

Brilliant Energy Institute

Office of the Vice President Research and Innovation

Ontario Tech University

BEI Energy News

Weekly newsletter

September 06, 2024

Top News

BEI News



Ontario Tech University hosts IAEA Philippines delegation for a scientific visit

In collaboration with the University Network of Excellence in Nuclear Engineering (UNENE), Ontario Tech welcomed a delegation of members of the Philippines Nuclear Research Institute, the Department of Energy, the Department of Education and professors for a week-long scientific visit. The agenda included discussions on nuclear training, research, laboratory tours and visits to OPG's Darlington facility, Canadian Nuclear Laboratories and McMaster University to demonstrate Ontario's nuclear expertise and highlight opportunities for training and research collaboration.

Energy Policy

How six heavy-emitting industries are working to decarbonize - World Economic Forum

<https://www.weforum.org/agenda/2024/09/decarbonization-heavy-emitting-industries/>

Six heavy-emitting sectors are working to decarbonize through the First Movers Coalition

(FMC), launched at the 26th United Nations Climate Change Conference (COP26). The FMC unites companies to drive demand for low-carbon technologies. Recent efforts include Swedish steelmaker SSAB's hydrogen-based steel project, Holcim's order of 2,000 battery-electric trucks to be deployed by 2030, and Microsoft's carbon removal credits program.

Wind Energy

495-MW Buffalo Plains wind farm, Canada's biggest, delivers first power to Alberta grid - Energy Mix

<https://www.theenergymix.com/495-mw-buffalo-plains-wind-farm-canadas-biggest-delivers-first-power-to-alberta-grid/>

Buffalo Plains, Canada's largest wind farm, is now delivering power to Alberta's grid. The 495-megawatt project in Vulcan County will have 83 turbines, with over a third already installed. The project is part of Copenhagen Infrastructure Partners' renewable energy portfolio. The county expects to collect \$7.1 million in tax revenue from the project this year.

Nuclear

Bruce Power-ATS contract extended - NEI Magazine

<https://www.neimagazine.com/news/bruce-power-ats-contract-extended/?cf-view>

Bruce Power has extended its contract with ATS Industrial Automation for Major Component Replacement projects. The \$62.8 million agreement supports automation tools and innovations for safe, on-time, and on-budget delivery. The contract covers units 4, 5, 7, and 8 at the Bruce site, starting in 2025 and ending in 2032. ATS will provide automated tooling and on-site support. The MCR project is part of Bruce Power's \$13 billion Life Extension Programme, which will extend the life of the site until 2064.

Hydrogen

Minister Wilkinson announces \$9.14 million to support clean hydrogen development in Canada - Hydrogen Central

<https://hydrogen-central.com/minister-wilkinson-announces-914-million-to-support-clean-hydrogen-development-in-canada/>

The Government of Canada announced \$9.14 million in funding for six clean hydrogen projects across the country. Of this, \$2.74 million will support initiatives such as a pilot plant at the University of British Columbia and a hydrogen hybrid project by Enbridge Gas. An additional \$6.4 million will fund studies on hydrogen blending in utility networks, including a \$5 million system-wide study by Enbridge. These projects are part of Canada's Hydrogen Strategy. The Clean Fuels Fund will re-launch in December 2024 to support further clean energy investments.

Canada will spend \$300 million on hydrogen export to Germany - Hydrogen Central

<https://hydrogen-central.com/canada-will-spend-300-million-on-hydrogen-export-to-germany/>

Canada will spend \$300 million to support hydrogen exports to Germany. Germany will match the funds. The project is part of an agreement between the two countries to build a hydrogen supply chain. The goal is to start exports from Atlantic Canada to Germany by late 2025. Some infrastructure, including pipelines and conversion facilities, is still needed. The funding is part of a broader plan to grow Canada's hydrogen sector.

Critical Minerals

Government of Canada supporting critical minerals Processing in Kingston - NRCAN

<https://www.canada.ca/en/natural-resources-canada/news/2024/09/government-of-canada-supporting-critical-minerals-processing-in-kingston.html>

Canada is investing \$8.4 million in critical mineral recycling projects. The funding will go to

Cyclic Materials Inc. and Green Graphite Technologies Inc. Cyclic Materials will build a demonstration plant to recycle rare earth elements. Green Graphite Technologies will recover graphite for use in lithium-ion batteries. The funding comes from Natural Resources Canada's Critical Minerals Research, Development and Demonstration Program. These projects aim to support a circular economy and strengthen Canada's electric vehicle supply chain.

A sprinkle of crushed wollastonite helps crops and captures carbon, company says - CBC

<https://www.cbc.ca/news/canada/ottawa/farmers-bet-on-silicon-rich-mineral-1.7311832>

Farmers in eastern Ontario are using a new mineral to boost crop yields and capture carbon. Canadian Wollastonite, based in Seeley's Bay, is working with U.K.-based UNDO on the project. The mineral wollastonite is spread on fields, capturing one tonne of carbon dioxide for every 1.6 tonnes used. The process also helps improve soil health and crop productivity. Farmers only pay for transportation, with costs offset by carbon credits. The mine is working to expand the process across Canada, with operations already underway.

Do you have any milestones, events, or news updates to share with the energy community? Email your submission to BrilliantEnergy@ontariotechu.ca for consideration in an upcoming edition.

Thank you.

The Brilliant Energy Institute news team

brilliantenergyinstitute.ca

(With a little help from ChatGPT)