



Environment and Climate Change Canada

2022-2023

Departmental Plan



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From the Minister



As the Minister of Environment and Climate Change, I am pleased to present the 2022–2023 Departmental Plan.

This plan outlines strategic actions that Environment and Climate Change Canada (ECCC) is taking to spur clean growth and fight climate change, help prevent and manage pollution, conserve nature, and predict weather and environmental conditions.

In Canada and around the world we are seeing the impacts of climate change including the increased frequency and severity of forest fires, extreme heat events, storms and flooding. We are seeing these impacts more and more at home, causing significant consequences to Canadian and Indigenous communities, economies and way of life. Building Canada's resilience to a changing climate continues to be a key priority for the Government of Canada. To meet this growing challenge, ECCC is working with partners to enhance action on climate change adaptation, including finalizing Canada's first National Adaptation Strategy.

We must also continue and drive decarbonization further and faster. That is what the science is telling us we should do, and it is also what will make Canada's economy more competitive and inclusive. In 2021, the Government of Canada increased its climate change ambition by setting an enhanced emissions reduction target under the Paris Agreement of 40 to 45% below 2005 levels by 2030 – a target that is commensurate to the scale of the challenge and the significant economic opportunities associated with climate action- and confirmed that the minimum price on carbon pollution will increase by \$15 each year starting in 2023 to reach \$170 per tonne in 2030. The Government also passed the *Canadian Net-Zero Emissions Accountability Act* requiring Canada to reach net-zero emissions by 2050. To achieve Canada's climate objectives, ECCC will keep working across federal departments and with provinces, territories, Indigenous partners, stakeholders and international partners to implement the important measures that we have been advancing since 2016, and to collectively increase our ambition and actions.

Canada will be the first major oil-producing country capping and reducing greenhouse gas emissions from the oil and gas sector to meet Canada's 2030 and 2050 goals.

At COP26 last November, Canada committed to achieve a net-zero electricity grid by 2035. The department will consider the design of a Clean Electricity Standard as a key part of the measures necessary to reach a net-zero electricity grid. This would allow Canada to decarbonize other parts of its economy through electrification.

ECCC will finalize the Clean Fuel Standard, an important part of Canada's plan to reduce emissions, accelerate the use of clean technologies and fuels, and create good jobs in a diversified economy.

ECCC will continue to work with Natural Resources Canada and Agriculture and Agri-Food Canada to implement the Natural Climate Solutions Fund to achieve carbon emissions reductions, while providing co-benefits for biodiversity.

We will also maintain our partnership and constructive dialogue with First Nations, Inuit, and Métis to advance Indigenous climate leadership and ensure federal policies and programs are designed to address Indigenous peoples' climate priorities.

We will continue to work towards our goal of zero plastic waste by 2030, including by banning harmful single-use plastic items and developing recycled content requirements. We will continue to work with provinces, territories and industry to implement the 2018 Canada-wide Strategy on Zero Plastic Waste and

Action Plan and in particular to facilitate harmonized approaches to extended producer responsibility, supporting alternatives to single-use plastic items, and tackling plastic pollution.

ECCC will work with Parks Canada Agency and the Department of Fisheries and Oceans on an ambitious plan to conserve 25% of lands and 25% of oceans in Canada by 2025, working towards 30% by 2030. Through the enhanced Nature Legacy Initiative and other key ongoing initiatives, we will work with domestic and international partners, other levels of government, Indigenous peoples and the public to protect and recover species at risk and their critical habitat. We will also conserve and protect healthy populations of migratory birds, and expand protected and conserved areas in Canada.

Canada will continue to work with international partners to finalize the post-2020 Global Biodiversity Framework, to be adopted at the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity that will be held in spring 2022. We will also develop a domestic response covering all aspects of nature conservation and sustainable use.

We will continue to support the Meteorological Service of Canada and its critical services to Canadians. ECCC will continue to implement the Weather Radar Replacement Program to upgrade outdated technology with at least 27 new radars by March 2023.

We have an ambitious program ahead of us that continues to reflect the interdependence of environmental sustainability and economic well-being. I invite you to read this plan for details on the priorities of ECCC, and our commitment to deliver on them as we work toward a cleaner and more prosperous future.

The Honourable Steven Guilbeault, P.C., M.P.
Minister of Environment and Climate Change

Plans at a glance

Environment and Climate Change Canada (ECCC) is the lead federal department for strategic action on a wide range of environmental matters, including clean growth and climate change, preventing and managing pollution, conserving nature, and predicting weather and environmental conditions. The Department's program focus reflects the interdependence of environmental sustainability and economic well-being. ECCC works in partnership with provincial, territorial and municipal governments, Indigenous partners, and communities to deliver important programs and services that are essential to ensuring the health and well-being of Canadians and the environment, in a manner that respects the Government of Canada's commitment to openness, effectiveness and transparency in government.

Taking Action on Clean Growth and Climate Change

Addressing climate change and building a clean, prosperous economy continues to be a key priority for the Government of Canada. The Department will continue to work with provinces, territories, Indigenous peoples, stakeholders, civil society and other federal organizations to implement the Pan-Canadian Framework on Clean Growth and Climate Change, the Strengthened Climate Plan, and Budget 2021 measures. The Department will also work with partners and stakeholders to increase climate action to meet Canada's 2030 greenhouse gas (GHG) emissions reduction target of 40–45% below 2005 levels and achieving net-zero emissions by 2050, including the implementation of the *Canadian Net-Zero Emissions Accountability Act*.

Canada will continue advocating for ambitious, comprehensive and enforceable environmental provisions in its free trade agreements, and to work with international partners to implement existing agreements and other bilateral and regional cooperation instruments.

ECCC will maintain its work with international partners to implement the Paris Agreement, which Canada ratified in October 2016, and to support developing countries transition to resilient, low-carbon economies. This includes delivering Canada's new five-year commitment of providing \$5.3 billion in climate finance to developing countries, in line with Canada's Feminist International Assistance Policy. ECCC will work closely with Global Affairs Canada to advance programming and implementation in support of this commitment.

In 2022–23, ECCC will continue to implement the Pan-Canadian Approach to Pricing Carbon Pollution, including: implementing the Federal Output-based Pricing System for industrial emitters; assessing provincial/territorial carbon pollution pricing systems against the minimum national stringency standards (federal "benchmark"); and finalizing the Federal GHG Offset System. ECCC will also continue to implement the [Low Carbon Economy Fundⁱ](#) and the [Climate Action and Awareness Fundⁱⁱ](#).

The Department will pursue its work with other federal organizations in delivering on new investments announced in 2021 for climate change adaptation and resilience, including wildfire resilience, flood maps, health adaptation, and standards to support infrastructure resilience, as well as \$1.9 billion to support provincial and territorial disaster response and recovery efforts.

Preventing and Managing Pollution

In 2022–23, ECCC and other federal government departments will continue to work with provinces and territories through the Canadian Council of Ministers of the Environment to implement the 2018 [Canada-wide Strategy on Zero Plastic Wasteⁱⁱⁱ](#).

To protect the environment from harmful substances, the Department will maintain efforts to strengthen the *Canadian Environmental Protection Act, 1999*, and will continue to deliver Canada's [Chemicals Management Plan^{iv}](#) in collaboration with Health Canada.

ECCC will provide ongoing support to the development a new Canada Water Agency to work with the provinces, territories, Indigenous communities, local authorities, scientists, and others to identify the best ways to keep freshwater safe, clean, and well managed. ECCC will lead and support efforts to restore, improve and protect key freshwater resources, including the Great Lakes, St. Lawrence River and Lake Winnipeg. The Department will provide science advice to Canada's \$1.5 billion Oceans Protection Plan.

In 2022–23, to advance federal sustainable development priorities, ECCC will develop a new Federal Sustainable Development Strategy for 2022–2026 with contributions from over 90 federal organizations and through public consultation with all Canadians. The new strategy will apply an environmental lens to the United Nations Sustainable Development Goals.

ECCC will develop, administer and amend, where appropriate, regulations to reduce air pollutant emissions from industrial sources, vehicles, engines and fuels, and consumer and commercial products. The Department will continue to collaborate with Health Canada to implement the Air Quality Health Index, to help Canadians make decisions to protect their Health, and with provinces and territories to implement the [Air Quality Management System^v](#) (AQMS), a comprehensive approach to reducing outdoor air pollution. ECCC will uphold Canada's role in international air quality treaties and fora, with the goal of reducing transboundary air pollution affecting Canada.

Conserving Nature

ECCC will continue to work with Parks Canada Agency and the Department of Fisheries and Oceans, as well as provinces and territories, Indigenous partners, key industry sectors, and private foundations and trusts to conserve 25% of Canada's lands and oceans by 2025 and work toward 30% by 2030. ECCC will also implement a number of programs that support reconciliation with Indigenous peoples and their leadership to achieve conservation outcomes.

The Department will lead collaboration with provinces and territories and other partners to recover species at risk, maintain and restore healthy populations of migratory birds, and protect and conserve lands and freshwater. This will include the negotiation of nature agreements with provinces and territories to advance shared interests. The Department will continue to implement the [Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada^{vi}](#) and related policy and program improvements to terrestrial species at risk conservation. Partnerships with Indigenous peoples will continue to be important in this work.

ECCC will provide global leadership for nature by engaging with international partners to negotiate and agree on a new post-2020 global biodiversity framework to guide nature action over the next decade, and will then work to implement a domestic response to 2030, which will cover all aspects of nature conservation and sustainable use.

Predicting Weather and Environmental Conditions

In 2022–23, the Department will innovate to improve its weather services, with a particular focus on the growing requirements of emergency manager clients at all levels of government. Actions will include continuous advancement of ECCC's weather and environmental prediction models and the upgrading of the high performance computing system. The Department will also carry out technical innovations, such as integrating new technologies into the monitoring network and implementing active radar and Lidar sensors. These improvements and innovations will lead to improved services when it comes to high-impact weather and flooding. ECCC's National Hydrological Service will continue to modernize and strengthen its engineering and technical capacity, modernize its hydrometric infrastructure, and put in place new technologies to gather and analyze water information.

For more information on Environment and Climate Change Canada's plans, see the "[Core responsibilities: planned results and resources, and key risks](#)" section of this report.

Core Responsibilities: planned results and resources, and key risks

This section contains information on the department's planned results and resources for each of its core responsibilities.

Core Responsibility: Taking Action on Clean Growth and Climate Change

Description

Through engagement with other federal departments and agencies, provinces, territories, Indigenous peoples, and other stakeholders, and external experts the Department will support and coordinate the implementation of the Pan-Canadian Framework on Clean Growth and Climate Change (PCF); work to reduce Canadian greenhouse gas (GHG) emissions; drive clean growth; develop regulatory instruments; support businesses and Canadians to adapt and become more resilient to climate change; and contribute to international climate change actions to increase global benefits.

Planning highlights

Canada's Climate Plan

In December 2020, the Government of Canada released its strengthened climate plan: *A Healthy Environment and a Healthy Economy*, building on and complementing the measures in the Pan-Canadian Framework. Since then, the Government has made additional commitments, including mandating the sale of zero-emission vehicles so that 100% of new light-duty vehicles (cars, pickups, etc.) sold in Canada are zero emission by 2035, and making additional investments in public transit and active transportation, as well as \$17.5 billion in green recovery measures under Budget 2021. Work is well underway to implement these policies and plans.

Building on the momentum from COP26, Environment and Climate Change Canada (ECCC) will continue to demonstrate strong climate leadership at home and abroad. Taking climate action now will be critical to enable Canada to benefit from and compete in a global low-carbon economy. In 2022–23, the Department will continue working with partners to implement its commitments and collectively increase climate action to achieve Canada's climate objectives.

In 2022–2023, ECCC will continue to advance Canada's National Adaptation Strategy and deliver climate services. In June 2021, over 60 participants from partner and stakeholder groups were engaged in a forum to launch the first phase of the development of Canada's National Adaptation Strategy. The second phase, focused on broader engagement and elaboration of actions, is planned to conclude in 2022 with the release of the strategy. The Canadian Centre for Climate services will continue to work with provinces, territories and Indigenous partners to establish regional climate service expert organizations, enhancing its National network of climate service providers across the country.

Departmental Result:

Canadian greenhouse gas and short-lived climate pollutant emissions are reduced

Achieving Canada's enhanced 2030 GHG reduction target and putting Canada on path to net-zero emissions by 2050

Over the past seven years, an intensive national effort has been made to put Canada on a path to significantly reduce emissions in a way that ensures all sectors and parts of the country can participate and thrive in an increasingly low-carbon economy.

In 2016, Canada adopted the Pan-Canadian Framework on Clean Growth and Climate Change, Canada's first-ever national climate plan that is doing more to cut carbon pollution than any other plan in Canadian history. The Pan-Canadian Framework was an historic achievement and represents an important step for Canada. However, with the rapidly accelerating climate crisis and, in light of the scale of the clean growth opportunity, the Government committed to meet and exceed its previous 2030 GHG emissions reduction target of 30% below 2005 levels, and formalized that commitment in December of 2020 through Canada's Strengthened Climate Plan — *A Healthy Environment and A Healthy Economy*.

In April 2021, Canada and many other countries, including the United Kingdom and the United States, raised their climate ambitions and recognized the need to continue building a sustainable and resilient economy and reduce emissions year over year. This is why Canada committed to a new 2030 target of 40–45% below 2005 levels, and submitted this target to the UNFCCC as Canada's Nationally Determined Contribution under the Paris Agreement.

At COP26, the Government of Canada announced new ambitious measures to support the achievement of Canada's 2030 GHG target. This includes capping and reducing emissions from the oil and gas sector at a scale and scope needed to achieve net-zero emissions by 2050, reducing methane emissions from oil and gas by at least 75% by 2030, and transitioning to a net-zero electricity grid by 2035.

In 2022–23, Environment and Climate Change Canada will continue to work with other federal organizations, provinces, territories, Indigenous partners and stakeholders to implement the plans and policies to meet Canada's 2030 target. The Department will also work with partners and stakeholders to increase climate action to achieve Canada's climate objectives, including implementing the *Canadian Net-Zero Emissions Accountability Act*.

First Nations, Inuit and Métis peoples have been at the forefront of drawing attention to the impacts of climate change. They have reinforced the need to take action to reduce pollution, to adapt to the impacts of climate change, and to improve the ways in which the natural environment is respected and protected. In doing so, they reinforce that leadership by Indigenous peoples is critical to achieving the foundational changes required to address climate change. In 2022–23, as identified in *A Healthy Environment and a Healthy Economy*, ECCC will continue its partnership and constructive dialogue with First Nations, Inuit and Métis organizations to advance Indigenous climate leadership and ensure federal policies and programs are designed to address Indigenous peoples' climate priorities. To that effect, feedback from Indigenous communities will be sought in the context of the Core Climate Change Mitigation evaluation that will inform and support ECCC with respect to Indigenous climate priorities.

Canadian Net-Zero Emissions Accountability Act

The *Canadian Net-Zero Emissions Accountability Act* received Royal Assent in June 2021, giving legal force to the achievement of the goal of net-zero GHG emissions by 2050 and requiring the Government to set national targets at least 10 years in advance for the reduction of GHG emissions at five-year intervals. Implementation of this legislation will ensure transparency and accountability through requirements for emissions reduction plans, progress reports, and assessment reports with respect to each five-year target. Plans will contain important information, such as descriptions of the key emissions reduction measures the Government of Canada intends to undertake to achieve the target for a particular milestone year. Canada's first emissions reduction plan to be established under the *Act* will be for the 2030 target year and is a key milestone on the pathway to net-zero by 2050.

Net-Zero Advisory Body

In February 2021, the Government of Canada announced the creation of the Net-Zero Advisory Body (NZAB) to engage with Canadians and provide independent advice to the Minister with respect to achieving net-zero emissions by 2050. Annual reports from the NZAB will inform the targets and emissions reductions plans required by the *Canadian Net-Zero Emissions Accountability Act*.

The *Act* also provides accountability and transparency by enshrining the role of Indigenous knowledge in the climate accountability process, and requires the Government, when setting or amending a target or plan, to provide the opportunity for provincial/territorial governments, Indigenous peoples, the Net-Zero Advisory Body and the public to make submissions. Under the *Act*, the Net-Zero Advisory Body is established as a Governor in Council-appointed body that will provide the Minister of Environment and Climate Change with independent advice on achieving net-zero emissions by 2050. The *Act* sets out requirements for reporting on actions taken to mitigate climate change (Commissioner of the Environment and Sustainable Development) and manage financial risks and opportunities (Minister of Finance).

Pricing carbon pollution

A [price on carbon pollution](#)^{vii} across Canada creates incentives for individuals, households, and businesses to choose cleaner options, including green technology. Under the *Greenhouse Gas Pollution Pricing Act*, the federal carbon pollution pricing system has two parts: a regulatory charge on fossil fuels (the fuel charge); and a performance-based pricing system for industrial facilities, known as the Output-Based Pricing System (OBPS). The system applies in those provinces and territories that requested it and in those that did not have their own system that meets the federal benchmark stringency criteria. The OBPS is designed to put a price on carbon pollution and reduce the risk of carbon leakage from industry, enabling industries to maintain competitiveness relative to international peers and affording them the flexibility to meet emissions limits through emissions trading and the use of GHG offset credits.

In 2022–23, ECCC will continue to implement the Pan-Canadian Approach to Pricing Carbon Pollution, including: implementing the Federal Output-based Pricing System for industrial emitters; assessing provincial/territorial carbon pollution pricing systems against the minimum national stringency standards (the federal “benchmark”); and finalizing the Federal GHG Offset System, which will encourage cost-effective GHG reductions and removals from activities that are not covered by carbon pricing, including in the agriculture, forestry and waste sectors. The Department will also submit its annual report on the *Greenhouse Gas Pollution Pricing Act* to Parliament.

Carbon pollution pricing proceeds programming

The federal carbon pollution pricing system returns proceeds collected to jurisdictions of origin, including proceeds collected from the fuel charge and the OBPS. Participating provincial and territorial governments that have committed to addressing climate change by voluntarily adopting the federal system can receive these proceeds directly from the Government of Canada. In the remaining provinces where the federal price on carbon pollution is in effect, the Government of Canada returns the proceeds through several mechanisms. Most of the fuel charge proceeds go directly to households through Climate Action Incentive payments, delivered through annual tax returns. Through these payments, the majority of households receive more money back than they pay. The remainder of those proceeds are returned to other affected sectors and groups, such as Indigenous peoples, farmers, and small and medium-sized businesses. In some provinces, the Department will also administer programming to return proceeds from the OBPS to support industrial decarbonisation projects and greening the electricity sector.

ECCC will continue to advance domestic and international work to reduce short-lived climate pollutant (SLCP) emissions in line with Canada's Strategy on Short-lived Climate Pollutants. SLCPs such as black carbon, methane, hydrofluorocarbons and ground-level ozone, are potent GHGs and air pollutants that contribute to climate warming and can affect air quality.

ECCC's commitment to modernize its digital services to improve access to authoritative, foundational climate science and information enables the work of ECCC scientists to inform and support clean growth and climate change program priorities, including the publication of reports. The most recent information on GHG emissions and air pollutants will continue to be published by ECCC in the following annual inventories and reports:

- [National Inventory Report: Greenhouse Gas Sources and Sinks in Canada^{viii}](#)
- [Overview of Reported Emissions: Facility Greenhouse Gas Reporting Program^{ix}](#)
- [Canada's Air Pollutant Emissions Inventory^x](#)
- [Canada's Black Carbon Emissions Inventory^{xi}](#)

Low Carbon Economy Fund

To support climate action across the country, ECCC will continue to implement the [Low Carbon Economy Fund^{xii}](#) to provide up to \$2 billion in funding to reduce carbon pollution. Specifically, in 2022–23 the Department will continue to implement the Low Carbon Economy Leadership Fund by working with provinces and territories, and by providing up to \$1.4 billion in support by 2023-24 to help them to deliver on their commitments to reduce carbon pollution and contribute to meeting or exceeding Canada's 2030 climate target.

The Department will also continue to administer the second component of the Low Carbon Economy Fund, the Low Carbon Economy Challenge, which provides approximately \$500 million in support to projects that will generate clean growth, reduce GHG emissions, and help meet Canada's Paris Agreement commitments.

Regulations to reduce GHGs and other air pollutants

To realize Canada's enhanced GHG emission reduction target of 40–45% (relative to 2005 emission levels) by 2030, in 2022–23 the Department will finalize the clean fuel standard regulations and associated lifecycle assessment model. The clean fuel standard is based on a lifecycle carbon intensity approach that takes into account the emissions associated with all stages of fuel production and use—from extraction through processing, distribution, and end use. It will reduce the lifecycle carbon intensity of liquid fuels used in Canada and will support the production of cleaner fuels to enable the changes required for long-term decarbonization in Canada.

ECCC will continue to use regulations to reduce GHG emissions from the oil and gas, transportation, electricity and other industrial sectors that contribute significantly to total GHG emissions in Canada. The following are some examples of how the Department will work to achieve this goal:

- Mandating the sale of zero-emission vehicles so that 100% of new light-duty vehicles sold in Canada are zero-emission by 2035, with at least 50% being zero-emission by 2030.
- Developing emissions standards for heavy-duty vehicles that are aligned with the most ambitious standards in North America, and requiring that 100% of selected categories of medium- and heavy-duty vehicles be zero-emission by 2040.
- Strengthening Canada's Light-Duty Vehicle regulations for the post-2025 period by aligning them with the most stringent performance standards in North America.
- Collaborating with the United States under the Canada-United States Air Quality Agreement to reduce air pollutant and GHG emissions from vehicles, fuels, and the oil and gas sector.

Commitment to reduce HFCs

Canada has committed, through the Kigali Amendment to the Montréal Protocol, to an 85% reduction in HFCs by 2036. Canada will continue to work with all industry stakeholders to ensure that it meets its international obligations to phase down HFCs and protect our environment. ECCC will maintain its efforts to renew regulatory reporting systems to lessen duplicative reporting for industry and integrate reported information with other key ECCC data holdings.

- Collaborating with California via the recent memorandum of understanding with the California Air Resources Board on measures to advance clean transportation and GHG emissions reductions.
- Continuing to implement regulations to reduce the release of methane and certain Volatile Organic Compounds (VOC) from the upstream oil and gas sector to achieve a 40 to 45% reduction below 2012 levels by 2025.
- Developing an approach to reduce methane emissions from the oil and gas sector by at least 75% below 2012 levels by 2030.
- Working with provinces, territories, Indigenous groups, and stakeholders to develop an approach to capping and reducing oil and gas sector emissions at a pace and scale necessary to ensure Canada meets its overall climate targets. This will involve setting 5-year milestones.
- Working with provinces, territories and other stakeholders to design and implement a Clean Electricity Standard to achieve a net-zero electricity grid by 2035.
- Continuing to implement the *Ozone-depleting Substances and Halocarbon Alternatives Regulations* to restrict the use of Hydrofluorocarbon (HFCs), which are powerful short-lived climate pollutants that contribute to climate change. These controls are expected to result in cumulative GHG emission reductions of 37Mt CO₂e (megatonnes of carbon dioxide equivalents) between 2018 and 2030.

Climate Action and Awareness Fund

Launched in September 2020, the Department continues to administer the [Climate Action and Awareness Fund^{xiii}](#) (CAAF), a funding initiative that will invest up to \$206 million over five years to support Canadian projects that help to reduce Canada's GHG emissions and build a sustainable net zero emissions economy by 2050. ECCC will continue to use funds from the Environmental Damages Fund, as well as \$15 million over five years from the Climate Action Fund, to create this unique opportunity.

The Climate Action and Awareness Fund is supported by the historic \$196.5 million fine paid by Volkswagen for circumventing Canada's environmental protection rules—the largest environmental fine in Canadian history. In 2022–23, ECCC will continue to apply monies from this fund to support environmental initiatives under three priorities: youth climate awareness and community-based climate action; advancing climate science and technology; and supporting climate research at Canadian think tank organizations and in academia. Initiatives will include:

- \$5.9 million for Let's Talk Science, which will engage over 600,000 youth across Canada in climate science awareness and action through regional events, action projects, hands-on activities and a suite of digital resources, including career information.
- \$6 million for the Halifax Discovery Centre's Inspiring Youth to Climate Action project, which will partner with 30 science centres across the country to engage some 200,000 youth in every province and territory to take real action to fight climate change.
- \$4.5 million for Clean Foundation's Youth Climate Action Now (YouCAN) project, which will engage and empower 70,000 youth to take climate action in their own lives and communities, including by providing professional learning to 2,000 educators to give them tools to support youth in their climate action initiatives.
- \$3.3 million for Project 2050: Community Climate Challenge, where Earth Rangers will engage 300,000 children aged six to twelve across Canada to take collective action at home, at school, and in their communities.

Nature-based climate solutions

Climate change and biodiversity loss are often referred to as dual crises, for which integrated and complementary solutions are both crucial and urgent. Canada has a role to play in implementing such solutions, in part because we have one of the world's largest carbon stores in our vast landscapes of forests, wetlands, peatlands, and other carbon-rich ecosystems. The Government of Canada has committed to conserving 25% of Canada's land and oceans by 2025, including by using nature-based solutions to fight climate change. By conserving, restoring and improving management practices in our carbon-rich ecosystems, such as wetlands, Canada will build climate resilience by reducing net GHG emissions while providing benefits for biodiversity, including habitat for species, and Canadians. As identified in Canada's new climate plan, *A Healthy Environment and a Healthy Economy*, ECCC will continue to work with federal partners, provinces, territories, conservation organizations, Indigenous peoples, the private sector, and civil society to implement new investments. These include the following initiatives under the overarching Natural Climate Solutions Fund: \$3.16 billion over ten years to plant two billion trees (led by Natural Resources Canada); \$631 million over ten years to enhance wetland, peatland, grassland and agricultural carbon sequestration potential through the Nature Smart Climate Solutions Fund; and \$185 million over ten years to establish a new Agricultural Climate Solutions program (led by Agriculture and Agri-Food Canada). Canada's new climate plan incorporates nature-based climate solutions as one of its five pillars. It also complements Canada's international efforts, including in developing countries where we have committed to assign at least 20% of our climate finance toward nature-based climate solutions with biodiversity co-benefits.

Partnerships to Step up ZEVs

ECCC will continue to work with federal partners (Innovation, Science and Economic Development Canada, Transport Canada and Natural Resources Canada) to advance zero-emission vehicle (ZEV) targets of at least 50% of light-duty vehicle sales by 2030 and 100% by 2035.

Reducing GHGs in ECCC operations

ECCC will continue to reduce energy-related GHG emissions from its own facilities by implementing cost-effective GHG emission reduction projects, in addition to rationalizing its real estate portfolio, optimizing space, and ensuring that all new buildings and major building retrofits prioritize low-carbon investments. The Department will also assess opportunities to deploy on-site clean electricity in its buildings and purchase off-site clean electricity to help achieve 100% clean electricity usage by 2022, where available, and by 2025 at the latest.

Moreover, ECCC will take actions to reduce energy use in its fleet through fleet-sharing and the purchase of zero-emission vehicles (ZEVs), with the objective of reaching 80% of ZEVs in its light-duty fleet by 2030 and, where possible, through the provision of ZEV charging stations within its facilities. In 2022–23, ECCC will continue to implement actions identified in its Departmental Adaptation Plan to address climate change risks to its assets, services and operations.

Departmental Result:
Canadian communities, economies and ecosystems are more resilient

Enhancing climate services

The [Canadian Centre for Climate Services^{iv}](#) (CCCS) works with partners and stakeholders to help Canadians increase their resilience to climate change through information, training, guidance, and resources to support climate-smart decisions. In 2022–23, ECCC will put the digital infrastructure in place in order to provide Canadians with authoritative climate information through the CCCS. The Department will continue to expand the national network of regional climate service organizations to increase local capacity. The CCCS will collaborate with partners to develop climate information products and tools. Training material and resources will be tailored to help Canadians use climate information, and expert support will be provided to individual enquiries sent through the Climate Services Support Desk.

Action on climate change adaptation

Canada is warming at twice the average global rate and three times this rate in the North, which in turn is increasing the frequency and intensity of flooding, droughts and wildfires, and contributing to permafrost thaw and sea-level rise. To meet this growing challenge, ECCC is working with partners to enhance action on climate change adaptation.

In August 2021, the Government of Canada released *Adapting to the Impacts of Climate Change in Canada: an update on the National Adaptation Strategy*. This report builds on a first round of conversations with provinces and territories, non-governmental organizations, the private sector, Indigenous representatives, and youth organizations to identify the strategy's objectives and principles. In 2022–23, ECCC will advance work on Canada's National Adaptation Strategy, focused on a shared vision for resilience in Canada and priorities for collaboration. This new approach will include the development of metrics to measure progress at the national level.

ECCC will partner with the climate consortium Ouranos in the planning of the seventh Adaptation Futures international conference series on global adaptation, scheduled to take place in Montréal in 2023. ECCC will also continue to collaborate with provinces and territories through the Canadian Council of Ministers of the Environment to share knowledge and best practices in order to advance adaptation efforts across jurisdictions.

In 2022–23, ECCC will collaborate with other federal departments and agencies in delivering on new investments announced in 2021 for climate change adaptation and resilience, including wildfire resilience, flood maps, health adaptation, and standards to support infrastructure resilience, as well as \$1.9 billion to support provincial and territorial disaster response and recovery efforts.

Departmental Result:

Canada contributes to reducing greenhouse gas emissions and increasing climate resilience globally

Meeting Canada's commitments to international partners under the Paris Agreement

ECCC will continue its leadership role in increasing the global response to climate change by working with international partners to implement the Paris Agreement, which Canada ratified in October 2016. Having continued to engage internationally to advance ambitious and inclusive climate action at the November 2021 Conference of the Parties (COP 26), Canada will prepare for COP 27 planned for November 2022. In the lead-up to COP 27 and beyond, ECCC will continue to lead Canada's engagement on climate change and the environment in various other multilateral fora, such as the G7, G20, Organization for Economic Cooperation and Development (OECD), United Nations Environment Assembly (UNEA), and others, in order to help advance the ambitious implementation of the Paris Agreement. This international work includes engaging Indigenous peoples in developing international climate policy, and promoting gender equality and the role of women in climate action around the world. Canada will also remain steadfast in its efforts to ensure that all Parties to the Paris Agreement undertake ambitious actions under a common framework reflecting the highest standards of transparency and environmental integrity.

The Department will continue to support developing countries transition to resilient, low-carbon economies. In June 2021, Canada announced a doubling of its climate finance to \$5.3 billion over the next five years. ECCC will support the delivery of Canada's climate finance commitment by implementing targeted and strategic initiatives through bilateral and multilateral channels to support climate action in developing countries. The Department will continue to collaborate with its partners to establish proper governance as identified in a recent evaluation on International Climate Change Cooperation. ECCC will also continue to advance clean growth and climate action in support of the goals of the Paris Agreement through international partnerships, initiatives, and bilateral cooperation. For example, the Department will continue to co-lead the Powering Past Coal Alliance (PPCA) with the United Kingdom. The PPCA is the world's first and only government-led initiative seeking to accelerate the global phase-out of emissions from coal power.

Reflecting clean growth/climate change in free trade agreements

Canada seeks to include ambitious, comprehensive, and enforceable environmental provisions in its free trade agreements (FTAs). This includes obligations to maintain robust environmental governance as trade and investment are liberalized, and commitments on a range of global environmental issues, including illegal wildlife trade, sustainable fisheries and forestry management, climate change, and clean technology. These commitments are being implemented as part of Canada's FTAs and other bilateral and regional cooperation instruments with key trading partners, including the United States, Mexico, the European Union and countries party to the Comprehensive and Progressive Agreement for Trans-Pacific Partnership.

Gender-based analysis plus



It is well understood that Canada's changing climate exacerbates existing challenges and health stressors for Indigenous peoples in Canada. Climate change also disproportionately impacts northern, rural, remote, and coastal communities, younger and older generations, people with health issues or disabilities, low-income groups, women, and those at the intersection of these identities. ECCC will continue to consider the impacts of its climate change policies and programs in order to avoid, as much as possible, further negative impacts on affected populations, and will lead and coordinate a whole-of-government development of Canada's strengthened climate plan, which included the [publication of GBA+^{xv}](#) analytical results from the initial policy development phase. The Government will continue to conduct additional GBA+ analysis for each policy and program to maximize positive benefits for those most impacted by the negative effects of climate change.

Canada's approach features a globally ambitious carbon price and returns all proceeds from the federal system to the jurisdiction of origin, with most proceeds returned through a household rebate system to keep costs down for low-income and vulnerable Canadians and so ensure that most Canadians are better off. An additional 10% top-up on these payments is given to households in rural and smaller communities. Proceeds support key sectors, including small- and medium-sized businesses, municipalities, universities and colleges, schools, hospitals, not-for-profit organizations and Indigenous communities. Under the federal system, relief is provided for farmers, fishers, residents of rural and small communities, users of aviation fuel in the territories, greenhouse operators, and power plants that generate electricity for remote communities.

In recognition of climate change's widespread and often disproportionate effects, including its ability to exacerbate existing inequalities and compound risks among already impacted populations, ECCC will continue its engagement with a diverse, inclusive and sometimes new set of partners to inform the development of a National Adaptation Strategy. The strategy will consider advancements to social equity and well-being as guiding principles in order to foster adaptation actions and processes that are inclusive of all Canadians. ECCC is continuing its ongoing engagement with First Nations, Inuit, and Métis Nation partners through senior-level bilateral tables to support self-determination and enable Indigenous-led climate solutions. On the international front, GBA+ considerations are included during the negotiation and implementation of FTAs, and are integrated into bilateral and regional environmental cooperation activities with international partners. Canada also continues to implement the Gender Action Plan that was adopted under the United Nations Framework Convention on Climate Change. The Plan aims to increase women's participation and leadership in climate action and to better integrate gender considerations in national climate plans and policies. Over the next five years, 80% of Canada's climate finance will also target gender equality outcomes.

Key Risks

The Department's ability to deliver results for Canadians on clean growth and climate change requires extensive collaboration with federal, provincial, territorial, Indigenous and international partners, as well as with the private and non-profit sectors and civil society, to ensure alignment and effective cooperation. These efforts can be complicated by policy or directional divergences, competing priorities and resource constraints.

ECCC works collaboratively with key partners to implement and build on the Pan-Canadian Framework on Clean Growth and Climate Change (PCF), as well as to support engagement efforts as part of Canada's Strengthened Climate Plan, *A Healthy Environment and a Healthy Economy*, and additional climate measures. The Department will continue to enhance its strategic relationships, including through participating in the development of a coordinated, government-wide engagement strategy. In the event that international travel restrictions related to COVID-19 are still in effect, the Department will continue to virtually facilitate bilateral and multilateral cooperation and targeted studies to continue to drive international leadership and advance commitments, and will explore new means of planning and conducting consultations in a coordinated fashion.

ECCC also plays an important role in supporting Government of Canada efforts to adapt to the impacts of changing climatic realities. The design of programs to account for climate change impacts and risks enables organizations to continue to deliver on their mandates by protecting assets and avoiding service disruptions. Adaptation also allows organizations to take advantage of any opportunities to address related uncertainties. To be resilient in the face of climate change, ECCC will continue to implement the Departmental Adaptation Plan and address the risks in ECCC's Climate Change Risk Assessment.



United Nations' 2030 Agenda¹ and Sustainable Development Goals^{xvi}

In defining a whole of government view of federal environmental sustainability commitments and actions, the 2019–2022 Federal Sustainable Development Strategy, developed and coordinated by ECCC, supports Canada's overall response to the United Nations Sustainable Development Agenda. ECCC's continued implementation of activities in support of its core responsibility for *Taking Action on Clean Growth and Climate Change* will directly contribute to the achievement of numerous sustainable development goals. For example, pricing carbon pollution and implementing associated regulations will comprehensively and directly combat climate change and its impacts by reducing greenhouse gas emissions and stimulating investments in clean innovation ([Goal 7^{xvii}](#) and [Goal 13^{xviii}](#)), while initiatives such as climate action incentives and partnership funding will promote inclusive and sustainable economic growth ([Goal 8^{xix}](#)). Supporting resilient infrastructure and innovative and inclusive approaches to industrial development will be achieved through LCEF incentives ([Goal 9^{xx}](#)), which will also foster sustainable business, employment and consumption practices ([Goal 1^{xxi}](#) and [Goal 12^{xxii}](#)). ECCC will continue to support Employment and Social Development Canada in delivering a whole-of-society 2030 Agenda National Strategy.

When considered together, ECCC initiatives represent a comprehensive approach to facilitate Canada's shift to a low carbon economy, reduce greenhouse gas emissions, achieve clean and sustainable growth, and promote innovation in industrial technologies and processes that will create sustainable industries and jobs and enhance Canada's competitiveness. ECCC's programs will also help regions and communities plan for and adapt to the impacts of climate change, and so mitigate threats to health, safety and well-being.

Commitment to Experimentation: Program of Applied Research on Climate Action (PARCA)

ECCC is participating in a program of applied research that will promote climate and environmental action and adaptation by Canadians and communities. The program draws on behavioural science and is being led by the Privy Council Office, in partnership with ECCC and Natural Resources Canada. It includes a multi-year public opinion study supplemented by rapid online studies, experiments and in-field testing to produce data on what drives individual choices and what barriers stand in the way of greater action. This will bring new insight and evidence to policy development, program design and public communications on climate and environmental action.

¹ In 2015, all United Nations (UN) member states came together and adopted *Transforming Our World: The 2030 Agenda for Sustainable Development*. At its heart are 17 Sustainable Development Goals that encompass key social, economic, and environmental challenges.

Commitment to Experimentation: Use of Satellites for Greenhouse Gas Policy Development

ECCC is testing the use of Canadian satellite technology to contribute to eliminating methane emissions in the oil and gas sector in a project called Satellite Wide-Area Surveillance of Greenhouse Gas Emissions (SWAS-GHG). ECCC is working with a private company to use Artificial Intelligence and predictive analytics to detect methane hotspots and forecast areas at higher risk of leaks, down to individual oil and gas wells and landfills. Canadian-built satellites will then measure the sites and the quantity of emissions with localized high-resolution coverage that would otherwise not be possible without an unfeasibly large number of satellites. This innovative project aims to improve current approaches related to performance and cost.

Planned results for Taking Action on Clean Growth and Climate Change

The following table shows, for Taking Action on Clean Growth and Climate Change, the planned results, the result indicators, the targets and the target dates for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental Result: Canadian greenhouse gas and short-lived climate pollutant emissions are reduced | | | | | |
|--|---|------------------------|---|--|---|
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| GHG emissions from light duty vehicles | Under review. ² | Under review. | 16% improvement [2016 model year reporting]. | 17% improvement in performance [2017 model year reporting]. | 21% improvement [2018 model year]. |
| GHG emissions from heavy duty vehicles | Reporting for 2021 Model Year: Percentage improvement in GHG emissions performance for manufacturer model year 2021–2023 reporting relative to the 2018 model year: •2%: heavy-duty pick-up trucks and vans •13%: Combination Tractors •8%: Vocational vehicles | April 2023 | Results not yet available. The performance results for the 2018-19 model year fleet will be available in the 2020-21 reporting cycle. | <ul style="list-style-type: none"> •12.2%: heavy-duty pick-up trucks and vans •19.1%: Combination Tractors •8.5%: Vocational vehicles [2018 model year] | <ul style="list-style-type: none"> 13%: heavy-duty pick-up trucks and vans •20%: combination tractors •9%: vocational vehicles [2019 model year] |
| Black carbon emissions, as reported in Canada's Black Carbon Emissions Inventory | 25% decrease from an annually calculated 2013 baseline of national emissions. | December 2025 | 30Kt in 2017 (19% reduction from baseline ³). | 31Kt in 2018 (16% reduction from baseline ³). | 31Kt in 2019 (16% reduction from baseline). |

² Current date to achieve target is December 2020. The Program is looking into updating this target post-2022.

³ Recalculated baseline.

| | | | | | |
|---|---|---------------|---|--|---|
| Hydrofluorocarbon (HFC) emissions | 10% reduction in consumption relative to calculated Canadian HFC baseline of 18,008,795 tonnes of CO ₂ e. | December 2022 | Results not yet available. Results expected to be available in April 2020, following the submission of the National Inventory Report for the 2019 calendar year. ⁴ | 13.76% below baseline for the 2019 calendar year. | 23% below baseline for the 2019 calendar year. |
| Reduced methane emissions from the oil and gas sector | Annual decrease towards a 40–45% reduction relative to 2012 levels. | December 2025 | Results expected to be available in 2022. ⁵ | | |
| Emissions reductions are being achieved under the Clean Fuel Standard building on the Renewable Fuels Regulations | Over 20 Mt annual GHG emissions reduction. | December 2030 | Results are not available. Draft regulations for the liquids class were published on December 19, 2020, with those for gaseous and solid classes to come in 2021. | | |
| Percentage of coal-fired electricity generation units meeting their regulated GHG emissions intensity performance requirement | 100% | December 2022 | Results not yet available. Although the date to achieve this target is identified as December 2019, reporting will only be available in 2021–22. | Results not yet available. Complete reporting will be available in 2021–22. ⁶ | Results not yet available. Complete reporting will be available in 2021–22. ⁷ |
| Carbon pollution pricing systems are in place in Canada | All Provinces and Territories have carbon pollution pricing systems in place that meets the federal benchmark stringency requirements or the federal backstop system applies. | March 2022 | As of March 31, 2019, all 10 provinces had in place carbon pollution pricing systems that aligns with the benchmark or the federal system. | As of March 31, 2019, all 10 provinces had in place carbon pollution pricing that aligns with the federal benchmark (either a provincial system or the federal backstop). The federal backstop applied in Nunavut and Yukon beginning | 13 Provinces and Territories have carbon pollution pricing systems in place that align with the federal benchmark or the federal system applies. ECCC annually verifies provincial and territorial carbon pricing systems continue to meet the minimum national stringency standards. |

⁴ First results available in the 2019-20 reporting cycle.

⁵ Methane regulations came into force in 2020. First results expected to be available in the fall of 2022.

⁶ As of July 2020, of the nine units required to meet the performance standard by January 1, 2020: two have shut down, three have until 2021 to provide a report demonstrating compliance with the regulation, and four are subject to equivalency agreements with specific provinces.

⁷ As of July 2021, of the six units required to meet the performance standard by January 1, 2021: one has shut down, one has demonstrated compliance with the regulation and four are subject to equivalency agreements with specific provinces.

| | | | | July 1, 2019. The Northwest Territories' carbon pollution pricing system came into force on September 1, 2019. | |
|---|---|---|---|--|--|
| GHG emissions from ECCC operations are reduced | 40% GHG emissions reduction from ECCC operations (facilities and fleet) relative to 21,549 tonnes in 2005–06 baseline year. | 2025 | 31% | 35.2% | Results not yet available. Results are expected later in 2021. ⁸ |
| Departmental Result: Indigenous peoples are engaged in clean growth and climate change | | | | | |
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Co-development of indicators with Indigenous peoples to ensure they are engaged in the implementation of the PCF, through three distinct senior-level joint tables with First Nations, Inuit and the Métis Nation | This indicator will be retired once the co-development of indicators with Indigenous peoples has been completed. | Targeted completion is development of indicators before March 31, 2023. | Results not yet available. A new date to achieve this target is being established in consultation with Indigenous partners. | In 2019-20, ECCC held a number of meetings of the senior-level bilateral tables with First Nations and the Métis. These meetings led to productive discussions on issues related to clean growth and climate change that matter most to the Indigenous groups, including carbon pollution pricing and the administration of federal programming. | In 2020–21, the department continued to advance work with Indigenous partners on the co-development of indicators, while addressing engagement obstacles posed by the COVID-19 pandemic. |

⁸ It is expected that the results will be available in future ECCC reporting.

| Departmental Result: Canada contributes to reducing greenhouse gas emissions and increasing climate resilience globally | | | | | |
|---|---|---|---|--------------------------------------|--|
| Departmental result indicator | Target | Date to achieve target | 2018-19 actual result | 2019-20 actual result | 2020-21 actual result |
| Cumulative amount of private finance mobilized through Canada's public sector investments | Higher cumulative amounts mobilized in private climate finance, from year to year (reaching overall a ratio of private sector finance leveraged by Canada's public sector investments, of at least 1 to 0.5). | Long-term cumulative indicator. ⁹ | This is a new indicator, as of 2021-22. First year of reporting will be for 2021-22. ¹⁰ | | |
| GHG reductions resulting from international initiatives funded by Canada | Higher cumulative reductions from year to year, from the baseline, reaching minimum reduction of 200 Mt of GHGs. | Long-term cumulative indicator. ¹¹ | An estimated cumulative reduction of 175.7 Mt of GHGs is expected from Canada's \$2.65B funding by 2018-19. | Results not available. ¹² | An estimated cumulative reduction to date of 222.2 Mt of GHGs is expected from Canada's \$2.65B climate finance commitment. |
| Cumulative number of people in developing countries who benefited from Canada's adaptation finance | At least 10 million. | December 2030 | A cumulative estimate of 4,593,285 people will have increased their resilience as a result of Canada's \$2.65B funding. | Results not available. ¹¹ | A cumulative estimate of 5.9M people to date with increased resilience is expected from Canada's \$2.65B climate finance commitment. |

⁹ Date to achieve target is not applicable. The nature of the indicator is such that it is expected to generate results for an undetermined period.

¹⁰ This indicator replaces the indicator "Canada's public sector investments leverage private sector climate finance", the latest results of which are as follows: Between 2017 and 2019, Canada's public funding of CAD \$87.4M mobilized CAD \$33.98M in private climate finance as part of Canada's \$2.65B climate finance commitment (equivalent to a ratio of 0.4). The new indicator continues to use the same methodology for tracking and reporting data, therefore the results of the two indicators are comparable.

¹¹ Date to achieve target is not applicable. The nature of the indicator is such that it is expected to generate results for an undetermined period.

¹² Some of the key initiatives under the \$2.65B climate finance were not operational during 2019-20, as they had not yet been initiated. As such, no update was reported on the cumulative results.

| Departmental Result: Canadian communities, economies and ecosystems are more resilient | | | | | |
|--|---|--|--------------------------------------|--|--|
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Number of individuals, businesses, and governments accessing climate services and using that information to inform decision-making | For annual reporting: Increase from baseline. For reporting every 5 years: Establish baseline. ¹³ | For annual reporting: Annually in March. For reporting every 5 years: March 2023. | Results not available. ¹⁴ | 180,390 visits to access climate services. | 201,272 users accessed climate services via the Portals supported by the Canadian Centre for Climate Services and inquiries received via the support desk. |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{xxiii}](#).

Planned budgetary spending for Taking Action on Clean Growth and Climate Change*

The following table shows, for Taking Action on Clean Growth and Climate Change, budgetary spending for 2022–23, as well as planned spending for that year and for each of the next two fiscal years.

| 2022–23 budgetary spending (as indicated in Main Estimates) | 2022–23 planned spending | 2023–24 planned spending | 2024–25 planned spending |
|---|--------------------------|--------------------------|--------------------------|
| \$478,116,465 | \$478,116,465 | \$445,367,740 | \$235,472,381 |

*All figures, throughout the document, are net of spendable revenues.

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{xxiv}](#).

Planned human resources for Taking Action on Clean Growth and Climate Change*

The following table shows, in full-time equivalents, the human resources the Department will need to fulfill this core responsibility for 2022–23 and for each of the next two fiscal years

| 2022–23 planned full-time equivalents | 2023–24 planned full-time equivalents | 2024–25 planned full-time equivalents. |
|---------------------------------------|---------------------------------------|--|
| 897 | 896 | 902 |

* Totals may differ within and between tables due to rounding. The Full-Time Equivalents numbers, throughout the document, include students.

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{xxv}](#)

¹³ Baseline for the 5-year survey will be established when the Canadian Centre for Climate Services has been operational for 5–6 full years.

¹⁴ The Canadian Centre for Climate Services became operational in 2018. Data for 2018-19 is partial only.

Core Responsibility: Preventing and Managing Pollution

Description

Collaborate with provinces, territories, Indigenous peoples and others to develop and administer environmental standards, guidelines, regulations and other risk management instruments to reduce releases and monitor levels of contaminants in air, water and soil; and promote and enforce compliance with environmental laws and regulations.

Planning highlights

Departmental Result:

The Canadian environment is protected from harmful substances

Toward a circular economy

In 2022–23, ECCC will build on the 2021 World Circular Economy Forum and the Canadian Council of Canadian Academies' study *Turning Point* on the Canadian circular economy. Specifically, the Department will continue to collaborate with domestic and international partners and counterparts to advance key actions and systemic changes that are needed to create the conditions for long-term success on the path to a thriving global circular economy.

In 2022–23, the Department will continue to take a strategic approach to reducing the environmental impact of its operations and procurement practices, with a view to diverting at least 75% of plastic and non-hazardous operational waste from landfills by 2030, thus supporting the country's transition to a circular economy. Among other specific actions, ECCC has started to track waste diversion rates in priority buildings, and is finalizing its Departmental Green Procurement Plan, which includes promoting the use of sustainable plastic in goods and the development of criteria to reduce the environmental impact of procurement decisions while still ensuring best value.



Addressing plastic waste and pollution—towards zero plastic waste

ECCC will continue to work towards achieving Canada's goal of zero plastic waste by 2030. Priorities for 2022–23 include finalizing the ban on six harmful single use plastic products and developing proposed recycled content requirements for plastic products. ECCC and other federal government departments will continue to work with provinces and territories through the Canadian Council of Ministers of the Environment (CCME) to implement the CCME's 2018 [Strategy on Zero Plastic Waste^{xxvi}](#). The comprehensive Strategy targets each stage in the lifecycle of plastics through a suite of activities described in its Action Plans ([Phase 1^{xxvii}](#); [Phase 2^{xxviii}](#)). ECCC and other federal government departments are working on an evaluation that focuses on the design, implementation and early results of the Strategy.

Canada will also continue to take a leadership position in addressing plastic waste both nationally and internationally. Since 2018, Canada has spearheaded the Ocean Plastics Charter, which remains the only global framework to take a comprehensive approach to addressing marine plastics pollution by encouraging ambitious action and cooperation by governments, businesses and organizations. In support of the Charter, Canada is delivering on its \$100M contribution to address plastic waste in developing countries, spark innovation to beat plastic pollution, and support innovative private-public partnerships. As

of October 2021, the Charter is supported by 28 governments and more than 75 businesses and organizations domestically and globally. ECCC will continue to promote broad endorsement of the Charter in 2022-23. More partnerships and investments are needed globally to address plastic pollution. This is why Canada is participating in the important work underway through the United Nations Environment Assembly and is supportive of beginning negotiations towards a new global agreement on plastics.

Strengthening the Canadian Environmental Protection Act, 1999 (CEPA, 1999)

Over the past several decades, the science on the risks associated with harmful chemicals and pollutants has evolved. In order for CEPA, 1999 to continue to protect Canadians and their environment from harmful substances, the Government of Canada will continue to take steps to strengthen the Act in line with the science, and in recognition of Canadians' right to a healthy environment.

The proposed changes would strengthen protections for Canadians and the environment by:

- Recognizing a right to a healthy environment for every individual in Canada — a first in a federal statute in Canada.
- Assessing real life exposure based on the cumulative effects of a substance in combination with exposure to other substances, and better-protecting populations most at risk due to greater susceptibility or potential exposure to harmful substances.
- Implementing a new regime for toxic substances that pose the highest risk.
- Supporting the shift to less harmful chemicals through the establishment of a Watch List of substances capable of meeting the CEPA criteria of being considered a risk if, for example, there should be an increase in exposure.
- Creating a new Plan of Chemicals Management Priorities which will address the assessment and management of substances, and also support activities such as research, monitoring, information-gathering and risk communication.
- *Amending the Food and Drugs Act (FDA)* to provide the ability to develop a regulatory framework under the FDA to assess and manage the environmental risks of new drugs.

The proposed amendments represent the first major reform to CEPA, 1999, which was last updated more than 20 years ago.

Chemicals Management Plan

To protect the environment and Canadians from harmful substances, ECCC will continue to deliver Canada's [Chemicals Management Plan^{xxx}](#) (CMP) in collaboration with Health Canada. As of September 30, 2021, the two departments had addressed 3,989 of 4,363 chemicals identified in 2006 as priorities for attention. The remaining established priority chemicals will be addressed in subsequent years as required. The pace and volume of this risk assessment work was identified as a noteworthy accomplishment in a recent [evaluation of the CMP^{xxx}](#), in particular when compared to other agencies involved in chemical regulation around the globe. Since the launch of the CMP in 2006, there has been a doubling of risk management measures for toxic substances: from about 200 in 2006, to over 400 in 2021.

In 2022–23, ECCC will complete the process of aligning its Canadian Notice and Manifest Tracking System with the *Cross-border Movement of Hazardous Waste and Hazardous Recyclable Material Regulations*. ECCC and Health Canada will also continue to support regional First Nation leadership organizations to host community sessions about environmental protection on reserve lands.

Federal Sustainable Development Strategy (FSDS) 2022–2026

In 2022-23, ECCC will develop the 2022–2026 FSDS with contributions from more than 90 federal organizations and through public consultation with all Canadians. This FSDS will be the first developed since *An Act to Amend the Federal Sustainable Development Act* came into force on December 1, 2020.

ECCC will also provide advice to departments and agencies as they report federal progress against their 2020–2023 Departmental Sustainable Development Strategies.

Under the CMP, several research projects will address issues of chemical fate¹⁵, bioaccumulation and the effects of CMP priority substances.

ECCC is committed to continuous improvement. In order to streamline and improve data collection, reporting and information dissemination, ECCC will invest in changes to its single window infrastructure to support the CMP. Certain populations in Canada, such as expectant mothers, children, the elderly, and Indigenous communities, are more vulnerable to harmful substances and their needs will continue to be carefully considered in selecting risk management measures.

Pollution prevention under the Fisheries Act

ECCC is the lead federal department for the administration of the pollution prevention provisions of the *Fisheries Act*. These prohibit water pollution that is harmful to fish. In 2022–23, ECCC plans to publish proposed *Coal Mining Effluent Regulations* for consultation, and to undertake consultations to advance the development of new *Oil Sands Effluent Regulations* and to amend the *Wastewater Systems Effluent Regulations*.

Food safety and security

The Department will continue to work with Indigenous partners, stakeholders, land users and communities, and will conduct research and monitoring to inform decision-making regarding contaminants in Canadian ecosystems and traditionally harvested foods. ECCC will monitor priority contaminant trends in ecosystems, including in northern and arctic environments, in support of domestic and international chemical management initiatives, food safety and security, and the maintenance of traditional ways of life.

Federal contaminated sites

In 2022–23, ECCC will continue to provide expert advice to help federal custodians assess and remediate their contaminated sites to ensure that the highest-priority sites are remediated, and that risks to human health and the environment are reduced, under the Federal Contaminated Sites Action Plan (FCSAP).

Departmental Result: Canadians have clean water

Protecting Canada's Freshwater Resources

The Great Lakes, St. Lawrence River and Lake Winnipeg are among Canada's most important freshwater resources. In 2022–23, ECCC will continue to focus effort on improving, restoring and protecting these and other large lakes. This includes undertaking the science necessary to improve water quality, and to conserve and enhance aquatic ecosystems in these vital watersheds. The Department will engage Indigenous organizations and communities in the conservation and restoration of its freshwater resources, including by implementing key water agreements, and will support organization capacity development projects for Indigenous communities in line with recommendations from recent Freshwater evaluations. The Department will also increase public engagement in conservation and restoration through citizen science.

Restoring Hamilton Harbour

Cleaning up Randle Reef is one of the most significant steps remaining to remediate Hamilton Harbour and remove it from the list of Great Lakes Areas of Concern. ECCC will continue to collaborate with the Ontario Ministry of the Environment, Conservation and Parks, Stelco, Hamilton-Oshawa Port Authority, City of Hamilton, City of Burlington, and Halton Region to complete the project in 2023. Construction of the Engineered Containment Facility (ECF) was completed in 2017 and removal and placement of contaminated sediments into the ECF was completed in 2021. Once completed, the site will be turned over to the Hamilton Oshawa Port Authority, which will maintain the facility in perpetuity and use the site as valuable port land.

¹⁵ Chemical fate describes where a chemical goes when it gets out into the environment and how it might be chemically transformed in the process.

The Great Lakes Basin is home to one in three Canadians and one in ten Americans, and provides significant environmental and economic benefits to both countries. According to the [State of the Great Lakes 2019^{xxxi}](#), Great Lakes water quality is assessed overall as “fair and unchanging,” but with ongoing challenges that include invasive species and excess nutrients that contribute to toxic and nuisance algae.

To address these challenges and protect and conserve these major lakes, ECCC will continue to lead the implementation of the 2012 Canada-United States Great Lakes Water Quality Agreement (GLWQA) on behalf of the Government of Canada and will continue work to finalize bi-national priorities for 2023–2025 in cooperation with other federal departments, the Province of Ontario, U.S. federal and state agencies, Indigenous communities and organizations, and other partners. In partnership with the Government of Ontario, the Department will lead the implementation of the 2021 Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (2021–2026) and will continue to implement the Canada-Ontario Lake Erie Action Plan. These major agreements are aligned to address key challenges, including chemical pollution and plastic waste.

ECCC will implement the Great Lakes Protection Initiative to restore the water quality and ecosystem health of Great Lakes Areas of Concern, among other priorities. The Department will lead the development of a detailed inter-agency implementation plan to achieve Canada-Ontario targets under the Canada-Ontario Lake Erie Action Plan.

The St. Lawrence River is recognized worldwide, as reflected by the Ramsar Convention designation of its four Wetlands of International Importance, as well as the United Nations Educational, Scientific and Cultural Organization (UNESCO) designations of the Lac Saint-Pierre Biosphere Reserve and the Miguasha National Park World Heritage Site. The governments of Canada and Québec will invest \$39 million and \$25 million respectively over five years for the conservation and enhancement of the St. Lawrence River. These investments are part of the new 2021–2026 program under the Canada-Québec Agreement on the St. Lawrence, also referred to as the St. Lawrence Action Plan 2011–2026. ECCC will initiate an evaluation of the St. Lawrence Action Plan in 2022–2023. ECCC will continue its monitoring program and publish the results of indicators of St. Lawrence water quality in 2022–23.

In the Lake Winnipeg Basin, ECCC will continue to collaborate with Manitoba to implement the new Canada-Manitoba Memorandum of Understanding (MOU) Respecting Lake Winnipeg and the Lake Winnipeg Basin. Under the five-year MOU, signed in 2021, work will continue with Indigenous and other partners to reduce nutrient loadings in the Basin in support of established nutrient reduction targets of 50% for Lake Winnipeg. The MOU will also support engagement of Indigenous peoples to advance reconciliation and mutual priorities related to water quality and the ecological health of Lake Winnipeg.

In other major basins, such as the Wolastoq [Wəlastəkw]/Saint John River watershed, the Department will continue efforts to increase coordination and collaboration with other government departments, Indigenous peoples and stakeholders to identify and advance water quality and ecosystem priorities, goals and objectives.

Supporting the development of a Canada Water Agency

Since late 2019, ECCC has worked to develop options to establish a Canada Water Agency to work together with provinces, territories, Indigenous communities, local authorities, scientists, and others, to find the best ways to keep our water safe, clean, and well managed. In 2022-23, ECCC will continue to work on plans to officially launch and transition to the new agency. As part of this work, ECCC will continue to build relationships and partnerships with Indigenous peoples through engagement in the development of the Agency, will continue to promote transparency through published reports and open data, and to remove barriers to secure access to the Department's digital water information assets to further evidence-based decision-making on water by Canadian businesses, academia and all levels of government.

Science advice to Oceans Protection Plan

The whole-of-government [Oceans Protection Plan^{xxxii}](#) (OPP) is a \$1.5 billion plan to strengthen Canada's marine safety system and protect coastal ecosystems. In 2022–23, ECCC will continue to support the implementation of a state-of-the-art safety system and other actions to preserve and restore marine ecosystems through the OPP. In addition to providing ongoing scientific expertise, and environmental and weather data on a 24/7 basis to support effective responses to environmental emergencies, the Department will contribute research on the physical and chemical properties and environmental behaviour of spilled bitumen, including the use of alternative response measures. ECCC will also participate in the upcoming horizontal evaluation of the OPP with other federal partners.

Salish Sea Ecosystem

ECCC and the United States Environmental Protection Agency signed a new four-year Action Plan in 2021 under their Joint Statement of Cooperation that commits both countries to work together on transboundary issues and challenges facing the Salish Sea ecosystem. Under the action plan, the two nations will continue to work together with Salish Sea partners — including British Columbia, the State of Washington, and Indigenous peoples — to advance shared priorities for ecosystem health, including information sharing, transboundary coordination, and ecosystem health reporting.

Departmental Result: Canadians have clean air

Reducing air pollution, improving air quality

ECCC will continue to work with its key federal partners, Health Canada and the [National Research Council of Canada^{xxxiii}](#), to address air pollution with the aim of improving air quality and reducing impacts on health and the environment. ECCC will continue to collaborate with provinces and territories to implement the [Air Quality Management System^{xxxiv}](#) (AQMS), a comprehensive approach to reducing outdoor air pollution in Canada. The Department, in collaboration with Health Canada, will complete a review of the 2020 national ambient air quality standards for fine particulate matter (PM_{2.5}) and, if warranted, propose more stringent standards. In 2022–23, ECCC will continue to monitor levels of key air pollutants in collaboration with provinces and territories through the National Air Pollutant Surveillance Program. The Department will leverage its high-performance computing infrastructure to conduct research and modelling to understand atmospheric chemistry processes and their impacts on ecosystems and human health, work to improve models to predict atmospheric contaminant effects on air quality, and provide scenarios to support policy development. The Department will also continue to deliver and improve daily [Air Quality Health Index^{xxxv}](#) observation and forecast services to help Canadians make decisions to protect their health and to collaborate with Health Canada to plan, develop, and implement strategic and targeted enhancements.

Multi-Sector Air Pollutants Regulations, Volatile Organic Compounds Regulations, and other measures

ECCC will continue to develop, administer and amend, where appropriate, regulations to reduce air pollutant emissions from industrial sources, vehicles, engines and fuels, and consumer and commercial products. The Department will continue to administer the *Multi-sector Air Pollutants Regulations (MSAPR)*, as well as various non-regulatory instruments that address air pollutant emissions from industrial sectors. The Department will also administer the *Regulations Respecting Reduction in the Release of Volatile Organic Compounds (Petroleum Sector)*, published in November 2020, which will reduce air pollution from petroleum refineries, upgraders and certain petrochemical facilities. ECCC will develop regulations to reduce VOC emissions from petroleum storage tanks and loading operations, and will continue to assess options to reduce air pollution from other sources in the oil and gas sector. In addition, ECCC will administer the *Off-Road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations*, published in December 2020.

ECCC will administer the newly finalized regulations to reduce VOC emissions from approximately 130 product categories and subcategories of personal care products, automotive and household maintenance products, adhesives, adhesive removers, sealants and caulks, and other products. VOCs are precursors to smog.

ECCC will also continue international efforts to reduce transboundary air pollutants, including under the [Canada-U.S. Air Quality Agreement](#)^{xxxvi} and the Convention on Long-Range Transboundary Air Pollution.

Enforcing environmental laws

The Department's on-the-ground enforcement officers will continue to verify compliance with environmental legislation and associated regulations that prohibit or control the pollution of air, water and soil. They will continue to take enforcement actions, where warranted, when non-compliance is found. ECCC, in collaboration with its partners, will continue to prioritize its activities based on the level of risk of non-compliance that poses the greatest harm to the environment and human health. The Department will continue to concentrate on capacity building by on-boarding and training newly recruited enforcement officers, and by providing re-certification training for existing designated enforcement officers.

Gender-based analysis plus



ECCC will continue to apply a GBA+ lens to the development of policy recommendations, programs and measures to address pollution. Detrimental health effects of air pollution can be compounded in individuals who have multiple risk factors. For example, a person could be disproportionately affected by air pollution if they are elderly, have chronic health conditions, and live in an area that has a higher degree of air pollution, compared to someone who has only one risk factor. The Department will continue to use the GBA+ lens to ensure that vulnerable populations, including Indigenous communities located near large industrial complexes and those affected by smoke during wildfires are involved in air quality work. Similarly, the Department will continue to engage with Indigenous communities on water quality initiatives in key freshwater ecosystems, including in the Great Lakes, Lake Winnipeg, the St. Lawrence River watershed and the Wolastoq/Saint John River Watershed. Projects are aimed at addressing communities' concerns, increasing Indigenous participation in decision-making and governance in water agreements, and expanding the use of Indigenous traditional knowledge in water quality initiatives. ECCC's work to identify and manage harmful substances will continue to use scientific information and reflect the importance of sound risk management to reduce risks posed to vulnerable groups from exposure to toxic chemicals. This will contribute to adapting compliance promotion material to better reflect the target audiences' cultural and linguistic profiles. The Department will also continue to strengthen its hiring practices to increase representation of the Canadian population in its enforcement workforce.

Key Risks

Partnerships are key to the Department's efforts to deliver anti-pollution programming that achieve results. Environmental issues are often cross jurisdictional and require extensive collaboration with various partners, such as businesses, non-governmental organizations, indigenous communities, municipalities, provinces, territories and other countries. The challenges associated with coordinating programming with partners are exacerbated by the pandemic response and resulting competing priorities. Moreover, as provincial and community restrictions continue to evolve, limitations to fieldwork and laboratory analysis could hamper the Department's ability to generate and leverage data to inform the development and implementation of environmental standards, guidelines and regulations, support enforcement action when non-compliance is found, respond to environmental emergencies in a timely manner, and provide expert advice to partners.

Continued adaptation and integration of modernized remote working practices will aid ECCC in continuing to closely collaborate, communicate and engage with partners. The Department will also continue to examine lessons learned regarding fieldwork during the pandemic, and ensure that Business Continuity Management Plans and Business Impact Analysis practices are evergreen and comprehensive.



United Nations' 2030 Agenda and [Sustainable Development Goals](#)^{xxxvii}

The diverse programs and strategies under ECCC's core responsibility for Preventing and Managing Pollution will contribute very substantially to more than half of the 17 UN Sustainable Development Goals. Continued enforcement of the *Canadian Environmental Protection Act 1999* and key provisions of the *Fisheries Act*, coupled with the implementation of the Chemicals Management Plan, implementation of Canada's obligations under the chemicals and waste multilateral environmental agreements, and advancement of regulations to protect air and water quality and promote clean fuels, will support healthy lives and well-being for all ([Goal 3](#)^{xxxviii}), while also advancing the sustainable management of water and sanitation ([Goal 6](#)^{xxxix}), promoting sustainable production and consumption practices ([Goal 12](#)^{xl}) and fighting climate change ([Goal 13](#)^{xli}).

Through the implementation of domestic and international measures focused on responsible waste management, oceans protection, and the elimination and reduction of plastics waste and pollution in the environment, ECCC will support sustainable use of marine resources ([Goal 14](#)^{xlii}) and promote inclusive approaches to sustainable development, industrialization, and urbanization ([Goal 8](#)^{xliii}, [Goal 9](#)^{xliv}, [Goal 11](#)^{xlvi}, [Goal 15](#)^{xlvi}, and [Goal 16](#)^{xlvi}). ECCC will also continue to be an active partner and leader in global action on pollution prevention and management ([Goal 17](#)^{xlviii}).

Commitment to Experimentation: Reducing Use of Plastics through Behavioural Science

ECCC will apply behavioural science to experiment in support of finding practical ways to reduce the use of plastics and promote a circular economy. One planned area of experimentation will examine how to encourage Canadians to purchase more environmentally friendly products that are safer for their health and the environment. Another will look at whether efforts to prevent waste and build a more circular economy (such as increased reuse, resale, repair, remanufacturing and sharing) should include regulations or measures to encourage individual action, which would include design and testing of communications materials.

Commitment to Experimentation: Stakeholder Engagement to Advance Supply Chain Transparency for Chemicals in Products

ECCC will apply a policy lab approach to engage Canadian stakeholders in co-developing new solutions to enhance supply chain transparency for chemicals in products. A policy lab approach is an experimental environment in which stakeholders collaborate to develop and test policy.

Planned results for Preventing and Managing Pollution

The following table shows, for Preventing and Managing Pollution, the planned results, the result indicators, the targets and the target dates for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental Result: Canadians have clean air | | | | | |
|---|--------|------------------------|--|--|--|
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Percentage of Canadians living in areas where air quality standards are achieved | 85% | 2030 | 77% for the 2014–16 data period. ¹⁶ | 77% for the 2015–17 data period. ¹⁷ | 68% for the 2016–18 data period. ¹⁸ |
| Departmental Result: Canadians have clean water | | | | | |
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Percentage of wastewater systems where effluent quality standards are achieved | 100% | 2040 | 73% ¹⁹ | 74% | 77% |
| Departmental Result: The Canadian environment is protected from harmful substances | | | | | |
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Percentage of actions taken in a timely manner to protect Canada's environment from chemicals found to be a risk to the environment ²⁰ | 100% | March 31, 2023 | First results will be reported in 2022–23. | | |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase](#)^{xlix}.

¹⁶ Air quality monitoring results are subject to data validation and are available 18–24 months after data collection.

¹⁷ The 2015 to 2017 value was previously reported as 75% in public reporting from Health Canada and Environment and Climate Change Canada. This value has since been revised to 77%. For more information, please refer to the [CESI website \(www.canada.ca/en/environment-climate-change/services/environmental-indicators/population-exposure-outdoor-air-pollutants.html#changes\)](#).

¹⁸ The percentage decrease in the 2020-21 result compared to 2019-20 is due to exceedances of the fine particulate matter standards which was attributed to large wildfires in the United States and British Columbia that negatively affected air quality in Alberta and British Columbia.

¹⁹ 2018-19 results have been updated. The Québec equivalency agreement reduced the number of wastewater systems subject to the *Wastewater Systems Effluent Regulations* (WSER).

²⁰ This is a new indicator and replaces the previous indicator: Percentage of substances that are added to Schedule 1 of CEPA (Toxic substances list) because they pose a risk to the environment that have controls in place within legislated timelines. The new indicator is more meaningful for departmental reporting and public communications, and a more valid measure of the Departmental Result. The previous DRI evaluated the timeliness of only those risk management actions subject to prescribed CEPA timelines.

Planned budgetary Spending for Preventing and Managing Pollution

The following table shows, for Preventing and Managing Pollution, budgetary spending for 2022–23, as well as planned spending for that year and for each of the next two fiscal years.

| 2022–23 budgetary spending (as indicated in Main Estimates) | 2022–23 planned spending | 2023–24 planned spending | 2024–25 planned spending |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| \$379,219,765 | \$379,219,765 | \$362,762,938 | \$310,690,179 |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase](#).

Planned human resources for Preventing and Managing Pollution

The following table shows, in full-time equivalents, the human resources the Department will need to fulfill this core responsibility for 2022–23 and for each of the next two fiscal years.

| 2022–23 planned full-time equivalents | 2023–24 planned full-time equivalents | 2024–25 planned full-time equivalents |
|--|--|--|
| 2,220 | 2,178 | 2,027 |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase](#).

Core Responsibility: Conserving Nature

Description

Protect and recover species at risk and their critical habitat; conserve and protect healthy populations of migratory birds; engage and enable provinces and territories, Indigenous peoples, stakeholders, and the public to increase protected areas and contribute to conservation and stewardship activities; expand and manage the Department's protected areas; and collaborate with domestic and international partners to advance the conservation of biodiversity and sustainable development.

Planning highlights

Departmental Result: Canada's wildlife and habitat are conserved and protected

Budget 2021 provided an investment in the Nature Legacy Initiative of an additional \$2.3 billion over five years to support more ambitious targets for protected and conserved areas, the protection and recovery of species at risk, and engagement of Indigenous peoples in conservation. Building on the funding provided for the Nature Legacy Initiative in Budget 2018, this represents the largest investment in nature conservation in Canada's history.

Conserve 25% of Canada's lands and oceans

The 2020 Speech from the Throne committed Canada to conserve 25% of its lands and oceans by 2025, working towards 30% by 2030. ECCC will continue to work with Parks Canada Agency, the Department of Fisheries and Oceans, other federal departments, all levels of government and Indigenous peoples on an ambitious plan to achieve these targets that is grounded in science, Indigenous knowledge and local perspectives. Recognizing that the loss of nature is a global issue requiring global action, Canada will also advocate that countries around the world set an ambitious 30% conservation goal for 2030, as advocated by the Prime Minister in September 2020.

The Enhanced Nature Legacy Initiative supports work with provinces and territories, Indigenous peoples, local government, key industry sectors, and land trusts to continue to build a network of protected and conserved areas across Canada through actions that include:

- Funding for both Indigenous and non-Indigenous applicants to support the establishment of additional protected areas and Other Effective area-based Conservation Measures (OECMs).
- An investment in the Planning Future Conservation Program for Indigenous Protected and Conserved Areas (IPCAs) that will only be available to Indigenous applicants, and will support the planning of future conservation goals and the establishment of IPCAs.
- ECCC's continued investment, through the Natural Heritage Conservation Program, in public-private partnerships through the Canada Nature Fund investment of \$100 million over four years to support the acquisition of private land with significant value for biodiversity.
- Continuing the Ecological Gifts Program, which will build on its 26-year history and continue to encourage donations of private lands for conservation through the provision of tax incentives.

The Department will also continue to follow through on more than 67 nature conservation projects announced in June 2020 to protect biodiversity from across the country. Nearly two thirds of these are led or are being implemented in partnership with Indigenous peoples, with the aim of creating IPCAs that will contribute substantially to the target to conserve 25% of Canada's lands by 2025.

Nature agreements

The Department will collaborate with provinces and territories and other partners to recover species at risk and protect and conserve lands and freshwater. This will be supported by up to \$200 million over five years to support interested provinces and territories in developing nature agreements with the federal government. The nature agreements will advance shared interests in a more integrated approach to conserving nature, establish more protected areas, and protect and recover species at risk and their habitat, while at the same time advancing reconciliation with Indigenous peoples. The agreements will also help support a green recovery by ensuring the coordinated delivery of nature-based solutions to climate change.

Protecting migratory birds

Migratory bird conservation and management is foundational to the Department, and is linked to all biodiversity and conservation acts and regulations administered by ECCC. The Department will continue to deliver on the Government of Canada's exclusive responsibility for migratory birds by ensuring that their populations and habitats are maintained and restored, helping to leave a legacy of biodiversity for future generations.

The Department will build, maintain, and apply a robust knowledge foundation to conserve migratory birds and other biodiversity through integrated, targeted and multispecies conservation initiatives, effective regulatory action, and management of protected areas. ECCC will also continue to foster collaboration domestically and abroad, and engage individuals and communities to achieve more impactful conservation outcomes for migratory birds. Specific actions include:

- Continuing to monitor and assess the status of migratory bird populations to support status assessment and population objective-setting, priority-setting, management, regulation, and evaluation of conservation actions.
- Identifying the causes and effects of migratory bird population changes.
- Improving migratory bird conservation through greater collaboration with the Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada.
- Providing expert advice to enhance the value of protected areas for migratory birds.
- Delivering a world class, modernized regulatory framework for conservation of migratory birds, including harvest management and permitting.
- Providing expertise and advice to support project assessments under the Impact Assessment Act, including cumulative effects, to minimize impacts on migratory birds and their habitats.
- Providing critical and timely input for emergency preparedness, including prevention/response measures and the identification of priority areas of concern to minimize risks to migratory birds.
- Working collaboratively to integrate migratory bird conservation considerations into policies and programs at all levels of government.
- Building and maintaining meaningful relationships with Indigenous peoples to support the management and conservation of migratory birds, including by beginning to develop approaches that bridge Indigenous peoples' ways of knowing and western science to enhance conservation outcomes.
- Supporting and encouraging domestic collaborations with non-governmental organizations, academia, industry, and other stakeholders to implement conservation measures.
- Fostering international partnerships to conserve and manage migratory bird populations throughout the annual lifecycle.
- Mobilizing individuals and communities, while fostering diversity and inclusion, and empowering them to take positive actions for migratory birds.

The Department will also continue to enforce the laws that protect migratory birds, their nests, and populations, and regulate any potentially harmful human activities that may affect them.

Wildlife health: A One Health approach

In 2022–23, in collaboration with other federal departments, provincial and territorial counterparts, and Indigenous peoples, ECCC will continue to deliver coordination, planning, research and monitoring to inform decision-making on emerging pathogens and the impacts of multiple stressors and cumulative effects on wildlife health following a “One Health” approach.

One Health is defined as a collaborative, multi-sectoral, and transdisciplinary approach which recognizes the connection between people, animals, plants and their shared environment. The Pan-Canadian Approach to Wildlife Health embodies the spirit of One Health, and encourages collaboration and cooperation across the human, animal and environmental sectors to achieve shared benefits.

Specifically, this approach will aim to include an increase in surveillance and readiness/preparedness to address environmental changes that have impacts on all sectors, including advancing efforts to address issues surrounding Indigenous food safety and security and the maintenance of a traditional way of life. By promoting collaboration across all sectors, a One Health approach can achieve the best health outcomes for people, animals, and plants in a shared environment.

Western Boreal Initiative

The Government of Canada will invest \$1.8 million over two years in the Western Boreal Initiative with the Dene Nation. The Initiative is a collaboration between provinces, territories and First Nations governments to evaluate the cumulative effects of wildfire, predation, key pests, human disturbances and climate change on the Western Boreal Forests of Canada.

Nature Smart Climate Solutions Fund

As noted earlier, the Government of Canada established the Natural Climate Solutions Fund (NCSF), led by Natural Resources Canada and in partnership with Environment and Climate Change Canada and Agriculture and Agri-Food Canada. The NCSF will invest \$4 billion over the next ten years to address the dual crises of climate change and biodiversity loss.

As a stream of this broader fund, the Nature Smart Climate Solutions Fund (NSCSF) is a \$631 million, ten-year fund to support projects that restore and enhance wetlands, peatlands, and grasslands that store and capture carbon. Activities supported by the NSCSF will focus on three main program objectives to effectively sequester carbon: restoring degraded ecosystems; improving land management practices, especially in agriculture, forestry, and urban development sectors; and conserving carbon-rich ecosystems at high risk of conversion to other uses that would release their stored carbon. Funds will also support monitoring and reporting of greenhouse gas emission reductions.

Nature conservation across southern Ontario

The Government will invest \$9 million to better conserve lands across southern Ontario through some sixty-three projects, in cooperation with regional conservation authorities. Activities will include a variety of conservation activities to protect more land, restore wetlands, and enhance agricultural management.

Meeting Canada’s international commitments for nature

In September 2020, Prime Minister Justin Trudeau joined 75 heads of state, government representatives and biodiversity stakeholders to launch the Leaders Pledge for Nature, a ten-point plan to put nature and biodiversity on a path to recovery by 2030. Recognizing that successfully addressing the biodiversity loss

Prairie Wetlands and Grasslands

The Government of Canada will invest more than \$25 million over three years to conserve, restore and enhance critical wetlands and grasslands in the Prairie Provinces, including up to: \$19.28 million for *Ducks Unlimited*, \$4.05 million for *Nature Conservancy of Canada* and \$2.4 million for *Manitoba Habitat Heritage Corporation*. These initiatives are among fourteen projects to receive funding from the Nature Smart Climate Solutions Fund. Collectively, they are projected to conserve up to 30,000 hectares; restore up to 6,000 hectares; and contribute to the enhanced management of up to 18,000 hectares of wetlands, grasslands and riparian areas.

crisis demands concerted international effort and commitment, leaders committed to actions such as placing biodiversity, climate and the environment at the heart of COVID-19 recovery efforts, implementing an ambitious post-2020 global biodiversity framework, transitioning to sustainable patterns of production, and consumption, and sustainable food systems. ECCC will continue to play a leading role in the international negotiation of a new Global Biodiversity Framework for 2021– 2030, with the aim of developing an ambitious, pragmatic plan that covers all aspects of nature conservation and sustainable use that will set a path to end the global loss of biodiversity. The post-2020 global biodiversity framework is expected to be adopted at the 15th Conference of the Parties to the Convention on Biological Diversity, the first phase of which took place virtually in October 2021, with the second phase scheduled to take place in spring 2022.

ECCC will continue to be represented as the Chair of the Convention on Endangered Species of Wild Flora and Fauna (CITES) Standing Committee. The Department will continue to monitor threats to species around the world, and act to effectively contribute to their conservation and sustainable use. ECCC will continue to build awareness of the role of wildlife trade in the spread of zoonotic diseases.

Departmental Result: Canada's species at risk are recovered

Conserving species at risk

The [Nature Legacy for Canada Initiative](#)^{lii} sets out a roadmap to protect Canada's biodiversity through the protection of lands and waters, and conservation of species at risk. With this initiative and support from the Canada Nature Fund, the [Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada](#)^{liii} (Pan-Canadian Approach) facilitates collaborative conservation efforts focused on a set of shared priority places, species and sectors across Canada. This approach largely shifts from independent actions on single species, to multi-species and ecosystems-based actions, developed in partnership with federal, provincial and territorial governments, Indigenous peoples, and stakeholders. The Enhanced Nature Legacy initiative will continue to support the ongoing implementation of the Pan-Canadian Approach through investments of \$209 million to protect priority places and \$377 million to support recovery actions for priority species.

In 2022–23, ECCC will continue to implement the Pan-Canadian Approach by supporting the recovery and conservation of six federal, provincial, and territorial priority species (Barren-ground Caribou [including the Dolphin and Union population], Boreal Caribou, Greater Sage-grouse, Peary Caribou, Southern Mountain Caribou, and Wood Bison) and other species of federal interest. ECCC will support recovery through collaborative efforts, including matched investments from partners and ongoing multi-jurisdictional conservation planning arrangements.

In 2022–23, ECCC will continue to invest in projects to support ongoing species at risk conservation in 11 federal-provincial-territorial priority places. ECCC will also continue to administer the Canada Nature Fund's Community-Nominated Priority Places for Species at Risk, a multi-year funding initiative to protect and recover species at risk that is supporting 18 community-led projects that were selected through two open calls for proposals. For example, an investment of \$2 million over four years in the Georgian Bay Biosphere Mnidoo Gamii supports a project that works to build and nurture the necessary relationships and partnerships to gather data and plan and implement actions to address threats to wildlife, such as roads and railroads, invasive plants and climate change.

To deliver on its obligations and commitments under the *Species at Risk Act* (SARA), ECCC will continue working to transform its approach to terrestrial species at risk conservation by advancing the implementation of the Pan-Canadian Approach and related policy and program improvements, including providing advice to processes under the *Impact Assessment Act* that reflects species at risk considerations. ECCC will continue to engage with provinces, territories, Indigenous peoples, as well as scientists, industry and other stakeholders, in the delivery of SARA activities. ECCC is also actively involved in various oversight engagements undertaken by the Commissioner of Environment and Sustainable Development, as well as in an upcoming evaluation that will support the management of Species at Risk activities.

Departmental Result: Indigenous peoples are engaged in conservation

Engagement with Indigenous peoples

ECCC remains committed to meaningful engagement with Indigenous peoples in conservation through the implementation of programs that support reconciliation and Indigenous-led action to achieve conservation outcomes. The Department will continue to renew nation-to-nation relationships with Indigenous peoples as part of the implementation of the Pan-Canadian Approach and the federal *Species at Risk Act*. Under the Canada Nature Fund, partnerships with First Nations, Inuit and Métis will advance the conservation of species at risk in a manner that recognizes and enables Indigenous leadership, knowledge systems, and interests in land management. In 2022–23, projects will contribute to building Indigenous partners' capacity to: lead the development and implementation of recovery and protection measures for at-risk species (including several culturally significant caribou species); negotiate and implement conservation agreements for the collaborative conservation of species at risk; and support meaningful participation in *Species at Risk Act* consultation and cooperation processes. In addition, efforts will continue to incorporate Traditional knowledge during species assessments undertaken by the Committee on the Status of Endangered Wildlife in Canada's (COSEWIC).

ECCC will initiate three distinctions-based Indigenous Nature Tables as part of its new external engagement model on nature with First Nations, Inuit and Métis. Tables will be established following a co-development approach that includes capacity support to Indigenous partners. The tables will serve as venues to amplify the voices of Indigenous peoples and their leadership in nature conservation initiatives for which the Department has lead responsibilities. They will also offer a more coordinated approach to seeking the advice of Indigenous peoples on shared priorities in order to achieve collaborative results.

Supporting Indigenous leadership in conservation is integral to the achievement of Canada's domestic and global biodiversity targets. The government is investing \$340 million over the next five years to support Indigenous Guardians and IPCAs as part of the Enhanced Nature Legacy for Canada Initiative. This investment will continue to support Indigenous-led Guardians initiatives, in partnership with the three Indigenous-led governance bodies, to protect sensitive and culturally important areas and species, monitor ecological health, and maintain Indigenous cultural sites. It will also support an evaluation of the benefits of Guardians initiatives and their effectiveness, and the development of national Indigenous Guardians Networks. This investment will also continue to support the establishment of IPCAs across Canada through funding opportunities similar to those under the Target 1 Challenge program.

In 2022–23, ECCC will continue to build the capacity of Indigenous communities to advance the use and integration of Indigenous traditional knowledge in three regional assessments under *the Impact Assessment Act: Offshore Oil and Gas Exploratory Drilling East of Newfoundland and Labrador*, the Ring of Fire in Ontario, and the St. Lawrence Seaway in Québec. This work will help ensure that ECCC advice better reflects Indigenous rights, values and interests during decision-making.

Learning from Indigenous Partners

Indigenous Guardians rely on the experience and traditional knowledge of Indigenous partners from across the country to ensure that lands and waters are protected for generations to come. For example, in June 2021, ECCC announced funding for 10 new Guardians initiatives that will enable First Nations to monitor ecological health, maintain cultural sites and protect sensitive areas and species, while creating jobs.

Additional Expected Departmental Results

Strategic assessments

Under the *Impact Assessment Act*, (IAA) ECCC will continue to provide expertise and advice related to climate change, air quality, water quality, environmental preparedness and emergencies, and biodiversity. This will include developing guidance for project proponents on standard methodologies to address common issues and contribute to the federal approach to cumulative effects under the IAA. In particular, the Department will publish the final Technical Guides Related to the Strategic Assessment of Climate Change (SACC), which was published in 2020. While the SACC provides guidance on how climate change should be considered in impact assessments to ensure greater transparency, clarity, consistency, and improved process certainty, the guides will provide additional technical guidance on specific elements of the SACC. This will allow proponents to be better prepared for impact assessments, which may in turn result in a more timely assessment process. The SACC provides Canadians with a clear link between impact assessment and national objectives on climate change. The Department published a draft of the first technical guide in August 2021 for public comment, and a draft of the second is anticipated in early 2022. Both final technical guides are planned for 2022.

Impact of coal projects

While coal projects that produce over 5,000 tonnes a day automatically trigger an impact assessment, smaller mines also have the potential to release selenium into waterways. Selenium is a natural element that washes out of piles of coal-mining waste rock. It can be toxic to fish populations by moving up the food chain to cause deformities and ruin their ability to reproduce. New and expanded coal mines of any size that could contaminate water with an element called selenium will now automatically undergo a federal impact assessment, under new rules announced in 2021.

Enforcing wildlife laws

The Department's on-the-ground enforcement officers will continue to verify compliance with wildlife legislation and associated regulations that protect migratory birds, species at risk, wildlife in trade and ECCC's 177 protected habitats. While ECCC, in collaboration with its partners, will continue to prioritize its activities according to the risk of non-compliance, activities will focus on areas and species of concern that are vulnerable to illegal activities. The Department will continue to concentrate on capacity building by on-boarding and training newly recruited enforcement officers, and by providing re-certification training for existing designated enforcement officers.

Gender-based analysis plus



ECCC will continue to work to achieve protection and recovery goals for species, while recognizing that Indigenous reserves and lands often provide important refuge for species at risk and that Canada's Indigenous peoples are also the holders of Indigenous traditional knowledge (ITK) essential to achieving these goals. To reduce the impact of consultation fatigue and repeated gathering of ITK on species, the Department will focus its efforts on ecosystem-based and multi-species conservation approaches, and on improving coordination among federal departments and provincial/territorial governments. In its efforts to meet Canada's biodiversity commitments, ECCC will work to increase its capacity to conserve biodiversity in Canada, including by increasing engagement of Canadians, including Indigenous communities, in conservation initiatives. Through the federal assessment process, the Department will continue to provide expert advice and knowledge to support resource development decisions that mitigate negative impacts on vulnerable populations and all Canadians.

Key Risks

ECCC's conservation and recovery efforts must be based in science and grounded on the collection and leveraging of information needed to support timely, evidence-based decision-making. As COVID-19 public health measures and restrictions continue to evolve, there is the possibility that the department's efforts to perform the technical fieldwork required to monitor wildlife populations, as well as engagements with key stakeholders, could be restricted. Developing and maintaining strategic partnerships with key partners and fostering quality relationships with Indigenous peoples will be key to ensuring the department can deliver on conservation outcomes.

ECCC will enhance its data management systems to better access and mobilize existing sources of biodiversity data through Open Data platforms. The Department will also continue to develop a strategic approach to investments in information management systems, infrastructure, and tools that compel the appropriate management of information and allow for corporate information and data sharing. In addition, the Department's Indigenous Engagement Strategy will continue to guide the department's efforts to include Indigenous communities' perspectives in nature conservation work.



United Nations' 2030 Agenda and [Sustainable Development Goals](#)^{liv}

ECCC's new Pan-Canadian Approach to Species at Risk and its substantial new investments in federal and other protected areas under its enhanced Nature Legacy initiative, combined with ongoing action for wetlands protection, habitat stewardship, and wildlife conservation, will serve to: conserve biodiversity and the quality and viability of natural ecosystems; preserve and restore air and water quality; and, promote sustainable land use and wildlife harvesting practices. These will primarily support the UN sustainable development goals of life in water ([Goal 14^{lv}](#)) and life on land ([Goal 15^{lv}](#)).

Commitment to Experimentation: Innovation in Monitoring Wildlife

ECCC continues to experiment with novel approaches for monitoring wildlife populations, particularly migratory birds. The goal is to evaluate the potential to use new and emerging technologies to increase efficiency and effectiveness, and fill geographical and species gaps. Several experiments are ongoing related to migratory birds surveys. One study is evaluating the use of digital sound recorders to complement and supplement traditional field-observer based approaches for surveys, such as the North American Breeding Bird Survey, which is the primary source of information on long-term population trends of most landbirds in North America. Paired studies compare counts of various species based on digital recordings with those obtained by field observers on the same routes at the same time.

A second study is evaluating Artificial Intelligence (AI) approaches for identifying and counting birds based on acoustic recordings, in collaboration with academic partners. Currently, AI approaches are less effective than human observers at distinguishing birds when multiple species sing at the same time, but they are more effective at scanning large volumes of material. The department is designing experiments to evaluate when, how, and how effectively AI can be integrated into the workflow. A recently completed study on training AI algorithms to detect polar bears in aerial photographs is expected to be extended to counting birds in photographs of seabird colonies, pending COVID-19 impacts on fieldwork.

Planned results for Conserving Nature

The following table shows, for Conserving Nature, the planned results, the result indicators, the targets and the target dates for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental Result: Canada's wildlife and habitat are conserved and protected | | | | | |
|---|--|-------------------------------|------------------------------|------------------------------|------------------------------|
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Percentage of migratory bird species that are within target population ranges | 70% | December 2030 | 58% | 57% | Results not yet available. |
| Percentage of Canadian areas conserved as protected areas and other effective areas-based conservation measures | Increase toward achievement of 17% to 20% from a baseline of 10.6% in 2015 (Terrestrial lands and inland waters) | March 2025 | 11.8% | 12.1% | 12.5% |
| Departmental Result: Canada's species at risk are recovered | | | | | |
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Percentage of species at risk for which changes in populations are consistent with recovery objectives | 60% | May 2025 | 41% | 41% ²¹ | 42% |
| Departmental Result: Indigenous peoples are engaged in conservation | | | | | |
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Percentage of Indigenous peoples engaged with ECCC who indicate that the engagement was meaningful | 61% | April of each year. | 61% | 69% | 64% |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase](#)^{vii}

²¹ 41% of species at risk show progress towards population and distribution objectives; 11% show mixed evidence, meaning that some information suggests improving trends, but that there is also some evidence of decline.

Planned budgetary spending for Conserving Nature

The following table shows, for Conserving Nature, budgetary spending for 2022–23, as well as planned spending for that year and for each of the next two fiscal years.

| 2022–23 budgetary spending (as indicated in Main Estimates) | 2022–23 planned spending | 2023–24 planned spending | 2024–25 planned spending |
|--|-----------------------------|-----------------------------|-----------------------------|
| \$609,338,156 | \$609,338,156 | \$547,017,840 | \$541,003,848 |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{lviii}](#)

Planned human resources for Conserving Nature

The following table shows, in full-time equivalents, the human resources the Department will need to fulfill this core responsibility for 2022–23 and for each of the next two fiscal years.

| 2022–23 planned full-time equivalents | 2023–24 planned full-time equivalents | 2024–25 planned full-time equivalents |
|--|--|--|
| 1,477 | 1,304 | 1,271 |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{lix}](#)

Core Responsibility: Predicting Weather and Environmental Conditions

Description

Monitor weather, water, air quality and climate conditions; provide forecasts, information and warnings to the Canadian public and targeted sectors through a range of service delivery options; conduct research; develop and maintain computer-based models for predicting weather and other environmental conditions; and collaborate and exchange data with other national meteorological services and with international organizations.

Planning highlights

Departmental Result: Canadians use authoritative weather and related information to make decisions about their health and safety

Providing Canadians with environmental and weather information

In 2021–22, ECCC proudly marked the 150th anniversary of the Meteorological Service of Canada (MSC). As one of the nation's longest-standing government institutions, the Service has a long and proud history of serving Canadians with accurate and timely information on weather and environmental conditions to help them make decisions about their health, safety and economic well-being. In 2022–2023, ECCC will continuously improve the Service through its scientific expertise, a leading-edge approach to data management, and a continued focus on the changing needs of its clients and stakeholders.

Every day, ECCC uses a state-of-the-art High Performance Computing (HPC) system to bring together 13 million observations about Canada's environment and other data available from domestic and international partners. The HPC infrastructure was updated in January 2020 to increase by 2.5 times its calculation power in order to simultaneously operate several weather and environmental models (e.g., air quality, hydrology, ice-ocean), including the first global coupled ocean-atmosphere model. In 2022, another HPC upgrade will allow the Department to maintain its operational capability while advancing research and development to further improve its models, forecasts and services. ECCC also serves on average 65–75 million machine-to-machine requests for weather and environmental data and products on a daily basis. The Department's meteorologists and scientists work around the clock in prediction centres across the country to leverage supercomputer model results and transform them into warnings, forecasts and expert advice for weather and extreme weather conditions. These are relied upon for decision-making by public authorities such as emergency managers, stakeholders and everyday Canadians.

Digital Service Modernization



ECCC is working to expand its computing and analytical capacity with an upgrade to the High Performance Computer infrastructure that will support the evolving needs of the Department to provide accurate and timely information to Canadians. This will provide priority data across organizations in order to support the development of new data products and services to Canadians.

ECCC provides quality-assured data and information on water levels and flows in real time to provincial and territorial clients to allow mitigation of water-related events. This helps Canadians, provincial and territorial emergency management organizations, and weather-sensitive businesses prepare for weather and flood events, and become more resilient to the consequences of climate change. ECCC will continue to leverage social media to broaden its reach when notifying Canadians of the potential for high-impact weather events. Weather warnings provide information that can assist Canadians, including vulnerable elderly people, children, the homeless, and the chronically ill or their caretakers, to make informed decisions in weather scenarios that may pose increased risks for them. As a result of a recent evaluation,

ECCC will enhance its focus on vulnerable Canadians and communities, particularly given Canada's changing climate and associated unprecedented weather.

Helping Canadians prepare for high-impact weather events

ECCC's state-of-the-art weather forecasting systems will continue to alert Canadians of approaching high impact weather such as severe storms, heatwaves, atmospheric rivers and hurricanes. Meteorologists will continue to focus their attention on the storms that have the potential to affect Canada, such as the summer of 2021 heatwave and prolonged periods of heavy rain that affected two Canadian coasts in the fall of 2021, and issue warnings according to a weather event's path, location and intensity. Through targeted engagement, the Department continues to provide interpretative and decision support services to provincial emergency management organizations to ensure broad civil preparedness. Canadians continue to have access to [updated forecasts and warnings^x](#) by visiting [ECCC's weather web site^{xi}](#), subscribing to [ECCC's hurricane e-bulletins^{xii}](#), accessing information through the [WeatherCAN^{xiii}](#) app, and through local media outlets.

In 2022–23, the Department will continue to innovate to improve its weather and environmental forecasting system, including through continuous improvement of weather and environmental (for example, high-impact weather and flood) prediction models and technical innovations, such as the development and implementation of active radar and Lidar sensors.

Upgrading weather radars and stations to improve short-term forecasts

In 2022–23, ECCC will continue to implement the Government of Canada's \$131 million [Canadian Weather Radar Replacement Program^{xiv}](#) to replace outdated technology with a minimum of 27 new radars by March 2023. Twenty-six new radar systems have been installed and a further seven are planned to be installed in several communities across Canada in 2022–23. Radars are the primary tools used by meteorologists to forecast short-term severe weather events associated with thunderstorms, tornadoes, ice storms, and blizzards. The new radars use the most modern technology available and will provide more detailed information on precipitation type and storm structure, and allow ECCC to give Canadians greater lead time to protect themselves and their property.

Strengthening the WeatherCAN Application

ECCC will continue to provide up-to-date weather information to Canadians through the WeatherCAN mobile application. Canadians can access current weather conditions and receive push notifications for weather alerts for locations anywhere in Canada. In 2022-23, ECCC will continue to develop tailored weather products for the WeatherCAN application, focusing on potential impacts of a weather situation to help better communicate risk to Canadians.

Modernizing national water monitoring for Canadians

Systematic monitoring of water levels and flow has always been a priority in Canada, and continues to be increasingly important as Canada is warming at twice the average global rate. A warmer climate means more weather extremes, including increased frequencies of droughts and floods. Better information on water levels and flows means Canadians, water managers and public authorities have access to the information they need to be prepared and make decisions.

In 2022–23, ECCC's National Hydrological Service will continue to modernize and strengthen its engineering and technical capacity and its hydrometric infrastructure, and put in place new technologies to gather and analyze water information. This is part of a \$90 million federal government investment over five years, ending in 2022–2023. As part of this investment, the National Hydrological Service will continue to work with key partners, including provinces and territories, to collaboratively develop capability for the prediction of water quantity. This work started with six major basins in Canada (the Nelson, Churchill, Mackenzie, and Yukon Rivers, the Great Lakes, and the Gulf of St. Lawrence), and is expected to be completed for the Columbia, St. John, and Skeena Rivers in 2022–23. ECCC will continue to provide expert advice and recommendations to inter-jurisdictional and international water boards. This investment will also modernize engineering models and systems for better service delivery to partner agencies involved with domestic and transboundary water management across the country.

Providing support to Canada's Emergency Management Strategy to Ensure Better Disaster Management in Canada

ECCC supports the Government of Canada's priority to improve the resilience of communities most at risk of flooding by contributing to the National Risk Profile initiative. ECCC is working with Natural Resources Canada (NRCan) and Public Safety and Emergency Preparedness Canada (PSC) to modernize best practices for consistent floodplain mapping in Canada. ECCC also engages with provinces and territories through existing governance structures to inform flood mapping engineering methods and approaches to assess flood maps, and supports NRCan in advancing a national flood-mapping standard. This program will support the dissemination of authoritative flood risk information to the public and inform decision-makers at all levels and in many areas, including in municipal planning and urban development. ECCC is also developing a national prediction system with the capability of generating forecasts and alerts for coastal flooding in response to the growing frequency and severity of storm surge events, and in support of resilient coastal communities and safer near-shore marine navigation.

Complete flood maps for higher risk areas in Canada

ECCC will assist NRCan and PSC with flood maps for higher-risk areas in Canada by providing support (setting priorities, specifications, review of products) in hydrology and hydraulics, contributing to development of the methodology to establish higher risk priority areas, and setting up a community of practice with the provinces and territories on hydrology and hydraulics related to floodplain mapping. ECCC will also work to improve the integration of climate change and uncertainty into the floodplain mapping process. The resulting information will be provided to provinces and territories to help in their floodplain management activities.

Gender-based analysis plus



ECCC will continue to gear its weather forecasts, warnings and expert advice to support the needs of Canadians, including those vulnerable to extreme weather and environmental events (such as floods, heatwaves or wildland fires), northern/rural dwellers, older Canadians and children, people with chronic diseases and people experiencing homelessness. To enhance the reach of ECCC information, ECCC has adopted strategies to better communicate risk to a wide variety of Canadians and prepare them for the potential impacts of hazardous weather. ECCC will continue to provide weather and environmental information through a wide range of platforms, notably the WeatherCAN application, weather website, automated telephone system "Hello Weather," and weather radios. Hydrometric data can also be used in combination with socio-economic data to identify potential impacts of water hazards on various groups and to implement mitigation measures accordingly. The Department will continue to improve the accessibility and documentation of its weather and environmental data and services, based on the results of stakeholder engagement.

Key risks

The Department relies on its capital and technological infrastructure to achieve its mandate and deliver mission-critical weather services. This infrastructure requires maintenance and ongoing investment to prevent rust-out and to ensure functionality in the face of changing and increasingly complex needs. In response to these potential risks, ECCC is enhancing its capital and technological planning in order to improve the assessment of enterprise-wide deficits, priorities and funding needs in these areas.

The Department's ability to effectively leverage and manage the internal and external information and data required to sustain core operations and to ensure timely delivery of world-class meteorological, environmental and hydrological information and services for Canadians could also be hampered by its capacity to access, collect, share, and analyze the increasing volume and complexity of data. To address these uncertainties, ECCC will continue to explore and implement strategies to enhance data governance and transparency, empower people, promote a data culture, and foster an enabling data structure. ECCC is also developing a strategic approach to investments in information management systems and tools that compel the appropriate management of data and allow for data mining, branch interoperability and inter-branch information sharing.



United Nations' 2030 Agenda and [Sustainable Development Goals](#)^{lxv}

ECCC's weather and environmental observations, forecasts and warnings, including its water monitoring programs, are vital for governments, industry, and citizens alike to make daily decisions related to weather-dependent economic activities. ECCC's work under the Air Quality Program and on the Air Quality Health Index, together with its extreme weather warnings, contribute to public health and safety ([Goal 3](#)^{lxvi}). Its weather forecasts play a vital role in assisting farming, forestry, transportation and other sectors plan and schedule their operations for optimal production and sustainability ([Goal 12](#)^{lxvii}), while water-monitoring services contribute to responsible water conservation and use ([Goal 6](#)^{lxviii}). More generally, the accumulated knowledge about weather and climate patterns and trends supports the development of effective long-term strategies for water and air quality management, action on climate change, and conservation of marine resources for sustainable development ([Goal 13](#)^{lxix} and [Goal 14](#)^{lxx}).

Commitment to Experimentation: Upper Air Renewal II

ECCC continues to identify new ways to improve weather warnings and forecasts for Canadians through new technologies that can build on existing data and integrate into existing monitoring networks. Following confirmation of the benefits of Aircraft Meteorological Data Relay (AMDAR) for weather prediction, the department is expanding the project to include new sources of data. ECCC will experiment with the possibility of extracting data from the descent phase of the instruments attached to weather balloons (known as *radiosondes*), since currently the department is only using data from the ascent phase of each flight. ECCC will also continue research on the use of instruments that use laser light to study the properties of the atmosphere (LiDARs) for improving short-term weather forecasts (also called *nowcasting*), particularly where there are gaps in the upper air monitoring network, such as in the Canadian Prairies.

Planned results for Predicting Weather and Environmental Conditions

The following table shows, for Predicting Weather and Environmental Conditions, the planned results, the result indicators, the targets and the target dates for 2022–23, and the actual results for the three most recent fiscal years for which actual results are available.

| Departmental Result: Canadians use authoritative weather and related information to make decisions about their health and safety | | | | | |
|--|-------------------------------------|-------------------------------|--|--|--|
| Departmental result indicator | Target | Date to achieve target | 2018–19 actual result | 2019–20 actual result | 2020–21 actual result |
| Index of the timeliness and accuracy of severe weather warnings on a scale of 0 to 10 | At least 8.4 on a scale of 1 to 10. | June 2023 | 8.6 (three-year rolling average 2016-18). | 8.8 (three-year rolling average 2017–19). | 8.8 (three-year rolling average 2018-20). |
| Percentage of program partners rating their satisfaction with Environment and Climate Change Canada's hydrological services as 8 out of 10 or higher ²² | 80% | May 31, 2023 | First results will be reported in 2022–23. | | |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{xxi}](#)

Planned budgetary spending for Predicting Weather and Environmental Conditions

The following table shows, for Predicting Weather and Environmental Conditions, budgetary spending for 2022–23, as well as planned spending for that year and for each of the next two fiscal years.

| 2022–23 budgetary spending (as indicated in Main Estimates) | 2022–23 planned spending | 2023–24 planned spending | 2024–25 planned spending |
|--|---------------------------------|---------------------------------|---------------------------------|
| \$281,875,508 | \$281,875,508 | \$226,002,859 | \$184,502,172 |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{xxii}](#)

Planned human resources for Predicting Weather and Environmental Conditions

The following table shows, in full-time equivalents, the human resources the Department will need to fulfill this core responsibility for 2022–23 and for each of the next two fiscal years.

| 2022–23 planned full-time equivalents | 2023–24 planned full-time equivalents | 2024–25 planned full-time equivalents |
|--|--|--|
| 1,711 | 1,572 | 1,546 |

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase^{xxiii}](#).

²² Replacing retired indicator: Percentage of Canadians that use ECCC information to address water-related impacts on health, safety, economy and environment. The new indicator is a more meaningful annual performance indicator as it represents the actual user groups of the program.

Internal Services: planned results

Description

Internal Services are those groups of related activities and resources that the federal government considers to be services in support of Programs and/or required to meet corporate obligations of an organization. Internal Services refers to the activities and resources of the 10 distinct services that support Program delivery in the organization, regardless of the Internal Services delivery model in a department. These services are:

- Management and Oversight Services
- Communications Services
- Legal Services
- Human Resources Management Services
- Financial Management Services
- Information Management Services
- Information Technology Services
- Real Property Management Services
- Materiel Management Services
- Acquisition Management Services

Planning highlights

The Department remains committed to providing a supportive, respectful and stigma-free environment that promotes employee wellness. ECCC's Culture of Care is founded upon the principle that employees feel safe talking about mental health and raising concerns, and that employees and managers are empathetic, promote professional support, and look out for one another by checking in regularly and staying connected. In 2022–23, ECCC will continue to develop and promote its workplace values and ethics resources, and mental health and wellness tools, as well as accessibility tools and a feedback mechanism that support the implementation of the Department's Accessibility Strategy and compliance with the *Accessibility Act*.

Diversity, Inclusion and Employment Equity remain a critical Departmental and government-wide priority. ECCC will continue to collaborate with employee-led networks that advocate Diversity, Inclusion and Employment Equity.

ECCC's 2021–2024 Diversity, Inclusion and Employment Equity Strategy, launched in June 2021, was inspired by feedback from ECCC networks, as well as the Clerk of the Privy Council's Call to Action on Anti-racism, Equity, and Inclusion in the Federal Public Service. The Department's Strategy includes a twenty-point action plan which sets out specific, bold and measurable actions to build a diverse and inclusive workforce by closing employment equity gaps under four broad pillars: recruitment; employee development and retention; education and awareness; and support to key elements in governance, including employee and management-led networks.

ECCC will continue to provide tools and advice to employees to support meaningful inclusion of Indigenous perspectives in the development of policies, programs and legislation, and in the delivery of ECCC evaluations. To facilitate the inclusion of Indigenous perspectives, ECCC's Practical Guide to Indigenous Consultation and Engagement was developed to provide culturally competent and legally sound policy advice to officials that consult and engage with First Nations, Inuit and Métis partners.

To fulfill its mandate, the Department relies on highly qualified and specialized personnel. Faced with a highly competitive labour market, the evolution of ECCC's business requirements are driving a need for new skills and competencies to address complex policy, program, scientific and regulatory issues. To ensure it has the capacity to respond quickly and effectively to emerging human resources priorities, ECCC will continue to maintain flexibility to realign resources to priority files, and support managers in human

resources and succession planning in order to attract and retain highly qualified and experienced personnel in a timely manner.

The pandemic has and will continue to influence the way the Department conducts its business. Early in the pandemic, ECCC implemented strategies to bolster its digital transformation to support virtual work, including extensive use of MS 365 and cloud-based collaboration tools. In 2022–23, ECCC's workplace policies that are impacted by COVID-19 will continue to align with public health guidelines. The Department will consolidate experience and lessons learned to date during the pandemic to support future operations. As the pandemic evolves, information management and technology programs will continue to collaborate with ECCC's COVID-19 response team to implement other services, such as Desktop Telephony, to meet program needs.

Beyond the work necessitated by the pandemic, the Department remains committed to implementing a data strategy, modernizing its digital services to Canadians and businesses, ensuring that timely information is available to support decision-making and scientific studies, and will build upon existing digital service investments in order to improve access to authoritative data and information. Digital initiatives enable the work of ECCC's scientists to inform and support its programs and priorities.

ECCC remains committed to transitioning to net-zero carbon and climate-resilient operations while also reducing other environmental impacts, including those associated with waste management, plastics and water usage. The Department will continue to implement measures and assess its performance to support the government-wide goal of reducing energy-related GHG emissions from Government of Canada operations by 40% from 2005 levels by 2025. ECCC will work towards diverting at least 75% of non-hazardous operational and plastic waste, and 90% of construction and demolition waste, from landfills by 2030, as per the Government of Canada's 2020 Greening Government Strategy and the Canada-wide Strategy on Zero Plastic Waste. ECCC will develop and deliver employee training on eco-conscious procurement practices, and develop a departmental waste management action plan with time-bound targets to reduce the generation and increase the diversion of non-hazardous operational waste.

ECCC will continue to provide support to employees affected by the government-wide pay transformation initiative and will support Public Services and Procurement Canada in addressing the backlog of pay issues. The Department will continue to contribute to the government-wide HR-to-Pay stabilization efforts, including various Human Resources and Pay system initiatives.

Planned budgetary Financial Resources for Internal Services

The following table shows, for internal services, budgetary spending for 2022–23, as well as planned spending for that year and for each of the next two fiscal years.

| 2022–23 budgetary spending (as indicated in Main Estimates) | 2022–23 planned spending | 2023–24 planned spending | 2024–25 planned spending |
|--|-------------------------------------|-------------------------------------|-------------------------------------|
| \$219,667,177 | \$219,667,177 | \$209,242,724 | \$204,571,827 |

Planned human resources for Internal Services

The following table shows, in full-time equivalents, the human resources the department will need to carry out its internal services for 2022–23 and for each of the next two fiscal years.

| 2022–23 planned full-time equivalents | 2023–24 planned full-time equivalents | 2024–25 planned full-time equivalents |
|--|--|--|
| 1,726 | 1,670 | 1,651 |

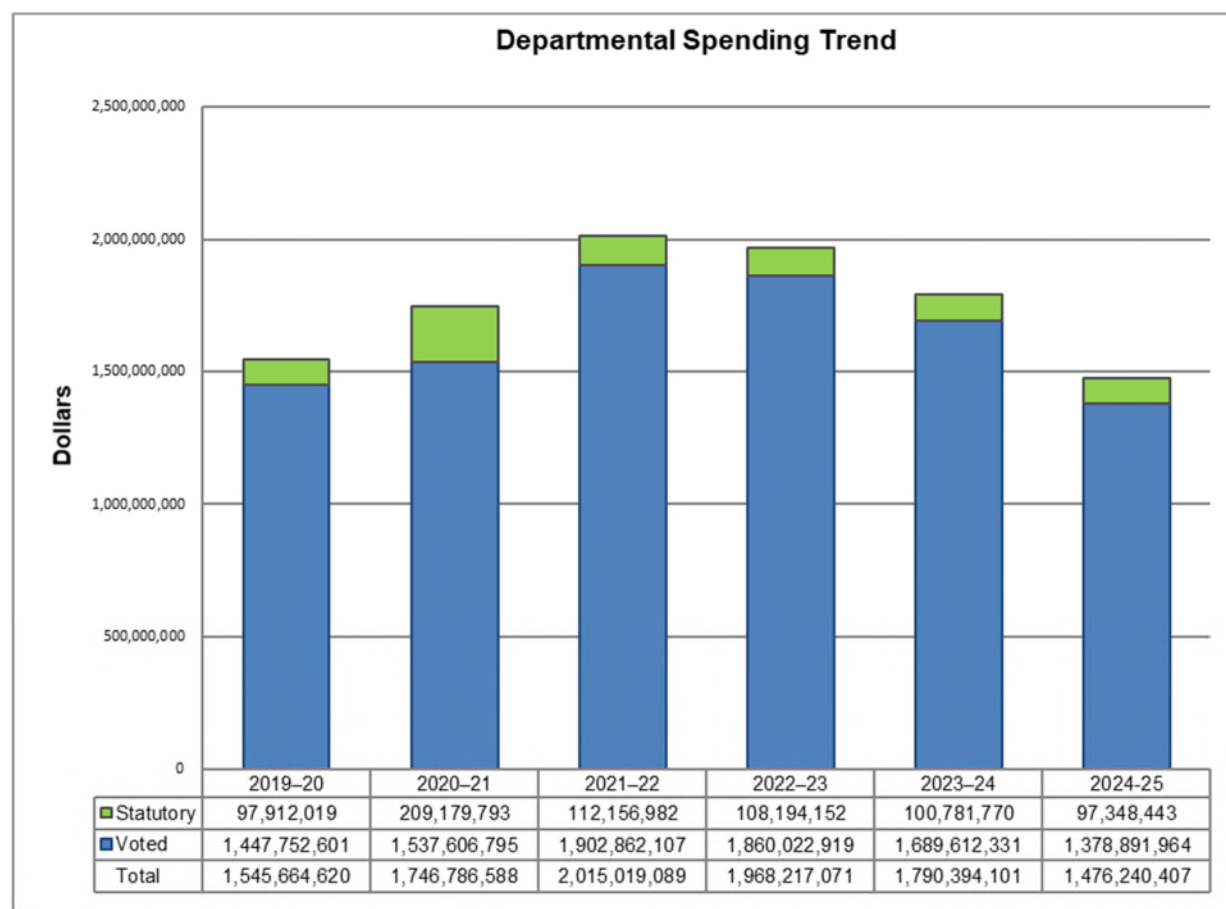
Spending and human resources

This section of Environment and Climate Change Canada's 2022–23 Departmental Plan describes the spending and human resources by programs through which the Department delivers its mandate.

Planned spending

Departmental spending 2019–20 to 2024–25

The following graph presents planned spending (voted and statutory expenditures) over time.



Note: Environment and Climate Change Canada will seek funding renewal for priority initiatives. Funding requests for such initiatives are subject to government decisions and will be reflected in future Budget exercises and Estimates documents.

For the period from 2022-23 to 2024-25, the planned spending reflects approved funding by Treasury Board to support departmental priorities.

Environment and Climate Change Canada's actual spending for 2020–21 was \$1,746.8 million, a year-over-year increase of \$201.1 million (13%) from the 2019–20 actual spending. This increase is mainly due to activities related to temporary initiatives such as: the Climate Action Incentive Fund, Protecting Canada's Nature, Parks and Wild Spaces (Southern Mountain Caribou), Youth Employment and Skills Strategy to support students and youth impacted by COVID-19 and Federal Leadership Towards Zero Plastic Waste in Canada. In addition, the year-over-year increase is due to new funding received for compensation allocations related to the new collective agreements.

The increase of \$268.2 million (15.4%) from 2020-21 actual expenditures of \$1,746.8 million to 2021-22 forecast spending of \$2,015.0 million is mainly due to an increase of funds for the Low Carbon Economy Fund, Modernizing the Enforcement of Environmental Laws and Regulations and for the Youth Employment and Skills Strategy in addition to new funding approved since the 2021-22 Main Estimates, namely; funding to conserve Canada's land and freshwater, protect species, advance Indigenous reconciliation and increase access to nature, to Implement natural climate solutions in Canada, to Reduce greenhouse gas emissions in the transportation and methane waste sectors, to establish a Net-Zero Advisory Body and Net-Zero Challenge and to establish the Canada Water Agency Transition Office. This increase is partially offset by the sunseting of the Climate Action Incentive Fund.

For explanation of the variance between 2021-22 forecast spending and 2024-25 planned spending, please see the Budgetary planning summary section.

Budgetary planning summary for core responsibilities and internal services (dollars)

The following table shows information on spending for each of Environment and Climate Change Canada's core responsibilities and for its Internal Services for 2022-23 and other relevant fiscal years.

| Core Responsibilities and Internal Services | 2019-20 actual expenditures | 2020-22 actual expenditures | 2021-22 Forecast Spending | 2022-23 budgetary spending (as indicated in Main Estimates) | 2022-23 planned spending | 2023-24 planned spending | 2024-25 planned spending |
|--|-----------------------------|-----------------------------|---------------------------|---|--------------------------|--------------------------|--------------------------|
| Taking action on Clean Growth and Climate Change | 391,473,954 | 495,862,449 | 590,642,070 | 478,116,465 | 478,116,465 | 445,367,740 | 235,472,381 |
| Preventing and Managing Pollution | 370,747,565 | 360,265,374 | 427,088,861 | 379,219,765 | 379,219,765 | 362,762,938 | 310,690,179 |
| Conserving Nature | 293,277,471 | 366,851,749 | 468,987,790 | 609,338,156 | 609,338,156 | 547,017,840 | 541,003,848 |
| Predicting Weather and Environmental Conditions | 260,270,783 | 252,729,019 | 295,769,712 | 281,875,508 | 281,875,508 | 226,002,859 | 184,502,172 |
| Subtotal | 1,315,769,773 | 1,475,708,591 | 1,782,488,433 | 1,748,549,894 | 1,748,549,894 | 1,581,151,377 | 1,271,668,580 |
| Internal services | 229,894,848 | 271,077,996 | 232,530,656 | 219,667,177 | 219,667,177 | 209,242,724 | 204,571,827 |
| Total | 1,545,664,621 | 1,746,786,588 | 2,015,019,089 | 1,968,217,071 | 1,968,217,071 | 1,790,394,101 | 1,476,240,407 |

*Totals may differ within and between tables due to rounding of figures.

Budgetary planning summary

Excluding funding announced in Budget 2022, approximately \$1,968.2 million in total funding is anticipated for 2022-23. The decrease of \$46.8 million from 2021-22 forecast spending to 2022-23 planned spending is mainly due to a decreasing funding profile for the Low Carbon Economy Fund, Great Lake Ecosystem Initiatives and the Youth Employment and Skills Strategy. This decrease is partially offset by an increase in the funding profile to conserve Canada's land and freshwater, protect species, advance Indigenous reconciliation and increase access to nature.

Overall, there is a decrease in planned spending over the 2022-23 to 2024-25 planning horizon presented in the summary table. This is the result of sunseting initiatives with temporary funding. Funding requests for such initiatives are subject to government decisions and will be reflected in future Budget exercises and Estimates documents.

Major initiatives whose funding profile will decrease in 2023–24 include:

- the Protecting Canada's Nature, Parks and Wild Spaces initiative;
- the Low Carbon Economy Fund;
- initiatives associated with the revitalization of meteorological services; and
- the Impact Assessment and Regulatory Regime Implementation.

Major initiatives whose funding profile will decrease in 2024–25 include:

- the Low Carbon Economy Fund;
- the Chemical Management Plan;
- Strong Arctic and Northern Communities;
- the Trans Mountain Expansion Pipeline;
- the Federal Contaminated Sites Action Plan; and
- initiatives associated with the revitalization of meteorological services.

2022-23 Budgetary planned gross spending summary (dollars)

The following table reconciles gross planned spending with net planned spending for 2022–23.

| Core Responsibilities and Internal Services | 2022-23 planned gross spending | 2022-23 planned revenues netted against expenditures | 2022-23 planned net spending |
|--|---------------------------------------|---|-------------------------------------|
| Taking action on Clean Growth and Climate Change | 478,116,465 | 0 | 478,116,465 |
| Preventing and Managing Pollution | 397,249,007 | -18,029,242 | 379,219,765 |
| Conserving Nature | 612,044,256 | -2,706,100 | 609,338,156 |
| Predicting Weather and Environmental Conditions | 333,874,989 | -51,999,481 | 281,875,508 |
| Subtotal | 1,821,284,717 | -72,734,823 | 1,748,549,894 |
| Internal services | 221,146,458 | -1,479,281 | 219,667,177 |
| Total | 2,042,431,175 | -74,214,104 | 1,968,217,071 |

*Totals may differ within and between tables due to rounding of figures.

Environment and Climate Change Canada's major sources of revenues netted against expenditures are the following:

- Provinces who receive water quantity monitoring services;
- Canadian Association of Petroleum Producers who funds the Joint Canada-Alberta implementation Plan for Oil Sands;
- NAVCAN to whom Environment and Climate Change Canada provides aviation weather services;
- Department of National Defence who receives detailed weather services in support of its military operations; and
- Canadian Coast Guard who receives ice and marine monitoring forecasts and services.

Planned human resources

The following table shows information on human resources, in full-time equivalents (FTEs), for each of Environment and Climate Change Canada's core responsibility and for its Internal Services for 2022-23 and other relevant years.

Human resources planning summary for core responsibilities and internal services (FTEs)*

| Core responsibilities and internal services | 2019-20 actual FTEs | 2020-21 actual FTEs | 2021-22 forecast FTEs | 2022-23 planned FTEs | 2023-24 planned FTEs | 2024-25 planned FTEs |
|--|---------------------|---------------------|-----------------------|----------------------|----------------------|----------------------|
| Taking action on Clean Growth and Climate Change | 593 | 611 | 831 | 897 | 896 | 902 |
| Preventing and Managing Pollution | 2,293 | 2,232 | 2,265 | 2,220 | 2,178 | 2,027 |
| Conserving Nature | 1,176 | 1,197 | 1,383 | 1,477 | 1,304 | 1,271 |
| Predicting Weather and Environmental Conditions | 1,706 | 1,700 | 1,721 | 1,711 | 1,572 | 1,546 |
| Subtotal | 5,768 | 5,740 | 6,200 | 6,305 | 5,950 | 5,746 |
| Internal services | 1,645 | 1,604 | 1,726 | 1,726 | 1,670 | 1,651 |
| Total | 7,413 | 7,344 | 7,926 | 8,031 | 7,620 | 7,397 |

*Totals may differ within and between tables due to rounding of figures. The FTE numbers throughout this document include students.

One FTE equals one person working a 37.5-hour work week for the entire year, or any number of part-time employees whose combined hours of work equal one FTE.

For fiscal years 2019–20 and 2020–21, the amounts shown represent the actual FTEs as reported in the Departmental Results Report. The total forecast and planned FTE for fiscal years 2021–22, 2022–23, 2023-24 and 2024-2025 are calculated using the forecasted FTEs for 2021-22 as per the departmental financial system, adjusted for sunsetting initiatives for future years.

The overall increase of 582 FTEs between the 2020–21 actual and the 2021–22 forecast FTEs is the result of an increase in funding profiles and new funding related to the following initiatives:

- Conserve Canada's land and freshwater, protect species, advance Indigenous reconciliation and increase access to nature, under the Conserving Nature Core Responsibility;
- Carbon Pollution Pricing Proceeds Return under the Taking Action on Clean Growth and Climate Change Core Responsibility;
- Reduce greenhouse gas emissions in the transportation and methane waste sectors, under the Taking Action on Clean Growth and Climate Change Core Responsibility;
- Climate Change Policy Capacity, under the Taking Action on Clean Growth and Climate Change Core Responsibility;
- Establish the Canada Water Agency Transition Office, under the Preventing and Managing Pollution Core Responsibility; and
- Implement natural climate solutions in Canada, under the Conserving Nature Core Responsibility.

The overall increase of 105 FTEs between the 2021–22 forecast and the 2022–23 planned FTEs is the result of new funding related to the:

- Conserve Canada's land and freshwater, protect species, advance Indigenous reconciliation and increase access to nature under the Conserving Nature Core Responsibility; and
- Carbon Pollution Pricing Proceeds Return under the Taking Action on Clean Growth and Climate Change Core Responsibility.

Overall, there is a decreasing trend in planned FTEs over the 2022–23 to 2024–2025 planning horizon. This is the result of sunseting initiatives with temporary funding. Funding requests for such initiatives are subject to government decisions and will be reflected in future Budget exercises and Estimates documents.

The overall decrease of 411 FTEs between the 2022–23 and 2023–24 planned FTEs is the result of decreasing funding profiles and sunseting initiatives with temporary funding related to the following initiatives:

- Protecting Canada's Nature, Parks and Wild Spaces, under the Conserving Nature Core Responsibilities;
- Impact Assessment and Regulatory Regime Implementation, under the Conserving Nature Core Responsibility;
- Initiatives associated with the revitalization of meteorological services, under the Predicting Weather and Environmental Conditions Core Responsibility; and
- Establishing the Canada Water Agency Transition Office, under the Preventing and Managing Pollution Core Responsibility.

The overall decrease of 222 FTEs between the 2023–24 and 2024–25 planned FTEs is the result of decreasing funding profiles and sunseting initiatives with temporary funding related to the following initiatives:

- Chemicals Management Plan, under the Preventing and Managing Pollution Core Responsibility;
- Trans Mountain Expansion Project, under the Conserving Nature and Preventing and Managing Pollution Core Responsibilities;
- Addressing imminent threats to wood bison herds, under the Conserving Nature Core Responsibility;
- Wildfire and flood preparedness and response capacity, under the Predicting Weather and Environmental Conditions Core Responsibility; and
- Wood Buffalo National Park World Heritage Site Action Plan, under the Preventing and Managing Pollution Core Responsibility.

Estimates by vote

Information on Environment and Climate Change Canada's organizational appropriations is available in the [2022–23 Main Estimates](#).^{lxxiv}

Future-oriented Condensed statement of operations

The future-oriented condensed statement of operations provides an overview of Environment and Climate Change Canada's operations for 2021-22 to 2022-23.

The forecast and planned amounts in this statement of operations were prepared on an accrual basis. The forecast and planned amounts presented in other sections of the Departmental Plan were prepared on an expenditure basis. Amounts may therefore differ.

A more detailed future-oriented statement of operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, are available on Environment and Climate Change Canada's [website](#).^{lxxv}

Future-oriented Condensed statement of operations for the year ending March 31, 2023 (dollars)

| Financial information | 2021–22 forecast results | 2022–23 planned results | Difference (2022–23 planned results minus 2021–22 forecast results) |
|--|--------------------------|-------------------------|--|
| Total expenses | 2,141,868,421 | 2,092,588,983 | (49,279,438) |
| Total revenues | 99,870,357 | 101,446,259 | 1,575,902 |
| Net cost of operations before government funding and transfers | 2,041,998,064 | 1,991,142,724 | (50,855,340) |

Total expenses are expected to decrease by \$49.3 million in 2022-23 in comparison with the forecast results of 2021-22. The overall decrease is mainly attributable to a decreasing funding profile for the Low Carbon Economy Fund, Great Lake Ecosystem Initiatives and the Youth Employment and Skills Strategy. This decrease is partially offset by an increasing funding profile to conserve Canada's land and freshwater, protect species, advance Indigenous reconciliation and increase access to nature.

Based on fiscal year 2021-22, total revenues for 2022-23 are expected to increase by \$1.6 million mostly due to an increase in revenues from the Cost Sharing Agreement for the Randle Reef Remediation Project.

For comparative purposes, planned results are based on historical data and trends, and include 2022-23 Main Estimates. 2021-22 forecast results give the reader information on 2021-22 estimated spending based on historical data and trends, the 2021-22 Main Estimates, Supplementary Estimates (A), (B) and (C) as well as government wide initiatives and carry-forward funding.

Corporate information

Organizational profile

Appropriate minister: The Honourable Steven Guilbeault, P.C., M.P.

Institutional head: T. Christine Hogan

Ministerial portfolio: Environment and Climate Change

Enabling instruments:

- [Department of the Environment Act, 1971](#)^{lxxxvi}
- [Canadian Environmental Protection Act, 1999](#)^{lxxxvii}
- [Fisheries Act, 1985](#)^{lxxxviii} (administration and enforcement of the Pollution Prevention Provisions)
- [Greenhouse Gas Pollution Pricing Act, 2018](#)^{lxxxix} (joint responsibility with Finance Canada)
- [Species at Risk Act, 2004](#)^{lxxx}
- [Manganese-based Fuel Additives Act, 1997](#)^{lxxxi}
- [Antarctic Environmental Protection Act, 2003](#)^{lxxxii}
- [Perfluorooctane Sulfonate Virtual Elimination Act, 2008](#)^{lxxxiii}
- [Canada Wildlife Act, 1985](#)^{lxxxiv}
- [Migratory Birds Convention Act, 1994](#)^{lxxxv}
- [Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act, 1992](#)^{lxxxvi}
- [National Wildlife Week Act, 1985](#)^{lxxxvii}
- [Canada Water Act, 1985](#)^{lxxxviii}
- [International River Improvements Act, 1985](#)^{lxxxix}
- [Lake of the Woods Control Board Act, 1921](#)^{xc}
- [Canada Emission Reduction Incentives Agency Act, 2005](#)^{xc}
- [Weather Modification Information Act, 1985](#)^{xcii}
- [Canadian Environmental Week Act, 1985](#)^{xciii}
- [Environmental Enforcement Act, 2010](#)^{xciv}
- [Environmental Violations Administrative Monetary Penalties Act, 2009](#)^{xcv}
- [Federal Sustainable Development Act, 2008](#)^{xcvi}
- [National Strategy for Safe and Environmentally Sound Disposal of Lamps Containing Mercury Act, 2017](#)^{xcvii}
- [Arctic Waters Pollution Prevention Act, 1985](#)^{xcviii}
- [Bridge to Strengthen Trade Act, 2012](#)^{xcix}
- [Canada Foundation for Sustainable Development Technology Act, 2001](#)^c
- [Canada Oil and Gas Operations Act, 1985](#)^{ci}
- [Canada-Newfoundland Atlantic Accord Implementation Act, 1987](#)^{cii}
- [Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act, 1988](#)^{ciii}
- [Energy Supplies Emergency Act, 1985](#)^{civ}
- [Impact Assessment Act, 2019](#)
- [Income Tax Act, 1985](#)^{cv}
- [Marine Liability Act, 2001](#)^{cvi}
- [Nunavut Planning and Project Assessment Act, 2013](#)^{cvi}
- [Resources and Technical Surveys Act, 1985](#)^{cvi}
- [Yukon Environmental and Socio-economic Assessment Act, 2003](#)^{cix}

Year of incorporation / commencement: 1971

Raison d'être, mandate and role : who we are and what we do

Information on Environment and Climate Change Canada raison d'être, mandate and role is available on Environment and Climate Change Canada's [website](#)^{cx}.

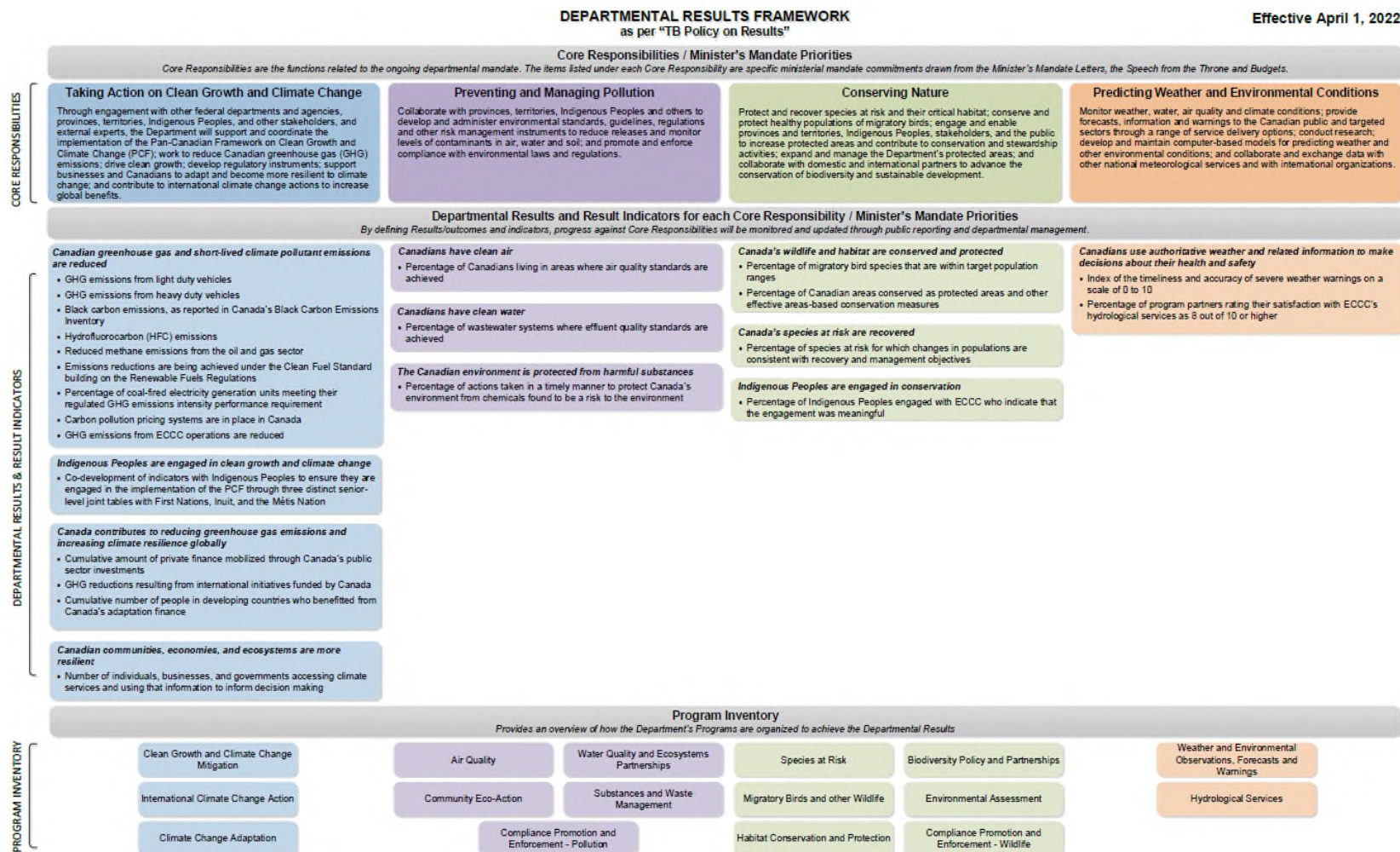
Information on the department's mandate letter commitments is available in the [Minister's mandate letters](#)^{cx}.

Operating context

Information on the operating context is available on Environment and Climate Change's [website](#)^{cxii}.

Reporting framework

Environment and Climate Change Canada's approved Departmental Results Framework and Program Inventory for 2022–23 are as follows:



Supporting information on the program inventory

Supporting information on planned expenditures, human resources, and results related to Environment and Climate Change Canada's Program Inventory is available in the [GC InfoBase](#).^{cxiii}

Supplementary information tables

The following supplementary information tables are available on Environment and Climate Change Canada's [website](#).^{cxiv}

- Departmental Sustainable Development Strategy;
- Details on transfer payment programs;
- Gender-Based Analysis plus;
- Horizontal Initiatives;
- Up-front multi-year funding; and
- United Nations 2030 Agenda and the Sustainable Development Goals.

Federal tax expenditures

Environment and Climate Change Canada's Departmental Plan does not include information on tax expenditures that relate to its planned results for 2022–23.

Tax expenditures are the responsibility of the Minister of Finance. The Department of Finance Canada publishes cost estimates and projections for government—wide tax expenditures each year in the [Report on Federal Tax Expenditures](#).^{cxv} This report provides detailed information on tax expenditures, including objectives, historical background and references to related federal spending programs, as well as evaluations, research papers and gender-based analysis plus.

Organizational contact information

Environment and Climate Change Canada
Inquiry Centre
Tel. : 1-800-668-6767 (in Canada only) or 819-938-3860
Email: ec.enviroinfo.ec@canada.ca

Appendix: definitions

appropriation (crédit)

Any authority of Parliament to pay money out of the Consolidated Revenue Fund.

budgetary expenditures (dépenses budgétaires)

Operating and capital expenditures; transfer payments to other levels of government, organizations or individuals; and payments to Crown corporations.

core responsibility (responsabilité essentielle)

An enduring function or role performed by a department. The intentions of the department with respect to a core responsibility are reflected in one or more related departmental results that the department seeks to contribute to or influence.

Departmental Plan (plan ministériel)

A document that sets out a department's priorities, programs, expected results and associated resource requirements, covering a three-year period beginning with the year indicated in the title of the report. Departmental Plans are tabled in Parliament each spring.

departmental result (résultat ministériel)

A change that a department seeks to influence. A departmental result is often outside departments' immediate control, but it should be influenced by program-level outcomes.

departmental result indicator (indicateur de résultat ministériel)

A factor or variable that provides a valid and reliable means to measure or describe progress on a departmental result.

departmental results framework (cadre ministériel des résultats)

A framework that consists of the department's core responsibilities, departmental results and departmental result indicators.

Departmental Results Report (rapport sur les résultats ministériels)

A report on a department's actual performance in a fiscal year against its plans, priorities and expected results set out in its Departmental Plan for that year. Departmental Results Reports are usually tabled in Parliament each fall.

experimentation (expérimentation)

The conducting of activities that explore, test and compare the effects and impacts of policies and interventions in order to inform decision-making and improve outcomes for Canadians. Experimentation is related to, but distinct from, innovation. Innovation is the trying of something new; experimentation involves a rigorous comparison of results. For example, introducing a new mobile application to communicate with Canadians can be an innovation; systematically testing the new application and comparing it against an existing website or other tools to see which one reaches more people, is experimentation.

full-time equivalent (équivalent temps plein)

A measure of the extent to which an employee represents a full person-year charge against a departmental budget. Full-time equivalents are calculated as a ratio of assigned hours of work to scheduled hours of work. Scheduled hours of work are set out in collective agreements.

gender-based analysis plus (GBA Plus) (analyse comparative entre les sexes plus [ACS Plus])

An analytical tool used to support the development of responsive and inclusive policies, programs and other initiatives; and understand how factors such as sex, race, national and ethnic origin, Indigenous origin or identity, age, sexual orientation, socio-economic conditions, geography, culture and disability, impact experiences and outcomes, and can affect access to and experience of government programs.

government-wide priorities (priorités pangouvernementales)

For the purpose of the 2022-23 Departmental Plan, government-wide priorities are the high-level themes outlining the Government's agenda in the 2021 Speech from the Throne: **building a healthier today and tomorrow; growing a more resilient economy; bolder climate action; fighter harder for safer communities; standing up for diversity and inclusion; moving faster on the path to reconciliation and fighting for a secure, just, and equitable world.**

horizontal initiative (initiative horizontale)

An initiative in which two or more federal organizations are given funding to pursue a shared outcome, often linked to a government priority.

non-budgetary expenditures (dépenses non budgétaires)

Net outlays and receipts related to loans, investments and advances, which change the composition of the financial assets of the Government of Canada.

performance (rendement)

What an organization did with its resources to achieve its results, how well those results compare to what the organization intended to achieve, and how well lessons learned have been identified.

plan (plan)

The articulation of strategic choices, which provides information on how an organization intends to achieve its priorities and associated results. Generally, a plan will explain the logic behind the strategies chosen and tend to focus on actions that lead up to the expected result.

planned spending (dépenses prévues)

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts presented in the Main Estimates.

A department is expected to be aware of the authorities that it has sought and received. The determination of planned spending is a departmental responsibility, and departments must be able to defend the expenditure and accrual numbers presented in their Departmental Plans and Departmental Results Reports.

program (programme)

Individual or groups of services, activities or combinations thereof that are managed together within a department and that focus on a specific set of outputs, outcomes or service levels.

program inventory (répertoire des programmes)

An inventory of a department's programs that describes how resources are organized to carry out the department's core responsibilities and achieve its planned results.

result (résultat)

An external consequence attributed, in part, to an organization, policy, program or initiative. Results are not within the control of a single organization, policy, program or initiative; instead, they are within the area of the organization's influence.

statutory expenditures (dépenses législatives)

Expenditures that Parliament has approved through legislation other than appropriation acts. The legislation sets out the purpose of the expenditures and the terms and conditions under which they may be made.

target (cible)

A measurable performance or success level that an organization, program or initiative plans to achieve within a specified time period. Targets can be either quantitative or qualitative.

voted expenditures (dépenses votées)

Expenditures that Parliament approves annually through an Appropriation Act. The vote wording becomes the governing conditions under which these expenditures may be made.

Endnotes

- ⁱ Low Carbon Economy Fund: www.canada.ca/en/environment-climate-change/services/climate-change/low-carbon-economy-fund.html
- ⁱⁱ Climate Action and Awareness Fund: www.canada.ca/en/services/environment/weather/climatechange/funding-programs/climate-action-awareness-fund.html
- ⁱⁱⁱ Canada-wide Strategy on Zero Plastic Waste: www.canada.ca/en/environment-climate-change/services/managing-reducing-waste/reduce-plastic-waste/canada-action.html
- ^{iv} Chemicals Management Plan: www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan.html
- ^v Air Quality Management System: ccme.ca/en/air-quality-report#slide-2
- ^{vi} Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada: www.canada.ca/content/dam/eccc/documents/pdf/species-risk/pan-canadian-approach-transforming-species-risk-conservation-canada.pdf
- ^{vii} price on carbon pollution: www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/putting-price-on-carbon-pollution.html
- ^{viii} National Inventory Report: Greenhouse Gas Sources and Sinks in Canada: www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html?utm_campaign=not-applicable&utm_medium=vanity-url&utm_source=canada-ca_ghg-inventory
- ^{ix} Overview of Reported Emissions: Facility Greenhouse Gas Reporting Program: www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/facility-reporting.html?utm_campaign=not-applicable&utm_medium=vanity-url&utm_source=canada-ca_ghg-reporting
- ^x Canada's Air Pollutant Emissions Inventory: www.canada.ca/en/environment-climate-change/services/pollutants/air-emissions-inventory-overview.html?utm_campaign=not-applicable&utm_medium=vanity-url&utm_source=canada-ca_apei
- ^{xi} Canada's Black Carbon Emissions Inventory: www.canada.ca/en/environment-climate-change/services/pollutants/black-carbon-emissions-inventory.html?utm_campaign=not-applicable&utm_medium=vanity-url&utm_source=canada-ca_black-carbon
- ^{xii} Low Carbon Economy Fund: www.canada.ca/en/environment-climate-change/services/climate-change/low-carbon-economy-fund.html
- ^{xiii} Climate Action and Awareness Fund: www.canada.ca/en/services/environment/weather/climatechange/funding-programs/climate-action-awareness-fund.html
- ^{xiv} Canadian Centre for Climate Services: www.canada.ca/en/environment-climate-change/services/climate-change/canadian-centre-climate-services.html
- ^{xv} Publication of GBA+: <https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/healthy-environment-healthy-economy/annex-gender-based-analysis-plus.html>
- ^{xvi} Sustainable Development Goals: www.un.org/sustainabledevelopment/sustainable-development-goals/
- ^{xvii} Goal 7: www.un.org/sustainabledevelopment/energy/
- ^{xviii} Goal 13: www.un.org/sustainabledevelopment/climate-change/
- ^{xix} Goal 8: www.un.org/sustainabledevelopment/economic-growth/
- ^{xx} Goal 9: www.un.org/sustainabledevelopment/infrastructure-industrialization/
- ^{xxi} Goal 1: www.un.org/sustainabledevelopment/poverty/
- ^{xxii} Goal 12: www.un.org/sustainabledevelopment/sustainable-consumption-production/
- ^{xxiii} GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- ^{xxiv} GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- ^{xxv} GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- ^{xxvi} Strategy on Zero Plastic Waste: ccme.ca/en/res/strategyonzeroplasticwaste.pdf
- ^{xxvii} Phase 1: ccme.ca/en/res/1589_ccmecanada-wideactionplanonzeroplasticwaste_en-secured.pdf
- ^{xxviii} Phase 2: ccme.ca/en/res/ccmephase2actionplan_en-external-secured.pdf
- ^{xxix} Chemicals Management Plan: www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan.html
- ^{xxx} evaluation of the CMP: www.canada.ca/en/health-canada/corporate/transparency/corporate-management-reporting/evaluation/chemical-management-plan.html
- ^{xxxi} State of the Great Lakes 2019: binational.net/2020/06/03/soql-edgl-2019-2/
- ^{xxxii} Oceans Protection Plan: tc.canada.ca/en/initiatives/oceans-protection-plan/report-canadians-investing-our-coasts-through-oceans-protection-plan#about
- ^{xxxiii} National Research Council of Canada: nrc.canada.ca/en/corporate/about-nrc
- ^{xxxiv} Air Quality Management System: ccme.ca/en/air-quality-report#slide-2

- xxxv Air Quality Health Index: www.canada.ca/en/environment-climate-change/services/air-quality-health-index/about.html
- xxxvi Canada-U.S. Air Quality Agreement: www.canada.ca/en/environment-climate-change/services/air-pollution/issues/transboundary/canada-united-states-air-quality-agreement-overview.html
- xxxvii Sustainable Development Goals: www.un.org/sustainabledevelopment/sustainable-development-goals/
- xxxviii Goal 3: www.un.org/sustainabledevelopment/health/
- xxxix Goal 6: www.un.org/sustainabledevelopment/water-and-sanitation/
- xl Goal 12: www.un.org/sustainabledevelopment/sustainable-consumption-production/
- xli Goal 13: www.un.org/sustainabledevelopment/climate-change/
- xlii Goal 14: www.un.org/sustainabledevelopment/oceans/
- xliiii Goal 8: www.un.org/sustainabledevelopment/economic-growth/
- xliiii Goal 9: www.un.org/sustainabledevelopment/infrastructure-industrialization/
- xlv Goal 11: www.un.org/sustainabledevelopment/cities/
- xlvi Goal 15: sustainabledevelopment.un.org/sdg15
- xlvii Goal 16: www.un.org/sustainabledevelopment/peace-justice/
- xlviii Goal 17: www.un.org/sustainabledevelopment/globalpartnerships/
- xlx GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- l GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- li GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lii Nature Legacy for Canada Initiative: www.canada.ca/en/services/environment/conservation/nature-legacy.html
- liii Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada: www.canada.ca/en/services/environment/wildlife-plants-species/species-risk/pan-canadian-approach.html
- liiii Sustainable Development Goals: www.un.org/sustainabledevelopment/sustainable-development-goals/
- liv Goal 14: www.un.org/sustainabledevelopment/oceans/
- lvi Goal 15: sustainabledevelopment.un.org/sdg15
- lvii GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lviii GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lix GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lx updated forecasts and warnings: weather.gc.ca/
- lxi ECCC's weather web site: weather.gc.ca/
- lxii ECCC's hurricane e-bulletins: weather.gc.ca/hurricane/index_e.html
- lxiii WeatherCAN: www.canada.ca/en/environment-climate-change/services/weather-general-tools-resources/weathercan.html
- lxiv Canadian Weather Radar Replacement Program: www.canada.ca/en/shared-services/corporate/publications/weather-radar-replacement-program.html
- lxv Sustainable Development Goals: www.un.org/sustainabledevelopment/sustainable-development-goals/
- lxvi Goal 3: www.un.org/sustainabledevelopment/health/
- lxvii Goal 12: www.un.org/sustainabledevelopment/sustainable-consumption-production/
- lxviii Goal 6: www.un.org/sustainabledevelopment/water-and-sanitation/
- lxix Goal 13: www.un.org/sustainabledevelopment/climate-change/
- lxx Goal 14: www.un.org/sustainabledevelopment/oceans/
- lxxi GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lxxii GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lxxiii GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- lxxiv 2020–21 Main Estimates www.canada.ca/en/treasury-board-secretariat/services/planned-government-spending/government-expenditure-plan-main-estimates.html
- lxxv Future-Oriented Statement of Operations: www.ec.gc.ca/default.asp?lang=En&n=31D9FF32-1
- lxxvi Department of the Environment Act: laws-lois.justice.gc.ca/eng/acts/E-10/index.html
- lxxvii Canadian Environmental Protection Act, 1999: laws.justice.gc.ca/eng/acts/C-15.31/
- lxxviii Fisheries Act: laws-lois.justice.gc.ca/eng/acts/F-14/
- lxxix Greenhouse Gas Pollution Pricing Act, 2018: <https://laws-lois.justice.gc.ca/eng/acts/G-11.55/>
- lxxx Species at Risk Act: laws.justice.gc.ca/eng/acts/S-15.3/index.html
- lxxxi Manganese-based Fuel Additives Act, 1997: laws-lois.justice.gc.ca/eng/acts/M-0.5/index.html
- lxxxii Antarctic Environmental Protection Act, 2003: laws-lois.justice.gc.ca/eng/acts/A-11.44/
- lxxxiii Perfluorooctane Sulfonate Virtual Elimination Act, 2008: <https://laws-lois.justice.gc.ca/eng/acts/p-8.3/index.html>
- lxxxiv Canada Wildlife Act, 1985: laws.justice.gc.ca/eng/acts/W-9/
- lxxxv Migratory Birds Convention Act, 1994: laws.justice.gc.ca/eng/acts/M-7.01/
- lxxxvi Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act, 1992: laws.justice.gc.ca/eng/acts/W-8.5/
- lxxxvii National Wildlife Week Act, 1985: laws-lois.justice.gc.ca/eng/acts/W-10/index.html
- lxxxviii Canada Water Act, 1985: laws-lois.justice.gc.ca/eng/acts/C-11/index.html
- lxxxix International River Improvements Act, 1985: laws.justice.gc.ca/eng/acts/I-20/index.html

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- xc Lake of the Woods Control Board Act, 1921: laws-lois.justice.gc.ca/eng/acts/T-10.4/page-1.html
- xcI Canada Emission Reduction Incentives Agency Act, 2005: laws-lois.justice.gc.ca/eng/acts/C-3.8/index.html
- xcII Weather Modification Information Act, 1985: laws-lois.justice.gc.ca/eng/acts/w-5/index.html
- xcIII Canadian Environmental Week Act, 1985: laws-lois.justice.gc.ca/eng/acts/e-11/index.html
- xcIV Environmental Enforcement Act, 2010: www.canada.ca/en/environment-climate-change/services/environmental-enforcement/acts-regulations/about-act.html
- xcV Environmental Violations Administrative Monetary Penalties Act, 2009: laws-lois.justice.gc.ca/eng/acts/E-12.5/page-1.html
- xcVI Federal Sustainable Development Act, 2008: laws-lois.justice.gc.ca/eng/acts/F-8.6/
- xcVII National Strategy for Safe and Environmentally Sound Disposal of Lamps Containing Mercury Act, 2017: <https://laws-lois.justice.gc.ca/eng/acts/N-16.8/>
- xcVIII Arctic Waters Pollution Prevention Act, 1985: laws-lois.justice.gc.ca/eng/acts/A-12/
- xcIX Bridge To Strengthen Trade Act, 2012: laws-lois.justice.gc.ca/eng/acts/B-8.05/FullText.html
- c Canada Foundation for Sustainable Development Technology Act, 2001: <https://laws-lois.justice.gc.ca/eng/acts/c-5.5/>
- ci Canada Oil and Gas Operations Act, 1985: laws-lois.justice.gc.ca/eng/acts/o-7/
- cII Canada-Newfoundland Atlantic Accord Implementation Act, 1987: laws-lois.justice.gc.ca/eng/acts/C-7.5/
- cIII Canada-Nova Scotia Offshore Petroleum Resources Accord Implementation Act, 1988: laws-lois.justice.gc.ca/eng/acts/c-7.8/
- cIV Energy Supplies Emergency Act, 1985: laws-lois.justice.gc.ca/eng/acts/E-9/
- cV Income Tax Act, 1985: laws-lois.justice.gc.ca/eng/acts/i-3.3/
- cVI Marine Liability Act, 2001: laws-lois.justice.gc.ca/eng/acts/m-0.7/
- cVII Nunavut Planning and Project Assessment Act, 2013: laws-lois.justice.gc.ca/eng/acts/N-28.75/
- cVIII Resources and Technical Surveys Act, 1985: laws-lois.justice.gc.ca/eng/acts/R-7/
- cIX Yukon Environmental and Socio-economic Assessment Act, 2003: laws-lois.justice.gc.ca/eng/acts/Y-2.2/
- cx Environment and Climate Change Canada's website: www.canada.ca/en/environment-climate-change/corporate/transparency/priorities-management/departmental-plans.html
- cxI Minister's mandate letter: pm.gc.ca/en/mandate-letters/2021/12/16/minister-environment-and-climate-change-mandate-letter
- cxII Environment and Climate Change Canada's website: www.ec.gc.ca
- cxIII GC InfoBase: www.tbs-sct.gc.ca/ems-sgd/edb-bdd/index-eng.html#start
- cxIV Environment and Climate Change Canada's website: www.ec.gc.ca
- cxV Government of Canada Tax Expenditures: www.fin.gc.ca/purl/taxexp-eng.asp