

PREPARED BY

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EXECUTIVE SUMMARY

This policy review is directed to the Honourable Minister of Environment and Climate Change Canada, Steven Guilbeault. Currently, Canada is unable to meet many of its environmental goals or address its environmental challenges. This is due to federal and P/T constitution-based jurisdictional challenges, contradicting environmental and economic policies, and a lack of transparency and accountability in environmental policies. These issues stem from a lack of effective coordination within and between governments at the federal and P/T level, in addition to a lack of funding for policy implementation, notably in terms of infrastructure development.

To increase collaboration and cooperation, it is recommended that the GoC develop PARTNER, a permanent PPE comprised of the CCME, industry stakeholders, and experts in clean technology. Private capital, including Indigenous and American capital, will increase investment in climate action and annual reports on activities and progress will increase transparency and credibility of Canada both domestically and abroad. PARTNER will increase governmental collaboration as well as collaboration between governments and industry stakeholders. Thus, PARTNER will promote a whole-of-society approach in mitigating the impacts of climate change while positioning Canada for success in a greener economy.

The oil and gas industries are the leading contributor to GHG emissions. Recognizing that Canada exports 98% of its oil to the US, President Biden's plan to phase out the oil and gas industry and reduce GHG emissions by 50-52% below 2005 levels by 2030 presents a significant risk to Canadians dependent on those industries. Canada also ranked extremely poor on the Yale Environmental Performance Index, ranking 168 out of 180 countries for GHG emissions per capita in 2020. Although progress has been made, current trends suggest that Canada will not meet its GHG reduction target of 40-45% below 2005 levels by 2030. In fact, it is estimated that Canada will need to invest as much as \$2 trillion, or \$60 billion annually, to achieve its target of net-zero GHG emissions by 2050.

Through the development of PARTNER, Canada can promote increased cooperation within government, between governments, and with stakeholders, thus increasing buyin and overall success. With Canada's enhanced climate commitments at COP26, a new approach to tackling climate change is required – one that brings all relevant stakeholders to the table.

ABBREVIATIONS

ECCC – Environment and Climate Change Canada

CCME – Canadian Council of Ministers of the Environment

COP26 – 26th Conference of the Parties (Global Climate Summit 2021)

GDP – Gross Domestic Product

GHG - Greenhouse Gas

GoC - Government of Canada

Montreal Protocol - Montreal Protocol on Substances that Deplete the Ozone Layer

NDP – New Democratic Party

NGO – Non-Governmental Organization

NRTEE – National Roundtable on the Environment and the Economy

PCF - Pan-Canadian Framework on Clean Growth and Climate Change

PARTNER - Partnership for Novel Environmental Resilience

PPE – Public Private Entity

P/T - Provinces and Territories/ provincial and territorial

U.S. – United States

BACKGROUND, HISTORY, AND POLICY PROCESS

Problems Facing the Nation

Based on current trends, Canada is not expected to meet many of its environmental goals (See "Goals and Objectives"). This is primarily due to:

(1) Constitution-based jurisdictional challenges between the federal and P/T governments

The environment is not listed as specifically falling within the jurisdiction of the federal or P/T governments, which means that it is either divided between, or shared by, the two levels. This has reduced the effectiveness of the policies, as provincial priorities are not always in line with federal priorities.^{5,6,7,8} In fact, the national reduction of GHG emissions was only 1% between 2005 and 2019. This is because P/Ts have a varying degree of "readiness" when it comes to climate policy (Figure 1).

Figure 1: Summary of Federal and P/T Readiness to Deliver on Climate Goals⁹

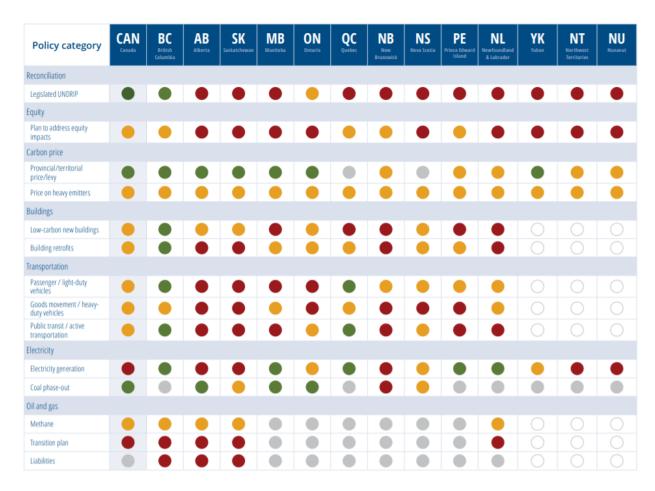
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Summary table

This summary table outlines the state of climate action in each P/T and at the federal level, based on 24 criteria. See endnote 8 for the reference containing the description of indicators.



Policy category	CAN Canada	BC British Columbia	AB Alberta	SK Saskatchewan	MB Manitoba	ON Ontario	QC Quebec	NB New Brunswick	NS Nova Scotia	PE Prince Edward Island	NL Newfoundland & Labrador	YK Yukon	NT Northwest Territories	NU Nunavut
Emission trends														
Emissions change 2005-2019	↓ -1%	1 4%	1 7%	1 10%	1 10%	-21%	↓ -4%	↓ -38%	↓ -30%	↓ -14%	1 5%	1	1	1
Emissions projection 2019-2030	1	1	1	1	_	_	1	1	1	1	_	_	1	↑
Emissions reduction targets														
2030 target														
2050 target														
Climate action plan														
Climate plan publication date	2020	2018		2017	2017	2018	2020	2016	2009	2018	2019	2020	2019	2003
Models to 2030 target														
Pathways to 2050														
Targets/budgets for every sector														
Climate accountability and go	vernance													
Legislative certainty														
Independent accountability														
Monitoring and reporting														
Climate adaptation														
Adaptation strategy														



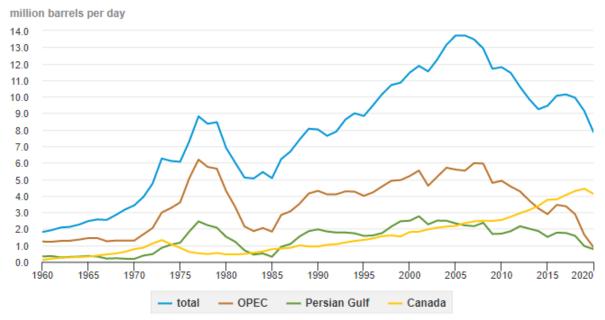
(2) Contradicting environmental and economic policies

Experts have noted how the effectiveness of environmental policies has been undermined by the Federal Government's effort to expand Canadian oil and gas exports (Figure 2), notably exports to the U.S. (Figure 3).¹⁰ This is in addition to Canada's continued efforts to expand its pipeline, which not only increases GHG emissions but also negatively impacts biodiversity¹¹ and Indigenous communities¹² (Annex A).

Figure 2: Canada's Crude Oil Export Summary 2016-2020¹³

	2016	2017	2018	2019	2020
Total Volume (10³m³/d)	492.71	528.37	575.57	597.88	581.99
Heavy	363.67	405.08	449.03	456.74	446.28
Light	129.05	123.29	126.54	141.14	135.71
Total Volume (Mb/d)	3 100.58	3 324.96	3 621.99	3 762.35	3 662.38
Heavy	2 288.51	2 549.09	2 825.69	2 874.18	2 808.40
Light	812.07	775.87	796.30	888.17	853.99

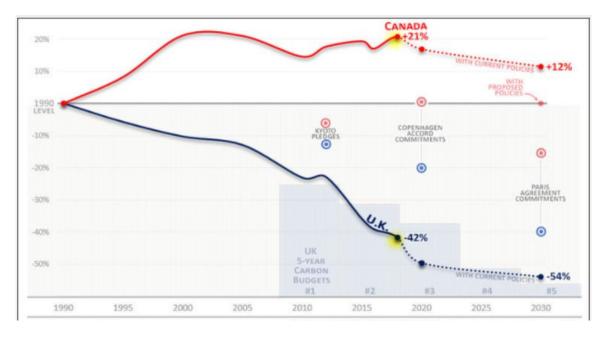
Figure 3: U.S. Petroleum Imports: Total, OPEC, Persian Gulf, and Canada, 1960 - 2020¹⁴



(3) A lack of transparency and accountability in environmental policies

The Federal Government did not meet any GHG targets in the last 30 years (Figure 4),¹⁵ conduct public consultation for the PCF, ¹⁶ nor disclose federal tax deductions or comprehensive inventories of direct spending to the fossil fuel industry.¹⁷

Figure 4: Canadian and UK Climate Targets, Progress, and Projections, 1990 to 2030¹⁸



Past Policies and Decisive Moments

Past Policies (Annex B)

To address the *Problems Facing the Nation*, Canada has created various interprovincial forums and frameworks to improve cooperation between the P/Ts. This includes the CCME (1964), ¹⁹ the Council of the Federation (2003), ²⁰ and the PCF (2016)²¹. Since these initiatives do not produce legally binding policies, they do little to assure national unity.

In addition, Canada sits on many environment-focused international advisory committees, ²² engages in environment-focused partnerships with other countries, ²³ and is a signatory to over 100 international environmental agreements. ²⁴ Despite this, little is done to penalize counterproductive domestic action. Furthermore, in 1988, Canada established an independent national policy advisory committee, the NRTEE, legislating its mandate in 1993. In 2013, however, funding for the NRTEE was cut. According to the Harper Government, this was because the NRTEE had "served its purpose", ²⁵ however, media accounts suggest it was because the last report by the NRTEE highlighted that Canada was off track to meet its 2030 GHG emission reduction goal. ²⁶

Similarly, while the *Canadian Net-Zero Emissions Accountability Act* (2021) marks "the first time a Canadian Government has legislated emissions reductions accountability to address climate change," ²⁷ the Act does not include an emission reduction plan, enforcement mechanisms, or legal consequences to ensure target attainment.²⁸

Decisive moments

In 1971, Canada was the second country to form a department devoted to the environment²⁹ and began its climate commitments early on by signing the 1987 *Montreal Protocol*, ³⁰ as well as the 1997 *Kyoto Protocol*³¹ (Canada withdrew from the latter in 2011).³² That said, national security concerns largely overrode environmental concerns as a federal policy priority until the election of the Harper Government in 2006.³³

The 2015 election of the Trudeau Government saw an expansion of environmental concerns into broader policy fora, including the 2017 Defence Policy Review, *Strong, Secure, Engaged,* which highlighted climate change as a critical security concern.³⁴ The most recent federal election in September of 2021 then witnessed "the most comprehensive climate agenda," addressing aspects from consumer behaviour to industry adaptation spending and regulation.³⁵ That said, due to the economic impact of the COVID-19 pandemic, the federal and P/T governments have suspended, delayed, and cancelled various environmental protection measures.³⁶ The GoC has also been accused of financing the fossil fuel industry instead of climate change (Annex C).

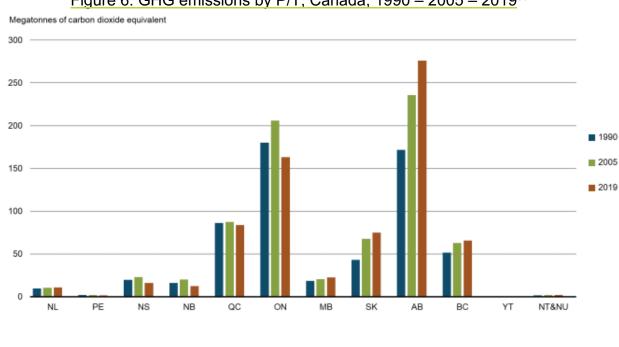
Trends

(1) National GHG emissions have maintained relatively constant over the past 30 years

Figure 5: GHG emissions, Canada, 1990 to 2019³⁷ Megatonnes of carbon dioxide equivalent 800 730 600 400 300 200 100 0

(2) Certain P/Ts are increasing, rather than decreasing ghg emissions

2003



(3) The oil and gas industry is the primary national contributor to ghg emissions – and Its proportion is increasing

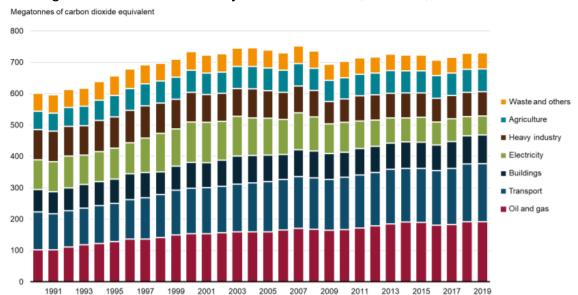


Figure 7: GHG emissions by economic sector, Canada, 1990 to 2019³⁹

Constraints

(1) Public support for climate action is Varied across P/ts

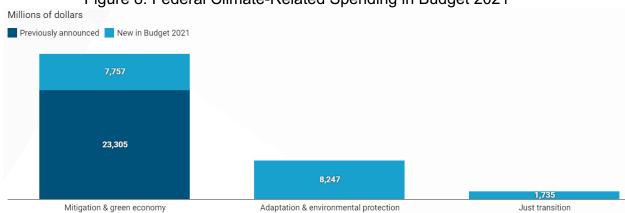
National studies consistently show that most Canadians think that climate change is a serious issue.⁴⁰ Such studies, however, omit critical differences between the P/Ts. For instance, while 83% of Canadians think the earth is getting warmer, the proportion increases to 89% for Quebec residents, while declining to 70% for Alberta residents (Annex D). These differences provide insight into the varied motivations of P/T policymakers.

(2) Parliament remains divided on climate action

As a minority, the GoC must rely on support from opposition parties to pass legislation. The NDP and Conservatives represent the two largest opposition parties, holding 25 and 119 seats, respectively. While the NDP wants more ambitious environmental policies, the Conservatives have announced they want to remove regulations on resource extraction and maintain the fossil fuel industry. Environment policies must therefore seek to appeal to both sides, or they become susceptible to reversal should Conservatives win a majority.

(3) Climate adaptation infrastructure is expensive

It is estimated that Canada will need to invest as much as \$2 trillion, or \$60 billion annually, to achieve its target of net-zero GHG emissions by 2050. 44 The 2021 Federal Budget demonstrated discrepancy between promised and actual funding (Figure 8). Experts suggest that climate spending should be at least 1-2% of GDP – Canada currently spends 0.25%. 45



POLICY ANALYSIS

Goals and Objectives

Goals

As per its Departmental Plan, the 2020-2021 goals for ECCC are:

- Clean growth and address climate change;
- Prevention and mitigation of pollution;
- Nature conservation; and,
- Accurately predict weather conditions.⁴⁷

Objectives

The mandate of ECCC is to ensure that Canadians are informed about conservation and how to maintain ".... A clean, safe and sustainable environment for present and future generations." According to the Minister's mandate letter, ECCC must collaborate with P/Ts, other federal departments with overlapping portfolios, and Indigenous Peoples to advance environmental policy and protect Canada's natural resources (Annex G). Such collaboration includes, but is not limited to:

- Finalizing flood maps in partnership with the Minister of Natural Resources;⁵⁰
- Working with the Minister of Fisheries, Oceans, and the Canadian Coast Guard to develop a plan "to conserve 25 percent of Canada's land and 25 percent of Canada's oceans by 2025"⁵¹ as well as to enact the Oceans Protection Plan;⁵²
- Coordinating with Parks Canada to conserve "cultural heritage";⁵³ and,
- Implementing the PCF.⁵⁴

ECCC is also committed to meeting the GoC international commitments. To fulfill its pledge under the Paris Agreement, for example, the GoC established GHG reduction targets of 40-45% below 2005 levels by 2030, ⁵⁵ an increase from the previous commitment of 30%. ⁵⁶

Stakeholders

	PRIMARY STAKEHOLDERS				
Associations representing oil, gas, and natural resource industries	Mixed : ¹ Advocates for the growth of Canada's oil, gas, and natural resource industries in a sustainable way. Many have committed to new technology development to reduce environmental impacts, notably GHG reduction. ^{57,58} That said, given that oil and gas production is one of the major contributors to GHG emissions in Canada, industry members will likely respond negatively if policies are designed to phase out the industry. For this reason, these associations are expected to operate primarily as detractors but are considered mixed because they are necessary partners in this transition as their industry is not sustainable in the long-term.				
P/Ts	Mixed : Crucial for the implementation of federal policies. P/Ts such as Ontario, Quebec, New Brunswick, and Nova Scotia have demonstrated a commitment to reducing GHG emissions. ⁵⁹ Other P/Ts such as Alberta, Saskatchewan, Manitoba, and Nunavut do not have emissions targets and have seen an increase in GHG emissions since 2005. ⁶⁰ P/Ts with economies heavily dependent on the oil and gas industry are likely to be more supportive of innovation or infrastructure development. P/Ts will likely be hesitant to increase spending for environmental policies, given the economic impact of COVID-19, but they continue to fund the CCME.				
CCME	Mixed : Composed of the environment ministers from the federal and P/T governments, council members meet annually to determine priorities and strategic direction. The current strategic priorities include climate change mitigation and adaptation; increased waste reduction and resource recovery; developing and implementing the Air Quality Management System; and maintaining the Canadian Environmental Quality Guidelines for water and soil. ⁶¹ The CCME can be leveraged to encourage greater P/T coordination, though federal and P/T ministers will likely be influenced by their distinct P/T agendas. Provinces with greater interests in oil and gas, such as Alberta, will likely operate primarily as detractors.				

¹ "Mixed" refers to stakeholders which may support certain policies while rejecting others.

Implicated Federal Departments Private	Ally: Each department is required to produce a "Departmental Sustainable Development Strategy" which is used to assess departmental goals and promote collaboration across departments. Some departments have funding programs available to support projects that advance sustainable growth in their specific sector. For instance, ECCC has the Climate Action and Awareness Fund, 62 among others, while Natural Resources Canada has the Smart Renewables and Electrification Pathways Program. 63,64			
	Ally: Includes private sector members focused on Canada's			
Sector Investors	transition to a low carbon economy. This includes institutions such as the Canada Infrastructure Bank.			
IIIVESIOIS	as the Canada ininastructure bank.			
	SECONDARY STAKEHOLDERS			
President	Ally: 98% of Canadian oil is exported to the U.S.65 While			
Biden	President Trump reversed many climate action policies,			
	President Biden has recommitted the U.S. to prioritizing climate			
	action. 66, 67, 68 The administration also intends to phase out the oil			
	and gas industry ⁶⁹ and reduce GHG emissions by 50-52% by 2030. ⁷⁰			
Indigenous ar				
Marginalized	disproportionately affected by climate change and will likely			
Communities	support positive climate action. Indigenous representatives have			
	been calling for a greater focus on environmental issues by the			
	Government. ⁷¹			
Environmenta NGOs				
NGOS	environment. These organizations often work collaboratively with P/Ts, local communities, industry members, and Indigenous			
	Proples to protect and conserve nature. These organizations			
	have mandates that are in line with Canada's domestic and			
	international commitments and therefore would likely leverage			
	their partnerships to promote environment-benefitting policies.			
	their partitionships to promote environment-benefitting policies.			

Programmatic Needs

A 2018 report from the federal and P/T Auditors General revealed a lack of coordination on climate action within and between all levels of government. The report concluded that this absence of leadership may lead governments to "overlook important opportunities or challenges or develop redundant or contradictory policies."⁷²

In addition, while the Federal Government has promised to further advance environmental policies, such as by requiring that a minimum of half of "passenger-vehicle sales be electric by 2030,"⁷³ it is unclear whether this will lead to greater funding and capacity for ECCC. According to the most recent federal budget, \$2.0 billion has been allocated to ECCC for

2020-21⁷⁴, an eight percent increase from the previous year. ⁷⁵ While this trend may continue with the next federal budget, the COVID-19 pandemic has taken a substantial toll on the economy. ⁷⁶ Planned budgetary spending already suggests that funding will decline (Annex E). As a result, any new policy could face financial, resourcie, and capacity limitations at both the development and implementation phase.

COSTED OPTIONS

OPTION 1 - Development of PARTNER

A long-term partnership between the public and private sector designed to support the implementation of Canada's environment policies and transition towards a greener economy. This partnership will develop targeted projects intended to address economic concerns with respect to the scaling back of the oil and gas industry. Membership will include industry stakeholders, Indigenous and American capital, and the CCME to ensure federal and P/T policy alignment.

Benefits	Drawbacks
Funding and knowledge from industry will supplement that of the public sector. Project risk will fall on the private sector.	Competing stakeholder interests complicate decision-making processes and reduce environmental goal achievement.
Projects will be used to employ Canadians dependent on the oil and gas industry, thus increasing support for PARTNER projects.	Oil and gas dependent P/Ts and industry members will initially push-back until the economic benefit is evident.
The GoC has experience with public- private partnerships that it can leverage for best practices. ⁷⁷	Community groups may oppose what they see as the increased privatization of public services. ⁷⁸
PARTNER streamlines activities and increases alignment of federal and P/T support. ⁷⁹ It will also help reduce political divisions related to P/T economic dependence on the oil and gas industry.	Public-private partnerships generally receive criticism due to higher costs, accountability issues, and loss of democratic control over public services. ⁸⁰

OPTION 2 – Develop the Canadian Climate Change Adaptation Platform (CAN-Climate-ADAPT)

Based on the European Climate Adaptation Platform, ⁸¹ CAN-CLIMATE-ADAPT is an online, publicly available database that tracks federal and P/T environment policies and adaptation actions. More specifically, this platform will provide Canadians with access to models of expected climate change impacts in Canada; current and future vulnerability of regions and sectors; national and interprovincial adaptation strategies and actions; adaptation case studies and potential adaptation options; and tools that support adaptation planning, including best practices development. ⁸² By providing a platform to track federal climate action to the public at large, CAN-CLIMATE-ADAPT will establish greater accountability and transparency with respect to GoC environmental initiatives and is expected to increase adherence to federal environmental goals by P/Ts. Further,

access to a comprehensive record of government progress can assist departments and agencies at the federal and P/T level to better align efforts and avoid duplication.

Benefits	Drawbacks
Promotes information sharing and	Is a time-consuming project that
reduces data redundancy between, and	requires input from a variety of
within, federal and P/T governments.	government stakeholders.
Is a publicly available platform that	Requires ear-marked annual funding
increases climate	from ECCC and related departments,
adaptation awareness at the federal, P/T,	including substantial start-up funding and
and local level.	maintenance costs.
Is based on a pre-existing platform	Information collection does not
that can be used to inform this initiative.	guarantee increased climate action.
Highlights global goals on climate	Requires initial training for
adaptation and holds the GoC publicly	programmers, including considerations
accountable to its progress.	for security risks related to viruses and
	corporate hacking.

OPTION 3 – Re-establish the National Round Table on the Environment and the Economy

Established in 1988, the NRTEE was created to coordinate a new relationship between the environment and the economy. ⁸³ In 2013, the *National Round Table on the Environment and the Economy Act (1993)* was repealed, thus dissolving the NRTEE. ^{84, 85} Originally, the NRTEE was not equipped to enforce compliance. In its re-established form, the NRTEE's mandate will be strengthened from its original policy advisory body function to include sanctioning powers and incentives mechanisms, which will allow it to also function as an oversight and accountability body. The NRTEE would be chaired by the Minister of ECCC, and members will consist of industry leaders, academics, environmentalists, labor unions, and Indigenous representatives. These members will be appointed by the GoC for terms not exceeding three years.

Benefits	Drawbacks
Federal membership is comprised of	Larger membership results in less
existing senior management and will not require additional personnel.	efficient decision-making processes.
It can leverage pre-existing government supports to solicit expertise, such as the Net-Zero Advisory Body. ⁸⁶	The leveraging of existing federal senior management places additional capacity pressures on departments.
It reduces redundancies in environmental policy	It may be seen as less transparent by stakeholders as meetings will occur behind closed doors.

implementation and triages cross-cutting P/T environmental issues.	
It addresses the problem of conflicting economic and environmental priorities.	It does not lead to additional funding for climate action.
It acts as a forum for enhanced cooperation, both within government and with external stakeholders.	Obtaining parliamentary and P/T support for a body with sanctioning abilities may be difficult given diverging stances.

Recommendation

It is recommended that the GoC implement Option 1 as it most effectively addresses each of the problems identified: it physically brings together federal and P/T government officials; provides a forum through which stakeholders can work through competing environmental and economic priorities; and increases transparency by producing an annual report which tracks progress towards goals. Relying on investors for project implementation also adds a degree of accountability.

By bringing these officials together, issues relating to jurisdictional obstacles, as well as competing regional interests, can be addressed at the early stages of policy development and remedied through enforcement mechanisms. Further, the creation of this entity will provide the GoC with the opportunity to find a consensus on how to address key issues and meet its domestic and international climate goals.

As PARTNER will engage members of both the public and private sector, stakeholders will be directly engaged in infrastructure development. Given the restricted budget of ECCC, this option addresses the critical need for increased investment in climate change mitigation using private capital.

Timeline, Implementation, and Expected impact

Activity	Timeline and Description	Key Performance Indicators
Creation	Year 1: creation of a	Impact: greater stakeholder buy-in,
and coordination of PARTNER programming	steering committee (Cabinet level) to ensure coordination between departments. Industry	measured by participation levels, including number of meetings held and attendance levels.
	members are recruited, and PARTNER policy,	Output: establishment of membership; creation of PARTNER policy, laws, and

	laws, and regulations are established.	regulations; public and private financial capital ear marked.
Project selection and preparation	Year 2: priority of value for money guides project selection. Creation of a project team with appropriate skills and expertise. Any necessary	Impact: maximizes PARTNER funding by selecting projects with the greatest 'value for money,' measured by quantity of projects funded and their expected impacts.
	sub-committees or task forces are established. ⁸⁷	Output: project management team established; projects chosen, funded, and value for money assessments completed; creations of sub-committees (as required).
Selection of Demonstration Projects	Year 2-3: purpose is to create precedent for future projects and to build investor confidence. These	Impact: investor confidence increases, measured by additional funding or interest in projects.
	projects are not so high profile as to make political interference likely but should still be politically strategic. ⁸⁸	Output: demonstration projects selected (based on total number of projects selected in the previous phase); degree to which initial timelines are met and/or delayed.
Preparation of best practice and bid documents	Year 1-3: standardize risk allocation and contract terms to reduce the cost of future projects. ⁸⁹	Impact: standardization and efficient implementation of PARTNER processes, measured by number of standard operating procedure and best practice documents created.
		Output: best practice documents to reduce time and cost of future procurement activities; risk allocation to promote investor confidence; production of necessary contracts for projects selected.
'Value for Money' assessment and approval process	Year 3: includes cost- benefit analyses, public sector comparators, and shadow models. Approval processes raise important	Impact: increased buy-in by P/T partners measured by the degree to which issues are raised and addressed during the approval process.
	issues during project preparation to ensure quality control and buy-in from other government departments. ⁹⁰	Output: cost-benefit analysis documents; public sector comparator report; shadow models developed for projects.

Annual
PARTNER
report

Year 1-4: implementation of program monitoring, knowledge capture, and sharing of lessons learned. A public report of the findings is released annually.

Impact: increased adherence to Canada's climate goals, measured by its Nationally Determined Contributions⁹¹ and Canadian Environmental Sustainability Indicators (Annex F); decreased fragmentation among federal and P/T public and private stakeholders, measured by number of explicit mentions of environmental goals by PARTNER members; increased infrastructure will lead high-carbon sectors to transition more quickly to greener solutions, measured by annual GHG emission reductions; number of green infrastructure projects implemented; and number of workers in non-renewable versus green energy sector.

Output: number of PARTNER projects implemented; comparison of progress between annual PARTNER reviews.

Communication strategy

The successful development, implementation, and long-term functioning of PARTNER relies on an effective communication strategy to:

- 1) Increase knowledge and understanding of the environmental challenges facing Canada and the importance of addressing these challenges in a timely manner;
- 2) Promote awareness of the initiative's success, leading to greater investment in PARTNER projects and faster attainment of Canada's climate goals and objectives; and,
- 3) Improve accountability and trust between the GoC, stakeholders, and the broader public which will increase support.

The way in which PARTNER will be announced to stakeholders and beneficiaries is outlined below. Note that similar means of communication will be used to announce when the annual reports are published and that stakeholders will be asked to promote ECCC social media efforts to amplify reach.

Stakeholder/ Beneficiary	Communication Strategy	Anticipated Timeline
Implicated Federal Departments	Announced at the next CCME meeting and through correspondence between the	December 2022

	Minister and Deputy Minister of ECCC and other Ministers and Deputy Ministers.	
Private Sector Investors	Letters will be sent to key ECCC industry stakeholders announcing the creation of PARTNER. The goal is to recruit potential investors.	End of fiscal year 2022/2023
International Community	Announced at COP27 and through bilateral meetings with close allies. Given Canada's close relationship with the country, direct correspondence to the U.S. Government will also be included.	November 2022
Environmental NGOs	Emails will be sent to key ECCC NGO partners. Environmental NGOs can be leveraged to help spread the news about the creation of PARTNER.	End of fiscal year 2022/2023
Canadian Public	ECCC will issue a press release and launch a social media promotion campaign with the title "PARTNERS in climate action." The location of where Canadians can find additional information on PARTNER, such as the annual reports, will be included.	End of fiscal year 2022/2023
Indigenous Communities	Letters will be sent to Indigenous community partners. Special consideration will be given to projects that may impact Indigenous communities, per the GoC's Duty to Consult (Section 35 of the Canadian Constitution).	End of fiscal year 2022/2023

APPENDICES

Annex A: Twelve Major Climate Risk Areas Facing Canada⁹²

Area of Climate Risk	Description
Agriculture and Food	Risks to agriculture and food systems, including adverse impacts on agricultural crops and the agricultural sector due to changing climate and environmental conditions, and increasing risk of disruptions to global food production and distribution systems.
Coastal Communities Risks to coastal communities in Canada, including damage to coastal infrastructure, property, an inundation, saltwater intrusion, and coastal erosion due to sea-level rise and storm surges.	
Risks to Canadian ecosystems and species, including threats to biodiversity, ecosystem resilience, and the ecosystems to provide a range of benefits to people such as environmental regulation, provision of naturally important activities and resources.	
Fisheries	Risks to Canadian fisheries and fish stocks, including declining fish stocks and less productive/resilient fisheries due to changing marine and freshwater conditions, ocean acidification, invasive species, and pests.
Forestry	Risks to Canadian forestry, including declining forest health and lower production of timber and forest products due to changing weather patterns, increasing frequency of extreme weather events, increasing range of invasive species and/or pests, and growing prevalence of wildfires.
Geopolitical Dynamics	Risks related to geopolitical dynamics affecting Canada, including increased international migration and associated political, social, and economic stresses; increasing political and social conflict over climate-affected resources; heightened geopolitical tensions over Arctic sovereignty and resources; and increasing need for humanitarian assistance and foreign aid due to climate-related crises.
Governance and Capacity	Risks related to the capacity of Canadian governments to effectively provide public services, manage and respond to climate risks, and maintain the public's trust, including new or increased obligations on government policies, programs, and budgets.
Human Health and Wellness	Risks to human health and wellness in Canada, including adverse impacts on physical and mental health due to hazards such as extreme weather events, heatwaves, lower ambient air quality, and increasing ranges of vector-borne pathogens.
Indigenous Ways of Life	Risks to Indigenous ways of life in Canada, including declining opportunities for practising activities such as hunting, fishing, and foraging; and associated impacts on safety, food security, communities, Indigenous knowledge, language, and culture.
Northern Communities	Risks to northern communities and people in Canada, including damage to buildings, roads, pipelines, power lines, and airstrips due to thawing permafrost; reduced or disrupted access to communities and facilities due to warmer temperatures; and increased risks from marine accidents due to increased marine traffic and reduced summer sea-ice extent.
Physical Infrastructure	Risks to physical infrastructure in Canada (e.g., homes, buildings, roads, bridges), including damage from extreme weather events such as heavy precipitation, high winds, and flooding; increased probability of power outages and grid failures; and an increasing risk of cascading infrastructure failures.
Risks to Canadian water systems and water supply, including reduced water quality and declining or les Water water supply for communities, industry, and utilities due to changing precipitation patterns, melting glad diminishing snowpack, and earlier or more variable spring runoff.	

Annex B: Timeline of Canada's Climate Commitments and Policies

1964

• The Canadian Council of Ministers of the Environment is established and is composed of, as well as financially supported by, the environment ministers from federal, provincial, and territorial governments.

• Its goal is to achieve environmental results through cooperative action at the international, federal, and P/T level.

1994

- Canada ratifies the United Nations Framework Convention on Climate Change and it enters into force.
- Its goal is to stabilize GHG emissions and prevent "dangerous" human interference with the climate system. The Convention has nearly universal support, with 197 country ratifications.

1999

- The Canadian Environmental Protection Act enters into force.
- Its goal is to contribute to sustainable development through pollution prevention as well as to protect the environment as well as human life and health from the risks associated with toxic substances.

2005

- Although the Kyoto Protocol is ratified by Canada in 2002, the convention officially comes into force in 2005
- Designed as an extension of the UNFCC, Canada committed to reducing its GHG emission by 6% from 1990 levels by 2012.
- Canada formally withdraws from the Kyoto Protocol due to and increase in GHG emissions by 30%

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2007

• ECCC releases the first climate change plan, as required by the *Kyoto Protocol Implementation Act*. The plan reiterates the government's commitment to reduce GHG emissions by 20% below 2006 levels by 2020 and adds a commitment to reduce Canada's total GHG emissions by 60% to 70% by 2050. These targets are repeated in the 2008 and 2009 climate change plans.

2009

- Canada ratifies the Copenhagen Accord at the G8 summit.
- Its goal is to encourage the reduction of global GHG emissions by 50% by 2050. A baseline year was not specified.

2010

• ECCC releases its 2010 climate change plan, as required under the *Kyoto Protocol Implementation Act.* It indicates that Canada's target is to reduce GHG emissions to an average of 6% below its 1990 emission level between 2008–2012 and reiterates the country's target under the Copenhagen Accord.

2015

• Canada commits to the 2030 Agenda for Sustainable Development, and to achieving the related 17 Sustainable Development Goals by 2030.

2016

- Canada launches the Pan-Canadian Framework on Clean Growth and Climate Change.
- a plan "developed with the provinces and territories and in consultation with Indigenous Peoples to meet Canada's emissions reduction targets, grow the economy, and build resilience to a changing climate. The plan includes a pan-Canadian approach to pricing carbon pollution and measures to achieve reductions across all sectors of the economy".

2018

- •The provincial and territorial Auditors General release a report, *Perspectives on Climate Change*, identifying key obstacles to Canada's efforts to respond to climate change.
- The obstacles identified included a lack of overall targets for reducing GHG emissions, failure to assess climate change risks and developing a plan to respond, limited coordination between governments, and poor monitoring and reporting processes.

2019

- $\bullet \hbox{The Liberal party announces ambitious environmental policies in their election platform.} \\$
- Promises include legally-binding five-year benchmarks to reach net-zero GHG emissions by 2050; planting two billion trees over 10 years; strengthening existing rules on emissions in the oil and gas sectors; implementing a ban on single-use plastics; and investing income earned from the Trans Mountain Expansion Project into Canada's clean energy transition.

2020

- Canada launches A Healthy Environment and A Healthy Economy.
- This plan builds on the Pan-Canadian Framework on Clean Growth and Climate Change. It continues down the path that Canadians, their governments, and businesses have been setting.

Mar 2021

- The Supreme Court of Canada rules that the federal government's carbon pricing regime is constitutional as per the "peace, order and good government" clause.
- This is significant as it requires all P/Ts to enforce a carbon tax, in line with the federal minimum pricing standards, to reduce GHG emissions.

Aug 2021

- Canadian enacts the Net-Zero Emissions Accountability Act.
- The Act "marks the first time a Canadian government has legislated emissions reductions accountability to address climate change, by setting legal requirements on the current government and future governments to plan, report, and course correct on the path to net-zero emissions by or before 2050".

Sept 2021

• The government launches their revised election platform. Promises include strengthening the Canadian Environmental Protection Act; federally recognize the "right to a healthy environment"; require oil and gas companies to reduce methane emissions by at least 75% below 2012 levels by 2030; ban thermal coal exports from and through Canada by 2030; create a Pan-Canadian Grid Council to promote innovation within the electricity sector; and establish 10 new natinoal parks and 10 marine conservation areas in 5 years.

Nov 2021

• During the Cop26 Conference, the government pledges to achieve net-zero emissions within the electricity grid by 2035 and reduce methane emissions by 30% below 2020 levels by 2030. The government also renews its committment to reduce GHG emissions by 40-45% below 2005 levels by 2030; reduce methan emissions in the oil and gas sector by 75% below 2012 levels by 2030; protect 25% of land and oceans by 2025; and plant 2 billion trees in 10 years. Trudeau also made pledges related to international climate financing.

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Annex C: Federal Financial Support to Oil and Gas in 202093

Direct spending announced or distributed in 2020 to the fossil fuel industry

Likely incomplete as most of these programs lack transparency and no database of projects funded is available.

PROGRAM	AMOUNT	FOR WHAT
Reduction Innovation \$6 million and de		The program supports targeted infrastructure investments at existing facilities or sites and aims to accelerate the development, validation and deployment of technologies that reduce oil and gas sector emissions.
Canada Emergency Wage Subsidy (COVID support program)	-\$300 million	The total amount of the federal wage subsidy claimed by oil and gas companies remains unknown, as the federal government has provided no transparency on the recipients. Imperial Oil alone claimed \$120 million (while issuing \$320 million in dividends). ²⁹ In June 2020, CAPP estimated the total at \$300 million. ³⁰
Clean Growth Program	\$1.6 million	The Clean Growth Program supports clean technology research and development and demonstration projects in three Canadian sectors: oil and gas, mining and forestry. In past years, much of this support has targeted the oil and gas sector.
Electric Vehicle and Alternative Fuel Infrastructure Deployment Initiative	\$8 million	The funds listed here went to natural gas refuelling stations, rather than electric vehicle infrastructure. Over the past two years, the amount dedicated to natural gas was \$19.5 million.
Emissions Reduction Fund (COVID support program)	\$750 million	This funding provides up to \$675 million to eligible onshore oil and gas companies and \$75 million to offshore oil and gas companies. The purpose is to reduce methane and other emissions. Funds will be provided over two years. This fund includes both repayable funding and grants, and it is not yet clear what the final breakdown will be.
Energy Innovation Program	\$2.75 million	Funding streams under this program support the development of "clean" oil and gas technologies.
Indigenous Natural Resource Partnerships	\$6 million	Efforts to increase Indigenous economic participation in oil and gas- related infrastructure projects in Alberta and BC.
Indigenous Services Canada	\$2.37 million	Funding for a diesel generating station in Nibinamik First Nation.
National Trade Corridors Fund	\$20 million	This program provides financial support for infrastructure projects that improve the performance of Canadian transportation systems, increase Canadian exports and enhance overseas trade. The fund is \$2.3 billion over 11 years. Some of this funding has targeted improvements to moving oil and gas products to export markets, but the exact amount of those funds is unknown. For example, the funds listed here went to projects that increase the efficiency of shipping from the Alberta Industrial Heartland. ³¹

TOTAL:	3.26 billion	
Sustainable Development Technology Canada	\$26.7 million	Supporting Canadian companies who are leading in the development of clean technologies. The funds here went to projects in the oil and gas sector. This program has contributed \$50 million to the oil and sector between 2011-2019.
Strategic Innovation Fund	\$100 million over four years	These funds are for the Clean Resource Innovation Network (CRIN) to commercialize clean technology for the oil and gas sector, to help the oil and gas sector grow, create jobs and reduce its greenhouse gas emissions.
RCMP	\$13 million	The cost of policing the Coastal GasLink pipeline conflict in northern B.C. between January 2019 and March 2020. ³² The cost of policing other fossil fuel infrastructure projects is unknown.
Reclamation of orphan and inactive wells (COVID support program)	\$1.7 billion	Funding for provinces to pay for the closure and reclamation of orphan and inactive wells.
Oil and Gas Industry Recovery Assistance Fund (COVID support program)	\$320 million	Support for Newfoundland & Labrador's offshore oil industry.

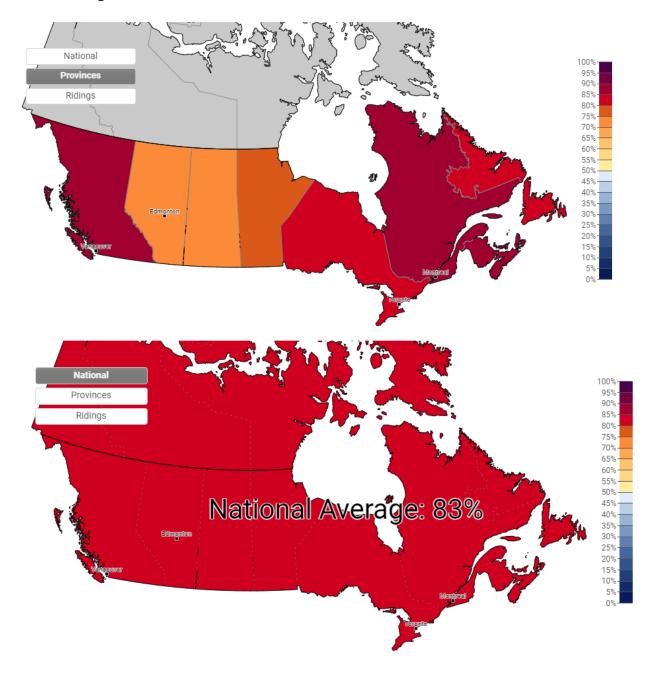
Programs announced in 2020 that without green strings, may result in significant subsidies

PROGRAM	AMOUNT	FOR WHAT
corporate bond of Canada laur purchase program \$10 billion Program (CBP (COVID support the secondary		To support the flow of credit for corporate issuers in Canada, the Bank of Canada launched a one year, \$10 billion Corporate Bond Purchasing Program (CBPP). The CBPP will purchase eligible corporate bonds in the secondary market from a list of eligible sectors and large Canadian companies. The list includes 15 fossil fuel companies. 33
Low Carbon Economy Fund	Support low-carbon initiatives in Alberta, including but not limited clean technology and industry. Previous allocations under this fur have been provided to fossil fuel producers.	
Low-carbon and Zero-emissions Fuels Fund (part of the federal climate plan)	\$1.5 billion	This program was established as part of the climate plan, to increase the production and use of low-carbon fuels (e.g., hydrogen, biocrude, renewable natural gas and diesel, cellulosic ethanol). It is as of yet unclear how funding will be spent, but it is likely that a significant portion of the funding will be for fossil fuel-derived hydrogen.
Net Zero Accelerator Fund (part of the federal climate plan)	\$3 billion over five years	This program was established as part of the climate plan, to rapidly accelerate decarbonization projects with large carbon emitters, scale-up clean technologies, and hasten Canada's industrial conversion across all sectors. It is likely that a significant portion of this program will be directed towards oil and gas companies.
Sustainable Development Technology Canada (part of the federal climate plan)	\$750 million over the next five years	This funding was established as part of the climate plan, to grow the cleantech market plan.

Financing Provided by Crown Corporations

PROGRAM	AMOUNT	FOR WHAT
	\$120 million in credit support	The amount claimed by oil and gas companies from the Business Credit Availability Program (BCAP) - a COVID credit support program run through both RDC and FDC RDC provides no transparency on recipients, so this number here (which comes from tracking public announcements from oil and gas companies) is likely a large underestimate (includes only loans to small companies including Bonterra Energy Corp., Inplay Oil Corp., Source Energy and Surge Energy).
Business Development Bank of Canada (BDC)	Unknown	Cleantech practice: BDC is committing \$600 million over the next five years (2018-2023) in both new equity and commercial loans to help cleantech firms scale and expand. It is possible that oil and gas companies could be included.
	Unknown	Industrial Innovation Venture Fund: A \$250-million fund bringing innovation and digitization to legacy Canadian industries including agriculture, resource extraction and manufacturing.
	Unknown	\$135-million industrial clean-tech and energy fund
Funcial Baselines	\$8.1 billion	Oil and gas financing provided to support the operations of oil and gas companies both domestically and internationally in 2020. ³⁴
Export Development Canada	\$5.25 billion	These amounts were financing renewals and amendments made in 2020 to finance the construction of Trans Mountain pipeline expansion, and came from EDC's Canada Account. ³⁵

Annex D: Estimated % of adults who think the earth is getting warmer, P/T and national average 94



Annex E: Planned Budgetary Financial Resources for Climate Action, 2021 – 2024⁹⁵

Planned budgetary financial resources for Conserving Nature

2021–22 budgetary spending (as indicated in Main Estimates)	2021–22 planned spending	2022–23 planned spending	2023–24 planned spending
325,886,137	325,886,137	313,718,807	141,879,293

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned human resources for Conserving Nature

2021–22 planned	2022–23 planned	2023–24 planned
full-time equivalents	full-time equivalents	full-time equivalents
1,192	1,179	790

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned budgetary financial resources for Taking Action on Clean Growth and Climate Change*

2021–22 budgetary spending (as indicated in Main Estimates)	2021–22 planned spending	2022–23 planned spending	2023–24 planned spending
540,359,130	540,359,130	284,689,573	254,559,871

^{*}All figures, throughout the document, are net of respendable revenues.

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned human resources for Taking Action on Clean Growth and Climate Change*

2021–22 planned	2022–23 planned	2023–24 planned
full-time equivalents	full-time equivalents	full-time equivalents
570	511	510

^{*} Totals may differ within and between tables due to the rounding of figures. The Full-Time Equivalents numbers, throughout the document, include students.

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned budgetary financial resources for Preventing and Managing Pollution

2021–22 budgetary spending (as indicated in Main Estimates)	2021–22 planned spending	2022–23 planned spending	2023–24 planned spending
356,702,104	356,702,104	339,022,613	330,169,771

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned human resources for Preventing and Managing Pollution

2021–22 planned	2022–23 planned	2023–24 planned
full-time equivalents	full-time equivalents	full-time equivalents
2,089	2,029	2,019

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned budgetary financial resources for Predicting Weather and Environmental Conditions

budge (as ind	2021–22 tary spending icated in Main stimates)	2021–22 planned spending	2022–23 planned spending	2023–24 planned spending
27	70,383,537	270,383,537	274,047,688	212,854,461

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned human resources for Predicting Weather and Environmental Conditions

2021–22 planned	2022–23 planned	2023–24 planned
full-time equivalents	full-time equivalents	full-time equivalents
1,718	1,703	1,526

Financial, human resources and performance information for Environment and Climate Change Canada's Program Inventory is available in the <u>GC InfoBase</u>.

Planned budgetary financial resources for Internal Services

2021–22 budgetary spending (as indicated in Main Estimates)	2021–22 planned spending	2022–23 planned spending	2023–24 planned spending
205,816,512	205,816,512	202,989,859	191,532,597

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Planned human resources for Internal Services

2021–22 planned	2022–23 planned	2023–24 planned
full-time equivalents	full-time equivalents	full-time equivalents
1,602	1,585	1,520

Financial, human resources and performance information for ECCC's program inventory is available in the GC InfoBase.

Annex F: Government of Canada Environmental Performance Indicators

Nationally Determined Contributions⁹⁶

"Under the Paris Agreement, countries are required to submit national greenhouse gas emission reduction targets, called Nationally Determined Contributions (NDCs), every five years. Each successive NDC is required to be more ambitious than the previous one." In 2021, Prime Minister Treaty increased the original GHG reduction target to "40-45% reductions below 2005 levels by 2030."

Canadian Environmental Sustainability Indicators (CESI)97

"The Canadian Environmental Sustainability Indicators (CESI) program provides data and information to track Canada's performance on key environmental sustainability issues including climate change and air quality, water quality and availability, and protecting nature. The environmental indicators are based on objective and comprehensive information and convey environmental trends in a straightforward and transparent manner. The indicators are prepared by Environment and Climate Change Canada with the support of other federal government departments, such as Health Canada, Statistics Canada, Natural Resources Canada, Agriculture and Agri-Food Canada, as well as provincial and territorial government departments."

Annex G: Minister of ECCC 2019 Mandate Letter – Key Points to Register⁹⁸

"I will expect you to work with your colleagues and through established legislative, regulatory and Cabinet processes to deliver on your top priorities. In particular, you will:

- Implement the Pan-Canadian Framework on Clean Growth and Climate Change, while strengthening existing and introducing new greenhouse gas reducing measures to exceed Canada's 2030 emissions reduction goal and beginning work so that Canada can achieve net-zero emissions by 2050.
- Lead government-wide efforts to develop a plan to set Canada on a path to achieve a prosperous net-zero emissions future by 2050. This includes:
 - Setting legally-binding, five-year emissions-reduction milestones based on the advice of experts and consultations with Canadians; and
 - Working with the Minister of Innovation, Science and Industry and the Minister of Natural Resources to position Canada as a global leader in clean technology.
- Work with the Minister of Natural Resources and provinces and territories to complete all flood maps in Canada.
- Support the Minister of Natural Resources to operationalize the plan to plant two billion incremental trees over the next 10 years, as part of a broader commitment

to nature-based climate solutions that also encompasses wetlands and urban forests.

- Work with the Minister of Natural Resources to help cities expand and diversify their urban forests. You will both also invest in protecting trees from infestations and, when ecologically appropriate, help rebuild our forests after a wildfire.
- Expand the Learn-to-Camp program to meet the target that 400,000 kids each year learn basic camping skills.
- Provide a bursary for children and their families who live in poverty or underprivileged circumstances that create significant barriers to visiting national or provincial parks.
- Advance Parks Canada's efforts to play a leadership role in natural and cultural heritage conservation and promotion, and work to ensure that Canada's national parks and national historic sites are a source of national pride and enjoyment today and for future generations.
- Work with the Minister of Canadian Heritage to provide clearer direction on how national heritage places should be designated and preserved, and to develop comprehensive legislation on federally owned heritage places.
- Work with the Minister of Fisheries, Oceans and the Canadian Coast Guard to introduce a new ambitious plan to conserve 25 per cent of Canada's land and 25 per cent of Canada's oceans by 2025, working toward 30 per cent of each by 2030. This plan should be grounded in science, Indigenous knowledge and local perspectives. Advocate at international gatherings that countries around the world set a 30 per cent conservation goal for 2030 as well.
- Implement our plan to ban harmful single-use plastic products and take steps toward eliminating plastic pollution in Canada. This includes working with provinces and territories to develop national targets, standards and regulations that will make companies that manufacture plastic products or sell items with plastic packaging responsible for collecting and recycling them.
- Work with the Minister of Health to better protect people and the environment from toxins and other pollution, including by strengthening the *Canadian Environmental Protection Act.* 1999.
- With the support of the Minister of Agriculture and Agri-Food, create a new Canada Water Agency to work together with the provinces, territories, Indigenous communities, local authorities, scientists and others to find the best ways to keep our water safe, clean and well-managed.
- Develop further protections and take active steps to clean up the Great Lakes,
 Lake Winnipeg, Lake Simcoe and other large lakes.
- Continue to work to protect biodiversity and species at risk, while engaging with provinces, territories, Indigenous communities, scientists, industry and other

stakeholders to evaluate the effectiveness of the existing *Species at Risk Act* and assess the need for modernization.

- Support the Minister of Transport and the Minister of Fisheries, Oceans and the Canadian Coast Guard in implementing the Oceans Protection Plan.
- Work with the Minister of Innovation, Science and Industry, the Minister of Transport and the Minister of Natural Resources to advance toward our zeroemission vehicles targets of 10 per cent of light-duty vehicles sales per year by 2025, 30 per cent by 2030 and 100 per cent by 2040."

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