Brilliant Energy Institute

Office of the Vice President Research and Innovation

Ontario Tech University

BEI Energy News

Weekly newsletter

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Top News

Electric Vehicles

What will the EV charging station of the future look like?
https://www.theglobeandmail.com/business/industry-news/property-report/article-what-will-the-ev-charging-station-of-the-future-look-like/

The future EV charging station will evolve significantly, focusing on sustainability, user convenience, and integration with renewable energy sources. At Fusion Day 2024, Canada's National Nuclear Laboratories unveiled designs that include solar panels and microgrids to enhance power supply. This shift aligns with Canada's goal of having all-electric vehicles by 2035. Current gas station operators like Gen7 Fuels are cautiously adapting, with plans to install solar-powered chargers. The need for robust infrastructure, universal charging standards, and amenities to occupy drivers during charging is essential as the industry transitions from gas to electric.

Nuclear

SaskPower, Westinghouse and Cameco Sign MOU to Explore Reactor and Fuel Supply Potential
https://nationalpost.com/pmn/business-wire-news-releases-pmn/saskpower-westinghouse-and-cameco-sign-mou-to-explore-reactor-and-fuel-supply-potential

SaskPower, Westinghouse, and Cameco have signed a memorandum of understanding (MOU) to explore the use of Westinghouse's nuclear reactor technology and develop a nuclear fuel supply chain in Saskatchewan. The MOU will evaluate deploying advanced reactors like the AP1000® and AP300™ small modular reactors for long-term electricity needs. This partnership also aims to foster nuclear research, development, and workforce training with local institutions. SaskPower plans to decide by 2029 whether to build the province's first small modular reactor,

intending to use Saskatchewan uranium.

CNL launches new initiatives to fast-track fusion energy deployment
https://www.neimagazine.com/news/cnl-launches-new-initiatives-to-fast-track-fusion-energy-deployment/?cf-view

Canadian Nuclear Laboratories (CNL) unveiled its "Fusion Energy for Canada" report at Fusion Day 2024, detailing a national strategy to accelerate fusion energy deployment. The report emphasizes fusion's potential to support Canada's Net-Zero goals by 2050. CNL announced the expansion of its clean energy programs, opening its small modular reactor (SMR) Invitation Process to fusion technologies and broadening the Canadian Nuclear Research Initiative (CNRI) to include fusion research. CNL aims to leverage its extensive resources and expertise to position Canada as a leader in fusion energy, fostering collaboration with international fusion technology developers.

Solar Energy

Solar co-ops help more people get a piece of the sun's energy
https://www.cbc.ca/news/science/solar-co-operatives-1.7235236

Solar co-operatives are emerging as a vital solution for expanding access to solar power, enabling diverse groups, including apartment dwellers and low-income individuals, to participate in the renewable energy economy. By pooling resources, these co-ops invest in local solar projects, such as "solar gardens," which are larger than residential installations but smaller than commercial solar farms. Members of these co-ops, like Wascana Solar Co-operative in Regina, earn returns from the energy produced, promoting environmental sustainability and economic inclusivity.

Hydrogen

McDermott chosen for Canada’s first commercial green hydrogen plant
https://energynews.pro/en/mcdermott-chosen-for-canadas-first-commercial-green-hydrogen-plant/

The development of Canada's first commercial green hydrogen and ammonia production plant marks a significant milestone in the nation's energy sector. This project, led by Abraxas Power Corporation and engineered by McDermott, will be established in Newfoundland. It will integrate a 530-turbine wind farm with a 150 MW solar power plant. This combination of renewable energy sources aims to facilitate the large-scale production of hydrogen and

ammonia, advancing Canada's clean energy initiatives.

Fossil Fuels

Ontario’s new energy minister says natural gas plants must stay ‘to help fuel our economy’
https://www.thestar.com/politics/provincial/ontarios-new-energy-minister-says-natural-gas-plants-must-stay-to-help-fuel-our-economy/article_ff1b7d0e-299e-11ef-827d-a72a301250d5.html

Ontario’s new energy minister, Stephen Lecce, emphasized the need to maintain natural gas plants to support the province’s growing economy. Speaking at the Darlington nuclear plant, Lecce stated that Ontario will use a mix of energy sources, including nuclear, natural gas, and renewables, to meet rising electricity demands. This approach follows concerns over increased reliance on natural gas, which saw a 26 per cent rise in usage last year. Despite environmental concerns, Lecce highlighted the importance of a balanced energy strategy to fuel industrial and population growth.

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
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(With a little help from ChatGPT)