News Alert

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Yukon University receives \$5.5M for clean energy research

WHITEHORSE, YT— The <u>Northern Energy Innovation</u> research program at Yukon University has received \$5.5M to assess the realities, challenges, and barriers of two clean energy options in a northern context. <u>Dr. Michael Ross</u>, <u>NSERC Industrial Research Chair in Northern Energy Innovation</u> (NEI), and his team, will use this funding over the next seven years to focus on carbon capture and storage, and offshore technologies in northern Canada.

This federal funding was secured through two academic partnerships:

1. Accelerating community energy transformation project

Academic lead	University of Victoria (<u>media release,</u> <u>website</u>)
Research focus	offshore and other renewable technologies
Funder	Canada First Research Excellence Fund (<u>media release</u>)
Funding to NEI	\$680K per year for three years, then \$420k per year for four years, ending in 2030, for a total of \$3,720,000
Research location	Northern and remote communities in Canada
Summary	NEI is working with UVic and other stakeholders on a multi-disciplinary initiative using offshore technologies to promote the transition of clean energy in small remote communities. Communities will define their energy, economic and social needs, and researchers and industry partners will help to identify pathways to achieve these goals. NEI will contribute technical expertise, in addition to their experiences working with many remote communities across Canada's north.

2. CANSTOREnergy project

Academic lead	University of Toronto (<u>media release</u>)
Research focus	carbon capture and storage

Funder	New Frontiers in Research Fund (<u>media release</u>)
Funding to NEI	\$302K per year for six years, ending in 2029, for a total of \$1.8M
Research location	Yukon
Summary	NEI is working with the UofT and other stakeholders to study how carbon capture and storage technologies might be effectively integrated in remote northern communities. If successful, surplus renewable energy could be used to synthesize carbon-neutral fuel sources for communities.

About the funding:

The Canada First Research Excellence Fund (CFREF) and the New Frontiers in Research Fund (NFRF) are two of Canada's major strategic research funding streams that support scientific discovery and world-leading interdisciplinary research, and train the next generation of researchers. YukonU is a partner on one of 11 large-scale CFREF projects that were awarded a combined total of \$1.4B, while six Canadian projects were awarded a total of \$72M in NFRF grants. YukonU's involvement in these successful CFREF and NFRF applications is a notable accomplishment, reflecting the quality and caliber of research led at YukonU.

About NEI:

Northern Energy Innovation (NEI) is one of seven research programs at the <u>YukonU</u> Research Centre. This research program is led by NSERC Industrial Research Chair, <u>Dr. Michael Ross</u>, in partnership with industrial partners Yukon Energy, ATCO Electric Yukon, and Northwest Territories Power Corporation. NEI has partnered with the Vuntut Gwichin Government —which is based north of the Arctic Circle in Yukon's only fly-in community of Old Crow — on these two projects, with anticipation of partnering with other Indigenous communities across Canada.

NEI's work is grounded in the principles of electric power system engineering and supports northern communities across northern Canada to meet their diverse energy needs. Our power system engineering team partners with communities and their utility companies to explore the integration of renewable generation in remote communities, diesel efficiencies, demand-side management, smart grids, and microgrids.

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