

# Leading the way?

A critical assessment of the federal  
Greening Government Strategy

Hadrian Mertins-Kirkwood and Jonah Somers





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**ABOUT THE AUTHORS**

Hadrian Mertins-Kirkwood is a senior researcher with the Canadian Centre for Policy Alternatives, where he focuses on the social and economic dimensions of Canada's shift toward a zero-carbon economy.

Jonah Somers is a master's student in the Institute of Political Economy at Carleton University, where he studies labour, Big Tech, data commodification and privacy.

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# Leading the way?

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## Introduction

As part of its broader sustainability plans the federal government has committed to “greening” government—reducing greenhouse gas emissions from its own operations, which includes real property (buildings), fleets (vehicles) and public procurement.

The federal government is one of the largest owners of property and vehicles in the country as well as the largest procuring entity, so cleaning up its own operations can make a meaningful contribution to Canada’s emission reduction targets. Moreover, the federal government plays an important role in demonstrating to other levels of government and the private sector how emissions reductions can be achieved.

To date, the federal government’s sustainability initiatives have had mixed success. On the one hand, government emissions have fallen significantly in the past two decades and the government has put in place a comprehensive Greening Government Strategy with a goal of achieving net-zero emissions by 2050. On the other hand, emissions have been creeping up in recent years and the government’s strategy includes potential loopholes for major emissions sources. Looking ahead, it’s not clear that the government’s emission reduction policies are sufficient to meet the net-zero goal.

This report provides a critical assessment of the federal government’s plans and policies to reduce greenhouse gas emissions from public operations. It begins with a breakdown of current government emissions followed by an overview of government sustainability plans before turning to a discussion of key issues with the government’s current approach.

We highlight three outstanding obstacles to achieving a truly green government: (1) loopholes for the biggest public emitters, such as the Department of National Defence; (2) a focus on low-hanging fruit rather than longer-term, structural changes; and (3) inadequate support for the public service, which is ultimately responsible for implementing emission reduction programs.

We conclude that the pursuit of a green government is worthwhile, but any plans and policies intended to reduce emissions from federal government operations must be more expansive and ambitious in order to address the urgency of the climate crisis.

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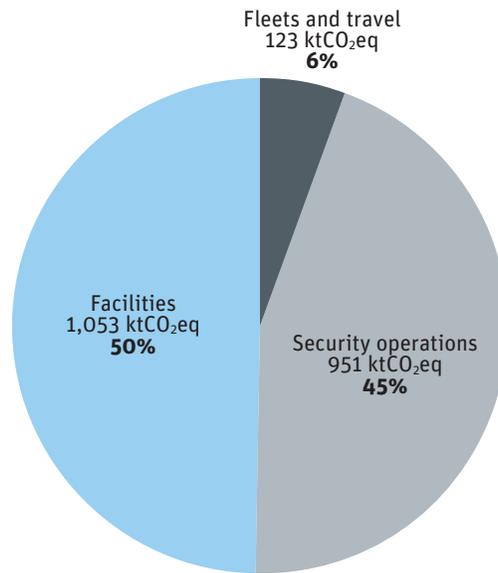
## **Overview of greenhouse gas emissions from federal government operations**

Emissions from federal government operations can be grouped into four general categories:

1. Real property, which includes buildings owned and leased by the federal government as well as operational waste;
2. Mobility, which includes government-owned administrative fleets, commuting and business travel;
3. National security, which refers specifically to vehicle emissions associated with the operations of the Department of National Defence, Royal Canadian Mounted Police and Canadian Coast Guard; and,
4. Procurement, which includes government contracts to external providers of goods and services not already covered by the first three categories.

Emissions from government procurement outside of the first three categories (i.e., goods and services not related to buildings or vehicles) are difficult to measure and are not included in the government’s own data. As such we are unable to estimate their overall contribution to the federal government’s emissions. However, so-called “Scope 3” emissions were included in the

**FIGURE 1** Greenhouse gas emissions from federal facilities, fleets and security operations



**Note** Totals may not add due to rounding.

**Source** Centre for Greening Government, "Government of Canada's Greenhouse Gas Emissions Inventory."

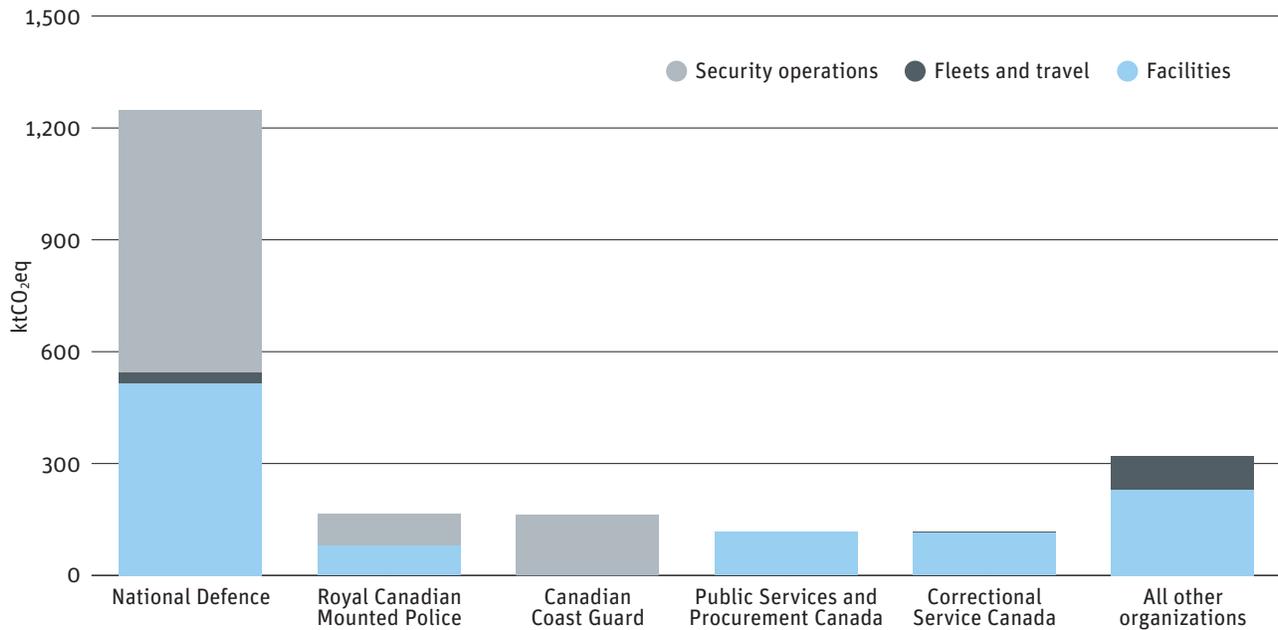
Greening Government Strategy in the December 2020 update, so improved data collection and reporting in this area is expected to become a higher priority moving forward.\*

The three categories for which data are currently available together accounted for 2,128 kilotonnes (kt) of carbon dioxide equivalent (CO<sub>2</sub> eq) in fiscal year 2019–20.<sup>1</sup> Real property was responsible for 1,053 kt or just under 50% of the total. National security operations produced 951 kt or 45% of the total. Administrative fleets and travel accounted for the remaining 123 kt or 6% of federal emissions (see Figure 1). Altogether, these sources account for about 0.3% of total Canadian greenhouse gas emissions.<sup>2</sup>

Facilities emissions are primarily the product of fossil fuel combustion for heating, cooling and electricity. The combustion of natural gas alone accounted for 52% of emissions from federal buildings in 2019–20. Electricity

\* Scope 1 emissions are produced directly through the combustion of fossil fuels by government-owned vehicles and buildings. Scope 2 emissions are produced indirectly through the generation of energy used in government operations (e.g., electricity generated by power plants that provide power to federal buildings). Scope 3 emissions are produced by external organizations related to federal government operations. For example, if the federal government contracts work out to a consulting firm, that firm's emissions are considered Scope 3 emissions for the federal government.

**FIGURE 2** Emissions from federal facilities, fleets and security operations by department



Source: Centre for Greening Government, "Government of Canada's Greenhouse Gas Emissions Inventory."

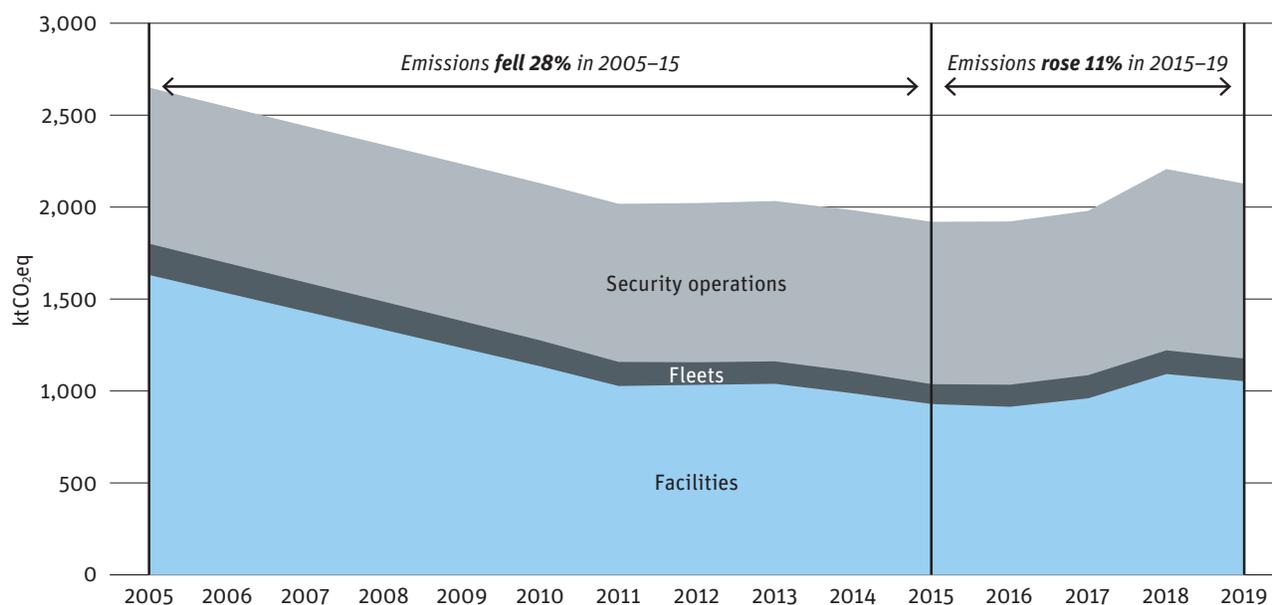
accounted for another 30% of emissions, which is generally a byproduct of the prevailing energy grid where facilities are located. For example, the provinces of Alberta, Saskatchewan and Nova Scotia, which still rely on gas and coal combustion for much of their power, accounted for 76% of the federal government's total electricity emissions even though only 20% of federal facilities are located in those provinces.

Fleet emissions are primarily a product of vehicle exhaust. The combustion of diesel fuel accounted for 50% of federal fleet emissions in 2019–20 followed by gasoline (35%), aviation fuel (8%) and biofuels (6%).

Security operations emissions are also a product of vehicle exhaust. Aviation emissions accounted for 62% of the category total in 2019–20, followed by marine emissions (29%) and land vehicle emissions (9%).

Emissions are not evenly distributed between government organizations. It is clear that national security concerns dominate all other aspects of government. The Department of National Defence alone accounted for 59% of federal emissions in 2019–20, followed by the Royal Canadian Mounted Police (8%) and Canadian Coast Guard (8%) (see Figure 2). Notably, Crown corporations are not counted in federal emissions inventories and are not covered by greening government policies, so there may be other federal

**FIGURE 3** Change in federal government emissions, 2005–19



**Note** Fleets and facilities data are unavailable between 2006 and 2010. Security operations emissions are unavailable between 2006 and 2017. Missing data are inferred from the available historical data. Travel emissions data are unavailable before 2019 and are excluded entirely.  
**Source** Centre for Greening Government, “Government of Canada’s Greenhouse Gas Emissions Inventory.”

government bodies that are significant emitters, such as the Trans Mountain Corporation, which is responsible for the construction and operation of certain oil pipelines.

Federal emissions have declined by 20% overall since 2005 (see Figure 3), led by a 35% reduction in facilities emissions and a 27% reduction in fleet emissions. However, security operation emissions increased by 12% in the same period. Moreover, this longer-term trend obscures a more recent reversal. Emissions declined by 28% between 2005 and 2015 but have since increased by 11% overall.

The large apparent reduction in facilities emissions since 2005 can be explained in part by the rationalization of the government’s property portfolio during that time.<sup>3</sup> In other words, the sale of federal buildings may create the appearance of reductions in federal emissions accounting even where there were no meaningful improvements in energy efficiency or energy generation. Likewise, provincial-level efforts to reduce emissions from electricity generation, such as the phase-out of coal power in Ontario, reduced federal facilities emissions even where the federal government itself took no action.

In sum, the federal government makes a relatively small direct contribution to national emissions despite its extensive operations. The largest source of federal emissions is the combustion of fossil fuels to heat and power government buildings. The second largest source is vehicles involved in national security operations. At an organizational level, the Department of National Defence alone accounts for the majority of federal emissions followed by other organizations involved in national security and public safety operations. While emissions have declined overall in the past few decades, the trend has reversed in recent years and federal operational emissions are once again on the rise.

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## Federal government emission reduction plans

Responsibility for overseeing the federal government's sustainability agenda originally lay with Public Services and Procurement Canada, which created the Office of Greening Government Operations in 2005. Responsibility was shifted to Treasury Board in 2016 with the creation of the Centre for Greening Government, which now leads and coordinates emissions reduction and adaptation initiatives across the federal government.<sup>4</sup>

The government has introduced a variety of sustainability policies and plans over the past two decades. Most significantly, Parliament passed the Federal Sustainable Development Act in 2008, which requires the federal government to produce, implement and monitor a whole-of-government Federal Sustainable Development Strategy (FSDS).<sup>5</sup> The FSDS is intended to integrate environmental considerations into all aspects of government decision making by prescribing targets and implementation strategies. Four versions of the FSDS have since been released, covering the periods 2010–13, 2013–16, 2016–19 and 2019–22.<sup>6</sup>

The government released a Greening Government Strategy in 2017 to advance specific elements of the FSDS.<sup>7</sup> The latest federal climate plan, released in December 2020, enhanced the Greening Government Strategy with more ambitious targets and a broader scope.<sup>8</sup> The 2021 federal budget further reiterated the government's commitment to prioritize lower-carbon fuels and procurement.<sup>9</sup>

Together, these documents lay out the government's latest commitments for reducing emissions from federal operations as well as their current thinking on how those ambitions can be achieved.

The government's overall target is to achieve net-zero operational emissions by 2050, which is consistent with the broader national goal of a net-zero economy by mid-century. To that end, the government aims to reduce direct (i.e., Scope 1 and Scope 2) operational emissions by 40% below 2005 levels by 2025 and all emissions by 90% below 2005 levels by 2050. The remaining 10% of emissions will theoretically be offset by natural carbon sinks and negative emission technologies.

Efforts to reduce emissions from federal buildings focus on energy efficiency and clean energy. All new federal buildings will be net-zero compatible. Existing buildings will transition to 100% renewable electricity by 2025 while raising standards for energy efficiency. Leased facilities where the federal government is the primary tenant are also covered by the strategy, though standards for these buildings are lower and the deadlines are later. For example, only 75% of new leases starting in 2030 must be in net-zero buildings.

Efforts to reduce emissions from federal fleets focus on zero-emission vehicles (ZEVs). At least 80% of conventional federal vehicles will be ZEVs or hybrids by 2030, including 75% of new vehicle purchases moving forward. However, national security fleets, which account for a far larger share of emissions, are exempt from the 2025 target. New, lower-emitting technologies will only be adopted by Canadian national security organizations "when available, affordable and operationally feasible," though they are still beholden to the 2050 target.<sup>10</sup>

Since government procurement emissions outside of buildings and fleets are not tracked, there are no concrete targets in this area. However, the government does commit to incorporating emission reduction criteria into procurement decisions. More recently, the Canadian and U.S. governments announced a joint Greening Government Initiative that focuses on procurement, though no concrete measures are yet in place.<sup>11</sup>

Other federal commitments relate to waste management, sustainable materials and resilient infrastructure. Though important, these are not emission reduction measures and are therefore beyond the scope of this report.

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## Key issues

The federal government's commitment to reducing greenhouse gas emissions from its own operations sets an important precedent for other levels of government and other sectors of the economy. However, several potential obstacles stand in the way of achieving a net-zero government based on current plans and policies.

## National security loopholes

The most obvious and serious challenge is the outsized contribution of national security operations to federal government emissions. The three largest public emitters—National Defence, the RCMP and the Coast Guard—are exempt from key commitments in the Greening Government Strategy. Specifically, while these organizations are beholden to the 2025 target for facilities and administrative fleets, their operational fleets (i.e., air, marine and police vehicles) are only subject to the 2050 target.

These departments are required by 2023 to develop decarbonization plans for their operations. However, there is a real risk that in the absence of interim targets, national security emissions, which have grown to 45% of the federal total, will continue to rise for the foreseeable future.

To date, the government's approach in this area has been to focus on lower-carbon fuels. For example, Budget 2021 included \$228 million toward a new Low-Carbon Fuel Procurement program for air and marine fleets.<sup>12</sup> Although this approach will likely lead to incremental reductions in security-related emissions, the government has not committed to moving away from fossil fuel-powered security fleets more broadly.

There are good reasons to require the decarbonization of security operations beyond climate change concerns. The United States Department of Defense has identified fossil fuel dependency as an operational risk and has made significant investment in renewable energy-powered bases.<sup>13</sup> More recently, the U.S. Army has expressed plans to transition to an all-electric vehicle fleet.<sup>14</sup> At the very least, as American security operations accelerate clean energy adoption it will become increasingly feasible for Canada to follow suit.

That being said, the U.S. and most of Canada's other NATO partners haven't made any serious commitments to reduce (or even to report on) national security emissions.<sup>15</sup> At least on paper, Canada is ahead of its peers in this area. It remains an international challenge to ensure world militaries are contributing their fair share to the global challenge of achieving net-zero emissions.

## Lack of urgency and specificity

The federal government's plans and policies appear to be aligned with the long-term goal of a net-zero economy, but independent assessments have been critical of the specifics.

In its review of the draft 2019–22 FSDS, the Office of the Auditor General concluded that many of the plan’s targets and strategies were so disconnected from key priorities and indicators that they could not be assessed.<sup>16</sup> Similarly, the Parliamentary Standing Committee on Government Operations and Estimates found in its 2019 assessment of the Greening Government Strategy that the government’s plan lacked “specific, measurable, achievable, realistic, and timely objectives.”<sup>17</sup>

The lack of emissions data and concrete targets related to government procurement (Scope 3) is one glaring example. Without more specifics, it becomes very difficult to assess progress and ensure new policies are making a meaningful contribution to the goal of reducing emissions. The government has been working on new methods to evaluate the emissions content of procured goods and services, such as through the introduction of Environmental Product Declarations (EPDs) for cement and concrete, but is only beginning to bridge this methodological gap.<sup>18</sup>

Even where policies are specific, the Greening Government Strategy takes an incremental rather than transformative approach to emissions reductions. For example, the plan prioritizes the replacement of internal combustion engine vehicles with zero-emission alternatives rather than reimagining the role of light duty vehicles in the government’s operations.

The strategy also tackles the lowest-hanging fruit at the potential expense of longer-term objectives. For example, the Greening Government Strategy exempts not only national security operations but also federal Crown corporations, such as Canada Post, Via Rail and Canada Development Investment Corporation, as well as some leased buildings. While this approach may get the government to its own interim targets, it makes the national path to 2050 even more difficult because transitions become more challenging and costly the longer they are delayed.<sup>19</sup>

A transformative vision that reflects the severity of the climate crisis would tackle all emissions sources with greater urgency and specificity.

### **Support for the public service**

Public servants play two important roles in advancing the greening government agenda. First, they are the people responsible for pursuing emission reduction initiatives within their departments or organizations. Public servants must have the guidance to weigh emissions reductions alongside other priorities, the knowledge to apply an emissions lens to their projects, and the authority to access resources for reducing operational emissions.

Other countries offer useful models for this approach. In Germany, for example, operational sustainability is a “a top-level priority” that has the explicit buy-in of all federal ministries.<sup>20</sup> Germany’s State Secretaries’ Committee on Sustainable Development includes senior leadership from all departments and is responsible for ensuring that sustainability is “tangibly applied to all policy areas”.<sup>21</sup> In 2013, Germany set up a Competence Centre for Sustainable Procurement specifically to build the capacity of public servants at all levels of government to integrate sustainability considerations into procurement decisions.<sup>22</sup>

In the United States, the Biden administration recently established a National Climate Task Force that includes senior leadership from every major department, including the Secretary of Energy, the Secretary of Defense and Director of the Office of Management and Budget. The group has a mandate from the president to “organize and deploy the full capacity of [the government] to combat the climate crisis.” It is too early to say if this standard has been met in practice.<sup>23</sup>

In Canada, a Cabinet Committee on Economy and the Environment serves a similar function, although its mandate to merely “consider” climate issues is considerably weaker than either the German or U.S. examples.<sup>24</sup> The practical application of the greening government agenda falls to the Centre for Greening Government, which chairs an interdepartmental committee at the assistant deputy minister level to implement the Greening Government Strategy.<sup>25</sup> The centre provides guidance to public servants working in relevant areas of real property, fleet management and public procurement on how best to reduce emissions, though it does not have the capacity to provide formal training.

Ultimately, the Greening Government Strategy must be clearly adopted as a whole-of-government priority and championed by senior leadership in all departments to avoid conflicting direction.

The second role of public servants in advancing the greening government agenda is in reducing emissions produced in the course of their day-to-day work—i.e., through the use of federal buildings, vehicles and equipment and by commuting. To help reduce emissions from their work, public servants need education and support in the workplace as well as flexibility to work in new ways.

Government managers can better support public servants to make more environmentally friendly choices by providing, for example, bike storage and showers at workplaces, providing public transit passes as a benefit, providing equipment that meets the highest standards of energy efficiency,

and adopting workplace best practices for energy efficiency. Public service unions have a role to play in pushing for these sorts of changes to reduce workplace emissions, including through the appointment of workplace green stewards and the inclusion of green clauses in collective bargaining.<sup>26</sup>

Government managers can also encourage greater flexibility in how public servants work to support both worker well-being and emissions reduction priorities. The public sector has historically lagged in this area. Before the COVID-19 pandemic began, only 4% of workers in public administration in Canada (at all levels of government) worked remotely at least 50% of the time compared to 17% in finance and insurance, 30% in professional and technical services and 33% in information and cultural industries.<sup>27</sup>

In 2019 the federal government began a pilot of co-working sites for public servants working outside of traditional offices and in early 2020 instituted a new Directive on Telework that increased access to remote work arrangements.<sup>28</sup> Further support for remote working arrangements, where feasible and informed by the lessons of remote work during the pandemic, has the potential to significantly reduce direct emissions from federal administrative operations moving forward.

However, there is a risk that emissions reduced in this way will simply be shifted from the federal government's balance sheet to the residential buildings sector without a net reduction in national emissions. In the absence of employer efforts to help employees reduce emissions at home, a large-scale shift from relatively efficient office buildings to inefficient home offices may not have the desired effect on emissions reductions, especially if workers elect to move out of dense urban areas into suburban sprawl.<sup>29</sup>

Public service unions have a role to play in ensuring that the shift toward greater remote work is not used to offload the federal government's responsibility for reducing emissions onto individual public servants. At an accounting level, emissions associated with remote work should still be attributed to the federal government. At a logistical level, money the federal government saves in downsizing its real estate portfolio should be invested in helping remote workers cut emissions at home and/or to support lower-emission commuting options.

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## Conclusion

The federal government is directly responsible for 0.3% of Canada's greenhouse gas emissions. About half of those emissions come from federal buildings

and the other half are attributable to exhaust from federal vehicle fleets. National security operations, such as the military and RCMP, are the largest organizational emitters. While total government emissions have declined since 2005, they have been on the rise since 2015.

Achieving net-zero operational emissions is important in its own right, but the federal government's greatest impact is in demonstrating to other levels of government and the private sector how deep emissions reductions can be achieved. If the federal government can't do it while pursuing an economy-wide climate strategy, no other sector will.

However, despite meaningful progress to date, including the adoption of a Greening Government Strategy, several potential obstacles stand in the way of a net-zero government.

First, the government's emission reduction commitments provide loopholes to the biggest emitters, such as the Department of National Defence, for emissions related to national security operations. Without requiring reductions from all emissions sources across all departments, agencies, and Crown corporations, it will be extremely challenging for the government to reach net-zero.

Second, the government's plans include commitments that are difficult to measure. Procurement emissions in particular are poorly tracked, inhibiting effective climate policies. Moreover, the government is focused on reaching its near-term targets without considering the implications for longer-term goals. Starting with the low-hanging fruit is reasonable but ignoring necessary structural changes may increase costs later on.

Finally, the public service plays an essential role both in delivering the greening government agenda and in reducing emissions from their own work. Without clear, consistent leadership and adequate support, public servants will be unable to effectively deliver on either priority.

The federal government's greening government initiative can play an important role in driving emissions reductions across all sectors of the Canadian economy. To do so, it must further expand its scope, implement concrete plans and targets for all federal emissions sources, and provide adequate support to the public service.

# Notes

**1** Unless otherwise noted, all data in this section are derived from: Government of Canada, Centre for Greening Government (Treasury Board of Canada Secretariat). “Government of Canada’s Greenhouse Gas Emissions Inventory.” Last modified November 26, 2020. Retrieved from <https://open.canada.ca/data/en/dataset/6bed41cd-9816-4912-a2b8-b0b224909396>.

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