Request for Information (RFI) - No. 12/2025

Concerning sustainable solutions for waste treatment, transforming it from a nuisance into <u>a resource</u>

The Haifa Economic Corporation Ltd. (hereinafter - HEC) is a municipal corporation under the full ownership of the Haifa Municipality, which, among other areas, operates in the development and promotion of economic, environmental and infrastructure projects for the benefit of the residents of the city of Haifa.

The HEC hereby requests information from professional entities in the market for the purpose of examining the feasibility of establishing and running a waste treatment center containing installations for separation and sorting, anaerobic fermentation, and energy recovery based on gasification technology, which will provide for advanced and optimal treatment of municipal solid waste collected in the city of Haifa and neighboring local authorities, while producing renewable energy and meeting strict environmental standards.

The aim of this RFI is to examine the project's feasibility from technological, regulatory, environmental, economic and operational viewpoints, by receiving information, proposals and ideas from relevant parties possessing proven experience in the field.

It is clarified that this RFI does not constitute a tender, offer, order or commitment of any kind to future engagement, and the information received will only be used for the purposes of study, formulating alternatives and examining feasibility.

1. General Background

The Haifa Economic Corporation, in collaboration with the Haifa Municipality and the Local Authorities Association for Environmental Quality, is considering the establishment of a waste treatment system containing installations for separation and sorting, anaerobic fermentation, and energy recovery based on gasification technology.

2. Project Goals

Reduction of waste treatment costs by establishing and operating a waste treatment system containing installations for separation and sorting, anaerobic fermentation, and energy recovery based on gasification technology, capable of handling some 600 tons of waste per day. The entire system will be capable of handling around 1,000 tons of waste per day.

The caloric value of all waste is approximately 2,200 kilocalories per kilogram. Waste is collected and transported to the plant throughout the year, excluding Saturdays and holidays. The sorting residues reaching the gasification installation will contain some 3,500 kilocalories per kilogram.

3. <u>Requested Information</u>

Entities possessing efficient utilization solutions with high implementation feasibility and meeting the project goals as set out above, either for a gasification facility only or a gasification facility that includes a sorting and separation and/or an anaerobic fermentation installation, are invited to respond to this request, supplying the following details:

- A. Information provider's particulars:
 - Name of body submitting the information;
 - Nature of entity (e.g. company, partnership, association, private individual, etc.) and particulars (including identity number in the relevant registry, address, telephone number, contact person's name and contact details (first name, surname, telephone number, mobile phone number, e-mail address), field of activity of provider of information and relevant experience.
- B. Information relating to the proposed solution for waste utilization: a complete and as detailed as possible document reviewing the technology, process, inputs and outputs, with emphasis on:
 - Inputs required from the Haifa Economic Corporation and/or Haifa Municipality for implementation of the solution; utilization, including collection arrangements, pre-treatment required from waste producers/the Municipality as a basis for implementing the solution insofar as this is needed, and appropriate transportation requirements;
 - Methodology for set-up and operation including planning, licensing, execution, costing, financing and operating phases;
 - Description of the type of facility, technical information, components of the facility, its size and the area required for its erection;
 - Basic technical specification of the proposed process.

The outputs of the process and its by-products, with an emphasis on environmental problems (odors, air, groundwater and soil pollution) related to the proposed technology.

The quantity of waste per year for landfilling based on the proposed technology.

Information on plant/facility maintenance, including - equipment repair and replacement, as well as the engagement of subcontractors for plant maintenance, operating costs, including the costs of labor, purchase of chemicals, water and electricity.

Details of the use of chemicals, water, and electrical power.

The number of employees in the plant, including *inter alia* those engaged in sorting, maintenance, cleaning, and management.

Potential end consumers of the products of the procedure, including the information provider itself, insofar as it is interested in constituting an end consumer of these products.

Previous experience in applying the solution in Israel and abroad, and compliance with required regulatory aspects - environmental, safety and planning licensing.

Initial recommended structure for engagement model – EPC, PPP, BOT, partnership, etc. A proposal for participation in the implementation of the proposed solution, including the nature of the engagement, the level of partnership in investment, operation and

outputs, insofar as such exist, similar engagements between the information provider and Israeli authorities.

Estimated period required from the beginning of the project to the start of its implementation, insofar as successive stages are involved (pilot and step-by-step commissioning).

Predicted obstacles, challenges and recommendations for reducing risks.

A conceptual program for the proposed treatment facility, covering all stages from the point at which waste arrives up to delivery of the final products and by-products, including costs and revenues.

- C. Optional: Information on potential location of the facility insofar as the information provider has rights to land available for setting up the project, it shall indicate the location of the land and its rights therein.
- D. General data for all collected waste:

Daily quantity of refuse - 1000 tons Number of working days per year - 300 days Waste composition (by weight): Paper and cardboard - 24% Plastic - 18% Diapers - 6% Metals - 3% Textiles - 4% Glass - 3% Organic matter - 34% Other - 8% Caloric value of waste - 2200-2400 kcal./kg. Moisture - 40% - 45%

Data on residues from sorting directed to the gasification installation: Quantity of garbage treated daily: 600 tons. Caloric value: 3,500 kilocalories per kilogram

<u>General Data:</u>

Electrical power consumption cost - \$0.12 per kWh (estimate only). Water consumption cost - \$1.80/cu.m. (estimate only). Air Emission Standard required – to EU Policy Annex. Best Available Techniques (BAT) Reference Document for Waste Incineration - not attached.

- A. No charge is imposed for submitting the response.
- B. The respondent may add any information and/or data it considers relevant.

4. <u>Deadline for Submitting Response</u>

Whoever wishes to respond to this RFI is asked to do so no later than 31.7.2025.

5. <u>Submittal of Response</u>

- A. The response to the RFI shall be submitted **as a Word file** using the form in Appendix A by email to Ofer Shani <u>ofer@hec.co.il</u>. The response is to be accompanied by a signed application with the signature and stamp of the information provider.
- B. A file containing Appendix A is published on the corporation website: <u>www.hec.co.il</u> under the "Tenders" tab and may be searched for under RFI No. 12/2025, beginning 5.6.2025.

Respondents are requested to save this file and enter the required information.

6. <u>Clarifications</u>

- A. Queries and requests for clarification may be sent to Ofer Shani in a Word document by email to <u>ofer@hec.co.il</u> no later than 10.7.2025.
- B. The HEC will be entitled, at its sole discretion, to address or not address the queries and/or requests for clarification.
- C. The HEC will examine the information received from the respondents and will be entitled to contact all or some of the respondents, requesting clarifications from them as well as any additional information.

7. <u>Reservation of Rights</u>

- A. The HEC reserves the right to call a meeting to be attended by the respondents participating in this stage of the RFI.
- B. This RFI is for information collecting purposes only, as a pre-tender stage for project formulation.
- C. This procedure, including the submission of a response entailed by it, is not such as to constitute any commitment on the part of the HEC, or a basis for any type of engagement between the HEC and any of the respondents, nor does it entitle any party to any right and/or expectation and/or defensible interest of whatever kind.
- D. Without derogating from the generality of the aforesaid, it is to be clarified that the HEC retains full discretion over determining the terms of the tender, the mode of engagement, the terms of the contract, pricing, and any other matter relating to the procedure.
- E. Without derogating from the generality of the aforesaid, it is to be clarified that each of the details set out in this RFI is subject to change at the sole discretion of the HEC, and does not bind the HEC in any way.

F. It is hereby to be clarified that this RFI does not constitute a tender or invitation to submit proposals, but merely a preliminary application to receive information. Hence it is hereby brought to the attention of the respondents that -

The Tenders Committee will document the information provided by the respondents and is at liberty to publicize information received, while maintaining business confidentiality in accordance with all laws and rulings.

G. All expenses associated with submittal of the response shall be borne solely by the respondent, and in no case will the respondent be entitled to reimbursement and/or any compensation and/or indemnity for expenses and/or damages incurred in connection with the response and/or the preparation and submission of the response.

Haifa Economic Corporation Ltd.

<u>Appendix A</u>

A. General Questions

1. General Particulars Pertaining to Respondent

Respondent's name	
Form of incorporation	
Identity number	
Place of registration	
Location of operational center	
Name of contact person	
Address	
Tel.	
Fax	
Email	

2. Further details regarding the representative or local branch of a respondent who is not an Israeli entity

Branch/Representative in Israel	<u>Existing</u>	Planned by respondent to be established
Name of Branch/Representative		
Form of incorporation (if applicable)		
Identity number		
Name of contact person		
Address		
Tel.		
Fax		
Email		
Authorized agent?	<u>Yes</u>	No
Sole representative/branch?	<u>Yes</u>	No
What actions is it authorized to take on behalf of the respondent?		
Starting from which year has it served as a representative/when was the branch established?		
Total financial scope of the representative's operations as a representative of the respondent or branch over the years 2020-2025		

B Information on professional experience over the years 2020-2025

	Project 1	Project 2	Project 3	Project 4	Project 5
Client's name					
Project location					
Project description					
Project function					
Starting date					
Current stage					
End date (if applicable)					
Total financial scope of project					
Project partners (structure and share of each partner)					
Proposer's share of project (% equity holding)					
Ratio between equity and debt capital in the project					

Part C – Response to Questions Set out in Section 3 of the RFI

Part D - Questions Regarding the Economic Model and General Matters

Economic Model

The Haifa Economic Corporation Ltd. (hereinafter: "the HEC") is examining a number of different options for an economic model for engagement that will be set out as part of the tender if and insofar as it is issued. It should be emphasized that the HEC reserves the right to change the economic model for engagement, at its sole discretion and decisions made concerning the said project.

Principles of the proposed model:

This model has professional and financial implications.

The following are a number of questions designed to examine the ability of potential bidders to execute the project based on different economic models:

1. Is the respondent in a position to carry out a project entailing all the types of specialization in the field? Specify:

2. Is the respondent in a position to assign suitable management and coordination personnel to such a project? (Planning coordination, subcontractor management, operation and maintenance, etc.)

3. The respondent's financial capacity in connection with the project.

4. What is the respondent's preferred economic model?

5. Does the respondent identify obstacles to project feasibility in the context of the economic model or the project in general? (Taxation, bank policy, licensing policy, etc.) - specify:

6. Any additional comments: