

BEI Energy News

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

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Top news

Brilliant Energy Institute News

[Today marks the National Day of Awareness of Missing and Murdered Indigenous Women, Girls and Two-Spirit People – BEI LinkedIn](#)

Red Dress Day, the National Day of Awareness of Missing and Murdered Indigenous Women, Girls and Two-Spirit People is a day of honour and remembrance for those taken from their families and communities. It is a day to acknowledge this disproportionate violence and advocate for change. The Brilliant Energy Institute team is in solidarity and are thinking about the people that have been or are affected by these horrific events.

[BEI Executive Director to moderate nuclear panel at Global Energy Show in Calgary – BEI LinkedIn](#)

At the [Global Energy Show](#) in Calgary, June 15, Brilliant Energy Institute's Executive Director Jacquie Hoornweg will explore "[Nuclear, The Myth, The Legend](#)" with expert panelists, Simon Irish, CEO of Terrestrial Energy, Harlan Bowers, President and COO of X-energy and John Gorman, President and CEO of the Canadian Nuclear Association. The panel will examine the benefits of nuclear in developing a clean energy grid, ways to support countries looking to deploy nuclear, and maximizing the generating potential of existing nuclear reactors.

Energy Policy

[German parliament seeks to ban hydrogen for heating – Hydrogen Insight](#)

The Bundesrat, the upper house of the German parliament, plans to amend the zero-carbon heating law put forward last month by the federal government to remove the possibility of using hydrogen to heat buildings. The proposed law plans to ban the installation of new fossil fuel-based heating systems from next year but allowed gas boilers if they were hydrogen-ready. The Bundesrat stated that the hydrogen-ready boiler option would be tempting for many consumers as an initial investment, compared to other alternatives, but the very high costs of future hydrogen operation are not accounted for. This would mean the additional financial burden will be postponed to the future.

[Oil rises but stays on track for third weekly decline – Energy Now](#)

Oil prices are set for a third consecutive weekly loss, falling by nearly 10 per cent this week despite a slight recovery on Friday morning. A combination of renewed banking fears in the U.S. and the surprise contraction in China's manufacturing activities are linked to the losses. Brent crude rose US\$1.88, or 2.6 per cent, to US\$74.38 a barrel. U.S. West Texas Intermediate (WTI) rose US\$1.89, or 2.8 per cent, at US\$70.45 after four days of declines that sent the contract to

lows last seen in late 2021. The Brent benchmark was on track to finish the week with a decline of about 6.5 per cent, while WTI was set for an eight per cent loss.

[Loblaw strikes deal with TC Energy to power all Alberta operations with renewables – Energy Now](#)

Loblaw Companies Ltd. has reached a deal with TC Energy to facilitate the decarbonization of the company's operations in Alberta. The agreement aims to provide Loblaw's 280 supermarket and drugstore locations as well as its offices and distribution centres in Alberta with electricity from renewable sources. This deal would cut the company's nationwide operating emissions by 17 per cent.

Energy Systems

Building Infrastructure

[Dubai could be home to the renewable energy smart highway – Energy Digital](#)

URB, a UAE based architect firm, has designed a 93-kilometre-long sustainable highway known as "[The Loop](#)". The concept is a running and cycling track that will be powered by 100 per cent renewable energy to act as a suitable route for sustainable travel along a 93 kilometre stretch. The aim of the project is to bring back pedal power and encourage more people to use their feet to limit the number of vehicles in the city. The project aims to generate renewable power through the installation of kinetic paving that creates energy by using electromagnetic induction generators which vertically displace from the weight of a person's footstep.

Electric Vehicles

[U.S. Postal Service carrier orders 50 fuel cell trucks from Nikola – Clean Technica](#)

AJR Trucking, a Los Angeles based trucking firm, has placed an order for 50 Class 8 fuel cell trucks with Nikola. AJR plans to take advantage of the tax incentives provided to zero emission Class 8 truck buyers in California. It expects to receive US\$270,000 per truck from California's point-of-sale incentives, and another US\$40,000 per truck in federal tax credits from the federal Inflation Reduction Act. The trucks are to be deployed to service the U.S. Postal Service's fleet.

Technologies

Nuclear

[Westinghouse unveils AP300 small modular reactor – World Nuclear News](#)

Westinghouse has launched the AP300 small modular reactor (SMR). It is a scaled-down version of its AP1000 reactor. The company says it hopes to benefit from the design utilizing its Gen III+ technology, which has regulatory approval in the U.S., U.K. and China as well as being compliant with European Utility Requirements. The company said the footprint of the AP300 would be about 25 per cent of the area of a soccer pitch, with a target cost per unit of \$US1

billion. The company aims to get licensing approval from the U.S. Nuclear Regulatory Commission by 2027 and deploy the first AP300 SMR 10 years from now.

[Holtec signs agreements with Korean financial firms – World Nuclear News](#)

Holtec International and Hyundai Engineering & Construction have signed agreements with Korea Trade Insurance Corporation and the Export-Import Bank of Korea for financial support to deploy SMR-160 projects globally. The agreements were signed during the Korea-U.S. Advanced Industry and Clean Energy Partnership Event hosted by Korea's Ministry of Trade, Industry and Energy in Washington, D.C., April 25. Holtec's 160 MW small modular reactor (SMR) is a pressurized light-water reactor. Its design has completed the first phase of the Canadian Nuclear Safety Commission's three-phase pre-licensing vendor design review and is undergoing pre-licensing activities with the U.S. Nuclear Regulatory Commission. The company has also applied for a Generic Design Assessment in the U.K.

Solar Energy

[INEOS Inovyn's solar endeavours strike energy investment – Energy Digital](#)

INEOS Inovyn, the chemical manufacturer, has announced it is investing in a 9,000-panel solar energy farm known as HELIOS. The project spans 30 hectares of land at Jemeppe-sur-Sambre, Belgium, and is a critical facility for reducing overall greenhouse gas emissions by producing 57,000 MWh of renewable electricity per year. The site is expected to go online in 2024 and replace around 10 per cent of their energy requirements.

Tidal Energy

[Sustainable Marine drops Nova Scotia tidal energy project – Offshore Energy](#)

Sustainable Marine Energy, a Scotland-based energy company, has announced it would not be continuing the development of the Pempa'q instream tidal energy project at Fundy Ocean Research Centre for Energy in Nova Scotia. The company said that Fisheries and Oceans Canada refused to provide a clear pathway or regulatory framework for the project. The objective of the project was [to provide up to 9 MW of clean renewable electricity to Nova Scotia's electrical grid](#), and was funded with CA\$28.5 million from Natural Resources Canada's Emerging Renewables Power Program back in 2020.

Hydrogen

[Electric Hydrogen announces 1.2 GW electrolyzer Gigafactory in Massachusetts – Hydrogen Insight](#)

Electric Hydrogen, a U.S. based startup backed by Bill Gates, has announced plans to build 100 MW electrolyzers at a new 1.2 GW Gigafactory in Devens, Massachusetts, in the first quarter of 2024. The company aims to reduce the cost of green hydrogen by producing a low-cost and efficient 100 MW electrolyzer, by far the world's largest, that has been designed from scratch. Their design contrasts with the mainstream electrolyzer company that combines smaller machines in series to produce hundreds or thousands of megawatts of capacity in total. They [raised](#) US\$198 million in Series B funding last year from investors such as Amazon, Equinor, Rio Tinto and Mitsubishi Heavy Industries.

Coalition applies for U.S. hydrogen hub funding – World Nuclear News

The Great Lakes Clean Hydrogen Hub coalition is led by industrial gases and engineering company Linde, power producer Energy Harbor, steel producer Cleveland-Cliffs Inc., aircraft component manufacturer GE Aerospace, the University of Toledo and the trade association Glass Manufacturing Industry Council. The coalition has applied for funding under the Infrastructure Investment and Jobs Act to create a nuclear-powered clean hydrogen hub to serve Ohio, Michigan, and parts of Pennsylvania and Indiana. The US\$2 billion plan involves the creation of a clean hydrogen hub using nuclear power from Energy Harbor's Davis-Besse plant in Ohio to produce clean hydrogen at a competitive cost.

Thank you.

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