Brilliant Energy Institute

Office of the Vice President Research and Innovation Ontario Tech University

BEI Energy News

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BEI NEWS

Ontario Tech University has been named <u>Canada's Research University of the</u> <u>Year for 2023</u> by RE\$EARCH Infosource Inc. As a national leader in energy and environmental sustainability research, Ontario Tech has made significant strides, with one-third of research being energy-related, making it our greatest area of strength.

Ontario Tech's success in the research sector is attributed to a strategic commitment to listening to industry, community, and government partners to understand the pressing needs and challenges. Our research approach is collaborative, responsive, and results-driven, earning us a powerful voice in Canada's research community.

If you're interested in learning more about Ontario Tech's research initiatives, contact the Brilliant Energy Institute team. <u>brilliantenergy@ontariotechu.ca</u>

Energy Policy

Shell & Infosys collab for green data centre initiative - Energy Digital https://energydigital.com/articles/shell-infosys-collab-for-green-data-centreinitiative

Shell and Infosys are partnering to advance green data centres using immersion cooling technology. Their collaboration will combine Shell's Immersion Cooling

Fluid with Infosys Topaz's AI services. This initiative aims to reduce energy use and carbon emissions in data centres. The move is significant as AI-driven data demand escalates, increasing environmental impact.

Indigenous and Community Engagement

Canada's 'Indigenous Advantage' in Carbon Capture and Storage -Energy Now

https://energynow.ca/2023/12/canadas-indigenous-advantage-in-carbon-captureand-storage/

At the *COP28 climate conference in Dubai*, Canadian representatives are showcasing the country's approach to carbon capture and storage (CCS), highlighting the involvement of Indigenous communities. Significant partnerships have been formed in Alberta, with local Indigenous groups playing a key role in major CCS projects. These initiatives aim to significantly increase CCS capacity, with targets set for substantial carbon storage by 2030. The Canadian model, emphasizing Indigenous participation, is presented as a potential global blueprint for CCS development.

Nuclear

Palisades SMR programme is underway: Holtec - World Nuclear News

https://www.world-nuclear-news.org/Articles/Palisades-SMR-programme-isunder-way-Holtec

Holtec International aims to launch two SMR-300 small modular reactors at Michigan's Palisades site by 2030. The firm also plans to restart an existing reactor there by late 2025. These SMR-300 units are designed to produce 300 megawatts of electrical power. Holtec's Oyster Creek site in New Jersey is set for early SMR-300 deployment, focusing on hydrogen production. The Palisades plant, acquired by Holtec in 2022, is expected to resume operations by the end of 2025.

Framatome and Nuclearelectrica to co-operate on production of Lutetium-177 at Cernavoda - NEI

https://www.neimagazine.com/news/newsframatome-and-nuclearelectrica-to-cooperate-on-production-of-lutetium-177-at-cernavoda-11352001

Framatome and Romanian utility SN Nuclearelectrica plan to produce medical isotope lutetium-177 (Lu-177) at Cernavoda NPP. The agreement follows Framatome's isotope production success in Canada in 2022. The project involves a feasibility study to use existing infrastructure for isotope production without hindering power generation. Lu-177 is used in cancer treatment, notably prostate cancer.

Wind Energy

Ottawa gives Newfoundland and Labrador more control over offshore wind power projects - Toronto Star (Paywall)

https://www.thestar.com/business/ottawa-gives-newfoundland-and-labradormore-control-over-offshore-wind-power-projects/article_ab5c19d6-6ea0-5ad8-95fd-eff62398a400.html

In a move to accelerate offshore wind power development, the Canadian federal government has allowed Newfoundland and Labrador to regulate its offshore wind projects. This agreement, announced by the government, enables the province to use onshore rules for offshore wind farms. The decision aims to advance Newfoundland and Labrador's transition to renewable energy and support an expanding hydrogen export industry. However, local fish harvesters' express concerns over potential impacts on marine ecosystems. The province plans consultations with these groups to address these issues.

Oil and Gas

Federal, provincial governments veto \$1.5-million bid to relaunch oil exploration off Nova Scotia - The Globe and Mail

https://www.theglobeandmail.com/business/industry-news/energy-andresources/article-federal-provincial-governments-veto-15-million-nova-scotiaoffshore/ The Nova Scotia and Canadian federal governments have rejected a \$1.5-million bid for oil and gas exploration in the waters off Nova Scotia. The decision, aligning with environmental protection efforts, halts the proposed project on the Scotian Shelf. The ruling reflects a broader shift towards clean energy, as highlighted in a joint ministerial statement. The designated offshore area will remain Crown land, and the bid deposit will be returned to the company. This move signifies a meaningful pivot towards sustainable energy initiatives in the region.

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

Thank you.

The Brilliant Energy Institute news team brilliantenergyinstitute.ca (With a little help from ChatGPT)