

Brilliant Energy Institute

BEI Energy News

This update is produced two times weekly by the Brilliant Energy Institute

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Top News

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[Durham Hydrogen Hub advisors hold hydrogen event – BEI LinkedIn](#)

An inaugural event was held May 9 to celebrate the affiliation of the Canadian Hydrogen and Fuel Cell Association (CHFCA) and Hydrogen Business Council (HBC). Brilliant Energy Institute was a key part of the event with Executive Director Jacquie Hoornweg moderating a panel on hydrogen development in Ontario. The global picture for hydrogen points to exponential growth that needs to be directed for the most effective, safe use in energy systems in a decarbonized economy. Several of the key organizations in the hydrogen sector were on the panel including Brennan Louw, Independent Electricity System Operator, Kelly Grieves, Atura Power, David Zekveld, Northland Power and Andrew Thiele, Bruce Power. Durham Hydrogen Hub advisors, Ivette Vera-Perez, CHFCA and Robert Stasko, HBC, led the event and Energy Minister Todd Smith was on hand to share Ontario's vision.

Ontario Tech News

[May 11 marks Moose Hide Campaign Day – BEI LinkedIn](#)

Today is Moose Hide Campaign Day, an Indigenous-led grassroots movement to engage individuals to take action against violence towards women and children. As an ambassador campus, Ontario Tech University and Brilliant Energy Institute are committed to create awareness in ending this violence. You can learn more about supporting the Moose Hide Campaign and where to get a Moose Hide pin on campus by visiting [Student Life's website](#).

Energy Policy

[The governments of Canada and Quebec announce the largest electric buses project in North America – Infrastructure Canada](#)

The governments of Canada and Quebec announced over CA\$1.8 billion to purchase 1,229 electric buses and enhance Quebec's network of electric public transit. This is the largest electric bus acquisition project in North America. The funding aims to allow ten public transportation organizations to begin conversion of their bus fleets to 100 per cent electric. Nova Bus, a company in Saint-Eustache, was awarded the contract to manufacture these buses. The buses will be produced and assembled in Nova Bus' Quebec plant, which would help generate significant economic benefits for Quebec and Canada.

[FCM and Government of Canada make strategic investments to improve urban sustainability in Quebec – Natural Resources Canada](#)

The Federation of Canadian Municipalities (FCM) and the Government of Canada [announced](#) more than CA\$1.4 million through the Green Municipal Fund to support 16 local initiatives across Quebec. These projects aim to help municipalities reduce emissions and contribute to achieving Canada's goal of net zero by 2050 by increasing energy efficiency and sustainability in key areas such as housing, transportation and municipal buildings and land use.

[Norway postpones controversial onshore wind power tax – Energy Now](#)

The Norwegian government announced they are postponing plans to introduce additional taxes for onshore wind power operators by a year, which they proposed earlier as a measure to benefit local and state finances. Onshore wind development in Norway was halted for three years until last year due to backlash from local communities, concerns over foreign ownership and conflicts over the rights of Indigenous Peoples. The new tax was expected to generate around 2.5 billion Norwegian crowns (US\$238.36 million) in tax revenue. The proposed measure received strong criticism from stakeholders, stating it would bankrupt older wind farms and erode investor confidence.

[High support for advanced nuclear worldwide, survey finds – World Nuclear News](#)

A [survey](#) conducted by non-governmental organizations ClearPath, Third Way, Potential Energy Coalition and RePlanet, finds widespread support for advanced nuclear energy technologies among the public. 13,500 members of the public from France, Germany, Japan,

Poland, South Korea, Sweden, the U.K. and the U.S. were surveyed online between November 2022 and January 2023. Poland, France and Sweden showed the highest levels of support and environmental group members were net supporters of advanced nuclear energy. In Germany and Japan, most of the supporters of every major political party also back using advanced nuclear energy.

Energy Systems

Battery Technology

[Glencore joins Li-Cycle to build Europe's biggest battery recycling plant – Financial Post](#)

Li-Cycle, Canadian battery recycling company, and Glencore, a Swiss multinational commodity trading and mining company, are planning to build Europe's biggest battery recycling plant in Sardinia, Italy. The two companies plan to conduct a feasibility study to convert part of an old Glencore lead refinery in Sardinia into a plant that recycles battery metals like lithium, nickel and cobalt. The new plant, subject to the results of the study, is expected to be commissioned by early 2027 and would have the capacity to process 50,000 to 70,000 tons of black mass a year. This plant would make Li-Cycle and Glencore key players in the European race to control the critical metals needed for the green revolution.

Technologies

Nuclear

[U.S. NRC gives approval for Holtec's New Mexico used fuel facility – World Nuclear News](#)

The U.S. Nuclear Regulatory Commission (NRC) has issued the final licence to Holtec International to build and operate the Hi-STORE consolidated interim storage facility (CISF) for used nuclear fuel in New Mexico. In 2017, the company applied for a 40-year license in the initial phase of the project to hold around 8680 tonnes of used fuel in about 500 canisters. The company has plans to expand to 10,000 canisters in 19 phases over 20 years. The project is expected to create around 400 jobs and bring about US\$3 billion to the region. The Hi-STORE CISF facility was planned by Holtec in partnership with the Eddy-Lea Energy Alliance in 2015 at a site between Carlsbad and Hobbs in Lea County, New Mexico. The site would be used to

store used nuclear fuel from U.S. power reactors until a permanent repository is available.

Hydroelectric Power

[U.S. DOE announces nearly US\\$600 million to modernize and advance hydropower – Renewable Energy World](#)

The U.S. Department of Energy (DOE) has announced US\$553.6 million in funding through the Maintaining and Enhancing Hydroelectricity Incentives program to modernize hydroelectric power and advance marine energy throughout the country. This funding aims to ensure generators continue to provide clean, affordable electricity while integrating additional renewable energy resources and help reduce environmental impacts. The U.S. DOE also announced US\$45 million to support a pilot demonstration site and community-led tidal and/or current energy project in the U.S. Both projects are funded through the Bipartisan Infrastructure Law.

Hydrogen

[More than 1,000 clean hydrogen projects worth US\\$320 billion announced, but few have reached FID – Hydrogen Insight](#)

A new report by the Hydrogen Council and McKinsey & Company titled [Hydrogen Insights 2023](#) finds that more than 1,000 renewable and low-carbon hydrogen projects requiring US\$320 billion of investment by the end of 2030 have been announced globally, but only less than 10 per cent have reached final investment decision (FID). Among these projects, 112 are for gigawatt scale production that require US\$150 billion of investment by 2030. The report also finds that almost half of the announced projects have not yet entered the planning stage or received government funding, while only US\$29 billion of projects have reached an FID in North America (US\$10 billion), Europe (US\$7 billion), China (US\$5 billion) and the Middle East (US\$5 billion).

[Korea considers deployment of NuScale SMR for hydrogen production – World Nuclear News](#)

GS Energy, a Korean power generation company, signed a memorandum of understanding (MoU) with Ulsan City in North Gyeongsang Province, South Korea, to consider the use of NuScale Power's small modular reactor (SMR) technology to provide heat and power to the planned Ulsan Nuclear Hydrogen National Industrial Complex, which is currently under

construction. According to the MoU, the parties will collaborate on a feasibility study to construct a NuScale VOYGR-6 SMR power plant within the Industrial Complex. The county plans to build the SMR plant by 2030, with construction beginning in 2028. The Industrial Complex is a part of South Korea's efforts to promote hydrogen as a future energy source and achieve carbon neutrality by 2050.

Fossil Fuels

[Alberta oil and gas producers restart operations as wildfires ease – Energy Now](#)

Many oil and gas companies in Alberta restarted their operations on Wednesday as the wildfires had eased. The wildfires forced the shutdown of at least 319,000 barrels of oil equivalent per day, or 3.7 per cent of Canada's production. Companies like Crescent Point Energy and Tourmaline Oil Corp. have announced the restoration of production activities without any damage to their assets.

Grid Management

[Alectra Utilities invests CA\\$22.5 million towards grid upgrades in Hamilton – Alectra Utilities](#)

Alectra is investing over CA\$22 million in infrastructure modernization projects to strengthen its power grid in the City of Hamilton. The upgrades aim to stabilize the existing system and reduce outage impacts in the community. The investment includes CA\$12.7 million towards renewing old infrastructure and CA\$5.7 million towards rehabilitation of cables, among others.

Thank you.

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