



# The Nutrient Recycling Challenge



U.S. Environmental Protection Agency



American Biogas Council



National Milk Producers Federation



Cooper Farms



Marquette University



Tyson Foods, Inc.



World Wildlife Fund



Washington State University



Smithfield Foods



U.S. Department of Agriculture

Dairy Farmers of America



CowPots



Innovation Center for U.S. Dairy



Water Environment Research Foundation



Newtrient, LLC



Cabot Creamery Cooperative



American Society of Agricultural and Biological Engineers

Iowa State University



Ben & Jerry's



National Pork Producers Council

The U.S. Environmental Protection Agency is partnering with pork and dairy producers, USDA, and environmental and scientific experts to find affordable technologies that take nutrients from livestock manure and create valuable products.

Every year, livestock producers manage over a billion tons of animal manure containing valuable nutrients—nitrogen and phosphorus—that plants need to grow. Manure can be a resource as a renewable fertilizer, but should be used properly to minimize water pollution and build healthy soils.

There is a tremendous opportunity to generate environmental and economic benefits from manure, but further innovation is needed to develop more effective and affordable technologies that can extract nutrients and create products that farmers could use, transport, or sell more easily to where nutrients are in demand. Now is an optimal time to help cutting-edge innovations advance to the next level.

The mission of the Nutrient Recycling Challenge is to help find technologies that are a win-win for the environment, farmers, and the economy.



Farmers across America are asking the question: *“How can I manage nutrients on my farm better and more affordably?”*



Photo credit: Cabot Creamery Cooperative

## Timeline:

Phase I: Concept Papers.....	November 16, 2015 – January 15, 2016 (completed)
Phase II: Designs .....	Summer 2016 (TBA)
Phase III: Prototypes/Proof of Concept .....	Early 2017
Phase IV: Finalists' demonstration pilots on farms .....	2017

## Prizes:

In Phase I of the challenge, EPA received 75 concept papers from around the world and selected 34 to continue on to Phase II. The selected teams were invited to the Nutrient Recycling Challenge DC Summit on March 30–31, 2016 at the White House Eisenhower Executive Office Building and World Wildlife Fund Headquarters in Washington, DC, at which EPA awarded a total of \$30,000 in cash prizes to the top ten submissions. The summit provided a forum for innovators to meet experts and other innovators, as well as learn about resources to develop their ideas into real-life technologies.

Potential awards for subsequent phases include further funding, incubation support, connections to other innovators, media and publicity, and opportunities to have technologies demonstrated on farms that supply the largest dairy and swine cooperatives and processors in the U.S.

For more information, visit: [www.nutrientrecyclingchallenge.org](http://www.nutrientrecyclingchallenge.org)