Commercial Building Case Studies



The old Selma Elementary School is reborn through community effort into the Selma Community and Education Cente. Photo Credit: Karen Chase.



Barry Russell examines his company's tiles, produced with use of solar power and energy efficiencies. Photo Credit: Karen Chase.

ENCORE CERAMICS AND SELMA COMMUNITY CENTER

Independence and Interdependence Influence a Rural Oregon County's Greening

By Karen Chase, Oregon Department of Energy

Josephine County in Southern Oregon has launched a pioneering effort that could propel this mostly rural area into a progressive and economically bright future. This year the Board of County Commissioners partnered with county residents to form the Josephine County Renewable Energy Task Force. Most of the energy currently consumed in the county is imported, yet Josephine County has a wealth of viable renewable energy, including a virtual gold mine of sunlight.

County Commissioner Dave Toler said, "We're an independent people here in Josephine County and renewable energy fits that notion." The Task Force initiative, he continued, is about "starting to meet the future and show that government can be a leader in renewable energy and also focus on economic revitalization."

A private business and a non-profit organization have recently completed projects that demonstrate that pioneering spirit.

Encore Ceramics

Encore Ceramics of Grants Pass designs and manufactures high-end, hand-crafted, ceramic tile. Owners Barry and Debbie Russell are as passionate about process as they are about their products.

Their success is proof that green business can be economically beneficial. In 2006, manufacturing production increased 22 percent, while energy use decreased by 7 percent.

The firm has received recognition from the Portland Business Journal, the Renewable Northwest Project, and membership in the Environmental Protection Agency's Green Power

Partnership Program. Barry Russell praises the cooperation and innovation of Josephine County Commissioners, the City of Grants Pass, the Oregon Economic and Community Development Department, and Southern Oregon Regional Economic Development, Inc. for helping to establish their business.

The Russells did not rest on their laurels after installing a 29 kilowatt rooftop solar electric array. They continue to find inspiring ways to make their business as sustainable as possible and to serve as a model to others. They use a process that produces no raw waste and reuses water; they produce a line of ceramic tiles that requires only a single kiln firing; and they use energy-efficient kilns and high-efficiency motors.

Bonneville Environmental Foundation purchases the renewable energy credits, or green tags, associated with the environmental benefits of the company's solar electricity generation. Remarkably, while the solar array produces about 5 percent of their electricity needs, the company buys green tags to offset greenhouse gases associated with all additional electricity, nature



Selma Farmers Market vendors and patrons are sheltered under a solar-paneled roof. Photo Credit: Karen Chase.

ral gas and transportation fuels used by the business.

A new adjacent manufacturing building will accommodate a process using waste glass. This building is equipped with clerestory windows for natural lighting and motion-sensor modulated T-5 fluorescent lights, along with 14,000 square feet of south-tilting roof. The Russells have a solar expansion in mind that could dwarf their current system.

Barry's strong motivation for a green business comes from his children and the "realization that all future generations of human beings live downstream from us."

He attributes his solar inspiration to Kettle Foods in Salem and used the same solar contractor, Eugene-based David Parker's Advanced Energy Systems, for his installation. Barry is continued on page 97

grateful for Parker's ability to usher them through the process, including providing information about the Oregon Depart-ment of Energy's Business Energy Tax Credit program. "Without the Business Energy Tax Credit, we could not have made the deal work," Barry said.

They received an \$82,548 tax credit (35 percent of eligible costs) and an Energy Trust of Oregon incentive of \$35,000. The grid-tied system is net-metered through an agreement with Pacific Power. And, the company continues to receive other State energy tax credits, such as a recent \$11,000 tax credit for an energy-efficient lighting project.

Barry Russell will continue to be a business leader in ceramics and renewable energy. And when he closes his eyes at night, he might see tile designs, but more often he sees pathways toward energy independence and sustainability.

SELMA COMMUNITY AND EDUCATION CENTER

It is a beautiful Sunday morning and Farmers Market vendors at the Selma Community and Education Center offer patrons tantalizing organic produce, plant starts, arts and crafts, and food and beverages. Located in rural Josephine County at the former Selma Elementary School which closed in 2000, the Center's members lease the building and grounds for a nominal fee.

The Center also has a recycling facility, a licensed commercial kitchen, and a library, which is especially critical with the recent closure of the County's public libraries. Hand-made pizza bakes in the Center's outdoor cob oven. All this and more in a rural community that, until recently, had neither a community space nor market.

The Center's members wanted to use the sun's energy to offset electrical bills and to demonstrate renewable energy to members of the community.



Barry Russell stands next to specially-designed single-fire kilns equipped with mechanical lifts. Photo Credit: Karen Chase.

When they learned the school building's roof could not support a solar array, they designed and constructed a 3,000-square-foot, open-air pole structure, mostly with volunteer labor. This pole building, with 6 kilowatts of photovoltaic panels, shelters the Market from sun and rain.

The solar system components were purchased from Energy Outfitters, a home-grown Josephine County company Bob Maynard founded and operated for 15 years, with business partner, Ray Ogden. Recently, the company merged with groSolar, creating one of the largest solar distribution and installation firms in the U.S. and Canada. The Center's solar array was installed by Bob-O Schultze of Electron Connection, Kerry Whitehead of Renewable Energy Systems and Maynard.

The Center also received contributions from the Board of Josephine County Commissioners, the Meyer Memorial Trust, the Illinois Valley Community Development Organization, and a \$35,000 project grant from the Energy Trust of Oregon.

The non-profit Center was able to



Butter the donkey and his owner visit Selma's Farmers Market. Photo Credit: Karen Chase.

use the Oregon Department of Energy's Business Energy Tax Credit Pass-through Option for the photovoltaic installation. A local resident served as a pass-through partner for the 35 percent tax credit, taking the credit over five years and paying the Center a lump sum of slightly more than \$10,000.

Local resident Orville Camp donated the timber from his own land for the structure. Camp, his mother, and his three children all attended the former Selma school. Well known for his generosity and dedication to sustainable land practices, Camp selected trees uprooted by snowfall, and said the poles were "as sustainably harvested as you can get in civilization."

Marilyn Mooshie is one of many Selma area residents who, through a collective dream and thousands of hours of volunteered time and effort, brought the Center, solar array and Farmers Market into being. "It's not about individual people living in their own little worlds anymore," said Mooshie. "It's about connection, community, interdependence, sustainability, and reliance on spirit."