

Brilliant Energy Institute

Office of the Vice President Research and Innovation
Ontario Tech University

BEI Energy News

Weekly newsletter

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BEI News

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Energy Policy

Lawmakers who passed a bill to lure nuclear energy to Kentucky say coal is still king

<https://nationalpost.com/pmnl/news-pmnl/lawmakers-who-passed-a-bill-to-lure-nuclear-energy-to-kentucky-say-coal-is-still-king>

Kentucky's legislature passed a bill to pave the way for nuclear energy projects, emphasizing nuclear complementarity to coal in the state's energy mix. The bipartisan support underscores the state's commitment to diversifying its energy portfolio while respecting its coal heritage. The bill establishes the Kentucky Nuclear Energy Development Authority, focusing on site suitability studies, workforce development, and community readiness for nuclear projects. The move signals a proactive approach to embracing nuclear energy alongside traditional and renewable sources.

Enbridge cuts off rebate, leaving some homeowners on the hook for thousands in green renovation costs

https://www.thestar.com/news/canada/enbridge-cuts-off-rebate-leaving-some-homeowners-on-the-hook-for-thousands-in-green-renovation/article_8c206ad0-e87b-11ee-8527-233b08bdb16f.html

Some Ontario homeowners, including Nicole Roberto, face unexpected financial burdens due to Enbridge's cessation of rebates for green renovations, despite

assurances from the federal government. The halt in funding, linked to the Greener Homes Program, has left thousands in limbo, prompting concerns about fairness and program management. Enbridge cites budgetary constraints and consumer response as reasons for the decision, sparking criticism from affected parties and environmental advocates who fear increased energy costs and carbon emissions. Communication gaps and contradictory guidance have exacerbated frustrations, highlighting systemic flaws in program administration.

Building Infrastructure

Here are the big hurdles to the global push to build up renewable energy

<https://nationalpost.com/pmnl/news-pmnl/here-are-the-big-hurdles-to-the-global-push-to-build-up-renewable-energy>

Governments globally aspire to triple renewable energy by 2030, as agreed upon at the U.N. climate summit, yet post-pandemic economic challenges pose significant barriers to achieving this target. Key hurdles include rising interest rates affecting renewable project financing more than fossil fuel investments, exacerbated by inflation impacting the cost of materials and services. Supply chain disruptions further impede progress, alongside local opposition hindering renewable infrastructure development. Particularly in low-income nations, elevated borrowing costs compound challenges, impeding efforts to scale renewable projects. Addressing these obstacles will be crucial for advancing renewable energy adoption and meeting climate goals.

Wind and sun are free, but it's harder to get renewable energy projects built these days. Here's why

<https://nationalpost.com/pmnl/news-pmnl/wind-and-sun-are-free-but-its-harder-to-get-renewable-energy-projects-built-these-days-heres-why>

Despite the abundance of wind and sunlight, renewable energy projects face significant challenges in today's economy. High interest rates, inflation, and supply chain disruptions hinder investment in wind, solar, and other clean energy initiatives. These obstacles slow the necessary expansion of renewables to combat climate change, a critical task underscored by commitments made at the recent U.N. climate summit. While projects like those in Sprakebuell, Germany, demonstrate local benefits and community involvement, broader global issues, such as borrowing costs and financing uncertainties, hamper progress, particularly in lower-income countries. Addressing these challenges is essential for accelerating the transition to clean energy and achieving climate targets on a global scale.

Nuclear

SMR model displayed in Houston by Last Energy

<https://www.neimagazine.com/news/newssmr-model-displayed-in-houston-by-last-energy-11633134>

Last Energy, a US microreactor startup, recently unveiled a prototype of its nuclear reactor module in downtown Houston, Texas. Suspended vertically from a crane outside the CERAWEEK energy conference, the module serves as a key element of Last Energy's modular 20 MWe power plant design. Boasting a quick construction timeline of just 24 months, Last Energy aims to target industrial consumers such as data centres and car manufacturers. Following its Houston debut, the prototype will be showcased in Washington DC, following a prior display at a business conference in Poland.

Solar Energy

Drake Landing, a solar energy community south of Calgary, loses its sizzle as system starts to fail

<https://www.cbc.ca/news/canada/calgary/okotoks-drake-landing-solar-energy-repairs-future-1.7148389?cmp=rss>

Drake Landing, once celebrated as a pioneering solar heating community near Calgary, is facing uncertainty as its aging system falters. Originally designed to showcase the potential of solar energy, the community's system is grappling with component failures and may need to be decommissioned. Residents, who once enjoyed a sustainable heating solution, are now considering fallback options, including transitioning to natural gas furnaces. Despite the setback, the project's significance in advancing renewable energy and express hope for alternative solutions aligned with sustainability goals remains. As Drake Landing navigates recent challenges, it reflects broader discussions surrounding the longevity and practicality of renewable energy infrastructure.

Hydrogen

AtkinsRéalis to engineer green hydrogen hub in Quebec

<https://www.canadianconsultingengineer.com/cleantech-canada/atkinsrealis-to-engineer-green-hydrogen-hub-in-quebec/1003418538/>

AtkinsRéalis, formerly SNC-Lavalin, secures a contract from TESCanada H2 to engineer the Projet Mauricie green hydrogen hub in Quebec, aiming to produce 70,000 tonnes of green hydrogen annually by 2028. Leveraging renewable power generation from 1,000 MW wind and solar farms, the initiative supports Quebec's decarbonization efforts in the industrial and transportation sectors. Collaborating with specialists from BBA, AtkinsRéalis will develop project plans and environmental assessments, ensuring a successful energy transition. Stéphanie Vaillancourt, AtkinsRéalis' President for Canada, highlights green hydrogen's role in decarbonization and the firm's expertise in executing similar projects globally.

Fossil Fuels

Calgary startup aims to launch sustainable aviation fuel facilities on the Prairies

<https://www.cbc.ca/news/canada/calgary/bakx-ceraweek-saf-clean-cut-energy-abb-1.7152926>

Cap Clean Energy, a Calgary-based startup, aims to establish sustainable aviation fuel (SAF) facilities across the Prairies, utilizing crop residue like wheat straw. This initiative comes amid increasing interest from airlines, including United Airlines, to reduce carbon emissions. While SAF offers environmental benefits, its higher cost is a challenge for airlines. Cap Clean Energy, collaborating with ABB, is in the early stages of development, with production commencement by 2027. SAF production holds promise in decarbonizing the aviation sector, aligning with government initiatives such as Canada's Aviation Climate Action Plan. Challenges remain, including transportation logistics and consumer willingness to pay a premium for lower-carbon flights.

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)