



**Smart Prosperity
Institute**

COMMENTARY ON THE DRAFT 2019- 2022 FEDERAL SUSTAINABLE DEVELOPMENT STRATEGY

MARCH 2019

SUBMISSION

COMMENTARY ON CANADA'S DRAFT 2019-2022 FEDERAL SUSTAINABLE DEVELOPMENT STRATEGY

Introduction

Smart Prosperity Institute (SPI) is a national research network and policy think tank based at the University of Ottawa. We deliver world-class research and work with public and private partners – all to advance practical policies and market solutions for a stronger, cleaner economy.

SPI welcomes the opportunity to participate in the development of Canada's 2019-2022 Federal Sustainable Development Strategy (FSDS). At its core, our aim reflects many of the basic principles of sustainable development. We are focused on demonstrating how addressing environmental challenges is inextricably linked with both long-term economic opportunity and the ability of future generations and communities to thrive. A growing number of companies, countries, and civil society leaders around the world are recognizing environmental sustainability as being critical for a healthy economy and livable communities.ⁱ

The importance of public consultation in the development of the Federal Sustainable Development Strategy cannot be understated. SPI has been proud to participate in the consultations for previous the Federal Sustainable Development Strategies in 2010, 2013, and [2016](#) (under our former name, Sustainable Prosperity). Many of the recommendations offered by SPI and others on previous iterations of the FSDS have been adopted, demonstrating a laudable willingness to adapt and improve the strategy, as well as the efficacy of this consultation process.

The 2019-2022 draft FSDS continues to build on the progress of recent reports including: additional and improved indicators that are more specific, measurable, achievable, relevant, and time-bound (SMART) and better linking with international commitments including the sustainable development goals. Additionally, recent changes to the Sustainable Development Act (2008) recognize that sustainable development transcends traditional departmental silos and requires a concerted effort across government to put Canada on a path toward achieving our goals by extending coverage from 26 departments to more than 90.ⁱⁱ

Smart Prosperity Institute offers the following comments on opportunities to build upon the current draft FSDS to continue to advance sustainable development in Canada.

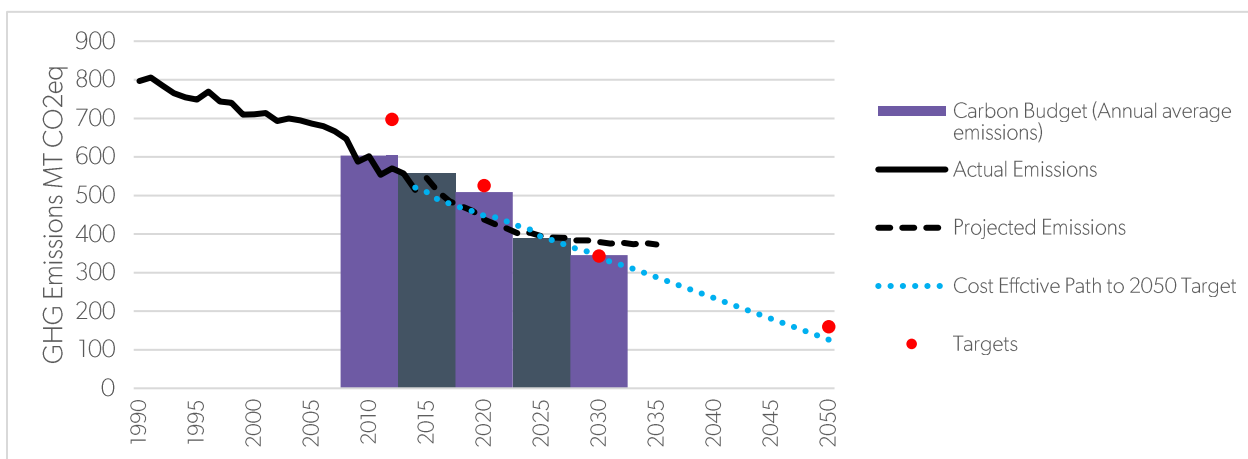
Commentary

Build upon recent efforts to craft accountable and predictable climate policy

The nationwide price on carbon, in effect as of April 1, is an important tool to reduce greenhouse gas emissions across the country. Carbon pricing has been shown to reduce emissions at the lowest cost as well as encourage innovation. British Columbia's carbon tax has proven the efficacy of this policy, where emissions are 5-15% lower than without a carbon tax and the economy has grown by 17% from 2008 to 2015.ⁱⁱⁱ However, meeting Canada's climate commitments will require more than the currently planned carbon price and complementary policies.^{iv} [Businesses are largely in agreement](#) that carbon pricing is an important part of the policy mix to cost-effectively reduce emissions, but seek long-term policy predictability to make informed investment decisions which will drive clean growth.

Ensuring Canada's climate targets are achieved and that the right policy mix is developed to stimulate clean growth could benefit from arm's-length accountability structures such as the United Kingdom's Committee

on Climate Change. The UK's Climate Change Act (2008) established the Committee on Climate Change, an independent body of experts mandated to report on progress toward achieving GHG reduction targets annually and provide recommendations for policies to achieve future targets and policies.^v The Act also calls for legally binding carbon budgets for rolling five-year periods set 10 years in advance. The fifth carbon budget for 2028-2032 was set in June 2016 and included a target reduction of 57% below 1990 levels by 2030.^{vi,vii} The UK has continued to increase stringency with its commitment to the Paris Agreement (2015) and with a target of net-zero carbon emissions by 2050 enshrined in law.^{viii} Despite government changes in the UK since 2008, support has remained for the current schedule of carbon budgets.^{ix}



Continuing to develop measurable and performance-based short-term actions where possible

The 2019-2022 Federal Sustainable Development Strategy continues to build upon past strategies with targets that are more specific, measurable, achievable, relevant, and time-bound (SMART) as well as milestones to achieve them. Recognizing that additional detail emerging from policy, program, and budget announcements in recent years has facilitated more specificity in target setting, there remains room for improvement.

For example, under the clean growth goal, the current milestone of “increase the value of Canada’s exports of clean technologies by 2020” (which will almost certainly occur regardless of intervention) a more specific metric such as [the Cleantech Economic Sector Strategy Table’s](#) target of “tripling current value to \$20 billion in cleantech exports by 2025” provides a far SMARTer target.

Additionally, setting outcome and performance-based targets where possible is desirable. While setting a concrete target of the amount of investment to be made may be most readily measurable and achievable, it does not necessarily mean that the aspirational goals set out in the strategy will be reached. While some areas such as zero emission vehicle infrastructure include measurable, term-bound targets for results to be achieved (e.x. 900 EV charging stations between 2018-2024) other areas do not have the same degree of specificity.

Organization and structure

The complementary web and print versions of the FSDS provide an easy-to-use interface for engaging with the strategy. In particular, the web interface that allows for filtering goals, targets, and milestones by different criterion is a user-friendly approach that has improved over recent years. Utilizing this interface to link targets and milestones with the most up to date metrics could provide an ever-green report for evaluating progress.

As a point of structure, the numbering of goals and targets that have been included in previous iterations of the FSDS has been useful in organizing and communicating the strategy. Returning to that type of approach can be helpful to readers as they navigate the strategy.

Recognizing the dual role of sustainable public procurement

SPI applauds recognition in the 2019-2022 FSDS that public procurement can play an important role in sustainable development not only to improve the environmental performance of government operations but also to support the demonstration of emerging Canadian clean technologies. Leading by example is important and the government's Greening Government Strategy sets out strong commitments. Notably, imposing an internal carbon tax/fee on direct or indirect emissions (net of any provincial carbon prices), and reinvesting revenues within government or creating an incentive fund for low-carbon innovation is a strong tool to achieve their commitments.

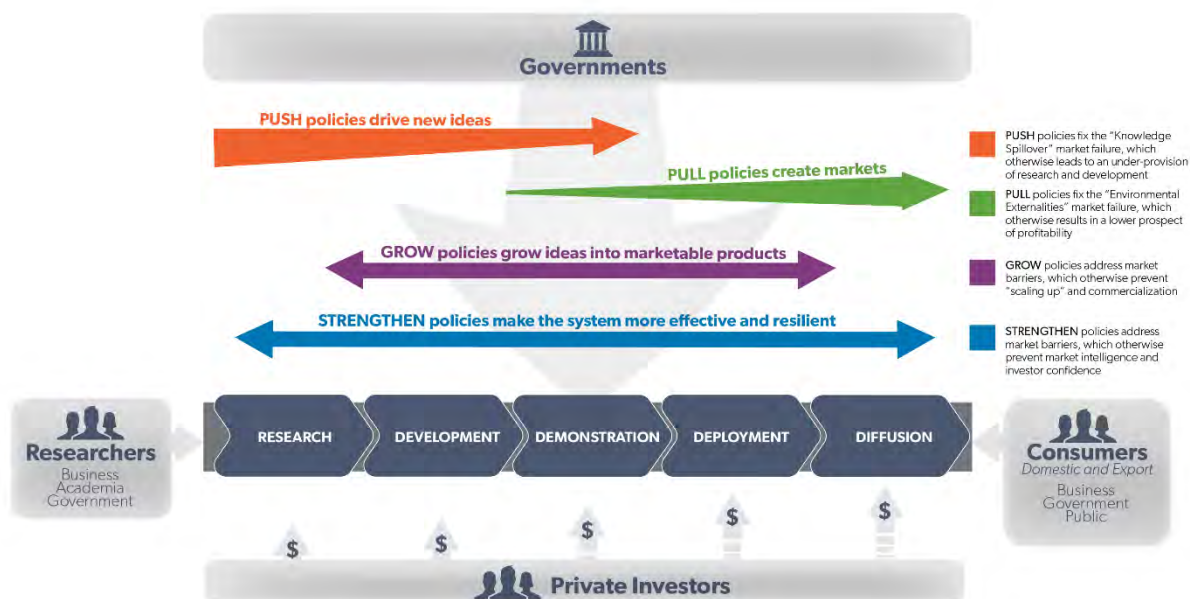
As the country's largest buyer, governments can also play a key role as early adopters of Canadian clean technologies. By serving as a test-bed for the development of promising new technologies and/or providing the initial contract for new technologies, governments can play an important role in attracting private investment and opening export markets.

Clean growth requires a holistic approach to driving clean innovation

Clean growth represents an economy-wide opportunity and Canada has many of the tools to succeed. However accelerating clean growth system requires more than just PUSH policies – such as public R&D financing, set out as the only target for the clean growth goal -- to perform effectively.

As outlined in our [recent report on clean innovation](#): Canada performs comparatively well in the early stages of clean innovation, such as research and development (R&D). But our performance drops off as budding clean technologies move towards commercialization and market deployment – where the majority of jobs and wealth are created. For example, Canada has a promising cadre of emerging cleantech companies poised for growth, including 12 of the Global Cleantech 100, companies expected to make the biggest impact in the next 10 years.^x However, access to finance is limiting the opportunity for emerging Canadian companies to scale up.^{xi}

The government has commendably taken significant steps in recent years to support different parts of the clean innovation system, notably in [Budget 2017](#). Although some of these other aspects are included as *milestones* towards the 'Clean Growth' goal, including public R&D investment as the only *target* oversimplifies the systemic nature of clean growth.



Market-based instruments can support sustainability goals beyond climate change

Market-based instruments have the advantage of offering flexibility to find the lowest cost compliance options. Such innovative policy tools can be applied beyond carbon pricing and can help address water quality challenges faced by some of Canada's important water bodies.

The goal of 'Pristine Lakes and Rivers' specifically highlights targets for Lake Erie and Lake Winnipeg that are facing significant water quality challenges, predominantly due to nutrient runoff in their respective watersheds. Addressing nutrient pollution in Lake Winnipeg and Lake Erie could be supported through the use of water quality trading. Water quality trading is a market-based mechanism that allows point sources of water pollution with high abatement costs to purchase offset credits from entities with lower-cost abatement opportunities in order to meet regulatory requirements. While water quality trading involves complex design and administration, it can significantly reduce the overall cost of pollution abatement while maintaining the polluter-pays principle, providing a financial incentive for conservation farming practices and, when designed well, can reduce overall nutrient pollution in the watershed. This can come with co-benefits such as increased farm competitiveness, reduced fertilizer inputs, and improved soil carbon retention. Recent research conducted by Smart Prosperity Institute in partnership with the Centre for Indigenous Environmental Resources examines the opportunity for implementing a water quality trading system to address pollution in Lake Winnipeg.

Benchmarking Canadian progress against peer countries

The FSDS importantly recognizes the links to the Sustainable Development Goals and some of the targets set out by them, including a detailed breakdown in Annex 3. As a measure of progress toward achieving these goals and targets, comparing Canada's performance to internationally with peers for indicators that align both with the Sustainable Development goals and the FSDS can provide an illustration of Canada's ambition and progress, in collaboration with Statistics Canada's SDG Data Hub. International benchmarking can also help to identify best practices around the world from which Canada can learn.

Addressing resource efficiency and moving to a circular economy

A notable area of omission in the current suite of goals in the Federal Sustainable Development Strategy is improving resource efficiency and reducing waste. While waste diversion targets are set for government

operations under the goal of ‘Greening Government’ and eliminating plastic waste is touched upon under the ‘Clean Growth’ goal, resource efficiency and waste reduction are an important component of sustainability that Canada must improve upon and is insufficiently integrated into the FSDS.

Demand for limited resource stocks, such as metals, biomass, minerals, and other materials, is expected to grow from 50 billion tons in 2014 to 130 billion tons by 2050.^{xii} The circular economy model is an emerging response to environmental pressures created through the current *take-make-waste* model of production by shifting toward a *take-make-reuse* model. Introducing targets and indicators for resource productivity, domestic material consumption per capita, food waste, and waste diversion, among others, will help measure our progress in moving towards a circular economy. For more, see SPI’s [primer on circular economy](#).

Improving outcomes for Canada’s species at risk - reforming policy and measurement

The FSDS recognizes the need to bolster federal efforts to protect and recover species at risk (SAR) populations, and for good reason – the population trends are sobering.^{xiii} These trends prompted Smart Prosperity Institute to undertake an [in-depth analysis of species at risk policy](#) to identify opportunities for improving outcomes for SAR conservation in Canada. Key recommendations included fully using the legislative provisions (such as emergency protection orders) contained within the *Species at Risk Act* (SARA), promoting stewardship on private land, making strategic use of place-based (multispecies and ecosystem) approaches to SAR recovery planning, and augmenting overall funding for SAR conservation. The report also called for increasing federal efforts on data collection, reporting and transparency on various dimensions of SAR policy to improve overall decision making.^{xiv}

Since the release of SPI’s report in February 2018, the government has made laudable efforts to advance SAR conservation – many of which were in line with our recommendations. Budget 2018 made a historic \$1.3 billion investment in nature conservation (including for species at risk) over five years, including a \$500 million contribution to the Nature Fund (with another \$500 million to be provided by provincial and territorial governments and other partners, for a total endowment of \$1 billion).^{xv} A portion of these funds will be devoted to stewardship and securement of private lands.^{xvi} And the *Pan-Canadian approach to transforming species at risk conservation in Canada* is advancing multispecies action plans for 11 priority places in collaboration with other governments and stakeholders.^{xvii}

While these new measures are encouraging, neglecting fundamental issues of data collection, reporting, and transparency runs the risk of unintentionally diluting or compromising conservation outcomes. For instance, the absence of reporting on the extent to which critical habitat (CH) has been identified – and protected – on non-federal land is a major omission from the FSDS. A recent analysis of 391 finalized recovery strategies for species listed under SARA has shown that only 20% of them have their CH fully identified, whereas CH has only been partially identified^{xviii} for another 42% of recovery strategies. Several stakeholders interviewed for SPI’s species at risk report noted that many SAR only have the full extent of their CH identified on federal land or in aquatic ecosystems (where the federal government has clear jurisdiction for enforcing SARA).^{xix} Given that automatic protections flow from the identification of CH, its identification is a lynchpin for effective SARA implementation. Fully identifying the extent of CH on non-federal lands would then help the federal government to determine whether SAR are being effectively protected on these lands, and whether stewardship agreements or protection orders would be necessary – two areas where much progress still needs to be made.^{xx}

In other cases the government has chosen a suitable indicator, but without the appropriate clarifications there are risks of the public misunderstanding its significance. For instance, the ‘Healthy Wildlife Populations’ goal has a medium-term target of ensuring that “by 2020, species that are secure remain secure and populations of species at risk listed under federal law exhibit trends that are consistent with recovery strategies and management plans”. Although the goal itself is sound, we know from experience

that changes in conservation status (e.g. threatened or endangered) assigned to species by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) are sometimes due to factors that are unrelated to the implementation of recovery measures, such as changes to the criteria employed by COSEWIC for assigning species status, or because new information was acquired, such as the discovery of a previously unknown population(s).^{xxi} We believe that the Canadian public has a right to know the extent to which improvements in species populations is attributable to new information and changing evaluative criteria, so that they can better gauge the contributions of government policy to improving conservation outcomes.

Finally, the government should make the detailed datasets underlining some basic headline indicators on SAR policy accessible to the public. For instance, the Healthy Wildlife Populations goal has a medium-term objective for 2023 of ensuring that “protection and recovery actions are being implemented by partner organizations for a high percentage of the 200 terrestrial species at risk through collaborative investment and action for shared priority places, species and threats.”^{xxii} Making the entire dataset of implemented recovery actions for each species publicly accessible would improve transparency and provide additional information to evaluate outcomes.^{xxiii} Similarly, although information on total federal government expenditures on species at risk is easily retrievable, data on federal government expenditures *per species* have not been published since 2005/2006, and it is not clear whether these data have been collected since then.^{xxiv} The lack of these datasets (implemented recovery actions and expenditures per species) has been a major impediment to statistically analyzing the factors associated with species at risk recovery in the Canadian context. By contrast, several such assessments have been undertaken for the *United States Endangered Species Act*.^{xxv}

In summary, while Smart Prosperity Institute applauds the government for its recent efforts to increase funding for species at risk and to advance SARA implementation, there is also a need to consolidate the ‘information ecosystem’ to foster transparency and institutional learning. To that end, we recommend that the federal government:

- Articulates an additional medium-term target stating that “by 2023, all species listed under Canada’s species at risk act will have the full extent of their critical habitat identified on federal and non-federal lands in finalized recovery strategies.”
- Clearly disaggregates the proportion of species at risk whose population trends are consistent with their respective recovery strategies and management plans due to the following factors: (i) changes in COSEWIC’s assessment criteria; (ii) discovery of new information (e.g. a previously unidentified population); (iii) measured changes in population abundance or distribution (or other appropriate biological indicators).
- Provides a publicly accessible database on implemented recovery actions and expenditures for all species listed under SARA by 2023 (this information could be included as a technical appendix to the FSDS document).

Conclusion

The 2019-2022 Federal Sustainable Development Strategy marks continued progress in developing a holistic approach to monitoring advancement towards sustainable development in Canada. In particular, steps to expand the scope of the FSDS across departments is a welcome move to embed sustainability throughout government. However, there remains room for improvement. Notable gaps in setting measurable targets and goals for material waste reduction present opportunities for the continued development of Canada’s FSDS.

We trust that our comments will be received as they are intended – to constructively contribute to the efforts of the government to improve the FSDS as a key planning and reporting tool for sustainable development in Canada, and a major pillar of Canada’s response to the Sustainable Development Goals endorsed by the global community. We look forward to the release of a final version of the Strategy that continues to build upon this positive momentum.

References

- ⁱ Dobbs, R., Oppenheim, J., Thompson, F., Brinkman, M., and Zornes, M. (2011) [Resource Revolution: Meeting the world's energy, materials, food, and water needs](#), McKinsey & Company, November 2011.
- OECD (2011) [Fostering Innovation for Green Growth](#), *OECD Green Growth Studies*.
- Business and Sustainable Development Commission (2017) Better Business, Better World, *Business and Sustainable Development Commission*.
- ⁱⁱ Seante of Canada (2019) [Bill C-57: Senate improves Canada's federal sustainability laws](#), Government of Canada.
- ⁱⁱⁱ Murray, B., Rivers, N. (2015). British Columbia's revenue-neutral carbon tax: A review of the latest "grand experiment" in environmental policy. *Energy Policy*, 86: 674-683.
- Monahan, K. and McFatrige, S. (2018) [Looking Back at B.C.'s Carbon Tax](#), *Smart Prosperity Institute*.
- ^{iv} Environment and Climate Change Canada (2017) [Canada's 7th National Communication and 3rd Biennial Report](#), Government of Canada.
- ^v Committee on Climate Change (2016) [About Us](#).
- ^{vi} Thompson, M. (2016) [The Fifth Carbon Budget – a balance path to a necessary goal](#), Committee on Climate Change, 31 March 2016.
- ^{vii} Vulliamy, E. (2016) [UK to Reduce Greenhouse Gas Emissions by 57% by 2030](#), *Independent*, 30 June 2016.
- ^{viii} Vaughn, A. (2016) [UK sets ambitious new 2030s carbon target](#), *The Guardian*, 30 June 2016.
- ^{ix} Vaughn, A. (2016) [UK sets ambitious new 2030s carbon target](#), *The Guardian*, 30 June 2016.
- ^x Cleantech Group (2019) [Global Cleantech 100 - 2019](#), *The Cleantech Group*.
- ^{xi} Brownlee, M., Elgie, S., and Scott, W. (2018) [Canada's Next Edge: Why Clean Innovation is Critical Canada's Economy and How We Get it Right](#), *Smart Prosperity Institute*.
- ^{xii} Lacy, P., Keeble, J., McNamara, R. (2014). Circular Advantage: Innovative Business Models and Technologies to Create Value in a World Without Limits to Growth, Accenture Strategy
- ^{xiii} For instance, Environment and Climate Change Canada assessed 126 SAR Recovery Strategies and Management Plans that have outlined population recovery objectives and re-assessed SAR population trends over time, and found that 52 (41%) of them show progress towards objectives, evidence is mixed for 15 species (12%), and 59 species (47%) fail to show signs of progress. See Environment and Climate Change Canada (2019) [Canadian Environmental Sustainability Indicators: Species at Risk Population Trends](#), Environment and Climate Change Canada.
- ^{xiv} For the full list of recommendations, see McFatrige, S., Young, T., et al. (2018a) [Species in the Balance: Partnering on tools and incentives to recover species at risk](#), *Smart Prosperity Institute*; McFatrige, S. (2018b) [Economic Instruments for Protecting Species at Risk on Private Land](#), *Smart Prosperity Institute*.
- ^{xv} Government of Canada (2018a) [Budget 2018: Equality + Growth = A Strong Middle Class](#), Department of Finance Canada.
- ^{xvi} *Ibid.*
- ^{xvii} Government of Canada (2018b) [Overview of the Pan-Canadian approach to transforming species at risk conservation in Canada](#), Government of Canada.
- ^{xviii} Although not formally defined under the *Species at Risk Act*, 'partially identified' critical habitat is generally "[understood] within the recovery strategies as inadequate for species recovery (even if all known and available habitat is designated) or needing additional study before full Critical Habitat designation is possible." Bird, S.C., Hodges, K. [Critical habitat designation for Canadian listed species: Slow, biased, and incomplete](#), *Environmental Science & Policy* 71: 1-8.
- ^{xix} McFatrige, Young, et al. (2018), *op. cit.*
- ^{xx} See discussion in Wojciechowski, S., McKee, S., Brassard, C., et al. (2011) [SARA's Safety Net Provisions and the Effectiveness of Species at Risk Protection on Non-Federal Lands](#), *Journal of Environmental Law and Practice* 22: 203-222; also McFatrige, Young et al., *op. cit.*
- ^{xxi} Khair, S., McIntosh, S.J., Stoyanovich, S., Greenwald, N., Suckling, K. and Findlay, C.S. (2019) "Empirical correlates of SAR recovery." *Department of Biology and Institute of Environment Working Paper, University of Ottawa*. Summary of preliminary findings contributed by authors to section 4 of McFatrige, Young, et al. (2018), *op. cit.*
- ^{xxii} Government of Canada (2018b), *op. cit.*
- ^{xxiii} Khair, McIntosh and Stoyanovich (2019), *op. cit.*
- ^{xxiv} *Ibid.*
- ^{xxv} See e.g. Ferraro, P., McIntosh, C., Ospina, M.. (2007) [The Effectiveness of the US Endangered Species Act: An Econometric Analysis Using Matching Methods](#), *Journal of Environmental Economics and Management*, 54: 245-261; Langpap, C., Kerkvliet, J. (2010) [Allocating Conservation Resources Under The Endangered Species Act](#), *American*