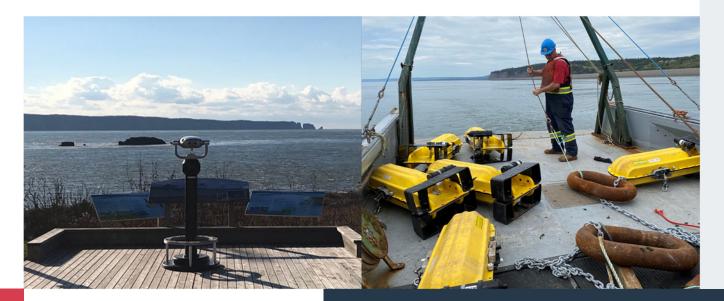


THE ATLANTIC REGIONAL ASSOCIATION OF THE CANADIAN INTEGRATED OCEAN OBSERVING SYSTEM

PARTNERSHIP PROFILE:

Fundy Ocean Research Centre for Energy

The Fundy Ocean Research Centre for Energy (FORCE) is Canada's lead research facility for tidal stream energy technology. This new, renewable technology uses the ebb and flow of the tide to generate electricity – much like wind turbines harness the wind. FORCE's test site is located in the Bay of Fundy's Minas Passage, about 10 kilometers west of Parrsboro, Nova Scotia. FORCE was created to better understand how tidal stream energy can play a role in Canada's clean energy future and help respond to climate change impacts like ocean acidification, sea level rise, and coastal erosion. FORCE is a private, not-for-profit company operated by a staff, governed by a board of directors, and guided by input from an independent environmental monitoring advisory committee, a community liaison committee, and federal and provincial regulators.







The Bay of Fundy is home to the world's highest tides; the FORCE test site, in Fundy's Minas Passage, features 14 billion tonnes of water moving over 5 m/s during peak flows, producing an estimated 7,000 megawatts of power.

"CIOOS provides a national, standardized platform for oceanographic data, which is a tremendous offering for Canada and beyond. CIOOS has the potential to be an integrator of data sources, to which FORCE is contributing its many and varied oceanographic data. Through an initial project funded in part by the Ocean Supercluster, FORCE has found a process towards making data live to satisfy required standardization and to be adaptable to the great variety of data sources. FORCE is excited to grow this platform and develop a mutually beneficial relationship with many other institutions and industries through this platform."

- FORCE

connection to the power grid. FORCE also works with multiple partners to conduct research to advance the science of data capture in high tidal flows, and identify

any potential environmental effects.

FORCE acts as a host

to turbine developers, providing a permitted

site, electrical infrastructure, an observation facility, and



https://catalogue.cioosatlantic.ca/organization/force







FORCE PARTNERSHIP WITH CIOOS ATLANTIC

A variety of stakeholders and rights holders can benefit from open access to data and metadata from the FORCE site. FORCE's partnership with CIOOS Atlantic allows for a diverse audience to access data without intervention of FORCE. Metocean data that has been contributed to CIOOS Atlantic supports site characterization, environmental monitoring, and operations at the FORCE site. FORCE has also partnered with Dalhousie University, Oceanmoor Technical Services, and RMI Marine for provision of select electrical equipment including hydrophones and novel software, marine operations and technical support, and the vessel and crew respectively. FORCE has received support from the Government of Canada, the Province of Nova Scotia, the Offshore Energy Research Association, and participating developers.

