

CASE STUDY

Net Zero Water

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Small city, big impact: Selkirk's model for resilient, low carbon municipal services

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Key insights

- Meaningful climate action is achievable from communities of all sizes.
- The City of Selkirk treats climate action as a core governance and service delivery function, fully integrated into decision-making tools, policies, procedures, and standards across departments.
- Innovative financial tools support implementation, notably the Greenhouse Gas Reduction Reserve, which reinvests carbon-cost-equivalent funds into emissions reduction projects.
- Modernizing infrastructure is used as a climate strategy, enabling emissions reductions, cost control, and resilience without relying solely on external grant funding.
- Integrating climate considerations into asset management allows the city to address utilities, buildings, transportation, and green infrastructure through routine asset replacement and holistic capital planning.

Background

In a country where more than 90 percent of communities are small or rural municipalities, resilience cannot be undertaken by large cities alone. Instead, it must be a shared endeavour that reflects the [realities of communities everywhere](#). The City of Selkirk stands out as a leading example of how smaller municipalities can take meaningful, sustained action.

With a population of roughly 10,500 residents, Selkirk focuses on efficiently delivering services while ensuring that they are resilient to a changing climate. Climate resilience is not a side project, but rather a pillar of the City's long-term direction. The Community Strategic Plan reflects this commitment; it identifies 'protect the natural features and resources that are so important to our communities' as the fifth pillar of the plan.



Chief Administrative Officer Duane Nicol reinforces this approach. “For us, climate action isn’t additional, it’s core.” Embedding resilience action in decision-making tools, policies, procedures, and standards signals to all departments and residents that its importance is central to government services and functions. This mandate is guided by a combination of elected officials and city staff.

Opportunity

Like many small and rural communities, Selkirk faces rising infrastructure costs, aging assets, and increasing exposure to climate risks, including drought and extreme weather. At the same time, limited municipal revenue tools constrain the City’s ability to respond while continuing to meet essential community needs.

Against this backdrop, the City modernizes core infrastructure and aligns decision-making with the Community Strategic Plan’s climate pillar. This approach enables the city to reduce emissions, manage long-term costs, and increase resilience without becoming entirely reliant on sporadic climate grants or one-time funding opportunities. Embedding climate considerations across all municipal policies, particularly within asset management, enables the City to address emissions and resilience across utilities, buildings, transportation, and green infrastructure through routine asset replacement and integrated, holistic capital planning.

Strategy

Selkirk ensures that climate action is not simply a concept or a document on a shelf, but an accountable action that is mechanized and attributed to financial decisions. “We integrate climate considerations into our existing business decision processes, so that climate action is the default for the city as opposed to yet another consideration in all of the choices we have to make,” notes Duane. With a goal to achieve net zero corporately by 2030, significant action has been undertaken since early work began in 2016.



That year, the City began formal mitigation efforts with a Greenhouse Gas Reduction Plan. It was followed by the adoption of the Greenhouse Gas Accountability By-law in 2021. The by-law requires annual tracking and public reporting of corporate and community greenhouse gas emissions using internationally recognized standards, establishes reduction targets aligned with Canada's 1.5°C commitments, and creates a transparent financial framework to achieve them.

This is made possible through the Greenhouse Gas Reduction Reserve, which are based on the cost of purchasing carbon offsets equal to that of the City's corporate emissions. These funds are reinvested into emission reduction initiatives. For emissions that cannot be eliminated by 2030, the City plans to purchase offsets.

Impact

As a result of the integrated approach, Selkirk produces measurable climate, financial, and resilience outcomes. In 2024 alone, the City invested approximately \$29,100 into the Greenhouse Gas Reduction Reserve and contributed to an already robust reserve of \$89,635. The Reserve deliberately aligns with capital planning, which enables strategic reinvestment in long-term infrastructure and includes capital projects supporting water and wastewater treatment facilities.

As a direct result of these policies, the City's core water and wastewater facilities now operate free of fossil fuels. This is achieved by leveraging existing infrastructure for geothermal applications and transitioning to electric heating systems. Utility facilities that once accounted for roughly 30 percent of corporate emissions have seen dramatic reductions. The water treatment plant alone reduced emissions by nearly 78 percent between 2023 and 2024, falling to just 18 tonnes of CO₂e. It is approaching near-zero emissions following the electrification of remaining systems.

Across the broader corporation, building retrofits and renewable energy projects continue to drive emissions reductions. Fleet electrification has reached 38 percent city-wide and 50 percent within utility operations.



By embedding climate considerations into core governance, capital planning, and financial systems, Selkirk demonstrates that meaningful climate action does not require extraordinary measures — only clear accountability, targeted policy, and sustained investment.

Lessons learned

Together, these outcomes demonstrate how a deliberate, integrated approach to climate governance can deliver rapid and durable results. The City of Selkirk's experience shows that aligning policy, capital planning, and financial mechanisms enables municipalities to decarbonize energy intensive services, strengthen resilience, and manage costs effectively. The City has created a replicable model for embedding climate action into core municipal operations, particularly for water and wastewater services, where the potential for impact is greatest.