



The Global Methane Initiative

Developing a Tender for Landfill Biogas Capture and Utilization Projects

GMI–Serbia Biogas Workshop

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Novi Sad, Serbia



Agenda

- Pre-Tender Considerations
- Tender Contents
- Proposal Evaluation

Pre-Tender Considerations: Project Feasibility and Scope

- Is the project technically and economically feasible?
 - Requires thorough assessment by experienced landfill biogas engineers.
- What type of project should be developed?
 - Direct-use, electricity generation, flaring-only, or combination?
- What is the anticipated size of the project?
- Develop a realistic budget and schedule for project implementation.

Pre-Tender Considerations: Roles of Owner, Developer, Operator

- Define the commercial roles and financial interests of the landfill owner, developer, and operator
 - Self-develop or use a developer?
 - Waste delivery, landfill biogas rights, energy sales agreements
 - Carbon credits and renewable energy incentive rights
 - Revenue sharing agreements or royalty payments
- Landfill owners often must follow a strict protocol for issuing an tender

Pre-Tender Considerations: Managing Project Expectations

- Project expectations must be well-defined, realistic, and understood by all parties
 - Expectations can be unreasonable if based on aggressive landfill biogas recovery and revenue estimates
 - Provide independent landfill biogas model estimates in tender for all proposers to use
- Project success should be evaluated primarily on the ability of a developer to meet performance standards
- Landfill biogas project tenders differ from other tenders, such as large equipment or engineering services

Tender Contents: Background Information and Legal Documents

- Provide a general overview of the project and purpose of the tender
- Provide background information on the landfill
 - Include model results or assessment reports
- Provide project scope and a description of major tasks
- Describe contractual arrangements
 - Landfill permits, land ownership, regulatory, or other requirements
 - Include draft versions of agreements (landfill biogas rights, bonds, other guarantees)

Tender Contents: List Project Requirements

- Major project tasks and equipment, including performance/technical standards
- Expected schedule for project implementation
 - Include clauses for contract termination and/or fines for unmet milestones
- Technical and financial qualifications
- Contract / financing terms and requirements

Tender Contents: List Project Requirements (continued)

- Agreement addressing ownership and compensation for landfill biogas rights, carbon credits, and energy produced from the project
- Ownership (and liability) for land and equipment
- Applicable rules and regulations
- Risk and contingencies, indemnification, insurance and liabilities
- Environmental and social issues

Proposal Evaluation

- Evaluate proposals using a ranking system
- Separate technical and financial proposals
- Use independent professional to evaluate technical proposal
- Specify in tender relative importance of technical proposal versus financial qualifications
- Include in tender:
 - A description of proposal ranking system, including how different components will be weighted
 - An outline of selection process steps and a timeline for making the final selection

Summary

- The first step in developing a landfill biogas project is the issuance of a tender to find a project developer
- A landfill owner should complete several tasks before issuing a tender:
 - Independently evaluate project feasibility
 - Determine procurement requirements
 - Determine what level of project ownership they are willing to take (risk versus reward)

Summary (continued)

- A landfill owner can improve their probability of finding a project developer that meets their needs with a well written tender
- A well written tender provides:
 - Clear understanding of project scope and participant roles
 - Background information on the landfill
 - Project requirements and anticipated contract terms
 - Proposal evaluation process

For More Information...

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