Government of Canada Gouvernement du Canada

Greening Government Strategy

From: Treasury Board of Canada Secretariat

In Canada and abroad, the effects of climate change are becoming evident. Impacts such as coastal erosion; thawing permafrost; increases in heat waves; droughts and flooding; ecosystem changes; and risks to critical infrastructure; and food and water security are already being felt in Canada and globally. The science is clear that human activities are driving unprecedented changes in the earth's climate, which pose significant risks to human health, security, and economic growth.

Response to climate change requires action to:

1. reduce greenhouse gas (GHG (Greenhouse gas)) emissions to the atmosphere and
2. increase the resiliency of assets, services, and operations to adapt to the changing climate.

Greening government operations will support Canada's sustainability goals already established under the Paris Agreement on climate change and in the Pan-Canadian Framework on Clean Growth and Climate Change. This Greening Government Strategy is consistent with the United Nation's 2030 Agenda for Sustainable Development and the Federal Sustainable Development Strategy.

Objective

The Government of Canada will transition to low-carbon and climate-resilient operations, while also reducing environmental impacts beyond carbon. Led by the Centre for Greening Government of the Treasury Board of Canada Secretariat, the Government of Canada will ensure that Canada is a global leader in government operations that are low-carbon, resilient and green. The government commits to:

- ✔ Low-carbon, sustainable, and climate resilient real property.
- ✔ Low-carbon mobility and fleet.
- ✔ Climate resilient assets, services, and operations.
- ✔ Green goods and services.

The Centre for Greening Government

> "Supporting climate action and sustainability in government operations"

The mandate of the Centre for Greening Government is to provide leadership towards low-carbon, resilient and green Government of Canada operations. The Centre will:

✔ lead and coordinate the federal emissions reduction, resiliency and greening government initiatives;
✔ integrate knowledge from other leading organizations and share best practices broadly;
✔ track and disclose government environmental performance information centrally;
✔ drive results to meet greening government environmental objectives.

The Centre will work with departments [1] to implement the government's Greening Government Strategy.

Commitments

Greenhouse gas (GHG (Greenhouse gas)) emissions

Direct (Scope 1) and indirect (Scope 2) GHG (Greenhouse gas) emissions from government operations

- The Government of Canada will reduce Scope 1 and Scope 2 [2] GHG (Greenhouse gas) emissions from federal government facilities and fleets by 80% below 2005 levels by 2050 (with an aspiration to be carbon neutral):
  - On this pathway, the government will reduce Scope 1 and Scope 2 GHG (Greenhouse gas) emissions by 40% below 2005 levels by 2030, with an aspiration to achieve this target by 2025.
  - Both targets include the use of renewable electricity generated on-site or purchased off-site to reduce Scope 2 GHG (Greenhouse gas) emissions from electricity use. [3] There is a

preference, but not a requirement, to buy electricity in the province or territory in which it is consumed.
    - Clean power to reduce Scope 1 GHG (Greenhouse gas) emissions may also be produced or purchased off-site. [4]
    - Achieving the 80% Scope 1 and Scope 2 GHG (Greenhouse gas) emissions reduction target does not include the use of carbon offsets.

Indirect (Scope 3 [5]) GHG (Greenhouse gas) emissions from government operations

- The Government of Canada will track emissions from air travel by public service employees by the 2019 to 2020 fiscal year and promote lower-carbon alternatives to work-related air travel.
- Emissions from new leased facilities and renewed leases will be tracked starting in the 2019 to 2020 fiscal year. The majority of emissions from leased facilities will be reported by 2025. The government will demonstrate leadership by ensuring that new leases include improved energy [6] and sustainability performance standards.
- The Centre will encourage employees to use low-carbon forms of transportation to reduce emissions from employee commuting and will track these emissions by the 2021 to 2022 fiscal year.
- Through greening procurement, the government will reduce emissions intensity from the goods and services it purchases.

National safety and security GHG (Greenhouse gas) emissions from government operations

Consistent with practices in other jurisdictions, some GHG (Greenhouse gas) emissions are excluded from the Government of Canada's GHG (Greenhouse gas) emissions reduction target for safety and security

reasons. Examples are emissions from military, coast guard or the Royal Canadian Mounted Police operations. These national safety and security related emissions will be tracked and publicly disclosed.

Alternative energy options will be examined to potentially reduce emissions through new technologies, operational efficiencies and other innovative processes.

Real property

The government is committed to implementing green building principles, and ensuring the sustainability and resiliency of its real property portfolio.

Low carbon

Departments that have the highest GHG (Greenhouse gas) emissions will undertake a strategic evaluation of their real property portfolios to determine the most cost-effective pathway to achieve low-carbon operations and meet the government's targets. In addition, departments:

- will evaluate their real property needs to determine opportunities for portfolio rationalization, optimal real property management, and shared locations and facilities;
- will be early adopters of building standards to be established through the Pan-Canadian Framework on Clean Growth and Climate Change – for example, a net zero energy ready building code will be published in 2022;

- will ensure that all new buildings and major building retrofits prioritize low-carbon investments based on integrated design principles, and life-cycle and total cost of ownership assessments which incorporate “shadow carbon pricing”; [7]
    - all new federal buildings (including build-to-lease and public-private partnerships) starting at the latest in 2022, should be constructed to be net-zero carbon unless a lifecycle cost-benefit analysis indicates net-zero carbon ready construction. [8]
- by 2030, 75% of domestic office lease transactions must be carbon neutral in situations where the federal government represents 75% or greater of the occupied space (m^2), market conditions permit and a competitive environment exists;
- all new domestic office leases and lease renewals awarded after April 1, 2025, where the federal government is the majority tenant, market conditions permit and a competitive environment exists, preference will be given to buildings with the highest available ENERGY STAR® Portfolio Manager score;
- in all new domestic office leases and lease renewals for space over 500 m^2, landlords must report building energy and water usage and waste generated using ENERGY STAR® Portfolio Manager;
- will use 100% clean electricity by 2025, as set out in the Pan-Canadian Framework on Clean Growth and Climate Change, by producing or purchasing megawatt hours of renewable electricity equivalent to that produced by the high-carbon portion of the electricity grid;
- should meter energy use and report energy use intensity by 2022 for government-owned buildings of no less than 1,000 square metres. [9]

Water

The government will reduce its water consumption and its load on municipal systems by:

- tracking and disclosing its potable water consumption by 2022;
- using best-in-class water-use practices in new construction and major renovations; [10]
- designing all new Crown-owned buildings to effectively manage storm water.

Materiel

The government will reduce the environmental impact of building materials using life-cycle assessment techniques to:

- minimize embodied carbon [11] and the use of harmful materials in construction and renovation.

Waste

The government will take steps to reduce the environmental impact of waste by:

- diverting at least 75% by weight of non-hazardous operational waste from landfills by 2030; [12]
- diverting at least 75% by weight of plastic waste from landfills by 2030;
- diverting at least 90% by weight of all construction and demolition waste from landfills and striving to achieve 100% by 2030;
- minimizing environmentally harmful and hazardous chemicals and materials used and disposed of in real property operations.

Real property operations

The government will manage its real property portfolios using the principles of sustainable development to maximize their energy and resource efficiency.

- Departments will deploy technologies and implement procedures to manage building operations and take advantage of programs to improve building performance.

Mobility and fleets

The government will adopt low-carbon mobility solutions, deploy supporting infrastructure in its facilities, and modernize its fleet as follows:

- Starting in the 2019 to 2020 fiscal year, 75% of new light-duty unmodified administrative [13] fleet vehicle purchases will be zero-emission vehicles (ZEV (Zero-emission vehicle)s) [14] or hybrid, with the objective that the government's administrative fleet comprises at least 80% ZEV (Zero-emission vehicle)s by 2030. Priority is to be given to purchasing ZEV (Zero-emission vehicle)s. [15]
- Starting in the 2018 to 2019 fiscal year, all new executive vehicle purchases will be ZEV (Zero-emission vehicle)s or hybrids. [15]
- Fleet management will be optimized including by applying telematics to collect and analyze vehicle usage data on vehicles scheduled to be replaced.
- Alternative energy options and their potential use in fleet operations related to national safety and security will be examined.

Adaptation to climate change

The Government of Canada is committed to becoming a leader in climate change resiliency. Consistent with the Federal Adaptation Policy Framework, departments will:

- by 2021, take action to understand the wide range of climate change impacts that could potentially affect federal assets, services and operations across the country;
- by 2022, develop measures to reduce climate change risks to assets, services and operations (i.e.: identified through departmental climate change risk assessment processes) including:
  - incorporating climate change considerations into business continuity planning, departmental risk planning or equivalent processes, and program design and delivery considerations;
  - integrating climate change adaptation into the design, construction and operation aspects of all major real property projects.
- adopt climate-resilient building codes being developed by National Research Council Canada;
- increase training and support on assessing climate change impacts, undertaking climate change risk assessments and developing adaptation actions to public service employees, and facilitating sharing of best practices and lessons learned.

Procurement

The government will aid the transition to a low-carbon economy through green procurement that includes life-cycle assessment principles and the adoption of clean technologies and green products and services by:

- including criteria that address carbon reduction, sustainable plastics and broader environmental benefits into procurements by departments for goods and services that have a high environmental impact;
- eliminating the unnecessary use of single-use plastics in government operations, events and meetings;
- promoting the procurement of sustainable plastic products and the reduction of associated plastic packaging waste;
- working with major suppliers to encourage the disclosure of their GHG emissions and environmental performance information;
- supporting departments in adopting clean technology and undertake clean technology demonstration projects;
- Using 100% clean electricity by 2025
- support for green procurement will be strengthened, including guidance, tools and training for public service employees.

Sustainability partnerships

As part of its greening strategy, the government will focus on the well-being of its employees and communities in which it operates by:

- creating sustainable workplaces and mobilizing employees on greening government;

- supporting strategic initiatives across government to contribute to a low-carbon economy;
- working with provincial, territorial and municipal governments, Indigenous peoples, industry, academia, and non-profit organizations to achieve common environmental goals;
- integrating sustainability planning with local communities, working with partners, and establishing communities of practice.

Policies

The Government of Canada will:

- align relevant government operations policies to further incorporate greening and climate resilience;
- incorporate greening priorities into the responsibilities of senior department officials who would ensure that greening, low-carbon and adaptation are addressed comprehensively in both planning and operations;
- require departments to include the future (shadow) price of carbon in major real property investment decisions in order to deliver value for money by putting a cost on avoided emissions.

Oversight and performance measurement

The Government of Canada will ensure accountability for the government's environmental performance and is committed to the principles of transparency and open data.

In order to ensure oversight, the Centre will:

- publicly disclose detailed environmental performance information on government operations, including a complete inventory of federal GHG (Greenhouse gas) emissions and energy use on the Centre's website;
- issue an annual call letter to departments to request the submission of departmental performance information on Greening Government Strategy commitments (as required by the Federal Sustainable Development Strategy, departments will continue to report on their progress through their Departmental Sustainable Development Strategies);
- develop additional guidance for departments to strengthen integration of low-carbon, climate resilience and green considerations in investment planning;
- update the Treasury Board submission template and guidance to confirm that departments have taken into consideration a climate change lens;
- explore integrating a climate change lens in assessing performance of management practices of the Government of Canada through the Management Accountability Framework.

The government will establish reporting requirements based on internationally accepted practices and standards, such as the Global Reporting Initiative (GRI) Standards, to enhance the comparability and quality of reported information, thereby enabling greater transparency and accountability of departments.

Benefits

Acting on climate change will reduce risks and create new economic opportunities and good jobs for Canadians. There is already a global market for low-carbon goods and services worth over $5.8 trillion, which is projected to keep growing at a rate of 3% per year. Through the deployment and promotion of innovative technologies that address climate change, the Government of Canada will contribute to the global competitiveness of the Canadian clean technology sector.

The government is one of the largest real property owners in Canada; ongoing greening of federal Crown-owned assets will support the development of the green building industry. Investments in clean electricity will contribute to both reductions in GHG (Greenhouse gas) emissions from federal operations and to renewable power development in Canada.

Through increased resource productivity and decoupling GHG (Greenhouse gas) emissions from its operations, the government will contribute to low-carbon environmentally responsible growth and to maintaining our ecosystems.

A focus on sustainability will help the government become an employer of choice, and contributions to wellness will increase productivity and attract and retain public servants. Broad based approaches to sustainability integrated into the community will support the effective achievement of common goals.

Footnotes

1 Throughout this document, the term “departments” denotes Government of Canada departments, agencies and other federal organizations.

2 Scope 1 GHG (Greenhouse gas) emissions are the greenhouse gases produced directly from sources that are owned or controlled, for example, from the combustion of fuels in vehicles or in heating buildings. Scope 2 GHG (Greenhouse gas) emissions are those generated indirectly from the consumption of purchased energy (electricity, heating and cooling).

3 Off-site renewable electricity purchases may take the form of new renewable energy certificates or power purchase agreements in denominations of units of electricity.

4 For example, clean power could take the form of biomass generation or landfill gas that could be acquired using power purchase agreements in denominations of units of energy.

5 Scope 3 GHG (Greenhouse gas) emissions are indirect emissions resulting from an organization’s operations.

6 For example, using ENERGY STAR Portfolio Manager, administered in Canada by Natural Resources Canada.

7 Shadow carbon pricing is method of investment or decision analysis that adds a surcharge, for carbon dioxide that would be released, to market prices for projects that involve significant carbon emissions. The initial carbon price will be established at Pan-Canadian Framework on Clean Growth and Climate Change backstop price of $50 per tonne. The Treasury Board of Canada Secretariat will provide guidance on future carbon pricing.

8 A Net-zero Carbon Ready building is one in which energy consumption is reduced to a minimum through building design strategies and efficiency measures to the point where it would be practical in the future to use non-carbon-based fuel sources to meet its energy needs. Embodied carbon in construction materials is also minimized.

9 National safety and security exemptions will apply.

10 Based on industry-recognized standards and compared with similar real property classes in Canada.

11 “Embodied carbon” refers to carbon dioxide emitted during the manufacture, transport and construction of building materials, together with end-of-life emissions.

12 Defined as diversion from landfill in major urban centres where facilities exist.

13 Category 3 and 4, as defined in Treasury Board guidance, where more than one option per vehicle class is available and considers operational feasibility.

14 ZEV (Zero-emission vehicle)s include battery electric, plug-in hybrid, and hydrogen fuel cell vehicles.

15 Targets will be reviewed in light of the government’s ZEV (Zero-emission vehicle) Strategy to ensure that the federal government continues to play a leadership role.

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