

# Oregon Department of Energy

## Saving Energy Saves Everything



## SELP helps local data center green up and prepare to boost growth

Business customers depend more and more on data centers, secure facilities where companies house their computer and network infrastructures. In total, these centers consume around three percent or 120 billion kilowatt-hours per year at a cost of \$7.4 billion. The U.S. Department of Energy predicts that by 2015 this number will rise to five percent of total U.S. energy consumption.

The Oregon Department of Energy (ODOE) has a number of programs designed to encourage Oregonians to use energy more efficiently and to use renewable energy sources. Its Small-scale Energy Loan Program (SELP) offers low-interest loans for energy saving projects.

[EasyStreet Online Services Inc.](#), headquartered in Beaverton received a \$5 million SELP loan. As one of Oregon's leading providers of managed data hosting and colocation services for businesses in the region, EasyStreet's growing customer demand dictates that it meet client need twenty-four hours a day, seven days a week. The company has two data centers totaling over 11,000 square feet of

space and includes managed data hosting, colocation, monitoring, backup and storage, and access to high-speed circuits.

Faced with outgrowing its original data center, the Small-scale Energy Loan Program enabled EasyStreet to build a new energy efficient facility, the biggest project and investment the company has made in its 16-year history.

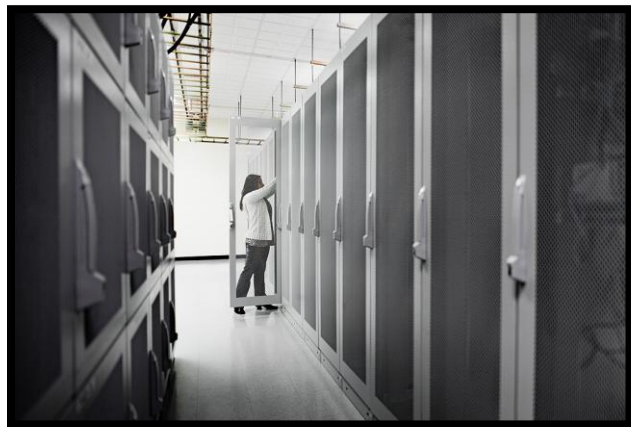
The new facility incorporates innovative technologies that help reduce the percentage of energy needed for cooling. It includes rooftop Indirect Evaporative Coolers (IECs) that cool air through the evaporation of water. IECs use fans and water to cool the air much like the radiator in a car engine. These coolers use considerably less energy to run than traditional, refrigerant-based computer room air conditioning units.

Another key design element is the hot/cold air containment feature. EasyStreet houses customers' computing equipment in special "chimney" cabinets, which isolate and direct the hot exhaust

from the equipment to the coolers rather than letting it mix with the cold air being returned by the IECs.

“EasyStreet’s new data center will save 1,532,634 kilowatt-hours per year,” says EasyStreet president and CEO, Rich Bader. “This savings is enough to power 153 average households a year, and it comes about after years of inventive design work by EasyStreet and a collection of some of the nation’s best IT and environmental engineering minds.”

Conserving and utilizing renewable energy is top-of-mind for EasyStreet. Bader says he realizes the environmental consequences of energy consumption that come from being a thriving data center, and therefore, is committed to doing his part when it comes to protecting the environment. EasyStreet buys 100 percent renewable power offsets from its electric utility, Portland General Electric (PGE). The company is one of only three



Customer equipment cabinets in EasyStreet’s colocation facilities

Platinum-level PGE Clean Wind Partners and the utility’s 2008 Green Power Leader.

“Conventional loan providers don’t understand the importance of lending to renewable energy development even though doing so would motivate business sustainability and growth,” explains Jack Flug, the vice president of finance at EasyStreet.

“If it had not been for SELP, we would have never been able to expand the vital services we offer to support Oregon companies,” says Flug. “The State’s renewable energy goal helped us to do the right thing,” Flug adds. “With programs such as SELP we were able to build one of the most energy efficient

facilities in Oregon.”



## A snapshot of EasyStreet’s green successes

- Installed a rainwater capture and filtering system, allowing cooling systems to run off rain water 70 percent of the year
- Uses uninterruptible Power Supplies (UPSs) with flywheels as their power source instead of batteries that need to be charged and recycled every four years
- Became the first data center services provider in the region to acquire *Bonneville Environmental Foundation Water Restoration Certificates*, offsetting 100 percent of water use
- Installed a charging station for plug-in hybrid and all-electric vehicles for use by customers and employees

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## About the ODOE Energy Loan Program

Oregon is one of the leading states focused on conservation and renewable energy development through a variety of incentive programs. Oregon’s goal is to reduce reliance on fossil fuels, keep energy dollars in Oregon and reduce green house gas emissions.

For additional information about the Department of Energy and the Small-scale Energy Loan Program, visit ODOE online at [Oregon.gov/ENERGY/LOANS/index.shtml](http://Oregon.gov/ENERGY/LOANS/index.shtml)

*Jack Flug, EasyStreet interview and article by Sylvia McDaniel, ODOE Public Affairs and Outreach.*