Brilliant Energy Institute

Office of the Vice President Research and Innovation
Ontario Tech University

BEI Energy News

Produced weekly

June 07, 2024

BEI News

One Week Left Until "Oppenheimer: Science in Hollywood"!

Join us next Monday for an exciting discussion on the intersection of science and cinema. Hear from Jason Donev of the University of Calgary as he explores the portrayal of science in the film "Oppenheimer" and examines the intersections of history, cinema, and the nuclear sector.

Date: June 10, 2024 **Time:** 12:00 – 1:30 pm

Location: Dixon/Alger Fireside Reading Room, Library

Don't miss this event! Register now.

Building Infrastructure

The Al Boom Has Sparked M&A Opportunities in the Clean Energy Space - Oil Price

https://oilprice.com/Energy/Energy-General/The-AI-Boom-Has-Sparked-MA-Opportunities-in-the-Clean-Energy-Space.html

The AI boom is drives demand for renewable energy credits globally, increasing mergers and acquisitions activity in the clean energy sector. Asset managers are acquiring wind, solar, and battery companies to capitalize on this demand. For example, Brookfield Asset Management, a Canadian multinational company, is buying a 53.32 per cent stake in French renewable energy firm Neoen for approximately \$6.6 billion. Neoen has faced financial challenges but aims to build 20 GW of new capacity by 2030. The deal aligns with broader trends as companies like Microsoft seek renewable energy credits to support their sustainability goals.

ENERGY STAR® Canada Recognizes Leaders in Energy Efficiency - NRCAN

https://www.canada.ca/en/natural-resources-canada/news/2024/06/energy-star-canada-recognizes-leaders-in-energy-efficiency.html

The Government of Canada supports the 2024 ENERGY STAR Canada award recipients, recognizing their contributions to energy efficiency. The Deputy Minister of Natural Resources Canada announced the winners, celebrating efforts in promoting energy-efficient products, homes, and buildings. Notable winners include Samsung Electronics Canada, The Home Depot Canada, and Terra View Custom Homes Ltd. These leaders empower Canadians to reduce emissions and save on energy costs. In 2023, the ENERGY STAR program saved enough energy to power over 323,000 homes for an entire year.

Wind Energy

Hydro-Quebec turning to wind power for new energy production - Global News

https://globalnews.ca/news/10535257/hydro-quebec-turning-to-wind-power-for-new-energy-production/

Hydro-Quebec is planning a significant shift in energy production by investing in wind turbine energy to meet growing demand and decarbonize the industry. The utility aims to generate 10,000 megawatts by 2035 through new wind turbines across Quebec. The move focuses on industrial-strength wind power and includes revenue-sharing with indigenous communities. Private companies will be invited to submit bids for turbine construction through public tenders. An additional \$3 billion will be invested to upgrade Montreal's power grid.

Battery Storage

Nano One and Worley Chemetics to produce 'cookie-cutter' battery plants - Financial Post

https://financialpost.com/commodities/energy/electric-vehicles/nano-one-worley-chemetics-cookie-cutter-battery-plants

Nano One Materials Corp., a Canadian clean technology company, and Worley Chemetics are collaborating to create standardized "cookie-cutter" battery plants. These plants, designed once and deployable anywhere, aim to streamline North America's battery supply chain. Nano One will provide its "one-pot" cathode process, while Worley will fabricate the equipment in its Pickering, Ont., facility. Although the partnership has not yet received any orders, it will start producing reactors for the nuclear sector. The approach aims to accelerate the energy transition to net zero by 2050.

Nuclear

Inaugural ISL tests completed at third Canadian uranium deposit - World Nuclear News

https://www.world-nuclear-news.org/Articles/Inaugural-ISL-tests-completed-at-third-Canadian-ur

Denison Mines Corp, a Canadian uranium company, has completed inaugural in-situ leach (ISL) tests at the Midwest uranium project in Saskatchewan. The tests confirm that the Midwest Main deposit has the characteristics needed for ISL mining. Denison, in collaboration with Orano Canada Inc., drilled ten boreholes to collect comprehensive geological and metallurgical data. Denison's CEO, David Cates, announced that the results support the feasibility of ISL mining at Midwest Main. Further evaluation, including a Preliminary Economic Assessment, is planned to proceed with ISR mining. The Midwest project is located 25 km from the McClean Lake Operation.

US Energy Secretary calls for more nuclear power while celebrating US\$35 billion Georgia reactors - ABC News

https://abcnews.go.com/Technology/wireStory/us-energy-secretary-calls-nuclear-power-celebrating-35-110723980

The U.S. government called for more nuclear reactors to be built in the United States and worldwide. Officials emphasized the need for 98 additional reactors, similar to the recently completed units at Plant Vogtle, to reduce carbon emissions. Despite cost overruns of US\$11 billion, the US\$35 billion project's completion was celebrated. The Georgia government suggested adding a fifth reactor to meet the growing demand for carbon-free electricity. The federal government aims to streamline licensing and support smaller reactors to reduce costs.

Hydrogen

Government of Canada announces almost \$10 million to launch the Clean Hydrogen Hub and scale-up made-in-Canada innovation - Hydrogen Central

https://hydrogen-central.com/government-of-canada-announces-almost-10-million-to-launch-the-clean-hydrogen-hub-and-scale-up-made-in-canada-innovation/

The Government of Canada announced \$10 million to launch the Clean Hydrogen Hub at Simon Fraser University (SFU) and scale up Canadian innovation. The project, located at SFU's Burnaby campus, will receive additional funding from the Province of B.C., SFU, and the City of Burnaby. Using B.C.-developed electrolyzer technology, the Hub will produce hydrogen with hydroelectricity, reducing costs and emissions. The initiative aims to generate \$104 million in revenue and support Canada's goal of net-

zero emissions by 2050. Operations are expected to begin soon, leveraging more than \$9.4 million in federal funding and additional contributions from various partners.

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

Thank you.

The Brilliant Energy Institute news team brilliantenergyinstitute.ca (With a little help from ChatGPT)