



ElectronVault Creates Next Generation of Energy Storage With Autodesk Software

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Autodesk Clean Tech Partner Program Helps Start-Up Improve Battery Packs for Applications From Electric Scooters to Lighting Remote Villages

LAS VEGAS, Nov 30, 2011 (BUSINESS WIRE) --

What has kept electric cars out of the mainstream for the past several decades? Most experts believe it has been deficiencies with battery technology. Now startup ElectronVault is closing in on solutions to some of the cost and performance problems that have hampered the energy storage industry in general, and the electric vehicle in particular, with help from [Autodesk, Inc.](#) (NASDAQ: ADSK) software.

ElectronVault uses [Digital Prototyping](#) technology powered by [Autodesk Inventor](#) and [Autodesk Vault Professional](#) software received through its membership in the [Autodesk Clean Tech Partner Program](#) to create a reliable, safe, affordable and sustainable method of building and managing dense electrical storage systems such as car or grid batteries.

Rather than needing a different, specialty battery cell for each application, ElectronVault's large-scale battery packs use the same types of batteries found inside digital cameras or laptops across all applications. The difference is in scale. A battery pack for an electric car might contain more than 6,000 commodity battery cells, while a pack to provide backup power for a housing development might contain millions. By mixing commodity cell prices with ElectronVault's proprietary management technologies, battery pack costs are halved when compared to other offerings.

"Electric vehicles have been around for decades, but their Achilles heel has always been expensive and short-lived batteries," said ElectronVault CEO Rob Ferber, who previously designed batteries for Tesla Motors and AC Propulsion. "Our business was formed to design battery packs that can be easily serviced in the field by changing out components that can later be repurposed or recycled. Autodesk Inventor was critical in this process, enabling us to reduce design and prototyping time by up to 75 percent."

By using Autodesk Inventor software to cut costs and speed time to market, ElectronVault has been able to prototype systems with greater efficiency. The company uses the software to design, simulate and refine battery packs that allow trained technicians to quickly swap out a few depleted cells within a large pack--similar to the way sparkplugs are replaced in traditional automobiles. ElectronVault also uses Autodesk Vault Professional data management software to share files with its network of partners and domestic suppliers.

ElectronVault, founded by a husband and wife team of Caltech alumni serial entrepreneurs, has deployed battery systems across the world. Together with SunPods, another participant in the Autodesk Clean Tech Partner Program, ElectronVault designed a low-carbon power system for rural communities that collects solar power during the day and stores it for consumption at night. An initial system was recently installed in South Africa.

"We often are asked by national government officials about how they can better secure their grid infrastructure and electrify certain regions of their countries for the first time," said Linda Maepa, who serves as ElectronVault's COO, and CEO of ElectronVault Energy Systems, the company's infrastructure energy storage subsidiary in Johannesburg, South Africa. "It's these sorts of big problems with immense impact that drive us. The Autodesk Clean Tech Partner Program has helped us immeasurably with access to incredible software that enables us to respond to customer and partner requests on a much faster timeline."

"Autodesk's Clean Tech Partner Program is providing entrepreneurial clean technology companies with the tools they need to make a difference in the world," said [Robert "Buzz" Kross](#), senior vice president, Manufacturing Industry Group at Autodesk. "ElectronVault is a powerful example of one of these forward-thinking companies that is working to advance transportation with its unique approach to energy storage."

About the Clean Tech Partner Program

The Autodesk Clean Tech Partner Program supports the efforts, innovations and environmental advancements of clean technology pioneers, providing world-class software to design, visualize and simulate their ideas through [Digital Prototyping](#). Clean tech companies in North America, Europe, Japan, and Singapore are invited to apply to receive up to \$150,000* worth of software for only \$50. Access to a collection of Autodesk industry-leading software includes up to five licenses each of [Autodesk Product Design Suite Ultimate](#), [AutoCAD Revit Architecture Suite](#), [Autodesk Simulation Mechanical](#), [Autodesk Inventor Publisher](#) and [Autodesk Vault Professional](#) software. Get [more information](#).

About ElectronVault

ElectronVault invents and licenses technologies that enable large-scale battery systems to be manufactured, sold and serviced at mass-market price targets. For more information, visit <http://electronvault.com/>.

About Autodesk University

Now in its 19th year, Autodesk University is the annual series of Autodesk in-person and virtual user conferences, which include the flagship Autodesk University event in Las Vegas, Autodesk University China, Autodesk University Japan and Autodesk University Brazil, as well as associated online content available through Autodesk University Virtual. The 2011 events will bring together 200,000 designers, engineers, architects and digital artists together to explore the "Power of the Possible". More information is available at the [Autodesk University web site](#).

About Autodesk

Autodesk, Inc., is a leader in [3D design](#), engineering and entertainment software. Customers across the manufacturing, architecture, building, construction, and media and entertainment industries -- including the last 16 Academy Award winners for Best Visual Effects -- use Autodesk software to design, visualize and simulate their ideas. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio

of state-of-the-art software for global markets. For additional information about Autodesk, visit www.autodesk.com.

**Value is based on a package of up to five commercial licenses of each application.*

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