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Business

Denver chamber of commerce to launch rooftop wind and solar system

When it comes to green energy, the Denver Metro Chamber of Commerce is upping the ante—to the roof of its LoDo headquarters.

The chamber long has been an advocate of investment in renewable energy. Now it is in the process of setting up its own system.

By next month, the chamber plans to flip the switch and begin generating electricity from a series of photovoltaic solar panels and small wind turbines atop its building at 1445 Market St.

"We really want to be able to walk the talk," said Holli Riebel, chief operating officer of the chamber.

The project is expected to garner plenty of attention — <u>not</u> <u>from the solar panels, which are now commonplace</u>, but from the notion of placing wind turbines in urban locations.

Few such systems exist, largely because the wind in cities tends not to blow enough to make wind power cost-effective.

But the project's developer, Quantum Renewable Energy of Denver, says that a combination of proprietary turbine technology and unexpectedly strong wind currents will provide for good power generation.



Holli Riebel, the chief operating officer for the Denver Metro Chamber of Commerce, stands near the new small wind turbines and photovoltaic solar panels installed on the roof of the agency's Lower Downtown headquarters. (Kathryn Scott Osler, The Denver Post)

Through wind-speed testing, Quantum found that buildings along 15th Street have created a man-made wind tunnel that often funnels breezes from the Central Platte Valley across downtown, including the chamber's 65-foot-high roof. Those gusts will enhance the building's average wind speed of 15 mph.

The wind generators won't have the look of conventional turbines with prominent spinning blades. The so-called vertical access turbines are contained in a box-like cowl that resembles a piece of HVAC equipment.

The system's first phase entails 10 kilowatts of solar panels and one 50-kilowatt wind turbine. Phase 2, scheduled for late fall, will add 30 more kilowatts of solar and two additional turbines.

All told, the project is expected to cut the chamber's annual \$150,000 power bill by at least 25 percent.

During nights and weekends, when power consumption is minimal, the generated renewable energy will spin the building's meter backward as it feeds into the Xcel Energy grid.

The \$6 million project — including equipment, installation and research-and-development costs — is being funded entirely by Quantum Renewable Energy. Quantum founder John Palizzi said he expects to benefit from chamber marketing and public exposure.

The project marks the first major installation by Quantum, which has spent the past seven years perfecting its wind-turbine technology.

"This gives us and Quantum the opportunity for the most innovative technologies to be tested," chamber president and CEO Kelly Brough said.

Time will tell if the system can meet projections in its unlikely urban location, said Larry Flowers, a Colorado-based small-wind expert for the American Wind Energy Association.

"Typically, we are very cautious about advising people to put a turbine on the top of a building," he said. "The wind resources (in urban areas) tend to be variable and turbulent."

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