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**PRESS RELEASE**  
FOR IMMEDIATE RELEASE

## **Maritime decarbonisation to cruise forward in Orkney**

Orkney is to be the setting for an ambitious seven-month project demonstrating technologies to enable maritime decarbonisation.

The £2.2 million HIMET (Hydrogen in an Integrated Maritime Energy Transition) project will explore solutions for decarbonising ferries as well as shore-side activities in ports.

It is one of 55 projects selected for funding under the Department for Transport's flagship Clean Maritime Demonstration Competition, delivered in partnership with Innovate UK.

Led by EMEC Hydrogen in Orkney, HIMET will progress an ambitious programme of activities centred on the decarbonisation of two key local maritime sectors: ferry services and cruise terminal operations.

To decarbonise ferries, various solutions will be designed and demonstrated including hydrogen storage specifically intended for use on board a vessel, and the supply of on-board auxiliary power using a hydrogen fuel cell. A conventional ferry propulsion engine will also be tested running on pure hydrogen.

To develop resilient shore-side power for the maritime sector a hydrogen engine will be deployed at Hatston to power crew welfare facilities at the cruise terminal, and microgrid solutions will be explored to consider future power requirements for ferry terminals.

In parallel, HIMET will carry out research and stakeholder engagement activities to establish how decarbonised fuels (hydrogen and ammonia) coupled with technology innovations can best inform the broader maritime energy transition and help overcome regulatory barriers.

HIMET draws upon leading energy system and maritime expertise locally in Orkney and is strengthened by the involvement of leading technology developers and sector experts drawn from across the UK. The consortium includes Aquatera, EMEC Hydrogen, Eneus Energy, OakTec, Orcades Marine Management Consultants, Orkney Islands Council, Ricardo, RINA, Schneider Electric, ULEMCo, and Urban Foresight.

Once project demonstration activities are complete, HIMET partners will help facilitate uptake across the UK and further afield, demonstrating the maritime working practices of the future.

### **Grant Schapps MP, Secretary of State for Transport said:**

“As a proud island nation built on our maritime prowess, it is only right that we lead by example when it comes to decarbonising the sector and building back greener.

“The projects announced today showcase the best of British innovation, revolutionising existing technology and infrastructure to slash emissions, create jobs and get us another step closer to our decarbonisation targets.”

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**James Walker, EMEC’s Hydrogen Development Manager said:**

“EMEC foresees significant opportunities in maritime innovation, with hydrogen and hydrogen derivative fuels expected to play a vital role in decarbonising the sector.

“Building on the knowledge and experience from various green hydrogen projects that have instigated the development of a hydrogen economy locally, the HIMET project will showcase emerging and innovative technologies which will help pave the way to decarbonising maritime activities. While the project will focus on addressing challenges in the Orkney context, we believe our findings will be applicable to all island and coastal environments where vessels provide vital lifeline services.

“Orkney has long been a living laboratory for renewable energy and decarbonisation and is well placed to become a centre of excellence in maritime decarbonisation as well.”

**Simon Edmonds, Deputy Executive Chair and Chief Business Officer for Innovate UK said:**

“As the UK prepares to host COP26 in the maritime city of Glasgow, it is great that we can announce funding for these fantastic projects in the maritime sector that will help the UK meet its net zero goals.

“From this competition we saw a very high level of demand, we have seen the very best of British ideas from all over the country. It is clear that not only does the UK have a great maritime history, but also a bright and greener future too.”

**ENDS**

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**Editors notes:**

**About the Clean Maritime Demonstration Competition**

The HIMET project is part of the Clean Maritime Demonstration Competition, funded by the Department for Transport and delivered in partnership with Innovate UK.

Announced in March 2020, and part of the Prime Minister’s Ten Point Plan to position the UK at the forefront of green shipbuilding and maritime technology, the Clean Maritime Demonstration Competition is a £20m investment from government alongside a further c.£10m from industry to reduce emissions from the maritime sector. The programme is supporting 55 projects across the UK, including projects in Scotland, Northern Ireland and from the South West to the North East of England. As set out in the Clean Maritime Plan (2019), Government funding has been used to support early stage research relating to clean maritime. The programme will be used to support the research, design and development of zero emission technology and infrastructure solutions for maritime and to accelerate decarbonisation in the sector.

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## **About EMEC Hydrogen**

EMEC Hydrogen is the arm of the European Marine Energy Centre (EMEC) focused on hydrogen innovation and demonstration. Using Orkney's renewable energy to produce green hydrogen, EMEC is a partner in a growing number of innovative energy systems and hydrogen demonstration projects driving the development of the local hydrogen economy. In 2017, the world's first tidal-powered hydrogen was generated at EMEC's tidal test site.

EMEC is committed to supporting the transition to net zero working and is working alongside global stakeholders to decarbonise power, heat and transport.

[www.emec.org.uk/hydrogen](http://www.emec.org.uk/hydrogen)

## **About Ricardo:**

Ricardo plc is a world-class environmental, engineering and strategic consulting company listed on the London Stock Exchange. With over 100 years of engineering excellence, we provide exceptional levels of expertise in delivering leading edge and innovative cross sector sustainable products and solutions, helping our global customers increase efficiencies, achieve growth and create a cleaner and safer future. Our mission is clear -- to create a world fit for the future. For more information visit [www.ricardo.com](http://www.ricardo.com)

## **About RINA:**

RINA provides a wide range of services across the Energy & Mobility, Marine, Certification, Real Estate & Infrastructure and Industry sectors. With net revenues in 2020 of 495 million Euros, over 4,000 employees and 200 offices in 70 countries worldwide, RINA is a member of key international organizations and an important contributor to the development of new legislative standards. [www.rina.org](http://www.rina.org)

## **About Eneus Energy:**

Eneus Energy Limited is a green ammonia project development company delivering zero carbon fuels (hydrogen and ammonia) that will decarbonise sectors of society that are either hard to electrify, or require longer term energy storage capacities and durations. Working with partners on Orkney, planning permission was granted in January 2021 for the development of green ammonia pathfinder project that will receive power from a 2-turbine extension to an existing wind farm at Hammars Hill, Orkney.

## **About ULEMCo:**

ULEMCo Ltd is the world's first hydrogen commercial vehicle conversion company, enabling fleet, commercial and niche vehicle owners to have access to zero emission hydrogen fuel, as part of their strategies to reduce transport related carbon emissions.

ULEMCo is based in Liverpool, UK and was founded in 2014 as a spin out of Revolve Technologies, to commercialise intellectual property and capability in hydrogen combustion engine technology. The company converts vehicles, having started with diesel Ford Transit vans, to enable them to run on commercially available hydrogen. The technology allows vehicle fleet managers to reduce their carbon dioxide emissions to ultra-low levels.

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Commercial fleets across the UK benefit from a reduced carbon foot print while still having the full range capability of standard diesel vehicles. Alongside various partners, ULEMCo already supports a fleet of vehicles across a range of hydrogen hubs in the UK. The company is targeting commercial fleet conversions to grow the market significantly over the next 18 months, and then expand into other vehicle types over the longer term. Its growth plans include creating a hydrogen re-fuelling network to capitalise on the existing local infrastructure for this 'green' fuel.

[www.ulemco.com](http://www.ulemco.com)

### **About Aquatera:**

Aquatera was launched in 2000 with to delivery new and improved ways of managing environmental and social interactions associated with industrial and economic development. The Company has now delivered over 900 projects across a wide range of sectors, working for governments, industry and communities in over 40 countries around the World.

Established in 2000, Aquatera is celebrating 21 years in the marine renewables sector. Aquatera provides a modern and innovative suite of environmental services and products specialising in environmental impact. Aquatera, as an international company, has its base in the heart of the Orkney community. It has always championed the island way of life and has used the experiences of our community to build partnerships to complete projects around the globe.

Aquatera's mission is to promote rational use of resources, protection of the environment and sustainable communities through the provision of information, services and technology to industry, government, other agencies and the public. Based at the heart of the renewable energy industry, Aquatera's client base includes leading marine technology developers, testing facilities, utilities providers and local and national government agencies.

### **About Schneider Electric:**

At Schneider, we believe **access to energy and digital** is a basic human right. We empower all to **do more with less**, ensuring **Life Is On** everywhere, for everyone, at every moment.

We provide **energy and automation digital** solutions for **efficiency and sustainability**. Combining world-leading energy technologies to provide end-to-end energy management systems for Homes, Buildings, Data Centres, Infrastructure and Industries. We are a leader in ship and port-based applications and our solutions include the ground-breaking, modular, high efficiency shore power system, ShoreBoX.

<https://www.se.com/uk/en/work/solutions/for-business/marine/shorepower.jsp>

### **About Oaktec:**

**OakTec** produces ultra-low emission gas engines for agricultural, industrial and power generation applications and gas engine hybrid power generation systems.

Our CAGE (Clean Air Gas Engine) technologies focus on delivering world best small and medium sized gas engines in the 2 to 50kW range. OakTec has developed class leading engines that use biogas, hydrogen, LPG, and natural gas fuels and hybrid systems combining clean gas engines with solar PV and battery storage. [www.oaktec.net](http://www.oaktec.net)

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