Brilliant Energy Institute

Office of the Vice President Research and Innovation Ontario Tech University

BEI Energy News

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BEI News

Toronto Global Forum lunch features Cenovus Executive Chair Alexander Pourbaix speaking on oil sands decarbonization and energy transition

BEI was pleased to attend the International Economic Forum of the Americas Toronto Global Forum lunch, Oct. 12, featuring keynote Alexander Pourbaix, Executive Chair at Cenovus Energy, who shared the company's plans for decarbonization (in conversation with David Jacobson, vice-chair of BMO). Canada's oil sector holds one of the greatest opportunities, and related challenges, for Canada to meet its commitments to netzero carbon by 2050, and related milestones along the way. Pourbaix said everyone in the industry "wants the same thing, a much cleaner industry... the argument is really the time it's going to take to decarbonize." He said currently the US is using more of a "carrot" strategy whereas in Canada, it remains more of a "sticks" policy. Small modular reactors for steam and power, direct air capture and carbon capture utilization and storage (CCUS) are all decarbonizing tools Cenovus is looking to employ in their netzero goals. The former Cenovus president (2017-2023) and long-time TransCanada president said very few people understand the challenge of changing the current energy system to a low-carbon one. He encouraged people to "be inquisitive."

Energy Community News

Join OSEA's Beyond Net Zero Symposium for Sustainable Energy Insights

Ontario Sustainable Energy Association (OSEA) is hosting the "Beyond Net Zero Symposium" at Centennial College on Oct. 30, 2023, from 8:30 am to 12:30 pm. This event is a key gathering for those interested in sustainable energy. Featured keynote speakers include Anna Kaduth from The Canadian Climate Institute and Jonathan Hack, Dean of Applied Research Innovation and Entrepreneurship Services at Centennial College. The symposium will cover essential topics in the sustainable energy sector,

with panels discussing Thermal Energy Opportunities, Green Smart Buildings, and Government Programs and Policies related to Canada's Net Zero goals.

For participation, OSEA members can join for free, while early bird tickets for others are available for \$40. Register here: https://ontario-sea.org/event-5381417

Energy Policy

French investment manager Ardian opens first Canadian office to tap sustainable investments - The Globe and Mail (Paywall)

https://www.theglobeandmail.com/business/article-tk-embargo-french-investment-manager-ardian-opens-first-canadian/

Ardian SAS, a French private equity firm is opening its first Canadian office in Montreal. Ardian plans to tap into existing partnerships with Canadian pension funds and investors, focusing on socially responsible investing. The Canadian government's \$80-billion investment in clean energy and sustainable infrastructure further supports this venture. With offices in New York and San Francisco, Ardian says its expansion aligns with its commitment to sustainable investments and a growing North American presence.

Prince Edward Island has to look after itself as competition for clean energy increases, energy minister says - CBC

https://www.cbc.ca/news/canada/prince-edward-island/pei-atlantic-loop-energy-1.6996803

Prince Edward Island's (PEI) Energy Minister, Steven Myers, expressed concern about Nova Scotia's decision to halt the Atlantic Loop project, which intended to bring hydroelectric power from Quebec. Nova Scotia cited the project's \$9-billion cost as the reason for discontinuation. Myers emphasized the importance of securing PEI's energy needs and noted the potential for competition in the Atlantic Canada energy market. In response, PEI is actively exploring energy storage options, transitioning to heat pumps and electric cars, and expediting wind farm projects. Furthermore, New Brunswick's plan to construct small nuclear reactors by 2035 is expected to support the Island's future energy requirements.

Nuclear

CNL, ITM join up to produce rare medical isotope - World Nuclear News

https://www.world-nuclear-news.org/Articles/CNL,-ITM-join-up-to-produce-rare-medical-radioisot

ITM Isotope Technologies Munich SE, a German biotech firm, and Canadian Nuclear Laboratories (CNL) have created a joint venture called Actineer. Their goal is to produce actinium-225 (Ac-225) on a large scale. Ac-225 which is a valuable alpha-emitting radioisotope. They plan to improve Ac-225 production and processing methods for short-term increases and eventually build an Actinium Production Facility (APF) for large-scale production. CNL will supply the initial irradiation material and oversee interim production, while ITM will process it to pharmaceutical grade. This partnership aims to meet the rising demand for targeted alpha therapies and expand the availability of Ac-225.

Canadian provinces announce collaborative coal phase-out plans - World Nuclear News

https://www.world-nuclear-news.org/Articles/Canadian-provinces-announce-collaborative-coal-pha

The Government of Canada is allocating up to \$20 million in federal funding to facilitate the phase-out of coal-fired electricity in Nova Scotia and New Brunswick by 2030. Part of this funding, \$7 million, will be directed towards the pre-development of a small modular reactor (SMR) at Point Lepreau in New Brunswick. This effort, backed by Canadian government officials and provincial leaders, aims to shift to clean energy and reach net-zero electricity by 2035. The ARC-100, a 100 MWe sodium-cooled fast reactor, is planned for launch at Point Lepreau by 2029, pending approvals and licenses.

Oil and Gas

Global Gas Report 2023: Demand uncertainty and investment gaps risk energy transition - Energy Now

https://energynow.ca/2023/10/global-gas-report-2023-the-unprecedented-demand-uncertainty-and-insufficient-level-of-investment-in-natural-gas-low-carbon-and-renewable-gases-are-putting-the-energy-transition-at-risk-undermining/

The 2023 Global Gas Report, a collaboration between IGU and Snam, produced by Rystad Energy, provides insights into the global gas industry. The report states that the gas industry was strong in 2022. The authors' perspective is and emphasizes the role of

natural gas, low-carbon gases, and LNG infrastructure have a role in clean energy. However, there were challenges with supply and price issues, and gas demand dropped in 2022, especially in Europe and Asia. The report recommendshighlights the need for investment in gas infrastructure, low-carbon gases, and CCS to transition to cleaner energy. It stresses the importance of affordable energy, especially in developing countries. The report also warns that without more investment, gas supply may not meet future demand, and global CO2 emissions will increase are high due to a shift from gas to coal.

Indigenous and Community Engagement

Indigenous clean energy project receives more than \$3.6 million to pursue geothermal energy - Canadian Manufacturing

https://www.canadianmanufacturing.com/manufacturing/indigenous-clean-energy-project-receives-over-3-6-million-to-pursue-geothermal-energy-295405/

The Fuel for Reconciliation geothermal energy project in British Columbia has received more than \$3.6 million in funding from the Pacific Economic Development Agency of Canada. This initiative, led by Kitselas Geothermal, aims to harness geothermal energy as a clean and renewable alternative to fossil fuels, reducing greenhouse gas emissions. Located in a geothermal-rich region along the Pacific Ocean, the project will involve drilling production wells, with expectations of creating more than 170 jobs. This development is a significant step towards economic independence for Kitselas First Nation and contributes to Canada's transition to clean energy.

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)