Brilliant Energy Institute

Office of the Vice President Research and Innovation
Ontario Tech University

BEI Energy News

Weekly newsletter

April 17th, 2025

BEI News

Hydrogen Energy Workshop



 $\underline{\text{https://research.ontariotechu.ca/discover-research/iaea-collaborating-centre/hydrogen-workshop-apr-2025/index.php}$

Discover the future of clean energy at the Hydrogen Energy Workshop, hosted by the Brilliant Energy Institute at Ontario Tech University on Saturday and Sunday, April 26 and 27, 2025. This two-day event brings together industry leaders with over 80 years of combined experience to explore the technologies, challenges, and opportunities surrounding hydrogen energy. Tailored for professionals and students, the workshop will feature expert-led sessions, real-world case studies, and engaging discussions on hydrogen's role in driving sustainable innovation.

Advanced Nuclear and Small Modular Reactor Panel

https://forms.gle/a5RDDRQ69z2ginEe8

The Brilliant Energy Institute at Ontario Tech University is hosting an in-person panel discussion on advanced nuclear and small modular reactors (SMRs) on Tuesday, April 29, 2025, from 12:00 to 2:00 PM at the ERC Atrium. The event will feature international experts, including Dr. Hadid Subki from the International Atomic Energy Agency, Sonia Iqbal of Conexus Nuclear, Igor Pioro from Ontario Tech, Dazawray Landrie-Parker, and Brian Fehrenbach from the Organization of Canadian Nuclear Industries. The panel will be moderated by Dr. Hossam Kishawy, Dean of Engineering at Ontario Tech.

Ontario Tech News

Ontario Tech University exploring the role of nuclear 'nano reactors' to widen access to a cleaner and less expensive energy source - Ontario Tech University https://news.ontariotechu.ca/archives/2025/04/ontario-tech-university-exploring-the-role-of-nuclear-nano-reactors-to-widen-access-to-a-cleaner-and-less-expensive-energy-source.php
Ontario Tech University and George Brown College's Brookfield Sustainability Institute are developing a new nano reactor concept to bring clean, scalable nuclear power to remote Canadian communities. The proposed concept, Canadian Uranium Energy Bridge (CUEB), is a portable, subcritical reactor designed to be affordable, emission-free, and capable of producing hundreds of kilowatts of energy. With a footprint no wider than a shipping container, the CUEB could address energy challenges in off-grid industries and reduce diesel reliance. Researchers are now seeking partners, regulatory support, and further design validation to bring the innovation to life.

Ontario Tech researchers receive funding from Natural Resources Canada to study nuclear fuel safety and sustainability - Ontario Tech University

https://news.ontariotechu.ca/archives/2025/04/ontario-tech-researchers-receive-funding-from-natural-resources-canada-to-study-nuclear-fuel-safety-and-sustainability.php

Ontario Tech University is collaborating on the SAFE-T (Safety Assessment and Fuel Evaluation of TRISO) project, a federally funded initiative focused on the secure storage and management of used nuclear fuel. Supported by nearly \$5 million from Natural Resources Canada's Enabling Small Modular Reactors (SMR) program, the project brings together Ontario Tech, Western University, McMaster University, York University, and Canadian Nuclear Laboratories. Ontario Tech's Centre for Small Modular Reactors will conduct advanced research on TRISO fuel, a next-generation nuclear fuel known for its safety, durability, and high-temperature performance. This work aims to enhance the safety and sustainability of Canada's future nuclear power generation.

Renewables

N.S. government will oversee recovery of abandoned tidal turbine - CBC

https://www.cbc.ca/news/canada/nova-scotia/tidal-power-green-energy-bay-of-fundy-trevor-boudreau-1.7509897

Nova Scotia's energy minister says the province will oversee efforts to recover a 1,300-tonne tidal turbine abandoned in the Bay of Fundy for over six years. The turbine was left after the collapse of Cape Sharp Tidal's parent company and later bankruptcy by Occurrent Power. A \$4.5-million bond remains to fund its removal. The province is showing confidence in tidal energy by opening two new berths at the Fundy Ocean Research Center for Energy (FORCE) for new project applicants.

Fossil Fuels - Oil & Gas

Trio Petroleum secures producing oil assets in Saskatchewan's heavy oil basin - Energy News

https://energynews.pro/en/trio-petroleum-secures-producing-oil-assets-in-saskatchewans-heavy-oil-basin/

Trio Petroleum has acquired producing oil assets in Saskatchewan's Lloydminster heavy oil basin from Novacor Exploration for \$650,000 and 526,536 shares. The deal includes seven active wells producing 70 barrels daily and four more wells ready for reactivation. With low operating costs and further development potential, the acquisition marks Trio's strategic entry into Canada's energy sector. The company plans to expand through partnerships and cost-effective field acquisitions.

Energy Policy

Manitoba to repatriate hydroelectricity from US - Canada's National Observer https://www.nationalobserver.com/2025/04/14/news/manitoba-repatriates-hydroelectricity-us
Manitoba will retain 500 megawatts of hydroelectric power previously sold to Minnesota, redirecting it toward domestic growth and future projects. Premier Wab Kinew said the move supports housing, manufacturing, and a potential Nunavut transmission line. While Manitoba Hydro had already planned for the shift, opposition critics raised concerns about financial impacts. Kinew also called for federal support on east-west grid expansion to boost Canadian energy sovereignty.

Growing opposition to PL-69 as Quebec considers liberalizing electricity - Energy News

https://energynews.pro/en/growing-opposition-to-pl-69-as-quebec-considers-liberalising-electricity/
Protests erupted in Saint-Jean-sur-Richelieu as Quebec unions and civic groups voiced strong opposition to Bill 69, which could open Hydro-Québec's electricity monopoly to private interests. Critics argue the legislation threatens affordability and disproportionately burdens households in the energy transition. Activists also raised concerns about unequal access to decision-making and the lack of promised public consultations. They're urging the government to adopt a more transparent and inclusive approach to energy reform.

B.C. makes heat pumps more affordable for people with low incomes - British Columbia Government News

https://news.gov.bc.ca/releases/2025ECS0014-000309

B.C. is expanding its CleanBC Energy Savings Program to make heat pumps more affordable for

low- and moderate-income households, including renters in multi-unit buildings. Starting mid-2025, eligible households could receive up to \$5,500 in rebates, with \$50 million allocated annually for the next two years. The move builds on existing provincial, federal, and utility partnerships to improve access to clean, energy-efficient heating and cooling. Officials say the initiative will help address climate goals while reducing energy costs for vulnerable residents.

Ontario's 1-day surcharge on U.S. energy exports raised \$260K - Global News https://globalnews.ca/news/11127907/ontario-surcharge-energy-collected/

Ontario's one-day, 25 per cent surcharge on electricity exports to the U.S. raised \$260,000 on 26,000 MWh sold, the province confirmed. The charge was a retaliatory move against American tariffs on Canadian steel and aluminum. The measure sparked backlash from U.S. President Donald Trump but ultimately led to a diplomatic meeting and the tariff increase being halted. The funds will support Ontario workers and businesses, though specific plans are yet to be announced.

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)