

Expression of Interest (EoI) Sludge-to-Energy Investment Opportunity in Jordan





Water Authority of Jordan (WAJ)

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Contents

List	of Abbreviations	. 3
1.	Background	. 4
	Objectives	
	Scope of EoI	
	Deliverables for the EoI	
5.	Methodology	. 5
6.	Eligibility Criteria	. (
7.	Submission Requirements	. (
8.	Evaluation Process	,

List of Abbreviations

EoI Expression of Interest EE Energy Efficiency GHG Greenhouse Gas

MoU Memorandum of Understanding
MWI Ministry of Water and Irrigation
PPP Public-Private Partnership

RE Renewable Energy

WWTP Wastewater Treatment Plant

1. Background

The Kingdom of Jordan is committed to addressing its pressing water, energy, and environmental challenges through innovative and sustainable solutions. As part of this effort, the utilization of dry sewage sludge from Wastewater Treatment Plants (WWTPs) in Jordan has emerged as a high-potential investment opportunity. With the rapid expansion of wastewater treatment infrastructure, the Kingdom generates significant quantities of sludge, currently underutilized but with considerable economic and environmental value.

Dry sewage sludge, processed into energy carriers represents a cost-effective and sustainable alternative to conventional fossil fuels. Its utilization aligns with Jordan's national strategies for renewable energy development, climate change mitigation, and circular economy principles. Additionally, the reduction of greenhouse gas emissions and improved waste management associated with sludge valorization directly support Jordan's international commitments under the Paris Agreement.

The Government of Jordan, in collaboration with key stakeholders, recognizes the transformative potential of sludge-to-energy initiatives and actively seeks partnerships with private sector investors to capitalize on this opportunity. Using Sewage Sludge as an Energy Carrier offers substantial financial incentives, including reduced dependency on imported fuels, a growing domestic energy market, and alignment with regulatory frameworks that encourage investment in sustainable technologies.

This initiative presents a unique opportunity for investors to contribute to Jordan's sustainable development while unlocking significant returns on investment. The Government invites expressions of interest from interested parties to develop and implement innovative projects that harness the energy potential of dry sewage sludge, positioning Jordan as a regional leader in sustainable resource management and green energy innovation.

2. Objectives

The objectives of this EOI are:

- 1. To identify, engage and support potential investors with the technical, financial, and operational capabilities to developing and implementing a sludge-based power plant project.
- 2. To promote public-private partnerships (PPP) for the utilization of dry sewage sludge as an energy carrier.
- 3. To ensure sustainable and economically viable solutions for sludge management and energy generation in Jordan.

3. Scope of EoI

Investors are expected to:

• Assess the technical and economic feasibility of utilizing dry sewage sludge from designated treatment plants in northern and missile areas.

- Propose innovative and sustainable technologies for converting dry sludge into energy (e.g., combustion, co-firing, gasification).
- Develop an implementation plan, including design, construction, operation, and maintenance of the proposed project.
- Ensure compliance with national and international environmental and safety standards.
- Collaborate with relevant authorities to secure permits, approvals, and support for project implementation.

4. Deliverables for the EoI

Interested investors should provide and fill out **Annex 1 Deliverables for EoI** to submit the following information:

- 1. Cover Letter: (see annex 1).
- 2. **Company/Investor Profile**: Details about the organization, including experience in energy, waste-to-energy projects, and sludge management.
- 3. **Proposed Investment Idea**: Brief description (2 pages Maximum) of the investment idea, technology, and methods to be used for converting sludge into energy with Conceptual and technical designs for the proposed power plant (simple) .. (see annex 1)
- 4. **Financial Capability** (): Evidence of the financial capacity to undertake the project. (see annex 1)
- 5. **Official Registration Certificate** (): an official registration certificate should be provided by the investor/company.
- 6. **Initial Implementation Plan**: A preliminary roadmap, including timelines, milestones, and resource requirements. (see annex 1)
- 7. **Partnership and Cooperation**: Description of potential partnerships with local entities, stakeholders, and government agencies. (see annex 1)
- 8. **Legal Disclosure**: indicate the legal situation as per the template in annex 1.
- 9. **Information or Notes:** any further clarification or note on from the investor side. (see annex 1)

5. Methodology

This Expression of Interest (EoI) process will follow these steps:

- 1. Interested companies/investors shall express their interest by completing and submitting the EoI documents to WAJ.
- 2. After the evaluation of the EOI's WAJ will invite the Eligible investor.
- 3. WAJ and the interested company/investor will sign an MoU outlining the main contributions of each party. The MoU will include WAJ's commitment to entering a long-term sludge take-off agreement if the investment idea is deemed feasible, without any financial obligations at this stage.
- 4. The interested company/investor shall conduct a financial and technical assessment, with WAJ providing significant facilitation throughout the process.

- 5. The interested company/investor shall present its investment idea and the results of its assessment to WAJ.
- 6. MWI is open to entering a negotiation phase with the interested company/investor if the results of the techno-economic assessment indicate the need for additional contributions from WAJ (without any initial commitment before the assessment). Any agreements reached during negotiations will be based on the MoU and the results of the assessment.
- 7. Upon presenting the assessment results and reaching an agreement on all aspects, based on the signed MoU and any negotiations, WAJ and the interested company/investor shall sign a long-term sludge take-off agreement to formalize the partnership.
- 8. The interested company/investor is required to initiate the investment procedure in full compliance with the applicable national regulations and requirements governing such projects.

6. Eligibility Criteria

Applicants must meet the following requirements:

- Applicants must complete all necessary documents outlined in Section 4 and compiled in Annex 1 Deliverables for the EoI. These documents must be submitted to the official email address specified in Section 7 Submission Requirements.
- Applicants must demonstrate a commitment to adhering to Jordanian laws and environmental regulations throughout the investment process.

7. Submission Requirements

Interested investors are required to submit their EOI by (10th of Mar, 2025) submitted one (1) original in the form of one (1) hard copy and one (1) soft-copy USB Flash Drive and send an electronically to The Director of Tenders and Procurement Directorate of WAJ,

<u>Rua_Alsoub@mwi.gov.jo</u> and to the Director of the PMD <u>Sultan_Mashaqbah@mwi.gov.jo</u>; <u>Ahmad_Al-Awamleh@mwi.gov.jo</u>. at the following address, which shall be the controlling address for the purposes of the timely submission of the Application:

Attn: Eng. Rua Alsoub

Address: Water Authority of Jordan WAJ Tender Department, 6th Floor

Shmeisani PO Box 5012

City: Amman 11181

Country: Jordan

The submission must include all deliverables listed in Section 4 though filling out Annex 1 Deliverables for the EoI.

8. Evaluation Process

The submitted EOIs will be evaluated according to the following criteria:

- The creativity and uniqueness of the proposed solution for energy-related purposes.
- Commitment to alignment for Jordan's environmental and energy requirements.
- Submission of all required documents as outlined in Section 4.

Disclaimer

This process does not constitute a solicitation or a guarantee of project implementation prior to the signing of the referenced MoU. Furthermore, WAJ reserves the right to accept or reject any submission (before signing the MoU) at its sole discretion, without any obligation or liability.