











# Canada

| Emissions   | Climate Commitment Status   |
|---|---|
| <p><b>1.6%</b> of global emissions<sup>1</sup></p>  <p>Agriculture = 59.1 MtCO<sub>2</sub>eq in 2019<sup>2</sup> or 8% of total emissions excluding LULUCF<br/>           ↑ +26% since 1990</p> <p><b>9.9</b> MtCO<sub>2</sub>eq LULUCF emissions in 2019<sup>3</sup></p> <p>Net source of emissions</p> | <p><b>2020 update submitted<sup>4</sup></b> ✓</p> <p><b>LTS submitted in 2016<sup>5</sup></b> ✓</p> <p><b>CAT rating<sup>6</sup></b> <b>HIGHLY INSUFFICIENT</b></p> <p><b>Net zero commitment:</b> Achieve net-zero greenhouse gas emissions by the year 2050 (Source: <a href="#">Canadian Net Zero Accountability Law</a> and <a href="#">Leaders Summit on Climate</a>)</p> <p><b>Net zero details:</b></p> <p><b>Date:</b> 2050</p> <p><b>Legal status:</b> In law</p> <p><b>Gases covered:</b> All greenhouse gases</p> <p><b>Credits allowed:</b> Uncertain</p> |

## How action-oriented are the NDCs in the food and land sector?

| Criteria   | NDC Assessment  |
|--|---|
| <p><b>Specific policy priorities or actions for agriculture and food:</b></p> <ul style="list-style-type: none"> <li>Specific actions and policies in the agriculture and food sector are included, as well as investments affecting this sector; in particular, the document details specific actions to be undertaken under Canada's Strengthened Climate Plan:</li> </ul> <ol style="list-style-type: none"> <li>Further reduce emissions in the agricultural sector by:               <ul style="list-style-type: none"> <li>investing \$165.7 million to support clean technologies in the agriculture sector;</li> <li>supporting on-farm climate action (e.g., improve nitrogen management, increase adoption of cover cropping) through increased investments in agricultural climate solutions;</li> <li>setting a national emissions reduction target for emissions from fertilisers of 30% below 2020 levels by 2030</li> </ul> </li> <li>Provide climate action programmes for farmers, including the \$185 million Agricultural Climate Solutions Programme and the \$165 million Agricultural Clean Technology Programme with an additional \$200 million to launch immediate, on-farm climate action, targeting projects that accelerate emission reductions by improving nitrogen management, increasing adoption of cover cropping, and normalizing rotational grazing</li> </ol> <ul style="list-style-type: none"> <li>Sustainable agricultural management is also mentioned as a key action at the subnational level in the provinces of Manitoba and Prince Edward Island</li> <li>Regarding adaptation, the province of Saskatchewan's focus on climate resilience and adaptation includes a focus on Natural systems related to "how we grow crops, harvest forests and protect water systems"</li> </ul> | <p>▲▲▲</p> <p><b>Very high:</b> NDC provides <b>specific orientations</b> pursued by the Party in different agricultural and food sub-sectors, including specific targets <b>and means of implementation (such as policies or funding associated to them)</b></p> |
| <p><b>Specific policy priorities or actions for LULUCF:</b></p> <ul style="list-style-type: none"> <li>The NDC does not have a dedicated LULUCF sector but lists specific actions, policies and investments. Exhaustive detail is given on the carbon accounting for LULUCF</li> <li>The document details specific actions to be undertaken under Canada's Strengthened Climate Plan:</li> </ul> <ol style="list-style-type: none"> <li>Invest more than \$3 billion over 10 years to plant two billion trees. To further boost carbon sequestration, Canada is investing \$631 million to restore and enhance wetlands, peatlands, grasslands and agricultural lands, as well as to improve land management practices, and conserve carbon-rich ecosystems.</li> <li>Increase funding for Indigenous Protected and Conserved Areas and Indigenous Guardians programmes with a portion of the recent investments of \$2.3 billion in Canada's Nature Legacy Initiative, to help address the biodiversity crisis, fight climate change, and protect and create jobs.</li> </ol> <ul style="list-style-type: none"> <li>The Government of Canada is committed to protecting 25% of the land and 25% of the oceans in Canada by 2025 and working towards 30% of each by 2030</li> <li>The province of Manitoba commits to investing annually in carbon sinks with extensive fiscal supports for forestry management, tree planting programmes, permanent cover and construction of wetlands.</li> <li>Regarding adaptation, the province of Saskatchewan's focus on climate resilience and adaptation includes a focus on Natural systems related to "how we grow crops, harvest forests and protect water systems"</li> </ul>  | <p>▲▲▲</p> <p><b>Very high:</b> NDC provides <b>specific orientations</b> pursued by the Party in different LULUCF sub-sectors, including specific targets <b>and means of implementation (such as policies or funding associated to them)</b></p>                |
| <p><b>Key policies in the NDC supporting priorities:</b></p> <p><b>Agriculture and food:</b></p> <ul style="list-style-type: none"> <li>A Healthy Environment and a Healthy Economy - Canada's Strengthened Climate Plan (including specific actions in the AFOLU sector described in the previous columns)</li> <li>Agricultural Climate Solutions Programme</li> <li>Agricultural Clean Technology Programme</li> </ul> <p><b>LULUCF:</b></p> <ul style="list-style-type: none"> <li>A Healthy Environment and a Healthy Economy - Canada's Strengthened Climate Plan (including specific actions in the AFOLU sector described in the previous columns)</li> <li>While Canada's Strengthened Climate Plan states actions in the sector, it is not a sectoral policy supporting the implementation of such actions</li> </ul>  | <p>▲▲</p> <p><b>High:</b> NDC lists <b>policies</b> related to either agriculture and food or LULUCF <b>which are directly linked to actions/orientations</b></p>   |

| Criteria   |  | NDC Assessment   |
|--|--|--|
| <b>Dedicated financial resources associated with policies or action:</b> <ul style="list-style-type: none"> <li>• \$165.7 million to support clean technologies in the agriculture sector</li> <li>• \$185 million Agricultural Climate Solutions Programme and the \$165 million Agricultural Clean Technology Programme with an additional \$200 million to launch immediate, on-farm climate action, targeting projects that accelerate emission reductions</li> <li>• \$3 billion over 10 years to plant two billion trees</li> <li>• \$631 million to restore and enhance wetlands, peatlands, grasslands and agricultural lands, as well as to improve land management practices, and conserve carbon-rich ecosystems</li> <li>• Increase funding for Indigenous Protected and Conserved Areas and Indigenous Guardians programmes with a portion of the recent investments of \$2.3 billion in Canada's Nature Legacy Initiative, to help address the biodiversity crisis, fight climate change, and protect and create jobs</li> </ul> |  |  <p><b>Very high:</b> NDC provides <b>specific details</b> (including amounts) on public funding to finance mitigation policies and actions in <b>both agriculture and food and LULUCF</b></p>                  |
| <b>Spatial information for mitigation provided in the NDC:</b> <ul style="list-style-type: none"> <li>• N/A</li> </ul>   |  |  <p><b>Low:</b> NDC does not provide <b>any information on spatial planning to support adaptation or mitigation actions in the food and land sectors</b> in the form of maps or indications of spatial data</p> |
| <b>Technology details provided in the NDC:</b> <ul style="list-style-type: none"> <li>• The NDC pledges \$165.7 million to support clean technologies in the agriculture sector under the Agricultural Clean Technology Programme, but no further detail or mention of specific technological subsectors are provided</li> <li>• Expedite decarbonisation projects with large emitters and scale up clean technology through the Strategic Innovation Fund's \$8-billion Net-Zero Accelerator Fund</li> </ul>  |  |  <p><b>Medium:</b> NDC provides a <b>general indication of technological development needs or plans</b> related to agriculture, food or LULUCF</p>  |
| What specific policy measures are included in the NDCs regarding critical food and land transitions?   |  |  |
| Critical transition  | Details  | NDC Assessment   |
| Healthy diets  | <ul style="list-style-type: none"> <li>• N/A</li> </ul>  |  <p>NDC does not mention any detail on the critical transition</p>  |
| Productive and regenerative agriculture  | <ul style="list-style-type: none"> <li>• Reduce emissions in the agricultural sector by investing \$165.7 million to support clean technologies in the agriculture sector, supporting on-farm climate action (e.g., improve nitrogen management, increase adoption of cover cropping) through increased investments in agricultural climate solutions, and setting a national emissions reduction target for emissions from fertilisers of 30% below 2020 levels by 2030</li> </ul>  |  <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>   |
| Protecting and restoring nature  | <ul style="list-style-type: none"> <li>• The climate crisis necessitates immediate, transformative action built on the recognition, respect, and safeguarding of First Nations governance, rights, and jurisdiction, advancing the Government of Canada's commitment to positioning First Nations climate leadership as a cornerstone of its climate efforts</li> <li>• The Métis Nation and Canada are beginning to discuss the implementation of shared priorities and remain committed to the recognition of rights, respect, cooperation and partnership on a Nation-to-Nation basis</li> <li>• Increase funding for Indigenous Protected and Conserved Areas and Indigenous Guardians programmes with a portion of the recent investments of \$2.3 billion in Canada's Nature Legacy Initiative, to help address the biodiversity crisis, fight climate change, and protect and create jobs. Invest more than \$3 billion over 10 years to plant two billion trees</li> <li>• To further boost carbon sequestration, Canada is investing \$631 million to restore and enhance wetlands, peatlands, grasslands and agricultural lands, as well as to improve land management practices, and conserve carbon-rich ecosystems</li> </ul> |  <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>   |
| A healthy and productive ocean   | <ul style="list-style-type: none"> <li>• The Government of Canada is committed to protecting 25% of the land and 25% of the oceans in Canada by 2025 and working towards 30% of each by 2030</li> </ul>  |  <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>   |
| Diversifying protein supply  | <ul style="list-style-type: none"> <li>• N/A</li> </ul>  |  <p>NDC does not mention any detail on the critical transition</p>  |
| Reducing food loss and waste   | <ul style="list-style-type: none"> <li>• Phasing out food and organic waste sent to landfill by 2030</li> <li>• Establishing national methane regulations for large landfills and taking additional measures to reduce and better use waste at these sites</li> </ul>  |  <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>   |

| What specific policy measures are included in the NDCs regarding critical food and land transitions?  |  |  |
|---|--|--|
| Critical transition   | Details  | NDC Assessment   |
| <b>Local loops and linkages</b>   | <ul style="list-style-type: none"> <li>The province of British Columbia will seek out continued reductions in transportations, buildings, and industries, while exploring new opportunities for reductions through negative emissions technology, the bioeconomy and the circular economy/waste</li> </ul>   | <p>●</p> <p>NDC provides inexplicit or unclear information on the critical transition (topic is mentioned, but not as a policy action)</p> |
| <b>Digital revolution</b>   | <ul style="list-style-type: none"> <li>The 2030 Plan for a Green Economy (PGE) is Quebec's climate policy framework that will be implemented through five-year plans that will be reviewed annually and include technological innovations. Scale up clean technology through the Strategic Innovation Fund's \$8-billion Net-Zero Accelerator Fund. Canada's carbon modeling to estimate and report emissions and removals from forest land is based on forest inventory information that includes forest ages and age-dependent growth rates. Changes in forest age-class structures due to management, conservation actions, or natural disturbances are reflected in the estimates of emissions and removals</li> <li>Further reduce emissions in the agricultural sector by investing \$165.7 million to support clean technologies in the agriculture sector, supporting on-farm climate action (e.g., improve nitrogen management, increase adoption of cover cropping) through increased investments in agricultural climate solutions, and setting a national emissions reduction target for emissions from fertilisers of 30% below 2020 levels by 2030</li> <li>Saskatchewan's climate change strategy commits the provincial government to track and report across all areas of focus to convey progress in making our province more resilient to climate change. The report tracks the status and trends, including increasing the total protected areas in Saskatchewan, decreasing energy consumption in government-owned buildings</li> <li>NDC has a section on Transparency and Ongoing Evaluation which includes monitoring and reporting mostly for climate mitigation</li> </ul> | <p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>    |
| <b>Stronger rural livelihoods</b>   | <ul style="list-style-type: none"> <li>Provide climate action programmes for farmers, including the \$185 million Agricultural Climate Solutions Programme and the \$165 million Agricultural Clean Technology Programme with an additional \$200 million to launch immediate, on-farm climate action, targeting projects that accelerate emission reductions by improving nitrogen management, increasing adoption of cover cropping, and normalizing rotational grazing. The Government of Canada is committed to a just transition, to ensuring that Canada transitions to a net-zero emissions economy in a way that promotes economic diversification and jobs</li> <li>The Government will conduct additional GBA+ analyses for each policy and programme to maximise positive benefits for those most impacted by the negative effects of climate change, including low-income Canadians, women, Indigenous communities, and people living in rural and remote areas</li> <li>The Ontario government is also expanding access to natural gas across the province to help keep the cost of energy low for families, businesses and farmers. Phase 2 of the Natural Gas Expansion Programme, created under the Access to Natural Gas Act (2018), will allocate more than \$234 million to support approximately 8,750 connections in 43 rural, northern and Indigenous communities</li> </ul>   | <p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>    |
| <b>Gender and demography</b>  | <ul style="list-style-type: none"> <li>Canada supports the UNFCCC Gender Action Plan to further advance women-led and gender responsive climate action at national and multilateral levels. The plan will support women's participation in climate negotiations, strengthen gender-responsive policy development, and raise awareness of gender and climate change issues</li> <li>The Government of Canada is committed to using Gender Based Analysis Plus (GBA+), an analytical process that provides a rigorous method to assess systemic inequalities, across the federal government to advance gender equality in Canada. Canada's latest climate plan, A Healthy Environment and a Healthy Economy, was informed by a gender-based analysis plus (GBA+), which assesses how diverse groups of women, men and non-binary people may experience policies, programmes and initiatives</li> </ul>   | <p>●</p> <p>NDC lists essential actions, including specific commitments, strategies, or funding, related to the critical transition</p>    |
| What specific institutional arrangements for climate have countries put in place?   |  |  |
| <p><b>Dedicated body in place:</b></p> <ul style="list-style-type: none"> <li>Intersectoral Commission of Climate Change</li> </ul> <p><b>Consultation processes:</b></p> <ul style="list-style-type: none"> <li>Ministry-organised technical roundtables with other agencies, private sector, academics and civil society</li> <li>At the sub-national level, the government organised workshops with the regional nodes of climate change, involving a wide range of stakeholders (government entities, regional and local governments, NGOs, community associations, unions, businesses, academics, and others)</li> <li>Public consultation to obtain feedback on the NDC, goals and targets, and a survey targeted at specific groups to collect technical inputs for the NDC revision and update</li> <li>Ten dialogues with community groups, including afrodescendents, farmers, indigenous groups, youth and women groups</li> </ul> |  |  |

## SUMMARY

### Summary of the NDC analysis:

- The NDC provides extensive detail on orientations in the food and land sector, including some specific targets, and actions at the national and subnational level
- Some detail on the implementation of these orientations and actions is provided, though not consistently. For instance, while some specific policies linked to actions in the agricultural sector are listed, this is not the case for policies specifically linked to the LULUCF sector. Non-sectoral, generic policies which include actions in the AFOLU sector are mentioned, in particular Canada's Strengthened Climate Plan and the Pan Canadian Framework on Clean Growth and Climate Change
- The NDC provides extensive detail on funding for the actions to be undertaken in the AFOLU sector, for both agriculture and LULUCF
- No details are provided on the need for and use of spatial information
- The need for technological development in the sector is reflected in the NDC in particular through the mention of the Agricultural Clean Technology Programme, to which a specific budget is allocated, however the NDC does not elaborate on which technologies are envisaged nor which need to be developed.
- The NDC addresses the implementation of the critical transitions well, covering eight of the ten transitions analysed. The NDC provides extensive details on the transitions and associated policy actions and commitments. The association with concrete funding to the essential actions to implement the transitions is a major strength in this NDC. The details of the means of implementation for the ocean protection target seem to be lacking.
- Key transitions on "productive and regenerative agriculture", "protecting and restoring nature", "digital revolution" and "stronger rural livelihoods" are particularly well addressed through targets and programmes including: the Agricultural Climate Solutions Programme, the Agricultural Clean Technology Programme, the Indigenous Protected and Conserved Areas and Indigenous Guardians programmes, and the target to protect 25% of the land and ocean by 2030.

## REFERENCES

1. Source: ClimateWatch, accessed 30 August 2021. <https://www.climatewatchdata.org/compare-all-targets?>
2. Source: UNFCCC, Greenhouse Gas Inventory Data, accessed 30 August 2021. [https://di.unfccc.int/detailed\\_data\\_by\\_party](https://di.unfccc.int/detailed_data_by_party)
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4. Submitted 12 July 2021; Source: UNFCCC. [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Canada%20First/Canada%27s%20Enhanced%20NDC%20Submission1\\_FINAL%20EN.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Canada%20First/Canada%27s%20Enhanced%20NDC%20Submission1_FINAL%20EN.pdf)
5. Submitted 17 November 2016; Source: UNFCCC. <https://unfccc.int/sites/default/files/resource/Canada%27s%20Mid-Century%20Long-Term%20Low-GHG%20Strategy.pdf>
6. Climate Action Tracker, accessed 15 September 2021. <https://climateactiontracker.org/countries/canada/>