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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