



Government
of Canada

Gouvernement
du Canada

SAFEGUARDING CANADA'S ENVIRONMENT

The Government of Canada is committed to protecting our rich natural heritage. Across a range of issues, from climate change to air quality to the conservation of our water and protecting Canadians from harmful chemicals, we are delivering results. Canada's strong environmental record is founded in sound scientific monitoring and research.

Protecting Land, Wildlife and Water

The government has a remarkable record of achievement in conservation and biodiversity. Ongoing action under the Natural Areas Conservation Program and Environment Canada's close collaboration with the Nature Conservancy of Canada has resulted in the protection of 387,000 hectares of private land, including habitat for 164 species at risk.

In 2014, the government launched the National Conservation Plan, which provides a more coordinated approach to conservation efforts across the country. Its emphasis is on enabling Canadians to conserve and restore lands and waters in and around their communities, and making it easier for citizens living in cities to connect with nature. Building on the conservation measures announced in Budget 2014, the National Conservation Plan includes funding of \$252 million, primarily over a five-year period (2014 to 2019) for a variety of conservation initiatives aimed at securing ecologically sensitive lands, supporting voluntary conservation and restoration actions, and strengthening marine and coastal conservation.

Since 2006, the Government of Canada has added 4.9 million hectares to Parks Canada's network of federal protected areas, which is comparable to an area twice the size of Vancouver Island. These additions include the expansion of Nahanni National Park Reserve, one

of the planet's first World Heritage Sites; the creation of Nááts'ihch'oh National Park Reserve to protect the headwaters of the South Nahanni River; and the protection of Nova Scotia's Sable Island and its iconic horses and sand dune complexes in a national park reserve. The government has also taken action that could protect up to an additional 11.2 million hectares, which will result in an overall increase of more than 58 per cent in the total land and water under Parks Canada's stewardship. This includes withdrawing lands in the Northwest Territories for the proposed Thaidene Nene National Park Reserve, and launching negotiations for a national park on Nunavut's Bathurst Island and a national park reserve in the Mealy Mountains of Labrador. The government also invested \$143.7 million over 10 years and \$7.6 million ongoing to create Canada's first national urban park in Toronto's Rouge Valley.

The federal government has taken action under the *Species at Risk Act*, which protects endangered and threatened species and the spaces they need to flourish. Through the release of the final Recovery Strategy for the Woodland Caribou Boreal population in 2012, the government aims to achieve self-sustaining local populations in all boreal caribou ranges throughout Canada. The government also issued an Emergency Protection Order to protect the Greater Sage-Grouse, a species in severe decline in Canada. This order, which came into force in February 2014, addresses imminent threats to the survival and recovery of the Sage-Grouse by protecting important habitat for this species. This marked the first time the federal government has issued such an order.

The Government of Canada is taking additional measures to ensure that it has a world-class tanker safety system for all ships navigating through Canada's

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waterways. For example, through increased tanker inspections, new and modified aids to navigation, and establishing a Canadian Coast Guard Incident Command System. This new system will allow the Coast Guard to respond more effectively and integrate its operations with key partners in the unlikely event of an incident.

The first report from research funded under the world-class tanker safety initiative on the behaviour of diluted bitumen in the environment was released in January 2014. The government also introduced the *Safeguarding Canada's Seas and Skies Act* as part of the comprehensive measures to establish the initiative, and a new expert panel to review and propose measures to further strengthen Canada's current tanker safety.

In addition, Canadian officials chaired the adoption of an amendment to the 1972 London Protocol to further regulate ocean fertilization and protect the world's oceans from pollution.

Safeguarding Water Resources

The government has a solid record of safeguarding Canada's water resources. Canada's collaboration with the United States led to an enhanced and renewed Great Lakes Water Quality Agreement in 2012, adding new provisions to address issues like aquatic invasive species, habitat conservation and the effects of climate change.

The government is investing in restoring the ecological health of Lake Simcoe and south-eastern Georgian Bay, and it is remediating degraded water quality in Areas of Concern throughout the Great Lakes. Additionally, the Great Lakes Nutrient Initiative is focused on addressing the complex problems of recurrent toxic and nuisance algae and near-shore water quality. The government also began the second phase of the Lake Winnipeg Basin Initiative, designed to support the clean-up and long-term sustainability of this area, and renewed the St. Lawrence Action Plan, which is focused on improved water quality, biodiversity conservation and sustainable use.

Environment Canada continued to improve research transparency on the cumulative impacts of oil sands development with the launch of the Oil Sands Monitoring online data portal, in partnership with the province of Alberta. This interactive tool provides Canadians with access to high-quality scientific information from both federal and provincial sources on air, water, land and biodiversity in the oil sands.

Taking Action on Air Pollution

Air quality in Canada has shown continuous improvement for the last two decades, with emissions of pollutants such as mercury and cadmium decreasing by approximately 90 per cent. Implementing various programs and policies has contributed to these air quality improvements. During the past two decades, the progressive introduction of cleaner vehicles, engines and fuels to meet federal regulatory requirements has resulted in important reductions of various smog-forming air pollutants from mobile sources.

Canada's new Air Quality Management System, developed in collaboration with provincial and territorial governments, industry, and health and environmental non-governmental organizations, provides a coherent Canada-wide approach that ensures air quality benefits for all Canadians. The government has published new outdoor air quality standards for fine particulate matter and ground-level ozone. In June 2014, the Government of Canada published the proposed *Multi-sector Air Pollutants Regulations*, which will establish mandatory national air pollution emissions standards for major industrial facilities across the country.

The transboundary flow of air pollutants is another key source of pollution in Canada. The Canada–U.S. Air Quality Agreement has achieved significant reductions in air pollutant emissions on both sides of the Canada–U.S. border. Internationally, Canada signed a new global, legally binding treaty, the Minamata Convention on Mercury that sets out a strong framework for reducing global atmospheric emissions of mercury.

Total releases of pollutants to air, water and land reported to the National Pollutant Release Inventory fell by 17 per cent (681,117 tonnes) between 2008 and 2012. The data shows decreases in total releases from base metal smelters, manufacturing facilities (for example, pulp and paper mills, and petroleum and coal products from manufacturing) and coal-fired electricity generating stations. These decreases are due to a number of reasons that vary by sector, including closure of facilities, technology improvements and decreases in production.

Strengthening Environmental Protection

With the *Canadian Environmental Assessment Act, 2012*, the government is providing greater certainty for industry at the same time as increasing penalties to ensure compliance. This allows Canada's natural resources to be developed in a responsible and timely way.

Canada's highly effective Chemicals Management Plan has been internationally recognized, including by the Organisation for Economic Co-operation and Development, and is an example of our commitment to be a world-class regulator.

The *Environmental Enforcement Act*, once fully implemented, will strengthen existing environmental laws by establishing minimum fines and increasing maximum fines to more accurately reflect the seriousness of environmental offences. It will add new enforcement tools such as administrative monetary penalties and direct all fines and penalties to the Environmental Damages Fund, which supports restoration projects.

Canada has also strengthened its environmental protection through:

- Increased National Energy Board inspections of oil and gas pipelines by 50 per cent annually to improve pipeline safety across Canada;
- Doubled the number of comprehensive audits of oil and gas pipelines to identify potential safety issues before they occur;
- Implemented enforceable environmental assessment decision statements to ensure that resource and other economic projects comply with required mitigation measures to protect the environment;
- Introduced new administrative monetary penalties for violations of the *Canadian Environmental Assessment Act, 2012*, the *Nuclear Safety and Control Act*, and the *National Energy Board Act* to help ensure compliance. Companies that violate Canada's environmental laws can now face new financial penalties; and
- Conducted a review of industry reporting through the National Pollutant Release Inventory.

Taking Action on Climate Change

The Government of Canada is taking action on climate change through tough regulations to reduce greenhouse gas (GHG) emissions, investing in clean energy, supporting adaptation and taking a leadership role in international climate change efforts.

Canada's sector-by-sector regulatory approach allows us to protect our environment and support economic prosperity. Since 2005, Canadian GHG emissions have decreased by 5.1 per cent while the economy has grown by 10.6 per cent. As a result of the government's action to date:

- Canada boasts one of the the cleanest electricity systems in the G7 and in the world, with 79 per cent of our electricity supply emitting no greenhouse gases.
- Canada has further strengthened its position as a world leader in clean electricity generation by becoming the first major coal user to ban construction of traditional coal-fired electricity generation units.
 - In the first 21 years, the coal regulations are expected to result in a cumulative reduction in GHG emissions of about 214 megatonnes—the equivalent of removing 2.6 million personal vehicles from the road per year over this period.
- 2025 passenger vehicles and light trucks will emit about half as many GHGs as 2008 models.
- GHG emissions from 2018 model-year heavy-duty vehicles will be reduced by up to 23 per cent.
- The currently proposed *Multi-Sector Air Pollution Regulations* are expected to have a co-benefit of 3.4 megatonnes of GHG reductions between 2013 and 2035.

In addition to regulatory action already taken, Canada continues to work with provinces to reduce emissions from other sectors while ensuring that Canadian companies remain competitive.

The federal government has also made significant investments to begin Canada's transition to a clean energy economy and advance climate change



objectives. Since 2006, the government has invested \$10 billion in green infrastructure, energy efficiency, the development of clean energy technologies, and the production of cleaner energy and fuels. For example, the ecoENERGY Innovation Initiative funds clean energy research, development, and demonstration activities to produce and use energy more cleanly and efficiently.

Through Sustainable Development Technology Canada, the Government of Canada also supports the development and demonstration of clean technology solutions such as waste water treatment and more efficient concrete manufacturing. The government is also working with the United States through the Clean Energy Dialogue to collaborate on clean energy research and development, to develop and deploy clean energy technologies, and to build a more efficient electricity grid.

Thanks to the collective actions taken by Canadian governments, consumers and businesses, there has already been a significant reduction in GHG emissions. Canada's GHG emissions in 2020 are projected to be 128 megatonnes less than those under a scenario where consumers, businesses and governments had taken no action to reduce emissions since 2005. In addition, emissions intensity (emissions per dollar of GDP) has shown an average annual decline since 1990, a trend that is projected to continue to 2030. Similarly, emissions per capita (tonnes per person) have been decreasing significantly since 2005, and this trend is also projected to continue to 2030.

At the same time, the Government of Canada is investing in helping Canadians adapt to climate change. The Government of Canada renewed and expanded its focus on adaptation by investing \$148.8 million over 5 years in 10 adaptation programs and adopting the Federal Adaptation Policy Framework (2011) to help bring climate change issues into the mainstream of federal decision making.

Internationally, Canada is actively participating in negotiations towards a single new international climate change agreement that includes meaningful commitments by all major emitters. Canada has fully delivered on its fast-start financing commitment by providing \$1.2 billion over 2010–2013, our largest-ever contribution to international climate change finance.

This funding is now supporting a range of climate change projects in more than 60 developing countries. Under its chairmanship of the Arctic Council, Canada is advancing the development of a new arrangement on black carbon and methane to address this pressing environmental issue in the Arctic. In addition, Canada is proud to be a lead partner in the Climate and Clean Air Coalition to reduce short-lived climate pollutants, which are potent global warmers and dangerous air pollutants.

The government has also continued to invest significantly in science and technology, which provides the information needed to maintain a clean, safe and sustainable environment for Canadians. Since 2006, Canada has invested more than \$4 billion at Environment Canada for scientific activities, such as monitoring and emergency response, as well as for research and development activities, for example, to better predict environmental changes. Over the same period, Environment Canada has produced or contributed to more than 5000 peer-reviewed scientific articles. This investment has helped to make Environment Canada a national—and indeed, world—leader in advancing, connecting and applying scientific understanding of the environment to anticipate and address the most pressing environmental issues.

For more information visit:

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