### **Brilliant Energy Institute**

Office of the Vice President Research and Innovation
Ontario Tech University

### **BEI Energy News**

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#### **Energy Policy**

## US energy panel approves rule to expand transmission of renewable power - National Post

https://nationalpost.com/pmn/news-pmn/us-energy-panel-approves-rule-to-expand-transmission-of-renewable-power

The Federal Energy Regulatory Commission approved a rule to facilitate the transmission of renewable energy like wind and solar power into the electric grid, aligning with President Joe Biden's objective to achieve carbon neutrality by 2050. The rule, in development for two years, aims to modernize the aging grid to accommodate increasing demand driven by data centres, electric vehicle adoption, and climate change. Despite some opposition, proponents argue that the rule will enhance grid reliability and affordability while supporting the integration of clean energy sources, essential for meeting ambitious climate targets.

### **Indigenous and Community Engagement**

# Program helps Indigenous businesses install EV chargers to accelerate climate and business goals - Globe and Mail

https://www.theglobeandmail.com/drive/mobility/article-program-helps-indigenous-businesses-install-ev-chargers-to-accelerate/

Indigenous communities in Canada are making strides in electric vehicle (EV) infrastructure, with Saskatchewan's Little Black Bear First Nation set to unveil one of Canada's first Level three EV chargers on reserve land. Spearheaded by Michelle Bellegarde, the initiative aligns with long-term climate goals and aims to boost tourism and youth engagement. Indigenous Clean Energy's Charge Up program, supported by Natural Resources Canada, has been pivotal in funding such projects, offering up to 75 per cent coverage of installation costs. This initiative supports the clean energy

transitionand fosters economic growth and sustainability for Indigenous businesses like White Pine Lodge Algonquin Inc., which installed Level two chargers with the program's assistance, accelerating their business and promoting Indigenous culture and sustainability.

#### **Building Infrastructure**

# Ontario EV battery separator plant will employ small number of 'short-term' foreign workers, officials say - Globe and Mail

https://www.theglobeandmail.com/business/article-ontario-ev-battery-separator-plant-will-employ-small-number-of-short/

Japan's Asahi Kasei Corp. is constructing a new electric-vehicle battery separator plant in Port Colborne, Ont., which will initially employ foreign workers for technical training. The \$1.6-billion project, part of Honda Motor Co.'s \$15-billion investment in Ontario's electric-vehicle supply chain, aims to introduce technology not yet available in North America. While the exact number of permanent jobs remains undisclosed, Ontario officials emphasize the necessity of technical expertise for this venture, assuring a predominantly local workforce. Asahi Kasei's decision reflects confidence in Canada's supportive governmental stance and access to skilled labor.

### Federal Investment for New EV Chargers Across Prince Edward Island - NRCAN

https://www.canada.ca/en/natural-resources-canada/news/2024/05/federal-investment-for-new-ev-chargers-across-prince-edward-island.html

Natural Resources Canada has announced a federal investment of \$1.4 million to install 13 fast chargers across Prince Edward Island by September 2025. This initiative aims to make it easier and more reassuring for electric vehicle (EV) drivers to travel, promoting a cleaner environment and fostering sustainable communities. The investment supports Canada's efforts to speed up the production of zero-emission vehicles, aiming to ensure that all vehicle sales are zero-emission by 2035. The initiative supports the nation's Net-Zero Plan by reducing transportation emissions and promoting EV adoption through federal incentives and provincial programs.

#### Nuclear

## Canadian firms team up for heavy water production - World Nuclear News

https://www.world-nuclear-news.org/Articles/Canadian-firms-team-up-for-heavy-water-production

Canadian Nuclear Laboratories, Atomic Energy of Canada Limited, and AtkinsRéalis have joined forces to explore collaboration opportunities for heavy water production in Canada, particularly for new Candu reactors. Heavy water, crucial for Candu reactors as moderator and coolant, has not been produced in Canada for over 25 years. The memorandum of understanding (MoU) aims to evaluate cost-efficient and environmentally responsible heavy water production technologies, potentially establishing industrial-scale facilities to support a new fleet of Candu reactors. This collaboration aligns with Canada's ambitions to lead the global heavy water market and underscores the importance of Candu technology in national objectives such as decarbonization and energy security. The initiative reflects a concerted effort among stakeholders to address the complexities of deploying large-scale nuclear power in Canada.

## Clean Core strengthens collaboration with CNL to advance ANEEL fuel technology - NEI Magazine

https://www.neimagazine.com/news/newsclean-core-strengthens-collaboration-with-cnl-to-advance-aneel-fuel-technology-11757709/

Chicago-based Clean Core Thorium Energy (CCTE) has extended its collaboration with Canadian Nuclear Laboratories (CNL) on the ANEEL fuel technology for pressurized heavy water reactors (PHWRs) and Candu reactors. CNL approved Clean Core's proposal for the "Advanced Nuclear Energy for Enriched Life (ANEEL) CNSC Licensing Verification and Validation" project, aiming to establish scope and timeline. The ANEEL fuel, utilizing thorium and high-assay low-enriched uranium (HALEU), promises improved performance and reduced life-cycle costs. Clean Core completed Phase one Pre-licensing Vendor Design Review with the Canadian Nuclear Safety Commission. The collaboration with CNL will accelerate the evaluation of advanced solutions for heavy-water reactors, aligning with Clean Core's goal of commercializing the ANEEL fuel by 2026.

#### **Energy Storage**

#### Hydrogen

New Mexico governor seeks hydrogen investment with trip to Netherlands - City News

https://toronto.citynews.ca/2024/05/11/new-mexico-governor-seeks-hydrogen-investment-with-trip-to-netherlands/

New Mexico Governor Michelle Lujan Grisham plans to attract investments in hydrogen fuel development during a business summit in the Netherlands. Highlighting New Mexico as a promising hub for hydrogen industry investment, Lujan Grisham aims to promote hydrogen as a cleaner energy alternative for vehicles, manufacturing, and electricity generation. While some environmentalistsexpress concerns about hydrogen's reliance on natural gas, proponents emphasize its potential when produced through renewable sources like wind and solar power. New Mexico, known for its energy reserves and recent investments in renewable energy infrastructure, seeks to leverage its position in the hydrogen market despite past setbacks in securing federal funding.

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)