A New Canadian Climate Accountability Act

Building the legal foundation to achieve net-zero emissions by 2050

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A New Canadian Climate Accountability Act: Building the legal foundation to achieve net-zero emissions by 2050

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CAN-RAC

Canada's primary network of organizations working on climate change and energy issues, Climate Action Network Canada is a coalition of 120 organizations operating from coast to coast to coast. Our membership brings environmental groups together with trade unions, First Nations, social justice, development, health and youth organizations, faith groups and local, grassroots initiatives. For 30 years, CAN-Rac has been the only national organization with a mandate to promote the interests of the Canadian climate movement as a whole, rather than any one individual organization.

Ecojustice

Ecojustice was established on the Canadian west coast as the Sierra Legal Defence Fund in 1990, and now has offices across the country, in Vancouver, Calgary, Toronto, Ottawa and Halifax. Ecojustice's 22 staff lawyers go to court and use the power of the law to defend nature, combat climate change, and fight for a healthy environment. Its strategic, innovative public interest lawsuits and law reform programs lead to legal precedents and legislation that deliver lasting solutions to Canada's most urgent environmental problems. More information about Ecojustice can be found at: https://www.ecojustice.ca/approach/.

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Environmental Defence is a leading Canadian advocacy organization that works with government, industry and individuals to defend clean water, a safe climate and healthy communities.
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Équiterre, an environmental leader in Quebec and Canada, offers concrete solutions to accelerate the transition towards a society in which individuals, organizations and governments make ecological choices that are both healthy and equitable. Since the beginning, Equiterre has relied on a dedicated team of specialists from a variety of fields. It develops projects in agriculture, transportation, fair trade, energy, responsible consumption and climate change.
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Pembina Institute

The Pembina Institute is a national non-partisan think tank that advocates for strong, effective policies to support Canada's clean energy transition. We employ multi-faceted and highly collaborative approaches to change. Producing credible, evidence-based research and analysis, we consult directly with organizations to design and implement clean energy solutions, and convene diverse sets of stakeholders to identify and move toward common solutions.

West Coast Environmental Law

West Coast Environmental Law is a non-profit group of environmental lawyers and strategists dedicated to safeguarding the environment through law. Since 1974, West Coast has successfully worked with communities, non-governmental organizations, the private sector and all levels of government, including First Nations governments, to develop proactive legal solutions to protect and sustain the environment.

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Canada has missed every GHG reduction target it has set.

A climate accountability law with 5 key elements can put us back on track.

CANADIAN CLIMATE ACCOUNTABILITY LAW

1

Legislate

2050 net-zero

and new 2030 targets

to ensure Canada's fair share contribution to **keeping global temperature rise to below 1.5 C**

No more missed targets

GHGs

A coherent approach to tackling climate change

2050

Climate Accountability Laws are being implemented all over the world

2 Five-year carbon budgets

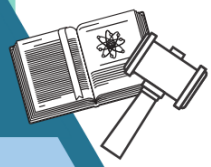
Statutory national and sub-national carbon budgets that cap total GHG emissions adopted on a rolling basis

Budgets are recommended by experts and **set in law**

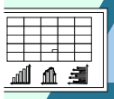
3 Five-year impact reports

Reports will assess the risks of the impacts of climate change on Canada

Reports based on expert analysis will then be **tabled in Parliament**



Climate Accountability Legislation will hold governments accountable to deadlines, delivering solutions to achieve net-zero **by 2050**



4 Plan. → Respond. → Act.

Require the federal government to:

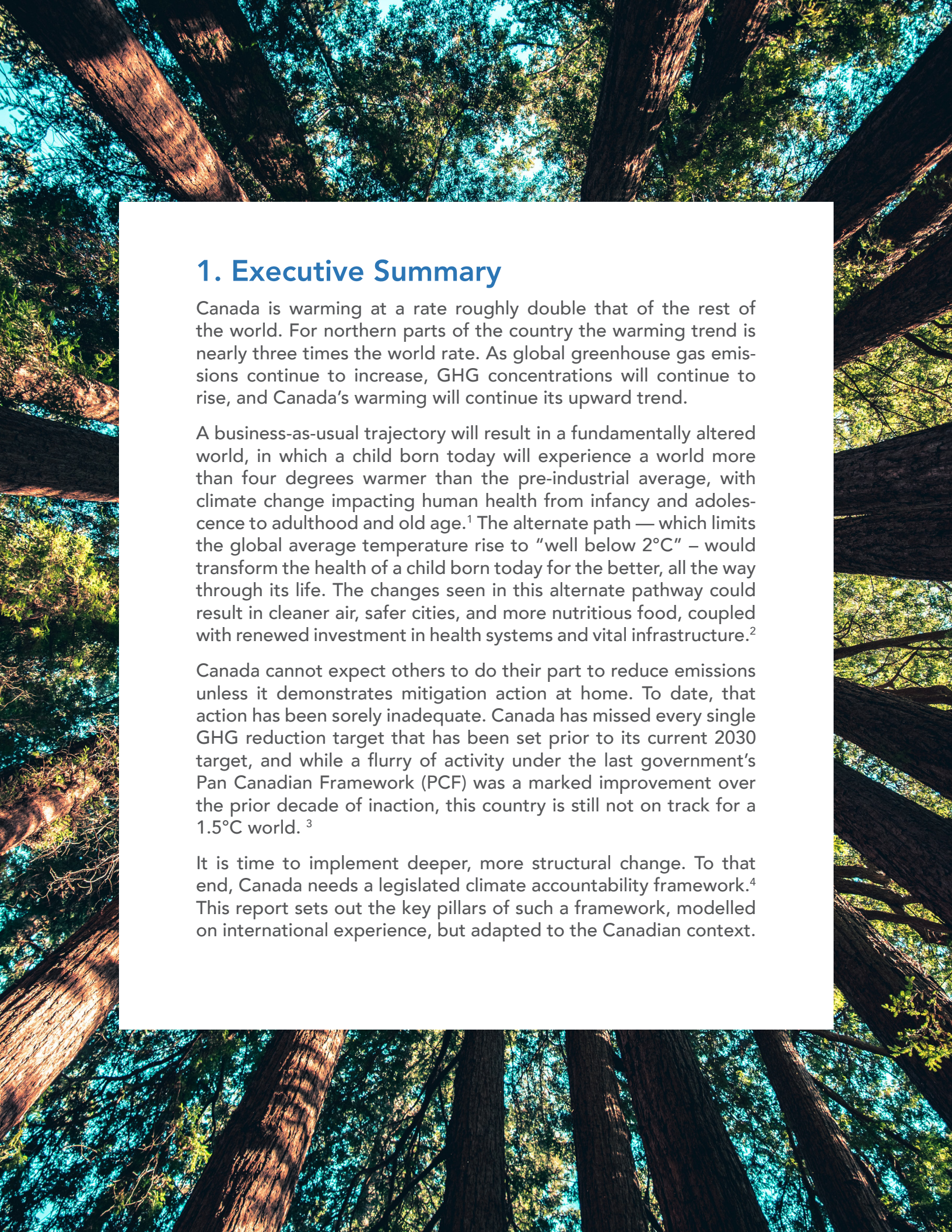
i. Develop a plan and act to achieve carbon budgets in a set time
ii. Develop a plan and act to adapt climate impacts
iii. Respond to expert climate committee reports on govt. progress

5 Expert climate advisory committee

An expert committee from across the country, Indigenous groups and Knowledge holders that:

i. Advises on targets, carbon budgets and impacts reports
ii. Monitors and reports on government progress
iii. Provides advice on climate solutions

ecojustice



1. Executive Summary

Canada is warming at a rate roughly double that of the rest of the world. For northern parts of the country the warming trend is nearly three times the world rate. As global greenhouse gas emissions continue to increase, GHG concentrations will continue to rise, and Canada's warming will continue its upward trend.

A business-as-usual trajectory will result in a fundamentally altered world, in which a child born today will experience a world more than four degrees warmer than the pre-industrial average, with climate change impacting human health from infancy and adolescence to adulthood and old age.[1] The alternate path — which limits the global average temperature rise to "well below 2°C" – would transform the health of a child born today for the better, all the way through its life. The changes seen in this alternate pathway could result in cleaner air, safer cities, and more nutritious food, coupled with renewed investment in health systems and vital infrastructure.[2]

Canada cannot expect others to do their part to reduce emissions unless it demonstrates mitigation action at home. To date, that action has been sorely inadequate. Canada has missed every single GHG reduction target that has been set prior to its current 2030 target, and while a flurry of activity under the last government's Pan Canadian Framework (PCF) was a marked improvement over the prior decade of inaction, this country is still not on track for a 1.5°C world. [3]

It is time to implement deeper, more structural change. To that end, Canada needs a legislated climate accountability framework.[4] This report sets out the key pillars of such a framework, modelled on international experience, but adapted to the Canadian context.

Five pillars of Canadian Climate Accountability Act

Pillar 1: Long-term (2050 & 2030) GHG reduction targets that are ambitious and move Canada towards its fair contribution to a 1.5 C mitigation scenario.

Pillar 2: Five-year carbon budgets that cap total GHG emissions and fairly distribute emissions reductions across the country. Carbon budgets are the basis for mitigation planning.

Pillar 3: Five-year impact reports tabled before Parliament that assess the risks of current and predicted climate impacts in Canada. Impact reports are the basis for adaptation planning.

Pillar 4: Planning and reporting requirements to achieve carbon budgets and guide adaptation. Plans, progress reports on their implementation, and the government's response to progress reports must be tabled before Parliament.

Pillar 5: Arm's-length expert climate advisory committee to advise on long-term targets, five-year carbon budgets, climate impact reports and policy solutions, and independently monitor and report on implementation progress. The expert committee is central to the accountability framework and has a key role in each of the preceding pillars.

If implemented effectively, these pillars can transform how our country approaches climate action and redefine its ambition. In addition to Canada's obligations to do its part – both internationally and to Canadians themselves – industry and businesses are asking for a clear climate framework to enhance certainty. A climate framework that charts a pathway to our long-term targets will promote steady action, avoid stop-start investment and ensure sufficient lead time for larger shifts in the economy – thereby providing more certainty for investors and stakeholders. A policy brief summary[5] of this report is also available.

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2. Overview & Background

Slightly more than a decade ago the United Kingdom created a climate accountability framework under its *Climate Change Act, 2008* (UK CCA).[6] The UK CCA was the first of its kind, remains very highly regarded[7] and has served as a model for legislation in other jurisdictions, including Sweden, Denmark, France, Germany, Spain and New Zealand.[8]

The UK's CCA has performed well to date. The UK has set five carbon budgets (covering 2008-2032) and regular reporting to Parliament has enhanced transparency and accountability. The UK's expert advisory committee, the Committee on Climate Change (CCC) is highly regarded. After 2022 there is a policy gap for meeting the UK's next two carbon budgets, but the structures put in place by UK CAA have identified this shortfall in a timely manner, highlighting the need to remedy the problem.

We propose the creation of a similar climate accountability framework in Canada. Our position is supported by the experience of the UK and other jurisdictions, as well as our assessment of Canada's efforts to achieve its fair share of GHG emissions reductions: Canada has missed every single GHG reduction target that has been set prior to the current 2030 target, and is not on track to meet its current inadequate target.[9] Continuing to develop and apply policy piecemeal, even with more broad ranging initiatives like carbon pricing, is not sufficient, and fails to provide certainty to Canadians, industry, investors and so on.

The current Liberal minority government has made its commitment to climate accountability and the creation of legislated long-term and interim targets a central pillar of its policy agenda. The Liberals, NDP, Greens and Bloc Quebecois all included commitments to this effect in their 2019 election platforms,[10] and election results are widely being interpreted as a clear directive from Canadians for ambitious action on climate.

Our recommendations for a Canadian climate accountability framework are set out below. The recommendations provided in this report were developed based upon extensive research, input received from legal, policy and economic experts during a two-day workshop at the University of Ottawa in 2019, as well as numerous additional discussions with constitutional and environmental lawyers, policy experts and economists.

We use the UK's CCA as our primary template but also reference the New Zealand Climate Change Response (Zero Carbon) Amendment Act which amended New Zealand's Climate Change Response Act, 2002 (NZ Climate Act).[11] We are careful to note the lessons learned from more than a decade of operation of the UK CCA. We are also cognizant that the UK model cannot simply be inserted into the Canadian context. We consider and address the challenges posed by applying a climate accountability framework developed for the UK in a different legal and political context. In particular, there is the issue of the Canadian division of powers, as well as the need to uphold and respect the rights of Indigenous Peoples and governments. To that end, we recognize that it is essential that Canadian climate accountability framework be built on a foundation of cooperative federalism that recognizes Indigenous inherent right to self-government, the United Nations Declaration of the Rights of Indigenous Peoples (UNDRIP), the Truth and Reconciliation Commission (TRC) Calls to Action and any other relevant guidance or law.

Finally, we have also considered the parallel international process under the Paris Agreement, which includes an ambition mechanism designed to compel Parties to ratchet up climate commitments and action over time. Our recommended framework dovetails with that mechanism: it will enable and encourage the ratcheting up of ambition - both in terms of setting targets and carbon budgets and the policies that are developed to achieve them - and it will be responsive to changing economic and technological conditions as well as our evolving understanding of the science of climate change and its impacts.

3. Key Features of a Climate Accountability Framework

This section sets out the key features of a climate accountability framework for Canada. Relevant legislative provisions from other jurisdictions are provided as examples where they are useful. Where possible, clear recommendations are provided. However, in some instances there are possible options to consider in designing certain features of the framework.

Indigenous input is still required. Accordingly, finalization of all recommendations is subject to Indigenous input to ensure respect and to uphold Indigenous Rights. We strongly encourage the federal government to meaningfully engage and incorporate Indigenous perspectives as the framework is developed.

The core pillars of a climate accountability framework are:

1. **Long-term (2050 & 2030) GHG reduction targets** that are ambitious and consistent with Canada's fair share contribution to a 1.5°C-consistent mitigation scenario.[12] These targets must be set in law and may be strengthened if experts (below) so advise.[13]

2. Interim **statutory five-year carbon budgets** at both the national and sub-national (i.e. provincial/territorial) levels that cap total GHG emissions and are adopted on a rolling basis. These carbon budgets would be recommended by experts (below) and set in law. Sub-national carbon budgets will ensure the work of reducing Canadian GHG emissions is fairly shared across the country.

3. **Five-year impact reports** that assess the national risks of the current and predicted impacts of climate change. These reports must take advice of experts (below) into account and be tabled before Parliament.[14] Impact reports are the basis for adaptation planning.

4. **Planning and adaptation requirements** that statutorily mandate the federal government to, in collaboration with other levels of government: **a) develop and implement a plan to achieve national and sub-national carbon budgets** within a set time after that budget is legislated, and **b) develop and implement a plan to adapt to climate impacts (i.e. adaptation plans).** Both of these plans must be tabled before Parliament. The government must also **table its responses to the expert committee's progress reports** before Parliament. The response must set out how the government will act on the body's recommendations.

5. **An independent arm's-length expert climate advisory committee** drawn from all regions of the country, that (a) **advises** on long-term targets, the five-year carbon budgets and climate impact reports, (b) **monitors and reports** on governmental progress towards achieving the short-term carbon budgets, long-term targets, and adaptation plans, and (c) provides advice to the governments on climate-related policy. The expert committee is central to the accountability framework and has a key role in each of the preceding pillars. In the Canadian context, this committee must include Indigenous Peoples and Knowledge holders.

Please note that the expert committee is #5 of our pillars only because it is impossible to talk about its role without first introducing and explaining pillars #1through #4. Being "last" does not reflect the expert committee's importance to the framework. Rather, it is central and foundational to the entire framework.

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3.1 Long-term GHG Targets

Setting the target

The legislation should place clear and unqualified legal duties on government to establish and meet the long-term targets, with a set date and a clear and measurable goal.[15] For example, section 1(1) of the UK CCA states that:

It is the duty of the Secretary of State to ensure that the net UK carbon account for the year 2050 is 100% lower than the 1990 baseline.

What should the targets be? The current government has committed to a long-term target of net-zero GHG emissions by 2050, and to revise its current 2030 target. Given Canada's historic role in global greenhouse gas pollution, including our limited success on reducing emissions, this may be an appropriate 2050 target, although Canada will need to ultimately move to net zero and contribute to emissions reductions elsewhere in the world in order to truly "do our part" to address climate change. Our recommendation, which aligns with the government's commitment, is to **set the 2050 net-zero GHG emissions target in law, and to legislate the 2030 target, once revised.**

Assigning responsibility

UK legislation refers to the "Secretary of State" as a proxy for central government rather than a particular ministry. In practice, responsibility under the UK CCA has moved over the years. In October 2008 the government brought the energy side of the (then) Department of Business, Enterprise and Regulatory Reform and the climate change mitigation side of the Department of Environment, Food and Rural Affairs (Defra) in a new Department of Energy and Climate Change (DECC), recognizing the need to bring energy and climate change policy together. In 2017 DECC was folded back into a new Department of Business, Energy and Industrial Strategy (BEIS).[16]

The following are relevant considerations when determining who should be the "Responsible Minister":

- The need to coordinate with sub-national governments and Indigenous Peoples;
- The need to ensure consistent and collaborative policy development and decision-making across key portfolios (energy, natural resources, etc.);

Greenhouse gases

Canada's targets and carbon budgets should apply at least to the seven GHGs currently reported under the United Nations Framework Convention on Climate Change: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3).

There may be value in setting separate targets for CO2 and non- CO2 GHG's. The science on CO2 is much clearer and we know that CO2 needs to go to net-zero (and then below zero), but a non-zero level for non- CO2 GHG emissions is expected. Another option is to follow New Zealand's example which breaks out a methane target, and otherwise reduces net emissions of all other greenhouse gases to zero by 2050. The Canadian Institute Climate Choices (CICC, discussed further below) may be well-placed to provide advice on these issues.

Carbon budgets are arguably a misnomer. New Zealand, for example, refers to "emissions budgets". We use the more well-known term "carbon budgets" but it is our recommendation that they (and the "net carbon account" discussed below) include at least the seven GHGs above.

Using "carbon dioxide equivalent" abbreviated as CO2e allows us to roll all GHGs into a single measure like a carbon budget. CO2e is a metric measure used to compare the emissions from various GHGs on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of CO2 with the same GWP.

3.1 Long-term GHG Targets (continued)

- The need to engage the departments with responsibility for the sectors that emit the most GHGs. Note that in the UK, the deepest results (GHG emissions reductions) were in the Ministry where responsibility was housed; and
- The need to ensure that financial budgeting aligns with carbon budgeting requirements.

In Canada, assigning responsibility to the Ministers of Environment and Climate Change and Finance might address the requirements above, and provide for an opportunity to synchronize financial and climate budgeting processes.

Another option is to make the Prime Minister responsible for reaching the targets and budgets in some way. Addressing climate change is a whole-of-government and economy-wide project. The highest levels of government can and should be engaged in ensuring that we progress as required. Clear involvement by the Prime Minister would more readily and consistently enable cross-Ministerial cooperation.

Climate accountability frameworks usually require that the government (the Responsible Ministers) largely comply with the advice of the independent expert advisory committee (set out in more detail below) when setting the long term target or targets. As noted above, the fact that this government has already committed to net-zero GHG emissions by 2050, and a revised 2030 target later in 2019, may make that requirement redundant in Canada at this time. However, the independent expert advisory committee would still have a role, which should be legislated, in pushing Canada to increase its ambition - and its targets - over time. This is explained below.

Office of Climate Change

One of David Milliband's first acts as the new Secretary of State for the Environment, Food and Rural Affairs in May 2006 was to write to the Prime Minister asking for permission to set up a new Office of Climate Change (OCC). The OCC, established in Defra in September 2006 with a cross-departmental ministerial oversight board and elements of cross-government funding, had the lead on the UK CCA Bill. It provided a "safe space" in which talks could take place without people feeling like they were engaged in defensive inter-departmental negotiations, and OCC members could brief the secretaries of state before the cabinet committee which helped to build consensus.[17]

The OCC moved to be part of the DECC strategy team after DECC was created in 2008, and has now ceased to exist as a separate entity.

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3.1 Long-term GHG Targets (continued)

Amending the targets

The legislation should allow for the long-term targets to be strengthened through legislative amendment.[18] Given the weight of scientific evidence we cannot envision a scenario in which the target would be weakened.

Under the UK CCA and the NZ Climate Act, the level of the 2050 target can be amended[19] if specified statutory tests are met and procedural steps are followed.[20] Both acts refer to "significant change" or "significant developments" in scientific knowledge about climate change, European or international law or policy, etc.[21] To date, the UK has only strengthened its long-term target, from 80% below 1990 levels to net zero by 2050.

In order to encourage increasing ambition, we recommend that the legislation require the expert committee to periodically review the targets and provide advice to the Responsible Ministers on whether they should be strengthened. The Responsible Ministers must respond to that advice and explain reasons for any departure from the advice.

Net carbon account

A "net carbon account" is a figure against which progress towards achieving the long-term targets and carbon budgets can be measured. The UK and most other countries with legislated targets have used the concept of a net carbon account. In the UK, the net carbon account is calculated by starting with actual or gross emissions, subtracting emissions removals (from land use, land use change and forestry (LULUCF) and then adjusting for carbon units brought in to the country (international credits) or sold overseas.[22]

We recommend that the government obtain expert, arm's length advice regarding Canada's "net carbon account." While the flexibility provided by such a concept may be attractive, inappropriate use of this concept could undermine Canada's ability to do its part to achieve a stable global climate. Several potential issues relevant to the concept of a net carbon account are discussed below.

i) International Aviation and Shipping

First is the question of whether to subtract emissions from international aviation and shipping (IAS) from the "actual" or "gross" GHG emissions or include them in the net carbon account. The UK is currently in the process of

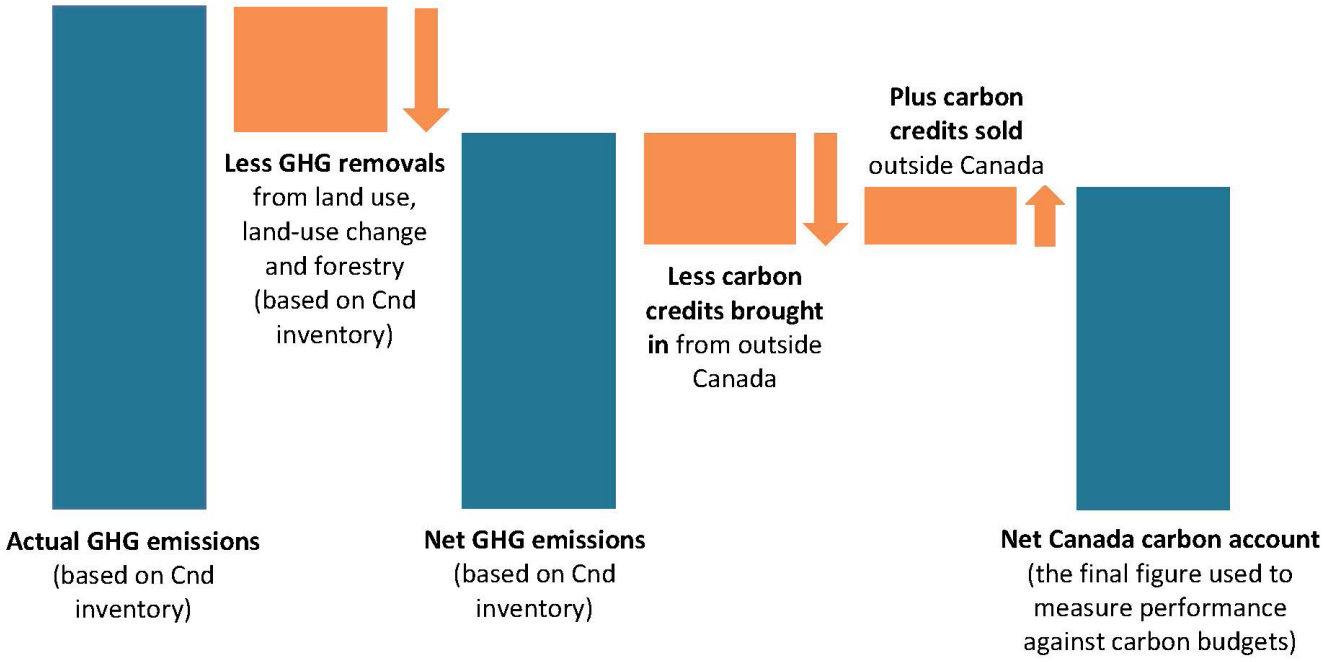


Figure 1 - Illustration of "Net Carbon Account" mirroring the UK's approach.

3.1 Long-term GHG Targets (continued)

revising its 2050 net-zero target to include IAS emissions on the advice of its expert advisory committee.[23] New Zealand's Climate Commission must, under the NZ Climate Act, provide advice to the government by December 2024 on whether to amend its 2050 target to include IAS.

Canadian legislation should either include IAS emissions in the net carbon account (and accordingly in its targets) now, or set a timeline to obtain expert advice on that point.

ii) International credits

Second is the question of whether to deduct, and if so within what parameters, carbon credits brought in or purchased from outside Canada. Given Canada's historic over-contribution to climate change and the need for all countries to strive to achieve net-zero emissions by 2050, there may be some role for credits in achieving Canada's 2030 target, but use of such credits by 2050 should be largely eliminated.

Regardless, the question of what role credits should have must be evaluated on the basis of expert advice and limits enshrined in law. Sweden has set a minimum of 85% domestic reductions. The NZ Climate Act enables the use of offshore mitigation (the purchase of international credits) in limited circumstances. In fact, the NZ Environment Committee specifically amended the draft legislation to:

- Clarify that offshore mitigation should only be used where a change of circumstances has affected the technical feasibility of reducing emissions domestically;
- Highlight the domestic focus of emissions budgets; and
- Require the Commission and the Minister to consider the circumstances that would justify the use of offshore mitigation when determining the cap on offshore mitigation.

We recommend similar restrictions (a Swedish-style cap, as well as New Zealand-style legislative guidance) on the use of international credits. The government should obtain independent expert advice on this question.

We note in particular that if the revised 2030 target is ambitious, then it may be fair to achieve a larger portion of that target through international credits.[24] If the revised target is not ambitious, then it should largely or entirely be achieved domestically. CANRac's "Deriving a Canadian Greenhouse Gas reduction target in line with the Paris Agreement's 1.5°C goal and the findings of the IPCC Special Report on 1.5°C" elaborates on this trade off.[25] See also the box regarding Article 6 below.

Article 6 of the Paris Agreement

Article 6 of the Paris Agreement[26] allows for the use of co-operative approaches, such as internationally transferred mitigation outcomes (ITMOs). ITMOs are meant to replace other existing forms of international carbon credits such as those issued under the Kyoto-era Clean Development Mechanism and Joint Implementation. Rules involving the use of ITMOs, however, have yet to be agreed-upon by the parties to the United Nations Framework Convention on Climate Change (UNFCCC).

Crucially, given that no country is currently on track to meeting its NDC, Article 6 must be used as a tool to increase ambition and promote sustainable development. Research has clearly shown that without careful design and implementation, the environmental integrity of international emissions trading mechanisms can be undermined through crediting of emissions reductions that are not additional or are overestimated. To add to these concerns, in Canada, some stakeholders have been advocating for Article 6 to allow the generation of ITMOs from low-carbon exports. This proposal represents a fundamental shift from the project-based focus of previously established international emissions trading mechanism and raises significant new challenges which will exacerbate ongoing challenges regarding the credibility and environmental integrity of CDM credits.

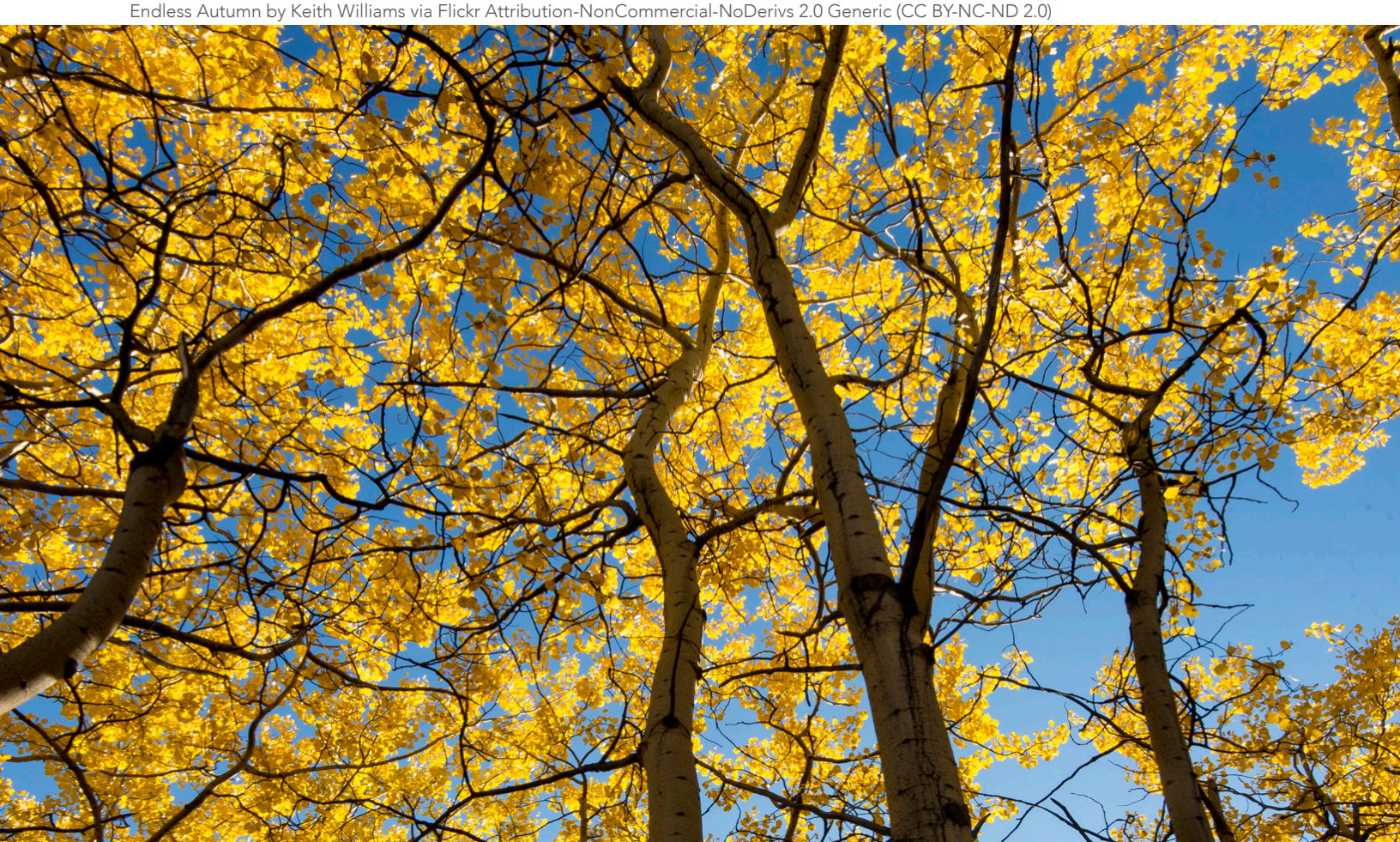
3.1 Long-term GHG Targets (continued)

iii) LULUCF

Under the UNFCCC any process, activity or mechanism which removes a greenhouse gas from the atmosphere is referred to as a "sink". Human activities impact terrestrial sinks, through land use, land-use change and forestry (LULUCF) activities, consequently, the exchange of CO_2 (carbon cycle) between the terrestrial biosphere system and the atmosphere is altered.

Mitigation can be achieved through activities in the LULUCF sector that increase the removals of GHGs from the atmosphere or decrease emissions by sources leading to an accumulation of carbon stocks. Canada has enormous potential to achieve mitigation through LULUCF measures given that it is the second largest country in the world, with over 6 percent of the world's land mass and 9 percent of the world's forests.

The main drawback of LULUCF activities is their potential reversibility and non-permanence as carbon stocks as a result of human activities, disturbances (e.g. forest fires or disease), or environmental change, including climate change.[27] Reductions in fossil fuel use must be prioritized over the potentially less permanent increases in LULUCF carbon stocks.



3.2 Five-year Carbon Budgets

National carbon budgets

In addition to the long-term 2050 target, the legislation would introduce a system of statutory five-year national carbon budgets that cap total GHG emissions and are adopted on a rolling basis. These national carbon budgets act as stepping stones to Canada's 2050 net-zero target.

Carbon budgets are medium-term targets. Each carbon budget establishes a cap on the economy-wide GHG emissions over a given period of time. Carbon budgets represent GHG emissions reductions by volume rather than a percentage. For example, the UK's Fourth Carbon Budget caps that country's GHG emissions at 1,950 MtCO2e for the years 2023-2027. This translates to a 51% reduction over 1990 levels.

Generally speaking, the national carbon budgets would follow the most cost-efficient path to the long-term target. That path involves steady action, avoids stop-start investment and ensures sufficient lead time for making more difficult changes – all of which provide predictability for industry and stakeholders.

The UK initially considered annual carbon budgets, but ultimately concluded that five-year budgets provide a good balance between predictability and flexibility. Factors include relevant international time periods, impact of weather fluctuations on emissions, and time lags in emissions data.[28]

Sub-national carbon budgets

A national carbon budget cannot be achieved without a clear understanding of what needs to be accomplished in each province and territory. Canadians need certainty of what the expectations are for GHG reductions within their region. Consequently, the national five-year carbon budgets should be apportioned between the provinces and territories, in an equitable and efficient fashion, into **sub-national carbon budgets.** While we recognize there are political challenges associated with this approach, in our view the benefits drastically outweigh the costs, as set out below.

A sub-national carbon budget is not binding on sub-national governments per se but rather

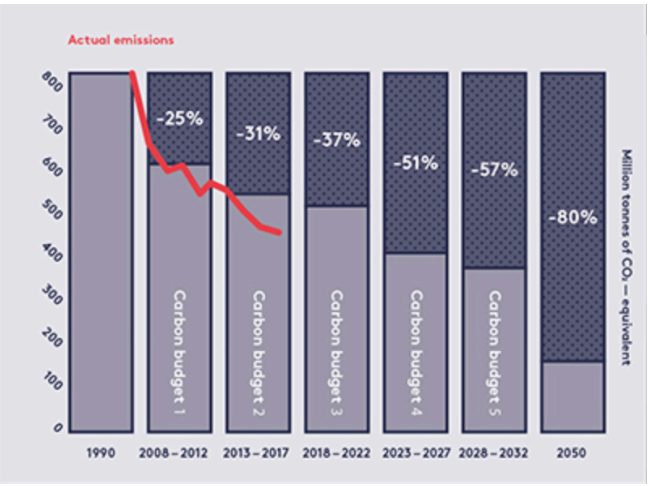


Figure 2 - UK's Carbon Budgets. Source: 10 years of the UK Climate Change Act, Grantham Research Institute on Climate Change and the Environment.

defines the maximum emissions from within the geographic boundaries of that province or territory. They are binding on the federal government to the extent that they set out a path to achieving the national budget but are informational for provincial and territorial governments - setting out their expected role in contributing to the national budget. As expanded further below, the responsibility to achieve the sub-national budgets will reflect the fact that in Canada jurisdiction over GHG emissions is jointly shared by all levels of government.

This understanding tracks with the GHG emissions reporting under the National Inventory Report (NIR) and to the UNFCCC.[29] Provincial/territorial GHG emissions estimates are based on the quantitative amount of human activity resulting in emissions during a given time period taking place within the geographical boundaries of that province/territory.[30]

Why sub-national carbon budgets?

The question of jurisdiction is central to dealing with Canadian GHG emission reductions. Constitutionally, it is well established that the environment is a shared jurisdiction. The federal government has well-established powers to regulate emissions from all sources of GHGs, fuels and the energy efficiency of appliances, equipment and vehicles. It also has broad taxation and spending powers. Provinces and territories also hold crucial levers over climate policy. These include control over buildings,

3.2 Five-year Carbon Budgets (continued)

electricity supply, natural resource project approvals and the administration of municipal governments. While the federal government also invests in public transit and road infrastructure, provinces/territories and municipalities are the major players in many transportation decisions.

Enacting an effective federal climate accountability framework in Canada poses unique challenges. Canadian federalism is among the most decentralized in the world, and the environment is not an enumerated subject assigned to either the federal or provincial government in the Constitution. Instead, authority to legislate on environmental issues is shared between both levels of government, depending on the dominant purpose of particular legislation. The power of the federal parliament to legislate is confined by the powers that are distributed to it under the Constitution Act, 1867. Legislation is valid only if it falls within the jurisdiction of the enacting level of government. That said, Parliament has considerable legislative authority over GHG emissions. The Constitution confers various powers which could authorize the federal government to set provincial targets/budgets or project specific targets/budgets.

Following a series of provincial challenges to the federal *Greenhouse Gas Pollution Pricing Act* (GGPPA), the precise extent and nature of federal jurisdiction to limit provinces' greenhouse gas emissions is highly partisan and subject to some legal uncertainty. The Courts of Appeal in Saskatchewan and Ontario have both upheld the federal government's jurisdiction to enact the GGPPA under the "national concern" branch of the Peace Order and Good Governance ("POGG") head of power - a catch all provision which aims to confer a general power on the federal government to legislate on matters of national importance. By contrast, the Court of Appeal of Alberta ruled that the GGPPA was a federal intrusion on provincial jurisdiction. Dissenting judgments in the Saskatchewan and Ontario Courts took a similar view.

Ultimately we will have to wait for the Supreme Court of Canada to provide some clarity on this matter. But this is no reason for delay: Parliament can design new climate laws to fit within the jurisdictional space as it is being defined by the courts. If the Supreme Court upholds the GGPPA under the "national concern" doctrine, this would create the space for federal legislation to use sub-national carbon budgets under that head of power.

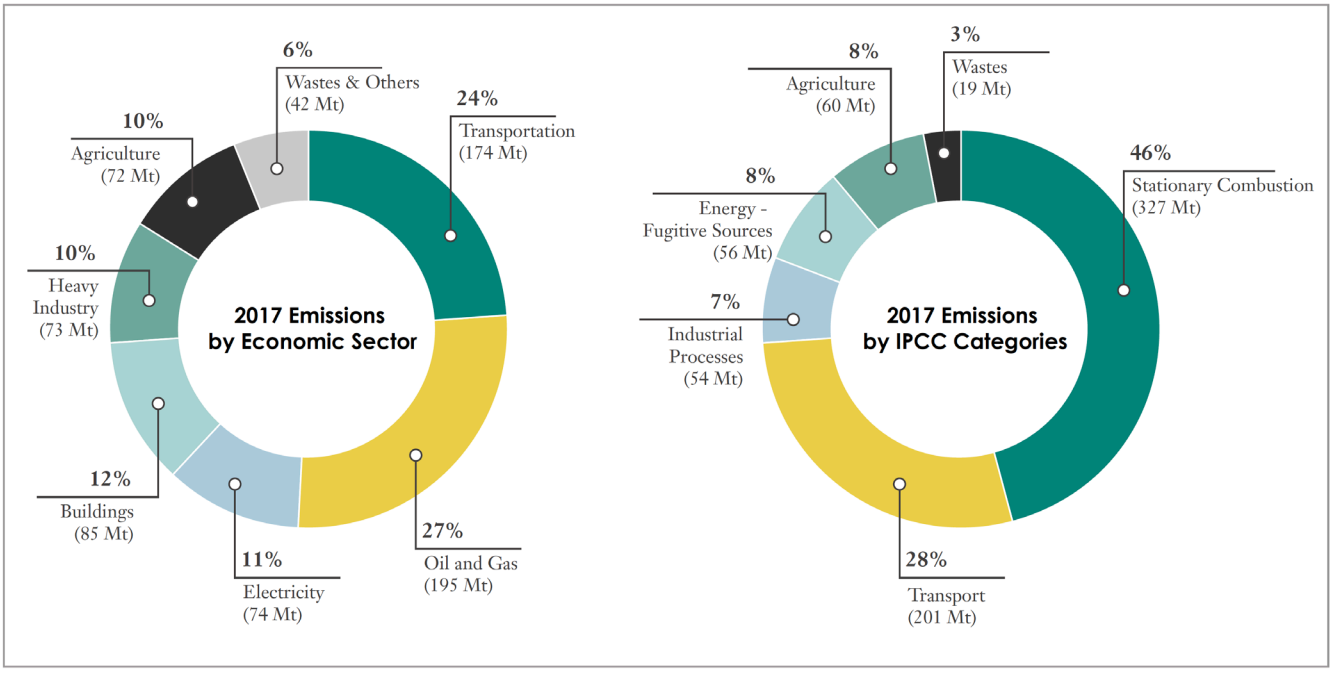


Figure 3 - Total Canadian 2017 GHG emissions (722 Mt CO2 eq)—Methods of Categorisation. Source Canada's 4th Biennial Report to the United Nations Framework Convention on Climate Change (UNFCCC)

3.2 Five-year Carbon Budgets (continued)

Even if it does not, there are other options which may prove less problematic. For example, the federal legislation could be designed to fit within the emergency branch of POGG, by establishing a clear temporal limit and tying the legislation to the achievement of carbon reduction targets for 2030 and 2050. This would be consistent with the emergency nature of addressing climate change, which has clearly been established by an overwhelming consensus of scientific opinion, a fact recognized by the Saskatchewan Court of Appeal in the Carbon Pricing Reference.

The legal basis for a federal climate act is less important than the political one. Ultimately, legislation that is based on consensus and fair and transparent allocation of the costs and benefits of climate change mitigation and impacts is less likely to face legal challenges and more likely to endure.

The breakdown of Canada's emissions by economic sector demands that the work of reducing GHGs be spread across both national and sub-national jurisdictions. Adding to the complexity, a given policy may strictly relate to a matter of sub-national jurisdiction (i.e. coal plants – electricity generation) but there may be a way to address the GHG emissions from that source by federal means (i.e. regulating the emissions of CO2 as a listed toxic substance under the *Canadian Environmental Protection Act* (CEPA)).

Practically, emissions vary significantly by province/territory as a result of population, energy sources and economic structure. All else being equal, economies based on resource extraction will tend to have higher emission levels than service-based economies. Likewise, provinces/territories that rely on fossil fuels for their electricity generation emit relatively more greenhouse gases than those that rely more on hydroelectricity.[31]

	Historical				Projected		Change 2005 to 2030
	2005	2010	2015	2017	2020	2030	
Newfoundland and Labrador	10	10	11	11	11	9	-1
Prince Edward Island	2	2	2	2	2	2	< -1
Nova Scotia	23	20	17	16	15	11	-13
New Brunswick	20	18	14	14	14	10	-10
Québec	86	80	78	78	77	73	-14
Ontario	204	174	165	159	161	160	-44
Manitoba	20	19	21	22	22	22	2
Saskatchewan	68	69	79	78	75	68	< -1
Alberta	231	239	275	273	265	258	27
British Columbia	63	59	59	62	61	59	-4
Yukon Territory	1	1	<1	1	1	1	< 1
Northwest Territory	2	1	2	1	2	1	< -1
Nunavut	<1	<1	1	1	1	1	1
Canada	730	693	722	716	705	673	-57

Note: Numbers may not sum to the total due to rounding. Historical emissions data comes from NIR 2019.

Figure 4 - Provincial and Territorial GHG Emissions (Mt CO2 eq) under WM Scenario, from 2005 to 2030 (Excluding LULUCF). Source: Canada's 4th Biennial Report to the United Nations Framework Convention on Climate Change (UNFCCC)

3.2 Five-year Carbon Budgets (continued)

Layered on top of the jurisdictional and regional issues is the political calculus. Climate change (and how to achieve the necessary national GHG reductions) is remains a partisan issue in Canada. This may begin to change, given the extent to which the last election was at least in part a referendum on climate action, for which 2/3 of Canadians voted in favour. For now, however, there may be concerns at the federal level of taking too central an approach to climate policy, or of appearing to target particular economic sectors, in fear of increasing regional divisions.

Given the jurisdictional, regional and political issues it may be tempting to consider leaving carbon budgets national in scope. This would be a mistake.

To have accountability, there must be (1) responsibility, (2) answerability and (3) enforceability. Climate framework legislation aims to apportion answerability for GHG emissions to the relevant actors. Sub-national governments hold important climate policy levers – building policy, transportation policy, and so on. If sub-national governments are not publicly answerable (as in held to public account) for failing to use their policy tools to achieve potential GHG reductions, responsibility for those key climate policies may fall away, deeply weakening the entire framework. Creating sub-national budgets will highlight the shared responsibility between the federal and provincial governments to achieve the necessary GHG reductions in a transparent way.

This position is supported by studies of the effects of federalism on climate change mitigation in other federal nations, such as Austria and Switzerland.[32] In both cases, the study authors concluded that federalism may lead to inchoate and watered down policies. Their recommendations align with ours: centralize responsibilities in the federal government where possible, and ensure that sub-national targets are meaningful. The alternative is the current complex web of federal/provincial interactions which have not produced the necessary GHG reduction results to date in Canada.

How might a national carbon budget be allocated into sub-national carbon budgets?

There are a number of approaches that could be used to ensure that the national carbon budget is allocated fairly and equitably between sub-national entities.

The European Union has undertaken specific effort-sharing negotiations among member states to share the joint target.[33] They use a combination of effort sharing calculations (a mixed formula that takes economic capacity and cost of mitigation into account) and political negotiation to establish targets for member states. A similar approach could be used in Canada.

Burden-sharing "principles" provide guidance on fair allocations.[34] For example, the sub-national "shares" of the national carbon budget could be split using an ex-ante approach (allocation rules that define fairness from the perspective of conditions as they exist *prior* to implementation of policies).

Specific examples include:

- Grandfathering (past emissions give rights to future emissions)
- Egalitarian (equal per capita emissions)
- Ability to pay (inverse proportion to GDP per capita)

Alternatively, an ex-post approach could be used (allocation rules that define fairness from the perspective of conditions as they exist after the implementation of policies – economic modelling required).

3.2 Five-year Carbon Budgets (continued)

Specific examples include:

- Horizontal equity (distribute to equalize welfare/GDP)
- Utilitarian (distribute allocation to minimize aggregate welfare loss)
- Rawlsian (minimize welfare loss to poorest region)

Setting national and sub-national five-year carbon budgets

Duties and timing - national budgets

We recommend that the legislation place clear and unqualified duties on the Responsible Ministers to set and meet five-year national carbon budgets. As discussed above, the legislation would set the 2050 net-zero target and a 2030 target, but it would not set the five-year national budgets themselves. Rather, **the legislation would set out a process for establishing those five-year budgets.** The national five-year budgets would be enshrined at a later date by either an Order-in-Council or regulation, in accordance with the deadlines set in the legislation.

The actual amount of the carbon budgets would be based on the expert committee's advice, set out below. **The Responsible Ministers must set carbon budgets that are at least as ambitious as the carbon budgets recommended by the expert committee.**

In addition to the five-yearly carbon budgets **we recommend requiring the Responsible Ministers to set "indicative annual ranges"** for each year of a budget period. These annual ranges maintain predictability within the more flexible five-year carbon budget periods.[35]

In terms of timing, the legislation should require that **at least the first two five-year carbon budgets be set within 6-12 months of passage of the legislation.**[36] After the initial set of carbon budgets, future carbon budgets should be set approximately 10 years in advance of the relevant period, as more lead time contributes to predictability.[37]

Several pieces of the Paris Agreement work together to ensure regular evaluation of progress toward Nationally Determined Contributions (NDCs) and to ratchet up ambition of national contributions over time. This package of measures, colloquially referred to as the Paris Ambition Mechanism, calls on parties to develop or update NDCs following a Global Stocktake that will take place every five years starting in 2023.[38] We therefore recommend aligning the timing of the carbon budget setting process with the Article 14 Global Stocktake. This would reinforce the credibility and enhance transparency of both processes and anchor the international measuring, reporting and verification system in a domestic process. The below timeline illustrates our recommended process and timing.

3.2 Five-year Carbon Budgets (continued)

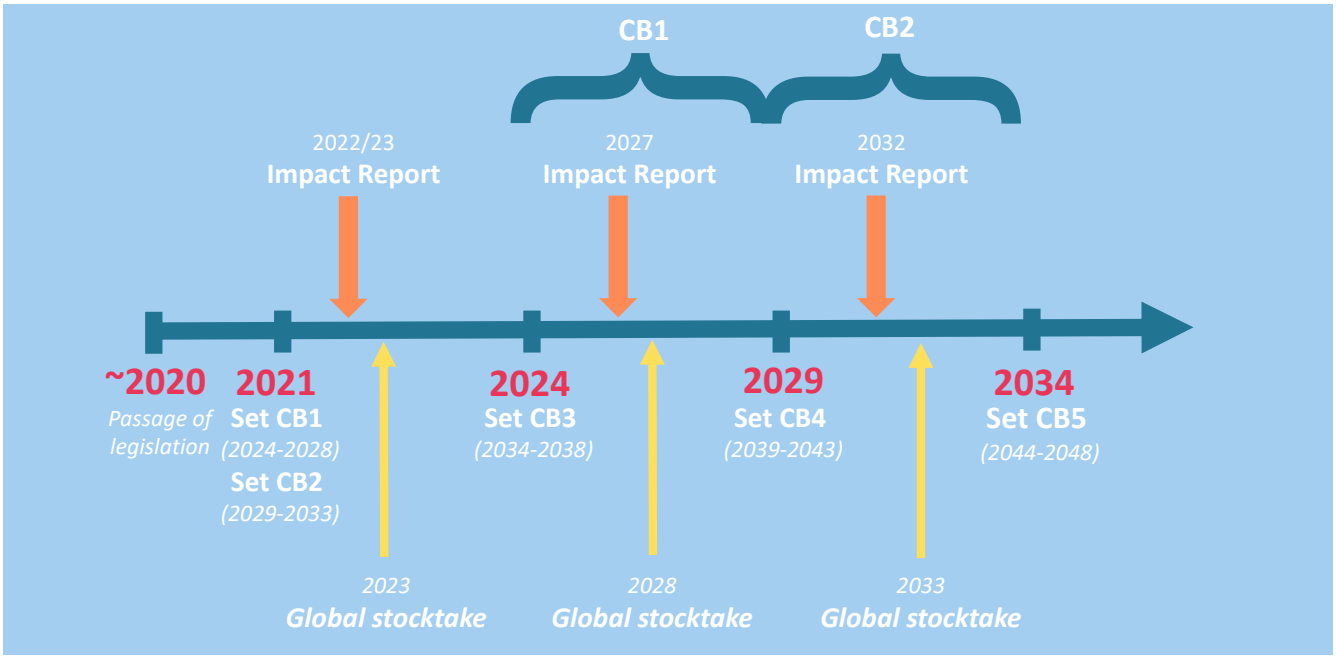


Figure 5 - Potential timeline for setting of Canadian carbon budgets.

Please note that figure 5 includes the timing of the impact reports which we explain further in section 3.3 below. In short, these reports focus on the existing and forecasted impacts of climate change on Canada and inform adaptation planning.

Expert advice and considerations - national budgets

We recommend that the legislation require the Responsible Ministers to obtain advice from the expert committee on the amount of the national (and sub-national - more on that below) carbon budgets. The legislation should, in parallel, require the expert committee to provide that advice.

The legislation should require the Responsible Ministers to set national carbon budgets that are at least as ambitious as the national carbon budgets recommended by the expert committee.

The legislation should specify the substantive considerations that inform the expert committee's advice on national carbon budgets. At a minimum, every budget must be set with "a view to meeting" the long-term target and international obligations, namely the Paris Agreement's 1.5 C goal.[39]

The legislation should specify additional substantive matters that must be considered by the expert committee when advising on the budgets. Drawing on the UK CCA[40] and the NZ Climate Act[41] we recommend that the following factors must be considered by the expert committee:

- The need for carbon budgets that are ambitious and are consistent with the 2030 and 2050 targets being achieved;[42]
- Scientific knowledge regarding climate change;
- Indigenous knowledge relevant to climate change;
- Historical and current responsibility for climate change/impacts;
- Economic circumstances, particularly the likely impact of the decision on the economy and the competitiveness of particular sectors of the economy;
- Differences in regional circumstances across the country;
- Circumstances at the international level;
- The results of public consultation on the carbon budgets;

3.2 Five-year Carbon Budgets (continued)

- The current and anticipated impacts of climate change in Canada, including the distribution of those impacts across the country and across generations;
- The current and anticipated impacts of climate change on Indigenous Peoples and their rights;
- The likely impacts of actions taken to achieve the carbon budgets and the 2050 target, including on the ability to adapt to climate change; and
- Canada's relevant obligations under international agreements.[43]

Expert advice and considerations - sub-national carbon budgets

The legislation should direct the expert committee to recommend sub-national carbon budgets at the same time that it recommends national carbon budgets.

The sub-national carbon budgets reflect GHG emissions from fuel consumption and sector activity levels within the geographical boundaries of that province/territory. Accordingly, the sub-national budgets reflect geographic budgets that can and must be achieved by a *combination* of federal and provincial/territorial (and other) effort.

The expert committee's advice on sub-national carbon budgets would be a natural extension of the committee's work on national carbon budgets and policy.[44] On the whole, we expect that similar or identical considerations to those set out for national budgets would apply to sub-national budgets, but we would specifically suggest that the burden-sharing principles outlined above be considered.

The legislation must set out parameters and processes for provincial and territorial governments, Indigenous Peoples and governments, stakeholders and the public to provide input on the national and sub-national carbon budgets.

We recommend a combination of the UK and New Zealand approaches, whereby:

- The expert advisory committee "proactively engages" and provides for participation where necessary, including with sub-national governments.[45]
- The Responsible Ministers must provide an opportunity to receive representations and/or discuss the expert advisory committee's proposed carbon budgets - both national and sub-national - with the sub-national governments. Sub-national governments that do not provide comments are deemed to accept the expert committee's recommendation.[46]
- The Responsible Ministers must be satisfied that the consultation by the expert advisory committee was adequate. If they are not, they must consult as necessary.[47]
- Where the Responsible Ministers' proposed budget deviates from the expert advisory committee's recommendations s/he must consider whether s/he needs to conduct further consultation.[48]

This approach sets out very clear and specific objectives for the consultation process and establishes a clear plan on how the outputs would feed into the Responsible Ministers' decision making.[49]

Strong opportunities for public and stakeholder engagement must be featured within the accountability framework. The legislation and policies developed "under" its remit must be perceived as legitimate by key stakeholders in order to survive political shifts and garner the necessary credibility across our regionally varied (both in economic focus and GHG emission intensity) nation. Many climate policies will attract consultation under the specific sectoral ministry anyway, but the budgets themselves should be the subject of public consultation.[50]

Responsibility for consultation should lie with a combination of the Responsible Ministers and the expert advisory committee. In the UK, the CCC has the general ancillary powers to gather information and carry out research and publish that research.[51] On that basis, it will

3.2 Five-year Carbon Budgets (continued)

launch a "Call for Evidence" to support its advice on, for example, a revised long-term target.[52] The UK CCA does not, however, give formal responsibility to any department or individual for communicating climate change decision-making. This omission should not be duplicated in Canada. Behavioural research has shown that communication of climate policy is essential to make it publicly acceptable.[53]

Setting sub-national carbon budgets

The process outlined above lays the framework for a transparent, principles-based discussion of how to share the burden of GHG reduction across the country.

Once this process is complete, the Responsible Ministers will be in a position to set sub-national carbon budgets (as well as national budgets). **The sub-national carbon budgets must add up to the national carbon budget for a given five-year period,** but the Responsible Ministers may, through its consultation and discussion with the sub-national governments and others elect to vary the expert advisory committee's recommendations. We see no issue with this so long as, again, the sub-national budgets total the national budget recommended by the experts.

The Responsible Ministers' duty to set sub-national carbon budgets will mirror the timing of the national carbon budgets set out above.

The Responsible Ministers' duty to, in cooperation with the relevant sub-national governments, meet the sub-national carbon budgets should ideally be enshrined in some form of legal instrument. They might be formalized in the same legal instrument as the national carbon budget for the given period, or a separate instrument.

This commitment by the Responsible Ministers will be the foundation for government action to achieve that region's contribution to a national budget, including, in the event of a gap in provincial/territorial action, any backstop measures that may be required, discussed further below.

While in theory the sub-national carbon budgets need not be set in law to provide the foundation for future action by the Responsible Ministers to ensure that the burden of GHG emissions reduction is being fairly shared across the country, a legislated requirement to establish sub-national carbon budgets through Order in Council or regulation are the strongest way to achieve this. At the very least, the sub-national carbon budgets would need to be published, and (under the legislation) strongly inform the Responsible Ministers' execution of their duty to meet the national carbon budgets.

As laid out in more detail in the planning section below, if a sub-national government will not take on its share of the work to achieve its sub-national carbon budget, the Responsible Ministers still have a responsibility to achieve the national budget in a way that is equitable to all Canadians, namely by ensuring those sub-national carbon budgets are met. The federal government can do so using the various federal

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3.2 Five-year Carbon Budgets (continued)

regulatory tools at their disposal, which include carbon pricing under the GGPPA (which can be increased on a regional/provincial/territorial basis),[54] the *Canadian Environmental Protection Act* (CEPA), the *Impact Assessment Act* (IAA), and so on.

Amending carbon budgets

The legislation should allow for carbon budgets to be strengthened, for example when there are significant changes in scientific knowledge regarding climate change, or on the advice of the expert committee.

Other considerations

There was fairly wide support among experts consulted in developing this report for the legislation to permit trading mechanisms between provinces and territories to achieve their sub-national carbon budgets. This option may make the sub-national carbon budgets more palatable to sub-national governments and more cost effective.[55] Some contributors are concerned that trading would undermine the initial setting process which, as set out above, already includes capacity and fairness. It bears noting that Quebec and Nova Scotia are already trading, with each other and California, under the Western Climate Initiative.

There was also some discussion among reviewers of this report around the value of a platform for the federal and provincial/territorial governments to have an open and frank discussion about the distribution of Canada's GHG emissions.[56] In our view, the Canadian Council of Ministers of the Environment (CCME) may not be a suitable platform for such discussions, because the task of setting provincial and territorial carbon budgets will require in-depth discussions that the broader agenda of the CCME may not be capable of sufficiently facilitating.

3.3 Impact reports

The legislation is focused largely on developing a framework for climate change mitigation, but adaptation is deeply connected to mitigation.[57] All levels of government, researchers, the private sector and non-government organizations now view adaptation as an essential complement to mitigation. Per the IPCC in its Fifth Assessment Report: "[a]daptation and mitigation responses are underpinned by common enabling factors. These include effective institutions and governance, innovation and investments in environmentally sound technologies and infrastructure, sustainable livelihoods and behavioural and lifestyle choices."

The fact that Canada is warming at approximately twice the global average was widely reported in April 2019.[58]

> The warming being experienced in Canada will require ambitious action to meet the objectives set out in the Paris Agreement; however, the response to climate change cannot be limited to reducing GHG emissions. It must include action to build climate resilience. This is not an admission of defeat; it is a necessary response to the impacts of climate change.
>
> …
>
> Adaptation is fundamentally about finding creative solutions to a persistent, growing, and complex problem. Investing in adaptation will spur innovation, promote clean growth and jobs, *and reduce GHG emissions.*[59] [Emphasis added]

Taking this context into account, **we recommend that the government be required to assess and report to Parliament on the risks to Canada of the impact of climate change.**

These impact reports must be completed every five years and must take the advice of the expert advisory committee into account. The impact reports will be released 1-2 years prior to each new carbon budget, so as to inform that process (see Figure 5 above).

The UK CCA includes the following requirements:[60]

56 **(1)** It is the duty of the Secretary of State to lay reports before Parliament containing an assessment of the risks for the United Kingdom of the current and predicted impact of climate change.

(2) The first report under this section must be laid before Parliament no later than three years after this section comes into force.

(3) Subsequent reports must be laid before Parliament no later than five years after the previous report was so laid.

(4) The Secretary of State may extend the period for laying any such report, but must publish a statement setting out the reasons for the delay and specifying when the report will be laid before Parliament.

(5) Before laying a report under this section before Parliament, the Secretary of State must take into account the advice of the Committee on Climate Change under section 57.

(6) The Secretary of State must send a copy of each report under this section to the other national authorities.[61]

The NZ Climate Act further specifies a requirement that the risk assessment/impact report take into account the "economic, social, health, environmental, ecological and cultural effects of climate change, and the distribution of those effects across society and vulnerable groups."

It is worth noting that this work already exists in Canada. In "Canada's Top Climate Change Risks" commissioned by the Treasury Board of Canada, the Expert Panel on Climate Change Risks and Adaptation Potential set out its view that such reports should be done regularly.[62] The Canadian Institute for Climate Choices has very recently mapped out some of these risks as well in "Charting Our Course – Bringing clarity to Canada's climate policy choices on the journey to 2050".[63]

Further, as noted above, the CICC already includes an adaptation group (in addition to mitigation and clean growth).

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3.4 Framework to Keep Government Accountable: Planning and Reporting

A vital part of ensuring that the five-year carbon budgets and long-term targets are met is having plans that clearly set out how those goals will be achieved. Similarly, adapting to the forecasted impacts on Canada requires a plan setting out the necessary strategies and policies.

In addition to the plans, regular reports on progress towards achieving the long-term targets and national and sub-national carbon budgets will help ensure that the government is held accountable to achieve its climate goals. This planning and reporting framework creates an early-warning system to signal any risk that a future target will be missed. If course correction is required, these reports provide the information needed to make the necessary adjustments to the plans.

There is already reporting and planning towards GHG emissions reductions under the Pan-Canadian Framework and to the UNFCCC. That existing planning and reporting needs to be calibrated towards the legislated long-term target(s) and the national and sub-national five-year carbon budgets, once set.

In addition, as set out in more detail below, the planning and reporting framework must be legislated. Feedback on the UK's CCA demonstrates the importance of a regular and rigorous planning regime, in particular for investors. Long-term clarity about Canada's climate ambition and its pathway cannot be delivered by targets and budgets alone.[64] While some policy flexibility is necessary, the framework must deliver as much certainty as possible. Legislating the planning and reporting system is one important way to deliver that certainty

Planning to meet targets and budgets

The government must prepare, and lay before Parliament, a plan that sets out the policies and strategies for meeting the next budget(s).[65] **The legislation should set this requirement out in clear and prescriptive language, with a timeline,** for example:

> **(1)** The Ministers must prepare and make publicly available a plan setting out the policies and strategies for meeting the next carbon budget, and may include policies and strategies for meeting [forthcoming] carbon budgets…
>
> **(2)** The plan must be prepared and published—
>
> (a) after the relevant carbon budget has been [set]; but
> (b) before the commencement of the relevant carbon budget period.

3.4 Framework to Keep Government Accountable: Planning and Reporting (continued)

This example, which is based on the NZ Climate Act, and the UK CCA, both leave the timing of tabling a plan to meet a given carbon budget somewhat vague.[66]

These loose timelines have been criticized, and we recommend more prescriptive requirements. In practice, the UK has published its carbon budget plans approximately one year after that carbon budget is set. **We recommend that Canadian legislation set a deadline for carbon budget plans of 1-2 years after a given carbon budget is set.**

The legislation should require that the policies and strategies be prepared with a view to meeting the long-term targets.[67] Other important considerations or requirements for these plans should be specifically mentioned in the legislation as well. This builds key guiding principles into the process in a tangible way. Examples that could be included in the Canadian context include:

- The contribution of the policies and strategies to ensuring ecological integrity;[68]
- The policies and strategies prepared by sub-national governments;[69]
- How the policies and strategies affect different sectors of the economy;
- How the policies and strategies impact the health and well-being of Canadians;
- How the policies and strategies affect the ability to adapt to the effects of climate change;[70]
- How the policies and strategies will affect Indigenous peoples and their rights;
- How the policies and strategies will support a just transition that will secure workers' rights and livelihoods (see "Planning for a Just Transition" sub-section below for more detail); and
- How the policies and strategies impact the equitable distribution of the burden of reducing GHG emissions across the country.

The UK CCA includes a requirement that the government have regard to the need for domestic action on climate change when considering how to meet the long-term target and any carbon budget.[71] This may be relevant to Canadian drafters, considering the focus by some political parties on international credits in some form (discussed above in section 3.1).

Revising Plans

Commentators have noted that the lack of a requirement to revise plans can be problematic, as with the UK's Fourth Carbon Budget and Plan.

We recommend that the legislation include a requirement to reassess the carbon budget plan within several years of publication of that plan. One possibility is to synchronize a revision with the publication of the next carbon budget plan (see Figure 6 below).

Adaptation planning

The government must prepare, and provide to Parliament, a national adaptation plan that sets out the policies and strategies for adapting to climate change shortly after each 5-year impact report.[72] As in the NZ Climate Act, the national adaptation plan should set out the government's objectives, strategies and policies for adapting to the impacts of climate change.

The legislation should set out the adaptation planning requirements in clear and prescriptive language, and include a timeline. This provision would mirror the provision requiring a plan to meet the carbon budgets.

The national adaptation plan should also be informed by input from the expert committee, provinces and territories, and Indigenous Peoples. This may take the form of bilateral or multilateral consultations, or the provinces and territories and other governments may wish to develop their own adaptation plans, and input those to the federal level plan.

3.4 Framework to Keep Government Accountable: Planning and Reporting (continued)

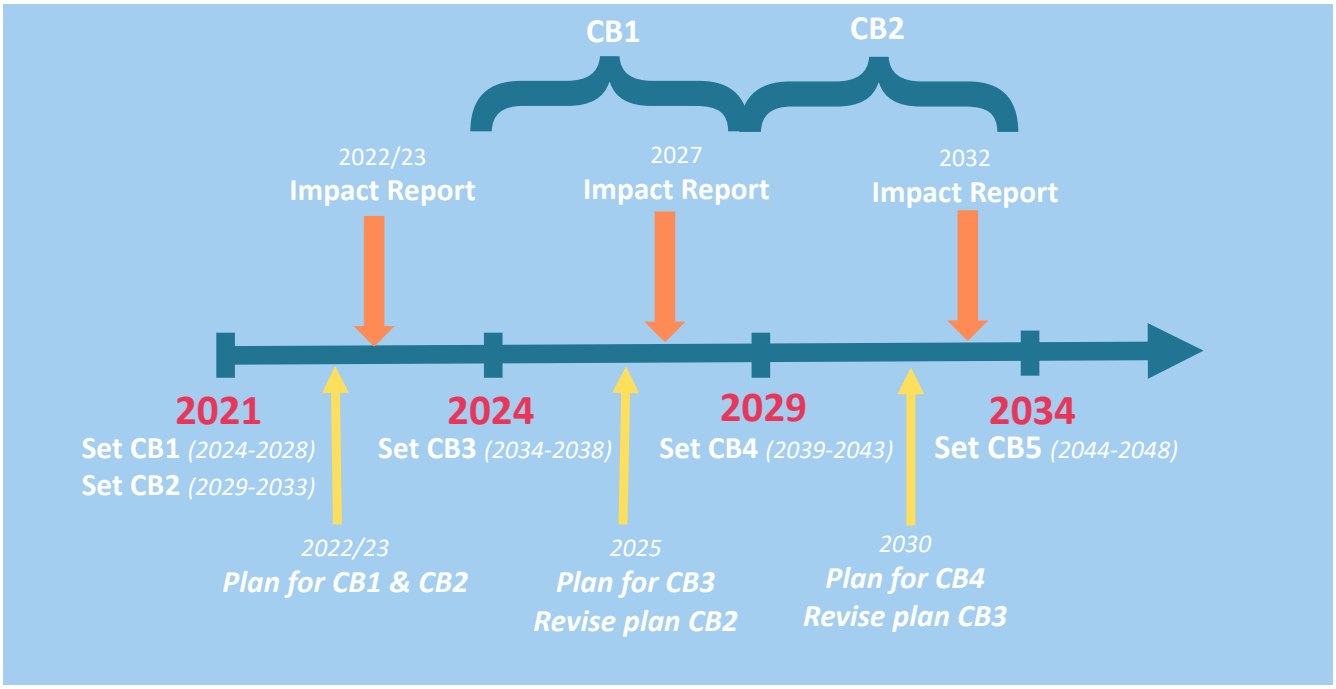


Figure 6 - Potential timeline for planning to meet Canadian carbon budget

Reporting on progress

Good targets must be complemented with good reporting to ensure the targets are achieved. As such, the legislation must set up a rigorous reporting framework with the aim of enhancing overall transparency and accountability of Canadian action on climate change. Requiring progress reports that regularly assess Canada's climate efforts and whether they are sufficient can play an important role in highlighting where further action and increased ambition is required.

Some elements of a strong reporting framework are already set out above, but in summary the legislation must establish the following reporting requirements:

- After each carbon budget is set, the government must publish and table in Parliament a plan setting out its policies and strategies for meeting the carbon budgets;
- After each impact report is tabled, the government must table before Parliament an adaptation plan that sets out its policies and strategies for adaptation to climate change;
- The government must report GHG emissions (1) annually, (2) at the end of each 5 year carbon budget period and (3) in 2052, on the 2050 target;[73]
- The expert advisory committee (details below) must report annually on: (1) progress towards achieving budgets and targets, and (2) progress on implementing the adaptation plan;[74] and
- The government must publicly respond to the expert advisory committee's annual progress reports.[75]

Specific reporting obligations are also triggered if carbon budgets or the 2050 target are not met:

- If the carbon budget for a budgetary period is exceeded, the Government must report to Parliament on proposals and policies to compensate in future periods for the excess emissions.[76]
- If the 2050 target is not met, the Government's final statement to Parliament on 2050 emissions must explain why the target has not been met.[77]

3.4 Framework to Keep Government Accountable: Planning and Reporting (continued)

Developing and Tracking Progress Indicators and Benchmarks of Success

It is important that progress reporting is done in a way that outlines clear deliverables and provides trackable metrics of success. Without objective indicators, progress on meeting climate targets and budgets cannot be accurately assessed.

As such, the expert panel should be tasked with developing a series of discrete indicators and benchmarks of success that can allow the tracking of progress towards Canada achieving the carbon budgets and longer-term targets. These quantitative (e.g. number of single passenger trips made by vehicles with internal combustion engines, total electricity generated by wind power and solar power) and qualitative (e.g. completion of floodplain mapping in Canadian municipalities) indicators should be tracked, including an assessment of how government policy is working to achieve benchmarks. This rich and multi-faceted information should be included in annual progress reports from the expert body in order to provide a cross-cutting, big-picture assessment on clean growth and climate change and, just as importantly, provide advice to governments on future actions. Work to this end is already being done by the CCME under the PCF, and can be built on by the expert committee as necessary.[78]

Establishing these metrics can also be thought of as establishing "positive targets" for Canadian action on climate change, an element that is essential to telling the story of Canada's climate action to Canadians. Currently, citizens hear once a year through the media how close or far Canada is from some distant climate goal. Instead, this new approach could help Canadians better understand the richness of climate action taking hold across the country and how they can play a part in a national undertaking of great importance.

This is one of the core features of the German Environment Agency, an organization that operates at arms-length from government to gather data concerning the state of the environment and provide policy advice/ recommendations.[79] Earlier progress reporting done under the *Federal Sustainable Development Act* also provides a model for reporting that is specific and time bound, allowing for progress to be clearly tracked and measured.[80]

Planning & reporting towards sub-national carbon budgets

If the system of planning and reporting demonstrates that a province or territory is not effectively using policy levers within its jurisdiction to help reach the sub-national carbon budget target, the federal government may need to increase its use of federal powers. Concurrently, equivalency agreements and financial incentives could help encourage provincial action.

Tools available to the federal government to reduce GHG emissions, both generally and to backstop provincial / territorial gaps in progress, include:

- *Greenhouse Gas Pollution Pricing Act:* Where a sub-national budget will not be met, the federal government may increase the carbon price on a regional/ provincial basis to address the shortfall and ensure that fairness and national equity is maintained, in a manner analogous to that used in determining equalization payments.

- *Canadian Environmental Protection Act (CEPA):* CEPA is already used to regulate GHG emissions. It gives the federal government broad powers to set standards, with the option for provinces/ territories to step up and provide equivalent or greater regulations under section 10. In the event that sectoral caps are deemed advisable, regulations under section 93 of CEPA can be used to set caps on emissions by industry type. To date 13 regulations have been made under CEPA that regulate GHGs, including a regulation limiting emissions of coal fired power plants and a regulation limiting CO2 emissions from natural gas-fired electricity generation. An additional regulation (or

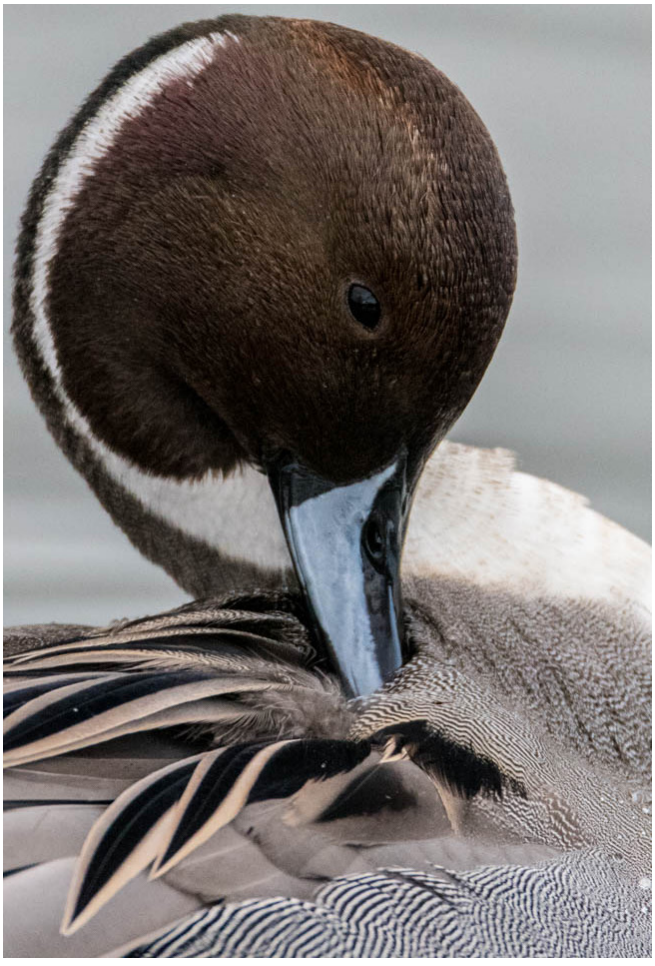
regulations) under CEPA could establish similar GHG limits on all industrial emitters, according to a schedule that reduces emissions caps incrementally (e.g., every five years) to 2050. This schedule could be periodically updated according to new information from the expert committee or existing Climate Institute.

- *Impact Assessment Act*: The new *Impact Assessment Act* requires the evaluation of the impact of larger projects on climate change. Where sub-national budgets have been established, the consistency of those projects with carbon budgets must be evaluated.

- *Incorporating the principles for a just transition to a low-carbon economy into the sub-national carbon budgeting process:* For example, the Task Force on Just Transition for Canadian Coal Power Workers and Communities recommended identifying, prioritizing and funding local infrastructure projects in affected communities and establishing a targeted, long-term research fund to facilitate the transition to a low-carbon economy. Provinces/territories which bear the near-term brunt of GHG emissions reductions should have their infrastructure investments prioritized and should be able to access such transition

Planning for a Just Transition

The NZ Climate Act mandates that plans include "a strategy to mitigate the impacts that reducing emissions and increasing removals will have on employees and employers, regions, iwi and Māori, and wider communities, including the funding for any mitigation action."[81] Canada can build on the work done by the Task Force on Just Transition for Canadian Coal Power Workers and Communities to develop a just transition strategy for affected workers and communities from other sectors, most notably oil and gas. The federal government has committed to passing Just Transition legislation, whose implementation can provide a significant portion of the required strategy and action. British Columbia's recent amendments to its Climate Change Accountability Act (via Bill 38 of 2019) contains strong features including clear planning requirements and integration with financial planning.[82]



Northern Pintail by sunrisesoup via Flickr Attribution-NonCommercial-NoDerivs 2.0 Generic (CC BY-NC-ND 2.0)

3.5 Expert Advisory Committee

As noted above, an independent expert advisory committee is key to achieving climate success under this framework. The UK's Committee on Climate Change (CCC) is highly regarded and trusted, and has been described as the key "institutional innovation" of the UK CCA. Its advice and reporting carry "immense authority"[83] and provide a point of reference for others, including parliamentary committees.[84]

Having an expert committee in Canada will help provide the independent expertise, authority and oversight necessary to ensure progress under this framework, regardless of which political party is in power. The government is the ultimate decision maker, but the committee's independence, expertise and authority would help maintain pressure on the government to develop and implement the plans necessary to achieve our climate goals.

The expert committee's core statutory functions would be to advise and report on Canada's progress towards meeting its climate goals. More specifically, it would:

(1) Advise on long-term targets (above);

(2) Advise on the five-year carbon budgets and climate impact reports (see below);

(3) Monitor and report on governmental progress towards achieving the five-year carbon budgets, long-term targets, and adaptation plans (see below); and

(4) Provide advice to the governments on climate-related policy.

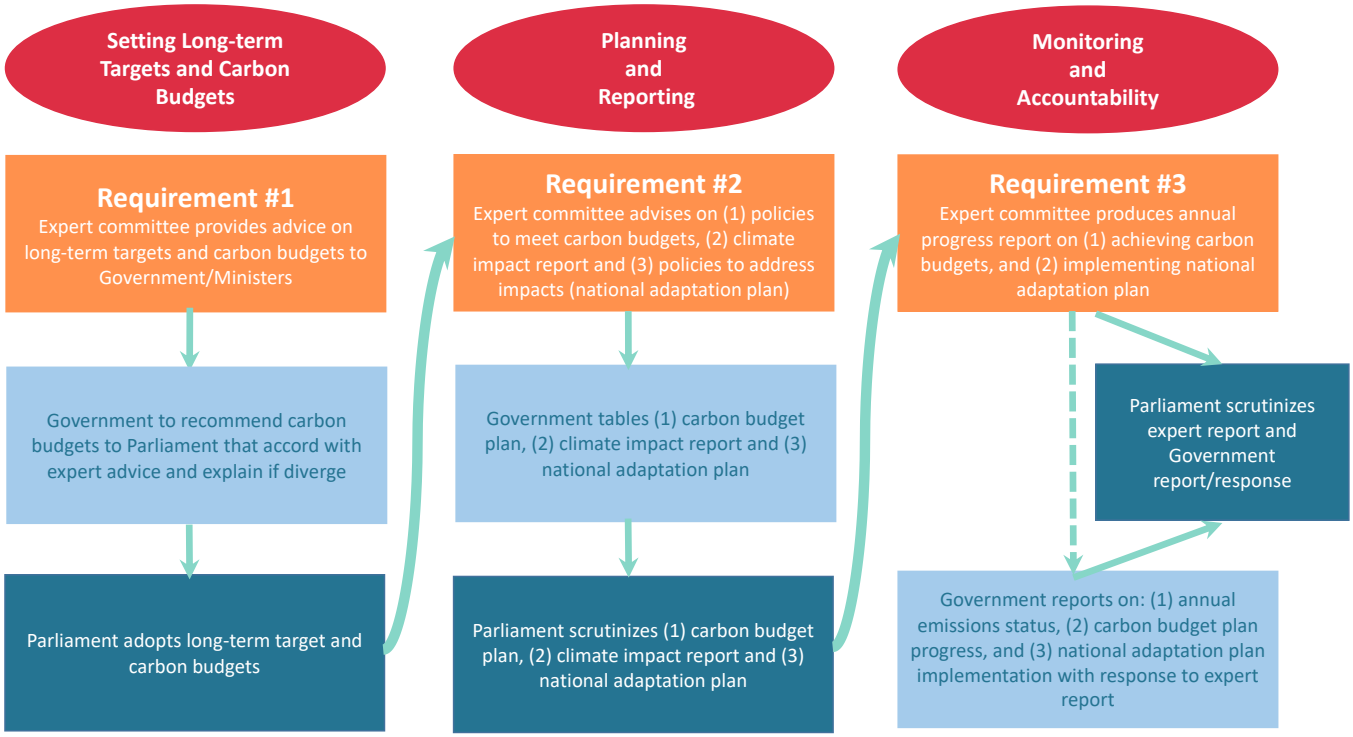


Figure 7 - Expert advisory committee's role under Canadian climate accountability legislation

3.5 Expert Advisory Committee (continued)

The recently formed Canadian Institute for Climate Choices (CICC) was modelled on the UK's CCC, and accordingly has the necessary elements of independence and expertise.

The CICC does not have a legislated mandate, but some amendments to its current structure and legal status could address the core statutory functions and our other recommendations for an expert advisory committee, below.

Alternatively, a separate, new expert advisory committee could be created which would hold the necessary status under the framework. We would recommend that this new committee work closely with the CICC, perhaps in a Committee or Secretariat type of relationship.

Advisory role of committee

Much of this is already set out above, but for ease of reference we replicate it here.

We recommend that the expert advisory committee, like the CCC under the UK CCA, have the duty to advise the Responsible Ministers, in relation to each budgetary period on:

- The level of the national and sub-national carbon budgets;
- The extent to which the budgets should be met by domestic emission reductions versus use of international carbon units and other "net carbon account" issues outlined above;
- Sectors of the economy in which there are particular opportunities for emission reduction contributions.[85]

The expert committee's advice on carbon budgets, as set out above, must take certain matters into account. They must give reasons for their advice and provide that advice a set period of time before the legislated deadline for setting the budget.

The UK CCA does not directly require its CCC to advise on proposals and policies for meeting carbon budgets. Section 13 simply requires the Secretary of State to prepare such proposals and policies "as the Secretary of State considers" will enable carbon budgets to be met.

The CCC must also:

- Give advice relating to the consequences of treating emissions from international aviation and international shipping as domestic UK emissions;[86]
- Provide advice, analysis, information or other assistance if requested by the Secretary of State;[87]
- Advise the Government on the preparation of the impact reports.[88]

Advice given must be published.[89]

Progress Reporting Role

As well as its advisory role, the expert advisory committee will also have reporting duties. In particular, the committee must report annually to Parliament on its views on:

- Progress made by all levels of government towards meeting existing carbon budgets and the 2050 target;
- Further progress that is needed from all levels of government to meet those budgets and the 2050 target;
- Whether those budgets and that target are likely to be met;90 and
- Progress in implementing the government's adaptation plan.[91]

It is important that the committee's reporting role explicitly extend to reviewing the joint progress of all levels of government to achieving the carbon budgets.

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3.5 Expert Advisory Committee (continued)

As noted below, the government will have a duty to respond to these progress reports.[92] This back and forth between the experts and government is key.

Consultation & Communication

The expert advisory committee should be required to proactively engage and provide for participation, including with sub-national governments, when drafting its advice and reports.

Cooperation with or role for Commissioner of Environment and Sustainable Development

Some aspects of the reporting requirements outlined above might be fulfilled by the Commissioner of Environment and Sustainable Development, who has somewhat analogous responsibilities under the *Federal Sustainable Development Act*. The CESD could not, under its existing mandate, perform the analysis and policy advice roles recommended here (set out above in Figure 7) because it is backward-looking and assesses the implementation of one policy at a time rather than as a comprehensive package.

Membership of Committee

We recommend that the legislation specify the desirable experience and knowledge of the Committee members. The makeup of the Committee should be country-wide and not over-represent any one interest group. It should also include Indigenous representation.

The NZ Climate Act, for example, sets up a nominating committee to identify suitably qualified candidates to be on the expert advisory committee and sets out the matters the Minister must have regard to before recommending the appointment of a committee member:

> 5H (1) ...
>
> **(a)** an understanding of climate change mitigation and adaptation, including the likely effects of any responses to climate change; and
>
> **(b)** experience working in or with local and central government; and
>
> **(c)** knowledge of the process by which public and regulatory policy is formed and given effect to; and
>
> **(d)** technical and professional skills, experience, and expertise in, and an understanding of innovative approaches relevant to,—
>
> (i) the environmental, ecological, social, economic, and distributional effects of climate change and climate change policy interventions; and
>
> (ii) the Treaty of Waitangi (Te Tiriti o Waitangi) and te ao Māori (including tikanga Māori, te reo Māori, mātauranga Māori, and Māori economic activity);[93] and
>
> (iii) a range of sectors and industries, at regional and local levels.

The UK CCA takes a similar approach.[94]

As in the UK and New Zealand, we recommend that Canadian accountability legislation establish a nominating committee to identify suitably qualified candidates to be on the expert advisory committee. In the UK, the national authorities (which includes the UK, Welsh, Scottish and Northern Ireland governments) nominate the candidates. We recommend that a Canadian nominating committee include regional representation and Indigenous Peoples.

If, as recommended above, the CICC steps into the role of the expert advisory committee, the nominating committee would be tasked with confirming what additional members, if any, need to be appointed and/or how replacements can ensure that the composition of the committee achieves required regional and subject matter expertise.

3.5 Expert Advisory Committee (continued)

We recommend that the legislation sets out the matters the nominating committee must have regard to before recommending the appointment of a committee member, including:

- an understanding of climate science and other branches of environmental science,
- an understanding of climate change policy and evaluation of the social and economic impacts of such policies;
- experience working in or with local, provincial or territorial, Indigenous or federal governments;
- knowledge of the process by which public and regulatory policy is formed and given effect to; and
- technical and professional skills, experience, and expertise related the environmental, ecological, social, economic, and distributional effects of climate change and climate change policy interventions; and
- Indigenous knowledge.

Adaptation sub-committee

The UK CCA mandates an adaptation sub-committee of the CCC. We recommend a similar approach in Canadian legislation.[95] We note that the CICC already has, effectively, an adaptation sub-committee since its work is split into three main areas of mitigation, adaptation and clean growth.

Canoe on a Misty Ilyn Padarn by Hefin Owen via Flickr Attribution-NonCommercial-NoDerivs 2.0 Generic (CC BY-NC-ND 2.0).jpg

4. Other considerations

4.1 Consultation on the legislation

Consultation on the Canadian accountability legislation should be limited to standard legislative processes, including: outreach to stakeholders and experts by government officials; engagement with Indigenous governments and organizations, provincial and territorial governments, and municipal governments; and subjecting legislation to study by the appropriate House of Commons Standing Committee that includes calling of witnesses and opportunities for the public and stakeholders to provide input through written submissions.

Commitments in the Liberal Party 2019 election platform to set legally binding, five-year milestones to reach net-zero GHG emissions by 2050 and to appoint a group of scientists, economists, and experts to recommend the best path to get to net-zero, along with the fact that 60% of voters in the 2019 election cast ballots for parties with ambitious climate policies, provide a strong mandate for the government to move forward quickly on creating this important legislation.

4.2 Integration with other decision-making

It is important to ensure that climate considerations and direction that are established under Canadian climate accountability legislation are integrated into other relevant laws, regulations, policies and federal decision-making, such that any federal decisions advance Canada's ability to adhere to its legislated carbon budgets and long-term targets. Under the NZ Climate Act, there is no such requirement and that is an identified weakness of that legislation.[96]

For example, an explicit requirement could be included in the Act specifying that federal decisions under such relevant legislation as the *Impact Assessment Act, Canadian Energy Regulator Act, Fisheries Act and Canadian Navigable Waters Act must* be consistent with Canada's plans for meeting its legislated carbon budget, and be accompanied by specific justification for how they are.

Another possible approach is for the federal government to amend other relevant legislation, including laws relating to planning, assessment and/or developmental approvals, to require decisions to be consistent with legislated plans for meeting federal carbon budgets and for reasons for decision to explicitly justify how the decision does so.

The federal government could also integrate climate accountability into financial decision-making by requiring that its financial budgets/spending supports the achievement of the carbon budgets. For example, in Oslo, the municipal government can only approve spending plans that align with its annual carbon budget emission reduction goals.[97]

4.3 Enforceability and Effect of Climate Accountability Frameworks

The UK CCA imposes unqualified requirements on Ministers to achieve a particular outcome, namely the Secretary of State's duty to meet the 2050 target and interim carbon budgets (the "primary duties"). In addition to these primary duties, the UK CCA contains procedural obligations (such as reporting to Parliament on various matters).

In theory, the UK CCA is enforceable by the courts through judicial review if breached, but there is uncertainty about whether the duties the CCA establishes are enforceable by the courts in practice. The enforceability of its various provisions is not made explicit in the Act. The NZ Climate Act, by contrast, provides for enforcement by the courts, but through declaration only.

While failure to comply with the procedural obligations under the UK CCA would be judicially reviewable, there is uncertainty and debate regarding the legal enforceability of the primary duties.[98] Although the UK government took the clear view when formulating the Act that the primary duties would be enforceable in the courts, there are potential obstacles to judicial enforcement of those duties.

That said, the risk of judicial review carries weight. In addition, the UK CCA creates political accountability, has greater permanence and allows for more scrutiny, and may have indirect legal implications – the courts could invoke the duty to interpret other legislation or the legality of other government actions by reference to the CCA requirements. Another important impact of legislating the framework will be greater weight and resource allocation for climate policy.

To address the potential weaknesses in the UK and NZ legislation, we recommend that the Canadian framework explicitly include:

- Clear and mandatory obligations placed on specific individuals or entities to meet the 2050 target and interim carbon budgets (the "primary duties") and other procedural obligations, such as planning and reporting ("secondary duties").
- Explicit statement that these mandatory obligations are enforceable in the court of law and that the full suite of remedies and relief are available to the courts when reviewing decision-making under the Act, including when the carbon budget or target is not being met (e.g. certiorari, mandamus).
- Mandatory timelines for fulfilling those primary and secondary duties.
- Requirements to provide reasons for decision-making, including providing reasons if decision is made to depart from the recommendations contained in expert reports.
- Secondary obligations to implement corrective measures if reporting shows that existing plans are not sufficient to achieve the carbon budgets or targets. One option is a requirement for the government to provide "corrective action" if reporting shows that they are not on track to meet the carbon budget or target. However, the legislation must be clear that this does not undercut or substitute the primary obligation to establish climate plans that will achieve the carbon budget.

Oberalp - Top of the Pass by Kecko via Flickr Attribution-NonCommercial-NoDerivs 2.0 Generic (CC BY-NC-ND 2.0).jpg

4.4 Indigenous Perspectives – Creating Space in Decision-Making

The idea that Indigenous law can be "integrated", "incorporated" or can "fit into" the existing legislative process assumes Canadian law is superior to Indigenous law. True reconciliation will not allow for a hierarchy but will engage with both knowledge systems to inform our path forward. It will require doing things differently moving forward, including exploring ideas of collaborative governance, collaborative consent and co-development of legislation.[99]

There must be a process to meaningfully engage Indigenous Peoples in developing and implementing this framework, and incorporate Indigenous input when developing the substantive components of the framework to ensure it reflects and respects and upholds Indigenous Rights. As noted above, this work remains largely outstanding, and the above recommendations are subject to change to address this significant issue.

4.5 Using CEPA to establish a climate accountability framework

CEPA is not appropriate legislation for establishing the necessary framework for ensuring that Canada achieves net-zero emissions by 2050. Implementing the climate accountability framework proposed herein would extend far beyond the current scope and structure of CEPA. Significant and complex amendments to the Act would be required to implement most of the key elements of a climate accountability framework, including planning and reporting requirements, and the integration of an advisory climate committee to provide expert advice and recommendations.

Grafting on the necessary amendments to CEPA would be more difficult and complicated than enacting new stand-alone climate accountability legislation, and would not have the same legal or political strength. CEPA can still be used as part of the suite of regulatory and policy tools to ensure that the net zero target that is set under the climate accountability framework is met.

5. List of Recommendations

Long-term target(s)

1. The legislation must set the net-zero 2050 and revised 2030 targets in law. If the revised 2030 target has not been confirmed prior to tabling of legislation, the legislation must set out the process by which the 2030 target will be legislated once it is confirmed.

2. The legislation must place clear and unqualified legal duties on government to meet the long-term target(s).

3. The legislation must assign those duties to the Ministers who are best positioned to achieve the whole-economy and whole-government task of reducing GHG emissions. We recommend some combination of the Minister of Environment and Climate Change, the Minister of Finance, and the Prime Minister.

4. The legislation should only allow for the long-term target(s) to be strengthened. We cannot envision a scenario in which the target(s) should be weakened.

    a. In order to increase ambition we recommend that the legislation set deadlines for review of the targets by an independent expert committee (see below). The legislation should require the Responsible Ministers to respond to the committee's advice on strengthening the target, and explain any departure from that advice.

5. The legislation must (necessarily) define a "net carbon account" (gross emissions, less removals and credits, plus credits sold outside Canada).
    a. The government should obtain independent expert advice on the "net carbon account" before passage of the legislation.
    b. Key questions for consideration regarding the net carbon account: whether to include international aviation and shipping, what parameters to place on international credits, and how to account for emission reductions due to land use, land use change and forestry (LULUCF).

Five-year carbon budgets

6. The legislation must place clear and unqualified duties on the Responsible Ministers to set and meet five-year national carbon budgets.
    a. The national carbon budgets should be set by Order-in-Council or by regulation.
    b. The legislation must require that the first two national carbon budgets (for example Carbon Budget #1 for the period 2024-2028 and Carbon Budget #2 for the period 2029-2033) be set within 6 – 12 months of passage of the legislation.
    c. The legislation must require that future national carbon budgets be set ten years in advance of their first year (for example, Carbon Budget #3 for 2034-2038 must be set by 2024).
    d. The legislation should align the timing of the national carbon budget setting process with the Paris Agreement Article 14 Global Stocktaking process, which will take place every five years starting in 2023.
    e. We recommend that the legislation require the Responsible Ministers to set "indicative annual ranges" for each year of a carbon budget period.

7. The legislation should require the Responsible Ministers to set and meet five-year sub-national carbon budgets. These sub-national carbon budgets will apportion the national carbon budgets between the provinces and territories equitably and efficiently, on the basis of expert advice.
    a. The sub-national carbon budgets should be set in a legal instrument at the same time as the national carbon budgets. They could be set in the same instrument as the national carbon budgets.
        i. In the alternative, the legislation should require that sub-national carbon budgets (1) be published and (2) that they strongly inform the execution of the Responsible Ministers' duty to meet the national carbon budgets.
    b. The sub-national budgets for a given five-year period must total the national carbon budget for that period.

8. The legislation should require the Responsible Ministers to obtain advice from the expert committee (see below) on what the national and sub-national carbon budgets should be.
    a. The legislation should require the Responsible Ministers to set national carbon budgets that are at least as ambitious as the national carbon budgets recommended by the expert committee.
    b. The legislation should specify the substantive considerations that inform the expert committee's advice on national and sub-national carbon budgets. These considerations should include, for example, the need to meet the long-term target, Canada's international obligations, regional concerns, burden-sharing principles, etc.

9. The legislation must set out parameters and processes for consultation on the national and sub-national carbon budgets with sub-national governments, Indigenous Peoples and governments, municipalities, stakeholders, etc.
    a. We recommend that the expert committee be tasked with proactively engaging with the parties listed above.
    b. The Responsible Ministers must provide an opportunity to receive representations and/or discuss the expert committee's proposed carbon budgets with the sub-national governments (with those that do not provide comments or participate being deemed to accept the recommendations).
    c. The Responsible Ministers must be satisfied that the consultation by the expert committee was adequate. If not, they must consult as necessary.
    d. If the Responsible Ministers' proposed national and sub-national carbon budgets deviate from the expert committee's recommendations, s/he must consider whether it is necessary to conduct further consultation.

10. The Responsible Ministers may amend the carbon budgets, once set, but only to make them more ambitious.

Five-year impact reports

11. The legislation must require the Responsible Ministers to table an "impact report" on the risks to Canada of the impact of climate change every five years.
    a. The impact reports should be required to be released 1-2 years prior to each new carbon budget being set, so as to inform that process.
    b. The legislation must require the Responsible Minister to take the expert committee's advice on the impacts of climate change into account before tabling an impact report.
    c. The legislation should require the Responsible Ministers to send copies of the impact reports to the sub-national governments.

Planning and reporting systems

12. The legislation must require the Responsible Ministers to prepare and table before Parliament a plan to meet the next national carbon budget (and accordingly the associated sub-national carbon budgets).
    a. The legislation must set a time for the tabling of that plan, ideally 1-2 years after the relevant national carbon budget was set.
    b. The legislation should require that the policies and strategies in the plan be prepared with certain considerations in mind, such as: the duty to meet the long-term targets, how the plan affects different sectors of the economy, how the plan affects the health and well-being of Canadians, the need for a just transition, etc.

13. We recommend that the legislation include a requirement to re-assess each carbon budget plan within several years of the plan's publication, possibly synchronizing with the publication of the next carbon budget plan.

14. The legislation must require the Responsible Ministers to prepare and table a national adaptation plan that sets out the policies and strategies for adapting to climate change.
    a. The legislation must set a time for the tabling of that adaptation plan, ideally 1-2 years after each impact report is tabled to Parliament.
    b. The national adaptation plan should be informed by input by the expert committee, the sub-national governments and Indigenous Peoples and governments.

15. The legislation must require the Responsible Ministers to report GHG emissions (1) annually, (2) at the end of each 5-year national carbon budget period, (3) in 2032, on the 2030 target if applicable and (4) in 2052, on the 2050 target (much of this reporting is already done, but must be calibrated to the target(s) and carbon budgets).
    a. The expert committee must report annually on (1) progress towards the carbon budgets and target(s) and (2) progress on implementing the adaptation plan.
    b. The government must table its response to the expert committee's annual progress reports in Parliament.
    c. If the carbon budget for a period is exceeded, the Responsible Ministers must report to Parliament on proposals and policies that will compensate in future periods for the excess emissions.
    d. If the 2030 and/or 2050 targets are not met, the Responsible Ministers' 2032 and 2052 reports must explain to Parliament why the target(s) was/were not met.
    e. The legislation must require the progress reporting to outline clear deliverables and provide trackable metrics of success. The expert committee should be tasked with assisting with or providing those metrics.

Expert advisory committee

16. The legislation must provide for the creation of an independent expert advisory committee (expert committee) tasked with advising and reporting.
    a. The legislation could make the newly-formed Canadian Institute for Climate Choices (CICC) the expert committee. In that event, some amendments to its current structure and legal status would be necessary for it to fulfill the recommendations outlined here.
        i. In the alternative, the legislation should create a new expert committee. This committee should work closely with the CICC.
    b. Advisory duties include:
        i. Duty to advise the Responsible Ministers on setting of long-term target(s).
        ii. Duty to advise, in relation to each budgetary period, on:
            1. the level of the national and sub-national carbon budgets;
            2. the extent to which the budgets should be met by domestic emission reductions versus use of international carbon units and other "net carbon account" issues;
            3. sectors of the economy in which there are particular opportunities for emission reduction contributions; and,
            4. policies that can achieve the carbon budgets.
        iii. Duty to advise the Responsible Ministers on the preparation of the climate impact reports.
    c. The expert committee's advice on carbon budgets must be required within a set period of time before the legislated deadline for setting the budgets.
    d. The expert committee must be required to take certain matters into account in developing its advice, such as the need for ambitious carbon budgets, scientific knowledge, the results of public consultation, etc.
    e. Advice given and reasons for advice must be published.
    f. Reporting duties include producing an annual progress report that includes an assessment of:
        i. the progress made towards achieving the carbon budgets and long-term targets;
        ii. further progress that is needed to meet those budgets and the 2050 target;
        iii. whether those budgets and the target are likely to be met; and
        iv. progress in implementing the national adaptation plan.
    g. Reports must be published.
    h. Some aspects of the reporting requirements outlined might be fulfilled by the Commissioner of Environment and Sustainable Development, who has somewhat analogous responsibilities under the Federal Sustainable Development Act.
    i. The expert committee must have an adaptation sub-committee.
    j. The expert advisory committee should be required to proactively engage and provide for participation, including with sub-national governments, when drafting its advice and reports.

17. The legislation should establish a nominating committee to identify suitably qualified candidates to be on the expert committee.

    a. In the event the CICC steps into the role of the expert committee, the nominating committee should be tasked with confirming what additional members, if any, are required.

    b. The nominating committee should represent a cross-section of Canadian interests.

    c. The legislation should set out the matters the nominating committee should have regard to before recommending expert committee members, including knowledge of climate science, regional and Indigenous representation, etc.

Endnotes

1 The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate, Lancet 2019; 394: 1836-78 at 1836 [Lancet 2019]

2 Lancet 2019 at 1837.

3 Climate Transparency (2019): Brown to Green: The G20 transition towards a net-zero emissions economy, Climate Transparency, Berlin, Germany

4 Our research in support of this conclusion is set out elsewhere, but in short, international experience strongly suggests that legislated targets, accountability measures and independent expert review together can drive GHG emissions reductions. See in particular Fankhauser, S et al (2018) 10 years of the Climate Change Act. Report. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science [Grantham CCA 2019] and Averchenkova, A (2019) Legislating for a low carbon and climate resilient transition: learning from international experiences. Report. Madrid: Real Instituto Elcano and Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science [Elcano 2019] and Ecologic – Climate Laws in Europe, February 2020

5 Croome, J., Abreu, C., et. al. (2020): A New Canadian Climate Accountability Act: Building the legal foundation to achieve net-zero emissions by 2050. [Policy Brief], Ecojustice, CANRac, et al. https://www.ecojustice.ca/wp-content/uploads/2020/05/policy-brief-a-new-canadian-climate-accountability-act.pdf

6 *Climate Change Act*, 2008 c.27 [UK CCA]

7 Grantham CCA 2019

8 See Croome, J and M. Gorrie (2020): Mini briefing on international climate change laws – abbreviated – March 2020. Report. Toron-to: Ecojustice. [International climate laws March 2020] Available at: https://www.ecojustice.ca/wp-content/uploads/2020/05/6-Mini-Briefing-on-international-climate-change-laws-abbreviated-March-2020.pdf. We also extensively reference the New Zealand Climate Change Response (Zero Carbon) Amendment Act which amended New Zealand's Climate Change Response Act, 2002 (the "NZ Climate Act").

9 Climate Action Tracker has ranked Canada's 2030 target as "insufficient" – "Commitments in this rating are in the least stringent part of their fair share range and are not consistent with holding warming below 2°C let alone with the Paris Agreement's stronger 1.5°C limit. If all government targets were in this range, warming would reach over 2°C and up to 3°C. Available at: https://climateactiontracker.org/countries/canada/

10 On February 24, 2020 the Bloc tabled Private Member's Bill C-215: An Act respecting Canada's fulfillment of its greenhouse gas emissions reduction obligations.

11 The NZ Climate Act had first reading on May 21, 2019. It was amended as of October 21, 2019 to reflect amendments by the Environment Committee and received Royal Assent on November 13, 2019.

12 It is our position that the minimum scientifically defensible targets would be a 50% reduction by 2030 and net zero emission by 2050. IPCC, 2018: Global warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [V. Masson-Delmotte, et al. (eds.)].

13 The current government has committed to an ambitious long-term target of net-zero emissions by 2050, and to revise its current 2030 target. Our recommendation, which aligns with the government's commitment, is to set both the 2050 net-zero and 2030 targets in law. If the revised 2030 target has not been released at the time legislation is tabled, the legislation must set out a process to include the 2030 target once it has been released.

14 The five-year impact reporting (and adaptation planning generally) is not always identified as a "core pillar" in the secondary literature. As set out below, we believe that adaptation should be given a more prominent role.

15 Macrory, R. (2014). "The UK Climate Change Act - Towards a Brave New Legal World?" in Regulation, enforcement and governance in environmental law (2ed), 261-274. Oxford: Hart Publishing, p. 263. See also Weeks, Teresa (September 2017) Examining the UK Climate Change Act, 2008, New Zealand Productivity Commission.

16 Grantham CCA 2019 at p. 19.

17 The "S" Factors – Lessons from IFG's policy success reunions. London: Institute for Government at pp. 117-118 [The "S" Factors]

18 Mexico's amendment to its legislation in 2018 specified that increasing ambition is required, in other words, the long-term target could only be increased. See Elcano 2019, p. 76. Parliament can of course always revise targets as it sees fit, regardless of what is said in the legislation, by re-opening and amending the legislation itself. We are suggesting that the legislation be crafted so that, short of broadly amending the legislation itself, the targets cannot be weakened.

19 Neither the UK CCA nor the NZ Climate Act distinguish between strengthening and weakening.

20 Sections 2 and 3 CCA.

21 Section 2(2)(a) CCA. The 2050 target can also be amended if a change is made to the range of greenhouse gases covered by the target or if emissions from international aviation or international shipping are added to the target: section 2(2)(b).

22 See sections 27 and 29 CCA. The Fourth Biennial Report just published by ECCC includes 28 Mt of imported Western Climate Initiative credits and an accounting adjustment for land use, land-use change, and forestry (LULUCF). These credits effectively define Canada's 2030 target as a net target of 511 Mt and a gross target of 539 Mt.

23 See section 30 CCA. IAS emissions must still however be taken into account by the CCC and government when (respectively) advising on, and setting, carbon budgets - Section 10(2)(i) CCA.

24 The EU's NDC does not allow offsets from outside the EU to be used for compliance with the EU NDC.

25 Holz, Christian, (2019): "Deriving a Canadian Greenhouse Gas reduction target in line with the Paris Agreement's 1.5°C goal and the findings of the IPCC Special Report on 1.5°C". Technical Backgrounder. Climate Equity Reference Project, CANRac. Available at: https://climateactionnetwork.ca/wp-content/uploads/2019/12/CAN-Rac-Fair-Share-%E2%80%94-Methodology-Backgrounder.pdf

26 Conference of the Parties, Adoption of the Paris Agreement, Dec. 12, 2015. U.N. Doc. FCCC/CP/2015/L.9/Rev/1 (Dec. 12, 2015). Available at: https://unfccc.int/sites/default/files/english_paris_agreement.pdf

27 UNFCCC (2020). "Land Use, Land-Use Change and Forestry." Available at: https://unfccc.int/topics/land-use/workstreams/land-use--land-use-change-and-forestry-lulucf/land-use--land-use-change-and-forestry

28 See Grantham CCA 2019 at p. 9 and The "S" Factors at p. 119. Some jurisdictions use annual targets, such as Scotland - see Climate Change (Scotland) Act, 2009, s. 3.

29 See Canada's 4th Biennial Report to the United Nations Framework Convention on Climate Change (UNFCCC) [4th Biennial Report]

30 Environment and Climate Change Canada (2019) Canadian Environmental Sustainability Indicators: Greenhouse gas emissions. Consulted on March 15, 2020. Available at: https://www.canada.ca/content/dam/eccc/documents/pdf/cesindicators/ghg-emissions/2019/national-GHG-emissions-en.pdf.

31 Canada National Inventory Report (April 15 2019) Part 1, online: https://unfccc.int/documents/194925 at p. 10

32 Casado-Asensio, Juan et al, "Mitigating climate change in a federal country committed to the Kyoto Protocol: how Swiss federalism further complicated an already complex challenge", Policy Sci (2016) 49: 257-279 [Casado-Asensio 2016] and Steurer, Reinhard et al, "Is decentralisation always good for climate change mitigation? How federalism has complicated the greening of building policies in Austria", Policy Sci (2015) 48: 85-107 [Steurer 2015

33 The Regulation on binding annual emission reductions by Member States from 2021 to 2030 ("Effort Sharing Regulation") adopted in 2018 sets national emission reduction targets for 2030 for all Member States, ranging from 0% to -40% from 2005 levels. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0842&from=EN]

34 Rivers, N. et al, Sharing the burden for climate change mitigation in the Canadian federation, Cnd J Econ (2015) 48 (4): 1350-1380 at p. 1357 [Rivers 2015]

35 Section 12 CCA.

36 See for example Section 4 CCA.

37 Section 4 CCA . New Zealand has taken the approach of setting out the deadline for each budget up to 2050 in the body of its legislation – see section 5X(3) NZ Climate Act.

38 Per Article 14 of the Paris Agreement, 2015.

39 Section 8 CCA.

40 The NZ Climate Act refers to "responses to climate change taken or planned by parties to the Paris Agreement or to the Convention".

41 See subsection 5ZC(2)(b) NZ Climate Act.

42 The analogous section in the NZ Climate Act originally read "the need for emissions budgets that are ambitious but technically and economically feasible". The Environment Committee proposed an amendment to "but likely to be technically and economically achievable" to ensure that ambition wasn't unduly limited – see p. 11 Commentary.

43 See subsection 5ZC(2)(b) NZ Climate Act.

44 See the CCC's Fourth Carbon Budget Report: Reducing emissions through the 2020s.

45 NZ Climate Act s. 5N(1)-(2)

46 See for example UK CCA ss. 22(4)

47 NZ Climate Act ss. 5ZB(1)-(2)

48 NZ Climate Act ss. 5ZB(4)

49 Elcano 2019 at p. 74, citing the lessons learned from the experiences of France, Chile and Germany in particular.

50 Elcano 2019 at p. 28.

51 Section 39 of CCA.

52 See for example its Call for Evidence to support its advice on long-term targets and a net-zero carbon economy in 2018-2019: https://www.theccc.org.uk/2018/10/30/ccc-launches-zero-carbon-economy-call-for-evidence/

53 Grantham CCA 2019 at p 33 citing Carattini S, Carvalho M, Fankhauser S (2017) How to make carbon taxes more acceptable. Policy Brief. London: Grantham Research Institute on Climate Change and the Environment, London School of Economics and Political Science.

54 Chalifour, N, "Canadian Climate Federalism: Parliament's Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Tax", Nat J Con Law (2016) 36: 331 at pp. 8 & 20 [Chalifour 2016]

55 Note that any trading system must be based on clear and well enforced rules to avoid "gaming the system" - see e.g. the SOx and NOx trading in the US and the first phase of the EU ETS to see how trading can go wrong.

56 An open discussion about GHG emissions by province could be an effective tool to encourage some provinces to act. See for example A Collaborative Report from Auditors General – March 2018 at https://www.oag-bvg.gc.ca/internet/English/parl_otp_201803_e_42883.html

57 Warren, F.J. and Lemmen, D.S. (2014): Synthesis; in Canada in a Changing Climate: Sector Perspectives on Impacts and Adaptation, (ed.) F.J. Warren and D.S. Lemmen; Government of Canada, Ottawa, ON, p. 1-18 at p. 2.

58 https://www.canada.ca/en/environment-climate-change/news/2019/04/canadas-climate-is-warming-twice-as-fast-as-global-average.html; Government of Canada, 2019. Canada's changing climate report: advancing our knowledge for action. A collaborative effort of Environment and Climate change Canada, Fisheries and Oceans Canada, Natural Resources Canada and University experts. April 2019. Available at: https://changingclimate.ca/CCCR2019/

59 Government of Canada, Working Group on Adaptation and Climate Resilience (2016)

60 As does British Columbia's Bill 38 – Climate Change Accountability Amendment Act, 2019 (received Royal Assent

61 Section 56 of the CCA.

62 Council of Canadian Academies, 2019. *Canada's Top Climate Change Risks*, Ottawa (ON): The Expert Panel on Climate Change Risks and Adaptation Potential, Council of Canadian Academies https://cca-reports.ca/wp-content/uploads/2019/07/Report-Canada-top-climate-change-risks.pdf

63 Canadian Institute for Climate Choices, 2020. *Charting Our Course*: Bringing clarity to Canada's climate policy choices on the journey to 2050 https://climatechoices.ca/reports/charting-our-course/

64 See Grantham CCA 2019 at pp. 3 & 26

65 When the legislation first comes into force, there should be at least two and possibly three carbon budgets "on deck" as set out above. The legislation should invite as much planning for those later carbon budgets as possible. New Zealand and the UK have taken slightly different approaches to this.

66 See subsection 5ZGof the NZ Climate Act. The CCA requires that the report is laid before Parliament "as soon as reasonably practicable" after the order setting the carbon budget is made – see sections 13 and 14.

67 See for example ss. 13(2) of the CCA.

68 See for example ss. 13(3) of the CCA.

69 See for example ss. 13(4) of the CCA.

70 See for example ss. 5ZG(3)(b) of the NZ Climate Act.

71 Section 15 CCA.

72 See section 58 CCA.

73 See sections 16, 18 and 20 of the CCA. See for example the UK Statement on the First Carbon Budget Period per s. 18 of the CCA, May 2014. Canada is already generating much of this reporting to the UNFCCC (see National Inventory Reports) and under the PCF. The reporting would need to be recalibrated to the legislated targets and national and sub-national five-year carbon budgets.

74 See section 36 CCA. See for example CCC – 2018 Progress Report to Parliament – Executive Summary. Available at: https://www.theccc.org.uk/publication/reducing-uk-emissions-2018-progress-report-to-parliament/

75 See section 37 CCA. See for example UK Delivering Clean Growth – Response to CCC 2018 Progress Report. Available at: https://www.gov.uk/government/publications/committee-on-climate-changes-2018-progress-report-government-response

76 See section 19 CCA.

77 See section 20 CCA.

78 The CCME has been working on similar indicators under the Pan-Canadian Framework, per the Second Annual Synthesis Report on the Status of PCF Implementation, see p. iii. These indicators should make an appearance in the Third Annual Synthesis Report on the Status of PCF Implementation (that report was expected at the end of 2019, but remains outstanding as of mid-March 2020).

79 See for example the Agency's Date on the Environment report: https://www.umweltbundesamt.de/sites/default/files/medien/376/publikationen/2017_dzu-bericht_wf_en.pdf

80 See the Commissioner of Environment and Sustainable Development's 2016 Review of the 2015 Progress Report of the Federal Sustainable Development Strategy.

81 Ss. 5ZG(3)(c) of the NZ Climate Act.

82 SBC 2007, c. 42, as amended, s. 4.3.

83 Macrory at p.267.

84 DECC, 2014, Triennial Review, p.10.

85 CCA Section 34

86 CCA section 35.

87 CCA section 38.

88 CCA section 57.

89 CCA sections 33-35

90 See section 36 CCA. See for example CCC – 2018 Progress Report to Parliament – Executive Summary. [TAB 17]

91 See section 59 CCA. Under the CCA, this requirement is biennial, though it can be amended to be annual.

92 CCA section 37.

93 In this section mātauranga Māori means traditional Māori knowledge; te ao Māori means the Māori world; te reo Māori means the Māori language; tikanga Māori means Māori custom and protocol.

94 See Schedule 1 UK CCA.

95 See Schedule 1, s. 16 UK CCA.

96 Ballinger, Duncan (2019). The Zero Carbon Bill: a framework for New Zealand's climate change journey. New Zealand Law Society. Available at: https://www.lawsociety.org.nz/practice-resources/practice-areas/environmental-law/the-zero-carbon-bill-a-framework-for-new-zealands-climate-change-journey

97 City of Oslo (January 2019). Oslo's Climate Budget 2019. Available at: https://www.c40knowledgehub.org/s/article/Oslo-s-Climate-Budget-2019?language=en_US

98 See discussion in McMaster, 2008; Macrory, 2014; McHarg, 2011; Reid, 2012; Church, 2015.

99 Phare, Merrell-Ann et. al. (September 2017) Collaborative Consent and British Columbia's Water – Towards Watershet Co-Governance. CIER and POLIS Project. Available at: https://poliswaterproject.org/files/2017/09/CollabConsentReport.pdf. See also Phare, Merrell-Ann et. al. (January 2018) Collaborative Consent as a path to realizing UNDRIP. Policy Options. Available at: https://policyoptions.irpp.org/magazines/january-2018/collaborative-consent-as-a-path-to-realizing-undrip/