JOHNSON SHOYAMA
Centre for the Study of
Science and Innovation Policy
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CSIP INNOVATION FORUM

Science, technology and innovation policy is essential in shaping our future. Translating the narrative into clear options, strategies and outcomes is necessary, but far from simple.

Thursday, March 10
12:00 - 1:00 p.m. (CST)

Delivered by Zoom.

Click here to register and a link will be emailed to you.

Saskatchewan's Energy Storage Advantage: Compressed Air Energy Storage

Brian Brunskill, Saskatchewan Geoscientist

In Saskatchewan, significant investment must be made to replace retiring coal generation by 2030 and to meet future increases in low-carbon electricity demand. We have abundant wind and solar resources that can help meet this demand but large-scale development is challenging because generation from renewables is intermittent. To provide the same reliability as natural gas generation using renewables, utility-scale energy storage is required. Batteries can provide short-term storage services but in Saskatchewan there is another option: our geological advantage supports the building of ***air batteries*** that use electricity generated from renewable sources to compress atmospheric air into large, rock-salt caverns in the deep subsurface. Later in the generation cycle this atmospheric air is released as needed to generate electricity. Compressed Air Energy Storage (CAES) is a mature technology that has been used in Germany since 1978 and in the USA since 1991. The technology is safe, dependable and it produces no toxic waste. Our investigations support the potential use of CAES technology in Saskatchewan.

The Centre for the Study of Science and Innovation Policy (CSIP) invites all students, faculty, researchers, and citizens interested in the study of science, technology and innovation policy to participate in a bi-weekly forum.

www.scienceandinnovationpolicy.ca