
Economic and Political Considerations for Anaerobic Digestion Technology Adoption on Animal Feeding Operations

If you would prefer to fill out an online version of the survey, type the following link into your browser:

www.tinyURL.com/OSUADSurvey

The survey will begin by asking a few questions about your agricultural operation. You will then be asked a series of questions about different renewable energy policies and how they could potentially affect your hypothetical decision to implement an anaerobic digester.

Definitions:

kWh = kilowatt-hour; **GHG** = greenhouse gas (example: methane and carbon dioxide); and **CCX** = Chicago Climate Exchange, which is the market for trading carbon credits in the U.S.

1. The envelope you received in the mail includes a 4-digit sequencing number on the upper right corner of the address label (e.g. Seq #: 1234). Please provide us with your 4-digit sequencing number in the space below.

2. Are you the owner or operator of an animal feeding operation (AFO) or confined animal feeding operations (CAFO)?

Owner Operator Other (please specify): _____ No – Thank you for your time. Please return the form in the postage-paid envelope.

3. What type of farm do you operate?

Dairy Swine Other (please specify): _____

4. How big is your operation (number of animals)?

5. Does your farm *currently* use an anaerobic digestion system for manure collected from animals that your farm owns?

Yes No

6. If no, has your farm *ever* used an anaerobic digestion system for manure collected from animals that your farm owns?

Yes No

7. If no, have you ever *considered* implementing an anaerobic digester on your farm?

Yes No

8. How much *do you currently pay* for electricity on your farm, in \$/kWh?

\$0 – 0.04 \$0.041 - \$0.08 \$0.081 - \$0.12 \$0.121 - \$0.16 Greater than \$0.16

9. What percentage of the manure generated on your farm is distributed to each of the following management strategies?

Compost	%
Land application	%
Stored on-farm	%
Stored off-farm	%
Other (please specify):	%
TOTAL	100%

10. If manure is land-applied, across how many acres is the manure spread?

0 – 49 acres 50 – 99 acres 100 – 149 acres 150 – 199 acres 200 – 250 acres Greater than 250 acres

11. What is the average hauling distance of the manure that is land applied, in miles?

0 – 0.49
 0.5 – 0.99
 1 – 1.49
 1.5 – 1.99
 2 – 2.5
 Greater than 2.5

12. If the manure is stored, what type of storage facility do you use?

Pit
 Lagoon
 Other (please specify): _____
 Manure is not stored

13. Has your animal feeding operation (currently or previously) been affected by any of the following environmental regulations? Please check all that apply.

Improved technology requirements	<input type="checkbox"/>
Reduced nutrient level thresholds on CAFO discharges	<input type="checkbox"/>
More stringent regulations on greenhouse gas (GHG) emissions	<input type="checkbox"/>
Direct tax on greenhouse gas (GHG) emissions	<input type="checkbox"/>
Indirect carbon tax on commodities	<input type="checkbox"/>
Mandated levels of methane abatement	<input type="checkbox"/>
Mandated levels of nutrient abatement	<input type="checkbox"/>
Other (please specify): _____	<input type="checkbox"/>

14. What are the main reasons you would not want an anaerobic digestion system on your farm? Please rank the following 6 items; 1 = most important and 6 = least important.

The costs of the digester exceed the benefits	
We prefer other methods of manure management	
Our operation is too small	
Not enough government support	
A digester requires too much time, management, and oversight	
I do not understand what an anaerobic digestion system is/does	

15. Now let's say your farm was considering implementing an anaerobic digestion system, what are the main factors that would influence your decision to implement an anaerobic digester on your farm? Please rank the following 9 items; 1 = most important and 9 = least important.

Sell surplus methane, electricity, and/or other digestion co-products	
Reduced odor	
Digester is easy to use (i.e. limited time, management, oversight, and/or upkeep required)	
Marketing or public relations	
Environmental stewardship and ecological sustainability	
Met or avoided regulatory constraints	
Government payments, grants, or tax credits for renewable energy production	
Government payments, grants, tax credits, or carbon credit trading for reducing GHG emissions	
Reduce greenhouse gas (GHG) emissions	

16. Holding everything else constant, would you implement an anaerobic digester on your farm if you could sell the surplus electricity generated for \$0.05 per kWh?

Yes
 No

17. Assuming no other incentives, would you implement an anaerobic digester on your farm if you could sell carbon credits for \$10.00 per animal unit per year?

- Yes No

18. Holding everything else constant and neglecting the other incentives, would you implement an anaerobic digester on your farm if you could receive government grants to cover 50% of the capital cost?

- Yes No

19. In which U.S. state do you reside?

20. What is your gender?

- Female Male

21. What is your age?

- 20 - 40 41 - 60 61 or older

22. How many years have you personally owned/operated your current agricultural enterprise?

- 1 - 3 years 4 - 10 years 11 - 25 years 26 - 50 years 50 years or more

23. What is your annual income from farming?

- \$0 - \$49,999 \$50,000 - \$99,999 \$100,000 - \$149,999 \$150,000 - \$199,999 \$200,000 - \$250,000 Greater than \$250,000

24. What is your annual non-farm income?

- \$0 - \$49,999 \$50,000 - \$99,999 \$100,000 - \$149,999 \$150,000 - \$199,999 \$200,000 - \$250,000 Greater than \$250,000

25. What is the highest degree or level of school that you have completed? If currently enrolled, mark the previous grade or highest degree received.

- | | | | | |
|--------------------------|---|--------------------------|---------------------------------|--------------------------|
| High school graduate | Vocational, technical, or 2 year degree | Bachelor's degree | Graduate or professional degree | None of these |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

26. In your opinion, what is the *one most important thing* that would have to be done to encourage more wide-spread adoption of anaerobic digestion systems?

Thank you for completing the survey!