



# ENVIRONMENT AND CLIMATE CHANGE CANADA

2020–21

DEPARTMENTAL RESULTS REPORT



Departmental Results Report 2020–21

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## From the Minister



As Minister of Environment and Climate Change, I am pleased to present the 2020-21 Departmental Results Report for Environment and Climate Change Canada (ECCC).

As Canada and the world continue to grapple with the COVID-19 pandemic, the Government of Canada is taking action to address immediate challenges, and looking ahead to solutions that can foster a strong, more resilient future.

2020-21 was undeniably an unusual year. Despite the challenges brought by the pandemic, the agility of ECCC's workforce allowed its important work to continue.

The Departmental Results Report outlines important achievements and work done to address clean growth and climate change, prevent and manage pollution, conserve nature, and predict weather and environmental conditions and continue to carry out a wide range of science.

Climate action, preventing pollution, and addressing biodiversity loss are critical issues – and our response to them will define the future that we will bequeath to our children and grandchildren.

### TAKING ACTION ON CLEAN GROWTH AND CLIMATE CHANGE

In 2020-21, the Department worked to ensure results for Canadians on clean growth and climate change. The Government of Canada continued to act on its commitments to reduce greenhouse gas emissions (GHGs), build Canada's resilience to climate change, and enable clean growth by working to fully implement the Pan-Canadian Framework on Clean Growth and Climate Change (PCF).

In December 2020, ECCC announced Canada's strengthened climate plan, *A Healthy Environment and a Healthy Economy*, which included 64 new and enhanced climate measures and \$15 billion in investments that will enable Canada to meet and exceed its initial 2030 target established in 2016. Under the plan, the Government also committed to and initiated collaborative efforts to develop Canada's first National Adaptation Strategy in Canada to enhance climate resiliency. In November 2020, ECCC tabled Bill C-12, the *Canadian Net-Zero Emissions Accountability Act*, [to legislate Canada's target of net-zero greenhouse gas emissions by 2050](#) and established an independent Net-Zero Advisory Body.

As the Department continues to increase its climate ambition, these targets are not just numbers, they are a commitment to the world, to all Canadians, and to Canada's youth in particular that we will take strong action to contribute to the global effort to prevent climate change from becoming worse and to build a healthier, more prosperous future.

Throughout 2020-21, the Department advanced Canada's international leadership on climate change, including by leading Canada's involvement in the Global Commission on Adaptation to accelerate adaptation action globally.

ECCC also continued its partnerships and constructive dialogue with First Nations, Inuit, and the Métis Nation. These partnerships are vital to the successful implementation of Canada's climate plan, and continue to inform decision-making and program design.

### CONSERVING NATURE

Protecting nature is an essential part of addressing biodiversity loss and fighting climate change. It is important for Canadians to continue to have access to the outdoors and to connect with our natural and cultural heritage through National Historic Sites, Parks and Marine Conservation Areas.

This is why we are taking transformative action to protect natural ecosystems now and into the future. ECCC is leading the Government of Canada's efforts to strengthen its commitment to nature and its goals to protect and conserve Canada's ecosystems, landscapes and biodiversity.

During the past fiscal year, ECCC established contingency plans for the delivery of critical wildlife services, including through the development of site-specific plans to maintain safe visitor access to publicly accessible National Wildlife Areas when local health and safety measures permitted to do so.

### **PREVENTING AND MANAGING POLLUTION**

Addressing plastic pollution remains a priority for the Government of Canada and for countries around the world, and this is an important part of the Government of Canada's overall plan to protect the environment, build a stronger economy, and help ensure a sustainable recovery from the COVID-19 pandemic.

The Department protected Canadians' water through the administration and enforcement of the pollution prevention provisions of the *Fisheries Act* regulations including the *Wastewater Systems Effluent Regulations*, the *Metal and Diamond Mines Effluent Regulations* and the *Pulp and Paper Effluent Regulations*. ECCC will continue implementing Canada's Chemicals Management Plan (CMP), in collaboration with Health Canada. Building on past accomplishments, the renewed CMP will continue to benefit all Canadians by assessing, managing and ultimately reducing risks to human health, the environment, and all living things from chemicals.

ECCC will continue to lead the Federal Leadership Towards Zero Plastic Waste initiative, a comprehensive agenda to achieve the Government of Canada's goal of zero plastic waste by 2030.

### **PREDICTING WEATHER AND ENVIRONMENTAL CONDITIONS**

ECCC continues to successfully deliver weather services, performed upgrades to weather radars and stations, and modernized nationwide water monitoring. ECCC remains on track to replace 32 outdated radars with new state-of-the-art radars across the country by 2024.

I invite you to read the ECCC 2020-21 Departmental Results Report to learn more about the contributions ECCC is making to improve the environment, prosperity, and health of all Canadians. As Minister, I look forward to building on these important accomplishments in the years to come.

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

## Results at a glance

In 2020–21, Environment and Climate Change Canada (ECCC) took actions on key environmental priorities to deliver on Government of Canada commitments to Canadians concerning climate change, pollution and harmful substances, species at risk, and conservation of lands and water. Through science, regulation, and partnership with Indigenous peoples, provincial and territorial governments and a diverse range of stakeholders, ECCC made significant progress on these priorities in Canada and globally. ECCC is a key federal government department supporting Canada's contribution to 10 of the 17 United Nations (UN) Sustainable Development Goals, which are an urgent call for global action by all UN member states.

The Department delivered on its mandate under evolving federal, provincial and local requirements designed to reduce the spread of COVID-19, including by developing and implementing tools to guide fieldwork in a manner that protected the health and safety of employees while maintaining critical operations.

## Taking action on clean growth and climate change

Climate change and its impacts remained a top priority for ECCC and the Government of Canada in 2020–21, as the significant impacts and costs of climate change persist across the country and globally.

In December 2020, the Government of Canada released its strengthened climate plan (SCP), [A Healthy Environment and a Healthy Economy](#)<sup>i</sup>, which included 64 new measures and \$15 billion in investments to support people, communities and the planet. The SCP builds on the achievements of and work underway to implement the Pan-Canadian Framework (PCF) on Clean Growth and Climate Change. Together, the PCF and SCP will bring Canada's emissions to at least 31% below 2005 levels by 2030, and put Canada on a path to achieve net-zero emissions by 2050. Under the plan, the government also committed to develop Canada's first National Adaptation Strategy, working with provincial, territorial and municipal governments, Indigenous peoples, and other key partners. Federal, provincial, and territorial governments have taken concrete actions on well over fifty measures as part of the PCF, and with the new and strengthened federal measures, collaboration with provinces and territories will continue to be a priority in designing and implementing new measures.

The Government tabled new legislation, the [Canadian Net-Zero Emissions Accountability Act](#)<sup>ii</sup> (Bill C-12) to establish a legal framework for Canada to achieve its target of net-zero greenhouse gas emissions by 2050 and launched an independent Net-Zero Advisory Body. In 2020–21, ECCC continued to implement the federal carbon pollution pricing system, which returns all direct proceeds of carbon pricing to the jurisdiction in which they were collected, directly to the governments that chose to adopt the federal system and directly to individuals, families and businesses in the remaining jurisdictions. ECCC also supported initiatives under the Low Carbon Economy Fund, including the Leadership Fund to provide up to \$1.4 billion of support to provincial and territorial actions, and the Challenge Fund that uses up to \$500 million to leverage Canadian ingenuity to reduce emissions and generate clean growth. The Department continued to work with the Assembly of First Nations, Inuit Tapiriit Kanatami and the Métis National Council to guide the design of climate change programs and projects to help support Indigenous climate leadership.

Moving forward on its regulatory agenda, ECCC published draft regulations to establish the [Federal Greenhouse Gas Offset System](#)<sup>iii</sup> to reduce carbon emissions by allowing the generation of offset credits from projects across Canada, published draft regulations to establish the [Clean Fuel Standard](#)<sup>iv</sup> to reduce greenhouse gas emissions from the production and use of liquid fossil fuels in Canada, committed to align Canada's light-duty vehicle (LDV) regulations with the most stringent performance standards in North America, continued to take actions to phase out coal-fired electricity by 2030 and support a just transition for coal workers and communities, and finalized regulations that will reduce pollution from petroleum and petrochemical facilities across the country to meet and exceed Canada's 2030 emissions-reduction target and achieve net-zero emissions by 2050.

ECCC continued to lead Canada's involvement in the Global Commission on Adaptation during its Year of Action, which included co-leading the Commission's Nature-Based Solutions Action Track with Mexico. The action track advanced a diverse set of activities and deliverables, including convening 13 virtual events and workshops, and provided key contributions to the Commission's overall success in catalyzing significant global awareness and momentum on adaptation.

### **Preventing and managing pollution**

Addressing plastic pollution remains a priority for the Government of Canada and for countries around the world. Building on the Canadian Council of Ministers of the Environment's (CCME) Canada-wide Strategy on Zero Plastic Waste, the Minister of Environment and Climate Change joined his provincial and territorial counterparts in the CCME to launch the second phase of an action plan to implement the Strategy. The phase 2 Action Plan aims to improve awareness of plastic pollution, reduce pollution from aquatic activities, advance science, clean up debris, and contribute to global action. The Department also took key next steps to achieve zero plastic waste by 2030, including proposing a ban on selected single-use plastic items and adding "plastic manufactured items" to Schedule 1 of the *Canadian Environmental Protection Act, 1999* (CEPA), investing \$2.2 million under [Canada's Plastics Science Agenda](#)<sup>v</sup> to support science-based research on the impacts of plastic pollution on the natural environment and human health, and announcing additional winners of the Canadian Plastics Innovation Challenge.

To protect and restore important freshwater resources across Canada, ECCC finalized a new Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, supported 46 new projects to protect and restore the Great Lakes, and invested \$1.18 million in 15 new projects to reduce excessive nutrients in the Lake Winnipeg Basin. The Department continued to coordinate integrated management of the St. Lawrence River Basin with numerous partners through two Grants and Contributions programs and the renewal of joint programming for 2021-26, and invested \$1 million in six new projects in priority watersheds in Atlantic Canada. ECCC continued to provide environmental data, expertise in ocean modelling and oil spill behaviour, and other scientific advice to build a world-leading marine safety system through Canada's \$1.5 billion Oceans Protection Plan.

The Department protected Canadians' water through the administration and enforcement of the pollution prevention provisions of the Fisheries Act and its regulations including the Wastewater Systems Effluent Regulations, the Metal and Diamond Mines Effluent Regulations and the Pulp and Paper Effluent Regulations. The Department also worked on the development of new regulations to reduce adverse effects on water from effluent from the coal mining and oil sands sectors. In addition, ECCC advanced amendments to the Pulp and Paper Effluent Regulations and the Wastewater Systems Effluent Regulations.

The Department strengthened regulations and tools to improve and protect air quality, including finalizing the *Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations* and the [Reduction in the Release of Volatile Organic Compounds Regulations \(Petroleum Sector\)](#)<sup>vi</sup>. ECCC continued to administer and enforce the *Canadian Environmental Protection Act, 1999* (CEPA, 1999), pollution prevention provisions of the *Fisheries Act*, and the *Migratory Birds Convention Act, 1994*, and to implement the Chemicals Management Plan in collaboration with Health Canada.

Internationally, ECCC continued to demonstrate leadership in international fora to reduce transboundary air pollution, notably through the Canada-United States Air Quality Agreement and the Convention on Long-range Transboundary Air Pollution, and continued to meet its obligations under these agreements.

### **Conserving nature**

ECCC continued to make significant progress to protect and conserve 25% of Canada's terrestrial lands and inland waters by 2025 through the \$1.3 billion Nature Legacy initiative, including a \$500 million Canada Nature Fund matched by partners' investments. Through the Nature Legacy, ECCC helped advance protection efforts in communities across Canada, with the goal of building a network of protected and conserved areas and natural ecosystems in every province and territory. The Canada Nature Fund invested \$100 million over four years in the Natural Heritage Conservation Program—delivered by the Nature Conservancy of Canada and its partners—to help secure and protect at least 200,000 hectares of



ecologically sensitive private lands. In 2020–21, ECCC invested in Indigenous Protected Areas in Taiga Shield (northern Manitoba) and Tasiujarruaq (Hudson Bay).

In partnership with provinces and territories, Indigenous communities and stakeholders, ECCC took actions to protect and restore species at risk and their habitat through the *Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada*. Investments in British Columbia and Nova Scotia increased protection for 40 species at risk in these two regions. The Department provided ongoing support to Indigenous conservation initiatives under the Indigenous Guardians Pilot. To date, the Government has funded \$20 million over 81 initiatives under this pilot that respects and recognizes the unique perspectives, rights, responsibilities and needs of Indigenous peoples, through three distinct programs: Inuit Guardians, First Nations Guardians and Métis Guardians.

In a year impacted by COVID-19, ECCC established contingency plans for the delivery of critical wildlife services, and continued its ongoing work in Canada to protect wildlife species and their habitats by promoting and enforcing environmental and wildlife laws.

### **Predicting weather and environmental conditions**

To enable Canadians to plan for extreme weather events, ECCC continued its program of expanding and upgrading its nationwide weather monitoring system by installing 33 new state-of-the-art radars across Canada. The Department continued to modernize Canada's water monitoring services and infrastructure to generate more timely and accurate information on water flows and levels across Canada to help communities and individuals plan for changes associated with droughts and floods. In a year marked by COVID-19 across Canada, ECCC retrofitted its weather forecasting centres and modelling centre with measures to maintain social distancing and necessary Personal Protection Equipment to protect uninterrupted, 24/7 operations.

For more information on ECCC's plans, priorities and results achieved, see the "[Results: what we achieved](#)" section of this report.



## Results: what we achieved

### Core Responsibilities

#### 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.

##### Results

#### Delivering on ECCC's climate change mandate during the COVID-19 pandemic



Throughout 2020–21, Environment and Climate Change Canada (ECCC) delivered on its mandate under evolving federal, provincial and local requirements designed to reduce the spread of COVID-19, while striving to limit the impact of the pandemic on its operations. ECCC continued to identify options to streamline operations and programming, better support partners and clients, and realign priorities. To support employees critical to operations, personal protective equipment (PPE) supplies were quickly acquired and distributed across the Department. Employees worked from home whenever possible, to ensure their safety and that of others, while still delivering on the Department's mandate. In response to travel restrictions and the cancellation of in-person meetings and events, ECCC established virtual ways to attend and engage with domestic and international partners including on Free Trade Agreements and the promotion of clean technology abroad. In multilateral fora and bilateral engagements, the international agenda was very busy as the number of meetings being organized grew significantly, with organizers and participants needing to develop new meeting technologies and practices, and convening meetings in a balanced manner across all time zones.

#### Implementing and building on Canada's climate commitments

Climate change remains a fundamental challenge for Canada and the world, with significant impacts to the environment, economy and social well-being. The science is clear, global emissions must reach net zero by 2050 to limit warming to 1.5 °C. The International Panel on Climate Change has also concluded that there is no pathway to limiting warming to 1.5 °C without deep reductions in short-lived climate pollutants such as methane and black carbon.

In 2020–21, the Government of Canada continued to act on its commitment to reduce greenhouse gas emissions (GHGs), build Canada's resilience to climate change, and enable clean growth by working with provinces and territories to fully implement the Pan-Canadian Framework on Clean Growth and Climate Change (PCF). Building on the PCF, in December 2020, Canada announced its strengthened climate plan (SCP), [A Healthy Environment and a Healthy Economy<sup>vii</sup>](#), with over 64 new federal measures and \$15 billion in investments aimed at creating jobs and supporting people, communities, and the planet. Together, the PCF and Canada's SCP will enable Canada to reduce its GHG emissions at least 31% below 2005 levels by 2030, and set Canada on the path to achieve net-zero emissions by 2050.

Other key achievements in 2020–21 include:

- Draft regulations to establish the [Clean Fuel Standard \(CFS\)](#)<sup>ix</sup>, an important part of Canada's approach to cutting pollution and growing the economy. This regulation will reduce GHG emissions from producing and using liquid fossil fuels in Canada. The Clean Fuel Standard will incent the uptake of technologies that reduce the lifecycle carbon intensity of liquid fossil fuels, such as carbon capture and storage and renewable energy. It will also create economic opportunities for lower-carbon fuel providers, such as biofuel producers, and feedstock providers like farmers and foresters supporting lower-carbon fuel production. The Clean Fuel Standard will also promote the uptake of advanced vehicle technologies, like electric and hydrogen fuel cell vehicles.
- The Government of Canada committed to align Canada's light-duty vehicle (LDV) and heavy-duty vehicle (HDV) regulations with the most stringent performance standards in North America post-2025, as part of its SCP. Automobiles and light trucks account for about 11% of Canada's total GHG emissions. Canada is working with U.S. partners in developing stringent, harmonized Canada-U.S. standards for LDVs, while providing the greatest economies of scale and lowest costs for the automotive industry and Canadian consumers<sup>1</sup>.
- Publication of draft regulations to establish the [Federal Greenhouse Gas Offset System](#)<sup>x</sup> to reduce carbon emissions and create jobs to incent cost-effective, voluntary emissions reductions and removals across Canada from activities not covered by carbon pricing. These credits can be used by industries regulated under the federal [Output-Based Pricing System](#)<sup>xi</sup> as a way to meet their compliance obligations and help reduce the overall cost of compliance, or by others for example to meet voluntary net-zero emissions targets or greening government objectives. The offset system will incentivize additional GHG reductions or removals by enabling farmers, foresters, Indigenous communities, municipalities and other project developers to oversee projects that meet eligibility criteria and follow federal protocols.

#### Net-Zero by 2050

The Minister of Environment and Climate Change tabled the *Canadian Net-Zero Emissions Accountability Act* in the House of Commons. The proposed legislation will establish a legal framework for Canada to achieve net-zero emissions by 2050, including setting emissions reduction targets at five-year intervals, and enshrining greater accountability and public transparency into Canada's plan.

#### Net-Zero Advisory Body

To support the net-zero emissions target, the Minister of Environment and Climate Change announced the [Net-Zero Advisory Body](#)<sup>viii</sup>—an independent group of experts from across Canada mandated to engage with Canadians and provide advice to the Minister on the best pathway to achieve net-zero GHG emissions by 2050.

<sup>1</sup> On June 29, 2021, the Government of Canada announced it was setting a mandatory target for all new light-duty cars and passenger trucks sales to be zero-emission by 2035, accelerating Canada's previous goal of 100% sales by 2040. As part of the strengthened climate plan, the Government of Canada initiated discussions with stakeholders in March 2021 on zero-emission vehicle supply-side options to achieve additional emission reductions from the LDV fleet, such as regulations and enabling measures. These efforts build upon initiatives already undertaken to encourage cleaner modes of transportation, such as a commitment of \$700 million in funding to provide purchase incentives to consumers, support adoption by businesses through tax write-offs, and expand the network of zero emission vehicles (ZEV) charging and refueling stations.

## Phasing out coal-fired electricity—at home and globally

Coal is one of the most significant sources of carbon emissions and air pollution in the world. Coal-fired electricity has significant adverse environmental and health impacts. Approximately 40% of the world's (and 8% of Canada's) electricity comes from burning coal. The Government of Canada is phasing out conventional coal-fired electricity by 2030 and is taking steps to support a just transition for coal workers and communities.

In addition to its domestic actions, Canada is also taking a leadership role to advance the phase out of coal internationally. Canada continues to co-chair the Powering Past Coal Alliance (PPCA), a coalition of governments (both national and sub-national), industry, businesses, and finance institutions that are committed to ending emissions from coal in support of global climate action. Together, members have committed to phase out nearly 35% of the OECD's total coal capacity, which represents around 20% of the world's coal capacity outside of China. Over 20 new members joined the Alliance in 2020–21.

### Partnering with Indigenous peoples

ECCC continued its partnership and constructive dialogue with the Assembly of First Nations, Inuit Tapiriit Kanatami, and the Métis National Council through senior-level distinctions-based, bilateral climate change tables. These partnerships are vital to the successful implementation of Canada's climate plans and help support Indigenous peoples to advance their climate priorities and adapt to the changing climate. The Department also continued to advance the Government of Canada's inter-departmental efforts to implement the foundational principles of Indigenous climate leadership in the implementation of Canada's climate actions.

## Federal Carbon Pollution Pricing Proceeds Programming

The federal carbon pollution pricing system returns all direct proceeds to individuals, families and businesses through payments and climate action programs. All proceeds are returned to the jurisdictions from which they were collected. Those governments that opted for the federal pricing system receive all the proceeds back to decide how to reinvest them. In the remaining provinces, where the federal price on carbon pollution is in effect, the Government of Canada returns approximately 90% of the fuel charge proceeds directly to families through Climate Action Incentive payments. In 2020–21 these were delivered through annual tax returns. Using a portion of fuel charge proceeds, the government continued to offer programming to support small and medium-sized businesses, Indigenous peoples, and other recipients reduce energy use, costs, and greenhouse gas emissions. Going forward, the federal carbon price will continue to be revenue neutral, and the Government of Canada remains committed to helping households make investments to increase energy efficiency and further reduce emissions. The Government will continue to return all proceeds from the federal fuel charge back to Canadian families and their communities, ensuring that the majority of households receive more in payments than they face in costs. These payments will move from annual to quarterly payments starting as early as 2022.

Proceeds collected from the Output-Based Pricing System (OBPS) for industry will be used to further support industrial projects to cut emissions and use new cleaner technologies and processes, as part of the plan to decarbonize industrial sectors. These proceeds began to be collected in the spring of 2021 and the Government of Canada plans to launch a call for proposals to find the most promising projects across industries.

## Climate change adaptation

As part of its strengthened climate plan released in 2020, the Government of Canada committed to developing Canada's first National Adaptation Strategy, working with provincial, territorial and municipal governments, Indigenous peoples, and other key partners. The strategy will establish a shared vision for climate resilience in Canada, identify key priorities for increased collaboration and establish a framework for measuring adaptation progress at the national level. The strategy will also help inform where the Government of Canada should best target its policies, programs and investments in adaptation going forward.

### Green Internships for Students in Clean Technology

ECCC provided 900 internship opportunities through the Science Horizons Youth Internship Program. Funding is part of a \$600 million investment under the Youth Employment and Skills Strategy to organizations that deliver a range of activities helping youth overcome barriers to employment and develop a broad range of skills and knowledge to participate in the current and future labour market. The internship program supports jobs in clean-technology sectors for recent post-secondary graduates in science, technology, engineering, and mathematics (STEM). The program includes specific opportunities for Indigenous graduates, graduates from rural and remote areas, and women in STEM fields.

In 2020–21, ECCC continued to provide advice and guidance to federal departments and agencies to increase their institutional resilience to climate change. Initiatives included developing and issuing guidance on climate change risk assessment and adaptation planning. ECCC continue to develop an adaptation plan to address risks identified in the Department's climate change risk assessment.

By working in partnership with provinces, territories, Indigenous organizations, communities, and stakeholders, the Government of Canada applies diverse approaches and actions to address adaptation. In 2020–21, the Department collaborated with provinces and territories through the Canadian Council of Ministers of the Environment to advance shared priorities, including projects on climate change risk assessment and natural infrastructure.

## Low Carbon Economy Fund

ECCC continued to implement the [Low Carbon Economy Fund<sup>xii</sup>](#) to provide up to \$2 billion in funding to reduce carbon pollution and generate clean growth. The fund is comprised of two components: the up to \$1.4 billion Leadership Fund that supports provincial and territorial actions (see next section); the Challenge Fund, consisting of an approximately \$450 million Champions Stream, and up to \$50 million Partnerships Stream.

In 2020–21, the Low Carbon Economy Fund announced funding for diverse projects across Canada, including initiatives that leverage Canadian ingenuity to reduce emissions and generate clean growth, and to retrofit for energy efficiency. Investments announced include:

- \$100 million from the Low Carbon Economy Leadership Fund to support initiatives in Alberta aimed at growing the clean economy, contributing to the creation of approximately 3,100 jobs in the areas of construction, energy efficiency retrofits, clean technology innovation, industrial transformation and research.
- \$18.3 million from the Low Carbon Economy Leadership Fund to support the South Baffin Energy Management Project, which will help improve energy efficiency and introduce renewable energy in 45 buildings owned by the Government of Nunavut in the six communities that make up the South Baffin region.
- Up to \$1.1 million from the Champions stream of the Low Carbon Economy Challenge to support the City of Toronto in reducing emissions from their ambulances and emergency paramedic response units.
- \$1.1 million from the Partnerships stream of the Low Carbon Economy Challenge to support clean energy initiatives of the Town of Lumsden, Saskatchewan.
- \$2 million from the Champions stream of the Low Carbon Economy Challenge to support the City of Calgary's biomass production and carbon sequestration project, which will reduce emissions by planting 300 new hectares of trees over three years at the City's successful willow plantation.
- \$974,000 from the Partnerships stream of the Low Carbon Economy Challenge to assist the University of British Columbia with its installation of heat-recovery systems that will reduce the University's reliance on natural gas.

- \$948,000 in funding from the Partnerships stream of the Low Carbon Economy Challenge to support Cowessess First Nation's and Muskoday First Nation's solar-power projects in Saskatchewan.

### Climate Action and Awareness Fund

In June 2020, ECCC launched the first Request for Proposals under the Climate Action and Awareness Fund (CAAF). The CAAF is investing 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 is using \$196.5 million from the Environmental Damages Fund, as well as \$15 million over five years from the Climate Action Fund, to create this unique opportunity. The CAAF is delivering projects in three priority areas: 1) supporting youth climate awareness and community-based climate action; 2) supporting climate research at Canadian think tanks and in academia; and 3) advancing climate science and technology. In 2020–21, 68 CAAF projects across the country, with \$90 million in funding from ECCC were approved. The following are examples of funded CAAF projects:

- Let's Talk Science will receive \$5.9 million to 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.
- The Discovery Centre will receive \$6 million to partner with 30 science centres across the country to engage approximately 200,000 youth in every province and territory as they participate in innovative activities that will inspire them to take real action to fight climate change.
- Colleges and Institutes Canada will receive \$5.3 million to help colleges and universities across the country reduce emissions by implementing climate plans on campus and sharing best practices for green buildings.
- Ryerson University will receive \$1.7 million to engage young Canadians on post-secondary campuses and in communities to find local solutions to reach net-zero by 2050.
- Lakehead University will receive \$135,000 to help prepare Canadian youth, particularly young adults in Northwestern Ontario, for leadership roles in climate action and in environmental careers.
- The Governing Council of the University of Toronto will receive \$6 million to support climate action by Canada's health care community to encourage the move toward a sustainable system.

### Reducing short-lived climate pollutants

ECCC continued to implement its [Strategy on Short-lived Climate Pollutants<sup>xiii</sup>](#) (SLCPs). These potent GHGs and air pollutants, including black carbon, methane, hydrofluorocarbons and ground-level ozone, play an important role in climate warming and air quality. A range of actions on SLCPs (and on other GHGs), including science and mitigation, are in support of meeting the temperature goals of the Paris Agreement. Black carbon is of particular significance in the Arctic due to its additional warming effect when deposited onto snow or ice. The Strategy takes a holistic approach to addressing SLCPs through 48 commitments under five pillars for enhanced action: 1) domestic mitigation efforts; 2) science and communications; 3) international engagement; 4) coordination of ECCC and government-wide activities; and 5) collaboration with provincial and territorial governments and other partners. The strategy is aimed at generating reductions from all key SLCP emission sources while ensuring a coordinated approach to addressing these GHGs across the Government of Canada.

In 2020–21, ECCC moved the regulatory agenda on SLCPs forward on a number of fronts:

- ECCC finalized equivalency agreements to reduce methane emissions from oil and gas production activities with the provinces of Alberta, British Columbia, and Saskatchewan. These agreements will allow strengthened provincial methane regulations to replace the federal regulations for up to five years. The Government of Canada remains committed to reducing methane emissions from the oil and gas sector by 40 to 45% below 2012 levels, by 2025. The Government of Canada has committed to undergo a review of the current approach to reducing methane from the oil and gas sector by the end of 2021 and establish new targets for 2030 and 2035, based on international best practices.
- The Department published draft regulations to establish the [Federal Greenhouse Gas Offset System<sup>xiv</sup>](#) to reduce carbon emissions through voluntary projects, creating economic opportunities in the forestry, waste and agriculture sectors.

- The Department published draft regulations to establish the Clean Fuel Standard to reduce greenhouse gas emissions from the production and use of liquid fossil fuels in Canada.
- ECCC launched engagement on a [review of the Output-Based Pricing System Regulations \(OBPSR\)<sup>xv</sup>](#), as committed to in the 2019 [Regulatory Impact Analysis Statement<sup>xvi</sup>](#) to align with the post-2022 carbon price trajectory proposed in Canada's strengthened climate plan.
- The Minister of Environment and Climate Change published the results of a mid-term evaluation of Canada's light-duty vehicle regulations for the 2022 to 2025 model years – a commitment made by both Canada and the U.S. Results of the analysis indicate that adopting more stringent standards for the 2023 to 2025 model years could result in net benefits of approximately 2.5 billion (2018 Canadian dollars) and would support the attainment of Canada's zero-emissions vehicles (ZEV) sales targets. Under Canada's strengthened climate change plan, released in December 2020, the Government of Canada committed for the post-2025 period to align Canada's LDV regulations with the most stringent performance standards in North America.
- ECCC finalized the [Reduction in the Release of Volatile Organic Compounds Regulations \(Petroleum Sector\)<sup>xvii</sup>](#) that will reduce pollution from petroleum and petrochemical facilities across the country, including in Sarnia, Mississauga, Montréal, Burnaby, Prince George, Saint John, and many communities in Alberta and Saskatchewan. The regulations also support clean growth in Canada's energy sector and complement the commitment to meet and exceed the country's 2030 emissions-reduction target and achieve net-zero emissions by 2050. They will lead to \$192 million in health benefits from 2021 to 2037. Health benefits include an estimated 34 fewer premature deaths; almost 6,900 fewer days without asthma symptoms; and over 33,600 fewer days of restricted activity.

### **Enhancing Climate Information and Services to Build Resilience to Climate Change**

The Canadian Centre for Climate Services (CCCS) continued to enhance access to climate information and provide support for Canadians to consider climate change in their decisions. The CCCS, in collaboration with its many partners, released new information and features on [ClimateData.ca<sup>xviii</sup>](#). These include a new health module with tailored climate data for that sector, an analysis tool allowing users to create their own thresholds, and a Learning Zone which includes training materials and information on foundational climate information concepts in different formats (e.g., videos, infographics and presentations).

As part of the CCCS' efforts to enhance integration of climate information into decision-making processes, it has supported the development of a new guide for municipal governments. [Talking it through: Guide for local government staff on climate adaptation<sup>xix</sup>](#), was designed to support municipal staff with speaking to decision-makers and elected officials about adapting to the local impacts of climate change. This was developed under the Municipal Climate Service Collaborative initiative, in collaboration with the Federation of Canadian Municipalities.

Finally, the CCCS continued to advance its efforts to build capacity and expertise across the country by collaborating with the Atlantic provinces to design and launch a competitive process for the establishment of a new regional climate organization to service the Atlantic region. Through this process, a new organization was identified, and will be established in 2021-22. This new organization will deliver regionally tailored climate information, data, tools and training to meet the growing demand for climate services in support of adaptation to climate change in the Atlantic provinces.



## International Agreements and Actions

Canada continues to play an active role in promoting ambitious and effective implementation of the Paris Agreement by all countries including through the G7, G20, UN, Powering Past Coal Alliance and other fora. Despite the global COVID-19 pandemic, maintaining global momentum on climate action has been and continues to be a priority for the international community. To support a successful 26th Conference of the Parties (COP26) to be held in November 2021, ECCC has played an active and constructive role in virtual conferences and consultations hosted by the United Nations Framework Convention on Climate Change (UNFCCC) and the COP25 and COP26 Presidencies, including the June Momentum for Climate Change (2020) and the UN Climate Change Dialogues (2020). The Minister of Environment and Climate Change co-convened, along with his European Commission and Chinese counterparts, two virtual meetings of the Ministerial on Climate Action, in July 2020 and March 2021. The meetings brought together Ministers and representatives from all major emitting countries and other countries playing an important role on climate change to discuss their respective efforts for a green recovery and to support enhanced action and ambition in the lead-up to COP26. ECCC officials have also continued to engage with international counterparts on outstanding elements of the Paris Agreement rulebook, advocating for strong and robust rules that ensure the Paris Agreement will be implemented with maximum transparency and environmental integrity.

Canada also worked closely with the UK and its G7 partners in 2020–21 to prepare for the May 2021 ministerial meetings, which led to the most ambitious environmental outcomes in the G7's history. In May 2021, the G7 Environment and Climate Ministers discussions focused on increasing ambition on climate change, and accelerating the transition to clean energy. To this end, all G7 members committed to net zero by 2050, keeping the 1.5 °C temperature goal within reach, as well as committing to putting climate and the environment at the centre of pandemic recovery efforts and investments. Canada also continues to strengthen bilateral and regional relationships with international partners through the negotiation and implementation of Free Trade Agreements (FTAs) and other environmental cooperation instruments. This includes supporting strategic engagement efforts to advance integrated climate and environment approaches with the United States (U.S.) Administration, expanding collaboration with key partners from the European Union (EU), as well as advancing environment and climate change priorities with Asian, African, Oceania, and Pan-American countries.

### Investing in women's leadership

Since 2017, Canada has been investing in women's leadership to address climate change by helping to train women negotiators from various developing regions to support them in influencing international climate discussions. Building on in-person workshops to support francophone women negotiators from Africa, in October 2020, ECCC supported a virtual workshop which included over 200 participants from more than 25 countries. By taking part in these workshops, women from the poorest and most vulnerable countries can hone their negotiation and leadership skills and learn how to make their voices heard at the decision-making table. These workshops also contribute to empowering women to become climate action leaders in their own communities.

There is significant alignment between Canada and the new U.S. Administration on climate and the environment. Building on our long history of cooperation to protect the environment, our two nations renewed our partnership to address shared environmental priorities with the U.S.-Canada Roadmap for a Renewed Partnership (Roadmap), launched by Prime Minister Trudeau and President Biden on February 23, 2021. As part of this Roadmap, a High-Level Ministerial Dialogue on Climate Ambition (Dialogue), co-chaired by Minister Wilkinson and John Kerry, U.S. Special Presidential Envoy on Climate Change, was formed with a framework to support joint efforts to align approaches to decarbonize both economies, and create good jobs on both sides of the border. Work under the Dialogue on emissions modelling informed the countries' respective announcement on enhanced 2030 Paris targets at the U.S. Climate Leaders' Summit on April 22, 2021.

Canada also continued to demonstrate leadership with the U.S. and Mexico through the Commission for Environmental Cooperation (CEC) to advance trilateral collaboration on environmental issues of common interest. Canada hosted the June 2020 Council Session virtually, to advance regional collaboration on environment and clean technology to support resiliency in communities. At this session, Canada, working with its partners, launched the 2021-2025 CEC Strategic Plan.

The European Union is a key forward-leaning global leader on climate and environment issues and is a like-minded strategic partner for Canada on climate change and environment. As such, Canada works to maintain a positive relationship with the EU and to expand its collaboration with key European partners. Canada and the EU take turns hosting the Canada-EU High-Level Dialogues (HLDs) on Environment and Climate, a commitment under the Canada-EU Strategic Partnership Agreement, where parties are able to discuss international and domestic issues, plans, policies, and collaboration opportunities on environment and climate change. Despite restrictions during the COVID-19 pandemic, Canada and the EU developed a virtual format for the 2020 HLDs, which took place throughout fall 2020 as a series of meetings at the Director General and Deputy Minister levels, where parties discussed key issues of mutual interest, including green recovery, carbon pricing, circular economy, biodiversity, and air pollution. Canada and the EU also jointly hosted a virtual webinar in March 2020 on Clean Technology opportunities under CETA that attracted over 600 registrants.

ECCC continued to implement bilateral projects with 11 developing countries to assist these countries in phasing down hydrofluorocarbons (HFCs) in accordance with the Kigali Amendment of the Montreal Protocol and agreed individual country work plans.

In 2015, Canada made a climate finance commitment to deliver \$2.65 billion to developing countries for their climate action over five years, which is expected to result in enhanced resilience for the poorest and most vulnerable people, reduced GHG emissions, and leveraged important amounts of co-financing for climate action in developing countries, especially from the private sector. Of that amount, ECCC is delivering \$57.5 million for important initiatives such as the [Climate and Clean Air Coalition \(CCAC\) Trust Fund<sup>xx</sup>](#) to reduce short-lived climate pollutants, the [Climate Risk Early Warning Systems \(CREWS\)<sup>xxi</sup>](#) of the World Meteorological Organization, as well as to provide innovative solutions and capacity building in helping countries such as [Chile<sup>xxii</sup>](#), [Mexico<sup>xxiii</sup>](#) and [Vietnam<sup>xxiv</sup>](#) implement their own nationally-determined contributions.

Canada successfully delivered on its \$2.65 billion climate finance commitment by the end of 2020–21. To date, this commitment is expected to reduce 222 megatons of GHG emissions and increase resilience of at least 5.9 million direct beneficiaries. Canada's public climate finance commitment is crucial to help donor countries achieve the collective climate finance goal of mobilizing US\$100 billion per year by 2020 from a variety of public and private financial sources. Recognizing the critical role of the private sector in reaching the collective goal, Canada has taken an innovative financing approach to partnering with multilateral development banks that have the expertise and reach for climate action in developing countries. This includes establishing Canadian climate funds at such banks to mobilize additional co-financing. Building on the success of this model, as part of its \$2.65 billion commitment, Canada announced a contribution of \$132.9 million to establish a Canada-African Development Bank Climate Fund to support gender-responsive climate change mitigation and adaptation projects in developing African countries.

During the 2021 G7 Leader's Summit, the Prime Minister announced that Canada will double its climate finance commitment to \$5.3 billion over five years. The commitment includes increased support for adaptation, as well as nature and nature-based solutions. This funding will continue to support the global effort in fighting climate change by helping developing countries build domestic capacity to take climate action, build resiliency, and reduce pollution, including by finding nature-based solutions to climate change, such as protecting biodiversity and planting trees, and supporting the transition to clean energy and the phasing-out of coal.

Coal is responsible for 20% of global GHG emissions and is the largest source of global temperature increase. In addition to domestic actions (see page 9), Canada is also taking a leadership role to advance the phase-out of coal internationally. In the context of the rapidly falling costs and increased availability of clean energy, as well as the accelerating climate crisis, Canada and the UK co-hosted the opening plenary of the [Powering Past Coal Alliance<sup>xxv</sup>](#) (PPCA) Global Summit (March 2021).

Since its inception in 2017 in the UK, the PPCA has grown to include more than 120 members, including 36 governments, 36 subnational governments, and 51 organizations ranging from financial institutions to energy producers and consumers. Alliance members commit to phasing out coal-fired electricity in a sustainable and economically inclusive way, while providing appropriate support for workers and communities.

ECCC continued to lead Canada's engagement in the [Global Commission on Adaptation<sup>xxvi</sup>](#), a two-year international initiative to raise the profile of adaptation and advance adaptation solutions. During the Commission's final year, a Year of Action (October 2019 to January 2021), Canada led the Commission's [Nature-Based Solutions \(NBS\) Action Track<sup>xxvii</sup>](#) with Mexico. The Action Track advanced a series of activities and deliverables to raise awareness of the value of nature for climate change adaptation, embed NBS into adaptation planning and policy, and increase investments in NBS. The Action Track also advanced technical analysis and understanding, including by developing an assessment of the landscape of international funding for NBS for adaptation. The Commission concluded with the Climate Adaptation Summit (January 2021), which was the first-ever international gathering dedicated solely to climate change adaptation. At the Summit, Canada reaffirmed its leadership on adaptation on the international stage. Canada and Mexico hosted an anchoring event for the NBS Action Track, which was the third-most highly attended event of the Summit's 27 sessions, with more than 10,500 international participants and over 65,000 social media impressions.

ECCC led, via the Canadian Center for Climate Services (CCCS), in collaboration with Natural Resources Canada, Canada's contribution to the Stepping-Up Knowledge Exchange between Climate Adaptation Knowledge Platforms (KE4CAP) project. The project, funded by the European Commission, provides a forum for climate adaptation platform developers and operators from across the globe (European Union Countries, Canada, Japan, Australia, Argentina, India, Mexico and South Africa) to come together to compare and learn from their individual approaches, to share knowledge and best practices, and to work together to address common and emerging challenges. Canada shared its experiences, best practices and challenges during many Virtual Knowledge Exchange Events, that brought together the international community to discuss various topics related to climate adaptation platforms.

#### **Commitment to Experimentation: Encouraging Canadians to purchase low-emission vehicles**

The experiment was conducted jointly with Natural Resources Canada to identify non-regulatory behavioural interventions to encourage Canadians to purchase lower greenhouse gas-emitting vehicles. The experiment began with a qualitative study using focus groups and one-on-one interviews to better understand the vehicle purchasing decision-making process of consumers. The information collected during this study was used to design three behavioural-informed intervention instruments to encourage Canadians to purchase low-emitting vehicles, which were then tested through an online preference panel study. The results of the panel study were inconclusive, with none of the three instruments demonstrating a significant shift in consumer purchasing behaviour.

#### **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 continued 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 led whole-of-government coordination of the development of Canada's strengthened climate plan, which included the [publication of GBA+<sup>xxviii</sup>](#) 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 the most returned through a household rebate system to keep costs down for low-income and vulnerable Canadians and ensuring 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 began planning in 2020–21 for engagement with a diverse, inclusive and sometimes new set of partners to inform development of the 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 to all Canadians. ECCC also continued its ongoing engagement with First Nations, Métis Nation, and Inuit partners through senior-level bilateral tables to support self-determination and enable Indigenous-led climate solutions. On the international front, GBA+ considerations were integrated into bilateral environmental cooperation activities with international partners, and Canada continued to support implementation of the Gender Action Plan 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.

### **Key risks (mitigation)**

With respect to this Core Responsibility, ECCC's key risks as identified in the Departmental Plan 2020–21 include risks related to capital infrastructure (such as facilities) that require ongoing investment to maintain integrity, especially in light of increasing frequency of extreme weather events due to climate change, risks associated with the Department's external relationships and partnerships, risks associated with the Department's significant data, information technology and management requirements, and reliance on highly qualified, specialized personnel. These risks have been addressed through the following risk response actions/mitigation strategies.

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 the private and non-profit sectors and civil society. To coordinate the implementation of Canada's climate plans and deliver results to Canadians, the Department continued to maintain and build relations with federal, provincial, territorial and Indigenous counterparts and maintain structures to coordinate the implementation and reporting of Canada's climate plan. For specific reporting on the status of the implementation of the PCF, the Department collaborated with federal counterparts through an Interdepartmental Working Group (IWG) and provinces and territories through the Coordinating Committee of Experts (CCE) to produce the [Annual Synthesis Report<sup>xix</sup>](#) on the Status of Implementation of the PCF.

The Department continued to enhance its strategic relationships, such as enabling the development of a coordinated government-wide engagement strategy. The Department facilitated bilateral and multilateral cooperation demonstrating international leadership on climate change adaptation. For instance, ECCC provided a leadership role through Canada's convening of the Global Commission on Adaptation, alongside 22 other convening nations, as well as Canada's leadership of the Commission's Nature-Based Solutions Action Track, which was co-led with Mexico and in partnership with the World Resources Institute, the Global Environment Facility, the United Nations Environment Programme, and the Global Centre on Adaptation, and in cooperation with Peru, Ethiopia, and the Netherlands.

Additionally, ECCC played an important role in supporting efforts by the Government of Canada to adapt to the impacts of a changing climate. The Department continued to provide advice to federal departments and agencies to increase their institutional resilience to climate change. In 2020–21, the Department published guidance and provided training sessions on climate change risk assessment to support federal practitioners in meeting their commitments in the Greening Government Strategy. The Department also collaborated with provinces and territories to advance work on shared adaptation priorities, including projects on climate change risk assessment and natural infrastructure. To enable the resilience and continuation of departmental operations and services in the face of a changing climate, ECCC finalized a Departmental Adaptation Plan and identified priority actions to address climate risks.



### United Nations' 2030 Agenda<sup>2</sup> and Sustainable Development Goals<sup>xxx</sup>

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 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<sup>xxxi</sup>](#) and [Goal 13<sup>xxxii</sup>](#)), while initiatives such as climate action incentives and partnership funding will promote inclusive and sustainable economic growth ([Goal 8<sup>xxxiii</sup>](#)). Supporting resilient infrastructure and innovative and inclusive approaches to industrial development will be achieved through LCEF incentives ([Goal 9<sup>xxxiv</sup>](#)), which will also foster sustainable business, employment and consumption practices ([Goal 12<sup>xxxv</sup>](#)). ECCC will continue to work with Employment and Social Development Canada as they work toward implementing 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 GHGs, 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.

<sup>2</sup> In 2015, all 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.

## Results achieved

Departmental Result: Canadian greenhouse gas and short-lived climate pollutant emissions are reduced					
Performance indicator	Target	Date to achieve target	2018–19 Actual result	2019–20 Actual result	2020–21 Actual result
GHG emissions from light duty vehicles	21% improvement in performance versus 2011 standard (measured by CO <sub>2</sub> e g/mile) for manufacturer model year 2018	March 2020 [2018 Model year reporting]	16% improvement [2016 model year]	17% improvement [2017 model year]	21% improvement [2018 model year]
GHG emissions from heavy duty vehicles	Percentage improvement in GHG emissions performance for manufacturer model year 2018–20 reporting relative to the 2010 model year: <ul style="list-style-type: none"> <li>•13%: heavy-duty pick-up trucks and vans</li> <li>•11%: combination tractors</li> <li>•5%: vocational vehicles</li> </ul>	December 2020	Results not available, performance results for the 2018-19 and 2019-20 model year fleet available in the 2020–21 reporting cycle	<ul style="list-style-type: none"> <li>•12.2%: heavy-duty pick-up trucks and vans</li> <li>•19.1%: combination tractors</li> <li>•8.5%: vocational vehicles [2018 model year]</li> </ul>	<ul style="list-style-type: none"> <li>•13%: heavy-duty pick-up trucks and vans</li> <li>•20%: combination tractors</li> <li>•9%: vocational vehicles [2019 model year]</li> </ul>
Black carbon emissions, as reported in Canada's Black Carbon Emissions Inventory	25% decrease from a baseline of national emissions in 2013	2025	30Kt in 2017 (19% reduction from baseline <sup>3</sup> )	31Kt in 2018 (16% reduction from baseline <sup>3</sup> )	31Kt in 2019 (16% reduction from baseline)
HFC emissions	85% reduction from baseline in 2017-18	2036	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 <sup>4</sup>	13.76% below baseline for calendar year 2019	23% below baseline for calendar year 2020
Reduced methane emissions from the oil and gas sector	40–45% reduction, relative to 2012 levels	2025	Results not yet available. Emission reductions to be estimated in 2020 based on compliance actions.		Results expected to be available in 2022 <sup>5</sup>
Emissions reductions are being achieved under the Clean Fuel Standard building on the <i>Renewable Fuels Regulations</i>	30 Mt annual GHG emissions reduction in 2030 relative to 2016 levels	2030	Results not yet 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	100% of coal-fired electricity generation units meeting their	Annually in December	Results not yet available.	Results not yet available. Complete	Results not yet available.

<sup>3</sup> Results amended due to recalculated baseline.

<sup>4</sup> First results available in the 2019-20 reporting cycle.

<sup>5</sup> Methane regulations came into force in 2020. First results expected to be available in fall 2022.

regulated GHG emissions intensity performance requirement	regulated greenhouse gas emissions intensity performance requirement		Although the date to achieve this target is identified as December 2019, reporting will only be available in 2021-22.	reporting will be available in 2021-22. <sup>6</sup>	Complete reporting will be available in 2021-22. <sup>7</sup>
Carbon pollution pricing systems are in place in Canada	13 Provinces and Territories have in place a price on carbon pollution that meets the benchmark or federal system applies	July 2019	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 July 1, 2019. The Northwest Territories' carbon pollution pricing system came into force on September 1, 2019.	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.
GHG emissions from ECCC operations are reduced	40% GHG emissions reduction relative to 22,793 tonnes of CO <sub>2</sub> e in 2005–06 <sup>8</sup>	2031	31%	35.2%	Results not yet available. Results are expected later in 2021.

<sup>6</sup> As of July 2020, of the 9 units required to meet the performance standard by January 1, 2020: 2 have shut down, 3 have until 2021 to provide a report demonstrating compliance with the regulation and 4 are subject to equivalency agreements with specific provinces.

<sup>7</sup> As of July 2021, of the 6 units required to meet the performance standard by January 1, 2021: 1 has shut down, 1 has demonstrated compliance with the regulation and 4 are subject to equivalency agreements with specific provinces.

<sup>8</sup> This is an interim target, established by Treasury Board of Canada Secretariat (TBS) in its Greening Government Strategy, towards a full 80% reduction below 2005 levels by 2050.

<b>Departmental Result: Indigenous peoples are engaged in clean growth and climate change</b>					
<b>Performance indicator</b>	<b>Target</b>	<b>Date to achieve target</b>	<b>2018–19 Actual result</b>	<b>2019–20 Actual result</b>	<b>2020–21 Actual result</b>
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	Revise target periodically, when required, to reflect Canada's engagement, and relationship, with its Indigenous partners	N/A	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.
<b>Departmental Result: Canada contributes to reducing greenhouse gas emissions and increasing climate resilience globally</b>					
<b>Performance indicator</b>	<b>Target</b>	<b>Date to achieve target</b>	<b>2018–19 Actual result</b>	<b>2019–20 Actual result</b>	<b>2020–21 Actual result</b>
Canada's public sector investments leverage private sector climate finance	Ratio of private sector finance leveraged by Canada's public sector investments, of at least 1 to 0.5	Long-term cumulative indicator <sup>9 10</sup>	0.48 in 2017 and 2018, Canada mobilised CAD\$19.2M in private climate finance, from public funding of CAD\$39.9M as part of its climate finance commitment	Ratio of 0.4 between 2017 and 2019, Canada mobilised CAD \$33.98M in private climate finance, from public funding of CAD \$87.4M as part of Canada's \$2.65B climate finance commitment	Results not yet available. The results of private finance leveraged in 2020 are expected to become available by the end of 2021.
GHG reductions resulting from international initiatives funded by Canada	Higher cumulative reductions from year to year, from the baseline, reaching a minimum reduction of 200 Mt of GHGs	Long-term cumulative indicator <sup>10</sup>	An estimated cumulative reduction of 175.7 Mt of GHGs is expected from Canada's \$2.65B funding by 2018-19.	Results not available <sup>11</sup>	An estimated cumulative reduction of 222.2 Mt of GHGs is expected from Canada's \$2.65B climate finance commitment to date.
Cumulative number of people in developing countries who	10,000,000 direct beneficiaries	December 2030	A cumulative estimate of 4,593,285 people with	Results not available <sup>11</sup>	A cumulative estimate of 5.9M people with increased

<sup>9</sup> Last year of public reporting. The new indicator will be a more meaningful indicator that will measure the cumulative amount of private finance mobilized through Canada's public sector investments.

<sup>10</sup> 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.

<sup>11</sup> Some of the key initiatives under the \$2.65B climate finance were not operational during 2019-20 as they had not been initiated yet; therefore no update was reported on the cumulative results.



benefited from Canada's adaptation finance			increased resilience by 2018-19 as a result of Canada's \$2.65B funding		resilience is expected from Canada's \$2.65B climate finance commitment to date
<b>Departmental Result: Canadian communities, economies and ecosystems are more resilient</b>					
Performance 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 <sup>12</sup> For reporting every 5 years: Increase from baseline <sup>13</sup>	For annual reporting: Annually in March For reporting every 5 years: March 2028	Results not available	180,390 visits where users accessed 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

**Budgetary Financial Resources [dollars]\***

2020–21 Main Estimates	2020–21 Planned spending	2020–21 Total authorities available for use	2020–21 Actual spending [authorities used]	2020–21 Difference** [actual minus planned]
845,293,508	845,293,508	827,222,224	495,862,449	-349,431,059

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

\*\*The actual spending for 2020–21 is lower than the 2020–21 Planned Spending, mainly due to a realignment of funds to future years to reflect when spending is expected for the Low Carbon Economy Fund.

**Human Resources [Full-Time Equivalents—FTEs]\***

2020–21 Planned FTEs	2020–21 Actual FTEs	2020–21 Difference [actual minus planned]
580	611	31

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

Financial, human resources and performance information for ECCC's program inventory is available in the [GC InfoBase<sup>xxxvi</sup>](#).

<sup>12</sup> Baseline for the annual survey will be established when the Canadian Centre for Climate Services has been functioning for one full year. It is expected that the baseline will be set in 2019-20.

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

## Preventing and Managing Pollution

### Description

Collaborate with provinces, territories, Indigenous peoples and others to develop and administer environmental standards, guidelines, regulations and 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.

### Results

#### Delivering pollution-related services during the COVID-19 pandemic



Environment and Climate Change Canada adapted its pollution prevention activities throughout 2020–21 to account for the COVID-19 pandemic. For example, the National Environmental Emergencies Centre put in place a hybrid model whereby critical operations staff rotated in and out of offices to maintain physical distancing while monitoring for emergencies 24/7. Efforts to monitor Canada's environmental laws were also adapted by advising those subject to regulations to document the steps taken to try to achieve compliance and the obstacles caused by the pandemic. Enforcement officers continued to respond to urgent situations, and proactive enforcement activities were evaluated on a case-by case basis, taking into consideration potential harm to the environment and the health and safety of officers and members of the public.

#### Moving to zero plastic waste through a circular economy

Addressing plastic pollution remains a priority for the Government of Canada and for countries around the world. Reducing plastic pollution and investing in Canadian innovation are part of the Government of Canada's overall plan to protect the environment and build a stronger economy and healthier communities, and is also part of sustainable recovery from the COVID-19 pandemic.

As a champion of the international effort to reduce plastic pollution, Canada introduced the [Ocean Plastics Charter<sup>xxxvii</sup>](#) at the Leaders' Summit it hosted during its 2018 G7 presidency. The Charter is annexed to the [Charlevoix Blueprint on Healthy Oceans, Seas and Resilient Coastal Communities<sup>xxxviii</sup>](#), and identifies actions and targets for endusers to address plastic waste and pollution. In support of commitments under the Charter, Canada is investing \$100 million to clean up plastic waste on shorelines, better manage existing plastic resources, and help developing countries prevent plastic waste from entering the oceans.

In Canada, ECCC continued to collaborate with provinces and territories through the Canadian Council of Ministers of the Environment (CCME) on a two-phased Action Plan to implement the 2018 [Canada-wide Strategy on Zero Plastic Waste<sup>xxxix</sup>](#). The Strategy lays out a vision for a circular economy for plastics. This approach seeks to support change across the entire lifecycle of plastics—from design to manufacture, use, and recovery.

Phase 2 of the Action Plan, announced in July 2020, identifies actions to: improve consumer, business and institutional awareness; reduce waste and pollution from aquatic activities; advance science; capture and clean-up debris in the environment; and contribute to global action. Actions taken in Phase 1 include developing guidance for jurisdictions to achieve consistent extended producer responsibility (EPR) policies. EPR transfers the responsibility of collecting and recycling the waste generated by products to the companies that produced them.

The Action Plan includes a roadmap to address single-use and disposable plastics, support for recycling infrastructure and innovation in remanufacturing and refurbishing plastic products, and tools for green procurement practices. An update on this Action Plan will be provided at the 2021 meeting of the CCME.

The Canadian Plastics Innovation Challenge has invested nearly \$19 million to support Canadian innovative solutions that address plastic waste from such sources as food packaging, construction, and the separation of plastics for recycling, among other challenges, as a means of moving Canada toward a zero plastic waste future. This initiative is part of the federal government's \$100+ million initiative to support the scale-up and growth of Canada's innovators and entrepreneurs by acting as a first customer for innovation. ECCC is one of 20 participating federal departments and agencies that have set aside funding to support the creation of innovative solutions by Canadian small businesses.

In 2020–21, ECCC made progress on many fronts of the zero plastic waste initiative. The Department:

- Published a [Discussion Paper<sup>xliii</sup>](#) on a proposed Integrated Management Approach to Plastic Products to Prevent Waste and Pollution, and announced key next steps in the Government of Canada's plan to achieve zero plastic waste by 2030. These include a proposed ban on six harmful single-use plastic items that are prevalent in the environment, often not recycled, and have readily available alternatives. The six items are plastic checkout bags, straws, stir sticks, ringed beverage carriers (e.g., six-pack rings), cutlery, and food service ware made from problematic or hard-to-recycle plastics. Other aspects of the plan include establishing recycled content requirements in products and packaging, and working with provinces and territories to improve and expand Extended Producer Responsibility.
- Conducted a series of webinars to provide an overview of the proposed Integrated Management Approach outlined in the Discussion Paper, and to solicit views from stakeholders.
- Published a proposed Order to add "plastic manufactured items" to Schedule 1 of the Canadian Environmental Protection Act, 1999 (CEPA). Listing plastic manufactured items enables the Government of Canada to propose risk management measures under CEPA, including regulatory actions that target the sources of plastic pollution and change behaviour at key stages in the lifecycle of plastic manufactured items, such as design, manufacture, sale, use, import, disposal and recovery.
- Invested more than \$2.2 million, under [Canada's Plastics Science Agenda<sup>xliv</sup>](#), to support 16 science-based research projects aimed at learning more about the impacts of plastic pollution on the natural environment and human health.
- Announced four [winners of the latest Canadian Plastics Innovation Challenge<sup>xlv</sup>](#), contributing up to \$150,000 each toward their development of solutions to plastic waste, and provided over \$1 million in funding to support targeted measures that set the necessary conditions to drive sustainable design, production and after-use markets across industry sectors that use plastics.
- Made advances in measuring plastic usage and plastic waste in Canada, including through the development and implementation of new survey content in Statistics Canada surveys<sup>14</sup>, and by advancing a foundational Plastic Material Flow Account for Canada, which will include information about the amount of plastics generated and discarded, and the fate of the discarded plastics.

#### **Science at work: plastic pollution**

To further address plastic pollution, the Government of Canada released the [Science Assessment of Plastic Pollution<sup>xl</sup>](#) (October 2020), which sheds light on the extent of the plastic pollution problem in Canada. The Assessment confirms that larger plastic items like bags and straws can physically harm animals and negatively affect their habitat. It highlights the negative impacts of microplastic pollution on animals and the environment, and the uncertainties regarding their potential effects on humans, for which more research will be supported. The Assessment will help inform the Government's actions and policies in support of its commitment to zero plastic waste including by developing new regulations and other measures. The Government is also investing in science to address priority research gaps. [Canada's Plastics Science Agenda<sup>xli</sup>](#) and [Plastics Science for a Cleaner Future<sup>xlii</sup>](#) establish a path forward for Canada's investments in research to better understand and address the impacts of plastic pollution.

<sup>14</sup> ECCC developed and implemented new survey content in the 2020 Annual Survey of Manufacturing and Logging Industries and the 2020 Waste Management Survey, in both cases, to address identified data gaps. Similarly, ECCC developed and implemented new survey content in the 2021 Household Environment Survey, for the purpose of providing information on household attitudes and behaviours towards plastic use in the home.

## Reducing global plastic pollution

Canada participates in global efforts to reduce plastic pollution. Work includes implementing Canada's obligations under several binding international agreements that help prevent waste and litter (e.g., Basel Convention, MARPOL, London Convention/Protocol) and participating in global campaigns, such as the United Nations Clean Seas Campaign and the Global Ghost Gear Initiative. Canada works with international partners, including the G7, G20 and various bodies under the United Nations, to strengthen policy, advance research, and exchange information and best practices. For example, Canada works with Mexico and the United States through the [Commission for Environmental Cooperation<sup>xvii</sup>](#) to bring together communities and decision-makers to build local solutions and raise awareness of marine litter in North America.

## Hosting the World Circular Economy Forum

Canada launched preparations to host the [World Circular Economy Forum 2021<sup>xviii</sup>](#) (WCEF2021). Postponed to 2021 due to COVID-19, the WCEF 2021 is co-organized by the Government of Canada and the Finnish innovation fund, Sitra, in collaboration with partner organizations. The first North American edition of the global forum will be held virtually, September 13–15, 2021. WCEF2021 will seek to drive ambitious action over the next five years to accelerate the transition to a circular economy, focusing on concrete actions, or "game changers," that businesses, policy makers, civil society and others must pursue for system-level change.

## Protecting Canada's Oceans

Canada's [Oceans Protection Plan<sup>xviii</sup>](#) (OPP) is a \$1.5 billion action plan to build a world-leading marine safety system and strengthen Canada's stewardship of the country's oceans and coasts. Led by Transport Canada, ECCC is a key partner in this national approach, together with the Canadian Coast Guard and Fisheries and Oceans Canada. In 2020–21, the Department continued to contribute weather and environmental data, as well as expertise in ocean modelling, oil spill behaviour, and other scientific advice, to support improved prevention, emergency planning, and response to oil spills. A 2021 evaluation found that ECCC has made substantial progress in implementing the OPP during the first half of the funding period. The evaluation recommended more strategic oversight and coordination of ECCC's activities.

## Broadening the base of shellfish safety in Canada

The Canadian Shellfish Sanitation Program is a federal food safety program jointly administered by the Canadian Food Inspection Agency, ECCC, and Fisheries and Oceans Canada. Aimed at minimizing the health risks associated with the consumption of contaminated bivalve molluscan shellfish, such as mussels, oysters and clams, the Program implements controls to verify that only shellfish that meet food safety and quality standards reach domestic and international markets.

Under the Program, ECCC monitors marine water quality, identifies and assesses pollution sources in adjacent coastal watersheds, and makes informed recommendations to regulators on harvest area classification.

In 2020–21, the Program completed a pilot project with commercial, Indigenous and recreational harvesters in three provinces to evaluate options for greater involvement of non-Government of Canada parties in program delivery, while maintaining food safety objectives. Monitoring agreements established between ECCC and non-GoC parties under the pilot project will serve as models for future partnerships to perform similar work. ECCC continued to engage stakeholders (commercial, Indigenous, and recreational harvesters) in all provinces to implement objectives and lessons learned from the Pilot Project.

## Protecting and Conserving Fresh Water

Canada is home to one fifth of the world's fresh water. The federal government continued to take action to protect this precious resource, together with its partners in provincial, territorial, municipal governments, environmental organizations, and First Nations and Métis communities. Healthier lakes mean economic growth, more recreational opportunities, and healthy, sustainable ecosystems.

ECCC's stewardship activities targeted a number of important freshwater resources across Canada, including:

- **Great Lakes**—among the largest freshwater lakes in Canada and the world, the Great Lakes are a natural wonder and a treasured shared resource that provides jobs, trade, and fresh water for tens of millions of Canadians and Americans. In 2020–21, ECCC finalized negotiation of a new Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health (COA), following public consultation in 2019 and 2020. The Agreement supports coordination of federal and provincial actions to restore, protect, and conserve water quality and ecosystem health, and to deliver on commitments under the Canada-United States Great Lakes Water Quality Agreement. It addresses the full suite of issues covered by the previous COA, such as nuisance algae, invasive species, and climate resilience. For the first time, COA also address emerging issues of concern, such as excess road salt application and plastic pollution. The Department also committed \$5.1 million through the Great Lakes Protection Initiative to support a total of 95 projects (57 new projects and 38 multiyear projects) to protect and restore the Great Lakes. These initiatives address priorities such as restoring areas of concern, preventing toxic and nuisance algae, reducing releases of harmful chemicals, engaging Indigenous Peoples on Great Lakes issues, and increasing public engagement through citizen science. For example, ECCC committed nearly \$175,000 for two projects in the Thunder Bay area to improve water quality in Lake Superior: Pays Plat First Nation will receive \$99,431 over two years for its Protecting Gitchigumi project that focuses on water, soil, sediment sampling, and continued monitoring of the First Nation's traditional territory; and Confederation College will receive \$75,000 over two years for its Riparian Habitat Rehabilitation project. ECCC also continued to assess and enhance the resilience of the Great Lakes coastal wetlands to climate change impacts and other threats, evaluate and identify at risk near-shore waters, and clean up Great Lakes Areas of Concern, including Hamilton Harbour (see sidebar).
- Restoring Hamilton Harbour**

ECCC continued 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 clean up this Great Lakes Area of Concern. Work continued on dredging and containing contaminated sediments within a six-hectare, double walled engineered containment facility. The project is scheduled for completion in 2023. 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 lands.
- **Lake Winnipeg Basin**—ECCC's efforts to restore water quality in Lake Winnipeg and its basin included \$1.18 million to support 15 new projects under the Lake Winnipeg Basin Program. Projects focus on reducing excessive nutrients that contribute to algae growth in the lake, and on enhancing collaboration throughout the Basin, including with Indigenous partners. The University of Manitoba, working with the Manitoba Métis Federation, received \$50,000 to expand community-based water-monitoring efforts and create a weather-keeper program. The International Institute for Sustainable Development received \$100,000 to demonstrate the capability of using floating treatment wetlands in conjunction with duckweed biomass harvesting, to remove phosphorus from storm water and livestock wastewater ponds. ECCC also worked with Manitoba to finalize a new Canada-Manitoba Memorandum of Understanding Respecting Lake Winnipeg and the Lake Winnipeg Basin, which provides for a long-term collaborative and coordinated approach between the two governments to support the sustainability and health of the Lake Winnipeg Basin. The Lake Winnipeg Basin is an important freshwater resource that is home to nearly seven million people and borders many parts of the country and the United States.
  - **St. Lawrence River Basin**—to continue to coordinate integrated management with numerous partners, ECCC coordinated joint Canada-Québec science-based projects to improve water quality, conserve biodiversity, and promote the sustainable use of the River and its basin. ECCC continued to collaborate to deliver the State of the St. Lawrence Monitoring Program, the Numerical Environmental Prediction Program, and funded community projects to protect this important water resource.
  - **Atlantic Canada**—initiatives included investing \$1 million in six new projects to directly address water quality issues in two priority ecosystems in Atlantic Canada: the Wolastoq/Saint John River watershed, and the southern Gulf of St. Lawrence watershed. Funded projects aim to improve the assessment, monitoring, modelling, and/or mitigation of multiple stressors and their cumulative effects on water quality, with a focus on specific stressors such as nutrients, bacteria, and/or micro plastics, and to encourage strong relationships among all watershed partners.

The Government of Canada takes water pollution very seriously and continues to work hard to protect and conserve Canada's water resources for future generations. A big part of this effort is applying Canada's laws that control pollution, such as the Fisheries Act. ECCC is the lead for the administration and enforcement of the pollution prevention provisions of the Fisheries Act, which prohibits the release of pollution in waters frequented by fish. These provisions are some of the federal government's strongest tools for reducing pollution to water. ECCC manages these responsibilities both by developing regulations that set strict requirements on any releases to water and by applying and enforcing this prohibition where there are no regulations.

In 2020–21, to further protect Canada's freshwater resources, ECCC advanced amendments to the Pulp and Paper Effluent Regulations and the Wastewater Systems Effluent Regulations that will strengthen protections. ECCC also plans to publish proposed Coal Mining Effluent Regulations for consultation, and to undertake consultations to advance the development of a new Oil Sands Effluent Regulation.

### **Enforcing Canada's Environmental Laws and Regulations**

ECCC is committed to protecting Canadians' health, safety, and environment, including by enforcing laws that protect Canada's air, water, and natural environment. The Department is responsible for the administration and enforcement of several important statutes, including the *Canadian Environmental Protection Act, 1999* (CEPA, 1999), pollution prevention provisions of the *Fisheries Act*, the *Migratory Birds Convention Act, 1994* and has joint responsibility for administration and enforcement of the *Greenhouse Gas Pollution Pricing Act, 2018*.

Enforcement actions in 2020–21 include several prominent cases, such as:

- A \$60 million penalty, which is the largest ordered under the *Fisheries Act* in Canadian history, was imposed on a coal mining company that pleaded guilty to the deposit of effluent containing harmful substances throughout 2012 into the Fording River in British Columbia. The company is also required to comply with a direction requiring additional prevention and mitigation measures for years to come.
- A fine of \$400,000 imposed on a mining company that pleaded guilty to disposing of dredged material at sea outside of an authorized disposal area on four occasions in 2014.
- A fine of \$350,000 levied on a mining company for its responsibility for the discharge of an acutely lethal effluent into the Wedding River in Québec, contrary to the *Fisheries Act*.
- A \$500,000 fine imposed on an inter-municipal board for the illegal release of ammonia nitrogen from its leachate treatment system at its sanitary landfill site and from its composting platform into a tributary of the Saint-François River.

Offenders are added to the [Environmental Offenders Registry<sup>xlix</sup>](#). Fines imposed as penalties under environmental legislation are credited to the Environmental Damages Fund (EDF). The EDF helps ensure that environmental good follows environmental harm by supporting projects in Canadian communities with measurable outcomes. Monies paid to the EDF are invested in projects that focus on environmental restoration, environmental quality improvement, research and development, and education and awareness.

In 2020–21, ECCC launched a review of the *Environmental Enforcement Act* and the final modules of movement tracking of the [Canadian Notice and Manifest Tracking System<sup>l</sup>](#) to align with the [Cross Border Movement of Hazardous Waste and Hazardous Recyclable Materials Regulations<sup>li</sup>](#), which provide the flexibility to implement the electronic system, adjust the scope and harmonize the definitions of hazardous waste and hazardous recyclable material, and improve the management of permits and overall administration of the Regulations.

### **Protecting Canadians and the environment from harmful substances**

ECCC continued to implement the [Chemicals Management Plan<sup>lii</sup>](#) (CMP). In collaboration with Health Canada, the Department conducts ecological risk assessments on substances used in Canada, including the assessment of approximately 400 new substances entering the market each year. To date, ECCC and Health Canada have completed the systematic review of some 3,974 of 4,363 existing priority substances, with 582 deemed toxic under CEPA 1999. Since 2006, the CMP has developed and implemented over 200 risk management actions for toxic substances. In July 2020, as part of the CMP, ECCC and Health Canada collaboratively published a [Performance Measurement Evaluation Strategy on the Risk Management of](#)

[Toxic Substances](#)<sup>liii</sup>. In 2020–21, ECCC published four performance measurement evaluation reports covering the following substances: Bisphenol A, Polybrominated Diphenyl Ethers (PBDEs), Lead, and Mercury.

ECCC also undertook CMP monitoring and surveillance activities for air, birds and water in support of risk assessment and risk management activities. These activities were limited in space and time due to restrictions on field work related to the pandemic. There were no monitoring and surveillance activities conducted for sediments, fish, wastewater and biosolids due to these restrictions. Very limited analyses of the samples collected occurred given the closure of ECCC laboratories due to the pandemic. For the same reasons, limited progress was made on continuing 19 research projects that had been initiated in 2019–20 on the fate, bioaccumulation and effects of CMP priority substances, including the development of new methods. However, significant progress was made on data analysis and reporting (e.g., reports, publications) from recent years for many priority substances.

### **Cleaning up federal contaminated sites**

In 2020–21, under Phase IV of the Federal Contaminated Sites Action Plan (FCSAP), ECCC assessed four sites and conducted remediation activities at eight sites for which the Department is responsible. Across all 17 FCSAP custodians, remediation of 36 sites were completed, assessment activities took place at 128 sites, and remediation activities were conducted at 597 sites (Federal Contaminated Sites Inventory, 2021). In collaboration with other expert support departments, ECCC also conducted 186 site classification reviews to confirm eligibility for funding, reviewed 56 technical documents from federal custodians, developed 16 guidance documents, and delivered 23 training sessions to support custodian departments in managing their contaminated sites. In addition to supporting these FCSAP activities, ECCC also provided expert support to non-FCSAP sites. The Department also released public annual reports for 2017–18 and 2018–19 results in March 2021. Phase IV sees the program extended to 2035 with federal funding of \$1.2 billion for the period 2020 to 2025.

### **Improving Air Quality**

ECCC's Air Quality Program continued to focus on domestic and international work to improve the quality of ambient air and reduce the adverse effects of outdoor pollution on human health and the environment. The Program helps to inform Canadians of the health risks of outdoor pollution and encourages personal actions to reduce these risks. A 2021 evaluation found that ECCC, Health Canada and National Research Council activities in relation with air quality are relevant and led to a number of key accomplishments, including the ongoing implementation of the Air Quality Health Index (AQHI) across Canada. Among other results, the evaluation found that a considerable volume of quality information and analysis on air quality and air pollution is produced and used to inform decision-making by a range of internal and external stakeholders – at the same time, there remains a need to improve communications and outreach with partners, stakeholders and the public.

In 2020–21, ECCC continued to collaborate with provinces through the [Canadian Council of Ministers of the Environment](#)<sup>liv</sup> (CCME) to implement Canada's Air Quality Management System (AQMS), which includes the Canadian Ambient Air Quality Standards (CAAQS) to drive local air quality improvements, as well as industrial emissions requirements, provincial air zones, inter-jurisdictional airsheds, and reporting to Canadians to drive local air quality improvements.

ECCC began consultations on its proposal to renew the Federal Agenda on the Reduction of Emissions of Volatile Organic Compounds (VOC) in Consumer and Commercial Products. VOCs contribute to formation of ground-level ozone and fine particulate matter, two key air pollutants. Products that contain VOCs include aerosol coatings, architectural coatings, automotive refinishing products, cutback and emulsified asphalt, and printing ink, among others.

The Department also continued, together with Health Canada, to develop, implement and maintain the [Air Quality Health Index](#)<sup>lv</sup> (AQHI), which reached 1.39 million individuals sensitive to the health effects of air pollution in 2020–21. ECCC also continued to report on air quality and emissions, including in Canada's [Air Pollutant Emissions Inventory](#)<sup>lvi</sup> and to meet international reporting obligations.

Internationally, ECCC continued to demonstrate environmental leadership, participating in international fora to reduce transboundary air pollution, notably under the Canada-United States Air Quality Agreement, the United Nations Environment Programme and the Convention on Long-range Transboundary Air Pollution (in particular, its amended Protocol to Abate Acidification, Eutrophication and Ground-level Ozone [Gothenburg Protocol] which entered into force in 2019), and continuing to meet its obligations under these agreements.

### **Strengthening Air Pollutants Regulations**

ECCC continued to develop, amend, implement and administer legislation, regulations and tools to reduce air pollution from a number of industrial sectors, vehicles, engines and fuels, and consumer and commercial products.

In particular, ECCC continued to administer the [Multi-Sector Air Pollutants Regulations<sup>vii</sup>](#), designed to reduce air pollutant emissions from boilers, heaters, and stationary spark-ignition used in many industrial sectors, as well as from cement facilities. In 2020–21, the online reporting system for stationary spark-ignition engines became operational.

In 2020–21, the Department finalized the [Reduction in the Release of Volatile Organic Compounds Regulations \(Petroleum Sector\)<sup>viii</sup>](#) that will reduce pollution from petroleum refineries, upgraders and petrochemical facilities across the country. Harmful volatile organic compounds emitted from these facilities contribute to premature deaths and more frequent and severe asthma symptoms, particularly for workers and nearby residents. ECCC also continued to implement its fuel quality enhanced verification project, including an annual risk-based review that assessed 87 fuels suppliers and led to action being taken to address reporting issues with over 50 suppliers. In addition, the Department conducted 146 analyses on 72 fuel samples during 2020–21 to verify compliance with federal fuel quality regulations. Thirteen enforcement measures were taken during 2020–21 as a result of this project.

In December 2020, the Department published the [Off-road Compression-Ignition \(Mobile and Stationary\) and Large Spark-Ignition Engine Emission Regulations<sup>ix</sup>](#) which will reduce air pollutant emissions from new off-road diesel engines, large spark-ignition engines and stationary diesel engines. These regulations repeal and replace the previous *Off-Road Compression-Ignition Engine Emission Regulations*, combining the previous mobile diesel engine standards together with the new large spark-ignition engine and stationary diesel engine standards into one consistent framework engines. The *Off-road Compression-Ignition (Mobile and Stationary) and Large Spark-Ignition Engine Emission Regulations* combine these new emission standards with the previous mobile diesel engine emission standards into one consistent framework. Large spark-ignition engines are typically used in machines such as forklifts, ice resurfacers, small generators and other specialty equipment. Stationary diesel engines are commonly used to provide off-grid electricity in remote communities, to power industrial equipment, and as a back-up or emergency sources of power for buildings.

### **Federal Sustainable Development Strategy and Canadian Environmental Sustainability Indicators**

*An Act to Amend the Federal Sustainable Development Act* came into force on December 1, 2020. It makes decision-making related to sustainable development more transparent and subject to accountability to Parliament. More than 90 federal departments and agencies (up from 27) are now required to report on their sustainable development activities, further supporting a whole-of-government approach to sustainable development policy within the Government of Canada.

In 2020–21, ECCC supported government-wide development of departmental sustainable development strategies as required under the Act, as well as on-boarding more than 60 new departments and agencies under the Act.

ECCC updated 37 environmental indicators in 2020–21. The Canadian Environmental Sustainability Indicators program provides data and information to track Canada's performance on issues including climate change, air quality, water quality and availability, and protecting nature. Environmental indicators are the primary instrument to measure progress of the Federal Sustainable Development Strategy (FSDS) and to report to Canadians on the state of the environment.



### **Commitment to Experimentation: Using Experimentation in National Stakeholder Engagement to Advance Supply Chain Transparency (SCT) for Chemicals in Products**

In 2020–21, ECCC employed a design-thinking approach and held a national workshop with government and external stakeholders to develop a path forward for addressing SCT for chemicals in products under the Chemicals Management Plan. Recommendations were developed to use experimentation in national consultations to measure if a policy lab approach is efficient in tackling complex, technical transparency issues for chemicals in products, and if a policy lab approach can yield solutions and recommendations transposable into policy making in a regulatory program. National engagement is expected to begin in September 2021.

### **Gender-based analysis plus**



ECCC continued to apply a GBA+ lens to the development of policy recommendations, programs and measures to address air pollution and improve air quality. 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. In 2020–21, the Department expanded the use of the GBA+ lens to ensure that more vulnerable populations, including Indigenous communities located downwind of large industrial complexes and those affected by smoke during wildfires are involved in air quality work. Similarly, the Department continued 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 were 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 continued 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 has contributed to adapting compliance promotion material to better reflect the target audiences' cultural and linguistic profiles. The Department also strengthened its hiring practices to increase representation of the Canadian population in its enforcement workforce.

### **Key risks (mitigation)**

With respect to this Core Responsibility, ECCC's key risks as identified in the Departmental Plan 2020–21 have been addressed through the following risk response actions/mitigation strategies.

To prevent and manage pollution across Canada, the Department addressed uncertainties regarding the development and implementation of environmental standards, guidelines, regulations and other risk management instruments to reduce releases and monitor levels of contaminants in air, water and soil, and to promote and enforce compliance with environmental laws and regulations.

The Department finalized national regulations that will reduce pollution from petroleum and petrochemical facilities across the country. ECCC conducted extensive collaboration with various partners, including businesses, non-governmental organizations, municipalities, provinces, territories and Indigenous communities as an essential component of the Department's efforts to deliver its mandate (e.g., on plastic waste, air pollution, oil sands monitoring, and protecting Canada's freshwater resources). ECCC continued to collaborate with industry and other partners to achieve Canada's ambitious goals of 100% reusable, recyclable or recoverable plastics by 2030, and increasing recycled content in plastic products where applicable by at least 50% by 2030. The Department also continued to work with the provinces and territories to implement the Canada-Wide Strategy on Zero Plastic Waste.

Additionally, ECCC continued to support strategic partnerships, both domestic and international, to address the new realities of climate change by maintaining alignment of these partnerships with key government-wide objectives, and exploring new means of planning and conducting consultations in a coordinated fashion. The Department also leveraged membership in international fora in order to deliver programming designed to manage climate change and transboundary air pollution.



### United Nations' 2030 Agenda and [Sustainable Development Goals](#)<sup>lx</sup>

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](#)<sup>lxi</sup>), while also advancing the sustainable management of water and sanitation ([Goal 6](#)<sup>lxiii</sup>), promoting sustainable production and consumption practices ([Goal 12](#)<sup>lxiii</sup>), and fighting climate change ([Goal 13](#)<sup>lxiv</sup>).

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](#)<sup>lxv</sup>) and promote inclusive approaches to sustainable development, industrialization, and urbanization ([Goal 8](#)<sup>lxvi</sup>, [Goal 9](#)<sup>lxvii</sup>, [Goal 11](#)<sup>lxviii</sup>, and [Goal 15](#)<sup>lxix</sup>). ECCC will also continue to be an active partner and leader in global action on pollution prevention and management ([Goal 17](#)<sup>lxx</sup>).

## Results achieved

Departmental Result: Canadians have clean air					
Performance 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 <sup>15</sup>	77% for the 2015–17 data period <sup>16</sup>	68% for the 2016–18 data period
Departmental Result: Canadians have clean water					
Performance 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% <sup>17</sup>	74%	77%
Departmental Result: The Canadian environment is protected from harmful substances					
Performance indicator	Target	Date to achieve target	2018–19 Actual result	2019–20 Actual result	2020–21 Actual result
Percentage of substances that are added to Schedule 1 of the CEPA (toxic substances list) because they pose a risk to the environment that have controls in place within legislated timelines <sup>18</sup>	100%	March 31, 2021	Results not available. First results for the indicator reported for the 2019–20 fiscal year	100%	87.5%

<sup>15</sup> Air quality monitoring results are subject to data validation and are available 18–24 months after data collection. In the 2018–19 and 2019–20 Departmental Plans, data were reported in the year the data were collected. As of the 2018–19 Departmental Results Report, data will be reported in the year that the data are validated. This ensures that the most recent data are reported in any given fiscal year.

<sup>16</sup> 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: <https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/population-exposure-outdoor-air-pollutants.html#changes>.

<sup>17</sup> 2018–19 results have been updated. Quebec equivalency agreement reduced the number of wastewater systems subject to the Wastewater Systems Effluent Regulations (WSER).

<sup>18</sup> This is a new indicator and replaces the previous indicator: Number of substances assessed, identified as toxic, and for which control measures were put in place. The new indicator is a more meaningful annual performance indicator that will measure the extent to which risk management actions are taken in a timely manner to reduce the potential for exposure of the environment to existing harmful substances.

**Budgetary Financial Resources (dollars)**

2020–21 Main Estimates	2020–21 Planned spending	2020–21 Total authorities available for use	2020–21 Actual spending [authorities used]	2020–21 Difference** [actual minus planned]
360,417,473	360,417,473	378,605,198	360,265,374	-152,099

\*\* The actual spending for 2020–21 is lower than the 2020–21 Planned Spending, mainly due to less spending than anticipated related to Federal Leadership Towards Zero Plastic Waste in Canada, Addressing Air Pollution and a realignment of funds to future years to reflect when spending is expected for the Trans Mountain Expansion Pipeline Project. This is offset by increased spending related to Youth Employment and Skills Strategy.

**Human Resources (FTEs)**

2020–21 Planned FTEs	2020–21 Actual FTEs	2020–21 Difference [actual minus planned]
2,218	2,232	14

Financial, human resources and performance information for ECCC's program inventory is available in the [GC InfoBase](#)<sup>lxxi</sup>.

## 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.

### Results

#### Delivering on ECCC's nature mandate during the COVID-19 pandemic



To mitigate the impacts of the COVID-19 pandemic on its operations, ECCC adapted its work to conserve nature as required to meet local public health requirements. For example, to support its pandemic-related efforts offices and field sites, ECCC established a senior management COVID-19 Task Team and a Fieldwork Advisory Working Group, as well as contingency plans for the delivery of critical wildlife services. The Department temporarily closed its publicly accessible National Wildlife Areas at the beginning of the pandemic (March 2020). Decisions to reopen sites to the public were based on criteria that included availability of PPE, the implementation of safe work practices, human resources capacity, and the Department's aim to keep Canadians active and safe in the outdoors. Employees remained on site when sites were open to ensure public compliance with public health measures. Efforts to monitor Canada's environmental laws were also adapted by advising those subject to regulations to document the steps taken to try to achieve compliance and the obstacles caused by the pandemic. Enforcement officers continued to respond to urgent situations, and proactive enforcement activities were evaluated on a case-by case basis, taking into consideration potential harm to wildlife and the environment and the health and safety of officers and members of the public (more details in the "Enforcing Wildlife Protection" section p. 36).

#### Nature Legacy

ECCC is leading the Government of Canada's efforts to strengthen its commitment to nature and its goals to protect and conserve Canada's ecosystems, landscapes and biodiversity. Canada made a historic investment of \$1.3 billion over 5 years (Budget 2018) under [Canada's Nature Legacy](#)<sup>lxxii</sup>, which included \$500 million, matched by partners, to establish the [Canada Nature Fund](#)<sup>lxxiii</sup>. With these investments, ECCC has been building partnerships and progressing toward achieving Canada's biodiversity targets for conserving land and inland waters, and advancing the protection and recovery of species at risk.

#### Conserving land and inland waters

The Department continued to work with partners through the Nature Legacy initiative and the Canada Nature Fund to protect and conserve 25% of Canada's terrestrial lands and inland waters by 2025, working toward 30% by 2030. Through the Canada Nature Fund's Target 1 Challenge initiative, ECCC helped to advance protected areas work in a total of 151,094 km<sup>2</sup> across Canada and made progress on Indigenous protected and conserved areas. With the goal of building a well-connected network of protected and conserved areas and natural ecosystems in every province and territory across Canada, ECCC made important strides in 2020–21, including:

- An investment of \$3.2 million in the Seal River Watershed Indigenous Protected Area initiative (Taiga Shield of northern Manitoba) in the traditional territories of the Cree, Dene and Inuit.

#### Combining sustainable grazing with species protection

The Governments of Canada and Saskatchewan forged an agreement to exchange lands so governments can work with the ranching community to conserve the Govenlock, Nashlyn and Battle Creek pastures of prairies grasslands in southwestern Saskatchewan, in ways that will conserve species at risk and migratory birds while continuing sustainable cattle grazing in ways that mimic traditional patterns of plains bison.

- An investment of \$1.43 million to support the creation of the Arqviit Indigenous protected and conserved area, a chain of 24 islands spanning 24,000 hectares in the north-eastern Tasiujaruaq (Hudson Bay), in partnership with the Inuit community of Inukjuak.
- A joint (50/50) investment of \$1.5 million by ECCC's Canada Nature Fund and Ducks Unlimited Canada to restore 75.5 hectares of wetlands in Lake Saint-François National Wildlife Area.
- The addition of 268 hectares to the Portobello Creek National Wildlife Area in New Brunswick, bringing the total to over 3,200 hectares. The initiative will further protect and connect the unique wetland habitat of the area, which is important for protecting migration routes and breeding areas for species at risk.

ECCC continued work to establish new National Wildlife Areas. For example, the Department is currently working on establishing the Edezhie National Wildlife Area in the Northwest Territories and the designation of Isle Haute, Country Island, and Saint Paul Island in Nova Scotia as National Wildlife Areas through regulatory processes. Additional islands in Nova Scotia are being acquired in the area islands noted above, to create the new Atlantic Archipelago National Wildlife Area. Progress is also being made in the negotiation of an agreement with the Department of Fisheries and Ocean for the creation of the St. Lawrence Islands' future National Wildlife Area in Québec. Furthermore, designation of Big Glace Bay Lake National Wildlife Area located in Nova Scotia, and the expansion of the Prince Edward Point National Wildlife Area in Ontario, are currently posted in Canada Gazette I. Acquisition for additional expansions is currently progressing.

#### High Ambition Coalition for Nature and People

Canada pledged to join other countries at the 2020 Leaders Event for Nature and People in a "high ambition coalition" to advocate for a target of conserving 30% of the world's lands and oceans by 2030. The target would be adopted as a part of the Post-2020 Global Biodiversity Framework at the 15th Meeting of the Conference of the Parties to the Convention on Biological Diversity, in 2021. The framework will include targets to guide the conservation and sustainable use of biodiversity around the world over the next 10 years. The Government of Canada has committed to conserving 25% of Canada's lands and oceans by 2025, and to work towards 30% by 2030. Canada is uniquely positioned to contribute to this important goal at home and abroad, with the second-largest land mass, one fifth of the world's fresh water, and the longest coastline in the world. Together, these resources are critical for biodiversity and for securing carbon in nature in the fight against climate change. Our forests, grasslands, and peatlands absorb enormous amounts of carbon pollution and are our best ally in protecting our climate.

The Canada Nature Fund invested \$100 million over four years in the Natural Heritage Conservation Program. The new Program is delivered by the Nature Conservancy of Canada and its partners, including Ducks Unlimited Canada, Wildlife Habitat Canada, and the Canadian Land Trusts Working Group. The Program provides assistance to these partners to secure and protect at least 200,000 hectares of ecologically sensitive private lands. The areas to be conserved are predominantly in southern Canada, where most biodiversity-rich areas are, and where most Canadians live.

#### Conserving nature is a global effort

Conserving nature in Canada and across the globe is critical to halting biodiversity loss, tackling climate change, and helping us all live sustainably. Over a million species are threatened with extinction, with 75% of land and 66% of the marine environment significantly altered by human actions. In Canada alone, populations of species assessed as at risk have declined by an average of 59% since 1970. (See sidebar).

## Transforming Species at Risk Conservation

ECCC, in collaboration with the provinces and territories, Indigenous peoples and stakeholders, continued to implement the *Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada*<sup>19</sup> for priority places, species, sectors and threats. Actions to implement the Pan-Canadian Approach were supported by contributions under the Nature Legacy initiative's Canada Nature Fund.

Key accomplishments in 2020–21 include:

- Investments of up to \$10.1 million in 79 projects for priority places for species at risk across the country. Sixty-four of these projects are being carried out within the 11 federal/provincial/territorial priority place where work continues to engage partners and stakeholders, establish governance frameworks, advance multi-species and ecosystem-based conservation action planning, and implement conservation actions through a directed funding process. Fifteen of these projects are being advanced through Community-Nominated Priority Places, including an investment of more than \$2 million over four years in Kootenay Connect, a program that aims to help protect and restore species at risk habitat and ecological connectivity in four biodiversity hotspots in the Kootenay region of southeastern British Columbia (comprised of the Bonanza Biodiversity Corridor, Creston Valley, Wycliffe Wildlife Corridor and the Columbia Valley Wetlands). Together, these hotspots encompass habitat for 28 species at risk.
- Investments in Community-Nominated Priority Places also include a commitment of \$1.2 million over four years to support the Unama'ki Institute of Natural Resources to lead local efforts to conserve 350,000 hectares in the Bras d'Or Lakes watershed of Nova Scotia, important habitat for 18 listed terrestrial species at risk in the Cape Breton area.
- Investments of up to \$9.3 million in 24 projects for the six priority species (Barren-ground Caribou, Boreal Caribou, Greater Sage-Grouse, Peary Caribou, Southern Mountain Caribou and Wood Bison) across the country, as well as \$53.6 million for partners to support Southern Mountain Caribou conservation measures under the *Intergovernmental Partnership Agreement for the Conservation of the Central Group of the Southern Mountain Caribou* between Canada, British Columbia, and West Moberly and Sauteau First Nations. Progress towards collaborative planning and advancement of stewardship approaches, continued through engagement with federal, provincial, and territorial governments, Indigenous Peoples, and other key partners and stakeholders.
- An investment of \$60,000 over one year to support Forest Certification Canada in their bid to employ Forest Stewardship Council certification to advance Boreal Caribou critical habitat protection within the forestry development sector in Canada.
- An investment of over \$1.3 million in 20 projects that advanced relationships with Indigenous peoples supporting the recovery of caribou, wildlife health monitoring, inclusion of Indigenous priorities in multi-species conservation planning, and a new approach to meeting ECCC's consultation obligations for species at risk. This work is in addition to ongoing mapping, stewarding and restoring species at risk and their habitat on Indigenous lands.
- An investment of \$100,000 over one year to support the University of Calgary in their work analyzing and cataloguing the ecological genomics.
- Engagement of partners and stakeholders to initiate the co-creation of conservation action plans with the agriculture, forest, and urban development sectors that seek to align conservation and sector policy and practice with positive outcomes for species at risk and sector sustainability.

In 2020–21, the Governments of Canada and British Columbia launched an initiative to develop a new bilateral Nature Agreement to strengthen nature conservation province-wide, with a strong focus on protecting species at risk and enhancing biodiversity by exploring new ways to protect and restore habitat and strengthen ecosystem resilience. The two governments will better protect species at risk through two

<sup>19</sup> Québec has not signed the Accord for the Protection of Species at Risk and has its own Act on Threatened and Vulnerable Species. It actively collaborates with the federal government on the conservation of endangered species of common interest through the Canada-Québec Agreement on Species at Risk. For example, Québec does not participate in the development of Canada-wide policies and mechanisms for the conservation of species at risk, and as such, will not implement the proposed Pan-Canadian approach. Québec intends to use existing mechanisms to complement the work of the federal government in setting priorities for the recovery of species in precarious situations.

pilot projects aimed at improving policies, processes, and information sharing, as well as evaluating additional pilot projects to advance multi-species recovery and the Pan-Canadian Approach to Transforming Species at Risk Conservation.

### Indigenous Guardians Pilot

Budget 2017 announced \$25 million over five years to support an Indigenous Guardians Pilot. Since 2018, the Pilot has been implemented jointly with First Nations, Inuit and Métis using an individual approach that respects and recognizes the unique perspectives, rights, responsibilities and needs of Indigenous Peoples.

Indigenous Guardians are a key part of Canada's Nature Legacy. To date, the Government has funded \$20 million over 81 initiatives through the Indigenous Guardians Pilot. In July 2020, the Government committed \$600,000 to fund 10 projects across the country: Lennox Island First Nation Guardian Program (Prince Edward Island); Wolastoqey Nation Guardian Program (New Brunswick); Atiku-napeu (Québec); Asubpeeschoseewagong Anishinabek Guardian Program (Ontario); Shkakamik Kwe Genwenmajig (Ontario); Fox Lake Cree Nation Guardian Program (Manitoba); Westbank First Nation Guardian Program (British Columbia); Williams Lake Indian Band Guardian Program (British Columbia); Ditidaht First Nation Guardian Program (British Columbia); and Kluane First Nation Guardian Program (Yukon).

In 2020–21, the Indigenous Guardians Pilot initiated its evaluation process to inform decision-making and a long-term approach for potential National Indigenous Guardians Networks for each Indigenous group. First Nations, Inuit and Métis partners provided input into the strategy laid out for the evaluation to ensure it remains culturally meaningful to Indigenous Peoples.

- **Inuit Advisory Committee for Guardians:** The Inuit portion of the Indigenous Guardians Pilot is governed by an Inuit Advisory Committee comprised of representatives from the four Inuit regions: Inuvialuit, Nunavut, Nunavik and Nunatsiavut and co-Chaired by ECCC and Inuit Tapiriit Kanatami (ITK). In 2019-20, the Committee opted for a competitive process to recommend six Inuit-led Guardians initiatives to receive multi-year funding through to 2022-23. In 2020–21, the Committee set evaluation methods, measurements and timelines for the Inuit portion of the Pilot's evaluation. The Committee also hosted a series of virtual technical workshops, in partnership with Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC), for Inuit communities and guardians.
- **First Nations Guardians:** The First Nations portion of the Indigenous Guardians Pilot is governed by the First Nations-Federal Pilot Joint Working Group (JWG). The mandate of the JWG was adopted in March 2019 by First Nations participants at a gathering in that welcomed approximately 340 participants. The JWG is comprised of First Nations Guardians experts and federal representatives. In 2019-20, the JWG opted to allocate funding through a tiered approach through a competitive process. Since 2019, the JWG has recommended more than 50 First Nations Guardians initiatives, including 10 in 2021-22 to support First Nations communities seeking to develop their Guardians program and create meaningful jobs for their community members.
- **Métis Guardians:** The Métis portion of the Indigenous Guardians Pilot is governed through the Métis National Council's (MNC) National Environmental Working Group, which is made up of representatives of the MNC's five governments. In 2019-20, the MNC opted to allocate funding through a non-competitive process working directly with its five governments. In January 2021, a joint Métis Indigenous Protected and Conserved Areas and Guardians Gathering was held (virtually, due to COVID-19). The gathering welcomed more than 60 participants, and provided a valuable forum to share best-practices and lessons learned, and discuss the future of Métis IPCAs and Guardians.

### Species Management

Following its 2019-20 investment of \$10 million over two years to support the North American Waterfowl Management Plan (an international partnership that helps protect wetlands and migratory birds, including species at risk), the Department is collaborating with various partners, such as the Nature Conservancy of Canada, Ducks Unlimited Canada, Island Nature Trust, and the Manitoba Habitat Heritage Corporation. This funding enables partners to implement projects to secure and restore at least 10,000 hectares of wetlands, including habitats that are of the highest value for migratory birds.

Following the 2019-20 release of [The State of Canada's Birds 2019<sup>xxiv</sup>](#) in collaboration with the North American Bird Conservation Initiative, ECCC has recognized the importance of full annual life cycle planning and international cooperation in identifying and reducing threats to migratory bird populations. That major report synthesized information from more than 50 years of monitoring data and highlighted investments that have been made in conservation. While some species (such as raptors and waterfowl) have been doing well, populations of other bird groups (such as grassland birds, aerial insectivores and shorebirds) were shown to be declining dramatically. Conservation action is urgently needed to address the decline. ECCC is developing a new Migratory Bird Strategy to lay out an approach to address those declines.

## Enforcing Wildlife Protection

In March 2020, the COVID-19 pandemic affected the ability of ECCC's wildlife enforcement officers to work in the field. In the summer of 2020, ECCC implemented a Business Continuity Management Plan (BCMP), highlighting critical services that officers would continue to provide during the pandemic. This included responding to requests regarding shipments of live wildlife, harmful live wildlife, and responding to the deposit of harmful substances in wildlife habitats, critical habitats, and protected areas.

Given COVID restrictions, ECCC focused on priority activities related to ports of entry where there was limited interaction with the public, open federal protected habitats, and partnership operations. These activities included:

- Wildlife Enforcement Officers returned to the field on June 1, 2020, to support the re-opening of 18 National Wildlife Areas (NWAs) as part of its Connecting Canadians to Nature initiative. The federal government actively encouraged Canadians to visit the re-opened NWAs. Additional NWAs were re-opened gradually and to varying degrees, using a phased approach over the summer months.
- In September and October 2020, to address its commitment to reducing the global illegal wildlife trade, ECCC collaborated with 103 other countries worldwide in INTERPOL's Operation Thunder 2020. This operation focused on stopping the illegal import and export of wildlife products at ports of entry. More than 1.3 tonnes of ivory were seized worldwide during the operation.
- ECCC collaborated with Natural Resources Canada to develop a pioneering identification guide for tropical wood found on the Canadian market. This guide is unique, as it helps to identify woods on natural characteristics of the wood, instead of the usual "end grain" approach. The guide will be shared with other enforcement agencies such as the Canada Border Services Agency and the Canada Food Inspection Agency.
- ECCC continued to strengthen its partnerships by finalizing MOUs with various partners, including: The Canadian Crime Stoppers Association, the Department of Fisheries & Oceans, Atlantic & Québec regions' provincial counterparts, and the Canada Food Inspection Agency.
- ECCC has been providing support and training to foster the enforcement and compliance capacities of Indigenous communities across the country who are setting up Guardians programs for the stewardship of their lands.

ECCC maintained ongoing efforts to protect wildlife species and their habitat from actions by businesses and individuals. Enforcement activities carried out by officers included conducting 1,167 inspections and initiating 128 new investigations under relevant wildlife legislation, and implementing 312 enforcement measures, consisting of Administrative Monetary Penalties (AMPs), compliance orders, prosecutions, tickets, warnings, and alternative measures.

Investigations led to five convictions and initiated 10 new prosecutions. A total of \$125,500 in penalties resulted from enforcement efforts; these funds were directed to the Environmental Damages Fund. Items confiscated include medicinal composites, finished products, dead specimens, wildlife skins, live samples, wood items, and hunting trophies. With a total value of \$88,500, some 90 AMPs were issued under the *Migratory Birds Convention Act, 1994*, the *Canada Wildlife Act* and the *Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act*.



## Impact Assessments

Under the auspices of the *Impact Assessment Act*, ECCC continued to provide expertise and advice related to climate change, air and water quality, environmental preparedness and emergencies, and biodiversity. Its work includes developing guidance for project proponents on standard methodologies to address common issues and contribute to the federal approach to cumulative effects under the Act. The Strategic Assessment of Climate Change provides Canadians with a clear link between impact assessment and national objectives on climate change.

### Commitment to Experimentation: Monitoring Wildlife Populations

ECCC continues to experiment with novel approaches for monitoring wildlife populations and comparing their efficiency and reliability with traditional survey methods. Several experiments are ongoing, including developing approaches to use digital sound recorders in bird monitoring protocols. Innovative tools have been developed to allow expert birders to interpret the recordings using an online computer interface. The results will be used to train artificial intelligence networks to improve bird identification. Also 2020–21 saw completion of an evaluation of a project that uses artificial intelligence approaches to analyze remotely sensed aerial photographs to detect polar bears on sea ice. The approach was able to correctly identify 95% of images with known bears, with a false positive rate of only 0.6% for images without bears. An efficient workflow emerged to process tens of thousands of images that would take weeks to process manually. This approach could be relevant to a wide range of wildlife surveys including for other mammals or cliff-nesting seabirds.

## Gender-based analysis plus



In 2020–21, ECCC continued 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 focused 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 worked 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 continued to provide expert advice and knowledge to support resource development decisions that mitigate negative impacts on vulnerable populations and all Canadians.

## Key risks (mitigation)

With respect to Conserving Nature, ECCC's key risks as identified in the Departmental Plan 2020–21 include risks related to capital infrastructure (such as accommodations and other facilities) that require ongoing investment to maintain its integrity, risks associated with the Department's significant data, information technology and management requirements, and reliance on highly qualified, specialized personnel. These risks have been addressed through the following risk response actions/mitigation strategies.

The effective management of information assets is critical to the Department's ability to conserve nature. The COVID-19 pandemic impeded collaboration with external partners, the technical work needed to monitor populations, and the establishment of protected and conserved areas. Nonetheless, a partnership has been built by the Canada Nature Fund to enable progress towards achieving Canada's biodiversity targets for conserving land and inland waters, and advancing the protection and recovery of species at risk.

ECCC continued to leverage its scientific data and partnerships with Indigenous Knowledge holders, and to adapt its approaches and programming on climate change and enforcement of legislation that facilitates conservation. ECCC is also co-delivering the Indigenous Guardians Pilot through an individual approach with Inuit, Métis and First Nations.

More specifically, ECCC continued to maintain ongoing capacity to protect and recover species at risk and critical habitat; to increase support to others to expand and effectively manage protected areas and contribute to conservation and stewardship activities; to expand and effectively manage the Department's protected areas; and to advance the conservation and sustainable use of biodiversity. The Department continued to provide expertise and advice on climate change, air and water quality, environmental preparedness and emergencies, and biodiversity.

To leverage available sources of information to support evidence-based decisions and activities, ECCC continued 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. Canadian Wildlife Service initiated the development of its first Information and Data Management Strategy, reflecting its vision for information and data management for the next three years.



**United Nations' 2030 Agenda and [Sustainable Development Goals](#)<sup>lxv</sup>**

The Pan-Canadian Approach to Transforming Species at Risk Conservation in Canada and its substantial new investments in federal and other protected areas under its 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 below water ([Goal 14](#)<sup>lxvii</sup>) and life on land ([Goal 15](#)<sup>lxvii</sup>).

### Results achieved

Departmental Result: Canada's wildlife and habitat are conserved and protected					
Performance 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%	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 17-20% from a baseline of 10.6% in 2015 (terrestrial lands and inland waters)	2020	11.8%	12.1%	12.5%
Departmental Result: Canada's species at risk are recovered					
Performance indicators	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% <sup>20</sup>	42%

<sup>20</sup> 41% show progress towards their population and distribution objectives; 11% show mixed evidence, meaning that some information suggests improving trends, but that there is also some evidence of decline.

<b>Departmental Result: Indigenous peoples are engaged in conservation</b>					
<b>Performance indicators</b>	<b>Target</b>	<b>Date to achieve target</b>	<b>2018–19 Actual result</b>	<b>2019–20 Actual result</b>	<b>2020–21 Actual result</b>
Percentage of Indigenous peoples engaged with ECCC who indicate that the engagement was meaningful	61%	April of each year	61%	69%	64%

**Budgetary Financial Resources (dollars)**

<b>2020–21 Main Estimates</b>	<b>2020–21 Planned spending</b>	<b>2020–21 Total authorities available for use</b>	<b>2020–21 Actual spending [authorities used]</b>	<b>2020–21 Difference** [actual minus planned]</b>
319,257,213	319,257,213	373,649,076	366,851,749	47,594,536

\*\* The actual spending for 2020–21 is higher than the 2020–21 Planned Spending mainly due to increased spending for Protecting Canada's Nature, Parks & Wilds Spaces (Southern Mountain Caribou) offset by a decrease in spending related to Impact Assessment and Regulatory Regime Implementation.

**Human Resources (FTEs)**

<b>2020–21 Planned FTEs</b>	<b>2020–21 Actual FTEs</b>	<b>2020–21 Difference [actual minus planned]</b>
1,205	1,197	-8

Financial, human resources and performance information for ECCC's program inventory is available in the [GC InfoBase](#)<sup>lxxviii</sup>.

## 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.

### Results

#### Delivering weather and environmental services during the COVID-19 pandemic



The COVID-19 pandemic impacted Environment and Climate Change Canada's operations throughout 2020–21. The Department responded promptly to evolving public health requirements to maintain service delivery, including the provision of weather and environmental services to Canadians. Personal protective equipment (PPE) supplies were quickly acquired and distributed across the Department to those employees critical to operations who remained on site, and processes were adjusted to protect staff. For example, ECCC retrofitted its weather forecasting centres and modelling centre with measures to maintain social distancing and necessary PPE to protect uninterrupted, 24/7 operations. Employees working in the field to sustain vital monitoring equipment across the country similarly adjusted their work procedures and received PPE to remain safe throughout the pandemic. Departmental operations used specialized equipment for everything from monitoring water levels in the spring, to monitoring wildfires, to predicting severe weather such as tornadoes and hurricanes through the summer and fall. ECCC sustained its critical services with minimal disruption by invoking its business continuity management plan.

#### Monitoring and Warning Activities of the Canadian Hurricane Centre

The Canadian Hurricane Centre (CHC) works to help Canadians prepare for the annual hurricane season, and to provide information to help them protect their health and safety. To track storms that have the potential to affect Canada or its waters, meteorologists at ECCC's CHC continued to work closely with the U.S.-based National Oceanic and Atmospheric Administration (NOAA) to map expected storm trajectories, predict their intensities, and issue warnings. In 2020–21, ECCC meteorologists provided tailored services and worked with federal and provincial authorities to mitigate the impacts of September 2020's Hurricane Teddy in Nova Scotia.

##### Providing Vital Data

ECCC continued to deliver ice service information to the Canadian Coast Guard, as well as meteorological services and products to the Department of National Defence and NAV CANADA. These users depend on mission-critical weather and environmental information for their vital security, surveillance and emergency response operations year-round.

#### Upgrades to Weather Radars and Stations

Weather radars are the primary tool used by meteorologists to forecast short-term severe-weather events associated with thunderstorms, tornadoes, ice storms and blizzards. Equipped with state-of-the-art technologies and extended tornado-detection ranges, new radars will provide more frequent updates and give Canadians greater lead time to take shelter. ECCC remains on track to replace 32 outdated radars with new state-of-the-art radars across the country by 2024. The radar network will also be expanded by one new radar, to be installed near Fort McMurray, Alberta. Of the 19 new radars installed to date, seven were installed in 2020–21. An additional seven new radars will be installed in 2021–22.

#### Modernizing nationwide water monitoring

In Budget 2018, the Department received an \$89.7 million investment over five years to modernize Canada's water monitoring services. These funds support ongoing work with provinces and territories to generate more timely and accurate information on water flows and water levels across Canada's rivers and lakes, starting with five major basins in Canada (the Saskatchewan, Nelson, Mackenzie, Columbia and

Churchill Rivers) and the Great Lakes and St. Lawrence River. The National Hydrological Service's professional engineering and technical capacity has been strengthened with the addition of 70 new staff. The national hydrometric network's stations and infrastructure are being modernized, with infrastructure improvements at over 300 sites. An updated version of the hydrometric data production system has been implemented on a cloud-based service, and more than 30 innovation test sites across Canada have been established. These investments will substantially improve the continuous collection and dissemination of data on water flow and water levels across the country.

ECCC continued its co-management relationships with international water boards and committees, as outlined in an International Joint Commission (IJC) Memorandum of Understanding (MOU) and other interprovincial MOUs. ECCC provides data and technical, engineering and communication support to IJC boards and committees and takes part in a total of 17 IJC boards and committees and three (3) non-IJC international committees. Key accomplishments in 2020–21 include the annual IJC appearances held virtually in April and October 2020, and the water level web symposium held on October 24 by the Georgian Bay Forever and Georgian Bay Association, with ECCC staff, Minister Wilkinson and Parliamentary Secretary Terry Duguid in attendance. At the request of the IJC, the Great Lakes-St. Lawrence River Adaptive Management committee initiated Phase 1 of an expedited review of Plan 2014, with a focus on supporting deviation decisions of the International Lake Ontario-St. Lawrence River Board during extreme conditions.

ECCC takes part in four (4) domestic water management boards. In 2020–21, for the Ottawa River Regulation Planning Board, ECCC signed an MOU with Public Services and Procurement Canada to provide additional support for the Board following the significant flooding events of 2017 and 2019. The Board also began to prepare a business case to address requirements following the Ontario Special Advisor's report on flooding on the Ottawa River. In 2020–21 the Prairie Provinces Water Board (PPWB) updated water quality objectives for 2020, prepared and submitted an initial plan for the 2025 water quality objectives, and completed the final review of a newly proposed schedule on cooperative groundwater management to the Master Agreement on Apportionment. The Mackenzie River Basin Board (MRBB) completed analysis of the MRBB Strategic and Operational Review Report and its 50 plus recommendations, developed a strategic plan to address high priority recommendations, prepared and submitted a web-based multi-year State of the Aquatic Ecosystem Report (SOAER) to the MRBB for final review, and upgraded of the MRBB website to include a Story Map.

ECCC's WeatherCAN app, launched in February 2019, provides access to live weather information and was downloaded over one million times in its first year of availability. WeatherCAN provides easy-to-understand weather observations and forecasts for virtually every community in Canada, and its unique message centre is used to provide backgrounders and contextual information about weather and climate. Two important modifications were made in 2020–21. First, working with Health Canada, ECCC adapted WeatherCAN to incorporate COVID-19 statistics with current weather data and contribute to improved public access to timely and relevant information in the fight against COVID-19. Second, in response to positive user feedback on the message centre content, ECCC made improvements to the message centre to make all recent messages accessible in an inbox for repeated reference.

### High Performance Computing

Building on the successful upgrade of the High Performance Computer (HPC) in January 2020, the Meteorological Service of Canada (MSC) launched its next innovation cycle of continuous improvement for all of its atmospheric, oceanic, hydrological and land prediction systems. This will improve the precision of localized weather forecasts and will lead to more accurate long-term weather forecasts. The HPC is a key pillar for Canada's forecasts, and critical to enabling forecast coverage for a country as large and diverse in landscape and climate. Continuous improvements to prediction capacity and the supporting computing infrastructure have allowed ECCC's global prediction model to consistently rank among the top three models in the world for forecast accuracy over North America.

### Canada Water Agency

In December 2020, in partnership with Agriculture and Agri-Food Canada, ECCC launched public consultations on the future Canada Water Agency (CWA). The Agency will work with provinces, territories, Indigenous Peoples, and other partners to find the best ways to keep our water safe, clean and well-managed. To support the consultations, ECCC released a [discussion paper](#)<sup>lxix</sup> with guiding questions. The Department also held national and regional freshwater forums in January and February 2021. ECCC started

to analyze and synthesize the input, which will be shared via a What We Heard report in 2021-22. In parallel with the public consultations, ECCC engaged provinces/territories and continued discussions with Indigenous groups across Canada. The Department also laid the groundwork for a CWA Transition Office to establish and operationalize the future agency.

### Complete Flood Maps

ECCC continued to work with Natural Resources Canada (NRCan) and Public Safety Canada to strengthen both policy and science related to flood mapping. Flood mapping supports the Government of Canada's priority to improve the resilience of communities in Canada most at risk of flooding. In 2020–21, ECCC also engaged with provinces and territories to inform flood mapping engineering methods and approaches to assess flood maps, and to support NRCan in advancing a national flood-mapping standard. ECCC is facilitating the creation of a national community of practice on floodplain mapping. Work to update the Federal Hydrologic and Hydraulic Procedures for Flood Hazard Delineation has also progressed as planned. In order to better align its alerting system, ECCC works with its partners to better understand risks and vulnerabilities in the coastal flooding zones.

#### Commitments to Experimentation:

##### COVID Trend Statistics within the WeatherCAN Mobile Weather App

In 2020–21, ECCC experimented with a methodology that would allow for the incorporation of COVID trend statistics, supplied by Health Canada, dynamically within the WeatherCAN mobile weather app. An approach was developed that enables a weather app user to access COVID trend data for their actual or selected geographical location at the same time as they view current weather conditions. This significantly improved accessibility and use of the COVID trend data, with usage increase by a factor of approximately eight.

##### Continuous improvement through National Hydrological Services Renewal Innovation

ECCC continuously seeks to improve the frequency and quality of its data and services to protect the safety and the economy of Canadians. Through targeted funding for the renewal of the National Hydrological Services, the Department continued to investigate and test new technologies for gathering hydrometric data such as water level and discharge measurements. ECCC tested and deployed several instruments and tested alternative data computation techniques to improve discharge measurement, hydraulic modelling, modernize telemetry, and enhance data dissemination and visualization capacity. As the technologies and methods prove beneficial, recommendations for implementation are being explored. In the end, new technologies can improve data quality and accessibility for Canadians.

### Gender-based analysis plus



ECCC continued 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), northern/rural dwellers, older Canadians and children, people with chronic diseases and people experiencing homelessness. To enhance the reach of ECCC information, ECCC adopted a number of strategies to better communicate risk to a wide variety of Canadians and prepare them for potential impacts of hazardous weather. ECCC provided weather and environmental information through a wide range of platforms, including the WeatherCAN application, weather radios and webinars. Hydrometric data was 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 also improved the accessibility and documentation of its weather and environmental data and services, based on results of stakeholder engagement.

## Key risks (mitigation)

With respect to this Core Responsibility, ECCC's key risks as identified in the Departmental Plan 2020–21 include risks related to capital infrastructure (such as weather stations and other facilities) that require ongoing investment to prevent rust-out and to maintain its integrity, risks associated with the Department's significant data, information technology and management requirements, and reliance on highly qualified, specialized personnel. These risks have been addressed through the following risk response actions/mitigation strategies.

The Department relies on its capital infrastructure to achieve its mandate and deliver mission-critical services. This infrastructure required 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 impacts, seven new radar systems, installed in several communities across Canada, used the most modern technology available and provided more detailed information on precipitation type and storm structure, and allowed ECCC to give Canadians greater lead-time to protect themselves and their property.

The Department maintained its ability to effectively leverage and manage the internal and external information and data required to sustain core operations and deliver world-class meteorological, environmental and hydrological information and services for Canadians. As such, ECCC continued to provide Canadians with accurate and timely information on weather and environmental conditions to help them make decisions about their health, safety and economic well-being. ECCC leveraged scientific expertise, a leading-edge approach to data management and analysis, and innovative information techniques. Additionally, a high-performance computing (HPC) upgrade has been completed that resulted in a major increase in computational power.

ECCC put in place a strategic approach aimed at enhancing data governance and transparency, empowering people, promoting a data culture, fostering an enabling data structure, and treating data as a strategic asset. ECCC also developed a strategic approach to investments in information management systems and tools that compel the appropriate management of data and allow for data mining, branch inter-operability and inter-branch information sharing. ECCC continued to modernize and strengthen its engineering and technical capacity, modernize its infrastructure, and put in place new technologies to gather and analyze water information. The Department also continued to provide expert advice and recommendations to inter-jurisdictional and international water boards.

In addition, in support of ECCC's core missions and program integrity, the Department started to put in place approaches to enhance multi-year capital planning by identifying capital infrastructure deficits, determining critical infrastructure priorities and funding needs, establishing robust principles to guide risk-based allocation decisions, and completing an enterprise-wide assessment of capital needs.



### United Nations' 2030 Agenda and [Sustainable Development Goals](#)<sup>lxxx</sup>

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](#)<sup>lxxxii</sup>). 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, while water-monitoring services contribute to responsible water conservation and use ([Goal 6](#)<sup>lxxxiii</sup>). 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](#)<sup>lxxxiii</sup> and [Goal 14](#)<sup>lxxxiv</sup>).

**Results achieved**

<b>Departmental Result: Canadians use authoritative weather and related information to make decisions about their health and safety</b>					
<b>Performance indicators</b>	<b>Targets</b>	<b>Date to achieve target</b>	<b>2018–19 Actual results</b>	<b>2019–20 Actual results</b>	<b>2020–21 Actual result</b>
Index of the timeliness and accuracy of severe weather warnings on a scale of 0 to 10	At least 8.2 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 Canadians that use ECCC information to address water-related impacts on health, safety, economy and environment <sup>21</sup>	For annual reporting: At least 80%  For reporting every 4 years: 10% increase over a baseline of 81% in 2013	For annual reporting: Annually  For reporting every 4 years: May 2025	For annual reporting: 70.5%  For reporting every 4 years: N/A	For annual reporting: 73%  For reporting every 4 years: N/A	For annual reporting: 60%  For reporting every 4 years: 19.1%

**Budgetary Financial Resources (dollars)**

<b>2020–21 Main Estimates</b>	<b>2020–21 Planned spending</b>	<b>2020–21 Total authorities available for use</b>	<b>2020–21 Actual spending [authorities used]</b>	<b>2020–21 Difference** [actual minus planned]</b>
255,482,742	255,482,742	270,083,089	252,729,020	-2,753,722

\*\* The actual spending for 2020–21 is lower than the 2020–21 Planned Spending, mainly due to a decrease in spending for Adapting Canada's Weather and Water Services to Climate Change.

**Human Resources (FTEs)**

<b>2020–21 Planned FTEs</b>	<b>2020–21 Actual FTEs</b>	<b>2020–21 Difference [actual minus planned]</b>
1,617	1,700	83

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

<sup>21</sup> The current indicator will be replaced with the following: Percentage of program partners rating their satisfaction with Environment and Climate Change Canada's hydrological services as 8 out of 10 or higher. This is a more meaningful annual performance indicator as it represents the actual user groups of the program.



## Internal Services

### 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 service categories that support Program delivery in the organization, regardless of the Internal Services delivery model in a department. The 10 service categories are:

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

### Delivering internal services during the COVID-19 pandemic



Throughout 2020–21, ECCC adapted its response to COVID-19, including through the rapid deployment of new digital tools to support safe work environments. To support employees working remotely, ECCC implemented strategies to bolster its digital transformation, such as the extensive use of MS 365, cloud-based collaboration tools to support virtual work, adherence to public health best practices, and maintaining a focus on employee safety, while maintaining operations, regardless of how the pandemic evolve.

In preparation for safe return to workplaces, in November 2020, the Department launched its “return to the workplace” app across all its buildings to ensure that ECCC’s approach to return to worksites will continue to be aligned with the latest national and local public health guidance. Employee’ health and safety will remain at the forefront of decision-making.

### Results

ECCC’s efforts align with an updated federal [Greening Government Strategy](#)<sup>booxvi</sup> (November 2020), and with the government’s commitment to lead by example by setting new targets for net zero, green and climate-resilient government operations. For example, in 2020–21, ECCC incorporated all reporting facilities in the RETScreen Clean Energy Management Software, ahead of the 2025 target, and began piloting the use of this software to calculate and report on the departmental GHG emissions inventory. ECCC also started to collect the data needed to assess the environmental impact of its non-hazardous operational waste (including plastic waste) and develop action plans to reduce it.

ECCC learned that it will receive funding for two accessible electric minibuses that will reduce its direct GHG emissions by approximately 530 tonnes over their 10-year lifecycle, compared to traditional gas-powered shuttles. The new shuttles will hold more passengers and will be accessible to those with disabilities.

In its ongoing effort to improve the workplace for employees, with respect as its foundation, ECCC held its 6th Annual Respect Day to encourage respectful discussions to understand different perspectives, raise and address fears of reprisals, and galvanize efforts to foster a culture of care built on respect and inclusion. Events included the 5-Day Respect Challenge. To promote diversity, ECCC supported Public Service Pride Week (August 2020), and created a Black Employees Network, welcoming all interested Black employees to join the network and access social, cultural and professional empowerment. ECCC celebrated the Government-wide Gender-based Analysis Plus (GBA+) Awareness Week, including by supporting opportunities for employees to learn more about GBA+ and promote GBA+ certification of employees.

In January 2020, the Department launched a year-long celebration of the *Department of Environment Act*, which established ECCC as a federal department in 1971. The year celebrated 50 years of environmental action in many areas, including science and research, environmental law (domestic and international), approaches to pollution prevention, climate action and environmental management, nature and wildlife conservation, and weather and environmental conditions forecasting. The year also marked the 150<sup>th</sup> anniversary since a small grant was provided to what would become the Meteorological Service of Canada, which delivers on ECCC's core responsibility of Predicting Weather and Environmental Conditions.

The Department continued to invest considerable effort in keeping employees informed of developments related to government-wide pay challenges. In 2020–21, a change management strategy was developed that included updates to ECCC's Pay and Leave Guide, as well as communications with key stakeholder groups and the introduction of self-service tools. As a result, the level of awareness for timelines, documentation, and proactive steps to avoid pay issues has improved significantly.

**Celebrating Indigenous Women and the Environment**

ECCC celebrated Indigenous Awareness Week (October 5-9, 2020) under the theme of Indigenous Women and the Environment, in response to the 2019 [Reclaiming Power and Place: The Final Report of the National Inquiry Into Missing and Murdered Indigenous Women and Girls](#)<sup>xxxvii</sup>. Throughout the week, the Department celebrated some of the amazing Indigenous women working at ECCC through the [She is Indigenous campaign](#)<sup>xxxviii</sup>. The week of events and activities recognized that Indigenous women have always played a central role in both traditional and modern societies. They make change across many venues to protect and preserve the environment.

**Budgetary Financial Resources (dollars)**

2020–21 Main Estimates	2020–21 Planned spending	2020–21 Total authorities available for use	2020–21 Actual spending [authorities used]	2020–21 Difference** [actual minus planned]
202,522,526	202,522,526	271,598,090	271,077,996	68,555,470

\*\* The actual spending for 2020–21 is higher than the 2020–21 Planned Spending, mainly due to increased spending related to Federal Contaminated Sites Action Plan, an internal reallocation of resources between programs and compensation allocations from TBS related to new collective agreements.

**Human Resources (FTEs)**

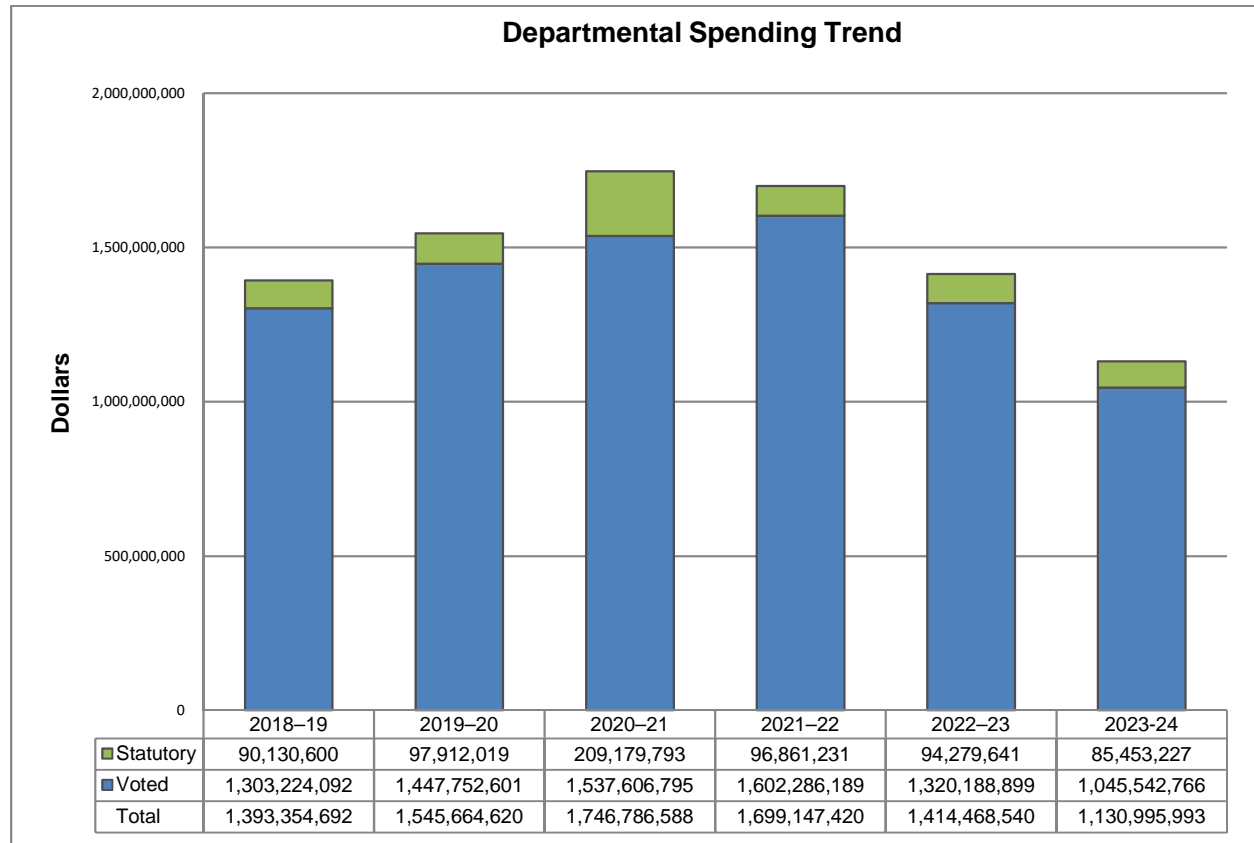
2020–21 Planned FTEs	2020–21 Actual FTEs	2020–21 Difference [actual minus planned]
1,524	1,604	80

## Analysis of trends in spending and human resources

### Actual expenditures

#### Departmental spending trend graph

The following graph presents planned (voted and statutory) pending trend over a six-year period. For fiscal years 2018–19, 2019–20 and 2020–21, the amounts shown represent the actual expenditures as reported in the Public Accounts. For fiscal year 2021–22, 2022–23 and 2023–24, the planned spending represents the planned budgetary and statutory expenditures as presented in [ECCC's 2021–22 Departmental Plan<sup>xxxxix</sup>](#).



ECCC'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: 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.

See [ECCC's 2019-20 Departmental Results Report<sup>xc</sup>](#) for additional details on year-over-year actual spending variances between 2018–19 and 2019–20.

For 2021–22 to 2023–24, the figures represent total planned spending for the fiscal year, which reflects approved funding by Treasury Board, at the time of the 2021–22 Departmental Plan, to support the departmental core responsibilities. Overall, there is a decrease in planned spending over the 2021–22 to 2023–24 planning horizon presented in the summary table. This is the result of sunsetting 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 2022–23 include the:

- Low Carbon Economy Fund;
- Great Lake Ecosystem Initiatives;
- Federal Leadership Towards Zero Plastic Waste In Canada; and
- Canada's Marine Safety Response.

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

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

Statutory authorities from 2021–22 to 2023–24 are declining, due to the sunsetting of the Climate Action Incentive Fund and a reduced funding profile for Youth Employment and Skills Strategy.

See [ECCC's 2021-22 Departmental Plan<sup>sci</sup>](#) for additional details on year-over-year planned spending variances between 2021–22 and 2023–24.

**Budgetary performance summary for Core Responsibilities and Internal Services (dollars)**

<b>Core Responsibilities and Internal Services</b>	<b>2020–21 Main Estimates</b>	<b>2020–21 Planned Spending</b>	<b>2021–22 Planned Spending</b>	<b>2022–23 Planned Spending</b>	<b>2020–21 Total Authorities Available for Use</b>	<b>2020–21 Actual Spending (authorities used)</b>	<b>2019–20 Actual Spending (authorities used)</b>	<b>2018–19 Actual Spending (authorities used)</b>
Taking action on Clean Growth and Climate Change	845,293,508	845,293,508	540,359,130	284,689,573	827,222,224	495,862,449	391,473,954	341,084,047
Preventing and Managing Pollution	360,417,473	360,417,473	356,702,104	339,022,613	378,605,198	360,265,374	370,747,565	348,236,529
Conserving Nature	319,257,213	319,257,213	325,886,137	313,718,807	373,649,076	366,851,749	293,277,471	242,306,745
Predicting Weather and Environmental Conditions	255,482,742	255,482,742	270,383,537	274,047,688	270,083,089	252,729,020	260,270,783	237,877,381
<b>Subtotal</b>	<b>1,780,450,936</b>	<b>1,780,450,936</b>	<b>1,493,330,908</b>	<b>1,211,478,681</b>	<b>1,849,559,587</b>	<b>1,475,708,592</b>	<b>1,315,769,773</b>	<b>1,169,504,702</b>
Internal Services	202,522,526	202,522,526	205,816,512	202,989,859	271,598,090	271,077,996	229,894,848	223,849,990
<b>Total</b>	<b>1,982,973,462</b>	<b>1,982,973,462</b>	<b>1,699,147,420</b>	<b>1,414,468,540</b>	<b>2,121,157,677</b>	<b>1,746,786,588</b>	<b>1,545,664,621</b>	<b>1,393,354,692</b>

The 2020–21 planned spending figures in the Departmental Results Report reflect those that had been published in the 2020–21 DP. It was tabled in Parliament prior to Budget 2021 and therefore does not reflect new funding announced in the Budget.

The 2020–21 Total authorities available for use includes all items approved through the Estimates processes for fiscal year 2020–21. The overall variance of \$138.2 million between the 2020–21 Total authorities available for use (\$2,121.2 million) and the 2020–21 planned spending (\$1,983.0 million) is mainly attributed to the following:

- An increase in authorities to the following initiatives:
  - Protecting Canada's Nature, Parks and Wild Spaces (Southern Mountain Caribou);
  - Climate Action Incentive Fund;
  - Youth Employment and Skills Strategy to support students and youth impacted by COVID- 19;
- Operating and Capital Budget Carry Forwards from 2019–20; and
- Compensation allocations from TBS related to new collective agreements.

The overall \$374.4 million variance between the 2020–21 Total authorities available for use (\$2,121.2 million) and 2020–21 actual spending (\$1,746.8 million) is mostly explained by the following:

- A reprofile of funds for the Low Carbon Economy Fund, as the Provinces and Territories have been delayed in submitting proposals to access the funding notionally allocated to them. Therefore, less spending than anticipated occurred in 2020–21;
- Additional reprofile of funds moved into future years for Adapting Canada's Weather and Water Services, Strong Arctic and Northern Communities and Revitalization of Canada's Weather Services;
- Unspent funds in the Operating and Capital vote being carried forward to 2020–21 to provide the Department with the additional flexibility it requires to fund pressures and address strategic investments.

The overall \$201.1 million increase between the 2019–20 actual spending of \$1,545.7 million and the 2020–21 actual spending of \$1,746.8 million is mainly due to the following variances in funding:

- Taking action on Clean Growth and Climate Change: The actual spending for 2020–21 is higher than the actual spending for 2019–20 mainly due to increased spending for the Climate Action Incentive Fund, the Assessed Contribution to the Commission for Environmental Cooperation (CEC), and the Low Carbon Economy Fund.
- Preventing and Managing Pollution: The actual spending for 2020–21 is lower than the actual spending for 2019–20 mainly due to decreased spending for the Federal Contaminated Sites Action Plan, Addressing Air Pollution and Chemicals Management Plan. This is offset by increased spending related to Federal Leadership towards Zero Plastic Waste in Canada.
- Conserving Nature: The actual spending for 2020–21 is higher than the actual spending for 2019–20 mainly due to increased spending related to Protecting Canada's Nature, Parks & Wilds Spaces (Southern Mountain Caribou) and the Impact Assessment and Regulatory Regime Implementation.
- Predicting Weather and Environmental Conditions: The actual spending for 2020–21 is lower than the actual spending for 2019–20 mainly due to decreased spending for the Revitalization of Canada's Weather Services, Strong Arctic and Northern Communities, and initiatives supporting Clean Growth and Climate Change. This is offset by increased spending related to the Oceans Protection Plan.
- Internal Services: The actual spending for 2020–21 is higher than the actual spending for 2019–20 mainly due to increased spending related to new funding received in 2020–21 for various initiatives such as Youth Employment and Skills Strategy to support students and youth impacted by COVID- 19.

**2020–21 Budgetary actual gross spending summary (dollars)**

<b>Core Responsibilities and Internal Services</b>	<b>2020–21 Actual gross spending</b>	<b>2020–21 Actual gross spending for specified purpose accounts</b>	<b>2020–21 Actual revenues netted against expenditures</b>	<b>2020–21 Actual net spending (authorities used)</b>
Taking action on Clean Growth and Climate Change	496,062,449	0	200,000	495,862,449
Preventing and Managing Pollution	373,146,797	0	12,881,423	360,265,374
Conserving Nature	369,685,076	0	2,833,327	366,851,749
Predicting Weather and Environmental Conditions	301,602,127	0	48,873,107	252,729,020
<b>Subtotal</b>	<b>1,540,496,449</b>	<b>0</b>	<b>64,787,857</b>	<b>1,475,708,592</b>
Internal Services	272,085,180	0	1,007,184	271,077,996
<b>Total</b>	<b>1,812,581,629</b>	<b>0</b>	<b>65,795,041</b>	<b>1,746,786,588</b>

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

- NavCan to whom ECCC provides aviation weather services;
- Canadian Coast Guard, who receive marine and ice monitoring forecasts and services;
- Provinces who receive water quantity monitoring services (Hydrometric);
- Canadian Association of Petroleum Producers who fund the Joint Canada-Alberta implementation Plan for Oil Sands;
- Department of National Defense who receive detailed weather services in support of its military operations; and
- Third parties to whom ECCC provides a permit to dispose of non-hazardous substances into the sea.

## Actual human resources

### Human resources summary for Core Responsibilities and Internal Services (full-time equivalents - FTEs)

Core responsibilities and Internal Services	2018–19 Actual full-time equivalents	2019–20 Actual full-time equivalents	2020–21 Planned full-time equivalents	2020–21 Actual full-time equivalents	2021–22 Planned full-time equivalents	2022–23 Planned full-time equivalents
Taking action on Clean Growth and Climate Change	509	593	580	611	570	511
Preventing and Managing Pollution	2,196	2,293	2,218	2,232	2,089	2,029
Conserving Nature	1,027	1,176	1,205	1,197	1,192	1,179
Predicting Weather and Environmental Conditions	1,627	1,706	1,617	1,700	1,718	1,703
<b>Subtotal</b>	<b>5,359</b>	<b>5,768</b>	<b>5,260</b>	<b>5,740</b>	<b>5,569</b>	<b>5,422</b>
Internal Services	1,584	1,645	1,524	1,604	1,602	1,585
<b>Total</b>	<b>6,943</b>	<b>7,413</b>	<b>7,144</b>	<b>7,344</b>	<b>7,171</b>	<b>7,007</b>

The variance between actual and planned full-time equivalents (FTE) for 2020–21 is mainly due to an increase in salary authorities approved during the fiscal year for the Climate Action Incentive Fund, Funding to Implement British Columbia Agreements and Funding to modernize the enforcement of environmental laws and regulations. The planned spending presented in the DP 2020–21 did not include the planned FTEs for these initiatives. The increase is also due to higher salary spending related to Carbon Pricing, the Chemical Management Plan and Protecting Canada's Nature, Parks and Wild Spaces.



### **Expenditures by vote**

For information on Environment and Climate Change Canada's organizational votes and statutory expenditures, please consult the [Public Accounts of Canada 2020–21<sup>xcii</sup>](#).

### **Government of Canada spending and activities**

Information on the alignment of Environment and Climate Change Canada's spending with the Government of Canada's spending and activities is available on the [GC InfoBase<sup>xciii</sup>](#).

## Financial Statements and Financial Statements Highlights

### Financial Statements

Environment and Climate Change Canada's (ECCC) unaudited financial Statements for the year ended March 31, 2021, are available on [ECCC's transparency page<sup>xciiv</sup>](#).

### Financial Statements Highlights

#### Condensed Statement of Operations (unaudited) for the year ended March 31, 2021 (dollars)

Financial Information	2020–21 Planned Results	2020–21 Actual	2019–20 Actual	Difference (2020–21 actual minus 2020–21 planned)	Difference (2020–21 actual minus 2019–20 actual)
<b>Total expenses</b>	2,157,376,723	1,885,234,296	1,713,994,950	-272,142,427	171,239,346
<b>Total revenues</b>	105,373,108	131,984,988	294,980,773	26,611,880	-162,995,785
<b>Net cost of operations before government funding and transfers</b>	2,052,003,615	1,753,249,308	1,419,014,177	-298,754,307	334,235,131

ECCC's 2020–21 Future-Oriented Statement of Operations are available on [ECCC's transparency page<sup>xciiv</sup>](#).

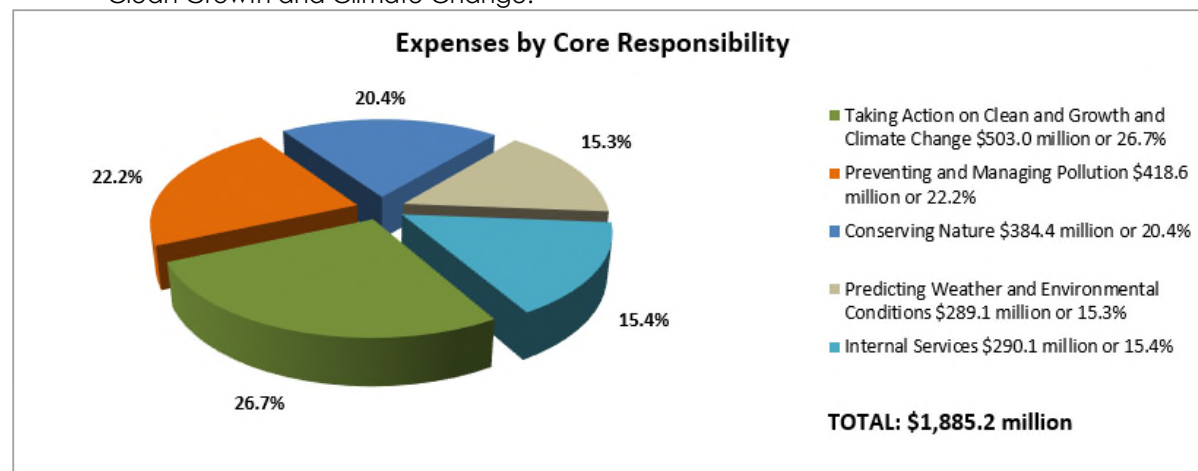
### Expenses by Core Responsibility

Total departmental expenses by Core Responsibility amounted to \$1,885.2 million for 2020–21 (\$1,714.0 million for 2019–20). The increase of \$171.2 million or 10.0 percent in ECCC's expenses is mainly attributable to:

- an increase in spending for temporary initiatives such as the Climate Action Incentive Fund and Southern Mountain Caribou as well as an increase in the lease payment for the Pacific Environmental Centre (PEC);
- a general increase in salaries and employee benefits following the ratification and signing of collective agreements;

offset by:

- a decrease in spending for temporary initiatives such as the Chemical Management Plan and Clean Growth and Climate Change.



See Note 16 of the Departmental Financial Statements for a further breakdown of expenditures – Segmented information by Standard Objects and Core Responsibilities.

## Revenues by Type

Total revenues amounted to \$132.0 million for 2020–21 (\$295.0 million for 2019–20). This amount excludes \$170.4 million earned on behalf of Government. Revenues at ECCC come from sales of goods and information products and services of a non-regulatory nature. Major revenue items include, for example: Oil Sands monitoring activities, Ocean disposal permit applications, Hydrometric services, Ocean disposal monitoring fees, Weather and environmental services as well as fines and court orders directed to the Environmental Damages Fund.

The decrease in ECCC's revenue is mainly attributable to a \$196.5M fine to Volkswagen AG after contravening the *Canadian Environmental Protection Act, 1999* in 2019–20 offset by a \$58.0M fine to Teck Coal Limited for unlawfully depositing a deleterious substance into water frequented by fish under the *Fisheries Act* in 2020–21.

## Condensed Statement of Financial Position (unaudited) as of March 31, 2021 (dollars)

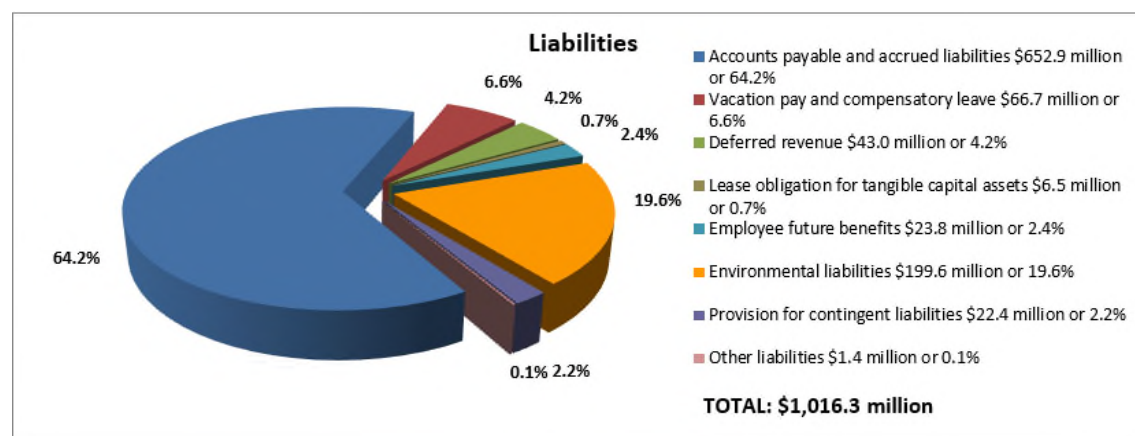
Financial Information	2020–21	2019–20 (restated)	Difference (2020–21 minus 2019–20)
<b>Total net liabilities</b>	1,016,348,122	804,183,189	212,164,933
<b>Total net financial assets</b>	635,110,201	446,231,788	188,878,413
<b>Departmental net debt</b>	381,237,921	357,951,401	23,286,520
<b>Total non-financial assets</b>	558,797,073	506,463,335	52,333,738
<b>Departmental net financial position</b>	177,559,152	148,511,934	29,047,218

## Liabilities by Type

Total liabilities were \$1,016.3 million at the end of 2020–21. This represents an increase of \$212.2 million or 26.4 percent from the previous year's total liabilities of \$804.2 million. The accounts payable and accrued liabilities (\$652.9 million) and the environmental liabilities (\$199.6 million) are the largest components of liabilities in 2020–21 and represent 83.9 percent of total liabilities.

The increase in ECCC's total net liabilities valuation is mainly attributable to:

- an increase in accounts payable and accrued liabilities mostly resulting from an increase in payables at year-end in Grants and Contributions;
- an increase in vacation pay; and,
- an increase in deferred revenues primarily relating to the Randle Reef Remediation Project.



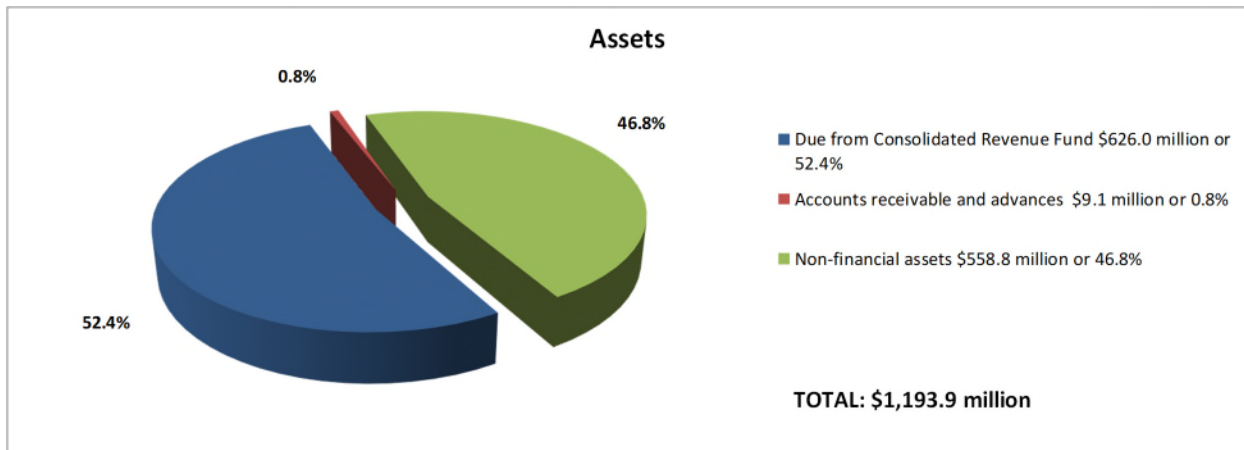
See Notes 4 to 8 and Notes 12 and 13 of the Departmental Financial Statements for more details – Accounts payable and accrued liabilities; Environmental liabilities; Deferred revenue; Lease obligation for tangible capital assets; Employee future benefits; Contractual obligations and contractual rights; Contingent liabilities and contingent assets.

**Assets by Type**

Total net financial assets (\$635.1 million) and non-financial assets (\$558.8 million) of \$1,193.9 million have increased by \$241.2 million or 25.3 percent in 2020–21. The amount due from the Consolidated Revenue Fund represents the largest component of assets at \$626.0 million (52.4 percent of total assets) in 2020–21.

The increase in ECCC's total net assets valuation is mainly attributable to:

- an increase in financial assets due from the Consolidated Revenue Fund mostly resulting from an increase in payables at year-end in Grants and Contributions;
- an increase in prepaid expense primarily explained by the Pacific Environmental Centre lease payment made to the Squamish Nation late in March; and
- an increase in tangible capital assets.



See Notes 9 to 11 of the Departmental Financial Statements for more details – Accounts receivable and advances; Inventory; Tangible Capital Assets.

## Corporate information

### Organizational profile

<b>Appropriate minister:</b>	The Honourable Steven Guilbeault, P.C., M.P.
<b>Institutional head:</b>	T. Christine Hogan
<b>Ministerial portfolio:</b>	Environment and Climate Change Canada

#### Enabling instruments:

- [Department of the Environment Act, 1971<sup>xcvi</sup>](#)
- [Canadian Environmental Protection Act, 1999<sup>xcvii</sup>](#)
- [Fisheries Act, 1985<sup>xcviii</sup>](#) (administration and enforcement of the Pollution Prevention Provisions)
- [Greenhouse Gas Pollution Pricing Act, 2018<sup>xcix</sup>](#) (joint responsibility with Finance Canada)
- [Species at Risk Act, 2004<sup>e</sup>](#)
- [Manganese-based Fuel Additives Act, 1997<sup>ci</sup>](#)
- [Antarctic Environmental Protection Act, 2003<sup>cii</sup>](#)
- [Perfluorooctane Sulfonate Virtual Elimination Act, 2008<sup>ciii</sup>](#)
- [Canada Wildlife Act, 1985<sup>civ</sup>](#)
- [Migratory Birds Convention Act, 1994<sup>cv</sup>](#)
- [Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act, 1992<sup>cvi</sup>](#)
- [National Wildlife Week Act, 1985<sup>cvii</sup>](#)
- [Canada Water Act, 1985<sup>cviii</sup>](#)
- [International River Improvements Act, 1985<sup>cix</sup>](#)
- [Lake of the Woods Control Board Act, 1921<sup>cx</sup>](#)
- [Canada Emission Reduction Incentives Agency Act, 2005<sup>cx</sup>](#)
- [Weather Modification Information Act, 1985<sup>cxii</sup>](#)
- [Canadian Environmental Week Act, 1985<sup>cxiii</sup>](#)
- [Environmental Enforcement Act, 2010<sup>cxiv</sup>](#)
- [Environmental Violations Administrative Monetary Penalties Act, 2009<sup>cxv</sup>](#)
- [Federal Sustainable Development Act, 2008<sup>cxvi</sup>](#)
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- [Nunavut Planning and Project Assessment Act, 2013<sup>cxxvii</sup>](#)
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- [Yukon Environmental and Socio-economic Assessment Act, 2003<sup>cxxix</sup>](#)

**Year of incorporation/commencement:** 1971

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

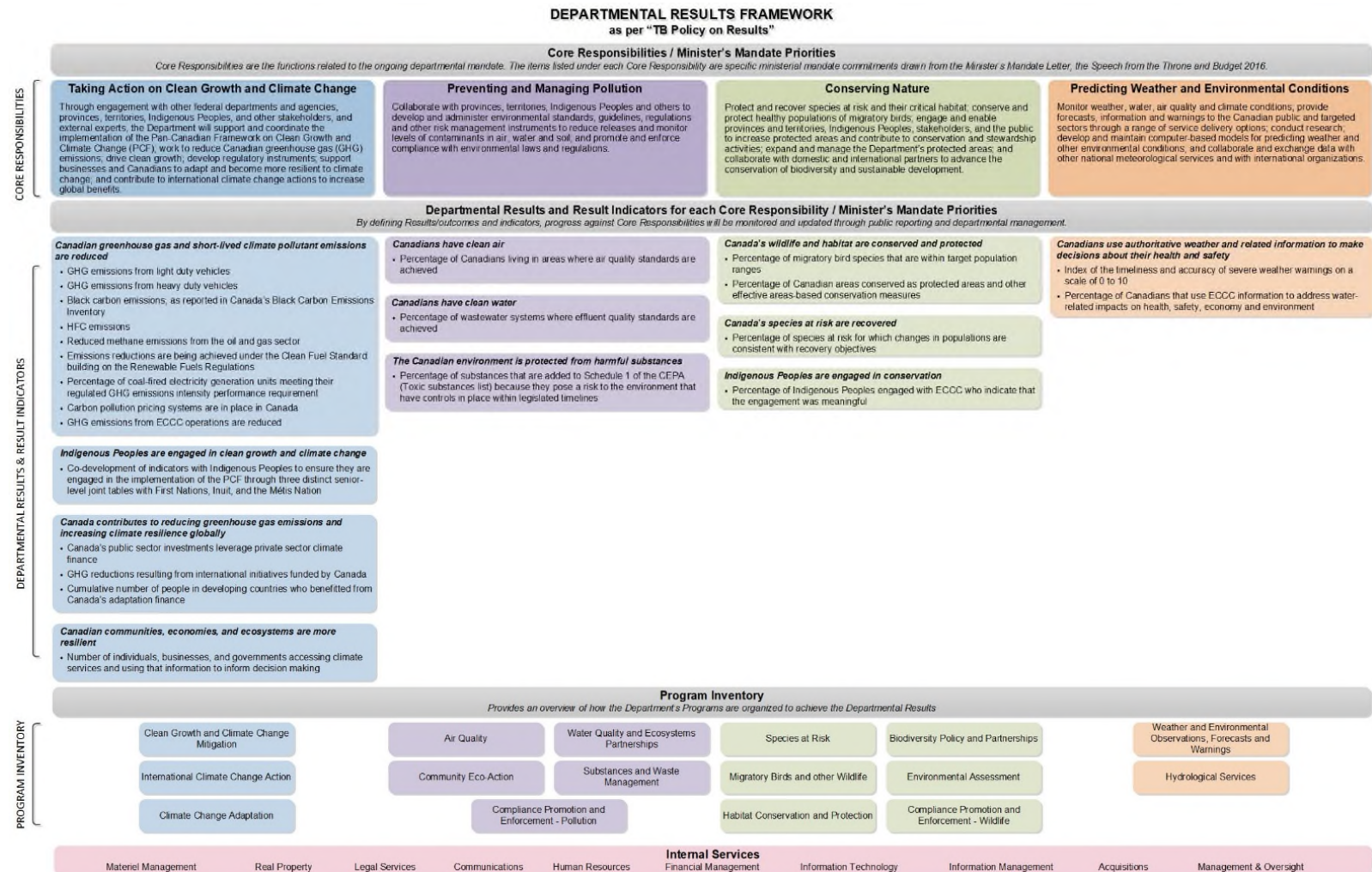
"Raison d'être, mandate and role: who we are and what we do" is available on [Environment and Climate Change Canada's website<sup>cxxx</sup>](#).

### **Operating context**

Information on the operating context is available on [Environment and Climate Change's website<sup>cxxxi</sup>](#).

## Reporting framework

Environment and Climate Change Canada's Departmental Results Framework and Program Inventory of record for 2020–21 are shown below.



## Supporting information on Program Inventory

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

## Supplementary information tables

The following supplementary information tables are available on Environment and Climate Change Canada's [website<sup>cxxxiii</sup>](#).

- Departmental Sustainable Development Strategy;
- Details on Transfer Payment Programs
- Gender-based analysis plus;
- Horizontal initiatives;
- Response to parliamentary committees and external audits; and
- Up-front multi-year Funding.

## Federal tax expenditures

The tax system can be used to achieve public policy objectives through the application of special measures such as low tax rates, exemptions, deductions, deferrals and credits. The Department of Finance Canada publishes cost estimates and projections for these measures each year in the [Report on Tax Expenditures<sup>cxxxiv</sup>](#). This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs as well as evaluations and Gender-based analysis plus of tax expenditures.

## 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<sup>cxxxv</sup>](mailto: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 report on the plans and expected performance of an appropriated department over a 3-year period. Departmental Plans are usually tabled in Parliament each spring.

### **departmental priority (priorité)**

A plan or project that a department has chosen to focus and report on during the planning period. Priorities represent the things that are most important or what must be done first to support the achievement of the desired departmental results.

### **departmental result (résultat ministériel)**

A consequence or outcome that a department seeks to achieve. 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 quantitative measure of progress on a departmental result.

### **departmental results Framework (cadre ministériel des résultats)**

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 accomplishments against the plans, priorities and expected results set out in the corresponding Departmental Plan.

### **experimentation (expérimentation)**

The conducting of activities that seek to first explore, then test and compare the effects and impacts of policies and interventions in order to inform evidence-based decision-making, and improve outcomes for Canadians, by learning what works, for whom and in what circumstances. Experimentation is related to, but distinct from innovation (the trying of new things), because it involves a rigorous comparison of results. For example, using a new website to communicate with Canadians can be an innovation; systematically testing the new website against existing outreach tools or an old website to see which one leads to more engagement, 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. For a particular position, the full-time equivalent figure is the ratio of number of hours the person actually works divided by the standard number of hours set out in the person's collective agreement.

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

An analytical process used to assess how diverse groups of women, men and gender-diverse people experience policies, programs and services based on multiple factors including race ethnicity, religion, age, and mental or physical disability.

**government-wide priorities (priorités pangouvernementales)**

For the purpose of the 2020–21 Departmental Results Report, those high-level themes outlining the government's agenda in the 2019 Speech from the Throne, namely: Fighting climate change; Strengthening the Middle Class; Walking the road of reconciliation; Keeping Canadians safe and healthy; and Positioning Canada for success in an uncertain world.

**horizontal initiative (initiative horizontale)**

An initiative where 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.

**performance indicator (indicateur de rendement)**

A qualitative or quantitative means of measuring an output or outcome, with the intention of gauging the performance of an organization, program, policy or initiative respecting expected results.

**performance reporting (production de rapports sur le rendement)**

The process of communicating evidence-based performance information. Performance reporting supports decision-making, accountability and transparency.

**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 to the expected result.

**planned spending (dépenses prévues)**

For Departmental Plans and Departmental Results Reports, planned spending refers to those amounts presented in 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 the department and focus on a specific set of outputs, outcomes or service levels.

**result (résultat)**

A 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

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