCESSING COMBUSTIBLE NON-RECYCLABLE REJECT WASTE INTO RDF/SCF AND ENABLING ITS CO-PROCESSING"

Category: Esteemed companies, NGOs, and organizations, including experienced and prospective investors and innovative idea holders (strike of whichever is not applicable)

Having examined the details given in the EoI document, we here by submitting the relevant information for considering the EoI for empanelment of companies/ NGOs/ organizations for establishing facilities for processing combustible non-recyclable reject waste into RDF/SCF and enabling its co-processing.

1. We hereby certify that all the statements made and information supplied in the enclosed forms and accompanying statements are true and correct.
2. We have furnished all information and details necessary for the EoI and have no further pertinent information to provide.
3. We confirm that we have no objection in Suchitwa Mission or their authorized representative approaching individuals, employers and entities to verify our competency, genuinity and general reputation.
4. We declare that all the provisions of this EoI Documents are acceptable to us and we will be bound to comply with the instructions and guidelines issued in this regard, once we get empaneled.
5. We also declare that we have not been debarred/ blacklisted by any Government/Semi Govt. organization in any state/country.

Date of Submission:

Name & signature of the Authorized Signatory.

Place:

Company Seal

Annexure - II

GENERAL INFORMATION OF THE APPLICANT

Note: Separate sheets may be used wherever necessary

1. Name and address of organization :
2. Country of Incorporation :
3. Legal Status (Company: Public/Private, Partnership, Limited Liability Partnership, Sole Proprietorship, Any order) :
4. Incorporation/ registration number : (attach the copy of Incorporation/ registration number)
5. Date of incorporation/ establishment : (in DD/MM/YY format)
6. GST No (attach the certificate) :
7. Last 2 year's average annual turn over (in Rs.) :
8. Principal place of business :
9. Name, Contact details of authorized signatory :
10. List of 5 major clients with contact details : (attach the copy of work order, agreement, satisfactory certificate to prove the credentials)

Signature of the Authorized Signatory.

Company Seal

Annexure - III

Table 8. Proposed Standards for SCF and RDF

S. No	Parameters	SCF	RDF - Grade III	RDF - Grade II	RDF -Grade I
1.	Intended Use [†]	Input material for the Waste to Energy plant or RDF pre-processing facility	For co-processing directly or after processing with other waste materials in cement kiln	For direct co-processing in cement kiln	For direct co-processing in cement kiln
			Grade III	Grade II	Grade I
2	Size	Anything above 400mm has to be mutually agreed between Urban Local Body/ SCF Supplier and Cement Plants.	<50 mm or < 20 mm depending upon use in ILC or SLC, respectively		
3	Ash – maximum permissible	<20 % [#]	<15 %	<10 %	<10 %
4	Moisture – maximum permissible	<35 %	< 20%	<15 %	<10%
5	Chlorine –maximum permissible	< 1.0 % [#]	< 1.0 %	< 0.7	< 0.5
6	Sulphur – maximum permissible	<1.5 % [#]	<1.5 %		
7	* Net Calorific Value (NCV) – in Kcal/kg (Average figure of every individual consignment)	> 1500 KCal/kg net	>3000 KCal/kg net	>3750 KCal/kg net	> 4500 KCal/kg net
8	Any other parameter	SCF – any offensive odour to be controlled. **	RDF – any offensive odour to be controlled.	RDF – any offensive odour to be controlled.	RDF – any offensive odour to be controlled.

Note: † It is up to the ULB, Cement and other industries to mutually decide which standard of RDF need to be produced.

If the blending process is done in cement plants, the deviations in recommitted limit for ash, chlorine and sulphur content can be mutually agreed between urban local body /SCF Supplier and cement plants.

* band width of variations acceptable in NCV can be mutually decided between RDF manufacturer and cement plants.

** Since odour is still largely a matter of perception and there is no satisfactory equipment to measure different types of odour, no quantitative figure has been given.

Annexure - IV

Standard Components of RDF Plant

Sl.No.	Standard Components of RDF Plant
1	MSW Receiving, Sampling, Hand Sorting and Bag-Opening Area: MSW arriving in trucks or compactors is unloaded for collection of samples, hand sorting of large components and transported to the bag opening machines.
2	Twin Shaft Primary Shredder is designed to shred MSW to less than 100 mm .
3	Rotary Trommel is then used for separating the fine sand and silt from the MSW before it can be sent for further processing. The material tumbles in the rotary screen as it moves ahead across the length of the screen and the fine silt and sand gets removed through the holes provided in the screen. The rest of the material is discharged onto the belt conveyor which carries the material for further processing. After the trommel, a belt for hand sorting (separation of recyclables) should be placed.
4	Air Density Separator and Dryer consist of a rectangular column designed to separate out light fractions from heavy inert. The material is introduced at the top section and air blast is given at its bottom. Both incoming and outgoing materials pass through their respective airlock valves. It is a three-stage process. High pressure air blast de-agglomerates the incoming materials and the very light fraction is sucked up. Furthermore, the air blast from the bottom of the column moves the medium sized fraction of the material up in the air. The bottom consists of heavy material that falls through the airlock and gets discharged. Hot air can also be injected in the system to lower the moisture content of material.
5	Twin-Shaft Secondary Shredder is designed to shred the material to less than 50 mm . Further components include again a main drive motor, a reduction gear box, other integral components and a starter panel.
6	Fine Shredder (Optional) is designed to reduce the size of the RDF fluff after it has passed through the secondary shredder.
7	Pellet Press (Optional) is designed to produce fuel pellets with a 16 - 25 mm diameter by extrusion. Ground and conditioned material are fed to the pellet press by gravity feed. A roller presses the material through die holes and extrudes the material. The size of pellets can be adjusted by a knife provided below the die press. The pellets are cooled on a cooling conveyor and sent for storage.
8	Testing of RDF and Transportation to cement plants/ waste to energy plants.

Ref : Table 9 of the "Guidelines on Usage of Refuse Derived Fuel in Various Industries," issued by the Central Public Health and Environmental Engineering Organisation (CPHEEO)

Note : In some modern plants dynamic disc screens (DDS) are installed in place of trommels for size gradation (size based separation).