

# Sound of Islay Tidal Energy Project

*Update August 2011*

Developer:	ScottishPower Renewables
Candidate Technology:	Hammerfest Strøm HS1000
Local Partner:	Islay Energy Trust
Size:	Ten 1MW tidal devices
Location:	Sound of Islay, Argyll, UK
Timescale:	Installation 2013
Status:	Consent Received



*Hammerfest Strøm HS1000*

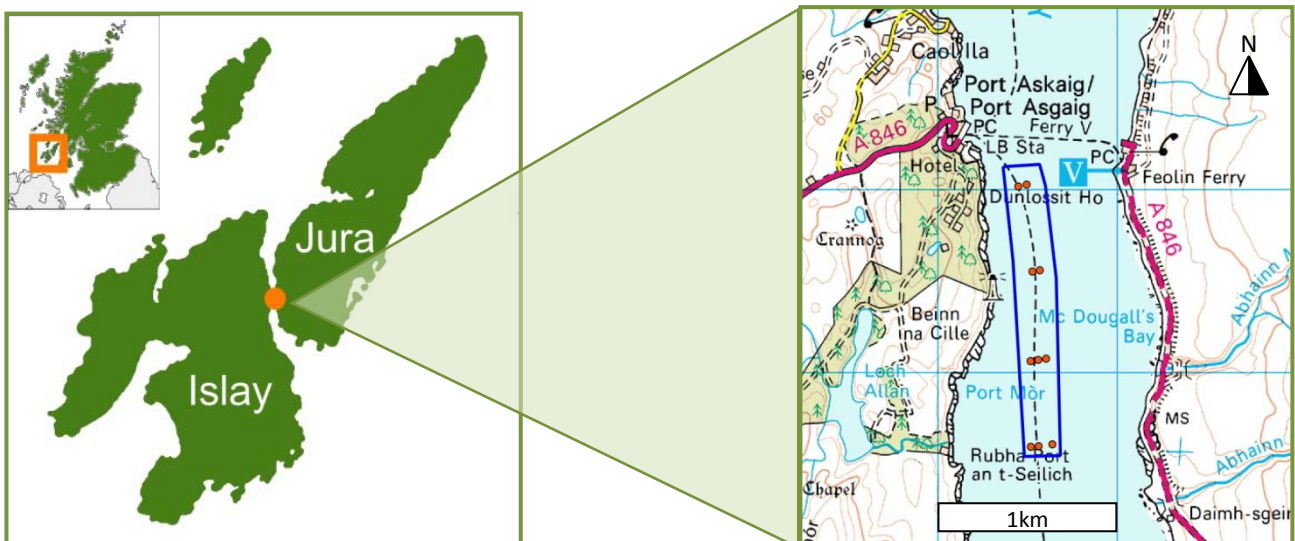
## Status

Consent for the Sound of Islay Demonstration Tidal Array was given by the Scottish Government in March 2011. Further testing is planned for a single device in Orkney in 2011 and if successful the ten devices for the Sound of Islay would be manufactured in 2012 and installed in the Sound of Islay in 2013.



## Location

The devices will be located in the Sound of Islay, just south of Port Askaig. It is most likely that they will be arranged in four rows in the area that is over 50m deep towards the Islay side of the Sound.



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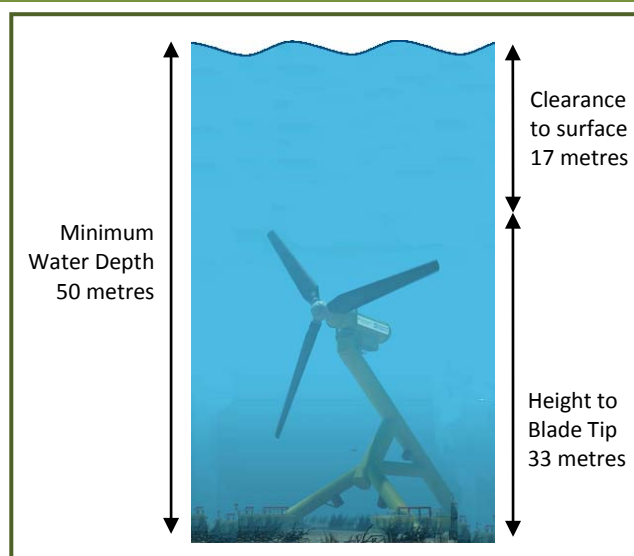
## Technology

The HS1000 tidal device is designed by Hammerfest Strøm AS who have been operating a 300kW device successfully in Norway for over six years.

The devices are placed on the seabed with a hub height of about 22 metres and a blade length of about 11 metres. The total height from the seabed to the top of the blade tip is approximately 33 metres.

The minimum water depth of the site is 50m so there will be approximately 17m clearance allowing vessels to travel above the tidal array.

Ten 1MW tidal devices will be installed and if these operate as expected, the demonstration array will generate around 30GWh per year. This is equivalent to the annual electricity consumption of Islay or the electricity used by 5000 average UK homes.



Hammerfest Strøm HS1000 in 50 metres of water.

## Tidal Resource in Scotland

Scotland has approximately 25% of the tidal energy resource in Europe. The tidal energy resource was mapped for the Scottish Government and the map shows the significant areas of tidal energy in the Pentland Firth and around Islay.

Detailed surveys identified the Sound of Islay as being particularly suitable as a demonstration site due to the fast-flowing current in an area that is relatively sheltered from high winds and waves.

## Islay Energy Trust

The Islay Energy Trust (IET) is a community owned organisation that aims to develop renewable energy projects for the benefit of the community.

After carrying out its own feasibility study for a tidal project in 2008, IET signed a memorandum of understanding with ScottishPower Renewables to work together on the Sound of Islay tidal project. It is estimated that by 2014, the project will have spent £500,000 on Islay and Jura.

If you have any questions, please contact:

**Andrew Macdonald**

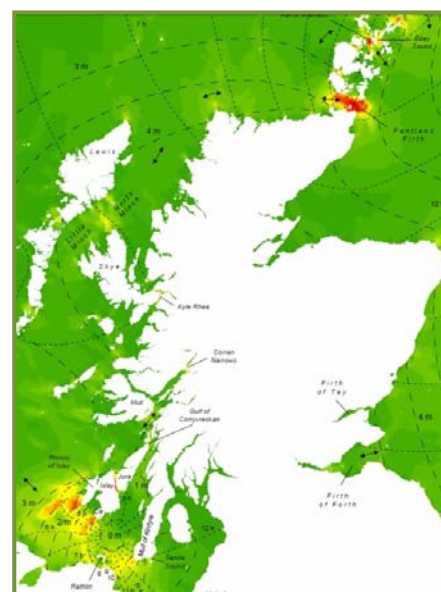
*Tidal Energy Project Officer*

Email: [andrew.macdonald@islayenergytrust.org.uk](mailto:andrew.macdonald@islayenergytrust.org.uk)

Office: 01496 810 873

Mobile: 07742 073 650

Web: [www.islayenergytrust.org.uk](http://www.islayenergytrust.org.uk)



Map from Scottish Government report *Matching Renewable Electricity Generation With Demand*