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Will Ontario's Climate Change Action Plan Transform Communities?

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Key Points

- Amid significant controversy, the province of Ontario recently released an ambitious climate change action plan that aims to price carbon, reduce reliance on natural gas and enhance the competitiveness of Ontario businesses.
- The Canadian federal government has declared that all provinces must price carbon by 2018, creating new challenges for the next series of provincial climate change and budget planning.
- Sources of emissions in Ontario suggest that efforts to densify communities, improve public transit, shift homes away from a reliance on natural gas and accelerate a transition toward electric cars will yield significant results for Ontario.
- Calls are being made for policies and actions that are transformative rather than incremental, but Ontario's plan lays out specific actions only for the next five years.

Introduction

A Seismic Shift in Provincial and Federal Climate Change Policy in Canada

In the wake of the twenty-first session of the Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change in Paris in 2015, and in the lead-up to the twenty-second COP in Morocco, momentum continues to build behind global efforts to address climate change. Any international treaty, however, must be translated into domestic legislation in each country that signs and ratifies the agreement. The Canadian federal government, present and active in the Paris negotiations, now faces the considerable task of devising a national climate change strategy, and ultimately must reduce greenhouse gas (GHG) emissions dramatically within the next 20 years (if we are to remain with the "carbon budget" that gives a reasonable chance of preventing more than 2°C of warming) (Rogelj et al. 2016).

Shortly after the federal election in 2015, and throughout 2016, the federal government launched an ongoing consultation process designed to inform the creation of a nationwide climate change action plan. The depth of these commitments was recently called into question by the federal government's approval of the Pacific Northwest LNG pipeline, despite assurances that habitat degradation, GHG emissions and indigenous rights would be carefully addressed (Wherry 2016). Despite what has

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been viewed by many environmental organizations as a step backward on Canadian climate change action, consultation on Canada's climate change plan continues: ideas on reducing emissions, clean technology, climate change adaptation and carbon pricing are being solicited from individuals, organizations and sectors. Given that the federal government does not have jurisdiction over all sources of GHGs, however, significant reductions in emissions will be impossible to reach without leadership at the provincial and municipal levels.

Released in June 2016, Ontario's Five Year Climate Change Action Plan represents a controversial and ambitious effort to delink economic growth from fossil fuel consumption, stimulate the uptake of renewable energy technologies and apply a price to carbon that begins to capture the true costs of carbon-intensive communities and lifestyles. This requires spending between $5.9 and $8.3 billion over the next five years, which would come from the revenues generated by auctioning off carbon emissions credits as part of the cap-and-trade market that Ontario will join (along with Quebec and California) (Government of Ontario 2016). In October 2016, the Canadian federal government announced that each province should place a price on carbon of at least $10/tonne of carbon dioxide equivalent (CO_2e) by 2018, rising to $50/tonne by 2022. This shifts the context within which Ontario will be operating in the next several budget cycles, and offers other provinces (grappling with their own preferred model of carbon pricing) the opportunity to learn from Ontario's experiences.

This policy brief summarizes key aspects of Ontario's Climate Change Action Plan and assesses its capacity to deliver transformative emissions reductions in light of provincial, federal and international commitments. By highlighting the successes and failures of climate governance in the province of British Columbia, it explores lessons for both policy makers and scholars who seek to uncover pathways to communities that are low-carbon, resilient to climate change impacts and more fundamentally sustainable.

The Key Components of Ontario's Climate Change Action Plan

Ontario's Five Year Climate Change Action Plan is comprised of eight action areas: transportation; buildings and homes; land-use planning; industry and business; collaboration with indigenous communities; research and development; government; and agriculture, forests and lands. Each action area consists of a number of proposed actions, specific targets and estimated costs. In this, it is not dissimilar from provincial and municipal climate change action plans developed across Canada and elsewhere, but a number of dimensions of this plan distinguish it from others: the central position of a cap-and-trade system in order to put a price on carbon, the extremely short time frame of the action plan and the level of ambition of both the targets and the proposed actions.

Of the 171 megatonnes (Mt) of GHG emissions produced annually in Ontario, the largest portion are related to transportation (35 percent). Close behind is industry (28 percent) and buildings (19 percent). The province has set GHG reduction targets of 15 percent below 1990 levels by 2020, 37 percent by 2030 and 80 percent by 2050. This action plan takes the province to the first of its goals, and should set the stage for the increasingly transformative medium- and long-term targets (for which specific actions have yet to be assigned). As such, it is important to iteratively take stock of the progress that specific actions and policies will make, while keeping in mind the potential for these (and additional) actions to ultimately yield exponentially increasing GHG reductions.

The main sources of emissions and the stated reduction targets suggest that efforts to densify communities, improve public transit, shift homes away from a reliance on natural gas and accelerate a transition toward electric cars (since the vast majority of electricity in Ontario is produced by hydro power) will yield significant results for Ontario.

Many of the action areas and goals, in particular those related to land-use planning in communities, however, are tied directly to steps that can only be taken by municipalities. While the province can require municipalities to embed climate change considerations in their official plans, and send a clear signal that climate change is a priority at the provincial level, municipalities have control over how communities are designed (such as the proximity of work to home and play, which affects commuting distances and viability of active/mass transportation), water and waste management, parks and economic development (Government of Ontario 2001). All of these domains have direct implications for reaching provincial GHG reduction targets, and so provincial policies must reinforce (rather than contradict) municipal climate change actions.

Learning Lessons from Other Provinces: The Experience of British Columbia

Climate change policy in British Columbia took a leap forward in 2008, with the introduction of a suite of regulatory and legislative tools targeting fossil fuel consumption, municipal planning, building codes and climate change target setting. Some municipalities throughout the province (and across Canada) had previously either independently explored GHG reduction strategies or subscribed to the International Council on Local Environmental Initiatives' five-milestone system for climate change action planning (requiring "members" to inventory GHGs, set a reduction target, create and implement an action plan, and monitor progress). The provincial climate change actions taken in 2008, however, provided top-down pressure on municipalities to take rapid steps toward carbon neutrality[1] and also provided some of the regulatory empowerment to do so.

At the centre of British Columbia's climate change policy was a revenue-neutral carbon tax — what some now describe as a "carbon fee and dividend." Unlike the cap-and-trade system announced by the province of Ontario, British Columbia's carbon

1 Carbon neutrality (or net zero carbon emissions) was to be achieved by all public sector organizations by 2010 and all municipalities by 2012. This required real reductions, carbon offsets or a mixture of the two.

tax targeted the consumption of fossil fuels and thereby applied to all consumers (from individuals at the gas pump to municipalities purchasing natural gas to heat their facilities). Beginning at $10/tonne of CO_2e in 2008, and rising by $5 per year until 2012, the revenues from the carbon tax were designed to flow back to BC residents through income and business tax reductions (rather than accumulating as a source of general revenue for the province) (Government of British Columbia 2008). This tax would also return to municipalities in the form of a rebate, if they could demonstrate that they were "making progress" toward becoming carbon neutral in their own operations.

Added to the carbon tax was the Climate Action Charter, a voluntary commitment made by municipalities to measure and report their GHG emissions, become carbon neutral by 2012 and create compact, complete communities. A British Columbia Green Building Code was created, which increased standards for water and energy efficiency, and the Local Government (Green Communities) Statutes Amendment Act required municipalities to integrate GHG reduction targets into their core planning documents (ibid.).

The provincial government acknowledged, however, that these strategies, even if implemented to their fullest extent and with complete success, would only take the province 73 percent of the way to its goal of reducing GHG emissions to 33 percent below 2007 levels by 2020 (ibid.).

The story in British Columbia has dramatically shifted since this flurry of activity nearly a decade ago. The carbon tax froze at $25/tonne of CO_2e in 2012, and has not increased since then. Many economists agree that $25/tonne is much too low to stimulate the sort of pervasive GHG reductions necessary to reach the province's goals — and, more importantly, limit warming to less than 2°C (Jaccard, Hein and Vass 2016). Clearly an extremely modest carbon tax is not a silver bullet: while emissions decreased from 65 Mt CO_2e in 2005 to 61 CO_2e in 2011, emissions increased to 63 CO_2e by 2014 (Environment and Climate Change Canada 2014).

The province's own Climate Leadership Team, comprised of scientists, First Nations representatives and climate change practitioners, composed an open letter to Premier Christy Clark in May of 2016 reviewing the recommendations that the team had offered the province to get "back on track" toward the legislated climate change targets (Campbell et al. 2016). The letter focused on necessary changes to the carbon tax (including increasing its amount and creating more transparency around how the funds are spent) and expressed concerns about the province's decisions to postpone the creation of a new action plan and delay reductions. These delays were cemented in August of 2016, when Clark announced that the government of British Columbia would wait for the federal government's climate plan before renewing its own.

Triggering Transformation at the Provincial Level — How Does the Ontario Plan Stack Up?

The underlying drivers of GHG reductions are not simply technological: they are social, economic and deeply political (Burch 2010; Shaw et al. 2014). In other words, in order to achieve communities (and industries) that are fundamentally sustainable, resilient and low-carbon, a deeper shift in the logic of economies and the values that underpin them must inevitably occur. These transformative shifts thus require communities to be imaginative, radical and ambitious, pursuing sustainability as a complex set of value propositions about what defines a "good life." Such shifts also rest on the model of governance that is participatory, and effectively integrates the often divergent and contested knowledge and capacities of civil society, technical experts, indigenous communities, the private sector and decision makers (while of course recognizing that these groups are not mutually exclusive). Jurisdiction over GHGs overlaps, so it is crucial that municipal, provincial and federal policies are complementary rather than contradictory (Dale 2008; Shaw et al. 2014). This is much more difficult than it might appear at first glance, as evidenced by the recent federal approval of the Pacific Northwest LNG pipeline.

The province of Ontario has set the target of reducing GHG emissions by 80 percent by 2050: a transformative goal. Ontario's Five Year Climate Change Action Plan is the first step toward this

goal, but it is extremely short-term, and it only briefly addresses the issue of a more transformative or longer-term vision for the transition to a low-carbon development pathway in Canada. Renewing this plan every five years is not enough: an action plan that explicitly considers the staged approach and specific actions needed to deliver on 2030 and 2050 targets is required. This is especially crucial given that both industrial assets and public infrastructure have anticipated lifetimes of 10–40 years, so decisions made now have economic and environmental implications that will last for several decades. A systematic engagement with all sectors of the economy (including both small and large enterprises) to explore the future of their industry, and the potential for transformation, would shed considerable light on opportunities to manage emissions and build economic resiliency. Indeed, such future visioning is an important dimension of responsible asset management: shifting regulatory conditions (and increasing risks of extreme events linked to climate change) challenge the long-term viability of assets.

The plan is also firmly rooted in a traditional "green growth" stance: that Ontario businesses can become more prosperous and competitive if they exploit the opportunities provided by renewable energy (such as the $2.2 trillion market of environmental goods, including energy and industrial efficiency, water and renewable energy goods). It is increasingly argued, however, that this growth-based model is fundamentally at odds with the very real limits presented by a small planet and constrained resources (Martinez-Alier et al. 2010). Furthermore, the need to replace carbon-based capital stocks with environmentally and socially benign assets collides with the demands placed upon existing firms to maximize shareholder value that remains rooted in an outdated, carbon-intensive business model.

Ultimately, however, the plan holds promise. It takes on the challenge of weaning Ontario homes off of natural gas and increasing the number of electric vehicles by providing significant incentives and infrastructure. The federal government's announcement of its intention to place a nationwide price on carbon and the impending complexity of cap-and-trade implementation suggest that the next several budget cycles will be a contested and complex navigation toward a low-carbon future. In recognizing the important role of municipalities, the plan may plant the seeds of a more synergistic relationship between cities and province. Without this, Ontario, and ultimately Canada, is unlikely to reach its climate change goals.

Policy Recommendations

Produce a longer-term action plan and adaptively manage progress toward targets.

While a five-year plan is an important first step toward transformative GHG reductions, a longer-term view is needed. The government of Ontario should iteratively take stock of the progress that specific actions and policies will make, while keeping in mind the potential for these (and additional) actions to ultimately yield exponentially increasing GHG reductions. Monitoring and revising are crucial, and often avoided, steps. Without data, it is unclear whether actions taken are sufficient to reach the goals laid out in this plan.

Build a visioning process that makes use of new tools (such as geovisualization and gamification) to build a longer-term vision of Ontario communities.

A long-term climate change action plan should incorporate the often divergent values of key stakeholders, because the character of communities will shift as deeper sustainability transitions are pursued. This requires an iterative, interactive visioning process, which can be enhanced by new tools such as geovisualization and the use of games to facilitate a more profound understanding of complex social-ecological systems.

Strengthen synergies between Ontario's Climate Change Action Plan, the emerging federal climate change action plan, municipal climate change policies and official community plans.

A provincial plan alone is insufficient to yield pervasive and accelerated decarbonization. Without explicitly considering the implications of federal decisions, and without endowing municipalities with greater resources to address the emissions over which they have jurisdiction, it is unlikely that Ontario's long-term target of an 80 percent reduction in GHGs by 2050 will be reached. For example, Ontario's cap-and-trade system must be woven into any federal effort to

price carbon, and transportation and infrastructure decisions must align with, and enhance, municipal land-use plans. Furthermore, infrastructure procurement criteria must incorporate full life-cycle costs, which now include a rising price on carbon.

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