

Agriculture and Agri-Food Canada

2017-2020 Departmental Sustainable
Development Strategy (Updated March
2019)

Canada

2017-2020 Departmental Sustainable Development Strategy (Updated March 2019)

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Executive summary

The Departmental Sustainable Development Strategy describes Agriculture and Agri-Food Canada's objectives and plans for sustainable development appropriate to its mandate. It articulates the Department's vision and decision-making process for sustainable development, and sets out its contribution to the goals and targets of the [Federal Sustainable Development Strategy](#), as well as the application of Strategic Environmental Assessments.

This Departmental Sustainable Development Strategy was updated from the version that was published in March 2018 for Agriculture and Agri-Food Canada's 2018-19 Departmental Plan to reflect minor updates regarding the indicators for the Effective Action on Climate Change goal and Sustainable Food goal as well as alignment with the United Nations Sustainable Development Goals.

Section 1: Context for the Departmental Sustainable Development Strategy

The [2016-2019 Federal Sustainable Development Strategy](#) presents the Government of Canada's sustainable development goals and targets, as required by the [Federal Sustainable Development Act](#). In keeping with the objectives of the Act to integrate environmental, social and economic considerations into decision making, and make such decisions more transparent and accountable to Parliament, Agriculture and Agri-Food Canada supports reaching goals laid out in the Federal Sustainable Development Strategy through the activities described in this Departmental Sustainable Development Strategy.

Achieving a Sustainable Future
The **2016-2019** Federal Sustainable Development Strategy

 Effective action on climate change	 Sustainably managed lands and forests
 Low-carbon government	 Healthy wildlife populations
 Clean growth	 Clean drinking water
 Modern and resilient infrastructure	 Sustainable food
 Clean energy	 Connecting Canadians with nature
 Healthy coasts and oceans	 Safe and healthy communities
 Pristine lakes and rivers	

13 Aspirational long-term goals **41** Federal organizations

Canada.ca/federal-sustainable-development-strategy 

Section 2: Sustainable Development in Agriculture and Agri-Food Canada

This Departmental Sustainable Development Strategy presents the results for commitments under the following government-wide goals:

- [Low-Carbon Government](#);

- [Effective Action on Climate Change](#);
- [Sustainable Food](#); and,
- [Safe and Healthy Communities](#).

The Minister of Agriculture and Agri-Food is specifically responsible for the Sustainable Agriculture target under the Sustainable Food goal. Agriculture and Agri-Food Canada is a key Department that contributes to the other three goals. Departmental contributions to these goals were supported by programs and initiatives under [Growing Forward 2](#), such as innovation and on-farm action. The current policy framework – the [Canadian Agricultural Partnership](#), effective April 1, 2018, has an emphasis on climate change mitigation and adaptation, environmental sustainability and innovation, among other goals. The Canadian Agricultural Partnership research priorities and programs have been finalized, and changes to departmental contributions to the Federal Sustainable Development Strategy goals are reflected appropriately within Agriculture and Agri-Food Canada’s Departmental Sustainable Development Strategy.

Agriculture and Agri-Food Canada’s contributions to the Federal Sustainable Development Strategy goals are summarized below:



Goal: Low-Carbon Government – The federal government is committed to becoming a leader on climate change, and is taking action to ensure that it is doing its part while contributing to the broader economy-wide plan.

The federal government is targeting to reduce greenhouse gas emissions from its buildings and fleets by 40% below 2005 levels by 2030, with an aspiration to achieve it by 2025.

Agriculture and Agri-Food Canada is a large federal custodian representing almost 6% of the federal government’s greenhouse gas emissions, and is well-positioned to continue making contributions to the Low-Carbon Government target. The Department has already reduced its greenhouse gas emissions by 32% as of 2017–18, and it will continue to make efforts predominantly through improvements to the energy efficiency of its buildings and operations and the modernization of its fleet.



Goal: Effective Action on Climate Change – Climate change is one of the greatest challenges of our time. Tackling climate change is important for our environment and for our economy. Canadian farmers have always been responsible stewards of the land, and can be part of the climate change solution. Through improved management practices and provision of bioproducts, the agriculture sector has the potential to support Canada’s greenhouse gas reduction commitment.

In December 2016, Canada’s First Ministers adopted the Pan-Canadian Framework on Clean Growth and Climate Change, which identifies collaborative federal, provincial and territorial actions to reduce greenhouse gas emissions and enable sustainable economic growth. Agriculture-related actions under the Pan-Canadian Framework include increasing stored carbon, generating bioenergy and bioproducts, and advancing innovation. This work will be supported primarily by the [Canadian Agricultural Partnership](#).

Agriculture and Agri-Food Canada is committed to funding and conducting targeted research to increase knowledge of climate change relative to agriculture. Prioritizing research funding on greenhouse gas emissions will accelerate the sector’s ability to reduce the most significant greenhouse gases emitted by agriculture, such as methane, primarily from cattle, and nitrous oxide primarily from fertilizer use. Building Agriculture and Agri-Food Canada science discovery capacity will also allow the Department to respond to agri-environmental challenges related to climate change adaptation.

Currently, the Department undertakes innovative research and development activities that contribute to the sustainable growth of the sector with climate change considerations in mind, including supporting increasing resource and input use efficiency (for example: land, water, and nutrients); and, developing beneficial management practices and precision agriculture technologies (for example: variable rate irrigation and robotic feeding systems). Department-led innovation and programming also play a significant role in enhancing the agriculture and agri-food sector’s resilience to changing climatic conditions (for example: increased risks from pests, drought, and flooding), and to better address water and soil conservation and development issues.

The [Agricultural Greenhouse Gases Program](#), renewed from 2016-2021 for \$27 million, supports projects that will create technologies, practices and processes that can be adopted by farmers to mitigate greenhouse gas emissions. These projects will also help farmers increase their understanding of how greenhouse gas emissions are connected to farming practices. Agriculture and Agri-Food Canada also conducts targeted research to increase knowledge of agriculture's impact on water resources and enhance knowledge of nutrient management, to increase efficiency and lower the potential of contamination of water resources.



Goal: Sustainable Food – Collective action by Agriculture and Agri-Food Canada and its partners contribute to an innovative agri-food and agriculture sector. Canada's work on sustainable agricultural production includes tracking progress on environmental sustainability, scientific research projects, and programs designed to transfer scientific knowledge, practices, and processes to agricultural producers. Agriculture and Agri-Food Canada promotes innovation and sustainable practices by assessing and reporting on the performance of the agriculture sector; conducting targeted research related to the impact of agriculture on climate change, soils, biodiversity and water; and, providing cost-shared funding to provinces and territories to support on-farm assessment of environmental risks and adoption of effective mitigation measures.

The [Canadian Agricultural Partnership](#) includes actions that support this goal. One priority area of the Partnership highlights environmental sustainability and climate change. It focusses on building sector capacity to reduce agricultural greenhouse gas emissions, protect the environment and adapt to climate change by enhancing sustainable growth while increasing production.

Agriculture and Agri-Food Canada is currently exploring additional areas of environmental research to augment our current research activities in sustainable agricultural production. As these areas are further developed, Agriculture and Agri-Food Canada, in conjunction with Environment and Climate Change Canada, will determine how these are reported to Canadians in the next Federal Sustainable Development Strategy.



Goal: Safe and Healthy Communities – The Government of Canada is committed to ensuring that Canadians live in clean, safe environments that contribute to their health and well-being. Among other measures, this means improving air quality, protecting Canadians from harmful substances, and preventing environmental emergencies or mitigating their impacts if they do occur.

Under the Federal Contaminated Sites Action Plan, the Department contributes to the action for the federal government to demonstrate leadership on assessing and remediating contaminated sites by completing remedial activities at four Federal Contaminated Sites Action Plan eligible departmental sites.

Section 3: Commitments for Agriculture and Agri-Food Canada

The below charts outline departmental commitments to the [2016-2019 Federal Sustainable Development Strategy](#). Agriculture and Agri-Food Canada's commitments to the Strategy under the Canadian Agricultural Partnership and the Departmental Results Framework are reflected.

Low-Carbon Government: The Government of Canada leads by example by making its operations low-carbon

Responsible Minister: All ministers

Low-Carbon Government Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
Reduce greenhouse gas emissions from federal government buildings and fleets by 40% below 2005 levels by 2030, with an aspiration to achieve it by 2025	Improve the energy efficiency of our buildings	<p>Undertake building energy efficiency feasibility studies at candidate facilities with greenhouse gas reduction potential</p> <p>Undertake heating, ventilation and air conditioning building automation optimization retrofit projects for laboratory and office complexes</p> <p>Procure 35% green electricity from renewable energy sources in Alberta</p> <p>Undertake employee awareness of energy conservation initiatives</p>	Actions that reduce the demand for energy or switch to cleaner sources of energy will lead to reductions in greenhouse gas emissions.	<p>Greenhouse gas emissions from facilities in fiscal year 2005–06 (base year) = 90.6 ktCO₂e</p> <p>Greenhouse gas emissions from facilities in fiscal year 2016–17 = 66.2 ktCO₂e</p> <p>Renewable power emission credits applied in fiscal year 2016–17 = 7.1 ktCO₂e</p> <p>Percentage (%) change in greenhouse gas emissions from facilities from fiscal year 2005–06 to fiscal year 2016–17 = 35%</p>	Internal Services	<p>SDG 13 - Climate Action</p> <p>Target 13.2: Integrate climate change measures into national policies, strategies and planning</p>
Reduce greenhouse gas emissions from federal government buildings and fleets by 40% below 2005 levels by 2030, with an aspiration to achieve it by 2025	Modernize our fleet	<p>Reduce carbon intensity through vehicle purchase and replacement, for example electric vehicles, hybrids, more fuel efficient vehicles</p> <p>Right Size the fleet</p> <p>Utilize fuel efficient vehicles</p> <p>Promote behavior change – for example, anti-idling campaigns,</p>	Actions that reduce the amount of fuel consumed for fleet operation or switch to less greenhouse gas intensive sources of fuels will contribute to greenhouse gas reductions.	<p>Greenhouse gas emissions from fleet in fiscal year 2005–06 (base year) = 8.2 ktCO₂e</p> <p>Greenhouse gas emissions from fleet in fiscal year 2016–17 = 5.3 ktCO₂e</p> <p>Percentage (%) change in greenhouse gas emissions</p>	Internal Services	<p>SDG 12 - Responsible Consumption and Production</p> <p>Target 12.7: Promote public procurement practices that are sustainable, in accordance with</p>

Low-Carbon Government Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
		<p>driver training, increased pooling of vehicles</p> <p>Develop fleet infrastructure to support alternative fuels, for example electric vehicle charging stations</p>		<p>from fleet from fiscal year 2005-06 to fiscal year 2016-17 = 36% (2005 – 1,313 vehicles, 2017 – 910 vehicles)</p>		<p>national policies and priorities</p>
<p>Reduce greenhouse gas emissions from federal government buildings and fleets by 40% below 2005 levels by 2030, with an aspiration to achieve it by 2025</p>	<p>Support the transition to a low-carbon economy through green procurement</p>	<p>Continue to incorporate environmental considerations into the Procurement Review Board's decision making for 70% of the procurement files for applicable commodities it reviews as part of Agriculture and Agri-Food Canada's key management procurement process</p> <p>Train procurement and materiel management specialists on green procurement, using the Canada School of Public Service Green Procurement course</p> <p>Ensure key officials include contribution to and support for the Government of Canada Policy on Green Procurement objectives in their performance evaluations</p> <p>Maintain target that 95% of copy paper purchases will contain a minimum of 30% recycled content and be certified to a recognized environmental standard to reduce the environmental impact of its production</p> <p>Continue the requirement that 100% of all new contracts that include janitorial services will include the use</p>	<p>Green procurement incorporates environmental considerations into purchasing decisions and is expected to motivate suppliers to green their goods, services and supply chain. Greenhouse gas reductions are one area of consideration in green procurement.</p>	<p>Percentage of procurement files reviewed by the Procurement Review Board that contemplated environmental considerations for applicable commodities</p> <p>Number and percentage of specialists in procurement who have completed training on green procurement</p> <p>Number and percentage of functional heads of procurement and materiel whose performance evaluation includes support and contribution towards green procurement, in the given fiscal year</p> <p>Dollar value or volume of copy paper purchases that meet the target objective relative to the total dollar value or volume of all copy paper purchases in the year in question</p> <p>Dollar value or number of contracts awarded that meet the target objective relative</p>	<p>Internal Services</p>	<p>SDG 12 - Responsible Consumption and Production</p> <p>Target 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p>

Low-Carbon Government Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
		<p>of janitorial products that minimize the environmental impact</p> <p>Leverage common use procurement instruments that incorporate environmental considerations where available and feasible</p>		to the total dollar value or number of new contracts that include janitorial services for the year in question		
Reduce greenhouse gas emissions from federal government buildings and fleets by 40% below 2005 levels by 2030, with an aspiration to achieve it by 2025	Promote sustainable travel practices	Maintain level of greenhouse gas emissions from departmental business-related travel (scoped to air travel only) to at least a 35% reduction until 2020–21 relative to 2005–06	Actions taken to reduce the amount of business travel will reduce greenhouse gas emissions.	<p>Greenhouse gas emissions from departmental business travel in fiscal year 2005–06 (base year) = 9.2 ktCO₂e</p> <p>Greenhouse gas emissions from departmental business travel in fiscal year 2016–17 = 3.9 ktCO₂e</p> <p>Percentage reduction in business travel emissions relative to 2005–06 to fiscal year 2016–17 = 57%</p>	Internal Services	<p>SDG 12 - Responsible Consumption and Production</p> <p>Target 12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities</p>
<p>* This new element shows how AAFC's departmental actions align with the achievement of the UN Sustainable Development Goals (SDGs) and targets. The extent of the contribution may vary as the Sustainable Development Unit at Employment and Social Development Canada continues its work on Canada's National Strategy.</p>						

Effective Action on Climate Change: A low-carbon economy contributes to limiting global average temperature rise to well below two degrees Celsius and supports efforts to limit the increase to 1.5 degrees Celsius

Responsible Minister: Minister of Environment and Climate Change; supported by a whole-of-government approach to implementation

Effective Action on Climate Change Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
By 2030, reduce Canada's total greenhouse gas emissions by 30%, relative to 2005 emission levels	Conduct climate policy research and analysis	<p>Implement the Agricultural Greenhouse Gases Program which will:</p> <p>Promote environmentally responsible agriculture and support the development of approaches and tools that assist the agriculture sector in mitigating greenhouse gas</p> <p>Support initiatives that have the potential to lead the way to broader adoption or application of beneficial management practices on farm and by the sector more generally</p> <p>Support efforts to understand the potential impacts of and approaches to mitigate agricultural greenhouse gas emissions and will result in better strategies for climate change adaptation across the agricultural sector</p>	<p>The Agricultural Greenhouse Gases Program supports projects that will create technologies, practices and processes that can be adopted by farmers to mitigate greenhouse gas emissions. These projects will also help farmers increase their understanding of how greenhouse gas emissions are connected to farming practices.</p> <p>The Program will ultimately contribute to the mitigation of greenhouse gas emissions and other positive longer-term environmental impacts for Canada, which in turn will support the Government of Canada's commitments to the environment and to climate change. The program contributes to the Government of Canada's continued commitment to the Global Research Alliance on Agricultural Greenhouse Gases' efforts to mitigate agricultural greenhouse gas worldwide.</p>	<p>The expected result is that greenhouse gas mitigation information and technologies are developed and/or made available to farmers.</p> <p>The performance indicator is the number of newly developed technologies and beneficial management practices demonstrated through field days and workshops..</p> <p>An initial target was set at 12, and has since been revised to 50 by March 31, 2021 (based on a review of Contribution Agreement work plans).</p> <p>Under the previous Agricultural Greenhouse Gases Program (2011-2016), 49 beneficial management practices were developed and demonstrated through field days and workshops.</p>	Agricultural Greenhouse Gases Program	<p>SDG 8 – Decent Work and Economic Growth</p> <p>Target 8.4: Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead</p> <p>SDG 12 - Responsible Consumption and Production</p>

Effective Action on Climate Change Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
						Target 12.2: By 2030, achieve the sustainable management and efficient use of natural resources
By 2030, reduce Canada's total greenhouse gas emissions by 30%, relative to 2005 emission levels	Develop a solid base of scientific research and analysis on climate change	Conduct targeted research to increase knowledge of climate change relative to agriculture	<p>Agriculture and Agri-Food Canada's science addresses key challenges and opportunities facing agricultural production. This includes managing production risks from weather variability and climate change.</p> <p>The Department's research related to production systems also informs the development of the Department and broader government policies regarding adaptation to climate risk.</p>	<p>The expected result for the climate change research is to increase knowledge by the scientific community in the area of climate change mitigation and adaptation and agriculture.</p> <p>The performance indicator for Foundational Science and Research is the number of scientific articles accepted for publication through an external peer-reviewed process.</p> <p>A target was set for 1,200 articles related to climate change by March 31, 2023.</p> <p>The performance indicator for the Federal-Provincial-Territorial cost-shared Science, Research, and Innovation Capacity programming under the priority area is:</p> <ul style="list-style-type: none"> • the number of papers published in peer-reviewed journals. <ul style="list-style-type: none"> ○ Provincial and territorial governments established a performance indicator target range of 31 (low) to 41 (high) for 2018-2019. A performance indicator target range of 194 (low) to 228 	<p>Foundational Science and Research</p> <p>2018-19: Federal-Provincial-Territorial Cost-shared Science, Research and Innovation Capacity</p>	<p>SDG 13 - Climate Action</p> <p>Target 13.1</p> <p>Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries</p> <p>Target 13.3</p> <p>Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning</p>

Effective Action on Climate Change Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
				(high) was established for the overall framework.		

* This new element shows how AAFC's departmental actions align with the achievement of the UN Sustainable Development Goals (SDGs) and targets. The extent of the contribution may vary as the Sustainable Development Unit at Employment and Social Development Canada continues its work on Canada's National Strategy.

Sustainable Food: Innovation and ingenuity contribute to a world-leading agricultural sector and food economy for the benefit of all Canadians

Responsible Minister: Minister of Agriculture and Agri-Food; Minister of Health; Minister of Fisheries, Oceans and the Canadian Coast Guard

Sustainable Food Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
<p>Ensure safe and accessible food supply by mitigating risks to animal and plant resources from pests, diseases and other health hazards and prevent risks to health of Canadians</p>	<p>Promote innovation and sustainable practices</p>	<p>Build the capacity of Canada’s agriculture, agri-food and agri-based products sector to promote innovation and encourage adoption of sustainable agricultural practices at farm and regional levels by working with provinces and territories. For example, work to increase the number of beneficial management practices implemented to 17,600 by March 31, 2019, through cost-shared programming under the Growing Forward 2 framework (2013-2018).</p> <p>Provide cost-shared funding to provinces and territories that provide a systematic approach to farmers to assess priority environmental risks, plan effective mitigation and increase adoption of sustainable agricultural practices at farm and regional levels.</p>	<p>Collective action by the Government of Canada and its provincial, territorial and non-government organization partners contributes to the overall stability of agricultural working environments and their ability to sustain a high level of agricultural production.</p>	<p>The expected result is that the sector is taking actions to minimize environmental risks and is using inputs efficiently.</p> <p>The performance indicator for Growing Forward 2 (2013-2018) is the cumulative number of beneficial management practices implemented under federal, provincial and territorial cost-shared programming.</p> <p>Under Growing Forward 2, a target was set of 14,361 by March 31, 2019 and as of 2017-18, a total of 21,982 beneficial management practices were reported by provinces and territories, exceeding the cumulative target by 53.1%.</p> <p>The performance indicators for the Canadian Agricultural Partnership (2018-2023) are:</p> <ul style="list-style-type: none"> • The number of on-farm beneficial management practices projects completed. <ul style="list-style-type: none"> ○ For the Federal-Provincial-Territorial cost-shared Environmental Sustainability and Climate Change programming under the priority area, provincial and territorial governments established a performance indicator target range of 2,829 (low) to 3,860 (high) for 2018-2019. A performance indicator target range of 17,286 (low) to 23,220 (high) was established 	<p>Federal, Provincial and Territorial Cost-shared Science, Research, Innovation and Environment</p> <p>2018-19: Federal, Provincial and Territorial Cost-shared Environmental Sustainability and Climate Change</p>	<p>SDG 2 - Zero Hunger</p> <p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality</p> <p>SDG 8 – Decent Work and Economic Growth</p> <p>Target 8.4: Improve progressively, through 2030, global resource efficiency in consumption and</p>

Sustainable Food Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
				<p>for the overall Canadian Agricultural Partnership.</p> <ul style="list-style-type: none"> • The number of agri-food processor beneficial management practices projects completed. <ul style="list-style-type: none"> ○ For the Federal-Provincial-Territorial cost-shared Environmental Sustainability and Climate Change priority area, provincial and territorial governments established a performance target range of 13 (low) to 23 (high) for 2018-2019. A performance indicator target range of 69 (low) to 113 (high) was established for the overall Canadian Agricultural Partnership. 		production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead
By 2030, agricultural working landscapes provide a stable or improved level of biodiversity and efficient management towards water and soil quality for food production	Increase knowledge of sustainable agriculture, fisheries and aquaculture	<p>Assess and report on the collective environmental impact of the adoption of sustainable agriculture practices by farmers on the Canadian landscape</p> <p>Conduct targeted research to increase knowledge of climate change relative to agriculture</p> <p>Conduct targeted research to increase knowledge of agriculture's impact on water resources and enhance knowledge of nutrient management to increase efficiency and lower the potential</p>	The Department's work on sustainable agricultural production includes the following components: tracking progress on environmental sustainability, undertaking scientific research projects (both discovery and applied), and providing programs designed to transfer scientific knowledge, practices, and processes to agricultural producers. These collective actions will make agricultural production more	<p>The expected result is to increase the knowledge by the scientific community in the area of sustainable agriculture. Agriculture and Agri-Food Canada's contribution to that result is to increase knowledge by the scientific community in the areas of climate change, nutrient management, water quality and soil quality.</p> <p>It is important to monitor the agriculture sector's environmental sustainability. To that end, the Department ensures that agri-environmental indicators are available to assess and report on the agriculture sector's environmental sustainability.</p>	Foundational Science and Research	<p>SDG 2 - Zero Hunger</p> <p>Target 2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to</p>

Sustainable Food Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
		of contamination of water resources	<p>sustainable as scientific knowledge, practices and processes are adopted in Canada.</p> <p>This collective action by Agriculture and Agri-Food Canada and its federal, provincial and non-government organization partners contributes to the overall stability of agricultural working landscapes and their ability to sustain a high level of agricultural production by Canadian farmers.</p>	<p>The following performance indicators are used to measure success and demonstrate progress regarding Departmental actions:</p> <p>Number of scientific articles accepted for publication through an external peer-reviewed process.</p> <p>Targets for each research area are to be achieved by March 31, 2023:</p> <ul style="list-style-type: none"> • Climate change articles: 1,200 • Nutrient cycling: 600 • Soil quality: 1,500 • Water resources/quality: 2,000 <p>Reporting on the environmental sustainability of Canadian agriculture every five years following the release of the Canadian Census of Agriculture which includes detailed reporting on nutrient management, air quality, water quality and soil quality metrics.</p>		climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality

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Safe and Healthy Communities: All Canadians live in clean, sustainable communities that contribute to their health and well-being

Responsible Minister: Minister of Environment and Climate Change; Minister of Health

<p>Safe and Healthy Communities</p> <p>Federal Sustainable Development Strategy targets</p>	<p>Federal Sustainable Development Strategy Contributing Actions</p>	<p>Corresponding departmental actions</p>	<p>Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target</p>	<p>Starting points and performance indicators for departmental actions</p>	<p>Programs in which the departmental actions will occur</p>	<p>Support for Sustainable Development Goal target*</p>
<p>Implement the Air Quality Management System to:</p> <p>Increase the percentage of the Canadian population living in areas where measured outdoor concentrations are below the Canadian Ambient Air Quality Standards for fine particulate matter and ozone compared to the year 2000</p>	<p>The 2017-2020 Departmental Sustainable Development Strategy (tabled October 2017) referenced that the Department does not contribute directly to an indicator in this area, but that as part of its work on sustainable agricultural production, research is conducted to increase knowledge of the effects of agricultural production on air. The Department has now identified the need to increase the knowledge of the effects of climate change on agriculture under the Canadian Agricultural Partnership. Once specific research priorities and programs are finalized, future Departmental Sustainable Development Strategies will be updated accordingly.</p>					
<p>By 2020, address the 4,300 substances identified as priorities for action under the Chemicals Management Plan</p>	<p>Demonstrate leadership on assessing and remediating contaminated sites</p>	<p>Complete remedial activity by 2019–20 at Agriculture and Agri-Food Canada’s 4 contaminated sites classified as a highest priority site under the Federal Contaminated Sites Action Plan</p>	<p>Contribute to the short-term milestone to remediate 599 of the highest priority federal sites under the Federal Contaminated Sites Action Plan by 2019–20.</p>	<p>Agriculture and Agri-Food Canada has no suspected or known contaminated sites eligible for assessment funding through the Federal Contaminated Sites Action Plan.</p> <p>Agriculture and Agri-Food Canada has four contaminated sites eligible for remediation funding through the Federal Contaminated Sites Action Plan.</p>	<p>Internal Service</p>	<p>SDG 12 - Responsible Consumption and Production</p> <p>Target 12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human</p>

Safe and Healthy Communities Federal Sustainable Development Strategy targets	Federal Sustainable Development Strategy Contributing Actions	Corresponding departmental actions	Contribution by each departmental action to the Federal Sustainable Development Strategy goal and target	Starting points and performance indicators for departmental actions	Programs in which the departmental actions will occur	Support for Sustainable Development Goal target*
						health and the environment
<p>* This new element shows how AAFC's departmental actions align with the achievement of the UN Sustainable Development Goals (SDGs) and targets. The extent of the contribution may vary as the Sustainable Development Unit at Employment and Social Development Canada continues its work on Canada's National Strategy.</p>						

Section 4. Integrating sustainable development

Agriculture and Agri-Food Canada's mission statement – "to provide leadership in the growth and development of a competitive, innovative and sustainable Canadian agriculture and agri-food sector" – identifies sustainability as a core attribute for the sector.

Achieving a sustainable agriculture and agri-food sector is a process of continuous improvement in the responsible use and management of agricultural resources along all points of the value chain, including producers, processors, and retailers. To improve sector sustainability, there is also a need to consider domestic and global agriculture and agri-food markets, and how well the sector responds and translates those market requirements to sustainable choices for consumers. Sustainable agriculture contributes to sector profitability by safeguarding the land's productive capacity now and into the future, and reducing operating costs through increased efficiencies. It also enhances the reputation of the sector and of producers as good stewards of the land, and helps to maintain access to existing markets and open new markets, creating opportunities for growth. These outcomes are integral to the sustainability and competitiveness of the Canadian agriculture sector and support its important contribution to Canada's economy.

The Department invests in a more sustainable agriculture and agri-food sector by supporting innovation and on-farm action, for example completion of environmental risk assessments and incentives for the implementation of beneficial management practices. Since jurisdiction over agriculture in Canada is shared with provincial and territorial governments, on-farm programs are based on partnerships and cost-shared between both levels of government and delivered by provincial or territorial agencies.

Agriculture and Agri-food Canada also supports research and development activities that contribute to the sustainable growth of the sector, including supporting increased resource and input use efficiency (land, water and nutrients), and developing beneficial management practices and precision agriculture technologies, such as, variable rate irrigation and robotic feeding systems. Other areas of research focus on the development of novel agriculture and agri-food products, including: transforming crops into agri-based bioproducts, and adding value to agricultural wastes. Department-led innovation and programming plays a significant role in addressing water and soil conservation issues, and reducing greenhouse gas emissions of the sector. Some investments contribute to broader clean technology and clean growth goals by reducing greenhouse gas emissions in other sectors, for example electricity production, through utilizing agricultural waste for bioenergy.

These activities contribute to a number of broader intergovernmental sustainable development goals, for example, the Pan-Canadian Framework on Clean Growth and Climate Change, and the Lake Erie Domestic Action Plan. Agriculture and Agri-Food Canada also engages Canadians and stakeholders on key priorities such as the development of A Food Policy for Canada. Agriculture and Agri-Food Canada is collaborating with other federal departments, including Health Canada and Environment and Climate Change Canada, to develop a policy that will set a long-term vision for the health, environmental, social, and economic goals related to food, while identifying actions we can take in the short-term. One of the four themes that guided food policy consultations was 'conserving our soil, water, and air', and recognized the importance of addressing environmental sustainability and stewardship.

Agriculture and Agri-Food Canada is also responsible for implementing the [Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals](#). To meet these requirements, the Department conducts Strategic Environmental Assessments for departmental policy, plan, or program proposals, which includes an analysis of the impacts of the given proposal on the environment, as well as considering whether the outcomes of the proposals could affect any of the Federal Sustainable Development Strategy goals and targets. The process comprises three steps, applied progressively as warranted, as follows:

1. Initial Review – a review to determine whether there is any potential for environmental effects associated with the proposal, or whether a previously conducted assessment still applies;
2. Preliminary Scan – an assessment to determine whether important environmental effects, either positive or negative, including effects on the achievement of Federal Sustainable Development Strategy goals and targets, would result from the implementation of the proposal; and
3. Detailed Strategic Environmental Assessment – a more comprehensive analysis when important environmental effects are identified, including strategies to mitigate the

negative, or enhance the positive, effects, or proposed measures to address any possible public and stakeholder concerns.

Agriculture and Agri-Food Canada is committed to:

- Continuously updating its Strategic Environmental Assessment guidance material (for example: templates and guidelines) to maintain relevance and compliance with the Cabinet Directive;
- Maintaining a Strategic Environmental Assessment database to track the number of policies, plans and program proposals assessed and/or Strategic Environmental Assessments completed;
- Ensuring consideration of any effects of proposals, on the goals and targets of the Federal Sustainable Development Strategy when conducting Strategic Environmental Assessments; and
- Issuing a public statement of environmental effects whenever a detailed Strategic Environmental Assessment is conducted, once initiatives are approved or announced, including the impact on the Federal Sustainable Development Strategy goals and targets, if applicable. Agriculture and Agri-Food Canada Strategic Environmental Assessment information can be found on the [Department's web page](#).