Brilliant Energy Institute

Office of the Vice President, Research and Innovation
Ontario Tech University

BEI Energy News

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BEI News

Accelerating Automotive Innovation ACE x OVIN Innovation Garage Challenge

https://studentlifeportal.ontariotechu.ca/home/upcoming.htm?eventld=28265

Don't miss the final symposium of the OVIN Accelerating Automotive Innovation Garage Challenge, happening on March 17th from 4:30 to 8:00 p.m. at the ACE Climatic Wind Tunnel. This is the final of three events, in partnership with Magna Inc. and Toyota Canada. This event will showcase the intuitive solutions students have created in advanced manufacturing and mobility solutions.

Hydrogen Energy Workshop

https://research.ontariotechu.ca/discover-research/iaea-collaborating-centre/hydrogen-workshop-apr-2025/index.php

The Brilliant Energy Institute at Ontario Tech University is hosting a two-day Hydrogen Energy Workshop on April 26-27, 2025, in the UA Atrium from 8:30 a.m. to 3:00 p.m. Experts with over 80 years of combined experience will lead in-depth sessions on hydrogen technology and its applications. This two-day seminar is tailored for professionals and students in the field, featuring case studies and interactive discussions to deepen your understanding of hydrogen's role in the energy transition.

Renewable Energy

New Setbacks for Wind Turbines - Government of Nova Scotia

https://news.novascotia.ca/en/2025/03/07/new-setbacks-wind-turbines

Nova Scotia has revised its regulations to facilitate wind energy projects by setting clear, maximum setbacks for wind turbines to protect communities and the environment. These changes, announced by Minister of Municipal Affairs John Lohr, prevent municipalities from blocking turbine placement based on visual impacts and establish strict limits on noise and shadow flicker. The amendments are part of Nova Scotia's commitment to its Climate Change Plan and clean energy goals.

Saint John energy company says it hit milestone in recycling nuclear waste for energy - CBC

https://www.cbc.ca/news/canada/new-brunswick/moltex-point-lepreau-nuclear-energy-small-modular-reactors-waste-to-stable-salt-process-1.7478175

Moltex Clean Energy has developed a method to recycle nuclear waste into usable energy, significantly advancing waste reduction. Their process converts high-level waste into new fuel, aiming to power a small modular reactor at Point Lepreau by the early 2030s. This breakthrough will reduce the environmental and economic burdens of nuclear waste disposal.

Renewables accounted for 54.1% of total energy in Spain in February - pv magazine

https://www.pv-magazine.com/2025/03/11/renewables-accounted-for-54-1-of-total-energy-in-spain-in-february/

In February, over half of Spain's electricity was generated from renewable sources, marking a significant shift towards cleaner energy. Nuclear power led at 22.1 per cent, followed by hydroelectric (20.2 per cent) and wind energy (17.3 per cent). Additionally, Spain exported 1,214 GWh of energy and stored 237 GWh. This transition aligns with broader environmental goals, despite a 3.4 per cent drop in national electricity demand compared to the previous year.

Energy Policy

Hydro-Québec says Newfoundland and Labrador power deal is 'clean break' from the past - Toronto Star

https://www.thestar.com/news/canada/newfoundland-and-labrador/hydro-qu-bec-says-newfoundland-and-labrador-power-deal-is-clean-break-from-the-past/article_7b5ebe93-3b34-5e37-a47e-bfa000e06c2c.html

Hydro-Québec and Newfoundland and Labrador have forged a new deal to rectify past energy contract imbalances, introducing higher rates for power from Churchill Falls starting January 2025. This agreement, which paves the way for new projects like the potential Gull Island hydroelectric plant, is set to boost Newfoundland's revenues by over \$225 billion by 2075. The partnership marks a shift towards equitable energy collaboration between the two provinces.

Ontario Hits Michigan, Minnesota and New York With Electricity Surcharge - The New York Times (Paywall)

https://www.nytimes.com/2025/03/10/us/politics/canada-tariffs-retaliation.html

Ontario has imposed a 25 per cent surcharge on electricity exports to Michigan, Minnesota, and New York in response to U.S. tariffs, a move Premier Doug Ford says could escalate to cutting off power entirely if tariffs persist. This surcharge could raise local energy bills by \$100 monthly and impacts power to 1.5 million homes. Regional grid operators are assessing potential disruptions, with New York expecting significant impacts. Ford's actions underscore Ontario's firm stance against U.S. economic tactics.

Fossil Fuels - Oil and Gas

Canada could boost oil supplies to US, but also needs new markets, Alberta premier says - Reuters

https://www.reuters.com/markets/commodities/ceraweek-canada-could-boost-oil-supplies-us-also-needs-new-markets-alerta-2025-03-10/

Amid U.S. tariff threats, Alberta Premier Danielle Smith announced at the CERAWeek conference in Houston that Alberta could boost its oil pipeline exports to the U.S. by 2 million barrels per day while also seeking new markets like Spain and India. Highlighting the urgency for diversified markets, Smith called for faster pipeline approvals to facilitate Alberta's ambition to double oil and gas production. Despite current tensions, she emphasized Alberta's commitment to supporting U.S. energy dominance but stressed the need for zero tariffs on Canadian crude to avoid disrupting the supply chain.

Canada's Whitecap, Veren in \$10.4 billion merger to boost shale presence - Reuters

https://www.reuters.com/markets/deals/whitecap-resources-veren-combine-form-15-billion-firm-2025-03-10/

Whitecap Resources and Veren Inc. are merging in a C\$15 billion all-stock deal, creating Canada's seventh-largest oil and gas producer. The merger will make them the largest landholders in Alberta's Montney and Duvernay shale regions, aiming for a production output of 370,000 barrels per day. This consolidation is designed to enhance financial resilience against market volatility and tariffs, with the transaction expected to close by May 30. Post-merger, Whitecap's management will lead the combined entity, with Veren shareholders receiving a 39 per cent premium on their shares.

Energy Systems

School of Sustainable Energy Engineering forms research partnership with Corix biomass plant at SFU - Education News Canada

https://educationnewscanada.com/article/education/level/university/1/1129355/school-of-sustainable-energy-engineering-forms-research-partnership-with-corix-biomass-plant-at-sfu.html

Simon Fraser University and Corix have initiated a research partnership to optimize the biomass plant at SFU's Burnaby Mountain, enhancing fuel quality and operational efficiency. This \$360,000 project aims to reduce emissions further and explore new sustainability practices, including carbon capture and ash reuse. Funded by the Mitacs Accelerate program, the initiative also offers practical training for SFU students, supporting the university's goal to halve GHG emissions by 2025.

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)