

# ASSESSMENT OF SUBNATIONAL AND NON-STATE CLIMATE ACTION



CANADA

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# Canada

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## COUNTRY CONTEXT

Canada faces an internal tug-of-war as it tries to steer its climate policies. National efforts to implement a carbon price have faced push-back from four provinces, and the country's trajectory may hinge on upcoming federal elections this fall. Campaigning conservative politicians have pledged to remove the carbon price if elected, turning to tax incentives and spending to improve energy efficiency and reduce fuel's carbon content, while the Liberal Party aims to maintain existing greenhouse gas (GHG) emissions reduction goals.

This debate comes at a crucial moment for Canada's overall climate policy. In the country's pledge in support of the Paris Agreement (its Nationally Determined Contribution or NDC), it sets a target of reducing GHG emissions 30% by 2030 (Government of Canada, 2016a) compared to 2005 levels. The latest assessment by NewClimate Institute, PBL and IIASA as shown in Figure 1 (top panel) indicate that the country is not on track to meet this goal with existing national policies (Kuramochi et al., 2018).

Canada's GHG emissions (including LULUCF) have been increasing consistently since 2010 and grew by 2.4% from 2012 to 2017 (UNFCCC, 2019a). Fossil fuel combustion accounts for the majority of Canada's emissions, and in 2018, the largest driver in the increase in carbon dioxide emissions was the growth in crude oil and liquid natural gas production (ibid.) The five most populous provinces, including Alberta, Ontario, and Quebec, account for over 91% of the country's total GHG emissions (Environment and Climate Change Canada, 2013). As a member of the Powering Past Coal Alliance, Canada has implemented policies, with the support of key coal-firing provinces, such as Alberta, to phase out coal production entirely by 2030. Yet this may result in a switch to the reliance on liquified natural gas production, another carbon-intensive fuel (Nace, Plante and Browning, 2019).

## INTERACTIONS BETWEEN THE NATIONAL GOVERNMENT AND SUBNATIONAL AND NON-STATE CLIMATE ACTORS

Canada's national climate policy formation has been marked by significant – and sometimes turbulent – back and forth between the federal government, local and tribal governments, and the private sector. In practice, local and regional governments have played a powerful role in both advancing and challenging Canada's national climate goals.

In 2018, the federal government implemented the Greenhouse Gas Pollution Pricing Act, which sets a fixed and gradually increasing carbon price per tonne of emissions. The government compels each province and territory to maintain a carbon pricing scheme and intends to impose a nationally-mandated backstop in provinces that fail to produce a scheme by the end of 2019 (Government of Canada, 2018). Several provinces have already established carbon pricing systems. British Columbia, for instance, introduced North America's first broad-based carbon tax in 2008, and its price per tonne currently exceeds the federally mandated rate – the province prices carbon at 30 Canadian Dollars per tCO<sub>2</sub>, well above the federal threshold of 10 Canadian Dollars per tCO<sub>2</sub> in 2018 (Ye, no date; Government of British Columbia, 2018). However, the provinces of Alberta, Saskatchewan, Ontario and New Brunswick have mounted legal challenges against the constitutionality of this carbon “backstop system,” in which federal carbon pricing is implemented in the absence of a provincial legislation (Climate Action Tracker, 2019b). In May 2019, the Saskatchewan provincial court ruled in favour of the act's constitutionality, and the case is now headed to Canada's Supreme Court.

Other actors, however, continue to push ambitious climate action forward. Under the 2016 Pan-Canadian Framework, many provincial, territorial, and municipal governments are working to implement climate action commitments. In 2017, the City of Toronto unanimously approved “TransformTO,” a climate action plan that pledges to reduce carbon emissions by 65% by 2030, thus surpassing Canada’s national level targets. Vancouver, a member of the Carbon Neutral Cities Alliance, has set a goal to achieve zero greenhouse gas emissions for all new buildings in the city by 2030. Canada’s 2016 Budget allocated 125 million Canadian Dollars to the Green Municipal Fund, which supports urban projects that deliver environmental benefits and improve quality of life (Government of Canada, 2019). These resources may help catalyse additional efforts from municipal governments, which have the ability to influence about half of Canada’s GHG emissions (Government of Canada, 2019).

There is also a growing awareness of climate action within Canada’s private sector, with more than 20 Canadian companies joining the Carbon Pricing Leadership Coalition, which advocates for international adoption of carbon pricing schemes (Government of Canada, 2019). Rural electrification and energy infrastructure schemes by the Government of Canada seek to increase private sector demand for carbon-neutral technologies (Government of Canada, 2018). In the past year, for instance, the federal government expanded key programs like the Electric Vehicle and Alternative Fuel Initiative, investing an additional 49.6 million Canadian Dollars into the development of a “coast-to-coast” electric transportation infrastructure and commercialization of electric vehicles (Infrastructure Canada, 2018).

## COMPARING SUBNATIONAL AND NON-STATE TRAJECTORY WITH NATIONAL TRAJECTORY

The assessment includes 23 cities, representing over 11 million people, and 3 regions, representing a population of nearly 14 million, that have made quantifiable targets to reduce GHG emissions.<sup>1</sup> It also includes over 330 companies, controlling over \$486 billion USD in revenue<sup>2</sup> – and including 20 of the world’s largest companies<sup>3</sup> – that have made quantifiable climate commitments, most frequently in the financial services and electrical and electronic equipment sectors.

Together, these cities, regions, and companies represent 260 MtCO<sub>2</sub>e/year in 2015, accounting for overlap between actors. Individual city, region, and company commitments could have a large impact on national GHG emissions. If fully implemented and if such efforts do not decrease efforts elsewhere, they would reduce emissions in 2030 by an additional 50 and 80 MtCO<sub>2</sub>e/year or 8.5% to 11% below reductions from current national policies, with provinces, cities and companies all making substantial contributions (Figure 1, bottom-left panel).

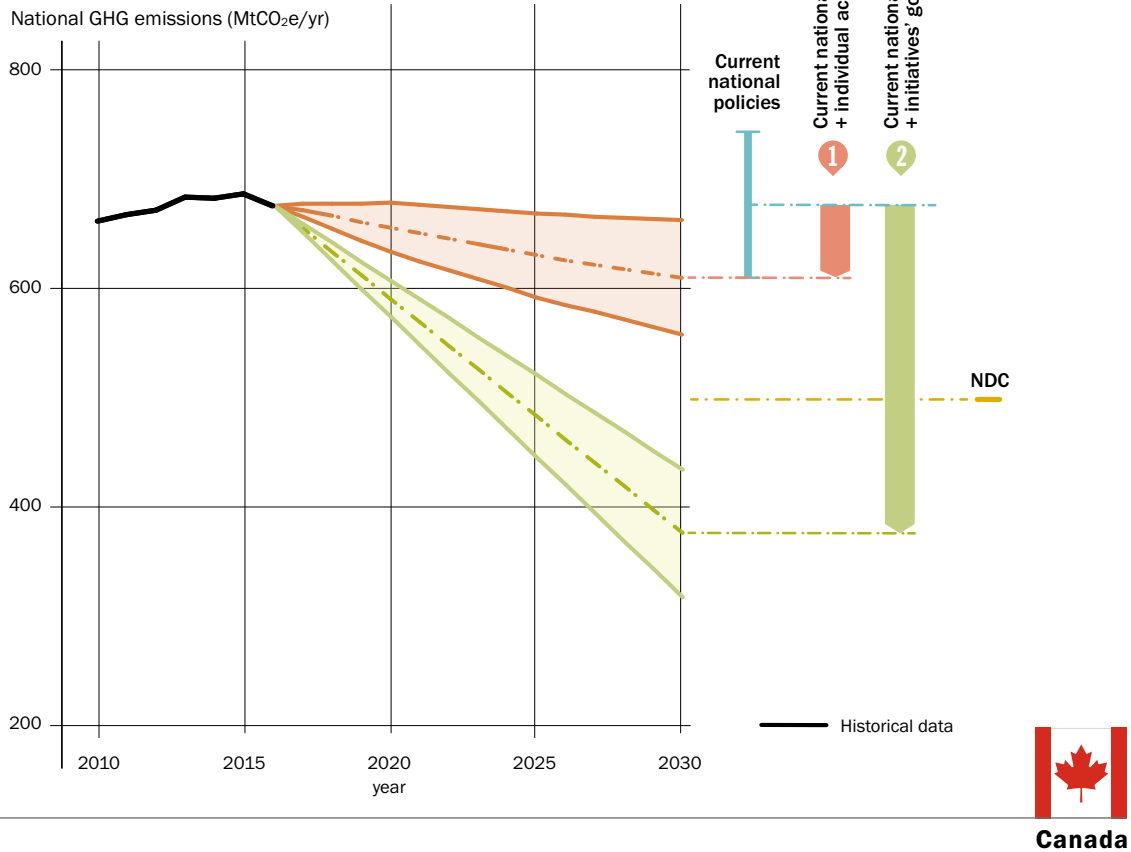
International cooperative initiatives (ICIs) – networks of cities, regions, companies, investors, civil society, and, in some cases, countries, pursuing common climate action – could have an even larger impact. If they realise their goals, they could reduce emissions in 2030 by 290 to 310 MtCO<sub>2</sub>e/year or 42% to 48% below the projected emissions under current national policies. Initiatives focused on cities and regions account for large majority of this estimated mitigation potential, followed by those targeting non-CO<sub>2</sub> GHG reductions (Figure 1, bottom-right panel). These initiatives’ success could enable Canada to remain on track to achieve net zero GHG emissions by early in the second half of the 21<sup>st</sup> century.

1 Quantifiable commitments to reduce GHG emissions typically include a specific emissions reduction goal, target year, baseline year, and baseline year emissions. See Technical Annex I for more details.

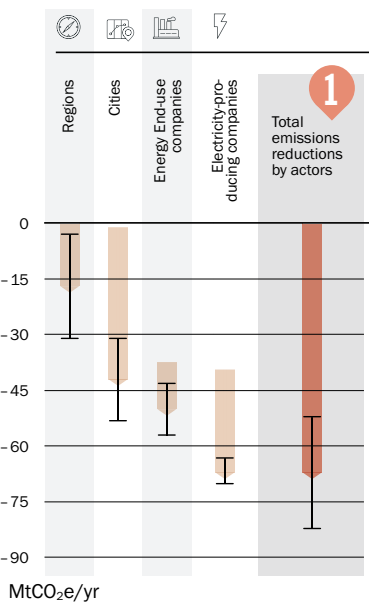
2 Companies’ combined revenue reflects companies making quantifiable commitments to reduce GHG emissions, whose headquarters are in Canada, and whose revenue data is publicly available. See Technical Annex I for more details.

3 The world’s largest companies are defined in terms of their inclusion in the 2019 Forbes 2000 and Global Fortune 500 lists.

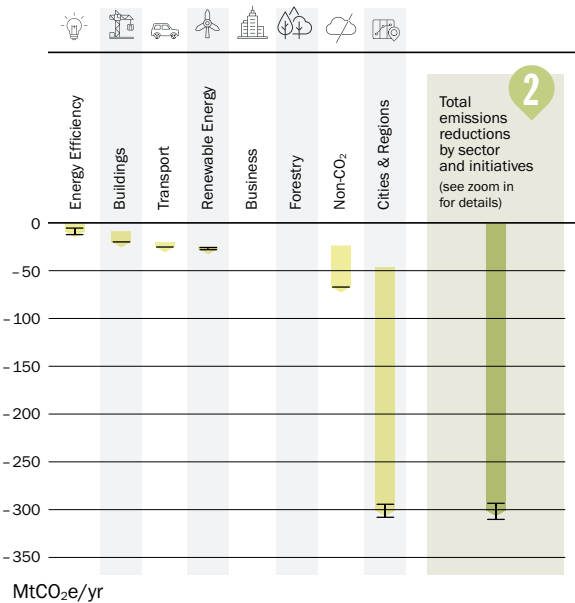
**Figure 1.** Potential greenhouse gas (GHG) emissions reductions in Canada resulting from the full implementation of individual subnational and non-state actor commitments and the full implementation of international cooperative initiatives (ICIs) goals compared to the “current national policies” scenario



Emissions reduction potential of individual actors beyond current national policies, by actor group



Emissions reduction potential of international cooperative initiatives beyond current national policies, by sector



The „current national policies“ scenario (Kuramochi et al., 2018) includes land use, land-use change and forestry. Top panel: historical GHG emissions up to 2016 (with authors' own estimates for years between the last inventory data year and 2016) and scenario emissions pathways up to 2030, alongside the NDC target emissions range (indicative target level for 2030). Emissions reduction target trajectories from individual actors' commitments and initiatives' goals are assumed to be achieved linearly from the latest historical data year and are presented here for illustrative purposes. Bottom-left panel: the breakdown of potential GHG emissions reductions from individual subnational and non-state actor commitments in 2030 by actor group. Bottom-right panel: the breakdown of potential GHG emissions reductions from ICIs in 2030 by sector. The results for “Current national policies plus initiatives' goals” scenario do not include the potential emissions reductions from Science Based Targets, RE100 and Collaborative Climate Action Across the Air Transport World (CAATW); they are only quantified at a global level.

## ABOUT THIS FACT SHEET

The **Global Climate Action from Cities, Regions, and Businesses** country fact sheet series takes a close look at the potential impact of subnational and non-state climate change mitigation action for ten high-emitting economies.

In each fact sheet, we: (1) provide general information on the country's greenhouse (GHG) emissions and its energy and climate policies (the country context); (2) describe the interactions between the national government and subnational and non-state actors on climate action; (3) identify and map the type of GHG emissions reduction commitments made individually by cities, regions and companies within that country, as well as the actors making them; and (4) quantify the potential GHG emissions reduction impact that city, region and company commitments, as well as those of international cooperative initiatives (ICIs), could have on that country's emissions trajectory. The analytical steps follow those described in an earlier 2018 report (Data-Driven Yale, NewClimate Institute and PBL, 2018) and adopts the methodological recommendations made in Hsu et al. (2019). Detailed descriptions of this can be found in the main report and its Technical Annexes I and II, all of which can be downloaded from the NewClimate Institute website (<https://newclimate.org/publications>). A full list of references can also be found in the main report (Section 5).

Regarding the emissions data presented in this section, total national GHG emissions include land use, land use change and forestry (LULUCF) unless otherwise stated. The historical GHG emissions data are plotted up to 2016; for a number of UNFCCC non-Annex I countries, the values between the last inventory year and 2016 were estimated based on current policies scenario projections by NewClimate Institute, PBL and IIASA (Kuramochi et al., 2018). All GHG emissions figures presented are aggregated with 100-year global warming potential (GWP) values of the IPCC Fourth Assessment Report. For the NDC target emission levels, we used LULUCF sector emission levels projected under the current policies scenario when a country's NDC: (i) excludes LULUCF emissions, (ii) is not clear about the LULUCF accounting or (iii) considers LULUCF credits. For these countries, the NDC target emission levels may not match the official values reported by the national governments.

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## SUGGESTED CITATION

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