

Brilliant Energy Institute

Office of the Vice President Research and Innovation
Ontario Tech University

BEI Energy News

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Ontario Tech News

An energy efficient lighting system is part of Ontario Tech's sustainable campus

<https://www.linkedin.com/feed/update/urn:li:activity:7117489487026274304>

The lowest carbon energy is the energy we don't use. Did you know Ontario Tech University uses automation to conserve energy on campus? At the university, the centralized computer control system turns off lights in rooms when they are unoccupied using automated occupancy sensors. Additionally, all electrical feeds are monitored with electronic metering so ongoing building operations are optimized. This is just one of the many ways Ontario Tech is creating a more sustainable campus while building the talent and innovation for a healthy, resilient and prosperous clean energy future.

Energy Policy

Renewables funds see record outflows as rising rates, costs hit shares

<https://www.theglobeandmail.com/world/article-renewables-funds-see-record-outflows-as-rising-rates-costs-hit-shares/> (Paywall)

Renewable energy funds are losing money as costs and interest rates rise. In the last quarter, investors pulled out a record \$1.4 billion. Companies like Orsted and First Solar are seeing their stock values fall, reflecting a broader trend in the sector. Despite this, there's still interest in green energy, with \$3.36 billion added in the first half of 2023. Challenges like project delays and higher operational costs are causing concern, but there's a silver lining. U.S. government subsidies are expected to give the industry a much-needed boost. With this support, the current financial struggles are seen as a temporary hiccup, and a recovery is anticipated.

EU finally OKs renewables target hike and easier permitting

<https://www.rechargenews.com/energy-transition/eu-finally-oks-renewables-target-hike-and-easier-permitting/2-1-1531737> (Paywall)

The European Council approved a raised target for renewable energy to 42.5 per cent by 2030, up from the previous 32 per cent. This includes simpler approval procedures to expedite the establishment of green energy projects. The initiative is part of a broader effort to diminish reliance on Russian energy following recent geopolitical events. Member nations are urged to support this heightened goal, with streamlined processes for green energy development. This comes amidst the backdrop of competition with China's state-subsidized green energy industry. Once published in the EU's official journal, nations have 18 months to enact these new regulations, signifying Europe's accelerated move towards enhanced energy security and environmental sustainability.

Indigenous and Community Engagement

Enbridge CEO calls for national Indigenous loan guarantee program

https://www.thestar.com/business/enbridge-ceo-calls-for-national-indigenous-loan-guarantee-program/article_455855cc-c321-55fb-aa5d-b131b5660dcd.html

Enbridge CEO Greg Ebel calls for a federal Indigenous loan guarantee program to aid First Nations in Canada in acquiring equity in major projects. This is in response to the limited access to necessary funds that these communities often face. The proposed national program aims to facilitate investments crossing provincial boundaries. This development follows recent trends of increased equity ownership stakes for Indigenous communities. The national program would include various sectors, promoting broader participation. Details on the program's launch and specific funding are yet to be announced.

Building Infrastructure

N.L. Hydro hatches 4-year, \$28M fix to 'galloping' problem on Muskrat Falls transmission line

<https://www.cbc.ca/news/canada/newfoundland-labrador/nl-hydro-turnbuckles-labrador-island-link-1.6989056>

N.L. Hydro is set to invest \$28M over the next four years to address a "galloping" issue on the Muskrat Falls transmission line. The problem arose from environmental conditions causing the lines to bounce, leading to equipment damage. N.L. Hydro will replace all 1,308 turnbuckles with more robust extension links and install air flow spoilers to counter the galloping effect, enhancing reliability. The utility reassures the public of ongoing reliable service amidst these upgrades. Testing for the line's maximum

capacity of 900 megawatts, initially scheduled for this fall, is now postponed to April 2024.

Nuclear

Ministerial Statement Regarding NWMO Integrated Strategy for Radioactive Waste

<https://www.canada.ca/en/natural-resources-canada/news/2023/10/ministerial-statement-regarding-nwmo-integrated-strategy-for-radioactive-waste.html>

The Canadian government has greenlit Nuclear Waste Management Organization's Integrated Strategy for Radioactive Waste management, aiming to ensure environmentally safe disposal. Developed over two years, with input from Indigenous Peoples and the public, the strategy aligns with international practices, focusing on deep geological repositories for intermediate and high-level waste, and near-surface facilities for low-level waste. Set for a review in 2028, the plan supports Canada's net-zero by 2050 commitment. Implementation timelines and funding details are yet to be announced.

US computing infrastructure provider announces SMR

plans <https://www.world-nuclear-news.org/Articles/US-computing-infrastructure-provider-announces-SMR>

Standard Power is set to develop small modular reactor (SMR) facilities in Ohio and Pennsylvania using NuScale's reactor technology to power data centres. The company, in partnership with ENTRA1 Energy, will install 24 units of NuScale's 77 MWe modules, totalling 1,848 MWe. This move aims to provide clean energy for tech sectors while boosting local economies. The first NuScale SMR, Project, is expected to be operational by 2029 at Utah's Carbon Free Power Plant.

Hydrogen

A Canadian hydrogen dynasty believes its moment has finally come. Can it happen here?

<https://www.theglobeandmail.com/business/article-a-canadian-hydrogen-dynasty-believes-its-moment-has-finally-come-can/> **(Paywall)**

Hydrogen Optimized, led by a third-generation Owen Sound-based company, is reigniting a family legacy in hydrogen tech. Their partnership with ABB Inc. underscores a strategic move to harness the global green energy wave. They hope enhanced electrolyzers, marked for scalability and efficiency, will be their ticket to a competitive edge. The project's progression is tied to anticipated Canadian government backing and international market interest. The company is advocating for policy evolution to strengthen Canada's stance in the hydrogen landscape. With aligned support, operations could grow rapidly by 2024.

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
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(With a little help from ChatGPT)