

BEI Energy News

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

March 20, 2023

Top news

Brilliant Energy Institute News

[Durham's Hydrogen Steering Committee meets to advance hydrogen opportunities in the Region – BEI LinkedIn](#)

The Durham Hydrogen Hub Steering Committee, facilitated by Brilliant Energy Institute, continues to advance its support for hydrogen production, commercialization, deployment in communities, and support for adoption by industry looking to decarbonize their equipment and operations. On Tuesday, March 7, the committee toured some of the university's hydrogen research facilities, including the Clean Energy Research Lab, ACE Climatic Aerodynamic Wind Tunnel and Sheldon Williamson's electrification lab. Durham's Hydrogen Hub includes: Atura Power, Bruce Power, the Region of Durham, Enbridge Gas, General Motors, Miller Waste Systems Inc., St. Marys Cement, the Hamilton-Oshawa Port Authority, Ontario Tech University, and our committee advisors and partners, the Canadian Hydrogen and Fuel Cell Association and the Hydrogen Business Council.

Clean Energy Policy

[There is indeed a problem with ESG investing, just not the one you think – The Globe and Mail](#)

The U.S. Senate recently voted to overturn a Labour Department rule allowing retirement plans to consider environmental, social and governance (ESG) issues when making investment decisions. The rule allows pension plans to consider ESG factors if they are in the best financial interest of plan beneficiaries. Yrjo Koskinen, the BMO Professor of Sustainable and Transition Finance at the University of Calgary, writes that ESG isn't the problem but the behaviour of the fund managers who push such investments. He recommends stiff penalties against self-serving and misleading financial marketing such as greenwashing and inflated claims of superior returns for ESG funds are required.

[BlackRock fast-tracks eviction of ESG violators from MSCI-linked ETFs – The Globe and Mail](#)

BlackRock Inc, the world's biggest asset manager, has halved the time it takes for companies breaching certain environmental, social and governance (ESG) related standards to be removed from many of its iShares exchange-traded funds. BlackRock's "fast-exit" rule, which went live in December 2022, will see such companies removed in 45 days at most, rather than 90 days previously. The ruling covers 35 of its European listed ESG Equity Traded Funds that track MSCI indices. The new rules were introduced to BlackRock's MSCI custom indices, where BlackRock defines the index rules, after discussions beginning last summer. Companies will be reviewed for exclusion monthly.

[These may be the UN climate panel's last words before we hit 1.5 C limit – CBC News](#)

A new [report](#) by the Intergovernmental Panel on Climate Change says it is still possible to hold global warming to relatively safe levels, but doing so will require global cooperation, billions of dollars, and big changes. It says that global average temperatures are estimated to rise 1.5 C above preindustrial levels sometime around “the first half of the 2030s,” as humans continue to burn coal, oil, and natural gas. The report, which was approved by 195 governments, says that existing and currently planned fossil fuel infrastructure (coal-fired power plants, oil wells, factories, cars, and trucks across the globe) will already produce enough carbon dioxide to warm the planet roughly 2 C this century. To keep warming below that level, many of those projects would need to be cancelled, retired early or otherwise cleaned up. After contentious debate, the UN science panel calculated and reported that to stay under the warming limit set in Paris, the world needs to cut 60 per cent of its greenhouse gas emissions by 2035, compared with 2019, adding a new target not previously mentioned in the six reports issued since 2018.

[Canada announces new support for the Métis Nation, the Saskatchewan Energy Advisors – Natural Resources Canada](#)

The Government of Canada announced an investment of \$414,000 to the Métis Nation – Saskatchewan (MN-S) to establish the Métis Nation – Saskatchewan EnerGuide Capacity Initiative. This project aims to increase awareness of home energy efficiency and build capacity for Indigenous energy advisors and EnerGuide home energy evaluation services for Métis in Saskatchewan. The MN-S will establish itself as a licensed EnerGuide service organization to ensure Métis communities have the internal capacity to conduct home evaluation activities for their housing throughout the province of Saskatchewan.

Technologies

Nuclear

[IAEA Nuclear Safety and Security Glossary - IAEA](#)

The International Atomic Energy Agency (IAEA) has posted an update to its [IAEA Nuclear Safety and Security Glossary](#), 2022 (Interim) Edition. The glossary defines and explains technical terms used in [IAEA safety standards](#), [IAEA nuclear security guidance](#) and other safety and security related IAEA publications, and provides information on their usage. The glossary provides guidance, primarily for the drafters and reviewers, of safety standards, nuclear security guidance and other publications, and is a source of information for users of these publications.

[Belgian-Dutch partnership for nuclear new build – World Nuclear News](#)

Belgian engineering firm Tractebel has signed a Memorandum of Understanding (MoU) with the Netherlands' NRG-Pallas to collaborate in providing engineering services for the construction of large nuclear power plants in the Netherlands. The MoU was signed at the Embassy of Belgium in The Hague in the presence of the Belgian Ambassador Anick van Calster on the sidelines of the Belgium-Netherlands Nuclear Summit. Tractebel has more than 60 years of experience in nuclear engineering and acts as Owner's Engineer for the planned Pallas research reactor in the Netherlands. The Nuclear Research and Consultancy Group is a leader in research into new nuclear technologies. The CEOs of both organizations expect to contribute to the New Build initiatives in Netherlands through their capabilities in contract management, operational readiness and capacity to facilitate the plans of the Dutch Government.

[Ukraine aims to produce nuclear fuel by 2026, exports to follow – World Nuclear News](#)

Ukraine is intending to produce its own nuclear fuel within three years, with Energy Minister Herman Halushchenko saying that in the longer term, the aim is to export to other countries. Energoatom and Westinghouse were already working together on diversifying the source of nuclear fuel for Ukraine's Russian-designed nuclear power plants before the war began, but the switch away from Russian-supplied fuel was accelerated once hostilities began.

Wind Energy

[Hydro-Québec accepts seven projects totalling nearly 1,150 MW of wind power – Hydro-Québec](#)

Hydro-Québec has accepted seven bids for a total of 1,303.36 megawatts (MW) of installed capacity under the two calls for tenders launched on Dec. 13, 2021. One of the calls for tenders was for a block of 480 MW from renewable energy sources and the other one was for a block of 300 MW generated from wind power. The selected projects will help meet Québec's growing demand for electricity. Over the coming weeks, Hydro-Québec will finalize contracts with the project proponents. Hydro-Québec hopes to quadruple their wind power capacity over the next 15 years to ensure their energy supply.

Solar Energy

[World's largest rooftop solar panel to be built in Thailand – Energy Digital](#)

Falken is building the world's most extensive solar panel installation on a single facility, covering an area of 100,000 square metres, which is equivalent to over 18 football pitches. This installation is being constructed at the Sumitomo Rubber Industries factory in Thailand. The installation is composed of 40,000 solar panels with a combined output of 22MW and is set to be completed by January 2025. The factory will be able to power itself with 100 per cent renewable energy as there is a gas co-generation system and biomass electric power system initiatives at the Rayong Province facility. The gas co-generation system, which comprises two 6.6MW boilers powered by renewable energy sources, will replace energy supplied by local utility companies.

Hydrogen

[Energy giants join forces for 'ground-breaking' green hydrogen venture – Energy Live](#)

Centrica and hydrogen producer Lhyfe have teamed up to develop offshore renewable green hydrogen in the UK, marking a first for the country. A Memorandum of Understanding has been signed to collaborate on a pilot green hydrogen production site in the Southern North Sea, combining Lhyfe's expertise in green hydrogen production with Centrica's experience of gas storage and infrastructure. The venture supports the UK government's target of producing 10GW of low carbon hydrogen by 2030, with at least half of this coming from green hydrogen.

Fossil Fuels

[Gas boost: New UK rule change to extract more gas – Energy Live](#)

The UK government plans to relax gas rules by 2025, allowing drillers to extract more gas that would have otherwise been left in the ground. The new measure will allow lower calorific value gas to be mixed with other supplies, which may remove existing constraints on the industry. The

change will bring the UK in line with many other European countries including Germany, the Netherlands, and Poland. According to Neptune Energy, the change could have produced 13 per cent more gas from its Cygnus field in the previous year.

Carbon Capture

[IPC CEO urges Canada to offer more funding to build carbon capture – Energy Now](#)

International Petroleum Corporation (IPC), the first foreign oil company to sanction a project in Canada's oil sands in more than a decade, could add carbon capture and storage to the plant if more government financial incentives become available, its CEO told Reuters. IPC sanctioned phase one of the 30,000 barrel-per-day (bpd) Blackrod Thermal Project, with \$850 million, in Northern Alberta last month. They expect first oil in 2026 and have regulatory approval to produce up to 80,000 bpd. The company joins the Pathways Alliance in urging policymakers to boost public funding for the costly technology that is seen as key to cutting emissions from the carbon-intensive oil sands.

Mining

[Falling Lithium Prices Are Making Electric Cars More Affordable – The New York Times \(Paywall\)](#)

Since January, the price of lithium has dropped by nearly 20 per cent, according to Benchmark Minerals, even as sales of electric vehicles have soared. The price of other minerals, such as cobalt and copper, have dropped too. This sudden decrease in price has surprised many analysts who expected the price to increase and thereby slow the transition to cleaner forms of transportation. This drop in price has made carmakers like Tesla and Ford [to](#) lower their prices. The average price of an electric vehicle in the US fell by \$1000 in February 2023 compared to January 2023. Some analysts say that the reduction in price of lithium was caused by short-term factors like slowing sales growth in Europe and China after subsidies for electric car purchases expired. But other industry experts think that it is due to the new mines and processing plants solving the lithium problem sooner than many analysts had thought was possible.

Thank you.

Regards,
Mohamed Mohamed Khaja
Energy Co-Op Student
Brilliant Energy Institute
brilliantenergyinstitute.ca