Saskatchewan:

Clean Electricity Snapshot

2022-2024

Saskatchewan has a growing electricity system, and partners across the province have shown leadership in the development of emerging technologies, such as small modular reactors (SMRs), carbon management technologies, and geothermal energy. The province also has immense potential for solar and wind power, both of which have grown in recent years, in many cases thanks to the leadership of Indigenous communities.

Powering Canada's Future **is the Government of Canada's strategy for clean electricity. It combines historic investments and balanced, fair regulations to lay out the path forward to build grids that will provide power that is reliable, affordable and clean and serve as the backbone of our economy.**

Federal Investments

As of November 2024, the Smart Renewables and Electrification Pathways Program (SREPs) has supported 19 projects with over $160 million in Saskatchewan.

In fall 2024, the Government of Canada announced a total investment of over $265 million clean electricity projects. Over $256.7 million was invested in eight projects through the Future Electricity Fund, and over $12 million for five Indigenous and community-led projects through SREPs.

In 2023, the Government of Canada announced a $50 million contribution to the Bekevar Wind Energy project. This builds on a $173 million investment from the Canada Infrastructure Bank.

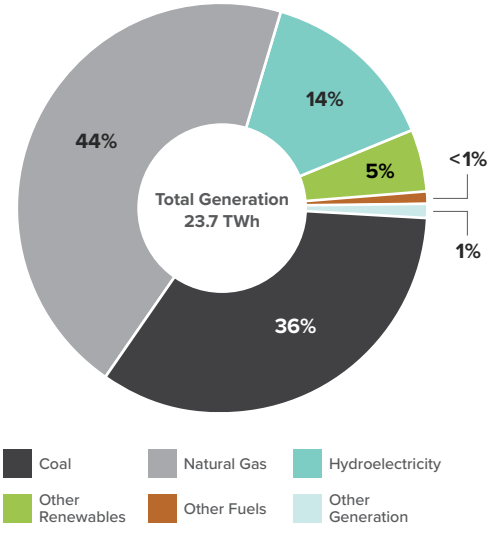
In October 2023, PrairiesCan announced a federal investment of $832,500 to help Saskatchewan businesses become qualified suppliers in nuclear and clean mining supply chains.

In August 2023, the Government of Canada announced federal investments up to $74 million for small modular reactor development in Saskatchewan.

In June 2023, the Government of Canada announced investments totaling over $7 million through the SREP to support Indigenous communities and businesses in Saskatchewan.

In May 2023, the Government of Canada returned $174 million to Saskatchewan through the Future Electricity Fund to support clean energy projects.

Saskatchewan's Electricity Generation in 2022



Emissions and Electricity Generation

According to the National Inventory Report, in 2022, 80% of Saskatchewan's electricity was generated from coal and natural gas, while around 20% was generated from renewable resources, like hydro, wind and solar, and other generation. Saskatchewan is on a path to phase out coal power while building up more sustainable electricity supplies.

Small Modular Reactors (SMRs)

The Government of Canada is committing up to $74 million to explore the potential for small modular reactors in Saskatchewan, which have the potential to provide abundant, reliable, non-emitting power. This is expected to drive economic growth and create good jobs throughout Saskatchewan, including in communities that have traditionally hosted coal-power plants. As well, SaskPower is in a multi-year planning phase to support the development of an SMR by the mid-2030s.

In September 2024, SaskPower established a nuclear subsidiary called SaskNuclear to advance the province's SMR project.

Solar Power

SaskPower plans to develop 2,100 megawatts (MW) utility-scale solar power projects in south-central Saskatchewan. Once complete, they'll be among the largest solar projects ever built in the province. Each 100 MW solar facility will be capable of powering an average of 25,000 Saskatchewan homes.

Indigenous communities across the province have also constructed major solar power projects, such as the Awasis Solar Project.

Wind Power

As of 2024, the province has eight wind farms in operation. Two large-scale wind energy projects became operational in 2022. This includes the 200 MW Golden South Wind Project and the 175 MW Blue Hill Wind Project. Together, the two projects can generate enough power for roughly 170,000 homes.

Indigenous communities across the province have also constructed major solar power projects, such as the Bekevar Wind Project.

Battery Storage

Battery storage is helping to drive reliability and cost-savings as Saskatchewan introduces more renewable power into the provincial grid. In 2024, SaskPower announced the completion of their first new battery-based energy storage system in Regina which was partially funded by the federal government. The facility has the capacity to provide 20 MW of power to the grid, enough to light up 20,000 homes for an hour.

Geothermal Energy

DEEP Earth Energy is developing the first geothermal project in Canada. DEEP's long-term goal is to develop 200 MW of geothermal energy, achieved through multiple facilities in Southeast Saskatchewan. The project is expected to create around 100 jobs during construction and thousands of jobs in Saskatchewan and across the Canadian prairies.

Carbon Management

Saskatchewan is a leader in the development and deployment of carbon management technology. The Boundary Dam Carbon Capture and Storage (CCS) Project is the world's first power station to successfully use CCS technology. By using CCS, the facility is capable of reducing CO_2 emissions by up to 90%. This project can also produce 115 MW of power, which is enough to power about 100,000 homes.

As of 2021, the Government of Saskatchewan anticipates that carbon management projects will attract provincial investment of more than $2 billion and sequester over two million tonnes of CO_2 annually.

Economic Opportunities

In addition to cleaner air and lower greenhouse gas emissions, a clean electricity grid can stimulate investment in innovation, provide economic opportunities, and create good jobs.

New Jobs

Electrification and increased deployment of cleaner forms of electricity generation is expected to create good jobs across Canada. Saskatchewan is projected to see some of the greatest growth rates in clean energy jobs by 2050. For instance, independent experts from Clean Energy Canada forecast that there could be 131,000 clean energy jobs added in Saskatchewan between 2025 and 2050.

For example, BHP's project to advance the development of its world-leading low emissions potash mine will minimize the carbon footprint of the mine, improve worker safety and implement technology to further reduce emissions from mine operations. The project will also support the local community with 3,500 jobs at peak construction and around 600 ongoing jobs through mine operations.

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