SNP Leadership election – Regan on the renewables circuit

Ash Regan MSP, one of the three SNP leadership hopefuls enjoyed a tour of the University of Edinburgh FloWave facility at King's Buildings on Friday followed by a demonstration of the wave simulator.

FloWave opened at King's Buildings in 2014 and is the first circular combined wave and current facility in the world where the team carry out research and development with the private sector and wider academia in offshore, wave and tidal energy. The tank is a 30 metre circular concrete basin containing the 25 metre diameter, 2 metre deep wave and current tank.

The Edinburgh Eastern MSP used the visit to emphasise her commitment to net zero.



Ash Regan MSP speaking to The Edinburgh Reporter on camera. Ash Regan met Thomas Davey, Principal Experimental Officer at Flowave and Professor David Ingram from the School of Engineering.

Credit: Colin D Fisher/CDFIMAGES.COM-

In 2020 97% of Scotland's electricity output was supplied by

renewable energy, which highlights the potential of Scotland's energy resources.

As First Minister Ash Regan said she will ensure that The Scottish Government works alongside industry, unions and communities to optimise existing energy infrastructure and champion innovation onshore and across Scottish waters.

On the campaign trail today it was all about renewable energy. <u>@AshReganSNP</u> visited FloWave where she learned more about their research and testing facility for wave and tidal energy devices. <u>pic.twitter.com/sZILFgcr5A</u>

- Edinburgh Reporter (@EdinReporter) March 3, 2023

Ms Regan said: "We're here at FloWave and I have just been told this is the first round tank of its type in the world. And obviously this is what they can use to test wave energy devices and also tidal turbines as well.

"We are leading the world at the moment on this, although other countries are also developing this technology. We have a lot of innovation in Scotland and there's a big opportunity here, I think, for the economy. We need to develop devices and get them into production. We need a good patient funding stream for that which is one of the key parts we are missing a little at the moment. And then there is a huge opportunity for Scotland to be building these devices – lots of skilled jobs, and also in generating electricity once these go into large scale production.

"I also think decommissioning of oil and gas should be a big part of our plan going forward. This type of technology is how we move to the just transition and how we create lots of skilled jobs for people in Scotland that can replace the ones that will eventually fade out for oil and gas."

"Supporting development from laboratory to ocean, University

of Edinburgh's innovative FloWave facility is a leading example of how Scotland's energy potential can be used.

"To achieve net zero we must become a leader in renewable energy, using the skills and revenue from decarbonised oil and gas production.

"As First Minister I will ensure that Scotland is the rock on which European energy security can depend as we progress towards a net zero future."



Ash Regan MSP visited FloWave at King's Buildings and is listening to Professor David Ingram explaining the work they do. PHOTO ©2023 The Edinburgh Reporter



(L-R) Thomas Davey — Principal Experimental Officer; Ash Regan MSP; Prof Gareth Harrison — Bert Whittington Chair of Electrical Power Engineering and Deputy Head of the School of Engineering; Prof Christina Boswell- Politics and Vice-Principal Research and Enterprise; Prof David Ingram — IDCORE Programme Director. PHOTO **Colin D Fisher/CDFIMAGES.COM** Professor David Ingram has a Chair in Computational Fluid Dynamics at the University of Edinburgh and is the academic in charge of the FloWave facility. He explained that he and his colleagues were talking to Ms Regan about both wave and tidal energy.

He said: "We test wave and tidal and also some floating wind machines here at the FloWave facility. It's very important that we do this as part of the development process, so that technologies can be tried out here on a small scale in a way that gives you confidence that when you deploy them at sea those machines are going to behave in the way that you would expect them to do, and are going to generate power for us.

"We are one of the leading countries of the world for wave energy, but that is not to say that we are going to see a lot of wave energy machines in the sea in the next couple of years. Wave energy is a long journey. We developed some of the earliest devices that have been tested in the sea, such as the Pelamis sea snake and the Oyster. I was involved in the design of the Oyster originally. But those machines had some problems, some technical problems. We learned a lot from that and we have been working with organisations such as Wave Energy Scotland and with developers. We have gone back and looked at different ways of doing things with a more cautious approach.

"So what happens now is that developers with ideas get funding to come and do testing with us and then if the machines are successfully demonstrated here then they'll get funding to go to scale, to go to sea and go to Orkney to try the machines there."

Professor Ingram said it is exceptionally important for FloWave that the Scottish Government works with them in the development of the new technologies.

He said: "These machines — both wave and tidal — are very expensive technologies to develop. It is not that they will eventually be expensive but you are doing things in a very hostile environment. These are things that people haven't done before. That takes a lot of innovation and we either need very very patient people with very deep pockets or we need governments to support what we're doing. The impact of the work, of these machines being successful is vast because it will create a huge amount of jobs in construction and building of the machines in dockyards around Scotland. It will also create a lot of jobs in ports, in infrastructure and in installation and maintenance. So the economic benefits to Scotland's success in wave and tidal energy are vast, and that



Ash Regan visited FloWave to see the circular wave tank there for herself. PHOTO **Colin D Fisher**/<u>CDFIMAGES.COM</u>



Ash Regan MSP visited FloWave at King's Buildings PH0T0 ${\odot}2023$ The Edinburgh Reporter



Ash Regan MSP visited FloWave at King's Buildings. PHOTO $\ensuremath{\texttt{©2023}}$ The Edinburgh Reporter