Brilliant Energy Institute

Office of the Vice President Research and Innovation Ontario Tech University

BEI Energy News

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Energy Policy

Statement from The Canadian Association of Petroleum Producers (CAPP) on the federal government emissions cap framework

https://energynow.ca/2023/12/statement-from-the-canadian-association-of-petroleum-producers-capp-on-the-federal-government-emissions-cap-framework/

The Canadian Association of Petroleum Producers (CAPP) has raised concerns over the federal government's new emissions cap framework, as reported by EnergyNow Media on December 8, 2023. CAPP criticizes the proposed cap-and-trade system, targeting a 35 per cent to 38 per cent reduction in emissions by 2030, fearing it could unintentionally restrict Canadian oil and natural gas production during an affordability crisis. The organization argues existing carbon policies are adequate for achieving emission goals and cautions that the new framework could undermine established carbon markets and clean energy initiatives. Despite these apprehensions, Canada's oil and gas sector, a significant contributor to the national economy, remains committed to advancing emission reduction efforts and achieving net-zero targets by 2050. CAPP intends to address its concerns in the consultation process, aiming to ensure the framework supports the industry's growth and Canada's energy security.

Nuclear

Bruce Power Pioneers Nuclear Carbon Offset Protocol

https://carboncredits.com/bruce-power-pioneers-nuclear-carbon-offset-protocol/

At COP28 in Dubai, Ontario-based Bruce Power introduced a pioneering carbon offset protocol for nuclear generation, marking a significant step in clean energy. This aligns with their 2027 goal to become North America's first net-zero nuclear plant. Developed with GHD, this initiative is part of Bruce Power's broader strategy, including selling Clean Energy Credits and reducing greenhouse gas emissions. Ontario's Minister of Energy, Todd Smith, lauded Bruce Power's transition from coal-fired generation. The protocol, pending third-party validation, will utilize nuclear power for decarbonization.. Bruce Power's role in the Net Zero Nuclear Industry Pledge at COP28 underscores nuclear energy's growing global importance in sustainable energy investment.

Energy Storage

Dominion Energy Virginia continues to expand battery fleet

https://www.renewableenergyworld.com/storage/dominion-energy-virginia-continues-toexpand-battery-fleet/

Dominion Energy Virginia expands its battery fleet with the Dry Bridge facility in Chesterfield County, now the largest in Virginia, capable of powering 5,000 homes. Operational since November, this is part of the company's larger move towards clean energy. In addition, Dominion Energy is developing over a dozen new solar projects across the state, aiming to add 800 megawatts of capacity. Major developments include the Dulles Solar and Storage project, poised to be the U.S.'s largest airport-based renewable energy project. Completion of these projects is expected between 2024 and 2026, marking a significant step in the company's sustainable energy initiatives.

Solar Energy

Massive solar farm puts Summerside farther down the road to energy self-sufficiency

https://www.cbc.ca/news/canada/prince-edward-island/pei-summerside-solar-sunbankgreen-energy-1.7052243

Summerside, P.E.I., has taken a significant leap towards energy self-sufficiency with the inauguration of a massive solar farm, Sunbank, which is projected to generate 21 megawatts of energy. This amount equates to roughly 25 per cent of the electricity needed for the city's 15,000 residents. The \$69-million project, supported by various government levels, Samsung, and the Federation of Canadian Municipalities, features over 48,000 solar panels spread across a 30-hectare well field. Notably, Sunbank is equipped with large batteries capable of storing 10-megawatt hours of energy, ensuring a steady power supply even at night. Officials highlight this development as a crucial step in Summerside's green energy movement and a move towards decarbonizing the community. The solar farm, which began operation on December 1, is expected to be fully operational by the end of the year, marking a new era in Summerside's journey towards sustainable energy independence.

Ray of light: This Toronto company is helping cities tackle climate change

https://www.thestar.com/business/mars/ray-of-light-this-toronto-company-is-helpingcities-tackle-climate-change/article_ec666b42-947f-11ee-99b7-3fb1ba3f9ee8.html Toronto-based Morgan Solar is pioneering climate change solutions with its smart blind system that reduces building energy needs and generates electricity. This innovative approach focuses on the extensive use of windows in urban buildings, which are key contributors to greenhouse gas emissions. The company's system, which is gaining traction with clients like the Canadian government and Cisco Systems Inc., offers a practical way to cut emissions, saving approximately 300 kg per window annually. Despite its benefits, the technology faces challenges in widespread adoption. However, it aligns with Canada's goals for reducing emissions by 2030 and achieving net zero by 2050, marking a significant step in urban sustainability and green technology integration.

Wind

'Offshore sector confidence still high'

https://renews.biz/90030/offshore-sector-confidence-high/

The latest report from the Offshore Renewable Energy (ORE) Catapult indicates that the United Kingdom offshore wind sector remains confident despite facing challenges in the past year. The Offshore Wind Supply Chain Confidence Survey, conducted in October and November 2023, shows that companies are optimistic about growth in revenue and employment, though overall confidence has dipped slightly compared to last year. The UK government's recent announcement of a significant increase in the administrative strike price for the next CfD Allocation Round has been positively received, bolstering industry confidence. The report highlights potential growth barriers like skills shortages and project visibility, with recommendations for overcoming these challenges. Additionally, the industry's potential to boost the UK economy by £92 billion by 2040 is underscored.

Hydrogen

Billionaires among bidders seeking subsidies to produce green hydrogen and electrolyzers in India

https://www.hydrogeninsight.com/policy/billionaires-among-bidders-seeking-subsidiesto-produce-green-hydrogen-and-electrolysers-in-india/2-1-1568483

India's green hydrogen sector advances with the first subsidy auctions for hydrogen production and electrolyzer manufacturing closing this week. Major corporations, including Reliance Industries and Torrent Power, are among the key bidders, signalling a robust corporate interest in green energy. The government has capped production at 450,000 tonnes per year and electrolyzer manufacturing at 1.5 gigawatts, aiming to boost local industry. This move marks a significant step in India's commitment to sustainable energy and is expected to influence the country's energy trajectory with operational and financial specifics to be determined shortly.

SamTrans Board of Directors approves purchase of up to 108 hydrogen fuel cell electric buses

https://www.masstransitmag.com/bus/vehicles/hybrid-hydrogen-electric-vehicles/pressrelease/53080272/samtrans-board-of-directors-approves-purchase-of-up-to-108hydrogen-fuel-cell-electric-buses

The San Mateo County Transit District (SamTrans) Board of Directors has greenlit the acquisition of up to 108 hydrogen fuel cell electric buses, marking a significant stride towards its Emission Zero goal. Set to replace aging diesel buses by 2034, this move aligns with SamTrans' commitment to a zero-emission fleet. The \$168.3-million contract with New Flyer of America, Inc. covers 40-foot low-floor buses, each boasting a 300-mile range, ideally suited for district routes. SamTrans, already integrating 17 battery-electric buses, anticipates deploying the first hydrogen fuel cell buses in winter 2024, further diversifying its eco-friendly transportation options in San Mateo County.

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)