



Mailing Address

PO Box 1372
Saskatoon, SK S7K 3N9

Office

204-220 20th Street West
Saskatoon, SK

p 306.665.1915

f 306.955.5852

info@environmentalsociety.ca

Board of Directors

President

B. Weichel, M.Sc.

Vice President

S. D. Praski, FEC, P.Eng.

Treasurer

R. (Bob) Paisley, M.Sc., CPA, CMA

A. Coxworth, M.Sc.

S. Gersher, B.Sc. Hon.

K. Green, Sc.D.

R.A. (Bob) Halliday, P.Eng.

J.D. Henry, Ph.D.

M. Hidlebaugh, M.Sc.

Rev. M. McKechney, M.A., M. Div.

P. Prebble, M. SEM, M.Ed., BBA

W.J. (Bill) Wardell, Q.C.

Saskatchewan Environmental Society (SES) Written Submission to TransformSK

Saskatchewan faces the **enormous challenge of building a sustainable society in an era of climate change.**

The global community is increasingly becoming aware of the reality of climate change and how it will fundamentally threaten our quality of life unless drastic action is taken to reduce greenhouse gas (GHG) emissions. New research from the Prairie Climate Centre at the University of Winnipeg predicts that the Canadian prairies will likely warm faster than the global average. Although Saskatchewan might experience benefits in the short term such as a longer growing season, our province will face increasing risks from severe weather, floods and drought, crop failure, invasive species, forest fires, threats to human health and inadequate infrastructure, disaster management and response.

Building a sustainable society in this context means beginning the transition to low carbon communities while establishing an economy that can provide good jobs and sustain vital public services. It also means managing our environmental resources in a way that will support healthy and diverse ecosystems. Lastly, it means making policy choices that are fair and balanced.

Given Saskatchewan's greenhouse gas (GHG) emission profile and current economic structure, the transition to a sustainable society may be particularly challenging in our province. However, it is clear that continuing to invest in old ways of operating will not get us where we need to be. Luckily, Saskatchewan is home to many dynamic and reliable people and organizations who are considering these problems and whose varied expertise can help us invest in better solutions. We hope you will find the particular expertise of the Saskatchewan Environmental Society (SES) valuable in planning for this challenge.

The Government of Saskatchewan has recently suggested it intends to take climate change seriously. While this is a positive step, we need to be acting much more urgently to reduce our emissions and preparing our province to reap the full benefits of a clean energy future.

For the short term it is clear that in-province fossil fuel infrastructure will be required to transport oil and gas products, but it is crucial that this infrastructure is built and maintained in a way that safeguards public well-being and a clean environment, while providing clear rules for sustainable resource development. While maintaining this existing infrastructure is presently necessary, policies incentivizing and allowing



an *expansion* of the fossil fuel industry in the province do not align with a vision for a sustainable future.

The new plans to improve pipeline safety recently announced by the Saskatchewan Government are a good first step, but more needs to be done. To transform Saskatchewan in these areas, SES recommends:

1. Establishing **consistent regulations around pipeline infrastructure**, including:
 - requiring that oil pipeline projects crossing important water bodies should be subject to an environmental impact assessment;
 - regular and thorough inspections of oil pipelines and transparency in reporting (particularly the chemical make-up of any spill);
 - utilization of the latest spill detection technology and improving the timing and effectiveness of emergency response;
 - enhancing construction, including the use of heavier walled pipes for new pipelines as well as upgrading safety features on existing pipelines (such as technical or site stability upgrades);
2. **Improving the Environmental Impact Assessment process** by empowering the Ministry of Environment to hold proponents accountable for proposed actions and reject unsafe proposals. Alternatives should be seriously considered in the context of regional and provincial planning frameworks.
3. **Introducing stricter regulations governing hydraulic fracturing** for oil and gas with full transparency around guidelines.

Simultaneously, we must **act to reduce GHG emissions**, particularly in our largest emitting sectors of electricity, oil and gas mining, and transportation. While each global region has a unique relationship to the causes and impacts of climate change, each region must also do its share to reach near zero emissions by mid-century. This emissions target is vital to meet the global temperature goals (1.5 to 2 degrees Celsius above pre-industrial levels) that science has indicated are necessary to avoid dangerous climate change and a significant disruption to our quality of life. As a developed region, **Saskatchewan has a duty to lead in action on climate change** and in leading, will incentivize other less developed regions to action. We also need to act because it is fair; Saskatchewan is the highest GHG emitter per capita and per unit of GDP, and the fourth largest emitter in terms of absolute emissions in Canada.

The Saskatchewan Government has recently released a climate change White Paper that refers to innovation and adaptation. These are important approaches, and a carbon pricing mechanism could represent an important source of revenue to support these pursuits. Revenue could be recycled in a way to mitigate the impact to Saskatchewan trade-exposed industries, such as via output subsidies to reward production. Alternatively, a hybrid carbon pricing system might work best, involving performance intensity standards tied into a national cap-and-trade system. Both options should be examined to identify the most efficient and sensible option.



To transform Saskatchewan's climate change plan and reduce GHG emissions, SES recommends:

1. **Targeting the electricity sector as a source of major emissions reductions**, including planning for a complete coal phase-out by 2030, aggressively pursuing renewable energy production and energy efficiency.
2. Adopting **venting and flaring efficiency regulations**, such as the proposed federal regulations targeting a 45 per cent reduction in methane emissions by 2025. Alone, fugitive methane emissions from the oil and gas sector contribute 17 per cent (13 Mt) to Saskatchewan's annual emissions.
3. Employing a **variety of strategies to reduce emissions from Saskatchewan's transportation sector**, including encouraging a shift to rail transport, working with municipalities to develop convenient and reliable public transit services and incentivizing the purchase and use of highly energy efficient vehicles.

In the longer term Saskatchewan must work to fundamentally transform our government, economy and infrastructure. **Fortunately, there are many unique things about our province that will enable us to achieve a sustainable, prosperous society, if we have the self-discipline to make sensible investment choices.** Saskatchewan has world-class solar and wind potential – many independent businesses and entrepreneurs are waiting for additional opportunities to develop these industries. SaskPower's plans to double the percentage of renewable electricity generation by 2030 is a good start. The Government of Saskatchewan has also begun to plan around this opportunity, including the creation of new siting guidelines for wind energy projects. New policies and more ambitious commitments can get us even further. **To transform how we produce our energy in Saskatchewan**, SES recommends:

1. **Increasing the planned capacity for renewables** in the electricity generating mix. This could include seriously considering alternatives instead of automatically adding new fossil fuel capacity like natural gas, and also considering hydro imports from Manitoba, as well as energy efficiency or co-generation where appropriate.
2. **Incentivizing renewable energy development** through implementation of **feed-in-tariffs**, allowing those individuals and independent producers who generate renewable energy to receive a fair price for their electricity that reflects the actual installation cost. Feed-in-tariffs are present in Ontario, Nova Scotia and 70 other countries around the world.
3. **Increasing industrial rates for electricity** close to the rate farm and residential customers currently pay to incent energy efficiency or alternative options such as co-generation at mines and refineries.

Saskatchewan is also rich in natural capital, featuring many unique and pristine natural areas. For example, the Athabasca sand dunes are the most northerly active sand dune formation in the world and are home to several species of (endemic) plants found nowhere else in the world. In the north-east, the Cumberland Delta is the largest inland freshwater delta in North America and a nationally significant wildlife area. The south features native prairie, the most endangered ecosystem in the world – due to human impact and land conversion, only 21 per cent remains in Saskatchewan. Similarly, grassland bird populations have declined 40 per cent since the 1970's and approximately 50 species of plants and animals are presently considered species at risk.



Maintaining biodiversity is key to healthy ecosystems and supports outdoor activities such as angling and hunting, each of which contributes millions annually to Saskatchewan's economy. In an era of climate change, having healthy ecosystems will become even more important so that Saskatchewan's environment remains resilient to severe weather, prolonged droughts and floods, and invasive species.

Government of Saskatchewan initiatives such as the Representative Area Network (RAN) is a good first step. **To transform conservation and build environmental resilience in Saskatchewan**, SES recommends:

1. **Ensuring 17% of Saskatchewan's landscape is protected** (up from the current 10%), particularly in ecologically sensitive areas. This is in line with the federal government's commitment to the Un to protect 17% of the Canadian landscape. Specifically, we would recommend including new RAN areas such as the Churchill River, the Cumberland Delta and southern portions of the Great Sand Hills.
2. **Designating new, and expanding existing, provincial parks and conservation areas.** Priorities would include the Clearwater River Provincial Park and ensuring the protection of urban parks and conservation spaces such as the Meewasin Valley and Wascana Park.
3. Ensuring **former PFRA pastures** that play a vital role in rural communities **remain under public control** and that the government retain the **professional expertise to manage biodiversity** on public lands.

Saskatchewan is also blessed with water resources that are currently adequate, but vulnerable. Water supply is particularly critical in the semi-arid southern reaches of the province where the majority of the population lives. Our province has approximately 100,000 lakes, mostly in the sparsely populated north, and in the south, the Saskatchewan River Basin is the fourth largest river system in North America and the primary water provider for the three prairie provinces. Climate change will alter the processes of precipitation accumulation and melt, change the timing of flow, shrink mountain glaciers and lead to a general decrease in water availability. These changes will threaten the security of the water resources that support our communities and economy. The Government of Saskatchewan has begun to recognize the considerable challenge posed in managing our water resources into a future that will become increasingly complex and uncertain, and has established the Water Security Agency (WSA) and provided funding to the Global Institute for Water Security. The WSA's 25 Water Security Plan features many positive policy initiatives including plans to legislate safety requirements for dams, strengthen prevention and emergency responses to flooding, and initiates new data collection endeavors such as a wetland inventory and water availability studies.

To further **transform the way Saskatchewan manages water**, SES recommends:

1. **Planning for climate change**, including developing a drought contingency plan, a priority system for water allocations and building infrastructure to high safety standards. Planning should **expect significant variability in precipitation from the historical norm and changes in reliability.**



2. **Building strong ties with, and utilizing innovative research from, the Global Institute for Water Security.** Lack of knowledge increases the likelihood of regulatory mistakes. Specifically, there should be an increase in northern groundwater mapping and watershed planning initiatives for our valuable northern water resources.
3. **Looking for opportunities to decentralize decision-making around water and providing more provincial support for those engaged in watershed planning.** Specifically, adequate core funding should be provided to the 10 senior watershed advisory groups in SK and watershed plans should be integrated in official community plans.

While there is much work to be done to transition to a low-carbon, sustainable society, there are many unique opportunities in Saskatchewan that SES believes will allow us to build a prosperous future. Climate change is an immense challenge and any transformational change planned for the province has to be considered in this context. We have to look for new ways to diversify our economy – whether through diversified agricultural production, small-scale processing or manufacturing – and have to engage industry experts willing to be innovative and unconventional. **Ideally, connections could be made between groups with varying expertise to build a robust planning structure that will clearly articulate the policy options available to us and the trade-offs associated with each.** Such connections could be made in a venue that was accessible to all Saskatchewan residents and created lateral lines of communication between stakeholder groups with unique perspectives and expertise. It is our hope the #TransformSK Summit can serve as the beginning of this conversation.

Sincerely,

Hayley Carlson, **Policy Coordinator**
Ann Coxworth, **Researcher and Board Member**

On behalf of the Saskatchewan Environmental Society.

The Saskatchewan Environmental Society (SES) is a non-profit, registered charity that is committed to supporting sustainable living and sustainable resource use in Saskatchewan. We work with, and on behalf of, communities, organizations, businesses and policy makers to encourage informed decision-making that moves us towards sustainability. SES's current action areas include sustainable energy and climate solutions, water protection, resource conservation, biodiversity preservation, and reduction of toxic substances.