

# ROGUE CREAMERY KEEPS COWS AND ENERGY BILLS IN A HAPPY PLACE

## EFFICIENCY SOLUTIONS SET THE MOOD FOR ENERGY SAVINGS

It's quite a journey from dairy farm to cheese aisle, and for Rogue Creamery, sustainability is a key part of the process. From energy-efficient equipment to a pleasant environment for cows to call home, it all comes together in a tightly run operation that produces some of the region's most enjoyed cheeses.

In 2012, Rogue Creamery purchased a 75-acre farm in Grants Pass, Oregon, to relocate its dairy operations. The property already included an outdated barn and milking parlor, setting the stage for a renovation fitting of the company's commitment to environmental and social responsibility. Energy Trust of Oregon assisted on the project, which continues to evolve as the farm expands.

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Investing in renewables and energy efficiency aligns with Rogue Creamery's core mission: People dedicated to sustainablity, service and the art and tradition of creating the world's finest handmade cheese.

David Gremmels, owner, Rogue Creamery







After frolicking outside, the happy herd returns to snack under the welcoming LED light of their new barn. The cows are free to roam, with the milking machine, pasture and even a back scratcher just a short stroll away.



Solar panels offset energy consumption at the milking parlor.



Charlie, the solar-powered milking machine, completes another shift.

# IT STARTS WITH A SPIRITED HERD

David Gremmels, owner of Rogue Creamery, often speaks about the importance of creating a comfortable environment for his milking cows. The spirited herd has the freedom to play in the pasture, hang out in the barn, or visit the milking station at all hours of the day.

When it came time to rebuild the loafing barn, Rogue Creamery chose to install an innovative LED lighting system that keeps cows happy while also saving significant energy and money.

The system includes 25 LED light fixtures automated to recreate the feel of an ideal sunny day, so even when the cows venture inside they can enjoy a warm and welcoming atmosphere. This is key because the recommended light exposure for cows is 16 to 18 hours of continuous light followed by six to eight hours of darkness. By meeting these standards, the cows stay healthier and happier, and daily milk production increases from 5 to 16 percent.

"The Rogue Creamery team and I were impressed with the conscious commitment and collaboration of Energy Trust and Winter's Electric in helping us select lighting systems that provided a healthful and safe environment," said Gremmels.

# **A NATURAL FIT**

The loafing barn's recyclable fabric roof lets in natural light so the LED fixtures can dim or turn off completely to conserve energy during daylight hours. An added bonus with the roof is its UV-protective covering, which reflects sunlight and heat away from the building. This reduces roof temperatures and helps maintain comfort.



In terms of energy efficiency, the LEDs save an estimated 188,400 kWh each year. Rogue Creamery received \$29,400 in cash incentives from Energy Trust to help offset the cost of the system.

"We measure our energy production and consumption monthly. We saw seasonal improvements in use and production. The lighting provided further comfort and safety for both cows and team members during evening and early morning hours," said Gremmels.

# HERE COMES THE SUN

Rogue Creamery's remodeled milking parlor is another example of innovative technology in action. It centers on a pair of robots, affectionately known as Matilda and Charlie, who handle the milking duties. The cows have 24-hour access to these machines but that doesn't mean it's a free-for-all. The robots read a chip in each cow's ear to determine if it's time to milk again or if the cow is returning too soon.

Despite their cute names, Matilda and Charlie do require a sizable amount of energy to operate. To help offset this energy consumption, a 9.9-kw solar array was installed on the roof of the milking station. The panels are estimated to generate about 11,000 kWh annually. Through Energy Trust, Rogue Creamery received \$8,900 in incentives for the solar project, and a second solar-powered milking station is already in the works.



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David Gremmels, owner, Rogue Creamery



## ROGUE CREAMERY AT A GLANCE

#### Overview

- · Loafing barn and milking parlor
- 120 cows onsite
- · Located in Grants Pass, Oregon

## **Energy-efficient features**

- · Automated LED light fixtures
- Daylighting
- Solar electric system

#### **Energy Trust incentives**

• \$38,336

## Estimated energy savings

· 188,425 annual kWh

#### Estimated energy production

· 11,076 annual kWh

## **Project contributors**

- Lanker Design
- Wild Country Construction
- · Winters Electric
- · True South Solar
- · Precision Structural Energy
- · Energy Trust of Oregon
- · Pacific Power



# **MISSION ORIENTED**

When Rogue Creamery acquired the Grants Pass property, many parts of the dairy farm had reached their lifetime use, and 80 percent of the structures required a rebuild. The design and building process included a conscious effort to reuse as much existing material as possible, while also introducing new features that reduce energy consumption and lower monthly utility costs. It's all part of Rogue Creamery's goal of becoming a "zero impact" company.

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## Get more from your energy

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