

RENEWABLE ENERGY IN SCOTLAND – VISIT NOTE

The Scottish Affairs Committee visited Orkney as part of the renewable energy in Scotland inquiry from Sunday 27 - Monday 28 June 2021.

Orkney hosts world-leading renewable energy projects and was described on this visit as the “NASA” of renewable energy. In 2013 Orkney produced 103% of its total electricity needs through renewable energy sources upping this figure to 120% in 2016.¹ 1 in 12 Orcadian households generate electricity from renewable sources.²

Members who attended:

- Pete Wishart MP (Chair)
- Mhairi Black MP
- Andrew Bowie MP
- Wendy Chamberlain MP
- Sally-Ann Hart MP

Sunday 27 June

Members had dinner on Sunday night with members of the Orkney Renewable Energy Forum (OREF). OREF is a place “where those interested in renewables can meet, discuss and debate issues, and find the most appropriate ways to move forward”.³ The focus of the organisations was marine renewable energy development and maintenance.

The guests were:

- Gareth Davies, [Aquatera](#) – environmental services and products
- Liz Foubister, [Xodus](#) – environmental and engineering services
- Neil Kermode, European Marine Energy Centre ([EMEC](#))
- Sarah Pamenter, [Community Energy Scotland](#) – innovation projects in Orkney
- Chris Retzler, [Mocean](#) – wave energy technology developer in the Wave Energy Scotland programme
- James Stockan, [Orkney Islands Council](#) Leader

¹ OREF, [Orkney's energy](#), accessed 15 June 2021

² OREF, [Orkney's energy](#), accessed 15 June 2021

³ ReFLEX Orkney, [Why Orkney](#), accessed 15 June 2021

Conversations focused on topics including:

- funding for research and design for renewable energy projects;
- the importance of renewable energy to the Orcadian economy;
- how oil and gas workers can transition to renewable energy;
- how renewable energy can help to decarbonise oil and gas production;
- how the security of energy systems comes from the diversity of the energy mix;
- conditions applied to UK Government funding and how they are not always appropriate;
- the support needed to develop and prove the efficacy of technology;
- issues surrounding the grid in Orkney and the grid constraints; and
- domestic heating and renewable energy.

Monday 28 June

On Monday the Committee was hosted by the European Marine Energy Centre (EMEC). EMEC was founded in 2003 in Orkney, Scotland and is the only accredited wave and tidal test centre for marine renewable energy in the world. More marine energy devices have been tested at EMEC than at any other single site in the world. EMEC has hosted 20 wave and tidal energy clients (with 32 marine energy devices) spanning 11 countries.⁴



⁴ European Marine Energy Centre Ltd (EMEC) ([RES0007](#))

Before they went on the boat the Committee viewed a hydrogen storage area.

Once on the boat Members saw the Orbital O2 tidal energy device, whilst the production, technology and maintenance of the device was explained by Neil Kermode and Eileen Linklater from EMEC and David Ingram, the Specialist Adviser.

The [Orbital O2](#) device is the most powerful tidal turbine in the world.



Members also saw the [Magallanes Renovables ATIR installation](#), a floating tidal platform. This device was also explained to the Members.

Evidence session

In the afternoon the Members held an evidence session with:

- Neil Kermode, Managing Director, European Marine Energy Centre (EMEC)
- Christopher Milne, Chief Financial Officer, Orbital Marine Power
- Dr Gareth Davies, Managing Director, Aquatera
- Steven Bruce, Project Officer (ReFLEX) at Orkney Islands Council, Orkney Islands Council

The topics of questioning included:

- the supply chain for renewable energy;
- transmission charges and the grid;
- jobs in renewable energy; and
- the economic impacts of renewable energy on Orkney.

Members drew on what they had learned at dinner and during the boat trip and discussed these matters with witnesses.