

# CorPower Deploys C3 Wave Energy Converter at EMEC



CorPower Ocean has successfully installed its half-scale C3 wave energy converter (WEC) at the European Marine Energy Centre (EMEC) in Orkney, Scotland. The C3 point absorber was installed at EMEC's Scapa Flow scale test site in collaboration with local marine contractor Green Marine (UK). The device was towed to site and the surface-operated install sequence was successfully performed from the Green Isle multicat vessel. The C3 WEC was connected to a floating microgrid unit provided by EMEC.

## Off-grid operations

The microgrid has been designed to allow the C3 device to behave as if it were grid connected by providing a stable voltage and frequency reference, simulating the impedance of a typical grid connection, absorbing power from the device under test and providing power to auxiliary systems. With the C3's performance already proven in grid connected configuration during a dry testing campaign in Stockholm, this ocean deployment is looking to prove off-grid operations to address market segments such as islands, offshore installations or remote coastal locations around the world.

CorPower's product development follows the structured five-stage verification process of Wave Energy Scotland (WES) and ETIP Ocean involving step-wise validation of survivability, performance, reliability and economics. The Stage 3 demonstration is funded by WES, the Swedish Energy Agency and InnoEnergy, with the testing at EMEC also supported by Interreg NWE FORESEA project.

The Stage 3 programme demonstration is supported by best practice from EMEC in Orkney, alongside experience from offshore power generation company Iberdrola Engineering and EDP, the University of Edinburgh and WavEC Offshore Renewables' expertise in cost and performance modelling.

## Electricity from ocean waves

Patrik Möller, CEO at [CorPower Ocean](#), stated he is pleased to have the C3 WEC installed at EMEC, marking a major milestone in the company's effort of providing reliable and competitive electricity generation from ocean waves. This demonstration programme shows how their resonant WEC technology can significantly reduce both CAPEX and OPEX of wave energy. The compact lightweight design enables effective handling using low cost vessels, reducing operational costs.

Neil Kermode, managing director at [EMEC](#), congratulated CorPower on the successful real-sea deployment of their wave energy converter. Installing technologies into the harsh marine environment is not easy, requiring a great deal of planning, ingenuity, and collaboration. He emphasised the learning that will come from operating the technology in the sea will be invaluable to CorPower. The EMEC team will continue to work with CorPower to support the performance assessment of their technology and we look forward to seeing this innovative device succeed.

## At-sea testing

Jason Schofield, managing director at [Green Marine](#), said they have been working with CorPower for the past two years and to finally see all their hard work and careful planning materialise into a successful offshore installation of their device is a huge achievement for all involved. The offshore operations carried out were one of the slickest installation methods Green Marine has experienced to date, with both the CorPower and Green Marine teams working extremely well together.

Tim Hurst, managing director at [Wave Energy Scotland](#), noted that Wave Energy Scotland sees one of its first programme participants install a prototype ready for at-sea testing with EMEC. The test results will be evaluated the coming months to see how the WEC performs in Orkney's waters.