

Brilliant Energy Institute

Office of the Vice President Research and Innovation
Ontario Tech University

BEI Energy News

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Top News

Canada delivers on key climate commitment to phase out inefficient fossil fuel subsidies - Environment and Climate Change Canada

<https://www.canada.ca/en/environment-climate-change/news/2023/07/government-of-canada-delivers-on-key-climate-commitment-to-phase-out-inefficient-fossil-fuel-subsidies.html>

The Government of Canada introduced new guidelines that would deem subsidies inefficient unless they meet certain criteria such as reducing greenhouse gas emissions, supporting clean technology, and aiding remote communities, among others. The release of the *Inefficient Fossil Fuel Subsidies Government of Canada Self-Review Assessment Framework* and the *Inefficient Fossil Fuel Subsidies Government of Canada Guidelines* make Canada the only G20 country to phase out inefficient fossil fuel subsidies ahead of the 2025 deadline. The guidelines apply to all federal departments and agencies as the government works to identify current public financing by 2024 and announce an implementation plan to phase out public financing of the fossil fuel sector by fall 2024.

Brilliant Energy Institute News

BEI Executive Director discusses new developments in Ontario's energy plans on podcast – BEI LinkedIn

<https://www.linkedin.com/feed/update/urn:li:activity:7089625429774327808>

Recent nuclear new build announcements in Ontario, coupled with the release of the Province's Powering Ontario's Growth report, could signal a seismic shift in the Province's and Canada's approach to a future energy strategy. Ontario, building on its existing nuclear strength, is looking at a major ramp-up of nuclear, and, for the first time in a long time, renewables. Hydrogen is in the mix too, as Ontario looks to support decarbonization in power, building heat, transportation, mining, agriculture and heavy-emitting industry like steel and cement. BEI's Executive Director Jacquie Hoornweg and Canadian Global Affairs CEO Kelly Ogle discuss the implications in another edition of West Meets East on the Energy Security Cubed podcast.

Energy Policy

TC Energy selling 40 per cent stake in Columbia gas and gulf pipelines for \$5.2 billion - The Globe and Mail (Paywall)

<https://www.theglobeandmail.com/business/industry-news/energy-and-resources/article-tc-energy-to-sell-40-interest-in-columbia-gas-and-columbia-gulf/>

North American energy company TC Energy plans to divest a 40 per cent stake in its Columbia Gas Transmission and Columbia Gulf Transmission pipelines for \$5.2 billion to Global Infrastructure Partners (GIP). The move aims to reduce debt and fund projects like the Coastal GasLink pipeline in British Columbia that is currently over budget. TC Energy and GIP will form a joint venture to operate the pipelines and jointly invest in annual maintenance and modernization of the pipelines. The pipelines cover more than 15,000 miles and supply a significant portion of daily US natural gas demand, including 20 per cent of US liquefied natural gas exports. The deal is expected to close in the fourth quarter, with GIP investing 40 per cent of gross capital expenditures over the next three years.

Energy Systems

Electric Vehicles

Simard Transport initiates electrification of its truck fleet - Hydro Quebec

<https://news.hydroquebec.com/en/press-releases/1964/simard-transport-initiates-electrification-of-its-truck-fleet-with-four-ecascadia-in-collaboration-with-globocam-and-cleo/>

Simard Transport, a Quebec-based transportation company, in partnership with Cleo, a Hydro-Québec subsidiary, introduced four electric trucks to their fleet. The project included four eCascadia trucks, powered by a 438 kWh battery and 470 hp equivalent engine, two Detroit eFill charging stations of 120 kW and two ABB DC Wallbox charging stations of 24 kW. Cleo's turnkey service and smart platform will oversee the deployment of charging infrastructure, ensuring reliable and cost-efficient charging. GLOBOCAM, a family-owned heavy truck dealership in Quebec, facilitated the purchase and supported Simard Transport throughout the transition.

Magna investing US\$790 million on Ford electric truck supplier plants in Tennessee - Financial Post

<https://financialpost.com/commodities/energy/electric-vehicles/magna-international-investing-ford-electric-truck-plants>

Magna International Inc., a Canadian parts manufacturer for automakers, is investing more than US\$790 million in the US to support Ford Motor Company's electric pickup truck production. The facilities in Stanton, Tennessee, part of Ford's supplier park, will produce battery enclosures, truck frames, and seats for Ford's second-generation electric truck. Magna currently produces battery enclosures for Ford in Brampton, Ont., as part of existing electric vehicle production agreements. The Tennessee investment is expected to create approximately 1,300

jobs, contributing to the growing electric vehicle market and supporting Ford's initiatives in the sector.

Technologies

Nuclear

France makes progress on potential Nuward SMR - World Nuclear News

<https://www.world-nuclear-news.org/Articles/Prelicensing-process-for-Nuward-SMR-begins>

French multinational electric utility company Électricité de France (EDF) submitted the safety options file for France's potential first Nuward Small Modular Reactor (SMR) plant to the French Nuclear Safety Authority (ASN). The document outlines safety objectives and design features as the company prepares for the licensing process. President of Nuward, Renaud Crassous, anticipates crucial feedback from ASN to consolidate the SMR's development. The project, led by French Alternative Energies and Atomic Energy Commission, EDF, Naval Group, and TechnicAtome, plans a 340 MWe SMR plant with two 170 MWe pressurized water reactors, aimed at replacing high CO₂-emitting plants and supporting hydrogen production. The construction of the project's first unit is scheduled to begin in 2030, following a detailed design and formal application in 2026.

Solar

Canada's Heliene planning new US solar panel and cell factory - Globe and Mail (Paywall)

<https://www.theglobeandmail.com/business/industry-news/energy-and-resources/article-canadas-heliene-planning-new-us-solar-panel-and-cell-factory/>

Heliene, a Canadian solar panel manufacturer, is planning a major expansion of its manufacturing operations in the US with a new factory in Minnesota. The facility will have an annual capacity of about 1 GW of modules and 1.5 GW of cells. This expansion is made possible by a US\$5 million equity investment from New York investment fund Orion Infrastructure Capital, along with US\$150 million in credit for the new facility. Heliene aims to begin module production in 2024 and cell production in 2025, marking its first step into cell production.

Hydrogen

EverWind green hydrogen project to develop three new Nova Scotia wind farms - CBC News

<https://www.cbc.ca/news/canada/nova-scotia/everwind-green-hydrogen-to-develop-3-new-wind-farms-1.6910782>

Nova Scotia could gain another 530 MW of renewables to be used for hydrogen. EverWind Fuels announced plans to develop a wind farm to help power its green hydrogen and ammonia production project. The proposed 66-turbine Windy Ridge wind farm in Colchester County, NS

will supply approximately 530 MW of renewable energy. The facility aims to meet strict international standards for green fuels and reduce reliance on fossil fuels. Pending approval, construction for Windy Ridge is targeted to begin in 2025. EverWind is also partnering with Membertou to purchase wind power from two of the band's proposed farms, the 20-turbine Kmtnuk project and the 15-turbine Bear Lake project. These projects will start in late 2024 and late 2025.

Carbon Capture

Researchers gather in Saskatchewan to study world-leading carbon capture and storage facility - Energy Now

<https://energynow.ca/2023/07/researchers-gather-in-saskatchewan-to-study-world-leading-carbon-capture-and-storage-facility/>

Canada's efforts in Carbon Capture and Storage (CCS) technology and policy have drawn international attention, offering valuable lessons to countries with coal power plants. Industry leaders such as Eadhard Pernot, a policy manager at Clean Air Task Force, and others participated in the International Energy Agency Greenhouse Gas R&D Programme CCS Summer School in Regina, Sask. Pernot highlighted the significance of hands-on experience at SaskPower's Boundary Dam Carbon Capture Project. With five of the world's 30 commercial CCS operations, including the pioneering Boundary Dam Power Station, Canada has captured and stored more than 5 million tonnes of CO₂ since 2014. More CCS projects are underway, including a \$24 billion initiative by Pathways Alliance targeting net-zero emissions in the oil sands by 2050.

Do you have any milestones, events, or news updates to share with the energy community? Email your submission to BrilliantEnergy@ontariotechu.ca for consideration in an upcoming edition.

Thank you.

The Brilliant Energy Institute news team

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(With a little help from ChatGPT)