eVinci™ Microreactor Deployment in Saskatchewan

Saskatchewan Research Council partners with Westinghouse to deploy the first-of-a-kind microreactor

Saskatchewan is undergoing an energy transition. Microreactors will play a key role in providing sustainable electricity, heat and energy resilience across Canada's north.

In November 2023, the Government of Saskatchewan announced \$80 million CAD in funding for the Saskatchewan Research Council (SRC) to demonstrate a first-of-a-kind eVinci™ microreactor in the province. This project will enable SRC to support Canadian communities and industry to understand the technology and its applications for future eVinci deployment opportunities.

SRC has a long history of providing support and leadership to the uranium/nuclear industry in exploration mining and milling, mine remediation and environmental protection. SRC owns and operates the world's largest uranium laboratory and successfully operated a SLOWPOKE-2 nuclear research reactor for over 38 years before safely decommissioning it in 2021.



Full-size eVinci™ Microreactor model at Saskatchewan Research Council

1 eVinci microreactor =



Avoids approx. **55,000 metric** tons of CO₂ emissions/year



Creates less than one diesel drum of spent fuel during its 8-year lifespan



Built above ground and requires **no water** for cooling or operation



Provides power for over 5,500 homes





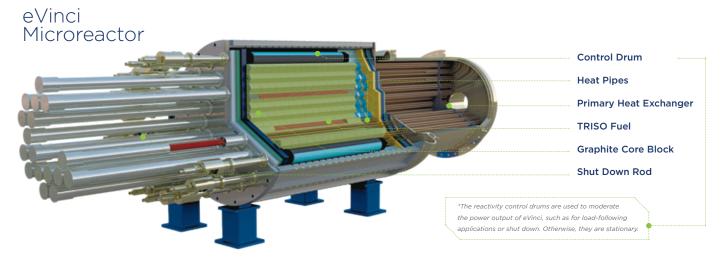
eVinci™ Microreactor

Safe, Reliable Technology

Resilient, emission-free baseload power

The eVinci microreactor's innovative design combines new technology advancements with 70+ years of commercial nuclear design and engineering, creating a cost-competitive and resilient source of zero-emissions power with superior reliability and minimal maintenance. Its small size allows for transportability and rapid, on-site deployment. eVinci can produce 5MWe with a 15MWth core design. The reactor core is designed to run for eight or more years at full power before refueling.

When the reactor nears its end of life, a new reactor is brought to site, replaced, and the spent fuel reactor, in its entirety, is removed for processing and handling back at the licensed facility. No spent fuel is stored on site.



Application Opportunities in Saskatchewan

- Industrial Heat and Power
- **►** Hydrogen Production
- Remote Industrial (Mining)
- ► Off Grid Communities (Heat & Power)
- Micro-Grids/Critical Infrastructure
- ► Net Zero Oil & Gas Recovery

www.src.sk.ca/srcnuclear

www.westinghousenuclear.com/evinci-microreactor

February 2024
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