

Brilliant Energy Institute

Office of the Vice President Research and Innovation

Ontario Tech University

BEI Energy News

Weekly newsletter

July 12, 2024

Top News

Hydrogen Energy

CWP Global-Corner Brook agreement: Towards a 5GW Green Hydrogen Hub in Canada - Energy News

<https://energynews.pro/en/cwp-global-corner-brook-agreement-towards-a-5gw-green-hydrogen-hub-in-canada/>

CWP Global, an Australian renewable energy developer and owner, and Corner Brook Port Corporation signed a Memorandum of Understanding. They will create a five GW green hydrogen hub in Newfoundland and Labrador. The Gwinya project will use wind power to produce green hydrogen and hot briquetted iron (HBI). This project will boost local economic growth and create jobs. The project will help decarbonize the steel industry. The next steps include project registration, environmental assessment, and feasibility studies.

Government of Canada Announces Support for Ekona Power Inc.'s Clean Hydrogen Development - NRCAN

<https://www.canada.ca/en/natural-resources-canada/news/2024/07/government-of-canada-announces-support-for-ekona-power-incs-clean-hydrogen-development.html>

Canada invests \$1 million in Ekona Power Inc. to advance clean hydrogen production. The funding supports Ekona's methane pyrolysis solution, which reduces greenhouse gas emissions. Ekona's reactor converts natural gas into hydrogen and solid carbon. The project will develop the reactor and expand Ekona's Burnaby test facility. Ekona aims to produce clean hydrogen while cutting emissions by up to 90 per cent. The first field unit will be deployed in 2025, with operations starting in 2026.

Indigenous community and engagement

Housing crisis in Indigenous communities should consider health and climate adaptation: report - National Observer

<https://www.nationalobserver.com/2024/07/09/news/housing-crisis-indigenous-communities-health-climate-adaptation>

A new report highlights holistic solutions to the housing crisis in Indigenous communities, emphasizing energy efficiency and climate adaptability. The concept of "healthy energy homes" supports cultural relevance and well-

being. Current on-reserve homes have a shorter lifespan than off-reserve housing, leading to overcrowding. The Assembly of First Nations estimates \$135 billion is needed to meet housing standards, but Ottawa has allocated only \$6.3 billion over seven years. The final report with policy recommendations is due next year.

Battery Storage

Nova Scotia's 1st Grid-Scale Battery Energy Storage Facilities - Clean Technica

<https://cleantechnica.com/2024/07/08/nova-scotias-1st-grid-scale-battery-energy-storage-facilities/>

Canadian Solar Inc. announced a new contract. e-STORAGE, part of CSI Solar Co., Ltd., will work with Nova Scotia Power. They will develop energy storage projects in Nova Scotia. The locations are Bridgewater, Waverley, and White Rock. The projects will total 150 MW / 705 MWh DC. Construction will finish by the end of 2026. The first site will be operational in 2025. e-STORAGE will handle engineering, procurement, and construction. They will also provide long-term service agreements. These projects will support Nova Scotia's clean energy transition.

Carbon Capture

After the carbon capture industry gold rush, how many facilities will actually be built? - CBC

[https://www.cbc.ca/news/canada/calgary/bakx-ccs-ccus-atlas-alberta-](https://www.cbc.ca/news/canada/calgary/bakx-ccs-ccus-atlas-alberta-1.7257666#:~:text=In%20total%2C%20there%20are%20about,constructed%20in%20the%20next%20decade)

[1.7257666#:~:text=In%20total%2C%20there%20are%20about,constructed%20in%20the%20next%20decade](https://www.cbc.ca/news/canada/calgary/bakx-ccs-ccus-atlas-alberta-1.7257666#:~:text=In%20total%2C%20there%20are%20about,constructed%20in%20the%20next%20decade)

Alberta began awarding rights to underground caverns for storing carbon emissions three years ago. This sparked a rush of project announcements. Despite high hopes, only one of Alberta's 25 proposed carbon capture and storage (CCS) projects has agreed. Shell Canada and ATCO EnPower recently signed paperwork for the Atlas carbon capture hub near Edmonton. They will now apply for permits. The federal plan aims to triple CCS capacity by 2030, with a tax credit covering up to half the cost of CCS equipment.

Nuclear Energy

Former N.B. energy minister joins nuclear industry after resigning in June - CBC

[https://www.cbc.ca/news/canada/new-brunswick/energy-minister-nuclear-resignation-](https://www.cbc.ca/news/canada/new-brunswick/energy-minister-nuclear-resignation-1.7255601#:~:text=Mike%20Holland%2C%20who%20was%20natural,business%20development%20for%20North)

[1.7255601#:~:text=Mike%20Holland%2C%20who%20was%20natural,business%20development%20for%20North%20America](https://www.cbc.ca/news/canada/new-brunswick/energy-minister-nuclear-resignation-1.7255601#:~:text=Mike%20Holland%2C%20who%20was%20natural,business%20development%20for%20North%20America)

A former New Brunswick cabinet minister is now the Director of Business Development for North America at AtkinsRéalis, formerly SNC-Lavalin. The minister resigned in June to pursue this private sector role. AtkinsRéalis aims to boost sales of its CANDU nuclear reactors and develop small modular reactors. The company stated that the former minister would not lobby the government of Canada. The CANDU reactor at Point Lepreau is one of 19 in Canada, with the other 18 in Ontario.

Hydro Energy

Vancouver Island to see \$3 Billion in BC Hydro upgrades, expansion over the next decade - Toronto Star (Pay wall)

https://www.thestar.com/news/canada/vancouver-island-to-see-3b-in-bc-hydro-upgrades-expansion-over-the-next-decade/article_c5f9bc02-0a1b-57e1-82b0-a23c5a903157.html

BC Hydro will invest more than \$3 billion to upgrade and expand the electricity grid on Vancouver Island. The government says the projects will create thousands of jobs and provide clean and affordable electricity. The spending is part of BC Hydro's \$36 billion, 10-year capital plan. Projects include seismic upgrades at Campbell River dams, new transmission cables for 100,000 homes in Victoria, and a new substation in Langford to power up to 70,000 homes by 2030. The plan also increases power line capacity in Nanaimo and Port Alice, reflecting rising electricity demand.

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

brilliantenergyinstitute.ca

(With a little help from ChatGPT)