Brilliant Energy Institute

Office of the Vice President Research and Innovation Ontario Tech University

BEI Energy News

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BEI and Ontario Tech News

Join BEI and regional partners for a night of climate leadership at Ontario Tech, next Tuesday evening

https://www.linkedin.com/feed/update/urn:li:activity:7128016428372295680 Join us – in-person or online – for a free night of learning and celebration on climate action in Durham Region, Tuesday, Nov. 14 from 7-9 p.m. The Durham Climate Roundtable and the Durham Environment and Climate Advisory Committee (DECAC) are partnering to host an evening to take stock of progress on climate action and celebrate the achievements of local environmental leaders. The Durham Environment and Climate Forum will include a presentation on the first annual report on Durham's greenhouse gas emissions and global climate trends, by Faculty of Engineering and Applied Science Professor, Dr. Daniel Hoornweg. BEI is secretariat for to the DCR, which is comprised of corporate and community leaders committed to climate action, from across Durham Region. Register here: Durham Environment & Climate Forum Tickets, Tue, 14 Nov 2023 at 7:00 PM | Eventbrite and learn more at DurhamClimateRoundtable.ca.

Energy Policy

Government of Canada Announces Funding to Support International Governance in the Mining Sector - NRCAN

https://www.canada.ca/en/natural-resources-canada/news/2023/11/governmentof-canada-announces-funding-to-support-international-governance-in-the-miningsector.html Canada is investing \$5.4 million to promote sustainable mining across the world. This funding goes to the International Institute of Sustainable Development to improve mining practices in 81 countries. The goal is to make mining more responsible and include better policies and training, especially in critical minerals. It's part of a bigger strategy by Canada to reduce pollution and create a cleaner economy. This strategy will also help Canada meet its target to cut greenhouse gas emissions by 40 to 45 per cent by 2030. The investment is ready to be used now and comes from a larger \$70 million fund dedicated to these efforts.

Government of Canada and FCM invest more than \$6.2 million in Ontario green projects to achieve net-zero targets - NRCAN

https://www.canada.ca/en/natural-resources-canada/news/2023/11/governmentof-canada-and-fcm-invest-over-62-million-in-ontario-green-projects-to-achievenet-zero-targets.html

The Government of Canada and the Federation of Canadian Municipalities have pledged more than \$6.2 million through the Green Municipal Fund to curb greenhouse emissions in Beckwith and Peel, Ontario. Beckwith is set to receive \$5.75 million for a new, energy self-sufficient municipal building, while Peel will conduct three feasibility studies to further eco-friendly developments, including a net-zero police division and wastewater treatment plant upgrades. These investments are geared towards meeting the nation's 2050 net-zero emissions goal, with the projects beginning as resources and plans are finalized.

Nuclear

Cameco buys US\$2.2 billion share in Westinghouse Electric Company - Global News

https://globalnews.ca/news/10080110/cameco-buys-westinghouse-share/

Cameco and Brookfield Asset Management have purchased a significant share in Westinghouse Electric for US\$8.2 billion. Cameco acquired a 49 per cent stake, with Brookfield taking the remaining interest. The transaction cost Cameco US\$2.2 billion, including the assumption of Westinghouse's debts. This deal is expected to expand Cameco's nuclear fuel cycle services. Following the acquisition, Westinghouse will maintain its autonomy, managed by a newly established joint board.

Ministerial approval for NexGen uranium project - World Nuclear News

https://www.world-nuclear-news.org/Articles/Ministerial-approval-for-NexGenuranium-project

NexGen Energy has received provincial approval for its Rook I Project in Saskatchewan, moving a step closer to starting its uranium mine. The company has completed responses to the federal review of its environmental impact, with applications for site development underway. The project, backed by local community consent, boasts significant uranium resources promising a 10.7-year mine life. NexGen anticipates the environmental assessment's completion, with operations expected to begin following final approvals and funding procurement.

Consortium to speed up development of lead-cooled SMRs - World Nuclear News

https://www.world-nuclear-news.org/Articles/Consortium-to-speed-updevelopment-of-lead-cooled

A memorandum of understanding was signed by key European and American entities, paving the way for the development of the Advanced Lead-cooled Fast Reactor European Demonstrator in Romania. Involved in the agreement are Belgium's SCK-CEN, Italy's ENEA, Ansaldo Nucleare, Romania's RATEN, and Westinghouse Electric from the US. The project, valued at EUR 1.0 billion, began with a small reactor in Belgium and is advancing towards a 300 MWt demonstration unit in Romania, with the goal of worldwide commercialization of SMR technology. Belgium committed EUR 100 million to SMR research, targeting a reduction in fossil fuel dependence and enhancing the future of nuclear power.

BWXT Selected as Nuclear Fuel and Component Manufacturer for Air Force Research Laboratory's JETSON Program - National Post

https://nationalpost.com/pmn/business-wire-news-releases-pmn/bwxt-selectedas-nuclear-fuel-and-component-manufacturer-for-air-force-research-laboratorysjetson-program

BWXT is chosen for the Air Force's JETSON program to manufacture nuclear fuel and components. Partnering with Lockheed Martin and SpaceNukes, the

program aims to develop advanced nuclear electric propulsion technologies. The effort will improve spacecraft power generation, drawing from NASA's KRUSTY reactor design. BWXT's role includes leading manufacturing and testing from its Lynchburg, Virginia facilities.

Hydrogen

B.C., Newfoundland, and Labrador agree to share details on growing hydrogen sectors - Globe and Mail (Paywall)

https://www.theglobeandmail.com/business/industry-news/energy-andresources/article-bc-newfoundland-and-labrador-agree-to-share-details-ongrowing/

British Columbia, along with Newfoundland and Labrador have agreed to share strategies for developing their hydrogen energy sectors. The collaboration aims to boost efficiency in creating green hydrogen, key to a net-zero economy. Both provinces will exchange information on governance and export strategies, with Newfoundland looking to Europe and the U.S., and B.C. to Asia. Premier Andrew Furey and Premier David Eby are set to share insights on land use and technology to combat climate change. The initiative aligns with federal goals for nationwide coordination in clean energy advancements.

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)