



NATIONAL CAPITAL COMMISSION
COMMISSION DE LA CAPITALE NATIONALE

Sustainable Development Strategy

2019–2020 Annual Report

Canada

Message From the CEO

I am pleased to present this year's report on the achievements of the National Capital Commission's (NCC) Sustainable Development Strategy, and proud of the story found within its pages.

As steward of federal lands and assets in the National Capital Region, the NCC is responsible for protecting and preserving the Capital's heritage, both natural and built; as chief planner for those same lands and assets, it works to augment their resilience in the face of climate change and extreme weather, while pursuing projects and initiatives that benefit the health and well-being of the region's million-plus inhabitants.

This is all carried out in alignment with Canada's Federal Sustainable Development Strategy and, as of December of 2020, the NCC will begin contributing to and reporting to Parliament on its progress toward the goals of this federal strategy, as legally required for a designated entity under the *Federal Sustainable Development Act*.

This report tells the story of the real and measurable progress the NCC is making in the area of sustainable development. For example, it has reduced its greenhouse gas emissions, and it has completed climate change projections for the National Capital Region — one of many research initiatives that will inform wiser and more effective policy making in the years to come.

The remediation and renaturalization of Victoria Island — a setting of significance to Indigenous nations in the National Capital Region — continue to move forward, as does the restoration of the Capital's other shorelines. The NCC's lands are becoming an even greater source of local food, and thus of food security. And a new structure at Rideau Hall will be the first Passive House-certified office building in the federal government's portfolio.

In the 18 months since the NCC adopted its Sustainable Development Strategy, we can report that the organization has made tangible progress toward completing 31 out of 36 actions and, of the 76 indicators considered in the Strategy, it has advanced 62. At a time when we are seeing with fresh eyes the importance of the NCC's green spaces, this dynamic stewardship is more vital than ever. And it is governed by the same commitment to accountability, collaboration, public engagement and leadership that permeates the culture of the NCC.

I would like to thank the staff of the NCC, as well as all the partners and stakeholders working with the organization for the successes you will read about here. Together, we are ensuring that those who follow us will inherit a National Capital Region that is stronger, healthier, greener and more resilient — a natural treasure to inspire Canadians for generations to come.



Tobi Nussbaum *Chief Executive Officer*



Introduction

[The National Capital Commission's \(NCC\) Sustainable Development Strategy, 2018–2023](#), outlines the NCC's role in creating a more sustainable National Capital Region, and aims to show leadership and promote collaboration among regional stakeholders. Although the strategy has a regional focus and was developed with input from NCC staff, stakeholders and the general public, it also follows the format of the Federal Sustainable Development Strategy, and is in line with the Greening Government Strategy and the United Nations Sustainable Development Goals.

This is the second annual report of the 2018–2023 Sustainable Development Strategy. It presents the NCC's progress since the launch of the strategy, while highlighting specific actions and partnerships initiated in the 2019–2020 fiscal year. It also provides a view toward upcoming initiatives, and reflects on challenges to be addressed.



Update on the Federal Sustainable Development Strategy

The Federal Sustainable Development Strategy sets out the Government of Canada's sustainable development priorities, and outlines how Canada will support the environmentally focused Sustainable Development Goals of the United Nations 2030 Agenda for Sustainable Development. The *Federal Sustainable Development Act* provides the legal framework for the strategy, and requires that it be updated every three years to reflect new federal priorities. The Federal Sustainable Development Strategy, 2019–2022, contains 13 aspirational long-term goals with a series of medium-term targets, short-term milestones and supporting actions.

The Greening Government Strategy, led by Treasury Board of Canada Secretariat, lays out the specific actions that federal departments will take to transition to low-carbon, climate-resilient and green operations.

The NCC voluntarily aligned its Sustainable Development Strategy, 2018–2023, with the Federal Sustainable Development Strategy, 2016–2019. Since this strategy was launched in 2018, the *Federal Sustainable Development Act* has been amended, and the NCC has been added as a designated entity under the Act. This change, which will come into force on December 1, 2020, means that the NCC will be legally required to contribute to and report on progress toward the next iteration and all future iterations of the Federal Sustainable Development Strategy. It is anticipated that the next iteration of the Federal Sustainable Development Strategy will cover the time frame from 2022 to 2025. The NCC would then table its aligned Sustainable Development Strategy in Parliament in 2023, and would begin reporting on progress toward that strategy in 2024.

In anticipation of these forthcoming requirements, the NCC is reviewing the Sustainable Development Strategy, 2018–2023, to determine if it requires any updates to better align it with the 2019–2022 Federal Sustainable Development Strategy and the Greening Government Strategy.

Priorities

The NCC recognizes the crosscutting nature of environmental issues and their impact on the well-being of Canadians. The two priorities of the Sustainable Development Strategy underscore the importance of working together for a more sustainable future for all Canadians.

Partnerships for regional sustainability

Through the implementation of the Sustainable Development Strategy, the NCC will act as a leader jointly with its regional partners, which include all three levels of government, non-governmental organizations, community groups, businesses, NCC tenants and members of the general public, to build a more sustainable National Capital Region.

Improving the built environment for human health

The interaction between the built environment and the natural environment can affect social and health outcomes. As the owner and steward of more than 10 percent of the lands in the National Capital Region, the NCC has a role to play in increasing the well-being of residents and visitors in the region. Through its mandate, the NCC has the potential to influence a number of determinants of human health, including access to nature, the quality of the built environment, aesthetic elements, transportation options, physical accessibility, access to healthful food, and safety from toxic substances and extreme weather events.



Valued Partnerships

One of the NCC's guiding principles is to add value as a partner with stakeholders, the public and all levels of government, to create lasting legacies. The Sustainable Development Strategy, 2018–2023, is predicated on building and maintaining partnerships that can leverage our collective ability to create a sustainable National Capital Region. The NCC places a high value on its relationships with stakeholders, Indigenous peoples, the public and all levels of government to achieve this goal. This section highlights some of the partnerships that were initiated or are ongoing in 2019–2020.

- The NCC partnered with the City of Ottawa and CBCL Limited to acquire and analyze precise climate change projections for the National Capital Region. The result of this successful partnership is a detailed public report that will enable all stakeholders in the National Capital Region to better assess the potential risks associated with climate change, including economic, health and safety, and ecological risks.
- The NCC is collaborating with the University of Ottawa to complete an inventory of pesticides used on NCC lands. Students are helping to collect data that will inform the revision of the NCC's pesticide policy.
- The NCC established a three-year partnership with La Cité college with the goal of improving forest health on NCC lands and developing students' forestry expertise. Students are responsible for the planting, maintenance, pruning and monitoring of crops, in addition to the detection of diseases and harmful insects.
- In partnership with the City of Ottawa and Ville de Gatineau, and with expertise from the University of Vermont, the NCC assessed forest cover in the National Capital Region. This public report provides vital information to help partners, stakeholders and citizens make decisions that will create a greener, more livable city. It will also inform the creation of a forest strategy for NCC lands. The public release of the report was part the National Tree Day programming, in conjunction with Tree Canada on September 25, 2019.



- To establish bird-friendly guidelines for building design, the NCC worked with Safe Wings Ottawa and FLAP Canada, which provided valuable expertise on reducing bird collisions with glass structures on buildings. These ongoing partnerships are helping the NCC assess and mitigate the risk that NCC buildings and other buildings subject to NCC approvals may pose to birds.
- The Citizen Science program in Gatineau Park was developed and implemented in 2018 in collaboration with the Friends of Gatineau Park to monitor biodiversity in the park. Ongoing projects include monitoring programs for common loons, monarch butterflies, frogs and toads, an invasive species control project, and a winter animal tracks inventory. Through this program, in 2019–2020, more than 70 volunteers used recognized scientific protocols and provided valuable data that will assist managers and biologists to enhance the ecological integrity of Gatineau Park.



Feature Stories

Climate Change

The NCC partnered with the City of Ottawa and hired CBCL Limited to develop a set of detailed climate change projections for the next 80 years. Climate projections use climate science and modelling to predict future changes in temperature, precipitation, wind and extreme events. The NCC and City of Ottawa collaborated with the Ville de Gatineau, Public Services and Procurement Canada, and Environment and Climate Change Canada's Canadian Centre for Climate Service, which provided most of the climate data for the project.

The report includes projections for 178 indices that are grouped according to the following parameters: temperature, precipitation, humidity, wind and extreme events. Indices include warmest temperature of the year, number of hot days, seasonal temperature range, number of freeze-thaw cycles, total annual precipitation, total monthly precipitation, winter rain, duration of snow cover, average monthly wind speed and so on. For each index, data are included to represent the expected changes for three periods of time, the 2030s, 2050s and 2080s, as well as for two different greenhouse gas scenarios: moderate and high.

The indices were selected to support adaptation planning for different sectors, including the following:

- infrastructure such as buildings, bridges and roads
- land management, real estate development and urban planning
- emergency response and public health
- agriculture
- recreation and tourism
- water services primarily managed by the City of Ottawa

These climate projections will serve as the basis for the next steps in this project, which are to conduct a climate risk assessment of the NCC's assets and programs, and create an adaptation and resiliency plan that will help maximize the resilience of built infrastructure, natural assets and human health.

The NCC and City of Ottawa are proud to have made the results of this project available to the general public. To learn more and read the report, visit the [NCC climate change web page](#).

Victoria Island

Victoria Island, or *Kabeshinân Minitig*, sits at the confluence of the Ottawa, Gatineau and Rideau Rivers on the traditional lands of the Algonquin Anishinabe Nation. Victoria Island holds a special significance for the Algonquin Anishinabe Nation as a current and historical meeting place for trade and spiritual and cultural exchange. Accordingly, the [Plan for Canada's Capital, 2017–2067](#), anticipates the development of a master plan to conserve and animate the natural and cultural heritage of the site under the guidance of elders and representatives from the Algonquin Anishinabe Nation.

After years of industrial activity on Victoria Island in the 19th and early 20th century, recent environmental studies found substantial contamination in the soil, including metals, polycyclic aromatic hydrocarbons and petroleum hydrocarbons at levels that present unacceptable risks to human health and the environment. The island had to be fully closed in late 2018 to allow for site remediation in order for it to be reopened without risk to the public.

The first phase of remedial activities commenced in fall 2019, and substantial completion was achieved by March 2020. Approximately 13,000 metric tonnes of contaminated soil, debris, garbage and compressed gas cylinders were removed from the ravine on the south side of the island. This was a highly complex project which required precise excavation to ensure that important archaeological resources were identified and protected during the work. Dangerous gas cylinders and infrastructure excavation also required special care. Contaminated soil was removed to a clean bedrock base or capped with clean soil.

The NCC is currently planning the second and third phases of work, which will include removing or capping contaminated soil in select areas. Remediation, including replanting and renaturalization, is expected to be complete by 2025, at which time Victoria Island will once again be a safe place to practise and learn about Indigenous traditions.



Progress in 2019–2020

The strategy has been in place for less than two years, and progress has been made toward many of the targets. As of March 2020, the NCC has made progress on 31 out of 36 actions and 62 out of 76 indicators. For 12 of the 76 indicators, work has begun, but issues have arisen that have required the timeline for the completion of the project to be extended, or that will make it difficult to attain the target. It is currently predicted that only one target will not be met by the end of this five-year strategy. Work has yet to begin for 14 of the 76 indicators.

The following tables provide details of the progress made in the 2019–2020 fiscal year. Much work is already planned for 2020–2021, and details of this work are also provided, where available.



Principles

Collaboration

COMMITMENTS	ACTIONS IN 2019–2020
Work with regional municipalities, provincial and federal governments, academia, Indigenous peoples, and non-governmental organizations to identify common interests and leverage resources for projects.	Several consultations with the NCC's regional partners took place. For example, the NCC worked with the City of Ottawa and Ville de Gatineau, Environment and Climate Change Canada, Canadian Parks and Wilderness Society, Tree Canada, Safe Wings Ottawa, FLAP Canada, and the University of Ottawa. Together, the NCC and these organizations advanced work on several themes, including climate projections for the National Capital Region, urban tree and forest management, bird-friendly building design, and pesticide usage.
Build relationships and maintain an ongoing dialogue with Indigenous peoples.	<p>A dialogue between the NCC and Kitigan Zibi Anishinabeg and the Algonquins of Pikwakanagan is ongoing on several projects and plans, including the Gatineau Park Master Plan, the Building LeBreton project and the NCC's Forest Strategy.</p> <p>An NCC delegation participated as an observer to a special meeting on Indigenous conservation at the United Nations Biodiversity Convention.</p>

Leadership

COMMITMENTS	ACTIONS IN 2019–2020
Identify financing streams for the implementation of this strategy, including a green fund and corporate partnerships.	The NCC initiated discussions to develop a framework for collaboration and philanthropy with possible financial contributors.
Convene an annual regional sustainability workshop.	An annual regional sustainability workshop was planned for April 2020 to discuss the recently acquired climate projections (see action 1.4) and identify potential joint initiatives to increase adaptation and resiliency for the National Capital Region. This workshop was postponed to a later date.
Lead by example, by applying best practices in terms of heritage and sustainability, including the NCC's challenging its partners through its federal approval role to do the same.	In 2019–2020, the NCC has initiated three projects that will use net zero and passive house standards, including NCC offices at Rideau Hall, the service, storage and maintenance building at Rideau Hall, and the Westboro Beach pavilion. The NCC also applied and integrated best practices for sustainability and heritage during a project to upgrade the building envelope of one of the official residences. Through the federal land use, design and transaction approval process, the NCC works with proponents and federal partners to improve heritage, sustainability and human health within the National Capital Region.

Public Participation

COMMITMENTS	ACTIONS IN 2019–2020
Create a platform to collect comments on the strategy at any time, and reach out to the public, via a public consultation process, every three years.	About 70 citizens and organizations registered for the NCC's Sustainable Development Strategy newsletter. The first newsletter was sent in July 2019, providing an update on various actions.
Use the NCC's Urbanism Lab and lands to host events that bring internal and external partners together for environmental engagement and capacity building.	<p>Sustainable development was again a focus topic for the 2019–2020 season of the NCC's Urbanism Lab. Over 550 in-person participants and over 950 online participants attended the following events:</p> <ul style="list-style-type: none"> September 6, 2019: From point A to B, intelligently October 24, 2019: The most sustainable buildings in North America November 5, 2019: Scientific research in Gatineau Park and the Greenbelt November 20, 2019: Inclusive urbanism January 22, 2020: Adapting to extremes February 2, 2020: The urban geography of race and culture February 27, 2020: The legacy of planning for Parliament Hill March 3, 2020: Nature as neighbour <p>The NCC collaborated with the Canadian Commission for UNESCO (United Nations Educational, Scientific and Cultural Organization) to promote Urbanism Lab topics related to diversity, inclusion and reconciliation.</p>

Social Equity

COMMITMENTS	ACTIONS IN 2019–2020
Conduct a geospatial study through the perspective of population health and wellness and social equity to guide new or renewed NCC plans, projects and programs.	A socio-economic mapping study was completed by Ottawa Neighbourhood Study. The data were analyzed, and will be presented to NCC staff to start integrating into plans, projects and programs.
Revise the project management process and prioritization tools to include social equity.	A revision of the project management process was initiated, but is not yet completed.
Provide training for NCC staff on how to assess and enhance social equity in plans, projects and programs.	An internal GBA+ Working Committee began building capacity for learning, applying and monitoring the use of GBA+ at the NCC. This ongoing work can be leveraged to ensure that the consideration of gender and other equity lenses is integrated into the management of NCC assets, including those that contribute to health and well-being and provide important ecosystem services.

Natural Capital in Decision Making

COMMITMENTS	ACTIONS IN 2019–2020
Adopt a method for natural capital accounting.	The NCC continues to participate in the Public Sector Accounting Standards consultations regarding the recognition of natural assets as tangible capital assets. The NCC will review feasibility and resource requirements to assess projects to account for natural capital.
Revise the project management process and prioritization tools to include natural capital values.	A revision of the project management process was initiated, but is not yet completed.
Communicate the importance of the ecosystem services provided by NCC green spaces, and provide training for NCC staff on natural capital.	The NCC continues to inform the general public about the importance of protecting natural habitats and green spaces to maintain the ecosystem services they provide the National Capital Region and its residents. The NCC also communicated the importance of keeping a distance from wild animals, not feeding wildlife, respecting outdoor ethics and protecting trail users from ticks.


Transparency and Accountability



COMMITMENTS	ACTIONS IN 2019–2020
Report on progress via the NCC's annual report, website and social media, and through the <i>Federal Sustainable Development Act</i> reporting process.	<p>The NCC's Sustainable Development Strategy website was updated to include details on climate change initiatives and the upcoming forest strategy.</p> <p>Several social media posts have been made on Facebook and Twitter to report on various aspects of the strategy.</p> <p>The NCC will be required to report via the <i>Federal Sustainable Development Act</i> starting in 2023–2024.</p>
Address failures by making changes to the Sustainable Development Strategy's implementation plans, as necessary.	Although the NCC will be required to contribute to the next Federal Sustainable Development Strategy for the 2022–2025 cycle, a detailed feasibility and financial assessment is under way to determine if the NCC's Sustainable Development Strategy, 2018–2023, should be amended to better align with the 2019–2022 Federal Sustainable Development Strategy.









Actions and Indicators

LEGEND:




- Work toward this action has begun, and the project is on track to be completed on time and for the target to be met.
- Work toward this action has begun, and issues have arisen that have required the timeline for the completion of the project to be extended, or that will make it difficult to attain the target.
- The target for this action will not be met or has not been met.
- Work toward this action has not yet begun.
-  This symbol identifies those actions that are to be implemented in collaboration with regional partners.

ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
1.1  Promote sustainable transportation and mobility in the National Capital Region.	The Capital Pathway Strategic Plan has been renewed.	2019–2020	●	This plan will be presented to the Board of Directors for approval in October 2020 following a final public consultation. It will provide policy direction in the planning and stewardship of the Capital Pathway for the NCC and its municipal partners in the region. It will also serve as the NCC's primary reference tool for the planning and management of the Capital Pathway network.
	The Parkways Policy has been renewed.	2020–2021	●	The NCC is currently updating policies dating back to 1984 in the context of recent federal plans and sustainable development policies, management strategies and mobility trends. A revised parkways policy is anticipated for Board approval in early 2021, following public consultation.
	The regional sustainable transportation and mobility strategy has been renewed.	2023–2024	●	The regional sustainable transportation and mobility strategy will provide a holistic and shared vision, as well as strategies on sustainable interprovincial transport to 2050. In 2019–2020, a consultant team was engaged to study interprovincial crossings and sustainable transportation, and will report in early 2021.
1.2  Promote balance in terms of jobs, housing and services, especially in federal employment nodes and in other significant developments subject to NCC land use approval.	The average number of kilometres travelled by private vehicles to/from traffic zones around federal employment nodes has decreased, based on a 2019 baseline.	2023–2024	●	<p>The NCC, City of Ottawa and Ville de Gatineau will launch an origin-destination survey in 2020–2021, which may provide information about commuting patterns around federal employment nodes.</p> <p>Long-term planning efforts for federal employment nodes such as Tunney's Pasture and Confederation Heights will aim to create complete communities with a mix of employment, residential and commercial uses.</p> <p>The NCC continued to participate in Public Services and Procurement Canada's (PSPC) Roadmap to Low-Carbon Federal Operations in the National Capital Region. This project will identify opportunities in the mobility sector, including fleet and employee commuting.</p>
	The percentage of private vehicle use for travel to/from work in federal employment nodes has decreased, based on a 2020 baseline.	2023–2024	○	The NCC, City of Ottawa and Ville de Gatineau will launch an origin-destination survey in 2020–2021, which may provide more detailed information about commuting patterns around federal employment nodes.
1.3 Promote the development of surplus NCC brownfield sites and sites adjacent to transit nodes, consistent with NCC plans.	There are at least 23 hectares of sites under contract for remediation and development.	2023–2024	●	<p>As of 2019–2020, 10.78 hectares of surplus NCC brownfield (or contaminated) sites adjacent to transit nodes have been sold for the development of the City of Ottawa's light rail transit project. Remediation of these sites will take place as required.</p> <p>Following the recently approved LeBreton Flats preliminary Master Concept Plan, the most significant portion of the contamination located in the Parks District will be managed "on-site" in line with the latest provincial directions. The rest of the plan will be phased and implemented over time with the Library Parcel and at least another phase targeted to be under contract by 2023.</p>









ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
1.4  Evaluate the risk of climate change impacts on NCC assets, programs and services, and develop a climate change adaptation and resiliency plan.	A research study for the Rideau Canal Skateway has been completed.	2019–2020		The NCC signed an agreement with the Standards Council of Canada to complete a research study to evaluate the risks of climate change impacts on the Rideau Canal Skateway. This study, which is planned to start in 2020–2021, will also provide recommendations regarding risk mitigation and adaptation measures. The project will start later than originally planned due to the delayed acquisition of climate projections for the National Capital Region, which are required for this project.
	A research study for NCC assets, programs and services has been completed.	2020–2021		Climate change projections for the National Capital Region are available. These data will be used to complete a risk and vulnerability assessment for NCC assets, programs and services. A request for proposals to assess the risks and vulnerabilities of the NCC's assets and operations will be launched in 2020–2021. However, due to a three-month delay in completing the climate projections, combined with delays related to the COVID-19 crisis, the project will be completed in 2021–2022.
	A climate change adaptation and resiliency plan has been completed.	2022–2023		The climate change projections and research study on climate impacts on NCC assets, programs and services (see above) will inform the creation of a climate change adaptation and resiliency plan.
	All NCC projects integrate climate change adaptation.	2023–2024		To date, only a few projects and plans considered climate change projections and impacts, such as the restoration of the Voyageurs and Ottawa River pathways and the Capital Pathway Strategic Plan. The climate change projections will facilitate adaptation integration into projects and plans. For example, the Rideau Canal Skateway will be integrating climate change adaptation into its strategic and operational plans.
1.5 Install electric vehicle charging stations at NCC parking lots.	There are at least 10 electric vehicle charging stations on NCC properties.	2021–2022		No additional charging stations were installed in 2019–2020. Additional sites are being identified, and applicable usage standards are being determined, to expand the number of charging stations on NCC properties from six to 10.









Goal 2: Low-Carbon Government

2.1 Undertake energy audits of residential, commercial and official residences buildings.	At least 75 percent of NCC-owned energy-consuming buildings have been audited.	2021–2022		<p>To date, 21 percent of NCC-owned energy-consuming buildings have been audited. In the official residences portfolio, 20 percent of the energy-consuming buildings have been audited to date. No new energy audits were performed in 2019–2020, but an agreement with Natural Resources Canada was established to audit 19 buildings in 2020–2021, which will bring total percentage of buildings audited in this portfolio to 85 percent.</p> <p>In the residential and agricultural portfolio, 27 percent of the buildings have been audited to date. To meet the target, the NCC will increase the number of audits performed in the residential-agricultural and commercial portfolios in the next two years.</p>
2.2 Integrate a greenhouse gas emissions analysis into renovation and construction projects considering best practices guidelines for heritage buildings and sites. ¹	A methodology for analyzing greenhouse gas emissions has been adopted.	2020–2021		The NCC has not yet adopted a greenhouse gas emissions options analysis, and is reviewing this action in light of new Greening Government Strategy requirements to apply zero carbon standards to all new buildings and major renovations.
	At least 75 percent of projects are integrating greenhouse gas emissions analysis.	2021–2022		<p>At Rideau Hall, the NCC is designing the first Passive House-certified federal government office building, and implementing net zero carbon requirements for the storage, maintenance and service building. The NCC also upgraded the building envelope at Harrington Lake to increase the energy efficiency of this heritage building.</p> <p>Within the urban lands portfolio, the NCC has initiated a project to renovate the Westboro Beach pavilion to a net zero building standard.</p> <p>In addition, new building proposals for commercial properties on NCC lands are required to integrate emissions reductions and sustainable design.</p>





1. https://www.historicplaces.ca/media/49493/resilience_en_june%202016.pdf and <https://www.historicplaces.ca/media/18072/81468-parks-s+g-eng-web2.pdf>

ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
2.3 Track energy consumption and greenhouse gas emissions of NCC buildings and lands, including new leased facilities and renewed leases.	At least 75 percent of NCC-owned energy-consuming buildings are tracked in ENERGY STAR Portfolio Manager.	2019–2020		The NCC has been tracking emissions from buildings and lands over which it has total operational control. In 2020–2021, with support from Natural Resources Canada, the NCC will begin tracking building energy using RETScreen Energy Management Software, instead of ENERGY STAR Portfolio Manager, because it offers project feasibility analysis in addition to portfolio performance analysis. This project has been delayed due to the size and complexity of the NCC's energy portfolio, which includes several hundred energy-consuming assets over which the NCC has varying degrees of operational control.
	The NCC has reduced its scope 1 and 2 CO ₂ equivalent emissions by 40 percent, compared with a 2005 baseline.	2030–2031		The NCC reduced its emissions from buildings and lands over which it has total operational control by 57 percent in the 2018–2019 fiscal year, compared with a 2005–2006 baseline. Of this reduction, 5 percent is due to changes in NCC operations, and the other 52 percent is due to the decarbonization of the Ontario and Quebec energy grids. The NCC's official residences account for nearly 60 percent of the NCC's overall greenhouse gas emissions.
2.4 Adopt minimum energy- and water-efficiency standards for renovations and construction on NCC land, including for heritage buildings.	Minimum energy- and water-efficiency standards have been adopted.	2021–2022		<p>The NCC has not yet adopted minimum energy- and water-efficiency standards, and is reviewing this action in light of new Greening Government Strategy requirements to adopt net zero energy ready building codes.</p> <p>Currently, all renovations at the NCC's official residences are undertaken with a main goal of reducing energy demand.</p> <p>Within the commercial and the residential-agricultural real estate portfolios, life cycle rehabilitation is focused on increasing energy and water efficiency.</p>
2.5 Purchase zero-emission or hybrid vehicles for the fleet.	At least 75 percent of new light-duty vehicles purchased for the fleet each year are zero-emission or hybrid vehicles.	2023–2024		<p>In 2019–2020, 100 percent of eligible fleet vehicles purchased were zero-emission or hybrid vehicles. The NCC added two new plug-in electric vehicles to its fleet.</p> <p>At least two more zero-emission vehicle purchases are planned for 2020–2021. Zero-emission and hybrid vehicles currently account for 15 percent of NCC fleet vehicles.</p>
2.6 Launch a green procurement policy for services and goods.	A green procurement policy, which includes life cycle analysis, has been adopted.	2020–2021		Procurement Services continues to use the NCC Green Procurement Guidelines, adopted in 2012, and works with clients to identify environmental considerations in the procurement process. The NCC will review and update these guidelines as per Greening Government Strategy requirements to include life cycle assessment principles in procurement policies, including criteria to reduce carbon and plastic waste.
2.7 Invest in measures to support low-carbon forms of transportation to reduce emissions from employee commuting and business travel.	CO ₂ emissions from business travel by NCC staff and executives are being tracked.	2020–2021		The NCC will begin tracking emissions from staff business travel in 2020–2021.
	The percentage of staff commuting trips taken using low-carbon forms of transportation has increased by 10 percent, based on a 2012 baseline.	2023–2024		<p>From May to September 2019, the NCC ran a bike-to-work campaign for NCC staff. As part of this campaign, the NCC participated in EnviroCentre's Bike-to-Work challenge, posted videos featuring NCC staff and their personal cycling stories, and collected commuting data via pre- and post-season cycling surveys.</p> <p>At least 60 percent of survey respondents rode their bikes to work at least once per week, and nine NCC employees began cycling to work for the first time in 2019. Future campaigns will be expanded to include all forms of sustainable commuting.</p>
	The percentage of local staff business trips taken using low-carbon forms of transportation has increased by 10 percent, based on a 2012 baseline.	2023–2024		The NCC currently has two electric bikes and seven zero-emission or hybrid vehicles available for local staff business trips. The NCC will begin tracking emissions from staff business trips taken using these forms of transportation in 2020–2021.

ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
2.8  Increase the waste diversion rate in public areas and NCC operations.	Each year, a minimum of 90 percent of the waste from building demolition on NCC lands is diverted from landfills.	2018–2019		All NCC demolition contracts are required to use deconstruction practices and the four Rs (reduce, reuse, recycle and recover). All building demolitions that took place on NCC lands since 2018–2019 diverted at least 95 percent of waste from landfills.
	Each year, a minimum of 80 percent of the waste from the activities associated with the Rideau Canal Skateway is diverted from landfills.	2018–2019		All waste on the Rideau Canal Skateway is sorted post-collection to ensure that all recyclable and compostable materials are diverted from the landfill. The diversion rate for 2019–2020 was 78 percent. The NCC will continue to work with the food concessions to ensure that all disposable dishes are either recyclable or compostable.
	Each year, a minimum of 60 percent of waste from NCC offices is diverted from landfills.	2019–2020		A waste audit for the NCC headquarters building at 40 Elgin Street, which was conducted in 2019 and included other building tenants, indicates a current diversion rate of 72 percent. An updated waste audit for all NCC staff offices will be completed in 2020–2021.
	Each year, a minimum of 50 percent of the waste from major events on NCC lands is diverted from landfills.	2019–2020		The average waste diversion rate for major events held on NCC lands was 39 percent. The NCC will establish initiatives to further build capacity for waste management.
	Each year, a minimum of 60 percent of the waste along the Rideau Canal corridor is diverted from landfills.	2023–2024		The NCC is currently exploring the feasibility of a partnership to implement a waste diversion program along the Rideau Canal corridor.






Goal 3: Modern and Resilient Infrastructure

3.1 Adopt stormwater management guidelines to reduce impacts on water quality and quantity.	Stormwater management guidelines have been adopted.	2019–2020		Stormwater management guidelines were completed in 2019–2020, and will be presented to the NCC Board of Directors for approval in early 2020–2021.
	All new projects apply stormwater management guidelines.	2023–2024		The guidelines will be implemented as new projects or retrofits arise.
3.2  Assess the flood risk for NCC operations and assets located in the 100-year and 350-year flood plain.	A flood risk assessment has been completed.	2020–2021		<p>The NCC has initiated a project to update the current flood plain maps, and will assess the risk to assets located in these flood plains as a second phase of the project. The NCC is also exploring ways to incorporate the impacts of climate change on future flooding into this project.</p> <p>At the northeast corner of Island Park Drive and the Sir John A. Macdonald Parkway, a 65-car parking lot adjacent to the shoreline, which flooded in 2017 and 2019, was relocated above the 100-year flood plain. This project will allow for enhancement of the riparian habitat and the user experience.</p>



Goal 4: Clean Energy

4.1 Assess the renewable energy potential of NCC land and buildings to increase the proportion of off-grid renewable energy systems.	An assessment of renewable energy potential on NCC lands has been completed.	2020–2021		Work toward this action has not yet begun.
4.2  Facilitate the connection of federal and NCC-owned buildings to the PSPC district energy system.	The number of planned federal and NCC-owned building connections to the PSPC district energy system has increased.	2023–2024		The proposal for the new Library and Archives Canada building at LeBreton Flats includes a connection to the district energy system. Planning is also under way for up to 14 NCC-owned commercial buildings to be connected to the updated district energy system.

ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
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Goal 5: Pristine Lakes and Rivers

5.1 <p>Prioritize and restore degraded shorelines along watercourses and lakes on NCC lands to improve ecosystem function.</p>	An assessment of threatened archaeological legacy on NCC shorelines has been completed.	2021–2022		In 2019, the NCC initiated Phase 1 of the assessment, which included an audit of 24 sites, as well as monitoring and limited rescue excavations at several sites. Phase 2 will include ongoing annual monitoring and rescue excavations, and the establishment of partnerships to rescue threatened archaeological legacies.
	Degraded shorelines have been identified and prioritized.	2019–2020		All degraded shorelines in Gatineau Park, on Quebec urban lands and in the official residences portfolio have been identified and prioritized. The majority have been identified and prioritized in the Greenbelt and on Ontario urban lands. A restoration plan has been prepared for a segment of Black Rapids Creek that passes through the Greenbelt Research Farm to establish a riparian buffer of 30 metres.
	At least 25 percent of high-priority shorelines have been stabilized and restored.	2023–2024		In the official residences portfolio, the shoreline at Harrington Lake was restored with native plantings in 2019. In Gatineau Park, restoration efforts are planned for Meech Lake, and will be carried out in coordination with municipal road restoration work. In the Ontario urban lands portfolio, shoreline restoration is ongoing on Victoria Island. A 300-metre section of the north shoreline was rebuilt in the summer of 2019 to a higher standard of design to better resist future flooding. Many sections of the nine-kilometre shoreline along the Sir John A. Macdonald Parkway were restored to protect the riparian habitat and pathway.
5.2 <p>Continue to establish riparian corridor zones within leased properties.</p>	Each year, all new leases include riparian protection measures.	2023–2024		Agricultural tenants must follow farm management best practices in accordance with the Ontario Ministry of Agriculture, Food and Rural Affairs, and the regional conservation authorities, including maintaining a minimum three-metre buffer along water bodies, ponds, springs, ditches and/or watercourses. For all other types of lease, riparian protection measures are required for any projects undertaken on lands adjacent to shorelines.



Goal 6: Sustainably Managed Lands and Forests

6.1 <p>Adopt and implement a forest strategy that considers natural and cultural heritage values, and focuses on urban tree protection.</p>	A forest strategy, which considers natural and cultural heritage values, and focuses on urban tree protection, has been adopted.	2019–2020		A draft forest strategy was completed in 2019 in collaboration with internal and external stakeholders. A total of four consultations were conducted with the public and stakeholders, as well as with Kitigan Zibi Anishinabeg and the Algonquins of Pikwakanagan. An additional online consultation with the general public is planned for 2020. This project is slated to be completed in late 2020.
	At least 100,000 trees have been planted.	2022–2023		In 2019, 12,500 trees of varying sizes and species were planted across 20 sites in the National Capital Region. Approximately 18,000 trees have been planted since the NCC's program for removing sick and dead ash trees started in 2014–2015. It is estimated that the NCC will be planting approximately 36,000 trees within the next five years. The 100,000-tree target will not be reached due to lack of resources and available tree planting sites. The NCC initiated discussions with potential partners that could financially support tree planting efforts, as the NCC does not currently have the resources to achieve this target.
6.2 <p>Control the spread of invasive plant species, in collaboration with regional stakeholders.</p>	A coordinated approach to invasive species control has been adopted.	2020–2021		In the Ontario urban lands portfolio, an area of 0.42 hectare of invasive species (garlic mustard and buckthorn) was controlled with the help of students and teachers from Regina Alternative School. This initiative is part of the ongoing Mud Lake Vegetation Management Project launched in 2015. In addition, an area of 0.9 hectare of buckthorn was controlled in an area adjacent to Rémic Rapids Park. This area was replanted and seeded with a variety of native species. In Gatineau Park, as part of an ongoing collaboration with the Friends of Gatineau Park, 0.04 hectare of invasive periwinkle was removed.
6.3 <p>Promote the connectivity of ecosystems and natural habitats in the National Capital Region.</p>	Potential corridors on, near and adjacent to NCC lands, have been identified.	2023–2024		Corridors have been identified in Gatineau Park and on Quebec urban lands. A protection and action plan will be developed in the coming years.

ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
6.4 Renew the Corporate Natural Resources Action Plan, which includes the improvement of biodiversity health on NCC lands.	The Corporate Natural Resources Action Plan has been renewed.	2018–2019	●	This action is complete. Funding for the Natural Resources Action Plan has been renewed in perpetuity, given the importance of this program for the NCC.
	At least 15 projects have been completed.	2022–2023	●	Since 2018, 15 projects have been completed under this program. Six projects were completed in 2019–2020. Projects included an invasive species monitoring program and analysis, species at risk studies, pollinator research and habitat restoration, a beaver monitoring program, and an education program to inform and engage citizens about biodiversity conservation on NCC lands.



Goal 7: Healthy Wildlife Populations

7.1 Adopt bird-friendly standards for building design and landscaping for federal buildings and lands, to reduce negative impacts on birds. Each year, all new projects apply bird-friendly standards.	Bird-friendly standards have been adopted.	2019–2020	●	Draft bird-friendly guidelines have been developed. These standards are in line with the CSA Group standard on bird-friendly building design, which was published in July 2019 and is the first Canadian national standard. The NCC guidelines will be presented to the Board of Directors in 2020–2021 to seek approval. The timeline for this project was delayed to allow the new CSA standard to be taken into account.
	Each year, all new projects apply bird-friendly standards.	2023–2024	●	Currently, projects that require an environmental assessment or a federal land use, design and transaction approval are required to address the potential for bird collisions in their project proposals. Once the NCC's bird-friendly guidelines have been approved, they will be incorporated into the larger Capital design guidelines for internal and external project proponents. In 2019, the NCC began to assess its current buildings for their potential for bird collisions. To date, nearly 100 buildings have been assessed, and a project to decrease bird collisions at the Gatineau Park Visitor Centre has been initiated.
7.2 Acquire and analyze ecological land classification data to identify and protect habitat of potential species at risk.	Data acquisition and analysis for designated natural areas have been completed.	2021–2022	○	Financial resources have been secured to address this action in 2021–2022.
	Data acquisition and analysis for other natural lands have been completed.	2023–2024	○	Financial resources have been secured to address this action in 2022–2023.
7.3 Create a pollinator habitat landscape program.	Pollinator habitat guidelines have been adopted.	2020–2021	●	A project has been initiated to create pollinator habitat guidelines. As part of this project, a Pollinator Habitat Restoration Workshop was held in April 2019. To increase pollinator habitat, the NCC plants pollinator-friendly plant species to restore natural areas after demolition projects.
	The number of hectares of new pollinator habitat has increased.	2022–2023	●	In 2019, 0.5 hectare of NCC lands was converted into pollinator habitat. The area east of Remic Rapids Park, which was dominated by invasive buckthorn, was replanted with native trees and shrubs, and seeded with a pollinator-friendly seed mix.
7.4 Develop guidelines to minimize wildlife mortality on roadways.	A research project has been completed to inform decision making regarding the impact of roads on wildlife.	2023–2024	●	In 2019, the NCC conducted a pilot project in Gatineau Park to monitor road mortality on the parkways.



Goal 8: Sustainable Food

8.1 Create a campaign to promote the production of local food on NCC lands.	A local food campaign has been launched.	2020–2021	●	In 2019, the NCC launched a social media campaign that builds on the local food campaign launched in 2018. Ongoing campaign efforts include farm brochures and maps, web content, and the promotion of Greenbelt farmsteads at conferences and public events.
8.2 Develop a food strategy for urban lands to complement the Sustainable Agriculture and Food Strategy.	A food strategy has been completed.	2022–2023	○	Work toward this action has not yet begun.
	Five new partnerships have been established for implementing the urban food strategy.	2022–2023	○	Work toward this action has not yet begun.

ACTIONS	WHAT WILL SUCCESS LOOK LIKE?	DEADLINE	STATUS	RESULTS/COMMENTS
8.3 Enhance the conservation and quality of soil and water resources.	Five projects have been implemented that apply management best practices, are pilot or research projects, and include data acquisition and analysis of soil health and quality.	2023–2024	●	Two projects to enhance soil quality and conserve water resources on farmlands are ongoing. Since 2018, the NCC has assisted five Greenbelt farms to transition to organic cultivation, and installed tile drainage systems on 242 hectares of farmlands. These projects will not only improve soil and water quality, but will also increase the productivity of these lands, and support the transition away from conventional monocropping to increase local food production.
8.4 Diversify farmlands covered by monoculture farming operations, and increase food production on existing Greenbelt farmlands.	An assessment of the food produced on NCC lands (type, quality and quantity, currently and potentially) has been completed.	2020–2021	●	In 2019, the NCC conducted a survey of NCC farmlands to assess farming types. Follow-up surveys will be conducted to further assess food production on NCC farmlands.
	At least 200 hectares of existing Greenbelt farmlands have been converted for food production.	2021–2022	●	In 2019, 138 hectares of Greenbelt farmlands were converted to food production. This brings the total number of hectares of farmlands converted to food production to 461 hectares.



Goal 9: Connecting Canadians With Nature

9.1 Develop new partnerships with local organizations to deliver programs and initiatives that engage and educate citizens about nature and biodiversity conservation on NCC lands.	The number of volunteers, participants and visitors in NCC parks and green spaces has increased due to new partnerships.	2020–2021	●	Two new partnerships were established in Gatineau Park to connect Canadians with nature. A partnership with Parkbus has helped increase equitable access to Gatineau Park, and a new partnership with MOBI-O helped promote safety for people and animals along the parkways. These programs were offered in conjunction with many other public programs designed to connect Canadians with nature, including school programs, programs for new Canadians, learn-to-camp programs, Parks Day and the Winter Carnival. The Mud Lake Vegetation Management Project, an initiative to control invasive plant species in this important urban natural habitat, was successful thanks to the participation of 56 elementary students who contributed over 60 volunteer hours. The NCC Indigenous Affairs Division supported outreach programs with the Canadian Parks and Wilderness Society to engage 40 First Nations youth in wilderness conservation stewardship in Gatineau Park and along the Ottawa River.
9.2 Promote greater accessibility of Capital parks and green spaces by public transit.	An assessment of green space accessibility has been completed, and recommendations to increase accessibility by public transit have been proposed.	2021–2022	○	Although work toward this action has not yet begun, sustainable transportation options for visitors have been reviewed as part of the drafting of the Gatineau Park Master Plan to improve equity in terms of access to the Park and the quality of the user experience, as well as to reduce the impact of motor vehicles. The NCC is also contributing to the City of Ottawa policy review to improve accessibility to green spaces, such as the Greenbelt, through the use of alternative modes of transportation.
9.3 Work with partners and the private sector to install new bike share locations in NCC urban green spaces.	The number of bike share locations on NCC lands has increased.	2022–2023	●	The NCC is continuing the discussion with the City of Ottawa and Ville de Gatineau to undertake a regional approach to offer this public service.



Goal 10: Safe and Healthy Communities

10.1 Remediate the highest-priority sites on NCC lands, under the Federal Contaminated Sites Action Plan.	At least 1.5 hectares of land have been remediated.	2023–2024	●	Focus has been placed on remediating the NCC's highest-priority contaminated site: Victoria Island. In 2019–2020, 0.5 hectare of land was remediated.
10.2 Assess alternatives to the use of chemical pesticides on NCC lands with a view to revising existing policies and practices.	An assessment of pesticide use on NCC lands has been completed.	2020–2021	●	An assessment of the pesticides used on NCC lands was initiated, and will continue in 2020–2021.
	The NCC pesticide policy has been revised.	2022–2023	○	The information collected through the assessment of pesticides used on NCC lands will help the NCC formulate recommendations to revise its pesticide policy to continue to protect human health and the environment.

Glossary

Climate change adaptation: Adjusting decisions, activities and thinking because of observed or expected changes in climate, in order to reduce harm or take advantage of new opportunities.

Biodiversity: The full range of animals, plants and other living things, and the places where they live on the planet.

Brownfield site: Abandoned, idle or underutilized commercial or industrial property where past actions have caused environmental contamination, but which still has potential for redevelopment or other economic opportunities. Brownfields are typically located in urban areas.

Clean energy: Renewable, nuclear, and carbon capture and storage technologies, as well as demand reduction through energy efficiency.

Contaminated site: Areas of land that contain chemical substances (e.g. heavy metals or petroleum products) that may pose a hazard to human health or the environment, or that exceed the levels set out in policies and regulations.

Decarbonize: To reduce the amount of greenhouse gases that are emitted by an asset or as a result of a process.

District energy system: A system made up of central plants that heat buildings with hot water or steam and cool buildings with chilled water. The water circulates through underground pipes connected in a loop. This process uses less energy and is more efficient than having equipment in each individual building.

Ecosystem: A unit of interdependent organisms that share the same habitat.

Ecosystem services: Services that humans derive from ecological functions such as photosynthesis, oxygen production and water purification.

Energy efficiency: Refers to how effectively energy is being used for a given purpose. For example, performing a similar function or providing a similar (or better) level of service with less energy consumption on a per unit basis is considered an improvement in energy efficiency.

Green demolition: The process of dismantling a building in such a way as to ensure that as many of its elements as possible can be recycled or reused, rather than sent to landfills.

Greenhouse gas: Gas such as nitrous oxide (N₂O), methane (CH₄) and especially carbon dioxide (CO₂) that accumulates in the atmosphere and acts to retain atmospheric heat, thus contributing to climate change.

Green procurement: An approach to business purchasing in which the environmental impacts of goods and services, in addition to price and quality, play an important role in purchasing decisions.

Natural capital: Natural resource stocks, land and ecosystems, which provide an array of resources and flows of ecosystem services necessary for life on earth.

Pollinator: An animal, such as a bird or insect, that carries pollen from one plant to another.

Remediate: Remove contaminants from soil, groundwater, sediment or surface water so as to eliminate the hazard to humans and wildlife.

Renewable energy: Energy derived from sources that are either inexhaustible, such as the sun (solar energy), wind or waves (tidal energy), or that can be naturally replenished before being exhausted, such as biomass and river flow (hydroelectric power).

Resilience: The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity of self-organization, and the capacity to adapt to stress and change.

Social equity (or social justice): Refers to the concept of a society that gives individuals and groups fair treatment and an equitable share of the benefits of society. In this context, social justice is based on the concepts of human rights and equity. Under social justice, all groups and individuals are entitled equally to important rights such as health protection and minimal standards of income.

Species at risk: Plant or animal species with special status at the federal or provincial level because it is vulnerable to extinction. Species may be listed as being of special concern, threatened, endangered, extirpated or extinct.

Stewardship: Management of resources in such a way that they can be passed on with integrity to future generations.

Stormwater: Rainwater, snowmelt or other form of precipitation that has contacted the ground or any surface.

Stormwater management: A process that deals with the component of the urban surface runoff that is or would be collected by means of separate municipal storm sewers.

Sustainable development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Waste diversion: The reduction, reuse and recycling of waste, leading to a reduction of waste being sent to the landfill.

Get Involved

Everyone in the National Capital Region has a role to play to build a greener and more sustainable National Capital Region. Whether you're involved in the local business community, active in your neighbourhood or interested in greening your own home, your efforts are essential to our shared success.

Stay Connected

Please visit our [Sustainable Development Strategy web page](#), where you can sign up for our e-newsletter and find more information about our baselines and progress made. We welcome any and all feedback as to how the NCC's sustainability efforts might be strengthened or improved upon.

For more information, to learn more or to get involved in this work, please contact us.

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