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:: Islay Set For Hydrogen Power

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James Freeman & Vicky Collins

Scientists want to turn Islay into the world's first hydrogen-powered island.

They plan to make the clean fuel by treating water with electricity generated from a wave power station already operating on the island. They will then store the hydrogen in batteries known as "fuel cells", which local people will take home to run everything from tumble-driers to tractors.

The plan is the brainchild of the Scottish Fuel Cell Consortium, a grouping of scientists and businesses backed by Scottish Enterprise. One of its leading figures, Professor Sinclair Gair, of Napier University, Edinburgh, said yesterday that the possibility of Islay as the ultimate "green-powered" island was very real.

"The feasibility of large-scale hydrogen production and use on the island is not in doubt," he said. "We need business partners in the first instance.

"We know we can convert vehicles to use hydrogen fuel cells. The next move is to power a public building, which we think we have already identified, in Islay. The intention is to show everyone where the future is, and in 10 or 20 years it is going to be a hydrogen future."

The consortium will present the plan to island businesses at a meeting in the Ardbeg Distillery on Islay tomorrow. A full public meeting will follow quickly.

Islay was picked because of its ground-breaking Limpet power wave power station in the village of Portnahaven. Built by the Inverness company

Robin Currie, a local councillor and a board member of the Islay Development Company, welcomed the project.

"I have always believed that Islay should be at the forefront of the green energy revolution. This initiative is excellent, very welcome, and fits in with the work of the IDC on electric cars and buses and our plan for photovoltaic cells in our new Gaelic school."

If the dream is realised, green electricity from the wave power station will be used to power a hydrolysing machine - already in common use to make commercial hydrogen - which will then be compressed, bottled, and can be used to feed fuel cells to provide green electricity for everything from industry, vehicles, public buildings to a crofter's cottage. The continuously regenerating batteries produce electricity from the combination of hydrogen and oxygen in a catalyst, leaving water as the only "emission".

It is hoped the Islay initiative will allow the UK to recover lost ground in the field of renewable energy. Previous governments' failure to invest in wind and wave power meant the industry moved to Europe. Denmark is now the world leader, although much of the technology was pioneered in Britain.

John MacLellan, manager of Bunnahabhain whisky distillery in the north of the island, welcomed the plan and said he would attend tomorrow's meeting.

Anything that would help the economy and environment of the island would be embraced by local residents, he said.

Wavegen, the Limpet is the first wave-driven power station to feed renewable energy directly into the national grid.

The Islay project is a UK leader at a time when governments and industry across the world, faced with diminishing fossil fuel resources, instability of oil supply, and rampant global warming, are engaged in a dash to master hydrogen fuel cell technology. There has been a particular upsurge of interest in the technology in the United States since the September 11 terrorist attacks, with car manufacturers ploughing funds into developing hydrogen vehicles.

"The last year has been difficult in some ways for Islay. Although we didn't have foot-and-mouth here, it did affect tourism and the local creamery closed, which has hit some farmers.

"Islay is an upbeat sort of place though, and we are all adaptable to change. It is certainly a very interesting idea, and anything that is going to bring work or prosperity to the island is at least worth trying."

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