THE ROAD FROM PARIS: CANADA’S PROGRESS TOWARD ITS CLIMATE PLEDGE

New federal leadership under Prime Minister Justin Trudeau has made climate change a bigger political priority. In practice, more policies that address climate change are needed—especially improving energy efficiency and stopping the expansion of the tar sands industry, which represents Canada’s largest source of emissions growth. Canada’s climate pledge proposes to cut greenhouse gas (GHG) emissions by 30 percent from 2005 levels by 2030; this is considered an unambitious goal. Even so, Canada is not on track to reach it. To ensure Canada does its fair share to mitigate the threat of climate change, the government should set a more ambitious emissions target and implement domestic policies to that end.

OVERVIEW OF NATIONAL CIRCUMSTANCES

Canada accounts for 2 percent of global GHG emissions, with most stemming from its transportation and energy sectors, including the tar sands industry. Per capita, Canada has the second-highest emissions intensity among the G7 countries. Canada is a major global producer and net exporter of energy and extracted fossil fuel resources.

Throughout the conservative administration of Stephen Harper from 2006 to 2015, Canada lagged behind on climate policy. During that time, Canada saw a massive increase in carbon pollution from the tar sands industry. The Harper administration also actively fought international efforts to advance stronger climate and clean energy policies, especially those that might have lessened demand for high-carbon fuel stocks like tar sands. The government is still giving significant subsidies to the oil and gas sector.

NATIONALLY DETERMINED CONTRIBUTION (NDC)

Canada has submitted its nationally determined contribution (NDC), formally proposing an economy-wide reduction of GHG emissions by 30 percent below 2005 levels by 2030, possibly using carbon credits from the international market. This commitment was submitted by the previous administration, and it remains unclear whether Trudeau will strengthen it.
In 2009, in an effort to keep global warming below 2 degrees Celsius, Canada and other G8 countries pledged to cut their GHG emissions by 80 percent or more of 1990 levels (or more recent years) by 2050. To meet that target, Canada would need to cut its emissions by 38 percent of 2005 levels by 2030, as opposed to the 30 percent pledged in the NDC.

In the past, Canada opted to sync its climate pollution reductions with those of the United States. However, the United States pledged to reduce emissions by 26 to 28 percent of 2005 levels by 2025; according to Canada's current target, it could reach only a 23.5 percent reduction from 2005 levels in the same period. In addition, Canada may purchase carbon emissions reduction credits from other countries to meet its 2030 commitment, allowing it to continue high rates of domestic climate pollution while paying for cuts made by other countries.

Canada's chances of satisfying its NDC are slim. At the 2009 conference in Copenhagen, Canada committed to reducing its emissions 17 percent below 2005 levels by 2020, but recent projections show that it will get only about halfway there. Even worse, Canada is on a path to actually increasing emissions by 2030, largely through the expansion of its tar sands industry. In fact, recent decisions by the Trudeau administration, including the approval of a $36 billion liquefied natural gas export terminal and signals that it intends to approve Kinder Morgan's $5 billion Trans Mountain pipeline expansion, may be locking in carbon emissions for decades to come. This would make it nearly impossible for Canada to meet its climate target.

**CLIMATE MITIGATION POLICY**

With the election of the Liberal government in 2015, many in the environmental community are encouraged that the federal government is no longer actively fighting climate policy and science. However, major questions remain about the new government’s future engagement on climate.

In the summer, Canada hosted the North American Leaders Summit, which included U.S. President Barack Obama, Mexican President Enrique Peña Nieto, and Canadian Prime Minister Justin Trudeau. This meeting produced the North American Climate, Clean Energy, and Environmental Partnership Action Plan, by which North America aims to generate 50 percent of its electricity from clean energy by 2025. This would be an increase from the current 37 percent. To reach this goal, the nations will invest in and deploy a variety of clean energy technologies, advance collaborative research, and align environmental standards and regulations across a variety of sectors.

**CANADA GHG EMISSIONS**

![Graph showing Canada GHG emissions from 1990 to 2030](image-url)

Based in Alberta, the tar sands industry extracts tarlike bitumen from strip mines that are destroying the boreal forest and from wells where the thick, toxic substance is steamed and pumped from the ground in a process closely related to fracking. Both the mines and wells require extraordinary amounts of energy and water and are decimating landscapes, rivers, lakes, and wildlife throughout northern Alberta. Prime Minister Trudeau now has the opportunity to develop new policies that will help Canada become a global leader on climate action by shifting away from fossil fuels, especially tar sands.

**TRANSPORTATION SECTOR**
The federal government has established progressively stronger GHG emissions standards for heavy-duty vehicles (model years 2014 to 2018) and for passenger automobiles and light trucks (2011 to 2025). The government is currently developing additional regulatory measures for post-2018 heavy-duty vehicles that will align with the new U.S. heavy-duty vehicle standards. These measures will be released in 2016.13

**ENERGY SECTOR**
Canada’s coal-fired electricity standards ban the construction of traditional coal-fired electricity generation units and accelerate the retirement of existing coal-fired power plants. Some provinces have taken the lead, with Ontario phasing out coal in 2014 and Alberta planning to phase it out by 2030.14 Also, Canada’s renewable fuel regulations require that gasoline contain an average of 5 percent renewable fuel content and that most diesel fuel contain an average of 2 percent. The Canadian government intends to develop regulations to address methane emissions from the oil and gas sector, as well as GHG emissions from natural gas–fired electricity, chemicals, and nitrogen fertilizers.

**TAR SANDS**
Canada needs federal leadership to signal that tar sands emissions must be addressed. Alberta has indicated willingness to begin tackling tar sands emissions, but its “Climate Leadership Plan” is not an emissions reduction policy; rather, it seeks to cap emissions at a level that is nearly 45 percent higher than current production emissions (allowing growth from 70 megatonnes to 100 MT).15

In November 2015, President Obama rejected the controversial Keystone XL pipeline. However, the company behind it, TransCanada, is now proposing the Energy East pipeline, which is 35 percent larger than Keystone.16 Energy East would take tar sands oil from northern Alberta to refineries in Quebec and a seaport in New Brunswick. From there, almost 300 oil supertankers would travel annually along the Atlantic and Gulf Costs to refineries in the southern United States.17 This proposal calls into question Canada’s commitment to climate action as it would mean a significant expansion of tar sands production. The Trudeau administration cannot approve this proposal without taking Canada far off track from its emissions targets.

**CARBON CAPTURE AND STORAGE PROJECTS**
In 2008, the Canadian government announced that any tar sands expansion project built after 2012 would require carbon capture and storage, which could meaningfully reduce emissions if implemented. To date, there is only one operating carbon capture and storage project, which was expected to offset less than 2 percent of tar sands emissions growth between 2005 and 2020.18 Worse, it has missed its targets, faced technological problems, and seen costs soar.19

**PROVINCIAL CLIMATE POLICY**
In the absence of federal climate leadership, many Canadian provinces are working to advance climate policies. For instance, there is the Western Climate Initiative—which includes British Columbia, Manitoba, Ontario, and Quebec. For their part, New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland, and Labrador have signed on to the New England Governors/Eastern Canadian Premiers Climate Change Action Plan. This plan aims to reduce emissions by 10 percent of 1990 levels by 2020, and then to reach reductions of 75 to 85 percent below 2001 levels by 2050.20 Individual provinces have adopted several measures to meet these targets, including the following:

- **Quebec** has implemented a carbon levy, a cap-and-trade system, and a climate action plan to reduce its emissions by 20 percent below 1990 levels by 2020.21
- **Ontario** retired all coal-fired generation units at the end of 2014.22 The province is also set to launch a cap-and-trade system.23
- **Nova Scotia** has instituted a cap on emissions and a renewable portfolio standard requiring renewable resources to make up 40 percent of electricity sales by 2020.24
- **British Columbia** implemented a carbon tax on nearly all fossil fuels in 2008.25 (Unfortunately, though, the province’s new climate plan from 2016 includes subsidies for natural gas.26)

Regrettably, the absence of a defined federal plan has translated to a lack of provincial commitment to these reductions. Though emissions reduction goals have been announced by all Canadian provinces and territories, save the Northwest Territories and Nunavut, only 5 of 13 have actually reduced emissions below the set baselines. This suggests that Canada’s continued reliance on a patchwork of provincial targets has deprived it of a coherent national policy and a national carbon market that would help drive deeper, faster emission reductions.
THE ROAD AHEAD

Canada’s new Liberal government has a strong opportunity to help the nation regain its credibility and leadership position on climate. This will, however, require the Trudeau administration to continue establishing clear targets and plans to achieve them. The Canadian government must take immediate, concrete actions toward its Copenhagen target, while also setting more ambitious future targets that will put Canada on track to fulfill its G8 commitment to reduce emissions by 80 percent of 2005 levels by 2050. To this end, the Canadian government should:

1. Design and implement a federal climate policy that provides a strong floor for all provinces to systematically price carbon, encouraging emitters to seek greater efficiency.

2. Scale back end and oil and gas subsidies, particularly for the tar sands sector.

3. Revive policies to support clean energy, including:
   a. Working with subnational governments to support renewable energy development, energy efficiency, energy storage, and low- or zero-emitting vehicles.
   b. Identifying opportunities to strengthen the U.S–Canada Clean Energy Dialogue, which requires political attention from both nations and a broader agenda.

The Trudeau administration certainly has its work cut out for it after nine years under Stephen Harper. Many of the earliest tests will relate to the environment, with the nation’s carbon-intensive tar sands industry emerging as a critical pressure point. International pressure is already mounting for Canada to set truly ambitious emissions reduction targets and policies to accomplish them. In doing so, there is huge potential for Canada to embrace a 21st-century, low-carbon economy, moving away from the tar sands industry and the accompanying pernicious boom-and-bust economic cycles that that come with a dependence on the oil and gas industry.

ENDNOTES
12 Ibid.
17 Ibid.