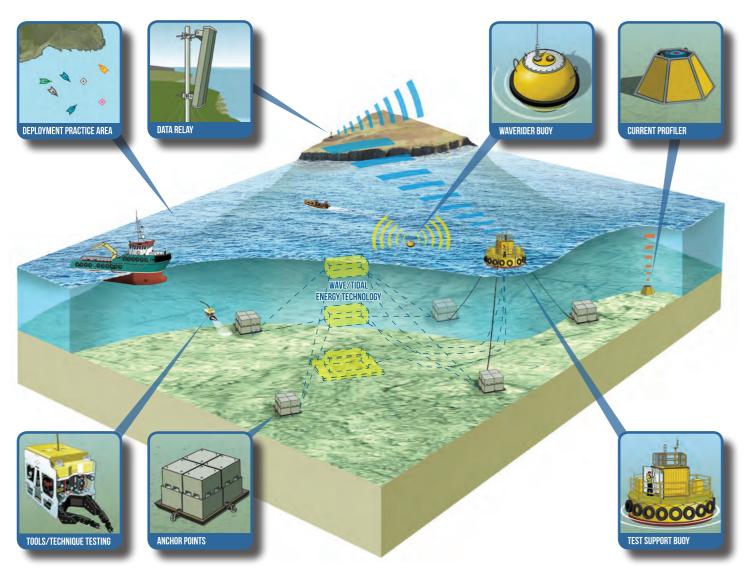
ACCESSIBLE, FLEXIBLE OPEN WATER SITES

SCAPA FLOW WAVE TEST SITE

SHAPINSAY SOUND TIDAL TEST SITE

In less challenging conditions, reducing the need for big vessels or large plant, the non-grid connected sites provide a more **flexible sea space** helping close the gap from tank testing, and acting as a stepping stone towards larger scale projects. Accessible real sea testing enables marine energy developers and suppliers to learn lessons more cheaply.

- Bespoke **test support buoys** can be provided, allowing developers to dissipate electricity generated by their devices and record data
- Pre-installed anchor points provide mooring options, and an area of seabed is available for rehearsal or deployment of other tools and techniques.
- EMEC holds an overarching site licence, simplifying the consent process within an agreed envelope of activity.



SITES SUITABLE FOR, BUT NOT LIMITED TO, THE FOLLOWING ACTIVITIES:

- Device testing
- Component testing
- New tools, techniques & supply chain solutions
- Monitoring corrosion, biofouling & acoustic instrument packages
- Anchoring, cabling, subsea hub & wet-mate connectors
- Installation tests
- · Rehearsal activities

- Testing ROV's & vessel activities
- Operation & maintenance tests
- Training
- · Health & safety procedures
- · Decommissioning trials
- · Research projects



For further information on marine renewables in Orkney visit: www.emec.org.uk, www.facebook.com/emecorkney, www.twitter.com/EMEC Orkney and www.orkneymarinerenewables.com











POWERING MARINE ENERGY R&D





WORLD LEADING CENTRE FOR REAL SEA TESTING

With over a decade of experience, EMEC is attracting developers from around the globe to prove what is achievable in the harshest of marine environments.

There are more wave and tidal energy converters being tested in the Orkney Islands than any other single site on the planet.

Further afield, as EMEC's expertise is in demand from emerging test sites around the world, the Centre is building an international network to create a global market for wave and tidal projects.



EUROPEAN MARINE ENERGY CENTRE Old Academy Business Centre,

Stromness, Orkney. KW16 3AW tel: (01856) 852060 email: info@emec.org.uk www.emec.org.uk

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EMEC, ORKNEY: HOME OF MARINE RENEWABLE ENERGY

EMEC clients benefit from a range of **ready-made** and **cost-minimising** test and demonstration facilities in major wave and tidal resources. There is a cluster of energy, maritime and environmental expertise around EMEC, with a fast developing supply chain providing support to this new industry. Significant infrastructure investments have been made in ports, harbours and vessels, to make it as easy as possible for technology developers to learn by doing, with full confidentiality of performance data.

Fall of Warness tidal test site

8 cabled test berths in up to 40 metres depth, chosen for its currents which can reach 4 m/s (8 knots) in spring tides (see opposite).

Billia Croo wave test site

5 cabled test berths in up to 70 metres of water subject to North Atlantic waves of up to 19 metres (see opposite).

EMEC office and data facilities

EMEC's head office is in Stromness, with fully furnished office accomodation provided to its wave and tidal developers in Stromness and Kirkwall.

Shapinsay Sound tidal test site

Up to 25 metres water depth with a peak tide of 1.5m m/s (see back cover).

Scapa Flow wave test site

Up to 25 metres water depth with an average significant wave height of 0.25-0.75m (see back cover).

MAINLAND



Pentland Firth ORKNEY

Edinburgh

ACCREDITED, GRID CONNECTED PERFORMANCE TESTING

BILLIA CROO WAVE TEST SITE

FALL OF WARNESS TIDAL TEST SITE

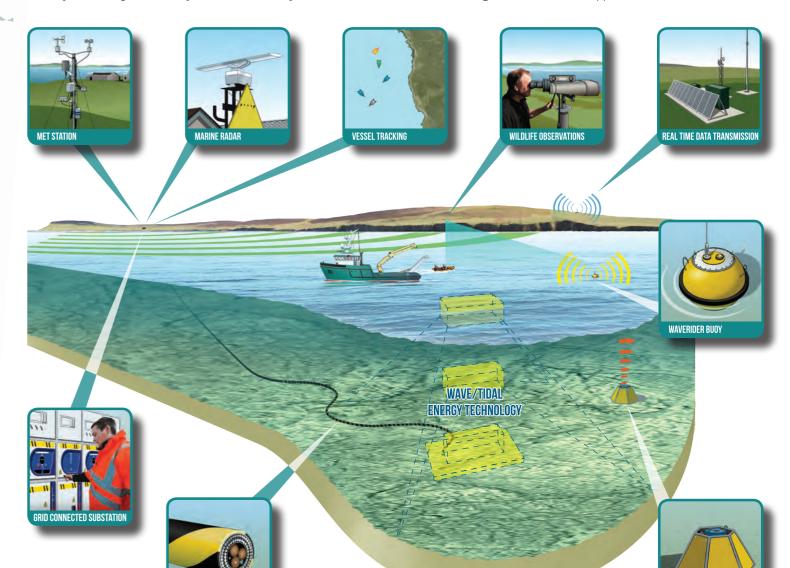
EMEC is the only accredited test centre in the world, suitable for testing multiple devices simultaneously while producing electricity to the national grid. All income generated by the sale of electricity is returned to the developers, increasing the funds for future industry investment.

• Accredited by the United Kingdom Accreditation Service (UKAS), EMEC operates to laboratory standards (ISO17025), providing a unique service independently verified performance reports.

SUBSEA CABLE

• EMEC works closely with regulators to streamline consenting and facilitate environmental monitoring. Research and Operational Forums give EMEC clients an exclusive platform to share learning and collaborative opportunities.

CURRENT PROFILER



SINCE BEING ESTABLISHED IN 2003, EMEC HAS:

HOSTED 15 WAVE AND TIDAL CLIENTS, WITH 24 DEVICES ... PERMITTED 2000+ OPERATIONS ON SITE ... PARTICIPATED IN 50+ R&D PROJECTS ... COLLECTED 160,000 HOURS OF DATA

