



AI Data Centre Strategy

Powering the future of artificial intelligence

Alberta's AI Data Centre Strategy

Alberta has an artificial intelligence (AI) data centre strategy, Powering the Future of Artificial Intelligence that sets the path to securing the province's position as the most attractive place to build artificial intelligence (AI) data centres in North America.

Power capacity

AI data centres require stable electric power, and a lot of it. Alberta's competitive electricity market is highly attractive to investors. As the world becomes increasingly electrified, the need for reliable energy is growing and Alberta has the resources to meet that demand.

The province is home to world-class energy industry leaders with the expertise developers are looking for to find innovative solutions to meet their energy needs. Coupled with Alberta's competitive power market structure, natural incentives for cost-savings, and a government committed to reducing red tape, Alberta is a premier destination for AI data centres.

To help encourage AI data centre projects, Alberta's concierge service will work hand in hand with potential project proponents. This includes helping facilitate the right industry connections and finding the best options to meet project's requirements.

This balanced approach to supporting the growth of the AI industry respects Alberta's priority of ensuring Alberta's grid is affordable, reliable and stable.

Sustainable cooling

AI data centres require solutions to keep servers at an optimal temperature. Alberta's cold climate provides a natural benefit to cooling solution challenges.

Alberta's strategy encourages project proponents to adapt cooling technology best suited for their needs, water license availability and regional and project circumstance. There are innovative solutions, including capturing and redirecting heat for other uses.

Economic growth

Alberta offers many advantages that AI data centre builders, operators and investors seek. Alberta is committed to a competitive marketplace, offering advantages such as low taxes, and efficient regulatory processes.

The government is dedicated to reducing red tape and creating a business-friendly environment to facilitate the establishment of AI data centres in the province.

AI data centres will contribute to Alberta's economy, providing jobs, revenues to all levels of government, and are important to grow Alberta's tech sector.

Next steps

In early 2025, Alberta's government will implement specific actions under the three strategic pillars of power capacity, sustainable cooling and economic growth.

Alberta's government will act to provide regulatory certainty for the AI data centre industry, collaborate with municipalities and Indigenous communities looking at investment attraction, and maximize the economic benefits for Albertans such as through leveraging computing capacity, and identifying supports for Alberta-based innovation in the growing AI-driven economy.

The AI data centre opportunity

The strategy arose from a pressing need for AI data centres in North America – a need that is in fact global.

The demand is a response to the proliferation of AI and machine learning tools adapted by businesses to improve customer experience and services, improve their efficiency and productivity, enable data-driven decision making, improve systems security and to be competitive. Personalized recommendations for our online shopping, Google Maps, fraud detection, and Netflix recommendations are some of the familiar ways AI is now commonplace in our lives.

These advancements are made possible by the processing and computation of vast amounts of data by AI and machine learning programs. AI data centres house thousands of servers that host the computation and store the data. A large supply of stable electric power is required for the related, immense amount of computation.

With the rapid growth of AI and machine learning, global demand for data centre capacity is expected to triple by 2030¹. AI data centre market size will more than double by 2030 to over \$820 billion².

This presents a generational opportunity for Alberta to become a world leader in the tech industry.

Benefits to Alberta and Albertans

The province aims to attract investment in AI technology to foster innovation, create jobs, and promote economic diversification. Growing the tech sector, particularly in AI, such as GovLab.ai and ecosystem leaders like Alberta Machine Intelligence Institute (amii), foster industry partnerships, catalyze economic growth, and enhance workforce skills and employment.

Alberta has a strong technology economy which has seen tremendous growth and investment in recent years. With province-based AI data centres, Alberta can position itself as a competitive player in the global AI landscape, attracting other tech companies, investment and talent from around the world.



Ensuring utility affordability and market stability

Alberta's government is focused on keeping utilities reliable and affordable. Our top priority remains the well-being of Albertans. This priority is embedded in our AI data centre strategy.

Municipal opportunities

As AI data centres require reliable and robust infrastructure, by attracting these projects, municipalities can accelerate and benefit from the modernization of their power, water, and internet services, making their communities more attractive to businesses and residents.

Municipalities and AI data centres can forge mutually beneficial partnerships, collaborating to improve digital services, support local technology initiatives, and enhance public safety.

AI data centres offer a unique opportunity to revitalize underutilized land and industrial areas.

Opportunities for Indigenous communities

Alberta will promote economic development opportunities and partnerships with Indigenous communities through programs like the Alberta Indigenous Opportunities Corporation (AIOC). This approach will ensure inclusive growth and shared prosperity while strengthening the relationship between Alberta's innovation ecosystem and Indigenous communities.

¹ McKinsey, "AI power: Expanding data center capacity to meet growing demand", October 24, 2024, www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/ai-power-expanding-data-center-capacity-to-meet-growing-demand

² Prescient & Strategic Intelligence Data Center Market Size www.psmarketresearch.com/market-analysis/data-center-market, amount converted from US\$.