Brilliant Energy Institute

Office of the Vice President, Research and Innovation
Ontario Tech University

BEI Energy News

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Faculty of Engineering and Applied Sciences (FEAS) – Ontario Tech

FEAS Research Day 2025

https://engineering.ontariotechu.ca/research/research-day/index.php

Attend the Annual Engineering Research Day 2025 at Ontario Tech University on February 20, at the North Oshawa Campus, UA Building. This year's theme, "Responsible & Sustainable Systems: Engineering for the Future," will be brought to life through expert panels, poster sessions, and research lab tours. Keynote speakers include Stephanie Smith from AtkinsRealis and the VP of Research at Ontario Tech. Don't miss the opportunity to engage with industry leaders and discover cutting-edge advancements in engineering. Register today to secure your participation.

Nuclear

Canadian Nuclear Laboratories Expands Clean Energy Siting Invitation to Include Fusion, Hydrogen and Battery Storage – GlobeNewswire

https://www.globenewswire.com/news-release/2025/02/04/3020565/0/en/Canadian-Nuclear-Laboratories-Expands-Clean-Energy-Siting-Invitation-to-Include-Fusion-Hydrogen-and-Battery-Storage.html

Canadian Nuclear Laboratories (CNL) is expanding its Clean Energy Siting Program to include a broader range of clean energy technologies including fusion, hydrogen production, and battery storage, in addition to its existing small modular reactor (SMR) projects. This initiative aims to support Canada's net-zero objectives and foster the development of innovative clean energy solutions by providing a platform for prototype construction and testing at CNL's facilities. The program emphasizes collaboration with the private sector and Indigenous communities to accelerate the deployment of these technologies.

Building Infrastructure

Manitoba Hydro sets new daily record for electricity demand – CBC

https://www.cbc.ca/news/canada/manitoba/manitoba-hydro-peak-usage-1.7446495

Manitoba Hydro set a new daily electricity demand record on January 20 as Winnipeg temperatures plummeted to nearly –33 C, reaching a peak of 5,112 megawatts early in the morning. This level of energy consumption surpasses the previous record from December 2024. The demand spike highlights the growing need for Manitoba Hydro to expand its capacity due to increasing electricity usage driven by population growth and a shift away from fossil fuels.

Al boom spurs Big Tech to build clean power on site - Reuters

https://www.reuters.com/business/energy/ai-boom-spurs-big-tech-build-clean-power-site-2025-02-05/

Amid rising demand for AI, major tech companies are collaborating with power builders to co-locate data centers with renewable energy sources, aiming to speed up deployment and address grid connectivity issues. This trend is exemplified by Google's \$20 billion deal with Intersect Power and TPG Rise Climate to integrate solar, wind, and

battery storage solutions directly with new U.S. data centers, highlighting a strategic shift towards more sustainable and secure energy solutions for the tech industry.

Renewable Energy

Stephenville mayor, businesses still hopeful as World Energy GH2 revises plans for wind project – CBC

https://www.cbc.ca/news/canada/newfoundland-labrador/world-energy-wind-pivot-1.7446984

World Energy GH2's shift in focus from a green hydrogen and ammonia plant to potential data centers and e-fuel production in Stephenville, Newfoundland, has stirred optimism among locals despite setbacks. The company, facing market difficulties for its initial project, is exploring alternative renewable energy developments, signaling economic revival for the area. The community, led by Mayor Tom Rose, expresses renewed confidence, seeing this pivot as an opportunity to leverage Stephenville's wind resources and infrastructure for new industries.

Energy Policy

Government of Canada investing in Energy Innovation Hub in Saskatchewan – Government of Canada

The Government of Canada is investing \$1 million in Saskatchewan's Petroleum Technology Research Centre (PTRC) to create an Energy Innovation Hub to drive sustainable energy development. Announced by Minister Terry Duguid, the funding supports PTRC's efforts to expand its research and testing capabilities, fostering collaboration across various sectors including energy, academia, and government. This initiative underscores Canada's commitment to enhancing energy security and sustainability through innovative clean technologies.

Amid U.S. tariff threat, B.C. to fast-track 18 mining and energy projects worth \$20B – National Post

https://nationalpost.com/news/canada/bc-fast-tracking-mining-energy-projects

The British Columbia government is fast-tracking 18 mineral and energy projects, collectively valued at \$20 billion, in response to potential U.S. tariff threats. These projects include controversial mining ventures and an LNG project that have faced opposition from First Nations and environmental groups. This aggressive push aims to bolster economic diversification and job creation amid ongoing international trade tensions, marking a significant move to secure the province's financial and energy future against external pressures.

Canada among top ten countries when it comes to energy transition – The Hamilton Spectator

https://www.thespec.com/news/canada/canada-among-top-ten-countries-when-it-comes-to-energy-transition/article 4d206b9e-bfa7-5d6b-89d5-b00a8954c678.html

Canada has entered the top ten globally for energy transition investment, placing eighth after a significant \$35.2 billion investment in 2024. This move is part of Canada's commitment to achieving net-zero emissions, spurred by a 19 per cent growth in investment that marks the country's first substantial foray into the competitive global landscape of renewable energy investments. With continued support for advancements in clean energy technologies and infrastructure, Canada aims to strengthen its position in the international race for sustainable energy solutions and enhance its energy security.

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 <u>brilliantenergyinstitute.ca</u>

(With a little help from ChatGPT)