

A banner for AgSTAR Focus. On the left, the text "AgSTAR Focus" is written in white on a blue background. The middle part of the banner shows a photograph of an industrial facility with large black pipes and a building. On the right, there is a blue square containing the AgSTAR logo, which features a yellow rooster and a flame.

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Thank you for being a subscriber to AgSTAR's listserv. AgSTAR Focus is a new, technology-centric listserv resource to assist in the safe, efficient, and economical operation of anaerobic digestion (AD)/biogas recovery systems. Visit our website for our upcoming topics and a full listing of this year's [AgSTAR Focus editions](#).

AD Project Financing

Project financing is an important consideration for anyone interested in developing an AD system. Often, financing is at least partly obtained through grants, loan guarantees, or other financial assistance from federal and state governments, nonprofits, or private companies.

EPA Resources on Project Financing

AgSTAR provides best practices, guidance, and recommendations for assessing the financial feasibility of an AD/biogas project. The [Project Planning and Financing page](#) walks you through preliminary project planning, developing a high-level estimate of the project's financial feasibility and return on investment, identifying funding sources, and refining your assumptions before applying for project funding. AgSTAR cannot guarantee that funding will be provided for projects and does not offer project

financing. Please feel free to [contact AgSTAR](#) if you have questions about best practices as you plan your project.

Securing Financing for Your Project

A common pitfall many anaerobic digestion projects encounter when applying for federal funding is incomplete or missing information on their application. This can lead to delays or denial of funding. A complete application should demonstrate that the project:

- Is technically sound and is consistent with generally accepted engineering practices.
- Has the ability to generate a revenue stream that is adequate to service the debt incurred.

The application should be based on a detailed project design document prepared by a registered professional engineer and should at least include the following:

- Waste or wastes to be anaerobically digested with the expected volume(s) and assumed physical and chemical characteristics.
- Estimate of biogas production potential.
- By-products of the anaerobic digestion process that will be sold to a third party.
- Explanation of how the energy value of the biogas will be monetized either by replacing a fossil fuel for heating, generating electricity, or producing renewable natural gas (RNG).
- Unit processes to be employed, selected vendors, and technical specifications.
- Project capital cost estimate with supporting details.
- Detailed operation and maintenance plan for the expected life of the project.
- Evidence that the project has identified and will be able to obtain all necessary local, state, and federal permits.

- Some projects may need to provide additional information. Consult a registered professional engineer to refine baseline assumptions and prepare specific information addressing all details of the funding opportunity.

To demonstrate that the project will have the ability to generate a revenue stream to at least service the debt incurred, a detailed financial statement for the expected life of the project should be prepared. This statement should include:

- A discussion of all underlying assumptions.
- Evidence that all relevant contractual agreements are in place or at least being actively negotiated, including formal agreements for:
 - The supply of wastes from third parties, such as food or food processing wastes.
 - The sale of the biogas, electricity, or RNG.
 - The sale of digester effluent or any by-products.

For more details about each of these items, please see the [Risk Analysis and Technical Review Checklist for Preparing Biogas Project Plans](#). For more information about project financing, see the [AgSTAR Project Planning and Financing webpage](#) or chapter 6.5 of the [AgSTAR Project Development Handbook](#).

Disclaimer: AgSTAR Focus provides technical information, processes, and concepts to better inform the development and operation of anaerobic digestion/biogas systems. This resource may not address all information, factors, applicable regulations, or considerations that may be relevant or required for anaerobic digestion/biogas projects. Any references to private entities, products, or services are strictly for informational purposes and do not constitute an endorsement of that entity, product, or service.

