

Central Valley farmers see profit in what cows leave behind

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It might not smell like gold, but cow manure may look almost as valuable to savvy dairy farmers in the Central Valley, say advocates of converting the waste into fertilizer and energy.

Third-generation dairy farmer Gary Crowell of Bar Vee Dairy in Turlock says he is saving thousands of dollars a year by using his 700 heifers' manure to fertilize the crops that feed them, instead of buying commercial nitrogen fertilizer. This process also keeps the manure nutrients from polluting local waterways.

"This is a no-brainer," Mr. Crowell tells Sustainable Conservation, a San Francisco-based nonprofit. "It pays for itself, strengthens your profits and keeps you in compliance with environmental regulations. I'm amazed more dairy producers aren't doing it."

He says he is saving approximately \$110 an acre annually on 275 acres.

Modern manure management methods were mulled by Central Valley dairy operators at a conference this week at California State University, Fresno, jointly hosted by Sustainable Conservation and the university's College of Agricultural Sciences and Technology.

"Given high natural gas prices, which account for 90 percent of commercial fertilizer production costs, managing manure so that nutrients are recovered and used to grow

crops instead of being lost to the environment can boost farm profits," says Kristen Hughes, dairies project manager at Sustainable Conservation, in a written statement.

The price of natural gas has risen more than 70 percent over the last five years. In a single year, farmers around the nation paid \$2 to \$3 billion more in increased fertilizer costs, according to Sustainable Conservation.

Manure can also be used to generate electricity or produce a gas that fuels vehicles.

"California has a tremendous amount of 'cow power' available, with 1.7 million dairy cows that could produce enough electricity to power about 120,000 homes or fuel all the natural gas vehicles in the state," says Allen Dusault, director of the sustainable agriculture program for Sustainable Conservation, in a written statement.

He says it can provide an additional income stream for dairy farmers while reducing greenhouse gas emissions -- which contribute to global warming -- and reducing odors and pathogens