# **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**

BEI Executive Director shares budget insights with CBC News - CBC

Following the late afternoon release of yesterday's budget, BEI Executive Director Jacquie Hoornweg was invited to share insights on the clean energy aspects with CBC News, The Rundown. Jacquie talked about the importance of sending strong signals that Canada is committed to a clean energy investment strategy to ensure continued competitiveness in a netzero economy while also addressing climate change and ensuring equity in Canada's energy future. BEI will have more pre-budget analysis in its next edition of BEI Energy News.

## **Clean Energy Policy**

### Canada releases its 2023 Budget - Government of Canada

The 2023 federal budget outlined a long list of modest measures aimed at softening the effects of inflation for Canadians. The expensive exception was a widely anticipated expansion of its national dental care plan, now expected to benefit up to 9 million Canadians at a cost of \$13 billion over five years. The budget offers \$16.4 billion in tax credits for clean tech manufacturing, clean electricity and hydrogen over the next five years, adding to the \$6.7 billion in support for the clean tech investment announced last fall. Finance Minister Chrystia Freeland has also agreed to add \$500 million to the \$4.1 billion in support announced last year for carbon capture, utilization and storage. The government has committed \$15 billion for the Canada Growth Fund, \$8 billion for a "net zero accelerator" and \$20 billion through the Canada Infrastructure Bank.

### New cars sold in EU must be zero-emission from 2035 - BBC

Countries in the European Union (EU) have approved a landmark law that will ensure all new cars sold from 2035 must have zero emissions. The EU law will require all new cars sold to have zero CO2 emissions from 2035, and 55 per cent lower CO2 emissions from 2030, versus 2021 levels. The targets are designed to drive the rapid decarbonisation of new car fleets in Europe. The European Commission has pledged, however, to create a legal route for sales of new cars that only run on e-fuels to continue after 2035, after Germany demanded this exemption. Poland voted against the law, while Italy, Bulgaria and Romania abstained.

### EU Deal on EV charging clears the way for ambitious CO2 targets - Clean Technica

A new law agreed by the European Union (EU) will require member countries to significantly ramp up the deployment of publicly available charging stations for electric cars and trucks. The Alternative Fuel Infrastructure Regulation requires EU country members to ensure that there is public EV charging for cars every 60 km along all main motorways by 2025, and on all secondary highways by 2030. For trucks, governments must provide at least 3,600 kW of truck

charging capacity every 60 km along the EU's primary motorways and at least 1,500 kW of truck charging capacity every 100 km along EU's secondary motorways by 2030.

## **Technologies**

### Nuclear

### Virginia governor signs bills to support SMR development – World Nuclear News

Governor Glenn Youngkin has signed into law two bills that will support ambitions for Virginia to include small modular reactors (SMRs) as part of an energy plan released last year. Projects on SMR feasibility and supply chain have also received a share of \$8.1 million of the grant awards announced by the governor. The first piece of legislation creates the Virginia Power Innovation Fund for the research and development of innovative energy technologies, including nuclear, hydrogen, carbon capture and utilization, and energy storage. It also creates the Virginia Power Innovation Program to use money from the fund to establish a nuclear innovation hub and award competitive grants to support energy innovation. The second bill creates the Nuclear Education Grant Fund to award competitive grants to higher education providers to establish or expand a nuclear education programme to create employment and training pathways in areas including nuclear engineering and nuclear welding.

#### Cameco to receive CAD300 million tax refund – World Nuclear News

The Canada Revenue Agency (CRA) has issued revised reassessments that will result in Cameco, a Canadian uranium mining company, being refunded a total of around \$300 million as the company's broader tax dispute with the CRA continues. The reassessments are a part of a tax dispute between Cameco and the CRA, following an earlier series of court decisions in Cameco's favour for the 2003, 2005 and 2006 tax years. The decisions determined that income earned by Cameco's foreign subsidiary from the sale of non-Canadian produced uranium was not taxable in Canada. The timing of the refund is yet to be determined. Cameco filed appeals with the Canadian tax court in 2021 for the years 2007 to 2013 and in October 2022 for the years 2014 and 2015.

#### More leaks shut down Monticello NPP – Nuclear Engineering International

U.S. power company Xcel Energy has shut down its Monticello NPP after an additional water leak was detected following previous reports about the leak of 400,000 gallons of water containing tritium. The company has said the new leak is still ongoing. The Minnesota Pollution Control Agency and Minnesota Department of Health said they will continue to review Xcel's response to the groundwater contamination and oversee the recovery, storage, and disposal of the impacted groundwater. Tritium levels found in a groundwater monitoring well at the Monticello plant have been well above standards set by the Environmental Protection Agency. The plant may not be reopened before the 25-day planned outage in April. The company said it does not anticipate any impacts to customers' electric service from powering the plant down early. After identifying the source of the leak late last year, the company implemented a shortterm solution to capture water from the leaking pipe and reroute it back into the plant for re-use.

### **Energy Storage**

ENGIE secures a 50 MW battery storage project in Scotland – Energy Live

ENGIE, a French multi-national utility company, has secured a new 50 MW battery storage project in Scotland. The project was developed by Hive Energy, EcoDev Group, Sirius Group, and Ethical Power. The project is expected to be completed by the second half of 2024. This acquisition is part of ENGIE's sustainable growth investments. The group plans to increase investments by 50 per cent for the period of 2023 to 2025, with a focus on accelerating the development of renewables and decarbonizarion solutions. ENGIE aims to add 10GW of battery storage capacity to the grid by 2030, mainly in Europe and the U.S.

## Solar Energy

### EEW sells a 42 MW Solar PV Project in Sweden - Energy Digital

Eco Energy World Limited, a renewable energy project developer, has announced the successful sale of a 42 MW DC solar PV project in Sweden to a large Swedish solar and wind power developer. The project is in the south of Sweden and is targeted to reach ready-to-build status in 2023 and commence operations in 2024. Once completed, the solar farm is expected to generate around 41 GWh of clean energy annually. Currently, solar energy accounts for just 1 per cent of Sweden's total energy mix. The Swedish Energy Agency forecasts that Sweden's solar output is set to triple over the next two years to 3 TWh.

### Hydrogen

### Two 'solid hydrogen' power plants brought online in China on same day – Hydrogen Insight

Two pilot 'solid hydrogen' power plants were both connected to the grid in southern China on Saturday, allowing variable wind and solar power to be stored in a solid for later use. China Southern Power Grid, the project developer, has not revealed exactly what solid substance is being used to store hydrogen. Solid forms of hydrogen storage are said to have terrible round-trip efficiencies, meaning that much of the energy contained in the hydrogen is lost when being stored and released. The Nansha Smart Hydrogen Station in Guangzhou, one of the two new pilot plants, can store 200 cubic metres of hydrogen "with high density". The other new pilot plant, in the city of Kunming, southwest China, can supply 2.3 MWh of electricity during peak hours and send power to the grid constantly for 23 hours.

### Whitby hydrogen heating trial | After public outcry, Cadent makes U-turn on gas cut-off and offers £2,500 to participants – Hydrogen Insight

The proposal to replace natural gas in 2,000 houses in Whitby for a two-year trial had been fiercely opposed. All homes were to have their natural-gas supply switched off and their gas appliances replaced by hydrogen equivalents or electric options such as heat pumps. The gas distributor behind the project has made changes to its plan. Residents opting out of the trial in Whitby were told they could receive electric heat pumps to replace their gas boilers. Now, they're being given a choice between keeping their existing gas boilers, cookers and fires or have them replaced free of charge with hydrogen-burning replacements. Incentives such as an offer of £2,500, appliance insurances, smart heating thermostats, etc. have been announced. This move by the operator follows a disastrous campaign to win support for the hydrogen trial.

### **Fossil Fuels**

### Alberta Energy Regulator to launch third-party probe of Kearl oilsands tailings leak – Energy Now

The Alberta Energy Regulator says it will launch an independent investigation into the tailings leak at Imperial Oil's Kearl oilsands mine. The regulator is looking for a qualified, impartial third party to conduct the probe. It says the inquiry will relate to issues around notification of the spill and what it calls "other potential process issues" and the findings will be released to the public. This investigation relates to Imperial Oil's leak in one of its tailings ponds in May 2022 that was reported only in February 2023.

### Crescent Point's \$1.3 billion shale deal speeds up push into Alberta - Energy Now

Crescent Point Energy Corporation is accelerating its shift into Alberta's shale plays with a \$1.7 billion acquisition of Spartan Delta Corporation's assets in the Montney formation. The purchase will add 600 drilling locations and production equivalent to 38,000 barrels of oil a day. The Montney is a major natural gas and light oil formation that accounts for about half of Canada's natural gas output. Crescent Point will spend about \$250 million to drill about 25 wells annually in the area.

### **Grid Management**

### Green tech helps stabilizes U.K. power grid - Energy Live

ABB, a digital technologies provider, has completed a project in Liverpool featuring high-inertia synchronous condenser systems coupled with flywheels to provide spinning inertia and help stabilize the U.K. power grid, mimicking the operation of coal or gas-fired generators. The ABB's technology increases the inertia by 3.5 times to maintain grid reliability. The project is predicted to provide around 1 per cent of the U.K.'s inertia requirement for 2025, saving consumers around \$122 million.

Thank you.

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