

Information About Nova Innovation

Edinburgh-based Nova Innovation is a world-leading tidal energy company designing, building and operating tidal turbines that generate electricity from the ebb and flow of the tide. In 2016 Nova installed the World's first offshore tidal array in Shetland, in 2018, partnering with Tesla they launched the world's first baseload tidal power station and in 2019 created the world's first electric vehicle (EV) charge point powered purely by the tide. Nova has arrays and project sites in Scotland, Wales, France, Canada and Indonesia.

This year sees the deployment of their first international turbine into the Petit Passage, Bay of Fundy, Nova Scotia.

Information About Tidal Power

Why is tidal power important for our future?

Climate change is the biggest global challenge of our generation and we must urgently reduce carbon emissions. Renewable energy is essential for our future, but solar and wind are not sufficient to bridge the gap on their own. The sun doesn't always shine and the wind doesn't always blow.

We need new sources of predictable, renewable energy to complement wind and solar. Tidal energy offers a solution.

What is tidal energy?

Tidal energy is generated from the natural movement of water in our seas and oceans by the orbit of the moon. Unlike other renewables, it is guaranteed and predictable to the minute. We can predict the tides months, years and even decades in advance. Tidal energy has global potential.

Why is tidal power important?

The tide is one of the strongest forces of nature on Earth and it remains largely untapped as a source of energy. As water is 830 times denser than air, this means tidal energy has a much higher energy density than wind power. Tidal energy can generate the same amount of power as wind in a far smaller area.

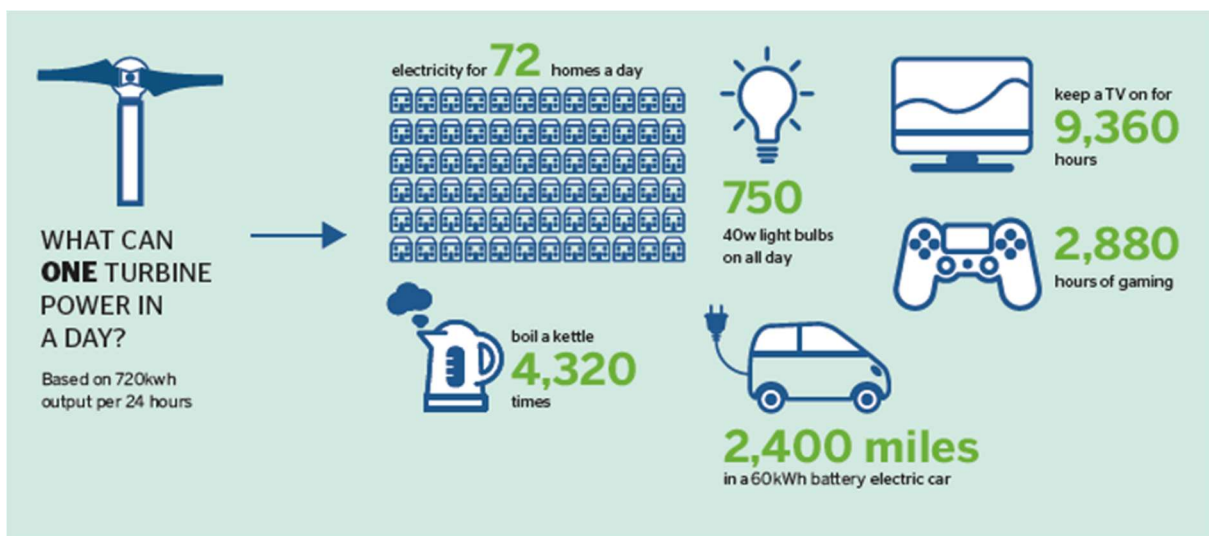


How Do Nova Innovations Turbines Work?

In simple terms, our turbines act like underwater wind turbines. They have no visual impact on the landscape as they are completely hidden beneath the surface of the sea. When the tides flow, our turbine blades spin and generate electricity so our technology transforms the power of our seas into clean, predictable electricity.

Our tidal turbines also work in harmony with the natural environment, and after 5 years of operation, Scottish regulator Marine Scotland concluded that our turbines in Shetland have caused no negative impact.

How Much Energy Can Tidal Power Create?



Every continent has abundant tidal resources making it a truly global market opportunity and the marine energy market is estimated to be worth up to US \$170 billion by 2050.