

Brilliant Energy Institute

Office of the Vice President Research and Innovation
Ontario Tech University

BEI Energy News

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Top News

Alberta commits more than \$60 million to help transform province's industries – Emissions Reduction Alberta

<https://www.eralberta.ca/media-releases/government-of-alberta-announces-over-67-million-in-funding-through-era-to-help-transform-the-provinces-industrial-sectors/>

The Government of Alberta announced more than \$60 million in funding to 14 projects through the Emissions Reduction Alberta's Industrial Transformation Challenge to help industries reduce emissions and improve competitiveness. The funding is provided by the province's Technology Innovation and Emissions Reduction fund and ranges from \$600,000 to \$10 million. These projects are estimated to deliver annual greenhouse gas reductions of 129,000 tonnes and expected to create more than 1700 person-year jobs in Alberta in the province by 2025. Projects include Canadian Pacific's hydrogen locomotives conversion project and Strathcona Resources' carbon capture project.

Brilliant Energy Institute News

BEI teaches Ontario Tech campers about clean energy – BEI LinkedIn

<https://www.linkedin.com/feed/update/urn:li:activity:7085248936453566464>

Last week, the Brilliant Energy Institute (BEI) spoke with future energy leaders about climate change, sustainability, and clean energy. The BEI team facilitated a session with Ontario Tech University's Exploration Galore summer camp group. These nine to 12-year-olds learned about how energy works and the different types of energy generation. Then they brainstormed their own sustainable home energy and conservation techniques. BEI looks forward to engaging with more campers throughout the summer.

Energy Policy

Premiers push back on Ottawa's clean energy policies – The Globe and Mail (Paywall)

<https://www.theglobeandmail.com/canada/article-premiers-push-back-on-ottawas-clean-energy-policies/>

Canada's premiers asked the federal government to reconsider its clean energy policies citing concerns on the impact it would have on the affordability crisis across the country. The annual three-day Council of the Federation conference held in Winnipeg concluded with the premiers stating clean electricity and clean fuel regulations would disproportionately harm the provinces due to increased costs and stranded assets. The premiers also stated the federal government needs to build the infrastructure, such as ports, railways and highways, highlighting the need for a national strategy around infrastructure.

Canada pledges \$450 million for UN climate change fund – The Globe and Mail

<https://www.theglobeandmail.com/world/article-canada-pledges-450-million-for-un-climate-change-fund/>

Canada's Minister of Environment and Climate Change, Steven Guilbeault, announced Canada will contribute \$450 million to the United Nations' (UN) main fund to help developing countries address climate change. This pledge represents a 50 per cent increase from Canada's previous commitment to the UN Green Climate Fund. The funds will support nations facing financial challenges in dealing with climate change impacts and assist them in reducing CO2 emissions. Minister Guilbeault also highlighted Canada's plan to eliminate inefficient domestic subsidies for fossil fuels, potentially reallocating funds to promote clean energy alternatives. He emphasized the need for increased financial contributions from other countries and the private sector to combat climate change effectively.

Indigenous and Community Engagement

Paqtnkek Mi'kmaw Nation to develop Nova Scotia's first microgrid – Infrastructure Canada

<https://www.canada.ca/en/office-infrastructure/news/2023/07/the-governments-of-canada-nova-scotia-and-bayside-development-corporation-invest-in-green-energy-upgrades-to-the-bayside-travel-centre-in-paqtnkek.html>

Paqtnkek Mi'kmaw Nation in Nova Scotia received more than \$1.6 million in joint funding for green energy upgrades to the Bayside Travel Centre. The project includes a direct current microgrid system with solar panels, battery storage, and EV fast chargers. The funding, provided by the Government of Canada, the Government of Nova Scotia, and the Bayside Development Corporation, aims to reduce greenhouse gas emissions by 3,945 tonnes and create local job opportunities. This initiative marks Nova Scotia's first microgrid combining these technologies.

Technologies

Nuclear

Polish government approves first nuclear power plant – World Nuclear News

<https://www.world-nuclear-news.org/Articles/Polish-government-approves-first-nuclear-power-plant>

Poland's Ministry of Climate and Environment granted Polskie Elekrownie Jądrowe (PEJ), a nuclear power plant developer owned by the State Treasury, decision-in-principle to construct a nuclear power plant in Pomerania. PEJ plans to use Westinghouse AP1000 technology. The decision aligns with Poland's energy policy to secure its electricity needs. The construction of the first nuclear power plant is expected to begin in 2026, with the first reactor commissioned in 2033. The aim is to reduce reliance on coal and transition to cleaner energy sources. Other applications for small modular reactors have also been submitted.

Energy Storage

TC Energy's Pumped Storage Project moving to final evaluation – Energy Now

<https://energynow.ca/2023/07/tc-energys-pumped-storage-project-moving-to-final-evaluation/>

Ontario's largest energy storage project, by proponents TC Energy and the Saugeen Ojibway Nation (SON) is in the final evaluation period, with a decision by the Ministry of Energy expected by the end of the year. TC Energy, a Canadian-headquartered energy infrastructure company, and the SON, a community located on the shores of Lake Huron on the Bruce Peninsula, proposed the Meaford-area project to support Ontario's emission-free electricity sector goals. The project would provide clean energy during peak demand would store clean electricity to power one million homes for 11 hours. A final investment decision is expected for 2024 and the project is targeted to be operational in the early 2030s.

Solar

Canada provides more than \$160 million for nine solar projects in Alberta – Natural Resources Canada

<https://www.canada.ca/en/natural-resources-canada/news/2023/07/minister-wilkinson-announces-over-160-million-for-9-alberta-solar-energy-projects-that-will-create-hundreds-of-good-jobs.html>

The Government of Canada announced more than \$160 million in federal investments for nine solar power projects in Alberta. These projects will create hundreds of jobs and generate 163 MW of new solar generation and 48 MW of battery storage capacity. The projects include partnerships with Indigenous communities and industry, promoting economic reconciliation. The funding is part of Natural Resources Canada's Smart Renewables and Electrification Pathways Program and aligns with Canada's goal of developing a net-zero electricity system by 2035. Among the approved projects are the Michichi Solar LP and Kneehill Solar LP projects, which together received the largest contribution of \$64 million.

Hydrogen

European Parliament signs off new rules on hydrogen filling stations and H2-based shipping fuels – Hydrogen Insight

<https://www.hydrogeninsight.com/policy/european-parliament-signs-off-new-rules-on-hydrogen-filling-stations-and-h2-based-shipping-fuels/2-1-1484863>

The European Parliament has formally adopted regulations requiring hydrogen filling stations every 200 kilometres along the European Union's (EU) core roads by 2031. The new rules aim to promote the use of alternative fuels and to reduce emissions in the transportation sector. Additionally, vessel operators will be mandated to use at least one per cent of renewable energy-derived fuels by 2034, with a potential increase to two per cent if necessary. The regulations also set greenhouse gas reduction targets for the shipping sector, including a two per cent reduction by 2025 and 80 per cent by 2050. The rules will apply to ships with gross tonnage of more than 5,000, accounting for 90 per cent of the EU's maritime emissions. The formal adoption by the European Council is expected by the end of July, and the rules are likely to come into force early next year.

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

brilliantenergyinstitute.ca

(With a little help from ChatGPT)