

Tidal energy turbine company is showing good results

August 25 2018, by Nancy Owano



Credit: Scotrenewables

Scotrenewables Tidal Power, a Scottish engineering company, is focused on an energy source they call "tidal energy generation." A video promoting their solution: They have plenty to show for their efforts, namely, the world's most powerful operational tidal turbine, the SR2000 2MW.

A reduction in manufacturing and installation costs plus simple, quick and low cost maintenance strategies will be key to success.

The company release said, "Scotrenewables Tidal Power has set another

record with its first 2MW floating tidal stream turbine with the unit clocking up over 3GWh of renewable electricity in its first year of testing at the European Marine Energy Centre (EMEC) in Orkney, Scotland."

Their equipment and operating environment carry advantages of ease of maintenance and low cost; that is their claim to fame because that is the critical challenge facing any engineer who wants to make a difference in tidal technologies.

The assembly is onshore—no offshore heavy lifting—in a safe, controlled environment.

Scotrenewables CEO Andrew Scott was quoted by the Institution of Mechanical Engineers.

"[Despite](#) being an R&D project, and it being our first full-scale turbine, its first year of testing has delivered a performance level approaching that of widely deployed mature renewable technologies." He added: "The ability to easily access the SR2000 for routine maintenance has been a significant factor in our ability to generate electricity at such levels over the past 12 months, including over winter. In addition, accessing the SR2000 using rigid inflatable boats and other similar types of low-cost vessel means that our operating costs and outage times are kept to a minimum."

It looks like a boat on the waters, and it moves like a boat before "laying a flexible mooring and harnessing tidal energy, clocked over 3GWh of renewable [energy](#) in its first year of testing at the European Marine Energy Centre in Orkney, [Scotland](#)."

"Older prototypes involved machines - similar to wind turbines - being fixed to the seabed. However, the SR2000 more closely resembles a boat

with the rotors hanging from a device which floats on the surface," said a report from the BBC. The latest full-scale prototype, at 63m, it added, has proved the most successful.

The report quoted Andrew Scott, chief executive officer of Scotrenewables Tidal Power: "For one, we've had continual generation or testing for a year. That's fairly unique in this sector.

He talked about how they generated over 3 GWh into the Scottish grid. "That's more than three times any prototype system that's come before us and, in fact, cumulatively that's more power generated in 12 months from this single turbine than the entire wave and [tidal energy](#) sector has done in Scotland in the 12 years preceding the launch of this turbine."

BBC Scotland's environment correspondent, Kevin Keane, said, "because it is still in its infancy, the power is still expensive to produce compared with wind."

In 12 months of continuous operation, the SR2000 tidal stream [turbine](#) supplied the equivalent annual electricity demand of around 830 UK households.

More information: www.scotrenewables.com/news

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