

Prairie Resilience:

A Made-in-Saskatchewan Climate Change Strategy



Why focus on resilience?

Resilience is key to Saskatchewan's approach to climate change. Resilience is the ability to cope with, adapt to and recover from stress and change. This is essential, as some effects of climate change are already underway and unavoidable.

Resilience is a much stronger indicator of effective climate action than simply measuring reductions in greenhouse gas emissions, because it measures our overall ability to adapt, innovate and even thrive.

Focusing on resilience will yield a stronger approach for Saskatchewan – a growing agricultural and resource-based economy not only rising to the challenge, but providing leadership through forward-looking policy change.

Saskatchewan has strong motivation to seek solutions. We have recently endured many varied and costly climate-related events and are acutely aware of our exposure to changing climate because the land is integral to our economy. Our province is expected to experience more extreme weather events, including an increase in the severity and frequency of droughts and flooding, and more intense forest fires. For Saskatchewan, climate change resilience is critical.

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Multiple systems need to be strengthened to improve the resilience of the province as a whole. This includes the ability of Saskatchewan's natural systems (including our land, water, and forests), infrastructure, communities and economy to adapt and thrive in a changing, low-carbon economy.

What steps will Saskatchewan take?

Critical to a resilience strategy is identifying efforts that can be undertaken within specific areas of focus. The province has developed climate resilience policies in several areas, including:

1. natural systems
2. physical infrastructure
3. economic sustainability
4. community preparedness
5. measuring, monitoring and reporting

These policies cover the ways climate change is affecting Saskatchewan. Although many policies have implications for more than one area of focus, they are identified under the area of best fit.

Natural Systems

We will:

- Develop and implement an offset system that creates additional value for actions that result in carbon sequestration or reduced emissions, especially from our soils and forests.
- Ensure natural and commercially forested lands are managed in a manner that enhances the removal and storage of carbon from the atmosphere while allowing for sustainable harvesting, respecting normal forest cycles and fire preparedness.
- Maintain or restore landscape integrity to optimize ecological goods and services, enhance resilience to extreme weather events and manage the risk to biodiversity.
- Increase our understanding of future climate trends and adaptation options to address impacts that extreme weather events such as flooding and droughts could have on future water supplies.
- Advance options to improve Saskatchewan's ability to measure stream flows and provide flow forecasts to aid in adapting to the potential effects of climate change on watersheds and infrastructure operations.
- Continue to implement Saskatchewan's agricultural water management framework in the province to help assure continued productivity, enhance wetland habitat conservation and improve runoff management in times of both drought and flood.
- Advance options to focus on permanent flood damage reduction and flood mitigation projects and thereby increase resiliency of flood prone areas.
- Continue to improve the condition and resilience of provincially owned dams and water infrastructure.
- Commit, in partnership across Canada, to help develop a pathway to achieve Canada's Target 1 and establish a coordinated network of parks and conservation areas throughout Canada that will serve as the cornerstone for biodiversity conservation for generations to come.

Physical Infrastructure

Electricity

We will:

- Introduce regulations governing emissions from electricity generation by SaskPower and Independent Power Producers.
- Meet the province's commitment of up to 50 per cent electricity capacity from renewables, through:
 - > Increasing renewable energy sources, including wind and solar
 - > Investigating the feasibility of energy storage services to expand renewables capacity

- > Updating the provincial electricity dispatch method with emissions criteria to support reduced emissions.
- > Explore additional energy efficiency and conservation products and services to support emission reduction targets.

- Determine the viability of extending carbon capture use and storage technology to remaining coal power plants while continuing to work with partners on the potential application for CCUS technology globally.

Transportation and Related Infrastructure

We will:

- Monitor the highway system for vulnerabilities that could impact human health, property and transportation efficiency to help prioritize preventative maintenance and redesign.
- Create a freight strategy to improve delivery times, reduce fuel use, and increase efficiency.
- Increase the use of idle time limiters in government trucks to reduce fuel usage.
- Evaluate government fleet vehicles for lower-carbon technology opportunities.
- Continue to support industry in expanding the size and usage of the short haul (short line) rail systems.
- Expand the Trucking Partnership Program to increase fuel efficiency in freight hauling.
- Facilitate traffic data specific to Saskatchewan to mitigate emissions from congestion and idling.

Homes and Buildings

We will:

- Adopt the 2015 National Building Code, effective January 1, 2018, with provisions that improve energy efficiency standards for houses and small buildings taking effect January 1, 2019.
- Adopt the 2015 National Energy Code for Buildings, applicable to large buildings effective January 1, 2019.
- Facilitate provisions in the 2015 National Building Code that provide for increased use of wood in building construction in order to extend carbon storage.
- Explore options to label buildings for energy performance.
- Encourage industry to further develop innovative solutions to meet energy performance requirements.
- Increase the number of government buildings with a sustainability certification.
- Require new and renovated government buildings to exceed the energy performance requirements of the 2015 National Energy Code for Buildings by ten percent.
- Work with other provincial and territorial governments in collaboration with the National Research Council to improve standards for climate resilience in building design.

Large Industrial Emitters

We will:

- Implement sector-specific output-based performance standards on facilities emitting more than 25,000 tonnes of CO₂e per year.
- Obligate facilities that annually emit more than the regulated performance standard to take compliance actions. Flexible compliance options will allow these facilities to meet their obligations in the way best suited to their business models through:
 - > Making improvements at their facility to reduce emissions intensity.
 - > Purchasing an offset, representing a reduction in greenhouse gas emissions made by a non-regulated entity (e.g., in agriculture, forestry or other approved offset protocol).
 - > Using best performance credits, which will be generated by a regulated facility reducing emissions beyond what is required in the performance standard. Best performance credits could also be purchased from another entity, from another facility.
 - > Engaging in the market mechanisms outlined in the Paris Agreement, specifically internationally transferred mitigation outcomes (ITMOs).
 - > Paying into the provincial technology fund.

Technology and Innovation

We will:

- Enact a provincial technology fund as a compliance mechanism to further enable investment in transformative technologies and innovation.

Upstream Oil and Gas Industry

We will:

- In consultation with the oil and gas industry, develop regulations to reduce greenhouse gas emissions from oil and gas wells and facilities using a results-based system that:
 - > Provides each oil and gas operator the ability to efficiently prioritize emission reduction investments
 - > Supports adoption of innovative emissions reduction technologies
 - > Firmly establishes provincial regulatory oversight of emissions from the oil and gas industry
 - > Includes a strategy to support the increased use of methane produced in association with oil for heating and electricity production, including the establishment of usage requirements for this source of natural gas.

Community Preparedness

We will:

- Examine current floodplain mapping to identify local communities at greatest risk of flooding, fire, and extreme weather events.
- Encourage family preparedness plans, by making emergency preparedness guides and suggested emergency kit content lists available through Saskatchewan and local government websites.
- Maintain and enhance partnerships with First Nations and Métis communities to address and adapt to a changing climate through actions that are guided by traditional ecological knowledge.
- Encourage communities to develop appropriate plans and preparedness to respond and recover from extreme weather events.
- Encourage municipalities to consider disaster mitigation projects a priority when applying for infrastructure funding.
- Promote the upgrading of municipal waste and sewage management services to reduce, capture and use GHG emissions and biogas that would otherwise be released into the air, by making these projects a priority category for support under joint federal/provincial funding programs.

Measuring, Monitoring and Reporting

Industry Reporting

We will:

- Develop annual reporting regulations for industry that apply to:
 - > All emitters of more than 25,000 tonnes of CO₂e annually
 - > A voluntary opt-in for emitters over 10,000 tonnes of CO₂e annually.
 - > Explore options for tracking the import and export of emissions.
 - > In conjunction with the business community and the Canadian Securities Administrators, develop a draft guidance document to require climate-related financial disclosures by publicly-traded companies based in Saskatchewan.

Government Reporting

We will:

- Track and report across all areas of focus to convey progress in making our province more resilient to climate change.
- Report to the national and international community, through Canada's annual submission to the United Nations Framework Convention on Climate Change, on how Saskatchewan's actions are impacting greenhouse gas emissions and mitigating the effects of climate change.

What's next?



The next step is to move from strategy to action. The following milestones include time for consultation on the exact regulatory standards to be put in place, time to put the appropriate structures in place to implement the system, and planning to begin implementation on January 1, 2019.

1. **Engage on the strategy:** Release strategy for comment and consultation.
2. **Proclaim or amend enabling legislation.**
3. **Release additional documents for consultation.**
4. **Refine the plan:** Hold consultations to refine the plan and develop the standards.
5. **Release regulations and guidance documents:** Introduce resilience measures and regulatory standards.
6. **Establish reporting structures.**
7. **Begin implementation.**

In this document, we've outlined the province's strategic direction, with the aim of kicking off a new, more comprehensive conversation on how Saskatchewan is preparing for climate change. Consultations will strengthen our ability to apply appropriate and valuable insight so we can adopt a plan that fits the needs and characteristics of our province.

The Government of Saskatchewan will use existing legislation, such as *The Management and Reduction of Greenhouse Gases Act*, to proclaim and/or amend necessary sections to provide legislative authority for provincial regulation.