

Swiss-based zinc-air battery maker picks Portland for U.S. operations

By [Richard Read, The Oregonian](#)

September 01, 2009, 6:00AM

Think zinc.

A Swiss company using the bluish-white metal in batteries to extend the range of electric vehicles has chosen Portland for its U.S. headquarters.

[ReVolt Technology](#) will announce plans today to establish a research-and-development center and a manufacturing plant, together hiring about 250 people. The total startup investment could easily reach \$60 million.

Oregon's success in landing the company, after a fast but rigorous selection process, bolsters the state's status as a clean-energy hub.

"We can attribute today's good news to our commitment to the next generation of vehicles and the state's business incentives that foster innovation and grow Oregon's renewable-energy sector," Gov. Ted Kulongoski said. "The state's efforts to reduce our greenhouse gas emissions are time and again proving to be an effective economic development strategy that delivers jobs to Oregonians."

Investment recruiters from the state and the city of Portland, backed by Kulongoski and members of Oregon's congressional delegation, helped land the company in less than two months. During the confidential search, ReVolt Chief Executive James McDougall and other executives visited the state.

A decisive factor, said Mark Brady, an Oregon Business Development Department clean-tech industry strategist, was Oregon's demonstrated commitment to green technology.

"More than one of them said that Oregon really walks the talk on clean tech and sustainability," Brady said.

Brady's agency and the Portland Development Commission learned of the search in early July from a site-selection company. Officials pitched Oregon over states including North Carolina, Texas and Michigan.

He said ReVolt managers were impressed that Oregon will test-market Nissan's new Leaf plug-in car and they expect to receive more than \$40 million in federal battery research and production grants.

They also noted Oregon companies such as Entek, EnerG2 and Cascade Sierra Solutions that are active in alternative energy. Separately on Monday, Kulongoski awarded a \$100,000 grant to Brammo Inc., an Ashland electric-motorcycle company that plans to hire about 300 more workers in the next two years.

ReVolt's rush to pick a state by late August stemmed from federal grant-application deadlines. The company, which was founded in 2004 and so far employs 34 people, is applying for \$30 million from the U.S. Department of Energy and plans to seek Oregon business energy tax credits.

ReVolt, based near Zurich, pioneered zinc-air rechargeable batteries. The units make power through the oxidation of zinc.

The company says zinc-based batteries deliver more than twice the energy of batteries made with lithium, a substance less abundant in the United States. Zinc-air technology, which can be used in hearing aid batteries and energy grid storage, costs less to make and is safer to use, the company says.

Zinc-air batteries could be recharged by mechanically replacing spent electrolytes and particles with fresh ones, according to a circular from the Lawrence Berkeley National Laboratory.

"This mechanical recharging is expected to take minutes at the equivalent of a gas station -- no time is wasted on conventional electrical recharging," the Lawrence Berkeley bulletin says. "The battery could give electric vehicles the same driving range as gas-fueled vehicles while eliminating exhaust pollution."

More study is needed, and some of that work could be accomplished by Ph.D-level workers at an Oregon research-and-development center to employ as many as 75, said ReVolt attorney Elizabeth Moeller, head of public-policy practice at Pillsbury Winthrop Shaw Pittman in Washington, D.C.

ReVolt managers expect to hire as many as 175 more workers in Oregon for the pilot and production phases, said Tom Resau, senior public relations manager at the Pillsbury law firm. ReVolt, which does not disclose sales figures and projections, has not chosen its research and manufacturing sites in Portland.

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ReVolt Technology

Product: Zinc-air batteries for electric vehicles and other products

Based: Staefa, Switzerland

Founded: 2004, as a spinoff of a Norwegian research institute

Investors: European renewable-energy and venture-capital companies

Chief executive: James P. McDougall, battery industry veteran

Web site: www.revolttechnology.com