

Canadian Light Source Synchrotron

How this project got started:

In the early 1990s, Canadian science organizations were calling for a national synchrotron light source facility to fit Canadian research needs. In 1996, an international peer review panel evaluated proposals from Ontario and Saskatchewan and unanimously recommended that the Canadian Light Source (CLS) be built in Saskatoon. The existing Saskatchewan Accelerator Laboratory with its experienced staff on the University of Saskatchewan campus tipped the balance in favour of Saskatoon.

Western Economic Diversification Canada (WD) was a catalyst for the project. The department brought together funding partners from across the Government of Canada and elsewhere, and provided knowledge and expertise on funding applications for the CLS synchrotron.

Capital Funding partners:

- o \$107.5 million from the Government of Canada
- o \$25 million from the Province of Saskatchewan
- o \$7.8 million from Canadian universities
- o \$2.4 million from City of Saskatoon
- \$21.1 million from other sources

This project represents unprecedented cooperation between national, provincial and municipal governments, as well as academic, industrial and government researchers.

Terms of Reference:

Before it was built, Canada was the only G7 country without a synchrotron. Canadian scientists travelled overseas to use facilities in other countries, which put time and financial pressure on their research. The construction of the synchrotron makes Canada globally competitive with similar technology in other countries. The CLS is also more focused on serving industrial users than other international facilities. Its long-term target for industrial use is 25 per cent compared to about 10 per cent industrial use worldwide.

Benefits:

As the fourth most powerful light source in the world, it provides a new, national research tool for Canadian scientists. The research done with the synchrotron may improve medical diagnostics and treatments, create new materials such as strong metal alloys for airplane wings, develop hardier agricultural crops and better ways to track environmental pollutants. The facility provides employment for over 120 people from scientists to administrators to facility operators. And finally, the facility brings new revenue to Saskatoon and Canada and new recognition to the University of Saskatchewan.