

Brilliant Energy Institute

Office of the Vice President Research and Innovation

Ontario Tech University

BEI Energy News

Weekly newsletter

March 22, 2024

Top News

Energy Policy

Alberta government releases map showing what areas are off-limits for renewable power projects

<https://globalnews.ca/news/10363332/alberta-government-renewable-energy-map/>

The Alberta government has unveiled restrictions on wind and solar development prohibiting projects along a vast area of the province's western edge. Five large regions require visual impact assessments, and development on agricultural land is limited. These measures will affect 57 projects totalling \$14 billion, with significant implications for Alberta's renewable energy sector. However, questions remain regarding the consistency and fairness of these restrictions, especially considering existing oil and gas facilities in the affected areas.

Ottawa signs memorandum of understanding with Germany for Canadian hydrogen

https://www.thestar.com/news/canada/nova-scotia/ottawa-signs-memorandum-of-understanding-with-germany-for-canadian-hydrogen/article_65f0b393-8e82-56c4-b972-7a0c6c4f24e6.html

Canada and Germany have inked a memorandum of understanding, facilitating the sale of hydrogen from proposed Atlantic Canada projects. Signed by Energy Minister Jonathan Wilkinson and German Vice-Chancellor Robert Habeck, the pact aims to grant early access to the German market for Canadian hydrogen producers. The agreement underscores Canada's commitment to supplying clean energy, aligning with Germany's climate goals. Projects in Newfoundland and Nova Scotia will utilize wind power to produce hydrogen and ammonia, with plans to export to Germany. Both countries aim to finalize terms for an early access trade window by June 30, emphasizing adherence to environmental assessment protocols.

Nuclear

I became a nuclear engineer because of my climate concerns

https://www.thestar.com/opinion/contributors/i-became-a-nuclear-engineer-because-of-my-climate-concerns/article_1bc97c50-e091-11ee-a2d4-03fafabaa23f.html

Benjamin Rand, a 24-year-old nuclear engineer, shares how his concerns about climate change guided his career choice. Despite the negative perception of nuclear power due to waste and safety concerns, he argues that shutting down nuclear plants is misguided, especially when considering environmental benefits. Rand addresses misconceptions about nuclear waste, highlighting its relatively small volume and manageable risks compared to other energy sources. He also emphasizes the safety record of modern nuclear reactors, citing examples like Fukushima to illustrate their resilience. Rand urges Canadians to embrace their nuclear legacy and work towards a cleaner energy future by dispelling myths and seeking evidence-based information about nuclear energy.

Solar Energy

New Brunswick dairy farm offsets electric bill with solar power

<https://globalnews.ca/news/10367989/new-brunswick-dairy-farm-solar-power/>

A New Brunswick dairy farm, Rothiemay Farms, has transitioned to solar power, completely offsetting its electricity bill with a ground-mount 100 kW system. Spearheaded by second-generation farmer Jesse Mitham, the shift to green energy reflects a commitment to sustainability amidst rising energy costs. Smart Energy Company, responsible for the grid, notes the growing trend of farms adopting solar technology to reduce input costs and emissions. With organizations like Dairy Farmers of Canada aiming for net-zero emissions by 2050, the shift to green technology aligns with broader industry sustainability goals.

Across the US, batteries and green energies like wind and solar combine for major climate solution

<https://nationalpost.com/pmnl/news-pmnl/across-the-us-batteries-and-green-energies-like-wind-and-solar-combine-for-major-climate-solution>

Batteries paired with renewable energies like wind and solar are a critical solution to combat climate change across the United States. These combinations allow for the storage of excess

energy generated during peak production periods for use during high-demand times, providing a reliable and steady flow of power. The expansion of battery storage capacity, especially in states like California and Texas, reflects a growing commitment to transitioning to clean energy sources and reducing greenhouse gas emissions. With large-scale projects like the Eleven Mile Solar Center in Arizona, which integrates solar panels with battery storage, the momentum to a green energy future is accelerating rapidly.

Hydrogen

Canada, Germany ink hydrogen deal in bid to shun Russian energy

<https://globalnews.ca/news/10367715/canada-germany-hydrogen-deal-2/>

Canada and Germany have agreed to boost clean hydrogen trade by aiming to reduce reliance on Russian energy. The memorandum of understanding facilitates transactions between Canadian hydrogen producers and German industries, aligning with climate change mitigation efforts. Germany plans to invest public funds to procure green hydrogen, supporting its transition to clean energy. Prime Minister Trudeau and Chancellor Scholz previously agreed to establish a transatlantic supply corridor, with Canadian exports to Germany expected to start in 2025. Despite challenges like infrastructure development, Canada remains committed to advancing low-carbon hydrogen production projects.

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)

