

Edinburgh wave energy company could create jobs in the Western Isles



Edinburgh wave pioneers Aquamarine Power have permission for a wave farm on the Western Isles, and the company have announced today that this could create hundreds of long-term skilled jobs in one of Britain's most remote communities.

The Edinburgh firm's 40MW Lewis wave farm – which was fully consented by the Scottish Government earlier this year – could generate between 98 and 200 jobs during construction and inject up to £9 million a year into the Western Isles and wider Highland economy.

The project would involve installing up to 50 of Aquamarine Power's Oyster near-shore energy machines along the north-west coast of Lewis. The company is currently testing their second full-scale prototype, the Oyster 800, at the European Marine Energy Centre (EMEC) in Orkney.

The figures come from an in-depth assessment carried out by Aquamarine Power using a methodology developed by consultants ABP Marine Environmental Research and Risk & Policy Analysts Ltd.

The consultants were commissioned by seabed owner The Crown Estate, using funds from their Pentland Firth and Orkney waters enabling actions programme, to develop an objective technique which project developers could use to identify the economic opportunity presented to the UK by the wave and tidal industry.

Aquamarine Power's study showed that their 40MW wave energy project in the Western Isles could generate:

– 98 to 200 jobs in the Outer Hebrides and wider Highlands and Islands during the construction phase, generating an estimated £4.49 million to £9 million gross value added per year;

– 23 to 37 jobs during the 20 year operations and maintenance phase, generating £1.3 million to £2.1 million per year.

The calculation includes all direct employees and contractors used by Aquamarine Power, indirect jobs such as shops, hotels and local services, and induced jobs created by the increased overall activity in the area.

The first two Oyster devices have been almost entirely British-built, and the study confirms that future machines could be manufactured wholly in the UK, with the potential to source a hundred per cent of the farm's manufacturing supply chain within Britain.



(Photo courtesy of Orkney Media Group)

“The UK is looking for success stories where British

businesses can build on British innovation to create economic activity and jobs here in the UK,” said Aquamarine Power Chief Executive Officer Martin McAdam.

“Wave energy has been invented here, is being tested here and has the potential to be a home-grown global economic success. Our study shows there is the potential to secure all of the manufacturing, construction and operations and maintenance supply chain here in Britain.

“The vast majority of the UK’s wave resource lies in remote locations, where economic opportunities are few. Wave energy offers a real opportunity for these communities, even for a relatively small project. With hundreds of megawatts of wave power in Scotland’s islands there is genuine potential for the UK to capture the entire supply chain of this exciting new industrial sector.”

Lindsay Leask, Senior Policy Manager for Offshore Renewables at Scottish Renewables said:- “This study shows yet again that wave and tidal energy has the potential to create thousands of jobs across Scotland. Importantly, many of these new, skilled jobs will be in some of our most remote communities.

“However, we must not forget this is exactly the kind of prize that could be lost unless access to the grid is secured and connection charges for Scotland’s island-based marine energy projects are set at a competitive level.”

Councillor Angus Campbell, Leader of Comhairle nan Eilean Siar, the Local Authority for the Western Isles, said:- “The Western Isles are home to one of the best wave energy resources in Europe, if not the world, and our community is determined to maximise the benefits from this resource. At a time when the islands are facing serious structural disadvantages on account of peripherality, transport costs, distance to markets and so on, it is important that the opportunity to develop new industries and to create employment

is grasped.

“We have worked closely with Aquamarine Power as they have developed their world-leading project off the Atlantic seaboard of the Western Isles and have long recognised the potential for local investment and employment through this project. Up to 200 jobs in construction and up to 37 long term jobs in operation and maintenance will make a huge difference in our fragile economy and we will continue to lobby for equitable transmission charges for the islands so that projects like Aquamarine Power’s can reach commerciality and contribute to UK security of energy supply. We must make sure that the UK retains its competitive advantage in this emerging technology which will have global application as it matures and as more maritime nations seek to address climate change issues.”

Calum Davidson, Director of Energy and Low Carbon with Highlands and Islands Enterprise, said: “We have been committed to the development of the marine energy industry in the Highlands and Islands for well over a decade, and there is no doubt that the region is now widely regarded as the global leader.

“Through the European Marine Energy Centre in Orkney, we have been pleased to enable Aquamarine Power to test and develop its Oyster devices to bring them to the stage when they can be put into commercial use, both in Scotland and around the world. Wave energy is still a relatively young part of the renewables sector, and this assessment underlines its tremendous potential to generate substantial economic benefits in some of our most fragile areas.”

David Krohn, Wave and Tidal Energy Development Manager, Renewable UK, said:-“This is a great example of a leading wave energy technology, developed and demonstrated in the UK, having a real positive effect on the British economy. This methodology will enable marine energy projects to highlight

the capacity for the industry to deliver real socio-economic benefits to the United Kingdom. We recommend the use of this tool to other developers looking to demonstrate the use of local supply chains.”

ABP Marine Environmental Research and Risk and Policy Analysts developed the methodology to look at all of the socio-economic inputs (both positive and negative) of wave and tidal energy developments in Scotland. It enables developers to gather all of the relevant information related to a project – such as materials and services used – based on standard industry data, and then runs this information through an excel-based spread sheet to deliver a set of objective, standardised outputs.

“The beauty of [this methodology](#),” says Stephen Hull, Technical Director at ABP Marine Environmental Research, “is that it can be picked up and used by other renewable industries such as offshore wind, to demonstrate the positive impact their projects will have on the UK supply chain.

“There is real potential for other businesses in the renewable energy sector to show, in an objective way, the jobs and economic activity their projects will create.”