Cover Sheet for Submissions

Instructions

Please read through all instructions and information available here before submitting your solution.

Contact name: _____

Team (if applicable): _____

Affiliation: _____

Address: _____

_____

Phone: _____

Email: _____

Title of the paper: _____

In the following table, indicate the nutrient(s) the technology would recover, the expected recovery efficiency for the nutrients, types of waste streams, sizes of operations and manure management systems for which the technology would be compatible.

Note: You may insert information for as many characteristics as are applicable for your technology, and for which you provide appropriate details in your concept paper. Applicants are permitted to submit separate concept papers (with separate cover sheets) for multiple technology ideas.

Submissions will be judged on the overall potential for effectiveness and adoptability of the concepts described, not ranked by the indicated percentage(s) of nutrient recovery alone. (For more information on evaluation criteria, see the pdf file *Competition Information, Criteria, and Guidelines,* available here, or when registered on InnoCentive's platform, here.)

	Dairy	Pork	Both
	Indicate percentage		
Nitrogen (N)	%	%	%
Phosphorus (P)	%	%	%
	Indicate which apply with an "X"		
Raw manure			
Manure with separated liquids and solids			
Anaerobically digested manure (digestate)			
	Provide the requested information below		
Size of operation (e.g., 500-head dairy, 2000-head swine farm)			
Type of manure collection system(s) for which the technology would be compatible (e.g., flush system, scrape system, deep pit, anaerobic lagoon, etc.)			
Expected capital cost for technology			
Expected operations & maintenance cost for technology			
Expected time to recoup return on investment ("ROI") for the technology			
Type of nutrient product(s) generated by technology			
Any identified markets for product(s) generated by technology			

Required Content for Concept Papers

I. Summary

- Briefly summarize your technology idea

II. Technology Description and Objectives

- Describe how your technology would address the above Primary Criteria, and any applicable "Desirable Characteristics".
- If possible, include technical information on the system(s), anticipated nutrient recovery performance, expected capital and operations and maintenance costs of the system, and types of operations and waste streams with which the technology would be compatible. Specify whether the system would treat raw manure, digested manure, and/or manure that's been otherwise conditioned. Include any applicable data or references if available.
- Explain how the concept is unique or transformative. How does the concept improve upon or go beyond technologies that are currently available, and advance the state of nutrient recovery technologies? (See information on existing technologies in the pdf file *Background Information on Nutrient Recovery Technologies and Pork and Dairy Production* here, or once registered, on InnoCentive's platform here).

III. Technology Development and Optimization Plan

- Describe what resources, steps, methodology, and, timeframe would be needed to bring your idea to fruition (i.e., from concept → design → prototype → pilot-scale system → commercially viable technology)?
- How could data on the technology be gathered, analyzed, and quality-assured at each stage?
- Where could the technology be in two years with incubation support and market development?

IV. About you

- Describe the background of you and your team (if applicable). How did you develop this idea? What could you contribute toward its development? What types of partners or resources would be most useful to take your idea to the next level?