

CHAPTER II

CANADA'S CLIMATE COMMITMENTS UNDER JUSTIN TRUDEAU'S ADMINISTRATION

This chapter explains on Canada's climate commitment by reviewing Canada's environmental approaches and policies particularly under the supremacy of Justin Trudeau. In this chapter, the researcher will provide a timeline of measurements taken by the Canadian government in reducing global emission.

A. Canada's Progress on Climate Change

Greenhouse gas (GHG) emissions are considered by most scientists to be the underlying factors causing climate change (NASA's Jet Propulsion Laboratory, 2017). In a global context, Canada's GHG emissions represent about 1.8% of the global total of GHG emissions. Although this might seem like a relatively small number, Canada includes among the top 10 emitters of GHG (Boothe & Boudreault, 2016). In order to combat climate change, it is crucial for Canada to achieve its GHG emission reduction target.

Canada was one of the countries who had red marks on its performance on combatting climate change particularly under the reign of Stephen Harper from 2006 to 2015. During that period, Canada lagged in climate policy and its carbon pollution increased particularly from the oil sands industry (Emissions Database for Global Atmospheric Research, 2017). However, the situation significantly changed with the newly elected Prime Minister in October 2015, Justin Trudeau, who promised to make climate change a priority in his campaign. When Trudeau took office, the Prime Minister appointed Stephan Dion to the position of Foreign Affairs. Dion is a great supporter of the issue of climate change. In addition, Trudeau also appointed Catherine McKenna as Minister to the newly named Environment and Climate Change who is also is passionate about combatting climate change. The appointment

of these two in the Canadian government sends strong signals to the public on strong commitment on the issue of climate change. Under Trudeau's regime, Canada not only focuses on working and collaborating with Canada's provinces and territories on emissions reductions such as creating Pan-Canadian Framework, phasing out dangerous fossil fuel subsidies but also start to take global approaches on the issue of climate change such as the actively participating in the Paris Agreement and negotiations with other countries like China and the European Union.

B. Canada's New Climate Finance Commitments

“Canada is back and ready to play its part in combatting climate change, and this includes helping the poorest and most vulnerable countries in the world adapt. The investment announced today will help build a more environmentally sustainable future for generations to come. It is yet another example that Canada is once again a serious player in the international fight against climate change.” – The Rt. Hon. Justin Trudeau, Prime Minister of Canada (Government of Canada, 2015).

In November 2015, a month after Justin Trudeau was elected as the 23rd Prime Minister of Canada, in the Commonwealth Heads of Government meeting in Malta, he announced a new climate finance commitment of Canada. In the announcement, Canada pledged to contribute \$2.65 billion over the next five years to help developing countries in combatting climate change. This contribution will bolster the commitment Canada made under the 2009 Copenhagen Accord to work with other countries and partners to gather, from a wide variety of sources, US \$100 billion every year by 2020. Canada's climate finance contribution will be distributed through various channels and instruments for critical efforts, such as helping developing nations to adapt to climate change, transferring renewable energy technologies, and overseeing risks related to extreme climate patterns. The

role Canada is playing in its climate commitment will ensure common efforts worldwide in addressing to combat climate change in a mutually supportive manner (Government of Canada, 2015).

C. Paris Agreement

In late 2015, Canada along with 196 countries reached the Paris Agreement. The Paris Agreement, adopted at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC), represents the first time in history that for all intents and purposes the majority of world's countries consented to seek after their most noteworthy aspiration to combat climate change under a common framework. There are 195 countries representing 97% of the world's GHG emissions speaking up, building common commitment to hand in hand respond against the threat of climate change most particularly through holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels (Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy, 2016). In order to achieve this long-term temperature goal, Article 4.1 in the Agreement states:

“Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty” (Mascher, 2015).

Unlike the Kyoto Protocol which specifies the binding emission reductions for the parties involved, the Paris Agreement allows states or the parties involved to communicate their own aspiration and goal of emission reduction known to be its nationally determined contributions (NDCs). The states, according to the Paris Agreement particularly in Article 4.2, shall maintain their actions and shall intend to pursue the goal by creating domestic mitigation measures in order to achieve their own NDC target. The Article commands all Parties within the agreement including the developed and developing to prepare their NDCs and domestic strategies to pursue it. This allows the countries who are parties to the agreement to have their own standard with respect to each country's responsibilities and capacities. The Paris Agreement through Article 4.4 assigns the leadership role to the developed nations where it stated that developed countries "should continue taking the lead by undertaking economy-wide absolute emission reduction targets". Developing country Parties, however, "should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances" (Mascher, 2015).

Canada played a vital role at the Paris COP21 and helped the establishment of a global agreement on the mitigation, adaptation, and financing of climate change action. With the newly elected liberal government of Justin Trudeau, with its active role in the conference, Canada showed the world that it is back and is ready in reducing GHGs at home and to help developing countries (Boothe & Boudreault, 2016). Trudeau in his national statement at the COP21 pledged that Canada will put more effort to address climate change issues.

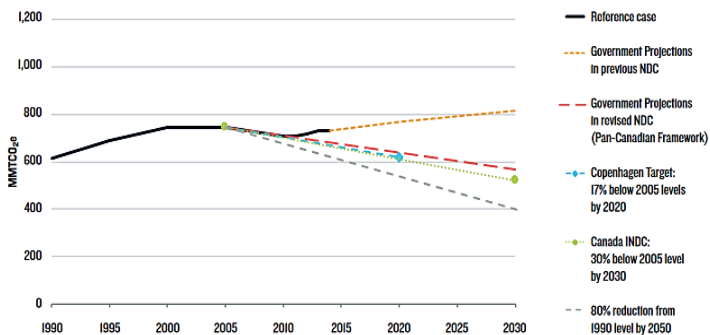
In this 21st session of the Conference of the Parties (COP21), the countries submit their intended nationally determined contribution (NDCs) showing their commitment

and concrete goal on emission reduction targets and their plans to reach the goal. As seen from the graphic 2.1 below, Canada, specifically through the speech of Justin Trudeau announced its global commitment to combatting climate change and pledged economy-wide GHG reductions of 30% emissions below its 2005 level of annual greenhouse gas (GHG) emissions by 2030, which was 731 Mt – two percent of global emissions. Canada has targeted to have annual GHG emission

Graphic 1.2.1 Canada’s Greenhouse Gas (GHG)

to reduce to 517 Mt by 2030 (Government of Canada, 2017).

Source: National Resources Defense Council, based on Environment Canada’s report, Canada’s revised NDC



submission to the UNFCCC

Under the reign of Justin Trudeau, Canadian government ratified the historic Paris climate agreement in October 2016 and publicly vows its climate commitments to the world. Further, Canada through its international climate financing commitment through the Paris accord has pledged \$2.65 billion by 2020 to help developing countries in their efforts to mitigate against and adapt to climate change (Environment and Climate Change Canada, 2017) In addition, in the Paris Conference, Canada joined with other countries to support the carbon Pricing Leadership Coalition. This is a momentum to global efforts to put a price on carbon. The

provinces within Canada such as Alberta, British Columbia, Ontario, and Quebec are also members of the coalition.

D. Carbon Pricing in Canada

After the ratification of the historic Paris accord, at the end of 2016, Trudeau government released the Pan-Canadian Framework on Clean Growth and Climate Change (PCF). The framework is significant as it includes concrete measures of Canada in combatting climate change and plans to achieve its targets in the Paris Agreement. The framework covers four pillars including carbon pricing, complementary mitigation measures such as a low-carbon fuel standard and a national coal phase-out, adaptation and resilience and finally, innovation to support clean technology and job creation (Chen, 2017).

One of the pillars of the framework is pricing carbon pollution. The carbon pollution pricing is central to the PCF. It is known to be one of the most efficient and effective policies with regards to reducing GHG emissions. In Canada, few of its provinces have taken this approach. The carbon tax is implemented in British Columbia, meanwhile, Quebec and Ontario use the cap-and-trade system. In Alberta, it uses a hybrid system which combines carbon tax system and the cap-and-trade system, particularly for large industrial emitters. Carbon pricing is a fiscal policy tool that is economically efficient to address the rising level of carbon pollution. In the case of Canada, it has been proven to be very successful especially in British Columbia where the province has developed strong economy while successfully reducing emissions. British Columbia's carbon pricing has recently been adopted by Quebec, Ontario, and Alberta. Given its effectiveness, Canada has made the carbon pricing system as a central element of its climate mitigation strategy under the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) (Pembina Institute, 2017).

Under the Pan-Canadian Framework on Clean Growth and Climate Change, the federal government would establish carbon price that starts at \$10 per tonne of carbon dioxide (t-

CO₂e) in 2018 and this price will increase annually by \$10/t-t-CO₂e until it reaches \$50/t-t-CO₂e in 2020. Under the framework, Canada ensures that the carbon pricing system allows the provinces to choose the type of system to implement either cap-and-trade system that has been implemented by Ontario and Quebec, or a direct pricing system that has been implemented by British Columbia. However, in cases where the provinces might refuse to implement the carbon pricing strategy, the federal government would issue the federal tax on carbon to the province. Through the PCF, Trudeau emphasized that if a subnational jurisdiction doesn't have a carbon pricing system by 2018 that meets or exceeds the national benchmark, the federal government will apply its model of a carbon tax in the jurisdiction. Trudeau promised that the revenues obtained would be returned to the jurisdiction and can be used by the region under its discretion (Pembina Institute, 2017).

In Canada, there are two main types of carbon pricing including the direct pricing system through tax and the indirect carbon pricing through cap-and-trade-system. The direct pricing system or known as carbon tax implemented by British Columbia and Quebec applies a price on carbon for consumers, large industrial facilities and by distributors of natural gas and petroleum products. The carbon dioxide emission is calculated by the government and the parties that are taxed on their carbon emission (industries or distributors) should report their usage and carbon emission and pay it accordingly. Meanwhile, the cap-and-trade has a more complex arrangement that begins with the government setting a cap (maximum level of pollution) on carbon emissions within its administration. The overall cap decreases over time to meet the emission reduction target. The government would distribute emissions permits among firms that produce emissions. Companies and firms emitting carbon must have a permit to cover each unit of pollution that they emit. These permissions are obtained through an initial allocation by the government or through an auction or through trading with other firms (Grantham Research Institute, 2013). The pricing

happens as the governments allow the taxed parties to buy and sell emission rights, which then creates a carbon market. Those companies that can reduce their emissions efficiently to the point where their emission is below the government allocation, may sell their excess allocations to other companies that might think that it is cheaper to buy emission rights than to reduce its emission. Thus, these economic trade between companies essentially sets the carbon price. A successful national approach and implementation of the carbon pricing will support both Canada's economic and climate goals and interests. It will also help Canada in achieving its targeted goals in the COP21. Finally, pricing carbon pollution is expected to foster and accelerate innovations by firms and business to find ways to reduce their emissions particularly using eco-friendly technology (Pembina Institute, 2017).

E. Climate Mitigation Policy

Under the Canada's Federal Framework on Environment which aims to deliver the PCF, to support Canada's progress in combatting climate change and achieving its carbon emission targets, the carbon pricing policy is supported and complemented with both the federal and provincial actions to reduce emissions and adapt to climate change in all sectors including industry, buildings, transportation and agriculture (Environment and Climate Change Canada, 2016).

1) Building and Homes

Under the Federal Framework, Canada aims to improve energy efficiency for the homes and buildings. The government of Canada will work with the provinces and territories too (Environment and Climate Change Canada, 2016):

- Develop a "net-zero energy ready" model building code, which Canada targets for the provinces and territories to adapt by 2030. First, the Canadian government will provide tools to make energy-

efficient buildings. Net-zero energy ready is known to be buildings that use as much energy as they could produce using renewable energy. Canada pledges to work with the provinces and territories also the federal government to develop such building code.

- In terms of the existing buildings, Canada will develop a model to help guide improving energy efficiency as the element in building renovations. Such code like above will also be ready for existing buildings. According to the report, by 2030, 75% of Canada's buildings will be energy efficient.
- By 2019, Canada is expected to have developed tools to support the aim of labeling requirements. Energy labeling will allow homeowners to increase the value of their homes from the increase of its energy performance from better insulation and better heating and cooling system. In addition to this, the federal government will have a set standard of efficiency for new heating equipment and other appliances.
- Canada will spend \$2 billion of Low Carbon Economy Fund and green infrastructure investments for the provinces and territories to support their efforts in improving the energy performance of buildings and homes.
- Canada will also set heating equipment and key technologies standards
- Finally, it will support vulnerable communities such as the indigenous communities to improve their building's energy efficiency.

2) Clean Transportation

Currently, 23% of Canada's carbon emission comes from transportation, thus in its effort to combat climate

change, Canada will also work in the transportation sector specifically in creating clean transportation to reduce emission. Canada in its federal framework will invest in transportation particularly in Zero-emission Vehicles (ZEVs) which are like electric cars and fuel cell vehicles. Canada is working along with its provinces, industries, and partners to develop clean transportation system with standardized fuel-efficient vehicles and promoting low carbon fuels and alternatives like biogas, electricity, and energy. In the framework, Canada has clearly stated its actions with the provinces and territories (Environment and Climate Change Canada, 2016):

- Continue cutting emissions from cars, trucks and transport vehicles through emission standards, fuel-efficient tire standards and requirements for fuel-saving technologies.
- Reduce emissions in the rail, aviation, marine and off-road sectors by improving efficiency and supporting fuel switching
- Developing a national strategy for zero-emission vehicles in collaboration with provinces and territories
- Investing in changing and fueling stations for zero-emission and alternative fuel vehicles
- Invest in public transit – Canada will install high-speed transit networks by investing \$25 billion to upgrade their public transit system for the next decade
- Develop a clean fuel standard

3) Electricity

Under the Pan-Canadian Framework on Clean Growth and Climate Change, Canada's approach on electricity will include increasing the amount of electricity generated from renewable and low-emitting sources, connecting clean power with places that need it, modernizing electricity system

and reducing reliance on diesel working with Indigenous people and northern and remote communities. In Canada, 80% of its electricity is produced from non-emitting sources such as hydro, nuclear, wind and solar. Under the federal framework, Canada strives to increase the number to 90%. Canada has pledged to phase out from the traditional coal-fired electricity by 2030. Canada is also working on to expand its energy storage and support “smart-grid” technology that uses sensors and automation to modernize the flow of electricity through the grid making electricity systems more reliable and efficient (Environment and Climate Change Canada, 2016).