

CANADA'S OCEAN SUPERCLUSTER AND INNOVATE UK ANNOUNCE \$2.3M NODE ZERO PROJECT TO DEVELOP WAVE POWERED OCEAN OBSERVATION SYSTEM

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(Halifax, NS) Today, at the H2O Conference in Halifax, Canada's Ocean Supercluster (OSC) and Innovate UK, the UK's innovation agency, announced Node Zero Project. It aims to develop the first of a global network of next-generation wave-powered, data collection buoys and marine autonomous systems hubs developed by UK and Canadian companies at the leading edge of the next ocean technology revolution. This project will provide oceanographic data to both the National Research Council and COVE's Digital Harbour, support autonomous underwater vehicle charging, and contribute to digital twinning solutions.

Led by Compusult Limited in Mount Pearl, NL, Node Zero aims to be the first true node for both Digital Harbour and an emerging global network of next generation data collection buoys. The outcome of this project is effectively "Node Zero" of a self-powered offshore ocean observation network that can be rolled out across Atlantic and Pacific Canada and extend into the Arctic and other regions globally. Node Zero will create green jobs and empower coastal communities with critically valuable information.

Project partners include UK-based Pure Marine Gen Ltd, Queen's University in Belfast, and collaborators PicSea Ltd in Edinburgh, as well as GRI Simulations in Mount Pearl, NL and the Institute for Ocean Research Enterprise in Dartmouth, NS. With a total project value of almost \$2.3 million, Canada's Ocean Supercluster is investing over \$575,000 with the balance of funding coming from Innovate UK and project partners.

The technologies employed through this project are individually novel, and the combination of their unique features is what makes Node Zero innovative at the international level, which is the primary benefit of operating as a collective. It will position Canada and the UK to supply technology and services to the worldwide coastal surveillance sector, which is projected to reach a value of \$43.19 billion by 2028.

Quotes:

"This strategic international partnership between Canada's Ocean Supercluster and Innovate UK highlights how collaboration is creating real benefits for Canadians and for the ocean sector beyond our borders," said the Honourable François-Philippe Champagne, Minister of Innovation, Science and Industry. "Node Zero, one of the four projects unveiled today, demonstrates how government support for Canada's Ocean Supercluster is

fostering transformative technologies that are critical to growth and sustainability within the blue economy.”

“The collection of data is critical to the sustainable development of our ocean and today we are proud to announce a new project that will help empower coastal communities with important information and also create new jobs in the process. The Node Zero Project comes from our first-ever international call for proposals in partnership with Innovate UK and will develop the first of a global network of next-generation wave-powered, data collection buoys and marine autonomous systems hubs.”

-Kendra MacDonald, CEO, Canada’s Ocean Supercluster

“Compusult looks forward to leading this collaborative and highly innovative ocean energy and environmental monitoring project. Together, we’re a synergistic Canada/UK team of exceptional specialists in wave energy, autonomous robotics, Geospatial Information Systems (GIS), simulation and digital twins, met-ocean data management, analytics, and visualization. Compusult also looks forward to leveraging this effort to further advance our commercial Web Enterprise Suite (WES) GIS and Nanuk Uncrewed Ground Vehicle (UGV) technologies to support initial and future deployments of Node Zero in Canada and worldwide.”

“GRi is excited to collaborate with a team of forward-thinking technology developers on the Node Zero project. Together, we aim to accelerate digital transformation in the marine sector by creating cutting-edge solutions that will help power, monitor, and maintain the next generation of intelligent, autonomous offshore assets. GRi will design software systems to plan missions, simulate operations, and provide visual data interfaces for real-time monitoring and enhanced decision making during the project and to end-users of the DUO wave energy product, post-project.”

About Canada’s Ocean Supercluster

Canada’s Ocean Supercluster accelerates the development and commercialization of made-in-Canada ocean solutions in energy transition, food security, future of transport, and climate change while also growing more companies, creating more jobs, and attracting ocean talent. As Canada’s national ocean cluster, the OSC is a convenor of members, partners, and networks and a catalyst for transformative growth that helps build the robust ecosystem needed to help realize [Ambition 2035](#) – a 5X growth potential in ocean in Canada by 2035. To date, the OSC has approved more than 100 projects which will deliver more than 220 new made-in-Canada ocean products, processes, and services to sell to the world. For more information visit oceansupercluster.ca

About Innovate UK

Innovate UK is a leading global organization that supports and promotes innovation in the UK. It provides a range of services to help businesses and organizations develop and commercialize their ideas. Innovate UK is committed to supporting the growth of the UK economy and creating jobs. It works with a wide range of partners, including government, industry, and academia, to deliver its mission. For more information, visit www.innovateuk.com

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