



Environment and  
Climate Change Canada

Environnement et  
Changement climatique Canada



# Environment and Climate Change Canada

2018–19

Departmental Plan

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The Honourable Catherine McKenna, P.C., M.P.  
Minister of Environment and Climate Change

Canada 

2018–19 Departmental Plan

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## Minister's message



As the Minister of Environment and Climate Change Canada (ECCC), I am pleased to present the 2018–19 Departmental Plan.

The Government of Canada believes that a strong economy and healthy environment go hand-in-hand. This underpins ECCC's forward planning. The current document describes the Department's plans and priorities and sets out the results ECCC is working towards for Canadians.

The challenges of climate change must be addressed in order to create and secure a better future for next generations. Implementing the Pan-Canadian Framework (PCF) on Clean Growth and Climate Change over the coming year continues to be an essential step towards securing that future.

To this end, we will continue to engage with provinces, territories, Indigenous peoples, external experts and others to improve collaborative outcomes under the PCF. We will collectively step up our efforts to reduce greenhouse gas emissions, drive clean growth, develop efficient regulatory instruments, support adaptation and resilience to climate change, implement carbon pricing, leverage investments in the low carbon economy, and contribute to international climate change actions.

My officials and I will also partner with other jurisdictions to drive global climate action internationally, including through the Ministerial on Climate Action, which we co-chair with the European Union and China, the Powering Past Coal Alliance, with the United Kingdom, to encourage the global phase-out of coal-generated electricity and the management of substances harmful to human health and the environment. We will remain a valuable contributor in international fora, such as the annual UN Climate Change Conference to advance the Paris Agreement and the Montreal Protocol Conference and we will play a strong leadership role supporting Canada's G7 Presidency, working together on climate change, oceans and clean energy.

In 2018–19, we will also work to prevent further decline, and build sustainable populations of species at risk, support and enhance biodiversity across Canada, and expand Canada's National Wildlife Areas, Migratory Bird Sanctuaries, and protected areas. This work will be possible due to the historic investment of \$1.3 billion over five years in nature conservation announced in Budget 2018.

The Government is delivering on its commitment to establish better rules governing the review of major projects. The new rules governing environmental assessment and regulatory processes will protect our environment, fish and waterways, restore public trust, and help create new jobs and economic opportunities. This process will ensure that cumulative effects are better considered and that science and Indigenous traditional knowledge are applied to strengthen the assessments.

Budget 2018 proposed funding of \$130.3 million over five years to complete the modernization of Canada's weather forecast and severe weather warning systems, and to revitalize water monitoring stations and improve water forecasts. These new measures will help provide accurate and up-to-date data to Canadians on weather and environmental conditions. This includes exploring and applying new technology to help improve the accuracy and timeliness of weather, water and other environmental information.

ECCC's recently-deployed supercomputer will further integrate data and provide applications well beyond current weather and environmental forecasting capabilities.

I invite you to read this Plan for details on the priorities of ECCC, and our commitment to deliver on them as we work towards a cleaner and more prosperous future.

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The Honourable Catherine McKenna, P.C., M.P.  
Minister of Environment and Climate Change

## Plans at a glance

### Taking action on clean growth and climate change



implementation of the PCF: engaging all partners, including Indigenous peoples (see sidebar) and external experts on clean growth and climate change will remain a focus.

ECCC will work with all provinces and territories to put a price on carbon across the country, finance clean growth innovation and initiatives that reduce greenhouse gas emissions (GHGs) and create jobs through the Low Carbon Economy Fund.

The Department will also establish the new Canadian Centre for Climate Services, which will provide a central access point for environmental data, information, tools and climate models to support a wide range of needs and users.

Canada will continue to drive action on climate change, oceans and clean energy. Canada will host the G7 Leaders' Summit in June of 2018 and will advance the implementation of the Paris Agreement at the Conference of the Parties 24 (CoP 24) in December 2018 so that climate action can be assured for generations to come.

Canada will continue to strengthen international relationships and will ensure that bilateral and multilateral free trade agreements reflect Canada's environmental priorities.

The Department will continue to advance regulatory initiatives aimed at reducing GHG emissions. The regulatory work to reduce short-lived climate pollutants such as black carbon, methane, ground-level ozone and hydrofluorocarbons (HFCs) continues also to be a priority. As such, ECCC will finalize regulations to limit GHG emissions from heavy-duty vehicles and continue administration of regulations to limit GHG emissions from light-duty vehicles, establish a clean fuel standard, and reduce methane from the oil and gas sector, oil and gas sector, as well as updating regulations to accelerate the phase out of traditional coal-fired electricity.

### Preventing and managing pollution

ECCC will continue to protect Canadians and the environment from harmful substances through scientific assessments of substances and by developing and implementing control measures, such as regulations. In 2018–19, the Department will implement the regulations to ban asbestos in Canada, limit toxic emissions from refineries and petrochemical plants, and reduce contaminants in effluent from mining.

As one of the country's great natural resources, Canada's freshwater lakes and rivers serve economic and recreational needs, provide drinking water to millions of Canadians and support diverse wildlife species. The Department will collaborate with communities, provincial and Indigenous partners to improve water quality.

The Department remains committed to implementing the Pan-Canadian Framework (PCF) on Clean Growth and Climate Change.

Partnerships and evidence-based decision-making are key to the successful and ongoing

#### Engaging Indigenous peoples in clean growth and climate change

As part of the government's commitment to renew its relationship with Indigenous peoples and in our steps on the journey of reconciliation, ECCC will engage Indigenous peoples in clean growth and climate change initiatives and decisions. ECCC will collaborate with First Nations (Assembly of First Nations), the Métis (Métis National Council) and the Inuit (Inuit Tapiriit Kanatami). These partners will bring their perspectives and knowledge to discussions and decisions and strengthen their involvement in issues that have unique and disproportionate impacts of climate change on Indigenous peoples, particularly those in coastal, northern and remote areas.

#### Commitment to Experimentation: Sentencing Panel Work

ECCC is continuing the work it began on the initiative to standardize sentencing recommendations with the view to increasing penalties. Appropriately significant penalties have a deterrence effect, reducing the amount of violations of federal environmental legislation, which in turn reduces the amount of damage caused to the environment. Fines imposed by the courts for violations of federal environmental legislation are directed to the Environmental Damages Fund, which provides funding for projects that benefit the environment.

Protecting Canada's coastal communities and species is a federal priority. As such, the Department will contribute its scientific expertise and strengthen its capacity to respond to marine environmental emergencies. Moreover, ECCC will conduct inspections and administer programs such as Disposal at Sea, which contribute to the protection of whales and other species from ocean pollution.

ECCC will also continue to work to improve Canada's air quality to further protect the health and environment of Canadians, including by continuing to collaborate with Health Canada and provincial, territorial and Indigenous partners to implement the Air Quality Management System.

### **Conserving nature**

To protect biodiversity and critical habitat for species at risk, the Department will implement Canada's Natural Legacy, which represents one of the largest investments in nature conservation in Canadian history. ECCC will collaborate with partners at home to make contributions towards Canada's ambitious goal of conserving 17% of the country's terrestrial areas and inland water, and 10 percent of coastal and marine areas, by 2020.



ECCC will also continue to protect migratory birds and species at risk through, for instance, the establishment of protected areas. In 2018 the department will continue to advance the designation of the Scott Islands marine National Wildlife Area as an important habitat for migratory birds.

In addition, ECCC will focus efforts on protecting the populations and habitats of a number of priority species, such as Caribou. In support of the protection of caribou habitat, Edézhíe National Wildlife Area will be designed and managed together with the Dehcho First Nations. Finally, work will begin on the Nature Fund with corporate, not-for-profit, provincial, territorial and other partners to make it possible to secure private land, support provincial and territorial species protection efforts, and help indigenous capacity to conserve land and species.

Under the proposed new system of impact assessment, ECCC will continue to provide expert advice and knowledge in support of impact assessments for subjects within its mandate. In addition, it will support the development of a new approach to cumulative effects, to help address broad issues associated with development.

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

As climate change contributes to more severe weather events, ECCC will place greater emphasis on collecting and communicating severe weather information. New radar and supercomputing will contribute to the Department's increased ability to provide accurate and timely warnings of weather events, such as storms, tornados and flooding. Communities, economic sectors, and targeted users will continue to benefit from ECCC's 24/7 weather and environmental information.

New investments, through Budget 2018, will enable ECCC to improve the weather and water services Canadians receive by strengthening the science underpinning these services and enhancing our ability to deliver earlier and more accurate information about environmental conditions and extremes such as severe weather and flooding. ECCC will improve the physical infrastructure as well as the technical and engineering capacity supporting the water quantity-monitoring program. It will investigate innovative new technologies for water measurement and further develop ECCC's capacity to produce water forecasts.

#### **Commitment to Experimentation: Implementation of User Experience Research and Design for the Federal Sustainable Development Strategy (FSDS) Progress Report**

ECCC will implement the results of a User Centred Design approach aimed at identifying, understanding and meeting the FSDS Progress Report user needs. The approach was based on an iterative design process and usability testing focused on observing real users completing real tasks related to the FSDS.

For more information on Environment and Climate Change Canada's plans, priorities and the planned results, see the "[Planned results](#)" section of this report.



## Planned results: what we want to achieve this year and beyond

### 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.

##### Planning highlights



ECCC will continue to lead the implementation of the Pan-Canadian Framework (PCF) on Clean Growth and Climate Change, which will include ensuring that carbon pricing is in place throughout Canada. The Department will work with provinces and territories as they develop their carbon pricing systems and will put in place a federal backstop pricing system for provinces that

choose it or that do not have their own systems in place in 2018 that align with the federal standard (see sidebar).

The Government of Canada's \$2 billion [Low Carbon Economy Fund](#)<sup>i</sup> (LCEF) is an important part of the PCF. The Fund supports the PCF implementation by leveraging investments in projects that will generate innovation and clean growth, and reduce greenhouse gas emissions towards meeting or exceeding commitments under the Paris Agreement.

The LCEF will provide funding over the next five years. The Department will assess proposals so that funding agreements are in place and projects can begin in 2018.

The \$2 billion LCEF is comprised of two parts:

- The Leadership Fund will continue to provide funding to provinces and territories that have adopted the PCF to help them deliver on commitments to reduce greenhouse gas emissions. The Leadership Fund will see wide-ranging investments: support for the preservation of forests, energy-saving renovations at home, commercial buildings, and assistance for small businesses and homeowners to reduce their energy bills.
- The Challenge Fund will support ambitious projects that can be submitted by all provinces and territories, municipalities, Indigenous governments and organizations, as well as businesses and not-for-profit and for-profit organizations. It will leverage ingenuity across the country to reduce emissions and generate clean growth.

##### Carbon Pricing

97 per cent of Canadians live in provinces that are either working towards or already have a price on carbon pollution. Carbon pricing is a low-cost way to reduce pollution and create incentives for companies to innovate and create cleaner solutions. Ensuring polluters pay in every province is central to a credible plan to tackle climate change.

Revenues generated from carbon pricing will remain in the jurisdiction of origin.

##### Commitment to Experimentation: RegPal: Regulation Discovery Tool

A challenge for businesses to comply with those regulations to which they are subject may be lack of a means to easily identify and find relevant federal regulations. RegPal intends to be a quick and efficient digital solution for businesses and stakeholders to find regulations that may apply to them. Through a User Experience Design lens, identifying, understanding and meeting user needs will be of utmost importance. This could have a positive impact for Canadians through ease of use, accountability, availability of information, and regulatory compliance.

The Department will establish a new Canadian Centre for Climate Services. The Centre will be the authoritative federal access point for climate change information, products and tools. It will provide accurate and timely information for emergency management and community planning in collaboration with provinces and territories. An online portal will be launched in 2018 through which users will have access to easy-to-use maps and interpretive products and services for practical planning and decision-making. The importance of sharing climate change information, products and tools was emphasized in recommendations of the [horizontal evaluation of the Clean Air Agenda Adaptation Theme](#)<sup>ii</sup>.

Transparent and informed decision-making that is supported by scientific evidence is necessary to ensure that actions taken in support of the PCF are effective in helping Canada achieve its 2030 target. ECCC will engage external experts to assess the effectiveness of PCF measures and identify best practices.

A robust regulatory agenda will be applied to combat climate change by reducing GHGs and short-lived climate pollutants (SLCPs) and to advance Canada's clean growth and climate change goals. ECCC will:

- develop the clean fuel standard, building on the Renewable Fuels Regulations, to a 30 megatonnes annual reduction in 2030;
- finalize regulations to reduce methane emissions from the oil and gas sector;
- update regulations for coal-fired electricity and propose complementary regulations for natural-gas fired electricity, to support the goal of 90 per cent non-carbon emitting electricity by 2030;
- phase down hydrofluorocarbons (HFCs) consumption;
- finalize regulations to reduce emissions from heavy-duty vehicles;
- continue to implement regulations to reduce emissions from light-duty vehicles; and
- continue developing regulations to reduce emissions from new stationary diesel (compression-ignition) engines.

ECCC will also continue implementing ECCC's SLCP Strategy which outlines enhanced actions related to SLCP mitigation, science, domestic coordination and collaboration, and international engagement.

Canada's regulatory agenda is intended to benefit all Canadians, including by alleviating impacts on vulnerable demographic groups. For example, melting permafrost, sea ice, lake ice, and snow affect resource-dependent, northern and coastal communities, including a significant number of Indigenous communities.

Minister McKenna will be at the helm of the [Canadian Council of Ministers of the Environment](#)<sup>iii</sup> (CCME) for 2018. The CCME is Canada's forum for collective action on environmental issues of national and international concern. The Minister will host a meeting with her provincial and territorial counterparts in Ottawa in 2018. This will be an important opportunity to tackle critical issues facing Canadians including climate change, clean air, clean water and clean growth, and to work collaboratively with Indigenous leaders on shared priorities.

The Minister and the Department will continue to demonstrate their commitment to taking action on climate change by playing a leadership role at key fora, and in meeting international commitments and obligations.

Canada will host the G7 Leaders' Summit in the Charlevoix region of Québec in June, 2018. In its capacity as G7 president, Canada will put forward an ambitious and progressive agenda. Canada's themes for the Summit include climate change, oceans, and clean energy. Minister McKenna will also host a meeting with her counterparts in the fall, as well as a women climate leaders event.

Canada will also host the [2018 Global Methane Forum](#)<sup>iv</sup>, bringing together governments, private sector experts and innovators to consider and commit to ways to further reduce methane emissions from all sectors.

As part of its ongoing commitment to taking action on climate change, the Department will advance Canada's priorities in the 24th session of the Conference of the Parties (COP 24) to the United Nations Framework Convention on Climate Change (UNFCCC) in Poland in December 2018. As a leader in the

UNFCCC, Canada will advocate for the implementation of the Paris Agreement and the operationalization of the Local Communities and Indigenous peoples Platform. In addition, Canada will continue advocating for the mainstreaming of gender perspective into all elements of global climate action, including through the UNFCCC Gender Action Plan. Canada will further demonstrate global leadership on climate change and the Paris Agreement by co-convening the Ministerial on Climate Action together with China and the European Union.

The Department will also promote the global reduction of GHGs through the 20-partner [Powering Past Coal Alliance](#)<sup>v</sup>. The Alliance brings together a diverse group of governments, businesses, and organizations united in taking action to accelerate clean growth and climate protection through the rapid phase-out of traditional coal power.

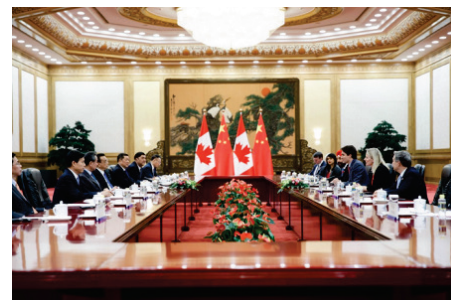
Canada will pursue meeting its obligations under the Montreal Protocol, including reducing consumption of HFCs, in accordance with the Kigali amendment. The Montreal Protocol is designed to phase out the production and consumption of ozone-depleting substances to protect the earth's fragile ozone layer. The Montreal Protocol, with its Kigali Amendment to phase down HFCs, will directly contribute to the objectives of the Paris Agreement and the UNFCCC, while continuing to protect the earth's ozone layer.

Canada is committed to supporting climate action in developing countries, in particular the poorest and most vulnerable, and will continue delivering on its \$2.65 billion pledge by 2020 to help them transition to low-carbon and resilient economies. This support will be delivered consistently with the Government of Canada's [Feminist International Assistance Policy](#)<sup>vi</sup>.

#### Collaboration with China

Under the December 2017 Canada-China Joint Leaders Statement on Climate Change and Clean Growth, the two countries will champion the transition to a competitive low-carbon economy and society, and will collaborate on issues related to climate change, renewable energy, clean technology, and emissions trading, through a range of high-level dialogue mechanisms. Canada will continue its leadership role in the [China Council for International Cooperation on Environment and Development](#)<sup>vii</sup>.

Canada's clean growth and climate change and other environmental priorities, including GHG reductions, will be reflected in environmental provisions of bilateral and multi-lateral trade agreements and relationships, including those with the European Union, the U.S., Mexico, China (see sidebar), and key economic organizations.



In addition to global efforts to address climate change, ECCC will continue to support the Government of Canada's low-carbon goal of a 40% reduction in GHGs from its operations by 2030 (over 2005–06 levels), through such initiatives as reducing its real property footprint and adopting green procurement practices within ECCC.

## Planned results

Departmental Result: Canadian greenhouse gas and short-lived climate pollutant emissions are reduced					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
GHG emissions from light duty vehicles	21.1% improvement in performance for manufacturer model year 2017 reporting relative to 2011 model year	2018	This is a new indicator. Results are not available from previous years.		
GHG emissions from heavy duty vehicles	Percentage improvement in GHG emissions performance for manufacturer model year 2018–2020 reporting relative to the 2010 model year: -13%: heavy-duty pick-up trucks and vans -11%: Combination Tractors -5%: Vocational vehicles	2020	This is a new indicator. Results are not available from previous years <sup>1</sup> .		
Black carbon emissions, as reported in Canada's Black Carbon Emissions Inventory	10.5Kt reduction by 2025 (Equivalent to 25% decrease from a baseline of national emissions of 42Kt in 2013)	2025	41Kt in 2014	38Kt in 2015	Results not yet available <sup>2</sup>
HFC emissions	10% reduction in consumption relative to 2017–18 levels	2019	This is a new indicator. Results are not available from previous years.		
Reduced methane emissions from the oil and gas sector	40–45% reduction, relative to 2012 levels	2025	This is a new indicator. Results are not available from previous years. <sup>3</sup>		
Emissions reductions are being achieved under the Clean Fuel Standard building on the Renewable Fuels Regulations	30 Mt annual GHG emissions reduction in 2030	2030	This is a new indicator. Results are not available from previous years.		
Percentage of coal-fired electricity generation units meeting their regulated GHG emissions intensity performance requirement	100%	Dec. 2019	100%	100%	100%
Carbon pricing systems are in place in Canada	13 Provinces and Territories have in place carbon pricing that meets the benchmark in 2018 or federal backstop applies	Dec. 2018	This is a new indicator. Results are not available from previous years.		
GHG emissions from ECCC operations	40% GHG emissions reduction relative to 22,793 tonnes in 2005–06 <sup>4</sup>	2030–31	4.7%	10.3%	23.1% <sup>5</sup>

<sup>1</sup> Quantitative results will be available commencing in 2019–20. Result reporting in 2018–19 will be qualitative.

<sup>2</sup> Due to the time required to receive, analyse and process data, results are not yet available.

<sup>3</sup> Quantitative results will be available commencing in 2019–20. Result reporting in 2018–19 will be qualitative.

<sup>4</sup> This is an interim target, established by TBS in its Greening Government Strategy, towards a full 80% reduction below 2005 levels by 2050.

<sup>5</sup> In 2015, the TBS Centre for Greening Government issued updated emissions factors for all federal organizations reporting GHG emissions from electricity consumption. Therefore, the 2016–17 results are not comparable to previous years' results.

<b>Departmental Result: Indigenous peoples are engaged in clean growth and climate change</b>					
<b>Departmental result indicators</b>	<b>Targets</b>	<b>Date to achieve target</b>	<b>2014–15 Actual results</b>	<b>2015–16 Actual results</b>	<b>2016–17 Actual results</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.	These indicators are developed by the target date (i.e. March 31, 2019).	March 31, 2019	This is a new indicator. Results are not available from previous years.		

<b>Departmental Result: Canada contributes to reducing greenhouse gas emissions and increasing climate resilience globally</b>					
<b>Departmental result indicators</b>	<b>Targets</b>	<b>Date to achieve target</b>	<b>2014–15 Actual results</b>	<b>2015–16 Actual results</b>	<b>2016–17 Actual results</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	March 31st of each year	This is a new indicator. Results are not available from previous years.		
GHG reductions resulting from international initiatives funded by Canada	Higher cumulative reductions from year to year, from the 2018–19 baseline, reaching minimum reduction of 200 Mt of GHGs.	Long term cumulative indicator	This is a new indicator. Results are not available from previous years.		
Number of people in developing countries who benefited from Canada's adaptation funds	Higher cumulative number of people in each consecutive year, reaching at least 10M people by 2030.	2030	This is a new indicator. Results are not available from previous years.		

<b>Departmental Result: Canadian communities, economies and ecosystems are more resilient</b>					
<b>Departmental result indicators</b>	<b>Targets</b>	<b>Date to achieve target</b>	<b>2014–15 Actual results</b>	<b>2015–16 Actual results</b>	<b>2016–17 Actual results</b>
Number of individuals, businesses, and governments accessing climate services and using that information to inform decision making <sup>6</sup>	Increase from baseline <sup>7</sup>	March 2021	This is a new indicator. Results are not available from previous years.		

<sup>6</sup> Annual reporting will relate to the number of individuals, businesses, and governments accessing climate services. Usage will be measured through a survey conducted every 5 years.

<sup>7</sup> Baseline will be established when the Canadian Centre for Climate Services (CCCS) has been functioning for one full year. It is expected that the CCCS will become operational in 2018–19, thus baseline will be set in 2019–20.

**Budgetary Financial Resources (dollars)\***

<b>2018–19 Main Estimates</b>	<b>2018–19 Planned spending</b>	<b>2019–20 Planned spending</b>	<b>2020–21 Planned spending</b>
575,300,731	575,300,731	570,276,685	578,444,049

\*All figures, throughout the document, are net of spendable revenues and do not reflect either potential investments and associated funding that were announced through the Federal Budget 2018, or potential funding that may be received if sunset initiatives are renewed.

**Human Resources (Full-Time Equivalents—FTEs)\*\***

<b>2018–19 Planned</b>	<b>2019–20 Planned</b>	<b>2020–21 Planned</b>
823	811	795

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

## Preventing and Managing Pollution

### Description

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

### Planning highlights

Pollutants and toxic substances are released into air, water and on land and, because they cross Canadian and international jurisdictions; collaborative efforts with partners are needed to prevent their release and reduce their impacts on human health and the environment.



### Chemicals

The [Chemicals Management Plan](#)<sup>viii</sup> (CMP) is a key program for protecting the environment and human health from the harmful effects of toxic substances under the Canadian Environmental Protection Act, 1999 (CEPA, 1999). CMP will progress with its [third phase](#)<sup>ix</sup>, which will see (by March 31, 2021) the remaining 1,550 priority chemicals (of 4,300 initially identified) be assessed and, if required, managed. In 2018–19, ECCC plans to publish draft screening assessment reports covering approximately 360 substances and final screening assessment reports covering approximately 370 substances. The Department will also assess approximately 500 new substances before their introduction to the Canadian market.

For the substances that are determined to be toxic to human health or the environment, risk management documents proposing potential risk management instruments will be published for consultation with stakeholders. These include a proposed Pollution Prevention Planning Notice for triclosan and a proposed Volatile Organic Compound (VOCs) Concentration Limits for Certain Products Regulations. ECCC will also publish final regulations to limit releases of VOCs, including petroleum and refinery gases, from Canadian petroleum refineries, upgraders, and certain petrochemical facilities, as well as [Prohibition of Asbestos and Asbestos Products Regulations](#)<sup>x</sup>.

To ensure the sound management of hazardous waste and hazardous recyclable material, the Department will continue to advance updates to regulations that control the international and interprovincial movements of these materials. ECCC will work with provincial and territorial governments through the [Canadian Council of Ministers of the Environment](#)<sup>xi</sup> and with many stakeholders to accelerate actions to reduce the amount of waste produced and to move Canada towards a low-carbon circular economy.

### Plastic Waste

Plastics are vital material in our economy and daily lives. However, here in Canada and globally, we are inefficient in our use of this valuable resource. Globally, less than 10% of all plastics are recycled and kept in the economy. Far too many plastics are sent to landfills, and in many countries far too much plastic enters waterways, much of it ending up in the oceans.

Addressing this issue requires action focused throughout the plastics lifecycle. Building on commitments made as part of the G7 and at other international fora, the department will work with all levels of government, industry and the public to develop a national commitment and action plan towards a long-term vision of zero plastic waste.



### Actions to reduce air pollution

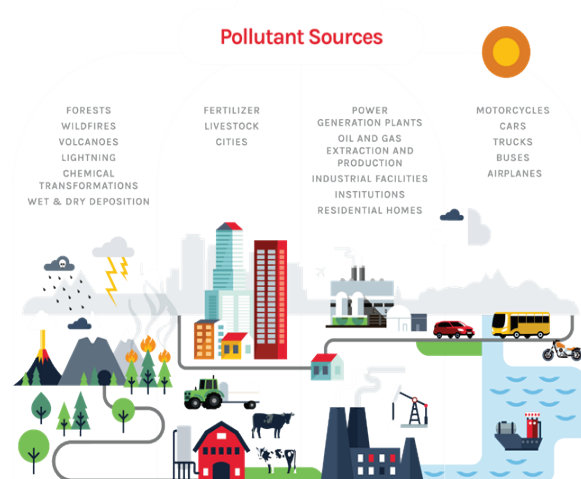
The federal government is committed to improving air quality to protect Canadians' health and their environment. Despite improvements in air quality over the past two decades, some areas in Canada have not yet met ambient air quality standards. ECCC takes specific domestic and international actions to reduce air pollution, including by monitoring, studying, mitigating and reporting on air quality.

Domestically, the Department will continue to work with Canadian, provincial, and territorial governments to implement the [Air Quality Management System](#)<sup>xii</sup> (AQMS), a collaborative system that includes ambient air quality standards for key pollutants and actions to reduce emissions from significant sources of air pollution in order to improve air quality, the health of Canadians, and the environment.

At the international level, ECCC will continue to work with the U.S. and international partners under the Canada-U.S. Air Quality Agreement and the Convention of Long-Range Transboundary Air Pollution to address transboundary air pollution that affects air quality in Canada.

In 2018–19, ECCC will also undertake a review of the adequacy of the 2020 [Canadian Ambient Air Quality Standards](#)<sup>xiii</sup> (CAAQS) for ground-level ozone. The Department will continue to work to reduce industrial emissions by implementing the [Multi-sector Air Pollutants Regulations](#)<sup>xiv</sup> and non-regulatory instruments. ECCC will develop and enforce air pollutant standards for vehicles and fuels, develop regulations to address air pollutant emissions from consumer products, and will finalize [regulations to limit toxic emissions from refineries and petrochemical plants](#)<sup>xv</sup>.

In addition, ECCC will work with its provincial and territorial partners to keep Canadians informed about air quality across Canada, air pollution and its effects, and actions to improve the air that Canadians breathe. Information is available through the interactive [State of the Air Report](#)<sup>xvii</sup>, released by the Canadian Council of Ministers of the Environment (CCME), in November 2017.



Source: CCME [Air Pollutants](#)<sup>xvi</sup>

According to this report, it is estimated by Health Canada that 14,400 premature deaths occur annually in Canada due to air pollution. Therefore, reducing air pollutants and toxic emissions will benefit all Canadians, in particular groups more vulnerable to air pollutant emissions, such as children and the elderly. Air pollution also degrades the environment and can reduce economic productivity.

### Actions to reduce water pollution

As part of Canada's \$1.5 billion [Oceans Protection Plan](#)<sup>xviii</sup>, ECCC will contribute to a whole-of-government strategy to better protect whales on Canada's west coast (Southern Resident Killer Whale), in the Gulf of St. Lawrence (St. Lawrence Estuary Beluga) and on the Atlantic coast (North Atlantic Right Whale). Under its existing national programs, ECCC will undertake new activities to address contaminants that threaten the health of whales and their prey. These include scientific research to identify key sources of contaminants that contribute to the declining whale populations. Research findings will support evidence-based action, as well as promoting the importance of international action to protect marine mammals from disposal and dredging operations.



### Commitment to Experimentation: Applying Behavioural Insights within the Regulatory Lifecycle

ECCC is building capacity to explore and experiment with applying behavioural insights (combination of knowledge and research methods from diverse behavioural science fields) to the selection, development, and implementation of regulations and non-regulatory instruments to improve public policy outcomes. This work will, for example, test the effectiveness of new approaches and techniques to encourage greater stakeholder engagement.

Healthier lakes contribute to the health of Canadians and wildlife species, economic growth for industries that rely on them, more recreational opportunities, and a healthy, sustainable ecosystem. ECCC will continue to invest in safeguarding Canada's important and valuable freshwater including by acting on recommendations of an [evaluation of the Department's Water Quality and Aquatic Ecosystems Health program](#)<sup>xxix</sup>. To provide strong support for the restoration and improvement of water quality in Lake Winnipeg (the 10<sup>th</sup> largest lake in the world) and its basin, the Department will invest close to \$26 million to reduce nutrient pollution in the lake, including to engage and collaborate with Indigenous peoples. In line with a recent [Lake Winnipeg Basin evaluation](#)<sup>xx</sup>, collaboration will help to integrate Indigenous knowledge to increase understanding of the lake ecosystem and to protect it from pollution. The Department will also continue to work with the Government of Manitoba, and all other levels of government in Canada and the U.S. regarding shared water resources in the basin.

The Great Lakes-St Lawrence region supplies over 50 million jobs in Canada and the U.S., representing almost one third of the countries' combined workforce.<sup>8</sup>

### Restoring Hamilton Harbour

ECCC will continue to work with the Ontario Ministry of Environment and Climate Change, Stelco, Hamilton Port Authority, City of Hamilton, City of Burlington and Halton Region to [clean up Randle Reef](#)<sup>xxi</sup>, the last major project required in the Hamilton Harbour Area of Concern in Lake Ontario. Better water quality and reduced contamination will benefit fish, wildlife and people in the area, and will generate over \$150 million in economic benefits. The federal contribution is \$46 million (of \$140 million investment by partners).

In 2018 and 2019, sediments will be dredged and contained within a six hectare, double walled "box" that will be sealed by 2020. Once completed, the surface area will be turned into valuable port lands and any remaining contaminated sediments in the area will be capped. For more details, please consult the [Randle Reef Supplementary Information Table](#)<sup>xxii</sup>.

To address issues that matter to Canadians, from cleaner drinking water, to beaches all can enjoy and waters in which Canadians can fish and swim, a federal investment of \$45 million (Budget 2017) will enable sustained restoration of the Great Lakes. Through the [Great Lakes Protection Initiative](#)<sup>xxiii</sup>, ECCC will take action to reduce the release of harmful substances, address the issue of toxic and nuisance algae, restore the quality of Canadian Areas of Concern, enhance the resilience of coastal wetlands, identify at-risk nearshore waters, and engage Canadians through [citizen science](#)<sup>xxiv</sup>. ECCC will also engage Indigenous peoples and other partners to restore water quality, building on the strong foundation of collaboration under the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health, and the [Canada-United States Great Lakes Water Quality Agreement](#)<sup>xxv</sup>, in keeping with recommendations of a recent [evaluation of its Great Lakes program](#)<sup>xxvi</sup>.

Building on years of successful ongoing collaboration to improve water quality and protect nature under the [St. Lawrence Action Plan 2011-2026](#)<sup>xxvii</sup>, ECCC and the Government of Québec will invest \$57.5 million over the next five years to conserve and enhance the St. Lawrence River. Through the joint Community Interaction Program, the investment will fund local projects aimed at protecting biodiversity, supporting sustainable use of water and improving water quality.

To further progress in protecting freshwater in Canada, ECCC will propose amendments to the Metal Mining Effluent Regulations (MMER) that will further limit the release into water of harmful substances related to mining activities. The Department will develop, amend and continue to administer other regulations under the Fisheries Act to limit or prevent the release of harmful substances into water.

<sup>8</sup> BMO 200 Capital Markets Special Report (Spring 2017): <https://economics.bmocapitalmarkets.com/economics/reports/20170425/sr20170425.pdf>

As president of the G7 in 2018, Canada will build momentum for concerted actions to prevent marine litter, including microplastics, from entering the environment and to improve the management of plastics throughout their lifecycle. ECCC is also leading the development of a National Strategy for Safe and Environmentally Sound Disposal of Lamps Containing Mercury, in collaboration with provinces, territories and other interested governments in Canada that are responsible for the environment.

### Federal Sustainable Development

In collaboration with federal departments and agencies involved in the [Federal Sustainable Development Strategy](#)<sup>xxviii</sup> (FSDS), ECCC will continue to lead the development of the FSDS, setting out the federal government sustainable development priorities. ECCC will also report on the progress of implementing the FSDS in 2018–19 using indicators drawn largely from the [Canadian Environmental Sustainability Indicators](#)<sup>xxix</sup> program.

To provide greater transparency and accountability, the Minister tabled [proposed amendments to the Federal Sustainable Development Act](#)<sup>xxx</sup> in June 2017. The proposed amendments call for tripling the number of federal departments and agencies required to report under the Act (from 26 to more than 90), creating a whole-of-government approach, providing more frequent sustainable development progress updates, in line with recommendations of a recent [evaluation of ECCC's Sustainability Reporting and Indicators program](#)<sup>xxxi</sup>, promoting engagement of Indigenous peoples, businesses, communities and the public in building a sustainable Canada.

### Planned results

Departmental Result: Canadians have clean air					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Percentage of Canadians living in areas where air quality standards are achieved	85%	2030	64%	70%	Results not yet available <sup>9</sup>

Departmental Result: Canadians have clean water					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Percentage of wastewater systems where effluent quality standards are achieved	100%	2040	Indicator not yet in existence.	77%	Results not yet available <sup>10</sup>

Departmental Result: The Canadian environment is protected from harmful substances					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Number of substances assessed, identified as toxic, and for which control measures were put in place	All substances assessed as toxic have a control measure in place <sup>11</sup>	March 31, 2021	This is a new indicator. Results are not available from previous years.		

<sup>9</sup> 2016–17 results will be available in 2018, as the data requires comprehensive analysis.

<sup>10</sup> Idem

<sup>11</sup> When reporting in the Departmental Results Report, we will be able to provide a numerical account of the substances found toxic for which a control measure was put in place.

**Budgetary Financial Resources (dollars)\***

<b>2018–19 Main Estimates</b>	<b>2018–19 Planned spending</b>	<b>2019–20 Planned spending</b>	<b>2020–21 Planned spending</b>
353,189,584	353,189,584	333,742,741	306,391,097

\* This summary does not reflect either potential investments and associated funding that were announced through the Federal Budget 2018, or potential funding that may be received if sunseting initiatives are renewed.

**Human Resources (Full-Time Equivalents—FTEs)**

<b>2018–19 Planned</b>	<b>2019–20 Planned</b>	<b>2020–21 Planned</b>
1,700	1,656	1,584

## Conserving Nature

### Description

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

### Planning highlights

ECCC's mandate to conserve nature encompasses securing natural habitat for birds and wildlife; protecting species and recovering species at risk; and enforcing Canadian wildlife laws and regulations, including those that implement international agreements on the conservation of migratory birds and the regulation of trade in endangered species.

ECCC will implement Canada's Natural Legacy, which will allow solid progress in reaching Canada's goals for protected areas, protecting and recovering species at risk, and maintaining biodiversity. As part of this initiative, ECCC will establish the Nature Fund to leverage partnerships with corporate, not-for-profit, provincial, territorial and other partners. The Nature Fund will make it possible to secure private land, support provincial and territorial species protection efforts and help build indigenous capacity to conserve land and species.

To prevent further decline and build sustainable populations of species at risk, the Department will collaborate with its partners across Canada and internationally, and will deliver on obligations under the [Species at Risk Act](#)<sup>xxxii</sup>.



To restore populations of the Boreal Caribou and the South Mountain Caribou to sustainable levels, ECCC will conduct research to enhance the understanding of disturbances to their key habitat. The Department will continue to work with provinces, territories, Indigenous peoples and other stakeholders (such as non-governmental organizations and industry) on innovative and collaborative projects to protect these key species.

For Canada's Wood Bison, ECCC will complete a science-based assessment of imminent threats facing this species at risk, and determine with Indigenous peoples and other partners needed actions to sustain the Wood Bison's populations and habitat.

To strengthen protection of the Western Chorus Frog, the Department will collaborate with the Government of Québec to further support protection for this species and its habitat including on federal lands.

To support and enhance biodiversity and species habitat across Canada, the Department will continue to adopt innovative ways and work with its federal, provincial, and Indigenous partners to reach the Government's ambitious goal of conserving 17 percent of terrestrial areas and inland water and 10 percent of coastal and marine areas by 2020. For example, ECCC, working with Indigenous partners, will explore the creation of Indigenous Protected and Conserved Areas to increase the conservation of ecologically important habitat for the benefit of wildlife and for Canadians.

An important component of ECCC's mandate to protect and conserve biodiversity is the ongoing management and expansion of Canada's National Wildlife Areas and Migratory Bird Sanctuaries. These provide important habitat for the sustainability of diverse wildlife species, including many migratory bird

### Working towards a new protected area on Canada's Pacific coast

[Scott Islands](#)<sup>xxxv</sup> and surrounding waters on Canada's Pacific coast form one of that region's most productive and biologically diverse marine ecosystems. Its designation (under the Canada Wildlife Act) as a marine National Wildlife Area will help protect the 5-10 million migratory birds (including some threatened species, such as the Short-tailed Albatross and the Pink-footed Shearwater) that feed on the local small fish and zooplankton in the area. The area is also home to the most intensive seabird research in Canada.

species. To support ECCC's mandate under the [Migratory Birds Convention Act, 1994](#)<sup>xxxiii</sup> (MBCA) to maintain healthy populations of some 450 migratory bird species that are in Canada for part of the year, ECCC will continue to monitor population trends, prepare an updated 2018 report on the State of Canada's Birds, and develop a strategy, with the [North American Bird Conservation Initiative](#)<sup>xxxiv</sup> (NABCI), to engage stakeholders to undertake conservation actions to reduce human-related mortality and maintain healthy habitats for birds.

ECCC will continue to make progress on the federal Action Plan for Boreal Caribou that was released in July 2017. This action plan focuses on three pillars: improving knowledge, accelerating recovery and protection, and reporting to the public.

ECCC is working with Agriculture and Agri-Food Canada, Indigenous partners and ranchers to protect the rich biodiversity in native prairie grasslands formerly used as pasture and managed by Agriculture and Agri-Food Canada in southwestern Saskatchewan. The lands are critical habitat to the Greater Sage-grouse (a species at risk) and provide important nesting sites for Burrowing Owls, Ferruginous Hawks and many other species.

ECCC is committed to designating the [Scott Islands Marine National Wildlife Area](#)<sup>xxxvi</sup> as a protected area before 2020, adding important marine and coastal areas to Canada's protected areas network (see sidebar.) Moreover, in collaboration with the Dehcho First Nations and Tłı̨chǫ Government and the Government of Northwest Territories, ECCC will continue to work toward establishing the Edézhíé National Wildlife Area, a rich and diverse area of ecological and cultural importance.

The Government of Canada is proposing a new impact assessment regime that will foster sustainability. The new impact assessment process will serve as a planning tool that takes into consideration the whole range of environmental, health, social and economic effects of projects. Under the proposed new system of impact assessment, ECCC will continue to provide expert advice and knowledge to impact assessments for subjects within its mandate.

ECCC will also support the development of a new, deliberate approach to cumulative effects, to help address some of the "big picture" issues associated with development. The cumulative effects of development in a region are the changes to the environment caused by a variety of activities over time. To better understand cumulative effects on the environment, the Department will conduct regional and strategic assessments outside the context of a single project review, beginning with a strategic assessment of climate change. In addition, ECCC will establish a publicly-accessible, single-window platform containing environmental science, knowledge and data, with tools that enable users to help understand the potential impacts of a project.

To further broaden the base of information considered in development project decisions, ECCC will engage Indigenous peoples in the co-application of science and Indigenous traditional knowledge in environmental assessments. The Department will continue to provide expert policy, technical and scientific analysis to determine the potential environmental effects of development projects.

### Commitment to Experimentation: Integrated Conservation Action Initiative

ECCC will pilot the Integrated Conservation Action (ICA) Initiative as a standardized approach that integrates the work of multiple organizations with common conservation agendas. The ICA initiative is designed to enable collaborative planning and efficient use of resources, funding and action to conservation.

The Initiative will initially focus on conservation in Southwest Nova Scotia, where ECCC will partner with more than 15 First Nations, non-government and government organizations and authorities in 2018–19 to implement three case studies. Results of this pilot will help determine if the process can be used more widely to further support the conservation of wildlife species and management of threats to them, and to identify if and how the approach needs to be adapted.

As part of a multi-faceted regime to protect biodiversity and wildlife in Canada and around the world, ECCC will continue to work with partners to promote compliance with and enforce wildlife laws and regulations that ensure the protection of sensitive habitats, vulnerable species and sustainable trade in wild species of plants and animals. ECCC contributes through crime prevention, regulatory inspections, intelligence-driven criminal investigations and use of penalties in the increasingly complex field of wildlife non-compliance.

The Department will represent Canada at the next [Convention on Biological Diversity](#)<sup>xxxvii</sup> (CBD) Conference of the Parties in Egypt, where Canada will continue its leadership role with respect to protected areas, sustainable wildlife trade, promoting the importance of Indigenous traditional knowledge, and actively participating in addressing environmental issues. The Department will also work with other federal departments, provinces, territories and Indigenous organizations to track and report on progress towards the 2020 Biodiversity Goals and Targets for Canada, as part of Canada's National Report to the CBD.

### Planned results

Departmental Result: Canada's wildlife and habitat are conserved and protected					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Percentage of migratory bird species that are within target population ranges	60%	2020	57%	Indicator not measured (data is collected every two years)	Results not yet available. <sup>12</sup>
Percentage of Canadian areas conserved as protected areas and other effective areas-based conservation measures	Increase toward achievement of 17% from a baseline of 10.6% in 2015 (Terrestrial lands & inland waters)	2020	10.6%	10.6%	10.5%

Departmental Result: Canada's species at risk are recovered					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Percentage of species at risk for which changes in populations are consistent with recovery objectives	60%	May 2025	52%	43%	43%

Departmental Result : Indigenous peoples are engaged in conservation					
Departmental result indicators	Targets	Date to achieve target	2014–15 Actual results	2015–16 Actual results	2016–17 Actual results
Percentage of Indigenous peoples engaged with ECCC who indicate that the engagement was meaningful	Target will be identified once the 2018–19 baseline is established.	To be identified once baseline is established in 2018–19.	This is a new indicator. Results are not available from previous years.		

<sup>12</sup> 2016–17 results will be available in 2018, as the data requires comprehensive analysis.

**Budgetary Financial Resources (dollars)\***

2018–19 Main Estimates	2018–19 Planned spending	2019–20 Planned spending	2020–21 Planned spending
172,066,587	172,066,587	136,751,137	139,020,288

\* This summary does not reflect either potential investments and associated funding that were announced through the Federal Budget 2018, or potential funding that may be received if sunseting initiatives are renewed.

**Human Resources (Full-Time Equivalents—FTEs)**

2018–19 Planned	2019–20 Planned	2020–21 Planned
856	828	807



## Predicting Weather and Environmental Conditions

### Description

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

### Planning highlights

Storms, floods, droughts and other extreme weather-related events are occurring with greater frequency and severity both in Canada and globally. In delivering on its mandate to predict weather and environmental conditions, ECCC will place greater emphasis on meeting Canadians' needs for information about severe weather events. The Department will continue to provide timely information to decision-makers (such as municipal governments, emergency response agencies) and individual Canadians as they make decisions and plans related to their health and safety. ECCC will continue to support the work of other federal departments with the provision of weather information, data and tools, such as partnering with Health Canada (on air quality alerts), and Fisheries and Oceans (on ocean modelling). ECCC will also endeavour to make its data holdings accessible by third parties, including the private sector and academia, to underpin and facilitate value-added services and products.



### Innovation in Action

ECCC's new supercomputer is among the fastest in the world, with processing speed that is close to 70 million times faster than the first supercomputer (of the 1970s). Its capacity enables faster and more accurate weather forecasting. Using artificial intelligence, it enables ECCC to process large-scale simulations, for example, to model how weather systems and storms are likely to behave and their impacts on the environment and human safety.

The Department will continue to provide weather and environmental forecasts and warnings with support from its new (2017) state-of-the-art supercomputer (see sidebar). With the support of additional investments announced in Budget 2018, ECCC will work to increase both the speed and accuracy of information it makes available to Canadians, in order to support their safety and decision-making as they adapt to climate change.

ECCC will also increase its capacity to provide earlier and more accurate weather and environmental forecasts, including extreme weather notifications, through the installation of up to 33 new radars to replace the existing network, one additional radar in the lower Athabaska region, and one training site. The first of 20 confirmed new radars was installed in 2017 (Radisson, Saskatchewan), where communities and agricultural operations in the province now have access to more reliable weather information to help them plan and adapt to a changing climate. In 2018–19, five radars will be replaced, with the remainder to be installed by 2023.

Together, the supercomputer and new radars will also better support ECCC's storm prediction centres. Accurate and fast delivery of storm prediction data will support decision-making, such as municipal planning for safety in severe storms or wildfires, and to support planning in the agriculture, transportation and recreation sectors.

The data that ECCC collects will provide 24/7 support to emergency operations and contribute to national and international security by modelling the movement of smoke, volcanic ash and radioactive material. Both current and archival environmental data will support the priorities of the new Canadian Centre for Climate Services, including providing trusted climate change information, data and tools through an online climate portal to support decisions related to climate change adaptation.



**Commitment to Experimentation: Mining social media and other non-conventional information feeds for complementing current real-time weather surface observation networks**

ECCC will use crowdsourced information feeds, such as those available on Twitter, weather mobile apps, Smart City open data streams (e.g., water and air quality sensors; real-time car and truck sensors), etc. to complement its conventional source of weather information (such as surface weather stations). The Department will work with partners to develop an experimental web site displaying maps with the different sources of information.

There has recently been an observable change in water availability in Canada, resulting from changes in weather patterns and overall climate (such as droughts and flooding) in many areas of the country. Provincial and territorial partners, along with many stakeholders, rely on ECCC water information for planning their day-to-day operations, developing infrastructure and supporting Canadian industry.

Budget 2018 announced significant new investments in Canada's National Hydrological Services, the program that monitors freshwater quantity and supports federal, transboundary and international water management decision-making. Through this new 5-year funding, ECCC will improve the physical infrastructure, as well as the technical and engineering capacity supporting the water quantity-monitoring program. It will investigate innovative new technologies for water measurement and will set Canada on a path to develop water forecasts analogous to the weather forecasts upon which Canadians rely today.

ECCC will continue to provide hydrometric information and water resource advice to Canada's transboundary treaty obligations, as well as to support all sectors of the economy, including agriculture, tourism and the transportation sector.

Other federal departments and agencies, such as Department of National Defence, Canadian Coast Guard, and NAV CANADA, rely on ECCC sound science and data on weather, water, ice and environmental conditions to deliver on their mandates. ECCC will continue to meet its commitments to these organizations.

ECCC will continue to collaborate internationally on science and data sharing, both bilaterally with other countries, and multilaterally through international organizations, such as the World Meteorological Organization. Through partnerships and adoption of international best practices, ECCC will continue to improve its meteorological and water services.

**Monitoring Volcano Action**

To support the International Civil Aviation Organization for aviation safety, the Department runs the [Volcanic Ash Advisory Centre](#) <sup>xxxviii</sup> in Montreal. The Centre is one of only eight volcanic ash programs globally that continuously monitors volcanic activities. During the November 2017 eruption of Mount Agung in Bali, Indonesia, the Department monitored the volcanic activities, issued warnings and predicted the movement of ash in the atmosphere.

**Planned results**

<b>Departmental Result: Canadians use authoritative weather and related information to make decisions about their health and safety</b>					
<b>Departmental result indicators</b>	<b>Targets</b>	<b>Date to achieve target</b>	<b>2014–15 Actual results</b>	<b>2015–16 Actual results</b>	<b>2016–17 Actual results</b>
Index of the timeliness and accuracy of severe weather warnings on a scale of 0 to 10	7.9	2018	8.3 (three year rolling average 2012–14)	8.3 (three year rolling average 2013–15)	8.2 (three year rolling average 2014–16)
Percentage of Canadians that use ECCC information to address water-related impacts on health, safety, economy and environment <sup>13</sup>	80%	2018–19	This is a new indicator. Results are not available from previous years.		

<sup>13</sup> Annual reporting will be based on annual surveys to partners of the National Hydrometric Program and members of water boards and committees. A survey to a sample of Canadians will be conducted every 5 years.

**Budgetary Financial Resources (dollars)\***

2018–19 Main Estimates	2018–19 Planned spending	2019–20 Planned spending	2020–21 Planned spending
218,314,208	218,314,208	222,871,514	219,851,665

\* This summary does not reflect either potential investments and associated funding that were announced through the Federal Budget 2018, or potential funding that may be received if sunseting initiatives are renewed.

**Human Resources (Full-Time Equivalents—FTEs)**

2018–19 Planned	2019–20 Planned	2020–21 Planned
1,501	1,468	1,443

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

## 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: Management and Oversight Services; Communications Services; Legal Services; Human Resources Management Services; Financial Management Services; Information Management Services; Information Technology Services; Real Property Services; Materiel Services; and Acquisition Services.

### Planning highlights

In 2018–19, ECCC Internal Services will support the Department as it delivers on its priorities and manages complex and sensitive environmental issues.

ECCC will continue to leverage its strategic human resources planning to ensure current and future employees have the skills required to deliver the Department's mandate and priorities in areas such as weather science and monitoring, climate change research, and to support the development of tools, including regulations, which are central ECCC responsibilities.

The Department will continue to develop and apply tools and facilitate workshops to promote diversity and inclusion in the workplace. ECCC will also continue to raise awareness for managers and employees on important mental health issues and to promote treating others with respect (see sidebar).

#### Respect Day

ECCC employees will come together to celebrate the annual Respect Day, a joint management-and-union initiative. ECCC's senior executives will take time to engage with employees about respect in the workplace. The Respect Day will be another opportunity to acknowledge that people are all unique and to celebrate differences.

ECCC will continue to collaborate with Shared Services Canada and other departments to safeguard information, and support the federal government's Open Data and Open Information initiatives, which will contribute to providing Canadians with information on matters such as weather trends and GHG emissions. The Department's information management/information technology services will also provide tools and infrastructure to support the data collection and integration to launch and maintain the new Canadian Centre for Climate Services.

The Department's communication services will support the launch of ECCC's new mobile weather application, which will be user tested in April 2018, and available to Canadians through Google Play and Apple in August 2018. As the use of mobile applications and social media continues to increase as a vehicle for information dissemination, ECCC will support the use of new and emerging media to communicate with Canadians. The Department will strengthen its capacity to enable work to be conducted on an "anytime, anywhere" basis through, for example, the increased use of wi-fi and videoconferencing.

ECCC's work to support employees affected by the government-wide pay transformation initiative will continue.

#### Commitment to Experimentation: #iwantasciencejob Recruitment Campaign

This initiative will experiment with the development of a recruitment model for the science community across government. The model will be designed to attract a wide range of candidates and will include the use of social media and to pre-assess candidates on key behavioural competencies, therefore maximizing technology and making use of modern assessment tools.

**Budgetary Financial Resources (dollars)\***

<b>2018–19 Main Estimates</b>	<b>2018–19 Planned spending</b>	<b>2019–20 Planned spending</b>	<b>2020–21 Planned spending</b>
196,994,198	196,994,198	195,817,311	191,396,683

\* This summary does not reflect either potential investments and associated funding that were announced through the Federal Budget 2018, or potential funding that may be received if sunseting initiatives are renewed.

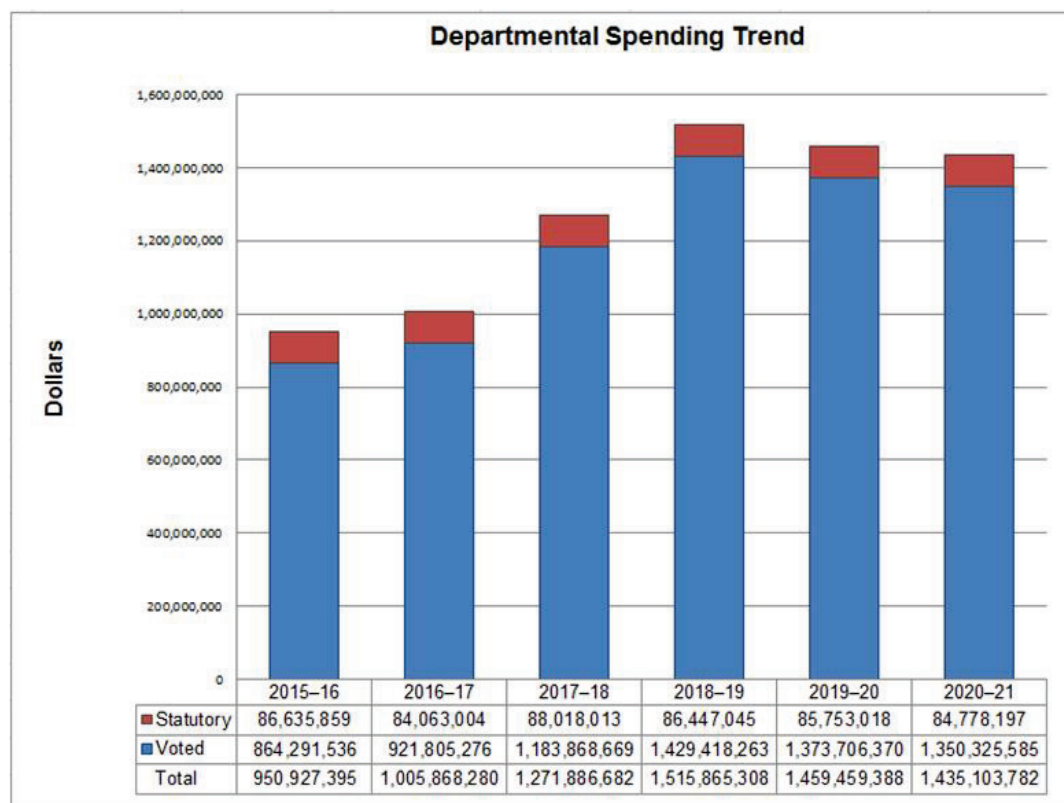
**Human Resources (Full-Time Equivalents—FTEs)**

<b>2018–19 Planned</b>	<b>2019–20 Planned</b>	<b>2020–21 Planned</b>
1,388	1,363	1,340

## Spending and human resources

### Planned spending

This section of Environment and Climate Change Canada (ECCC) 2018–19 Departmental Plan describes the spending and human resources by Core Responsibilities and Internal Services through which the Department delivers its mandate.



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

For fiscal years 2015–16 and 2016–17, the amounts shown represent the actual expenditures as reported in the Public Accounts.

For fiscal year 2017–18, the forecast spending represents the planned budgetary and statutory expenditures as presented in the Estimates documents (Main Estimates and Supplementary Estimates), the approved reprofiles of funds to future years, the compensation allocations from Treasury Board Secretariat for adjustments made to terms and conditions of service employment of the federal public administration for collective agreements, and other adjustments from central agencies.

For the period of 2018–19 to 2020–21, the planned spending reflects approved funding by Treasury Board to support departmental priorities.

ECCC's actual expenditures for 2016–17 were \$1,005.9 million, a year-over-year increase of \$54.9 million (5.8%) from the 2015–16 actual expenditures (\$951.0 million). This increase is mainly due to increased spending for temporary initiatives to address priorities in support of the:

- Canada Foundation for Sustainable Development Technology;
- International Climate Financing;
- Youth Employment Strategy;
- Contaminated Sediment Remediation Projects;
- Revitalize Canada's Weather Radar Network; and,
- 2016 Federal Infrastructure.

The increase of \$266.0 million from 2016–17 actual expenditures (\$1,005.9 million) to 2017–18 forecast spending (\$1,271.9 million) is mainly due to new funding announced in the Budgets 2016 and 2017 to address priorities in support of the:

- Clean Growth and Climate Change;
- Addressing Air Pollution;
- Youth Employment Strategy;
- Revitalize Canada's Weather Radar Network;
- Green Municipal Fund;
- Low Carbon Economy Fund; and
- Compensation allocations from Treasury Board Secretariat for adjustments made to terms and conditions of service employment of the federal public administration for collective agreements.

These increases are partially offset by the transfer of Sustainable Development Technology Fund to Innovation, Science and Economic Development Canada.

For explanation of the variance between 2017–18 forecast spending and 2020–21 planned spending, please see the [Budgetary planning summary](#) section.

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

<b>Core Responsibilities and Internal Services</b>	<b>2015–16 Expenditures</b>	<b>2016–17 Expenditures</b>	<b>2017–18 Forecast Spending</b>	<b>2018–19 Main Estimates*</b>	<b>2018–19 Planned Spending</b>	<b>2019–20 Planned Spending</b>	<b>2020–21 Planned Spending</b>
Taking action on Clean Growth and Climate Change	105,773,509	126,084,560	267,345,187	575,300,731	575,300,731	570,276,685	578,444,049
Preventing and Managing Pollution	268,682,745	286,323,031	360,034,953	353,189,584	353,189,584	333,742,741	306,391,097
Conserving Nature	190,845,958	193,481,114	179,385,887	172,066,587	172,066,587	136,751,137	139,020,288
Predicting Weather and Environmental Conditions	206,084,986	207,249,810	236,197,090	218,314,208	218,314,208	222,871,514	219,851,665
<b>Subtotal</b>	<b>771,387,198</b>	<b>813,138,515</b>	<b>1,042,963,117</b>	<b>1,318,871,110</b>	<b>1,318,871,110</b>	<b>1,263,642,077</b>	<b>1,243,707,099</b>
Internal Services	179,540,197	192,729,765	228,923,565	196,994,198	196,994,198	195,817,311	191,396,683
<b>Total</b>	<b>950,927,395</b>	<b>1,005,868,280</b>	<b>1,271,886,682</b>	<b>1,515,865,308</b>	<b>1,515,865,308</b>	<b>1,459,459,388</b>	<b>1,435,103,782</b>

\* 2018–19 Main Estimates exclude Budget 2018 items.

**Budgetary Planning Summary**

Excluding funding announced in Budget 2018, approximately \$1,515.9 million in total funding is anticipated for 2018–19. The increase of \$244.0 million from 2017–18 forecast spending to 2018–19 planned spending is mainly due to new funding announced in the Budgets 2016 and 2017 to address priorities in support of the Low Carbon Economy Fund. This increase is partially offset by reductions in planned spending for the following initiatives:

- Green Municipal Fund and Contaminated Sediment Remediation Projects, under the Preventing and Managing Pollution Core Responsibility;
- Species at Risk program, under the Conserving Nature Core Responsibility; and
- 2014 and 2016 Federal Infrastructure, under the Predicting Weather and Environmental Conditions Core Responsibility.

Overall, there is a decrease in planned spending over the 2018–19 to 2020–21 planning horizon presented in the summary table. This is the result of sunseting initiatives with temporary funding. Funding requests for such initiatives are subject to government decisions and will be reflected in future Budget exercises and Estimates documents.

Major initiatives whose funding profile will decrease at the end of 2018–19 include:

- Youth Employment Strategy and Contaminated Sediment Remediation Project, under the Preventing and Managing Pollution Core Responsibility; and
- National Conservation Plan, under the Conserving Nature Core Responsibility.

Major initiative whose funding profile will decrease at the end 2019–20 include:

- Federal Contaminated Sites Action Plan, under the Preventing and Managing Pollution Core Responsibility.

**2018–19 Budgetary planned gross spending summary (dollars)**

<b>Core Responsibilities and Internal Services</b>	<b>2018–19 Planned Gross Spending</b>	<b>2018–19 Planned Spending in Specified Purpose Accounts</b>	<b>2018–19 Planned Revenues Netted Against Expenditure</b>	<b>2018–19 Planned Net Spending</b>
Taking action on Clean Growth and Climate Change	575,726,898	0	-426,167	575,300,731
Preventing and Managing Pollution	372,941,642	0	-19,752,058	353,189,584
Conserving Nature	174,777,503	0	-2,710,916	172,066,587
Predicting Weather and Environmental Conditions	275,496,180	0	-57,181,972	218,314,208
<b>Subtotal</b>	<b>1,398,942,223</b>	<b>0</b>	<b>-80,071,113</b>	<b>1,318,871,110</b>
Internal Services	200,742,227	0	-3,748,029	196,994,198
<b>Total</b>	<b>1,599,684,450</b>	<b>0</b>	<b>-83,819,142</b>	<b>1,515,865,308</b>

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

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



## Planned human resources

### Human resources planning summary for Core Responsibilities and Internal Services (FTEs)\*

Core responsibilities and Internal Services	2015–16 Actual FTEs	2016–17 Actual FTEs	2017–18 Forecast FTEs	2018–19 Planned FTEs	2019–20 Planned FTEs	2020–21 Planned FTEs
Taking action on Clean Growth and Climate Change	621	688	803	823	811	795
Preventing and Managing Pollution	1,756	1,697	1,701	1,700	1,656	1,584
Conserving Nature	884	929	906	856	828	807
Predicting Weather and Environmental Conditions	1,632	1,579	1,567	1,501	1,468	1,443
<b>Subtotal</b>	4,893	4,893	4,977	4,880	4,763	4,629
Internal Services	1,429	1,432	1,431	1,388	1,363	1,340
<b>Total</b>	6,322	6,325	6,408	6,268	6,126	5,969

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

One FTE equals one person working a 37.5-hour work week full-time for the entire year, or any number of part-time employees whose combined hours of work equal one FTE. For fiscal years 2015–16 and 2016–17, the amounts shown represent the actual FTEs as reported in the Departmental Results Report. The total forecast and planned FTE for fiscal years 2017–18, 2018–19, 2019–20 and 2020–21 are calculated using average salary.

ECCC's overall increase of 83 FTEs between the 2016–17 actual and the 2017–18 forecast FTEs is mainly due to new funding announced in the Budgets 2016 and 2017 to address priorities in support of the:

- Clean Growth and Climate Change;
- Addressing Air Pollution;
- Revitalize Canada's Weather Radar Network; and,
- Low Carbon Economy Fund.

The overall decrease of 140 FTEs between the 2017–18 forecast and the 2018–19 planned FTEs is mainly due to the reduction in funding profile related to the:

- Species at Risk program, under the Conserving Nature Core Responsibility;
- Revitalize Canada's Weather Radar Network and World Class Oil Spill Regime, under the Predicting Weather and Environmental Conditions Core Responsibility.

This decrease is partially offset by the increase in funding to address priorities in support of Clean Growth and Climate Change.

Overall, there is a decreasing trend in planned FTEs over the 2018–19 to 2020–21 planning horizon. This is the result of sunseting initiatives with temporary funding. Funding requests for such initiatives are subject to government decisions and will be reflected in future Budget exercises and Estimates documents.

The overall decrease of 142 FTEs between the 2018–19 and the 2019–20 planned FTEs is mainly due to the reduction in funding profile related to the:

- Oceans Protection Plan, under the Preventing and Managing Pollution Core Responsibility;
- National Conservation Plan, under the Conserving Nature Core Responsibility;
- Revitalize Canada's Weather Radar Network and World Class Oil Spill Regime, under the Predicting Weather and Environmental Conditions Core Responsibility.

The overall decrease of 157 FTEs between the 2019–20 and the 2020–21 planned FTEs is mainly due to the reduction in funding profile related to the:

- Federal Contaminated Sites Action Plan, under the Preventing and Managing Pollution Core Responsibility.

## Estimates by vote

For information on Environment and Climate Change Canada's organizational appropriations, consult the [2018–19 Main Estimates](#)<sup>xl</sup>.

## Future-Oriented Condensed Statement of Operations

The Future-Oriented Condensed Statement of Operations provides a general overview of Environment and Climate Change Canada's operation. The forecast of financial information on expenses and revenues is prepared on an accrual accounting basis to strengthen accountability and to improve transparency and financial management.

Because the Future-Oriented Condensed Statement of Operations is prepared on an accrual accounting basis, and the forecast and planned spending amounts presented in other sections of the Departmental Plan are prepared on an expenditure basis, amounts may differ.

A more detailed Future-Oriented Statement of Operations and associated notes, including a reconciliation of the net cost of operations to the requested authorities, can be found on Environment and Climate Change Canada's [website](#)<sup>xlii</sup>.

## Future-Oriented Condensed Statement of Operations

### For the Year Ended March 31, 2019 (dollars)

Financial Information	2017–18 Forecast results	2018–19 Planned results	Difference (2018–19 Planned results minus 2017–18 Forecast results)
Total expenses	1,444,747,441	1,662,916,382	218,168,941
Total revenues	92,948,122	94,472,458	1,524,336
Net cost of operations before government funding and transfers	1,351,799,319	1,568,443,924	216,644,605

Total expenses are expected to increase by \$218.2 million in 2018–19 in comparison with the forecast results of 2017–18. The overall increase is mainly due to new funding announced in the Budgets 2016 and 2017 to address priorities in support of the Low Carbon Economy Fund. This increase is partially offset by reductions in planned spending for the following initiatives:

- Green Municipal Fund;
- Contaminated Sediment Remediation Projects;
- Species at Risk Program; and
- 2014 and 2016 Federal Infrastructure.

Based on fiscal year 2017–18, total revenues for 2018–19 are expected to increase by \$1.5 million. The overall increase is mainly due to an increase in Vote Netted Revenue (VNR), part of which includes anticipated collections for the Joint Canada-Alberta Implementation Plan for Oil Sands Monitoring Activities.

For comparative purposes, planned results are based on historical data and trends, and include 2018–19 Main Estimates whereas 2017–18 forecast results give the reader information on 2017–18 estimated spending based on historical data and trends, the 2017–18 Main Estimates, Supplementary Estimates A and B, anticipated Supplementary Estimates C and funding received from Treasury Board for retroactive compensation of collective agreements. Figures for the forecast and planned results do not include items such as carry-forward funding.

## Supplementary information

### Corporate information

#### Organizational profile

**Appropriate Minister:** The Honourable Catherine McKenna, P.C., M.P.

**Institutional Head:** Dr. Stephen Lucas

**Ministerial Portfolio:** Environment and Climate Change Canada

**Enabling Instruments:**

- [Department of the Environment Act](#)<sup>xlii</sup>
- [Canadian Environmental Protection Act, 1999](#)<sup>xliii</sup>
- [Species at Risk Act](#)<sup>xliv</sup>
- [International River Improvements Act](#)<sup>xlv</sup>
- [Canada Water Act](#)<sup>xlvi</sup>
- The [Lake of the Woods Control Board Act, 1921](#)<sup>xlvii</sup>
- [Weather Modification Information Act](#)<sup>xlviii</sup>
- [Fisheries Act](#)<sup>xlix</sup> (administration of the Pollution Prevention Provisions)
- [Antarctic Environmental Protection Act](#)<sup>i</sup>
- [Migratory Birds Convention Act, 1994](#)<sup>ii</sup>
- [Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act](#)<sup>iii</sup>
- [Canada Wildlife Act](#)<sup>liii</sup>
- [Federal Sustainable Development Act](#)<sup>liv</sup>
- [Canadian Environmental Assessment Act, 2012](#)<sup>lv</sup>
- [Environmental Violations Administrative Monetary Penalties Act](#)<sup>lvi</sup>
- [National Wildlife Week Act](#)<sup>lvii</sup>

**Year of Incorporation / Commencement:** 1971

## Supplementary Information

### Raison d'être, mandate and role

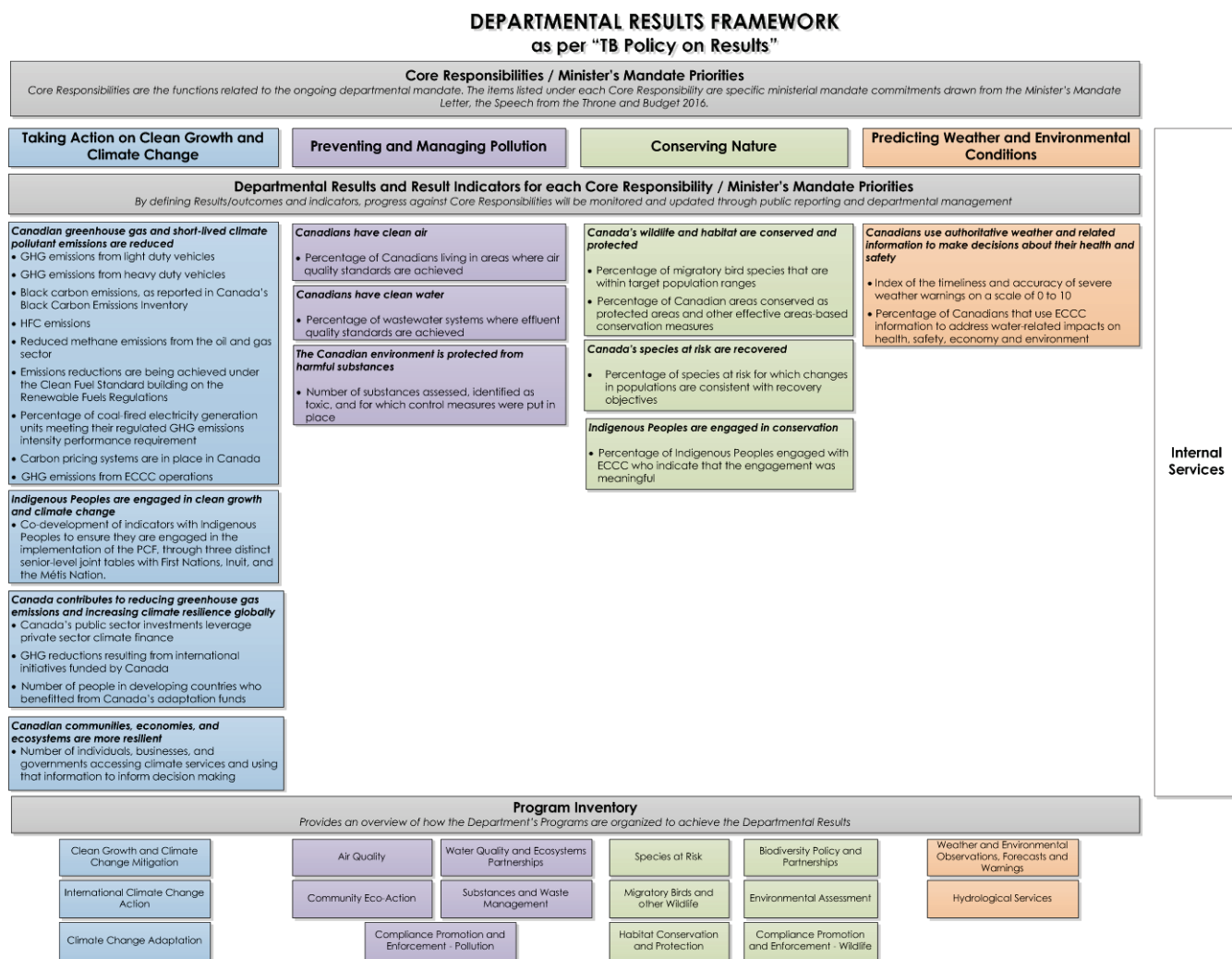
"Raison d'être, mandate and role: who we are and what we do" is available on [Environment and Climate Change Canada's website](#)<sup>lviii</sup>

### Operating context and key risks

Information on operating context and key risks is available on [Environment and Climate Change Canada's website](#)<sup>lix</sup>

## Reporting framework

Environment and Climate Change Canada's Departmental Results Framework and Program Inventory of record for 2018–19 are shown below.



In 2017–18, the Department transitioned from its Strategic Outcomes and Program Alignment Architecture (PAA) required under the former Treasury Board Secretariat (TBS) Policy on Management, Resources and Results Structure, to the new Departmental Results Framework (DRF) required under the TBS [Policy on Results](#)<sup>x</sup>. The table below outlines the concordance between the old PAA and the new DRF.

The DRF embeds the Minister's mandate letter commitments and supports the Department's ability to demonstrate results for Canadians. It includes Core Responsibilities (what the Department does), Departmental Results (what the Department strives to achieve), indicators (how progress will be measured), and a Program Inventory (how the Department's programs are organized to achieve results). Together, the DRF supports ECCC's efforts in delivering results for Canadians.

2018–19 Core Responsibilities			
Taking Action on Clean Growth and Climate Change	Preventing and Managing Pollution	Conserving Nature	Predicting Weather and Environmental Conditions

The concordance between the 2018–19 Departmental Results Framework and Program Inventory and 2017–18 Strategic Outcomes and Program Alignment Architecture is shown below.

2017–18 Lowest-level program of the Program Alignment Architecture	Percentage of lowest-level Program Alignment Architecture program (dollars) corresponding to the program in the Program Inventory	2018–19 Program Inventory
1.1.1 Biodiversity Policy and Priorities	100%	Biodiversity Policy and Partnerships
1.1.2 Species at Risk	100%	Species at Risk
1.1.3 Migratory Birds	100%	Migratory Birds and Other Wildlife
1.1.4 Habitat Conservation Partnerships	100%	Habitat Conservation and Protection
1.1.5 Protected Areas	100%	
1.2.1 Water Quality and Aquatic Ecosystems Health	100%	Water Quality and Ecosystems Partnerships
1.2.2 Water Resource Management and Use	100%	Hydrological Services
1.2.3 Hydrometric Services	100%	
1.3.1 Sustainability Reporting and Indicators	100%	Community Eco-Action
1.3.2 Ecosystem and Environmental Assessments and Monitoring	2.57%	Water Quality and Ecosystems Partnerships
	35.85%	Migratory Birds and Other Wildlife
	61.58%	Environmental Assessment

2017–18 Lowest-level program of the Program Alignment Architecture	Percentage of lowest-level Program Alignment Architecture program (dollars) corresponding to the program in the Program Inventory	2018–19 Program Inventory
1.3.3.1 EcoAction Community Funding	100%	Community Eco-Action
1.3.3.2 Environmental Damages Fund	100%	
1.3.3.3 Environmental Youth Employment	100%	
1.3.4 Great Lakes	100%	Water Quality and Ecosystems Partnerships
1.3.5 St. Lawrence	100%	
1.3.6 Lake Simcoe / South-eastern Georgian Bay	100%	
1.3.7 Lake Winnipeg	100%	
1.3.8 Ecosystems Partnerships	100%	
1.4 Compliance Promotion and Enforcement – Wildlife	100%	Compliance Promotion and Enforcement – Wildlife
2.1.1 Weather and Environmental Observations, Forecasts and Warnings	100%	Weather and Environmental Observations, Forecasts and Warnings
2.1.2 Health-related Meteorological Information	100%	
2.1.3 Climate Information, Predictions and Tools	83.37%	Climate Change Adaptation
	16.63%	Weather and Environmental Observations, Forecasts and Warnings
2.2.1 Meteorological Services in Support of Air Navigation	100%	Weather and Environmental Observations, Forecasts and Warnings
2.2.2 Meteorological Services in Support of Marine Navigation	100%	
2.2.3 Meteorological Services in Support of Military Operation	100%	
3.1.1 Substances Management	100%	Substances and Waste Management
3.1.2 Effluent Management	100%	
3.1.3 Marine Pollution	100%	
3.1.4 Environmental Emergencies	100%	
3.1.5 Contaminated Sites	100%	
3.2.1.1 Industrial Sector Emissions	89.87%	Clean Growth and Climate Change Mitigation
	9.68%	Air Quality
	0.45%	Substances and Waste Management
3.2.1.2 Transportation Sector Emissions	56.53%	Clean Growth and Climate Change Mitigation
	43.47%	Air Quality
3.2.2 International Climate change and Clean Air Partnerships	98.45%	International Climate Change Action
	1.55%	Air Quality



2017–18 Lowest-level program of the Program Alignment Architecture	Percentage of lowest-level Program Alignment Architecture program (dollars) corresponding to the program in the Program Inventory	2018–19 Program Inventory
3.2.3 Environmental Technology	19.19%	Clean Growth and Climate Change Mitigation
	26.26%	Air Quality
	48.57%	Water Quality and Ecosystems Partnerships
	5.98%	Substances and Waste Management
3.3 Compliance Promotion and Enforcement – Pollution	100%	Compliance Promotion and Enforcement – Pollution

## Supporting information on the Program Inventory

Supporting information on planned expenditures, human resources, and results related to Environment and Climate Change Canada's Program Inventory is available the [GC InfoBase](#)<sup>lxi</sup>.

## Supplementary information tables

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

- Departmental Sustainable Development Strategy
- Details on transfer payment programs of \$5 million or more
- Disclosure of transfer payment programs under \$5 million
- Gender-based analysis plus
- Horizontal initiatives
- Planned evaluation coverage over the next five fiscal years
- Status report on transformational and major Crown projects
- Upcoming internal audits for the coming fiscal year
- 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 Federal Tax Expenditures](#)<sup>lxiii</sup>. This report also provides detailed background information on tax expenditures, including descriptions, objectives, historical information and references to related federal spending programs. The tax measures presented in this report are the responsibility of the Minister of Finance.

## Organizational contact information

Environment and Climate Change Canada  
Inquiry Centre  
Tel.: 1-800-668-6767 (in Canada only) or 819-997-2800  
Fax: 819-994-1412  
Email: [ec.enviroinfo.ec@canada.ca](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 appropriated departments over a three-year period. Departmental Plans are tabled in Parliament each spring.

### **Departmental Result (résultat ministériel)**

Any change or changes that the department seeks to influence. A Departmental Result is often outside departments' immediate control, but it should be influenced by Program-level outcomes.

### **Departmental Result Indicator (indicateur de résultat ministériel)**

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

### **Departmental Results Framework (cadre ministériel des résultats)**

The department's Core Responsibilities, Departmental Results and Departmental Result Indicators.

### **Departmental Results Report (rapport sur les résultats ministériels)**

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

### **experimentation (expérimentation)**

Activities that seek to explore, test and compare the effects and impacts of policies, interventions and approaches, to inform evidence-based decision-making, by learning what works and what does not.

### **full-time equivalent (équivalent temps plein)**

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

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

An analytical process used to help identify the potential impacts of policies, Programs and services on diverse groups of women, men and gender-diverse people. The “plus” acknowledges that GBA goes beyond sex and gender differences to consider multiple identity factors that intersect to make people who they are (such as race, ethnicity, religion, age, and mental or physical disability).

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

For the purpose of the 2018–19 Departmental Plan, government-wide priorities refers to those high-level themes outlining the government's agenda in the 2015 Speech from the Throne, namely: Growth for the Middle Class; Open and Transparent Government; A Clean Environment and a Strong Economy; Diversity is Canada's Strength; and Security and Opportunity.

**horizontal initiative (initiative horizontale)**

An initiative in which two or more federal organizations, through an approved funding agreement, work toward achieving clearly defined shared outcomes, and which has been designated (by Cabinet, a central agency, etc.) as a horizontal initiative for managing and reporting purposes.

**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.

**planned spending (dépenses prévues)**

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

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

**plan (plan)**

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

**priority (priorité)**

A plan or project that an organization 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.

**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.

**Program Alignment Architecture (architecture d'alignement des programmes)<sup>14</sup>**

A structured inventory of an organization's programs depicting the hierarchical relationship between programs and the Strategic Outcome(s) to which they contribute.

**results (résultat)**

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

**statutory expenditures (dépenses législatives)**

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

**Strategic Outcome (résultat stratégique)**

A long-term and enduring benefit to Canadians that is linked to the organization's mandate, vision and core functions.

**sunset program (programme temporisé)**

A time-limited program that does not have an ongoing funding and policy authority. When the program is set to expire, a decision must be made whether to continue the program. In the case of a renewal, the decision specifies the scope, funding level and duration.

**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.

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<sup>14</sup> Under the Policy on Results, the Program Alignment Architecture has been replaced by the Program Inventory.

## Endnotes

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- <sup>i</sup> Low Carbon Economy Fund: [www.canada.ca/en/environment-climate-change/news/2017/06/low\\_carbon\\_economyfund.html](http://www.canada.ca/en/environment-climate-change/news/2017/06/low_carbon_economyfund.html)
- <sup>ii</sup> Horizontal Evaluation of the Clean Air Agenda Adaptation Theme: [www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/evaluations/horizontal-evaluation-clean-air-agenda-adaptation-theme-2017/evaluation-at-glance.html](http://www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/evaluations/horizontal-evaluation-clean-air-agenda-adaptation-theme-2017/evaluation-at-glance.html)
- <sup>iii</sup> Canadian Council of Ministers of the Environment: [www.ccme.ca/](http://www.ccme.ca/)
- <sup>iv</sup> 2018 Global Methane Forum: [www.globalmethane.org/GMF2018/](http://www.globalmethane.org/GMF2018/)
- <sup>v</sup> Powering Past Coal Alliance: [www.canada.ca/en/services/environment/weather/climatechange/canada-international-action/coal-phase-out/alliance-declaration.html](http://www.canada.ca/en/services/environment/weather/climatechange/canada-international-action/coal-phase-out/alliance-declaration.html)
- <sup>vi</sup> Feminist International Assistance Policy: [international.gc.ca/world-monde/issues\\_development-enjeux\\_developpement/priorities-priorites/policy-politique.aspx?lang=eng](http://international.gc.ca/world-monde/issues_development-enjeux_developpement/priorities-priorites/policy-politique.aspx?lang=eng)
- <sup>vii</sup> China Council for International Cooperation on Environment and Development: [www.cciced.net/cciceden/](http://www.cciced.net/cciceden/)
- <sup>viii</sup> Chemicals Management Plan: [www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan.html](http://www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan.html)
- <sup>ix</sup> Third phase: [www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan/implementation-table-at-a-glance-2016-2021.html](http://www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan/implementation-table-at-a-glance-2016-2021.html)
- <sup>x</sup> Prohibition of Asbestos and Asbestos Products Regulations: [www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan/initiatives/asbestos.html](http://www.canada.ca/en/health-canada/services/chemical-substances/chemicals-management-plan/initiatives/asbestos.html)
- <sup>xi</sup> Canadian Council of Ministers of the Environment: [www.ccme.ca/](http://www.ccme.ca/)
- <sup>xii</sup> Air Quality Management System: [www.ccme.ca/en/current\\_priorities/air/index.html](http://www.ccme.ca/en/current_priorities/air/index.html)
- <sup>xiii</sup> Canadian Ambient Air Quality Standards: [www.ccme.ca/en/current\\_priorities/air/caaqs.html](http://www.ccme.ca/en/current_priorities/air/caaqs.html)
- <sup>xiv</sup> Multi-sector Air Pollutants Regulations: [laws-lois.justice.gc.ca/eng/regulations/SOR-2016-151/](http://laws-lois.justice.gc.ca/eng/regulations/SOR-2016-151/)
- <sup>xv</sup> Regulations to limit toxic emissions from refineries and petrochemical plants: [www.canada.ca/en/environment-climate-change/news/2017/05/proposed\\_regulationstoreducetheleakageofvolatileorganiccompounds.html](http://www.canada.ca/en/environment-climate-change/news/2017/05/proposed_regulationstoreducetheleakageofvolatileorganiccompounds.html)
- <sup>xvi</sup> CCME Air Pollutants: [airquality-qualitedelair.ccme.ca/en/](http://airquality-qualitedelair.ccme.ca/en/)
- <sup>xvii</sup> State of the Air Report: [airquality-qualitedelair.ccme.ca/en/](http://airquality-qualitedelair.ccme.ca/en/)
- <sup>xviii</sup> Oceans Protection Plan: [letstalktransportation.ca/OPP](http://letstalktransportation.ca/OPP)
- <sup>xix</sup> Evaluation of the Department's Water Quality and Aquatic Ecosystems Health program: [www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/evaluations/evaluation-water-quality-aquatic-ecosystems-health-program/evaluation-summary-water-quality-aquatic-ecosystems-health-program.html](http://www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/evaluations/evaluation-water-quality-aquatic-ecosystems-health-program/evaluation-summary-water-quality-aquatic-ecosystems-health-program.html)
- <sup>xx</sup> Lake Winnipeg Basin evaluation: [www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/evaluations/evaluation-lake-winnipeg-basin-initiative/evaluation-summary-lake-winnipeg-basin-initiative.html](http://www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/evaluations/evaluation-lake-winnipeg-basin-initiative/evaluation-summary-lake-winnipeg-basin-initiative.html)
- <sup>xxi</sup> Clean up pollution in Randle Reef: [www.randlereef.ca/](http://www.randlereef.ca/)
- <sup>xxii</sup> Randle Reef Supplementary Information Table: [www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/departmental-plans.html](http://www.canada.ca/en/environment-climate-change/corporate/transparency/corporate-management-reporting/departmental-plans.html)
- <sup>xxiii</sup> Great Lakes Protection Initiative: [www.canada.ca/en/environment-climate-change/services/great-lakes-protection.html](http://www.canada.ca/en/environment-climate-change/services/great-lakes-protection.html)
- <sup>xxiv</sup> Citizen science: [science.gc.ca/eic/site/063.nsf/eng/h\\_97169.html](http://science.gc.ca/eic/site/063.nsf/eng/h_97169.html)
- <sup>xxv</sup> Canada-United States Great Lakes Water Quality Agreement: [binational.net/glwqa-aqegl/](http://binational.net/glwqa-aqegl/)
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**[www.ec.gc.ca](http://www.ec.gc.ca)**

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