## **BEI Energy News**

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## Top news

## **Brilliant Energy Institute Energy News**

#### BEI hosts delegation from Japan – BEI LinkedIn

To strengthen international collaboration and knowledge sharing, the Brilliant Energy Institute (BEI) welcomed a Japanese delegation, hosted by the Organization of Canadian Nuclear Industries at Ontario Tech University. BEI's Executive Director, Jacquie Hoornweg, and the Centre for Small Modular Reactors' Director, Dr. Kirk Atkinson, highlighted the university's expertise in energy and nuclear research to the delegation, members who represent both academic and industry organizations. Ontario Tech has more than 30 nuclear experts, labs, centres and institutes. The group visited the Clean Energy Research Lab, the SMR Test loop, Dr. Glenn Harvel's lab and the ACE Research facility, a climatic wind tunnel, used for testing and commercialization of hydrogen, electrification and several other transportation and energy applications.

## **Clean Energy Policy**

## Net-Zero Industry Act: Making the EU the home of clean technologies manufacturing and green jobs – European Commission

The European Commission's proposed Net-Zero Industry Act (NZIA) seeks to scale up manufacturing of clean technologies in the European Union (EU) and ensure it is well-equipped for the clean-energy transition. The NZIA is part of the EU's Green Deal Industrial Plan. It is seen as a response to the U.S.' Inflation Reduction Act and is intended to strengthen the resilience and competitiveness of net-zero technologies manufacturing in the EU and make their energy system more secure and sustainable. The NZIA supports "strategic net-zero technologies that are commercially available or soon to enter the market and have significant potential for the rapid scale-up to contribute to the EU's decarbonization targets." Together, with the proposal for a European Critical Raw Materials Act and the reform of the electricity market design, the NZIA sets out a clear European framework to reduce the EU's reliance on highly concentrated imports.

### <u>TotalEnergies pumps up its climate goals – Energy Live</u>

TotalEnergies, the French multi-energy company, active in more than 130 countries, has announced an ambitious plan to further reduce its Scope 1 and 2 emissions in 2023. In its sustainability and climate progress report, the company has set a new absolute target of 38 Mt of carbon dioxide by 2025, which is two million tonnes lower than its previous target. TotalEnergies credited the success of this effort to the active involvement of all its teams in a \$1 billion energy efficiency programme which covers 2023-2024. The company will also increase its objective for reducing Scope 3 emissions from oil activities. The new goal is to achieve a 40 per cent reduction by 2030 (up from the previous target of 30 per cent) and 30 per cent by 2025.

### **Energy Systems**

#### Electric Bus News Roundup - Clean Technica

In the U.S., Nova Bus (a member of the Volvo Group) has been awarded a contract for five LFSe+ battery-electric buses from the Washington Metropolitan Area Transit Authority (Metro). The company's five buses are the 40-foot long-range model from Nova Bus and will be assembled at the Nova Bus facility in Plattsburgh, New York. This order is part of Metro's Battery-Electric Bus Test and Evaluation program. In Germany, VHH (a local public transit provider) has purchased 95 Mercedes Benz eCitaro/eCitaro G buses. These fully electrical-powered vehicles are expected to be delivered by 2028, with the first one scheduled to by the end of this year. This marks a significant milestone in their mission to provide sustainable and clean transportation solutions in Hamburg and Holstein.

## **Technologies**

#### **Nuclear**

#### OPG's Darlington reactor clears preliminary review – The Globe and Mail

Ontario Power Generation (OPG) has cleared a preliminary review with the Canadian Nuclear Safety Commission (CNSC) to build a Small Modular Reactor (SMR) at its Darlington Nuclear Generating Station. The CNSC has found "no fundamental barriers to licensing" the BWRX-300. It is a 300 MW SMR designed by GE Hitachi Nuclear Energy. It is the first such reactor to complete a two-phase preliminary process called vendor design review. The process assesses whether a reactor developer understands Canada's regulatory requirements and can meet them. This review began in early 2020. Its findings offer an early indication of OPG's prospects for obtaining a licence to construct the SMR, which requires a construction licence and other approvals from the CNSC. OPG applied for that licence in November 2022, and the CNSC expects public hearings to take place in late 2024.

Finland, Sweden and Ukraine consider Rolls-Royce SMRs – World Nuclear News
Britain's Rolls-Royce SMR has signed memorandums of understanding (MoUs) to explore the deployment of its Small Modular Reactor (SMR) in Finland and Sweden, as well as to help postwar recovery in Ukraine. Under the MoU signed with Energoatom of Ukraine on March 20, 2023, the companies will work together to explore future opportunities to deploy Rolls-Royce SMR reactors in Ukraine. Under the MoU signed with Fortum of Finland, the companies will jointly explore the opportunities to deploy SMRs in Finland and Sweden. Fortum operates the Loviisa Nuclear Power Plant in Finland and announced its plan to explore the prerequisites for new nuclear power in both Finland and Sweden. Aside from Rolls-Royce SMR, Fortum has signed cooperation agreements with EDF of France, Kärnfull Next of Sweden and Helen of Finland.

## <u>Euratom to support nuclear research with €132 million in funding – Nuclear Engineering</u> International

The European Commission (EC) has adopted the Euratom Work Programme for 2023-2025 implementing the Euratom Research & Training Programme and supporting nuclear research with €132 million in funding. The related call for proposals will focus on the safety of small modular reactors, development of nuclear materials and the secure management and disposal of radioactive waste. The EC mentioned that the funding would include support for researchers

from Ukraine, noting that "Among Eastern Partnership countries, Ukraine is the only country participating in the 2021-2025 Euratom programme." Most of the research and innovation focuses on fusion energy, nuclear materials, radioactive waste management and radiation protection. They will be carried out through co-funded European Partnerships, which involves a wide range of public and private partners.

### Wind Energy

## Newly Launched Consortium Sets Sights on Norwegian Offshore Wind – Offshore WIND

Norwegian renewable energy developers Vårgrønn and Å Energi, together with U.K.-based Corio Generation, have entered into a partnership dedicated to developing sustainable offshore wind in Norway. The consortium will operate under the Brigg Vind brand, which was launched in the lead-up to the first Norwegian offshore wind tenders expected to open later this month. Brigg Vind announced that it will initially tare the first round of awards for offshore wind in the Sørlige Nordsjø II area, in the Southern part of the North Sea, where the Norwegian Government plans to award up to 1,500 MW of capacity.

### Hydrogen

## <u>Italian government lines up more than €100 million of funding for 36 new hydrogen</u> fuelling stations across country – Hydrogen Insight

The Italian government is preparing to grant up to €103.5 million (\$111.4 million) in funding to build 36 new hydrogen refuelling stations across the country by 2026. A total of 17 companies, from a wide range of sectors, have seen their projects deemed eligible for state contributions from the country's National Recovery and Resilience Plan fund, pending the filing of final documentation and guarantees. The final contracts are expected to be awarded by the end of this month. A total of €230 million had been set aside under this programme, which aimed to build at least 40 hydrogen refuelling stations for light and heavy vehicles by the end of June 2026.

# <u>U.K.</u> 'hydrogen champion' calls for rapid stimulation of H2 demand in blending, heating and transport – Hydrogen Insight

Jane Toogood, the U.K.'s Hydrogen Champion, states in a <u>45-page report of recommendations</u> published today that the government should support the blending of hydrogen into the gas network, that hydrogen will have a role to play in domestic heating and that the U.K. should incentivize the construction of hydrogen fuelling stations and the purchase of hydrogen trucks. The U.K. government has stated that it will not make any decisions on whether 100 per cent hydrogen could be used for heating homes until 2026. But Toogood recommends that the government provide clarity on the nature of the decision on hydrogen heating for homes, including its funding. This is intended to give the networks the information they need to begin detailed planning.

#### **Fossil Fuels**

Alberta's Premier says changes coming to ensure prompt reporting of oilsands spills – Energy Now Premier Danielle Smith says the public notification of Imperial Oil wastewater spills in the oil sands has illuminated the need for Alberta to ensure future alarms are sounded quicker. She says her government is working with the Alberta Energy Regulator to develop better policies to give affected groups timely notification. Area First Nations and the Northwest Territories government have said they should have been kept in the loop on the spills from Imperial's Kearl mine tailings ponds. The first wastewater release was spotted and reported in May 2022 at the Kearl site north of Fort McMurray. It was found to be tailings seepage and no further updates were provided to area First Nations until February 2023, when it was disclosed to the public and federal and provincial environment ministers along with news of a second release of 5.3 million litres of tailings.

#### <u>U.K. urged to take strong stance on FHS by ensuring no 'fossil fuel loopholes' – Energy</u> Live

A coalition of organizations, including energy companies, financial institutions, aviation firms and manufacturers have written to the U.K. Minister for Housing to request confirmation that no new gas grid connections will be permitted under the Future Homes Standard (FHS). The FHS is a key government policy aimed at ensuring newly built homes are fit for the future, with high fabric performance and clean heat. The coalition's main concern is that allowing hydrogen-ready boilers and new connections to the gas grid could trap new homeowners into using fossil fuels, putting them at risk of expensive retrofits in case the domestic gas grid is never fully converted to green hydrogen.

#### Iraq in final stages of talks on \$27 billion TotalEnergies deal - Reuters

Negotiations between TotalEnergies, the French multi-energy company, active in more than 130 countries, and Iraq over the long delayed \$27 billion energy deal have advanced. The proposed deal was signed in 2021 for TotalEnergies to build four oil, gas and renewables projects with an initial investment of \$10 billion in southern Iraq over 25 years. Baghdad hopes this project will revive foreign investment in the country. Iraq's demand for a 40 per cent share in the project is a key sticking point while TotalEnergies wants a majority stake. This has caused disputes among Iraqi politicians over the deal and an agreement hasn't been reached with TotalEnergies yet.

Thank you.

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