

Stewardship Leaders in Agriculture

Dairy and Creamery Sustainability

Straus Family Creamery

Founded in 1994, Straus Family Creamery is a family owned and operated business located outside of Marshall, CA. President Albert Straus is part of a proud tradition of dairy farming having grown up on his parents' dairy farm. In the 1970s Mr. Straus completed his Bachelor's degree in Dairy Sciences at California Polytechnic State University in San Luis Obispo and returned home to manage the family operation. With an eye to the future, Mr. Straus began implementing progressive practices such as no-till silage and an abolishment of herbicides. In 1994, the Straus Family Farm became the first certified organic dairy in California and west of the Mississippi River. During the conversion to organic, the Straus Family Creamery was founded to handle the processing and distribution of the organic milk becoming the first 100% certified organic creamery in the United States. With oversight of the entire field-to-bottle infrastructure, the Straus family is able to produce high quality products that have a deep respect for the land's and animals' wellbeing.

Straus Family Farm

Straus Family Dairy has 275 dairy cows on 660-acres of pasture outside of Marshall, CA along the shores of Tomales Bay. The Dairy has been on the forefront of sustainable practices stopping herbicide use in the 1970s, converting to no-till silage to reduce soil erosion and fuel consumption in the early-1980s, stopping the use of chemical fertilizers in the mid-1980s, and converting to organic in 1994. The dairy sources cow feed from nontraditional food waste sources such as rice sake waste and orange peel and pulp from other family owned businesses. A manure wastewater pond system supersedes state and federal requirements. A methane digester provides electricity to power the dairy and Mr. Straus' car. When the needs of Straus Family Creamery outgrew the family dairy, partnerships with six other organic, local, family farms ensure a steady supply of certified organic, Non-GMO Verified milk.



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ACHIEVEMENTS

- First certified organic dairy west of the Mississippi River and the first 100% certified organic creamery in the United States
- Recipient of the 2006 Ecological Society of America's Corporate Award in its Sustainability and Land Stewardship
- Straus Dairy reuses 94% of the water from the Creamery
- Saves ~\$6,000 per month on energy cost by producing clean energy on-site with a methane digester



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California Energy Commission: Dairy Power Production Program

The California Energy Commission's (CEC's) Dairy Power Production Program (DPPP) is funded by the nearly \$10 billion SB5X alternative-energy program of 2001 and provides grants that can cover up to half the cost of a project or a maximum of \$2,000 per produced kilowatt. The Western United Resource Development, Inc. administers the funds and close to 20 methane digesters have been completed. Methane is a powerful greenhouse gas, 23 times as detrimental as carbon dioxide, and methane digesters prevent this gas from entering the atmosphere. Flies and smell are reduced and the byproducts of the process can be used as fertilizer. Excess heat from the electrical generation process is used to heat water for cleaning barns. Some methane digesters produce more energy than is needed on site and power purchase agreements to sell excess power have been problematic, but the recently passed California legislation, Senate Bills 594 and 498, concerning net metering is making the process smoother. Straus Family Dairy received a DPPP grant that covered a large cost of capturing the naturally occurring methane from the covered manure pond and converting it to capturing electricity. Straus Family Dairy saw its system pay for itself within five years and believes the economic and environmental savings of projects like this will attract more ranchers.

"It is essential to the Straus Family Creamery way of doing things that we remain within a framework where the relationships between our dairy, our creamery and our participating family farms are personal and mutually accountable."
– Albert Straus

PROJECT PARTNERS

California Certified Organic Farmers

California Energy Commission Dairy Power Production Program

California Regional Water Quality Control Board

Ecological Society of America

Marin County Resource Conversation District

Marin Organic Certified Agriculture

Non-GMO Project

U.S. Department of Agriculture Natural Resources Conservation Service

U.S. Department of Agriculture National Organic Program

U.S. Environmental Protection Agency

PROJECT DETAILS

METHANE DIGESTER

The Straus Family Dairy barns are flushed twice a day and this water, along with manure from the barns, is collected in a holding pond. A separator collects the solid for use as compost, while the liquid is piped into a second pond that is sealed with a large tarp. Bacteria break down the liquid manure resulting in the production of methane gas. The gas collects under the pond's tarp and is pumped to a combustion engine where it powers a generator creating electricity that allows the farms electric meters to run in reverse as electricity is fed back into the grid. In addition to the CEC's DPPP grant, Straus Family Dairy received grants from Marin County Resource Conversation District, California Regional Water Quality Control Board, the U.S. Environmental Protection Agency and the U.S. Department of Agriculture Natural Resources Conservation Service.

ORGANIC CERTIFICATION

In 1994, Straus Family Dairy became the first certified organic dairy in California and west of the Mississippi River. The same year, Mr. Straus founded the first certified organic creamery in the US. The United States Department of Agriculture (USDA) National Organic Program's (NOP's) standards are followed and certification comes from independent third-party organizations; California Certified Organic Farmers (CCOF) certifies the creamery, Marin Organic Certified Agriculture (MOCA) certifies the dairy, and the USDA NOP covers both the dairy and creamery.

NON-GMO TESTED AND VERIFIED

After finding genetically modified organisms (GMOs) in some purchased feed in 2006, a testing system was developed and implemented and in 2010, when the Non-GMO Project began, the creamery became the first in the country to be certified. This means all ingredients, not only the milk, are tested for GMOs and verified GMO free.

WATER REUSE

The Straus Dairy and Creamery create a closed loop water treatment process that sees 94% of water used at the creamery reused at the dairy. At the creamery, water is removed from the milk through reverse osmosis before being treated and used to sanitize equipment. This waste water is then used in the dairy's methane digester after which it is used to clean the barns and finally the water is used to irrigate the fields.

