

Brilliant Energy Institute

Office of the Vice President Research and Innovation

Ontario Tech University

BEI Energy News

Weekly newsletter

October 25, 2024

Top News

BEI News

Durham Climate Roundtable Fall Forum

On October 19, 2024, the Durham Climate Roundtable Fall Forum brought the community together for a fun-filled day of education and conversation. Hosted by the Brilliant Energy Institute at Ontario Tech University and Durham Region, the event featured engaging activities, community-led workshops, and Repair Café, where attendees brought devices for free troubleshooting and repair. Ontario Tech University's Associate Professor Dr. Dan Hoornweg presented the annual Durham Region's Greenhouse Gas Emissions report, sharing mitigation strategies on how the community can move towards net-zero goals. Following the presentation, a panel discussion titled "50 Years Forward: Building a Strong and Sustainable Durham Community" took place, featuring public and private sector leaders.

Indigenous

Potential location identified in revival of Iqaluit hydro project Territorial government scrapped - CBC

<https://www.cbc.ca/news/canada/north/potential-location-revival-iqaluit-hydro-1.7358625>

Nunavut Nukkiqsautiit Corporation (NNC), an Inuit-owned clean energy developer, is reviving the Iqaluit hydro project and has identified the Kuugaluk River, 60 kilometres northeast of Iqaluit, as a potential site. The hydro project, previously halted in 2014 due to high costs, aims to reduce the city's dependence on diesel, with plans to explore electrification of heating. Community consultations and federal funding are underway, with NNC positioned to access more financing than the government's Qulliq Energy Corporation (QEC). If successful, the \$500-million project could ease energy costs and foster collaboration between NNC and QEC on ownership structures.

Energy Policy

Ontario aiming to become energy superpower, energy minister says - CBC

<https://www.cbc.ca/news/canada/toronto/ontario-energy-nuclear-electricity-natural-gas-lecce->

[1.7359244](#)

Ontario aims to position itself as an energy superpower, with the Minister of Energy unveiling plans to meet and exceed a projected 75 per cent increase in electricity demand by 2050. Emphasizing the province's strategy to boost nuclear and hydroelectric power while maintaining natural gas generation for reliability, despite a slight decline in emissions-free energy production. Ontario plans to scale up clean energy exports to U.S. markets and develop new energy efficiency programs for residents and businesses. The government is also pursuing modular nuclear reactors and long-term partnerships to drive job creation and economic growth, with further details to come in an integrated energy plan.

Ambitious new district energy project sets the stage for one of the most sustainable new waterfront communities in Canada - Mississauga

<https://www.mississauga.ca/city-of-mississauga-news/news/ambitious-new-district-energy-project-sets-the-stage-for-one-of-the-most-sustainable-new-waterfront-communities-in-canada/>

The City of Mississauga, Enwave Lakeview Corporation, Lakeview Community Partners Limited, and the Region of Peel have broken ground on a sustainable district energy system at Lakeview Village, transforming a former coal power site into one of Canada's greenest waterfront communities. This innovative system will use treated wastewater from the nearby G.E. Booth facility to provide low-carbon heating and cooling, reducing greenhouse gas emissions. Envisioned as a mixed-use community with 16,000 homes, parks, and commercial spaces, Lakeview Village aims to set a new sustainability standard. The first residential building will open in 2029, marking a major milestone in the project's evolution.

Energy Security in Uncertain Times: How Canada and Taiwan Can Partner for Strategic Gain - APFC

<https://www.asiapacific.ca/publication/energy-security-uncertain-times-how-canada-and-taiwan-can>

As Taiwan faces mounting energy security risks due to geopolitical tensions and a reliance on imported fuels, Canada's clean energy expertise offers a strategic opportunity for partnership. Taiwan is reducing its reliance on unstable energy sources by investing in renewable energy, particularly offshore wind and hydrogen. As one of the world's top hydrogen producers, Canada can offer valuable expertise and technology to support Taiwan's efforts. Despite challenges, including competition from regional exporters and infrastructure gaps, this collaboration could bolster Taiwan's energy resilience and Canada's Indo-Pacific ties, while supporting Taiwan's critical semiconductor sector.

Federal, Alberta governments commit \$50M to energy management in industrial facilities - Journal of Commerce

<https://canada.constructconnect.com/joc/news/government/2024/10/federal-alberta-governments-commit-50m-to-energy-management-in-industrial-facilities>

The Government of Alberta and Natural Resources Canada are investing \$50 million in Emissions Reduction Alberta's new Strategic Energy Management for Industry (SEMI) program. This initiative aims to reduce energy costs and boost operational efficiency in industries including manufacturing, oil and gas, and agriculture. Announced at the Lafarge Exshaw Cement Plant on October 16, SEMI provides funding for energy management systems, training, and capital retrofits, helping facilities boost competitiveness and sustainability. Eligible participants will undergo a Facility Readiness Assessment, with applications open as of

October 17.

Wind Energy Market in Canada Market Is Likely to Experience a Tremendous Growth in Near Future - OpenPR

<https://www.openpr.com/news/3704876/wind-energy-market-in-canada-market-is-likely-to-experience>

A new report from DiMarket offers an in-depth analysis of Canada's wind energy sector, forecasting substantial growth driven by increasing investments and new projects. The study examines market dynamics, regional breakdowns, and competitive strategies, with notable players such as Alberta Wind Energy Corporation, TransAlta Corporation, and Siemens Gamesa Renewable Energy SA. Onshore wind deployment is expected to dominate the market, with sustainability, low environmental impact, and independence from fossil fuels highlighted as advantages. The report aims to guide established and emerging companies in leveraging opportunities within the industry.

Tourmaline, Clean Energy open 2 new natural gas fuelling stations in Alberta - CBC

<https://www.cbc.ca/news/canada/calgary/tourmaline-clean-energy-gas-fuelling-1.7359821>

Tourmaline Oil Corp. and California-based Clean Energy Fuels Corp. have opened two new compressed natural gas (CNG) fuelling stations in Calgary and Grande Prairie, aiming to reduce the trucking industry's reliance on diesel and lower emissions. The two companies plan to build up to 20 CNG stations across Western Canada, with the capacity to fuel up to 3,000 natural gas-powered trucks each day. While natural gas remains a fossil fuel, it produces 20 per cent fewer CO2 emissions than diesel, making it a viable "bridging" solution as Canada works toward cleaner technologies like electricity, hydrogen, and renewable natural gas (RNG). Industry leaders such as Cummins, Walmart, and Mullen Group Ltd. have already begun integrating CNG-powered trucks, with further growth anticipated by 2025 as new stations open in Kamloops, Fort St. John, Chilliwack, and Fort McMurray.

Prince George, B.C., hydrogen project plans put on hold - CBC

<https://www.cbc.ca/news/canada/british-columbia/prince-george-hydrogen-plan-1.7356820>

Australian mining company Fortescue has paused its \$900-million Coyote Hydrogen Project in Prince George, B.C., citing the high cost and availability of the hydropower required to run the facility. The project aims to produce 140,000 tonnes of green hydrogen annually, supporting British Columbia's goal of becoming a global leader in low-emission hydrogen by 2050. However, the 1,000 megawatts of power needed — equivalent to nearly 91 per cent of the capacity of the Site C dam — proved too costly. Local leaders remain optimistic about future hydrogen opportunities if the province can increase renewable energy supply. Fortescue is continuing hydrogen projects in other countries, including Australia and the U.S., while B.C. Hydro warns that provincial power demand will rise 15 per cent by 2030, not accounting for large hydrogen ventures.

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)