

Research Program to Benefit U.S. Dairy Farms, Communities

Agreement focuses on the development of sustainably best management practices.

Compiled by staff

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An agreement has been announced by representatives of the U.S. dairy industry who have work jointly with a national energy research laboratory to advance the science and best management practices of renewable energy, environmental stewardship and life cycle analysis of dairy systems and processes.

The Innovation Center for U.S. Dairy, the Dairy Research Institute and Idaho's Center for Advanced Energy Studies are working to develop a national research program focused on enhancing the economic viability of dairy farms and rural communities.

"This partnership directly aligns with the dairy industry's science-based effort to measure and improve the sustainability of the U.S. dairy industry, across every segment of the supply chain," said Kevin Ponticelli, chair of the Dairy Research Institute and senior executive vice president of the Innovation Center for U.S. Dairy and Dairy Management Inc., which manages the dairy checkoff on behalf of the nation's farmers. "The only way that we can accomplish this commitment is by working with and through partners like CAES to leverage the latest data, current and emerging technologies, and innovative thinking and practices."

CAES is a national research partnership representing the U.S. Department of Energy, Idaho National Laboratory and the state of Idaho through its research universities. As part of the research program, CAES and the Innovation Center will bring together the science-based information and funding needed to accelerate the development and the commercialization of innovative technologies for the dairy industry.

"I'm pleased that the Innovation Center and our state resources through the CAES national research partnership are working collaboratively on renewable energy, sustainability and environmental impacts of the national dairy industry," said U.S. Rep. Mike Simpson of Idaho, chairman of the House Appropriations Subcommittee on Interior and the Environment. "The combined effort of private industry with state and federal partners is an example of sound use of public and private resources on behalf of Idaho and the rest of the United States."

The agreement outlines the following key partnership objectives:

- Collect baseline data on nutrient and manure management practices to assist in the identification of best practices for dairy farms
- Identify opportunities for dairy farms of all sizes to increase renewable energy production through anaerobic digesters, gasification and composting
- Research best management practices for farm-based renewable energy production on small, medium and large farms
- Analyze the U.S. utility grid infrastructure, electric rates and renewable energy incentives applicable to dairy farm operations

- Identify opportunities to increase funding of national research on sustainable dairy practices, manure management, substrates, renewable energy technologies and smart grid applications
- Facilitate technology-based economic development

"The collaboration between CAES, the Innovation Center and Dairy Research Institute will pursue the development of research and pilot project funding sources and facilitate technology-based economic development, which is a priority of the U.S. Department of Energy," said Dr. Harold Blackman, director of the Center for Advanced Energy Studies. "Through this industrywide effort, CAES will serve as a model for other U.S. Department of Energy labs in the advancement of sustainability research and transfer of technology to the broader industry."

Mike Roth, an Idaho dairy farmer, president of the Idaho Dairymen's Association and board member of the Dairy Research Institute, said the outcomes of this cross-industry partnership could greatly benefit dairy farms across the country.

"As one of the largest dairy-producing states in the country, we're happy to see a national relationship like this develop in our own backyard," said Roth. "Making the most efficient use of natural resources, such as energy, water and waste byproducts, not only contributes to profitability, it also lessens environmental impact."

Source: Center for Advanced Energy Studies and Innovation Center for U.S. Dairy