



Green Ocean Energy Harvests Power of Ocean Waves With Autodesk Inventor

April 29, 2009

Autodesk Names Renewable Energy Company as April Inventor of the Month for Design of Electricity-Generating Devices

SAN RAFAEL, Calif., April 29 /PRNewswire-FirstCall/ -- Autodesk has named Green Ocean Energy Ltd. (Green Ocean), a renewable energy company headquartered in Aberdeen, Scotland, as the Autodesk Inventor of the Month for April 2009. Green Ocean successfully used Autodesk Inventor software in the development of the Ocean Treader and Wave Treader, floating devices that convert the motion of the ocean into clean, renewable energy.

The Ocean Treader is much like a buoy with a pair of arms, and is meant to be moored one to two miles offshore in open water. The Wave Treader shares a similar design but is intended to be mounted on the base of a static offshore structure, such as a wind turbine or tidal turbine. Both devices work on the same principle: as the ocean causes the floating arms to rise and fall, the motion is harvested by hydraulic cylinders that generate electricity, which can then be exported back to shore via cable.

The Inventor of the Month program recognizes the most innovative design and engineering advancements made by the extensive community using Autodesk Inventor software - the foundation of the Autodesk solution for Digital Prototyping. A digital prototype is a 3D digital model of the entire end product, used to virtually explore and validate a product before it is built to reduce the necessity of constructing physical prototypes.

Digital Prototyping Tests "Seaworthiness"

One of the primary challenges Green Ocean faced was building a device that could withstand the rough waters of the North Atlantic, where wave heights range from a relatively small six to 10 feet, to as much as 30 feet during winter storms. Every working part of the Ocean Treader needed to be thoroughly analyzed and tested to help make it have the strength to survive in such a powerful and dynamic environment.

"Fortunately, Inventor is more than just design software; it's an analysis tool too," says George Smith, managing director at Green Ocean. "Inventor allows us to validate our designs on the computer before there's any investment made in constructing a physical prototype."

Modeling in 3D - combined with collaboration from Autodesk reseller and training partner Imass Design Solutions - has allowed Green Ocean to efficiently develop working prototypes of the Ocean Treader and Wave Treader. These models have allowed the company to prove its concept through extensive indoor wave-pool testing. The team is currently raising funds to develop a full-size prototype to start offshore testing in 2011.

"The race is on to find the best way to harness energy from our natural resources, and Inventor is helping Green Ocean innovate its way into a frontrunner position," said Robert "Buzz" Kross, senior vice president, Manufacturing Industry Group at Autodesk.

About the Autodesk Inventor of the Month Program

Each month, Autodesk selects an Inventor of the Month from the more than 800,000 users of Autodesk Inventor software, the foundation for 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.

About Green Ocean Energy Ltd.

Green Ocean Energy Ltd. is a renewable energy company headquartered in Aberdeen, Scotland. The company is dedicated to developing technology that will allow the harnessing of energy from the Earth's oceans in a way that is harmonious to the environment and economically viable, thereby providing a clean and sustainable source of energy. For additional information about Green Ocean Energy, visit www.greenoceanenergy.com.

About Imass Ltd

Imass Ltd is a leading UK-based IT provider of practical and integrated software solutions to customers within the public safety, utilities and manufacturing design sectors.

Imass Design Solutions

Imass Design Solutions is Autodesk's leading UK partner operating in the oil, gas, nuclear and manufacturing sectors. The team, operating out of Newcastle upon Tyne and Aberdeen, supply 3D computer aided engineering design software, as well as specific third party software applications and consultancy services. The group supports over 600 organisations, with 75% of customers located in the North East of England and Scotland. Imass runs an Autodesk authorised training centre, delivering certified training courses to over 300 delegates per year. In addition, the team has software development capabilities and is a member of Autodesk's developer network. The team provides solutions to help customers maximise their investment in design by managing and sharing data effectively across the entire enterprise. www.imass-ids.co.uk

Imass Limited is an Infoterra company, part of EADS Astrium, Europe's leading space systems and services specialist.

About Autodesk

Autodesk, Inc., is a world leader in 2D and 3D design software for the manufacturing, building and construction, and media and entertainment markets. Since its introduction of AutoCAD software in 1982, Autodesk has developed the broadest portfolio of state-of-the-art Digital Prototyping solutions to help customers experience their ideas before they are real. Fortune 1000 companies rely on Autodesk for the tools to visualize, simulate and analyze real-world performance early in the design process to save time and money, enhance quality and foster innovation. For additional information about Autodesk, visit www.autodesk.com.

Editorial Note:

An interview with Green Ocean Energy is available on the Autodesk YouTube Channel at <http://www.youtube.com/watch?v=nWooWDAYuAU>.

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