

# Brilliant Energy Institute

Office of the Vice President Research and Innovation  
Ontario Tech University

## BEI Energy News

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### BEI and Ontario Tech News

Ontario Tech is a place for continuous learning and community-building for people of all ages, not just full-time students. This week, at a Campus Community Connect Event hosted by the Committee for an Age-Friendly University featured a keynote on climate change, by Dr. Daniel Hoorweg. Dan articulated the enormity of the problem but also provided ways government, industry and individuals can make meaningful improvements. BEI and several other university departments also talked about programs and services all community members can access in their life-long learning journey. Thanks to Dr. Shilpa Dogra and the committee for including BEI in this engaging event. Learn more at: <https://ontariotechu.ca/agefriendly/experience-it/index.php>

### Energy Policy

#### How Ontario is working towards a zero-emissions energy grid - Toronto Star (Paywall)

[https://www.thestar.com.cdn.ampproject.org/c/s/www.thestar.com/opinion/contributors/how-ontario-is-working-towards-a-zero-emissions-energy-grid/article\\_48db21d2-506a-5f7f-a338-fda3034a36af.amp.html](https://www.thestar.com.cdn.ampproject.org/c/s/www.thestar.com/opinion/contributors/how-ontario-is-working-towards-a-zero-emissions-energy-grid/article_48db21d2-506a-5f7f-a338-fda3034a36af.amp.html)

Lesley Gallinger, president and CEO of the Independent Electricity System Operator (IESO) reports on Ontario's progress in decarbonization, as well as policy questions that have arisen, since publication of the *IESO's Pathways to Decarbonization* Report, in late 2022. Ms. Gallinger notes that only three per cent of Ontario's greenhouse gas emissions (GHG) come from its electricity production due to the primarily low-carbon mix. Natural gas, while not low carbon is an important part of the mix for system reliability, Ms. Gallinger says. Natural gas currently comprises about 11 per cent of electricity mix, hence a small contributor to overall GHG but an important contributor to Ontario's electricity stability. She says sweeping changes are coming in how all aspects

of Ontario's energy is produced and distributed, including use of hydrogen and other clean fuels. But the path to change will require a thoughtful balance of many complexities.

## Nuclear

### **Rolls-Royce partners for SMR fuel design and analytics - World Nuclear News**

<https://www.world-nuclear-news.org/Articles/Rolls-Royce-partners-for-SMR-fuel-design-and-analy>

Rolls-Royce has partnered with Westinghouse Electric to develop fuel components for their small modular reactor (SMR) as part of the UK's Generic Design Assessment process. This collaboration leverages Westinghouse's nuclear fuel design expertise. Simultaneously, Rolls-Royce SMR is working alongside the UK's National Physical Laboratory to explore automated monitoring techniques, such as inductively coupled plasma tandem mass spectrometry, to enhance reactor safety and efficiency. These partnerships support the UK's efforts to strengthen its nuclear supply chain and energy security. The project is currently progressing, with a final investment decision expected in 2029.

## Wind and Solar Energy

### **N.S. abandons Atlantic Loop, will increase wind and solar energy projects for green electricity - CBC**

<https://www.cbc.ca/news/canada/nova-scotia/clean-power-plan-abandons-atlantic-loop-1.6992765>

Nova Scotia has abandoned its Atlantic Loop project, part of its plan to decarbonize the electrical grid by 2030. This decision comes as the province aims to increase wind and solar energy in its grid while relying on hydroelectricity imports from Labrador via the Maritime Link. The Atlantic Loop, intended to expand grid connections and access renewable electricity from Quebec, was deemed too costly, with its price soaring from \$3 billion to \$9 billion. Instead, Nova Scotia will focus on domestic wind supply and battery storage sites to meet its green energy goals.

## Fossil Fuels

### **Exxon's US\$59.5 billion bet on fossil fuels has implications for Canadian oilpatch: experts - Toronto Star**

[https://www.thestar.com/business/exxons-us-59-5b-bet-on-fossil-fuels-has-implications-for-canadian-oilpatch-experts/article\\_06456c24-52ef-50ee-a912-a2464bac768f.html](https://www.thestar.com/business/exxons-us-59-5b-bet-on-fossil-fuels-has-implications-for-canadian-oilpatch-experts/article_06456c24-52ef-50ee-a912-a2464bac768f.html)

Exxon Mobil, an American multinational oil and gas corporation, acquired Pioneer Natural Resources for US\$59.5 billion, signaling its strong confidence in fossil fuels, with potential implications for Canadian producers. This deal, their largest in two decades, creates a major participant in hydraulic fracturing in West Texas. It reflects Exxon's belief in ongoing global oil demand due to slower adoption of alternative energy tech and energy security concerns amid the Ukraine conflict. The Canadian oil sector, especially in regions like Montney, may see more mergers and short-term production growth. However, the industry remains cautious about risks in the transition to alternative energy.

## Oil and Gas

### **Not long ago, West White Rose was withering, but today the N.L. oil project is blooming again - CBC**

<https://www.cbc.ca/news/canada/newfoundland-labrador/cenovus-argentina-oil-platform-1.6991577>

Newfoundland and Labrador's West White Rose offshore oil project, which faced uncertainty due to the COVID-19 pandemic, is now progressing with optimism. The project, led by Cenovus Energy, a Canadian integrated oil and natural gas company, has reached 83 per cent completion, with the construction of a concrete gravity structure (CGS) taking place in Argintia. Nearly 1,000 workers are involved, and the project aims to reach a height of 145 meters and a weight of 200,000 tonnes. First oil production is expected in 2026, with a daily output of 80,000 barrels. Unlike other platforms, it won't refine or store oil but will send it back to the SeaRose vessel. This project was temporarily halted but resumed in May 2021 after an ownership shakeup and government agreement, with significant investments made, including \$405.9 million by OilCo.

### **Public inquiry needed into Alberta Energy Regulator; U of C study concludes - CBC**

<https://www.cbc.ca/news/canada/calgary/study-orphan-wells-regulator-aer-review-1.6992620>

Academics at the University of Calgary are calling for a public review of the Alberta Energy Regulator, citing concerns of secrecy and close ties to the industry. In a peer-reviewed report, they describe a "massive policy failure" in addressing the environmental liability left by the oil and gas industry, estimated to be more than \$60 billion. A spokesperson for the regulator says work has ramped up in recent years, including more than \$1 billion spent on the reclamation efforts in 2022. The report highlights a lack of legislated time frames for closure work on inactive wells and discretionary regulatory authority. The report also states financial information is withheld and suggests an inappropriate dominance of the industry in the Orphan Well Fund.

## Hydrogen

### **Green hydrogen for iron | H2 Green Steel in talks to build \$6bn green steel plant in Quebec - Hydrogen Insight**

<https://www.hydrogeninsight.com/industrial/green-hydrogen-for-iron-h2-green-steel-in-talks-to-build-6bn-green-steel-plant-in-quebec/2-1-1531945>

Swedish firm H2 Green Steel (H2GS) is in talks with Canadian authorities about a potential \$6 billion H2-based iron and steel plant in northern Quebec, contingent on securing access to hydropower. H2GS has pinpointed a 500-acre site near an iron-ore depot owned by partner Rio Tinto. Two options are under consideration: a \$6-billion green iron and steel plant or a \$3-billion green iron plant for export. This initiative aims to reduce emissions in steel production by using green hydrogen and renewable energy sources.

*Do you have any milestones, events, or news updates to share with the energy community? Email your submission to [BrilliantEnergy@ontariotechu.ca](mailto: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)