BEI Energy News

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Top news

Ontario Tech News

ACE business development manager attends Canadian Hydrogen Convention – BEI LinkedIn

Expert researchers at Ontario Tech University have been working on hydrogen R&D for close to 20 years through the Clean Energy Research Lab. More recently, a hydrogen testing and commercialization centre has emerged at the university's ACE Core Research and Testing Facility. And, Brilliant Energy Institute is (BEI) working with partner organizations across Canada and internationally, including Hydrogen Business Council and Canadian Hydrogen and Fuel Cell Association, to advance hydrogen policy to address climate change and build healthy communities and a vibrant net zero economy. This week, Mark Klintworth, ACE's business development manager, is in Edmonton for the Canadian Hydrogen Convention with more than 4,000 participants to further strengthen collaboration for a clean energy future.

Energy Policy

<u>Canada's financial support for clean energy transition is competitive with U.S. – The Globe and Mail</u>

A report from TD Economics finds the financial support offered by Canada towards the clean energy transition is competitive with the Inflation Reduction Act (IRA). The government of Canada has spent CA\$139 billion since the 2021 budget, or five per cent of the country's nominal GDP, to support clean energy development. In comparison, the U.S.' IRA estimated spending is US\$393 billion, or 1.5 per cent of that country's nominal GDP. The report suggests that Canada must focus on expediting project assessments, speeding up mine development times, and refocusing policy on labour force skills and training to attract clean energy investment.

MPs and activists push back as Ottawa pitches expansion of nuclear energy – CBC News

Anti-nuclear activists, meeting with a small cross-partisan group of MPs, urged the federal government to drop its support for nuclear energy projects. They called the energy source a "dirty, dangerous distraction" from climate action. Susan O'Donnell, a professor and member of the Coalition for Responsible Energy Development in New Brunswick, said the nuclear industry has been advertising heavily in Canada to convince us that new SMR designs will somehow address the climate crisis and that SMRs produce toxic radioactive waste that could lead to serious accidents while turning some communities into nuclear waste dumps. Liberal MP Janica Atwin, Green Party Leader Elizabeth May, among other MPs were present at the anti-nuclear press event on Tuesday. The story highlighted the role nuclear already plays as a key part of energy systems in Canada. *BEI editor's note:* Susan O'Donnell is an adjunct professor in sociology.

South Africa's energy minister attacks Canadian-funded climate project at former coal station – The Globe and Mail

South African Energy Minister Gwede Mantashe criticized a Canadian-funded energy transition project to replace the coal-fired Komati power plant with renewable energy sources. The project received a US\$47.5 million concessional loan from a Canadian government climate fund. The minister supports coal power and argues that Komati will produce less power and fewer jobs under the new clean energy project. By the end of its life last year, the station was contributing only 121 MW. Under the current project, the station is being converted into a renewable generation site with 150 MW of solar, 79 MW of wind and 150 MW of storage batteries.

Energy Systems

Electric Vehicles

GM to end production of Chevy Bolt/Bolt EUV this year - Clean Technica

General Motors (GM) said on Tuesday it will end production of its Chevrolet Bolt electric vehicle (EV) later this year as it shifts zero-emission production to trucks and SUVs built on a new battery platform. GM expects to build 400,000 EVs in North America from 2022 to mid-2024 and increase capacity to one million units annually in North America in 2025. They sold 38,120 Bolt EVs in 2022, up from 24,828 in 2011, and 19,700 in the first three months of the 2023. The Bolt is GM's first mass market EV and still accounts for more than 90 per cent of all U.S. GM EV sales.

IEA released Global Electric Vehicle Outlook - IEA

The International Energy Agency (IEA) released its *Global Electric Vehicle Outlook*. It identifies and discusses recent developments in electric mobility across the globe. The outlook finds that more than 10 million electric cars were sold worldwide in 2022 and that sales are expected to grow by another 35 per cent this year to reach 14 million. It also finds that nearly one in five cars sold globally this year will be electric, with the prices of smaller EV models dropping to rival those of combustion engine cars in North America and Europe by the mid-2020s.

Hydrogen Vehicles

<u>Edmonton Region Hydrogen HUB launches 5,000 Hydrogen Vehicle Challenge – Edmonton Global</u>

The Edmonton Region Hydrogen HUB launched the 5,000 Hydrogen Vehicle Challenge, an initiative aimed at getting 5,000 hydrogen-powered vehicles on the road in Western Canada within five years. The Challenge demonstrates the demand in the Edmonton region for fuelling station operators, original equipment manufacturers, service providers, and production and transportation companies to invest in Western Canada's emerging hydrogen economy, centred in the Edmonton region. The announcement also featured many organizations working towards a hydrogen economy.

Technologies

Nuclear

Expansion of U.S. – Korean cooperation on SMRs – World Nuclear News

Agreements to cooperate on small modular reactors (SMRs) have been signed between South Korean and U.S. companies during a visit by Korean President Yoon Suk Yeol to the U.S. Doosan Enerbility and the Export-Import Bank of Korea signed a memorandum of understanding (MoU) to cooperate with NuScale Power towards strengthening their cooperation to deploy NuScale VOYGR plants globally and establish a U.S.-based supply chain for NuScale Power Module production. SK and Korea Hydro & Nuclear Power have signed an MoU to collaborate with TerraPower to support the demonstration and commercialization of the Natrium reactor and integrated energy system.

U.K. launches Nuclear Waste Services strategy – World Nuclear News

The U.K. government launched the Nuclear Waste Services strategy. The strategy sets out 10 key milestones to be achieved by 2030, such as capping starting on the Low Level Waste Repository between 2024 and 2025, thermal treatment technologies developed as a proven technology by 2026 to 2027 and decisions taken in 2026 on which communities will progress to detailed testing as part of the Geological Disposal Facility programme. Nuclear Waste Services was created in 2022 as the single U.K. waste business for the Nuclear Decommissioning Authority (NDA), integrating Radioactive Waste Management, Low Level Waste Repository and the NDA Integrated Waste Management Programme.

Hydrogen

<u>Japanese 'hydrogen town' to start using country's first 100 per cent hydrogen water</u> heaters for this summer – Hydrogen Insight

Kitakyushu, the Japanese city, will see its first 100 per cent hydrogen water heaters being used from July, in a demonstration project being conducted by multinational corporations Rinnai and Iwatani. The gas will be supplied by an existing 1.2 km hydrogen pipeline in the Yahata-Higashi ward. Rinnai, a household appliance manufacturer, has developed a hydrogen combustion technology for home water heaters and plans to commercialise the technology upon evaluation of the water heaters' performance and safety in the demonstration project.

Aircrafts will fly on 28 per cent hydrogen-based fuels by 2050 under new EU blending rules – Hydrogen Insight

Under new blending rules agreed by the European Commission (EC), aircrafts departing European airports will need to refuel with increasing quantities of sustainable aviation fuels (SAFs) and hydrogen-based synthetic fuels as soon as 2025. The new rules envision planes refuelling with blends containing at least two per cent of SAFs in 2025, of which 0.07 per cent should be derived from synthetic aviation fuels like hydrocarbons, such as e-kerosene, made by combining carbon molecules with green hydrogen made with renewable energy. The EC estimates the new rules will slash European Union aviation emissions by two thirds by 2050.

Thank you.

Regards, Mohamed Mohamed Khaja Energy Co-Op Student Brilliant Energy Institute brilliantenergyinstitute.ca