



## Autodesk Software Helps Enable Cost-Effective Electric Bike Design at Pi Mobility

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### Digital Prototyping Puts Clean Tech Company on Path to Profitability While It Produces a Green Transportation Alternative

LAS VEGAS, Dec 01, 2010 (BUSINESS WIRE) --

[Autodesk, Inc.](#) (NASDAQ: ADSK) has named Pi Mobility as the Autodesk [Inventor of the Month](#) for December for using Autodesk software to more efficiently design the Pi Cycle, a new generation of sturdy, long-lasting electric bicycles.

In the early stages of design, Pi Mobility used [Autodesk Inventor](#) software to produce a 3D digital prototype of the Pi Cycle that showed that by increasing the diameter of the bike's tube by a half an inch, the company could immediately save \$335,000. Extrapolated over several years, this discovery translates into seven figures worth of cost savings -- a discovery that puts Pi Mobility on track to achieve profitability a full year ahead of schedule.

"We can form a tube in about 30 seconds, and with the help of Autodesk software, changes to the design can be embedded very quickly," said Marcus Hays, CEO of Pi Mobility. "Our manufacturing method offers very rapid scale at very competitive prices, but it also reduces the required labor to a fraction of more traditional electric bikes."

The Pi Cycle's single, arched tube of recycled aluminum is the key to its strength, providing a frame that eliminates the need to cobble together multiple plastic components that are prone to breakage. In addition to giving the Pi Cycle an iconic and instantly recognizable shape, the arch provides a durability that ensures the bike will last over the long haul -- helping increase the viability of electric bikes as a sustainable transportation option.

The Pi Cycle has a miles per gallon equivalent (MPGe) of roughly 1,250 miles, which makes its unique hybrid of human and electric power 20 to 30 times more efficient than a conventional car or motorcycle running on fossil fuel. In addition, the recycled aluminum tube that makes up its frame requires just one-thirteenth the amount of electricity to produce when compared to virgin aluminum, further reducing environmental impact.

#### Digital Prototyping Optimizes Design Process

Pi Mobility is also a member of the Autodesk Clean Tech Partner Program, which provides software for emerging clean tech companies in North America and Europe. The Autodesk solution for [Digital Prototyping](#) -- including [Autodesk Vault](#), [Autodesk Alias Design](#), and [Autodesk Showcase](#), as well as Inventor -- helped the company to rapidly explore different materials and iteration choices to optimize the design of the Pi Cycle.

Thanks to the less labor-intensive design and associated cost savings of the single tube, the company is able to maintain high-quality production of its Pi Cycles in the United States -- rather than sending the work overseas, where most electric bikes are produced -- and still be profitable.

"Clean tech companies like Pi Mobility need to take a great idea and make it a reality--quickly and cost effectively," said [Robert "Buzz" Kross](#), senior vice president, Manufacturing Industry Group at Autodesk. "With Digital Prototyping, they can do just that: save time and money, build better products, and beat the competition to market."

#### About the Autodesk Inventor of the Month Program

Each month, Autodesk selects an Inventor of the Month from the users of Autodesk Inventor software, which takes manufacturers beyond 3D to Digital Prototyping. Winners are chosen for engineering excellence and groundbreaking innovation. For more information about Autodesk Inventor of the Month, contact us at [IOM@autodesk.com](mailto:IOM@autodesk.com).

#### About the Clean Tech Partner Program

The Autodesk Clean Tech Partner Program supports early-stage clean technology companies by providing design and engineering software that accelerates their development of solutions to the world's most pressing environmental challenges. Clean tech companies in North America and Europe who can benefit from Autodesk solutions for Digital Prototyping 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 applications includes up to five licenses of [AutoCAD Inventor Professional Suite](#), [Autodesk Showcase](#), [Autodesk Vault Professional](#), [Autodesk Revit Architecture](#), [Autodesk Alias Design](#), [Autodesk Algor Simulation](#) and [Autodesk Inventor Publisher](#) software. For additional information, visit <http://www.autodesk.com/cleantech>.

#### About Pi Mobility

Headquartered in Sausalito, California, Pi Mobility has been developing electric bicycles since 2000, providing an earth-friendly mode of personal mobility that reduces dependence on automobiles. For additional information, visit <http://pimobility.com>.

#### 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 15 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](http://www.autodesk.com).

An interview with Pi Mobility is available on the Autodesk YouTube Channel at <http://www.youtube.com/watch?v=MU-CRpyQpec>.

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

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