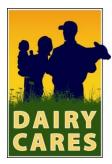
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Dairy Cares Newsletter

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Environmental agendas of 2013 underscore ongoing progress, opportunities for dairies

It's clear that the New Year has already seen a marked uptick in discussions about two environmental issues of critical importance to California and indeed the entire nation.

The first is climate change. Though this has been a subject of discussion for years in Washington, the Obama Administration – encouraged by its success in the election and an improving economy – has signaled that it will push forward with concrete climate change efforts. We can expect the administration to continue to promote development of renewable energy while striving to reduce dependence on coal for generating electricity. Meanwhile, already five years after adopting a scoping plan for reducing greenhouse gas emissions to 1990 levels by 2020, California's leaders are revisiting their own policies for greenhouse gas reductions and renewable energy.

Water quality is also clearly on the agenda in 2013. In December, the state adopted new water quality protection regulations for east San Joaquin Valley farmers aimed partly at reducing impacts to groundwater from fertilizer use. More regulations are expected in coming months for other regions of the Central Valley.

Both of these issues underscore the remarkable progress of the California dairy industry in addressing these critical issue areas, even while identifying opportunities for further progress. Even as other farmers are taking steps to increase fertilizer efficiency, dairy farmers across the Central Valley have been operating under fertilizer use efficiency plans (called nutrient management plans) for several years. They are also monitoring the success of their efforts with newly installed networks of monitoring wells. Across the valley, dairies routinely test more than 4,000 wells each year (some much more often) to ensure that their water quality stewardship efforts are successful.

Dairy farmers have also made stunning progress in reducing their "carbon footprint" (the amount of greenhouse gases created in producing milk). Today, the nation has 16.3 million *fewer* dairy cows than in 1944, yet these cows produce 59 percent more milk. These increases in efficiency, won through hard work and research to promote better animal health and nutrition, have resulted in a **65 percent reduction in the carbon footprint of**

a gallon of milk. Few other sectors of the economy can tell such a positive story of increased productivity coupled with lower emissions.

Yet this progress pales compared to the potential opportunity for dairies to be part of a green energy future in California. Already, hundreds of dairies in the U.S. are converting manure from cows into "green energy" by capturing methane gas that is emitted by stored manure in devices called methane digesters. Methane, which can be used to replace natural gas, can be used to generate clean electricity without fossil fuel, and can even be used – much as natural gas is now – to heat homes and fuel cars, buses and trucks. As the natural gas economy in the U.S. continues to develop, this opportunity to use renewable natural gas from dairies only gets better.

As with any innovative ideas, the key is achieving economic viability so the idea can be adopted more widely. While digesters show promise, they remain a risky and capital-intensive technology and out of reach to most dairy farmers. California dairy groups are determined to continue to work to develop this opportunity to improve the energy and economic future throughout our state's communities. One such effort is an ongoing study that could improve the economic viability of digester projects by linking dairies together to collect biogas to a centralized processing facility. As the economy improves, investors are moving forward with efforts to try to build more dairy digesters in California.

And these efforts aren't the only ways dairies are moving toward a better energy future. Some dairies have replaced fossil-fuel engines with electric motors to pump irrigation water, and some dairies have installed solar panels to offset their electricity use.

Sustainability for California dairy communities

For California communities, sustainability means a careful balance between living in the present while planning for the future, between protecting our environment and our economy. Hundreds of dairy families across California are part of this effort every day, as they manage, re-use and recycle resources on their farms to improve economics and the environment. Whether it's recycling water from washing barns to irrigate feed crops, using manure from cows as a natural fertilizer and soil nutrient, or reducing air emissions and energy use through new technology, California dairy families have come a long way. Looking forward, there is clearly an opportunity for dairies to play a key role in our state's sustainability future, even as they continue to provide nutritious, delicious and affordable dairy products for millions of American families.

Dairy Cares is a statewide coalition supporting economic and environmental sustainability and responsible animal care. Our members include Bar 20 Dairy Farms, California Cattlemen's Association, California Dairies Inc., California Dairy Campaign, California Dairy Research Foundation, California Farm Bureau Federation, Dairy Farmers of America-Western Area Council, Dairy Institute of California, GHD, Inc., Hilmar Cheese Co., Joseph Gallo Farms, Land O'Lakes, Merck Animal Health, Milk Producers Council, Ruan Transport Corp., Western United Dairymen, Yosemite Farm Credit and others. For information, visit DairyCares.com or call 916-441-3318.