

# AgSTAR Anaerobic Digestion System Feasibility Questionnaire

U.S. Environmental Protection Agency

## Checklist for facility characteristics:

1. Do you have at least 500 cows/steer or 2,000 pigs at your facility?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. Are these animals in confinement all year round?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. The average animal population does not vary by more than 20% in a year?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<p>If the answer is <b>YES</b> to all the above questions, your facility is in good shape. Proceed to the next section. If the answer is <b>NO</b> to one or more of the above questions, the production and utilization of biogas as a fuel may not be suitable for your facility. For biogas production and utilization to succeed, a continuous and relatively consistent flow of biogas is required. However, collecting and flaring biogas can reduce odors. Therefore, also proceed to the next section if you have the need for an effective odor control strategy.</p>		

## Checklist for manure management:

1. Do you collect manure as a liquid/slurry/semi-solid?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. Is the manure collected and delivered to one common point?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. Is the manure collected daily or every other day?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4. Is the manure sand relatively free of clumps of bedding and other material, such as rocks, stones, and straw?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<p>If the answer is <b>YES</b> to all the above questions, manure management criterion is satisfied. If the answer is <b>NO</b>, to any of the questions, you may need to change your manure management routine. See text.</p>		

## Checklist for energy use:

1. Are there on-site uses (e.g., heating, electricity, refrigeration) for the energy recovered?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. Are there facilities nearby that could use the biogas?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. Are there electric power distribution systems in your area that could or do buy power from projects such as biogas recovery?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
<p>If the answer is <b>YES</b> to any of the above questions, the energy use criterion is satisfied for initial screening purposes.</p>		

### Checklist for management:

1. Is there a “screw driver friendly” person on the farm that can operate and maintain the technical equipment?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. If YES, can this person spend about 30 minutes a day to manage the system and 1 to 10 hours on occasional repair and maintenance?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. Will this person be available to make repairs during high labor use events at the farm?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4. Is technical support (access to repair parts and services) available?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
5. Will the owner be overseeing system operations?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

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If the answers are **YES** to the above questions, the management criterion is satisfied.  
In general, if the owner is committed to seeing the system succeed, it will.

### Initial appraisal results checklist:

1. Are there at least 500 cows/steers or 2,000 hogs in confinement at your facility year round?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
2. Is your manure management compatible with biogas technology?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
3. Can you use the energy?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4. Can you be a good operator?	Yes <input type="checkbox"/>	No <input type="checkbox"/>

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If the answer is **YES** to all questions, there are promising options for gas recovery. Proceed to Chapter 3, where the project technical and economic feasibility will be determined. If you answered **NO** to any of the questions, you may need to make some changes. Read the relevant section, evaluate the cost of changes required, if any, before proceeding.

(Source: EPA, 2009)

<http://www.epa.gov/agstar/documents/AgSTAR-handbook.pdf>