

ONTARIO
SUPERIOR COURT OF JUSTICE

B E T W E E N:

SOPHIA MATHUR, a minor by her litigation guardian Catherine Orlando,
ZOE KEARY-MATZNER, a minor by her litigation guardian ANNE KEARY,
SHAELYN HOFFMAN-MENARD, SHELBY GAGNON,
ALEXANDRA NEUFELDT, MADISON DYCK and LINDSAY GRAY

Applicants

and

HER MAJESTY THE QUEEN IN RIGHT OF ONTARIO

Respondent

FACTUM OF THE APPLICANTS
(application returnable September 12-14, 2022)

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PART I - OVERVIEW

1. As the Supreme Court of Canada has recognized, climate change is “an existential threat to human life in Canada and around the world.”¹ Governments have an obligation to help avert catastrophe. Ontario’s conduct, however, has only exacerbated this threat.

2. The Applicants — seven courageous youth who are climate activists in their respective communities — brought this claim because they know the harms that climate change will pose to the life and health of all Ontarians. They can see that Ontario’s response to this threat — setting a target that commits to a dangerously high level of greenhouse gas emissions between now and 2030 — causes these imminent harms. And they understand that Ontario is discriminating against youth and future generations on the basis of their age by subordinating their interests to those of older generations and forcing them to disproportionately bear the brunt of climate change’s harms.

3. Ontario has repeatedly recognized the need for all governments around the world, including Ontario, to do their part to reduce greenhouse gas emissions and to fight this threat to humanity.

4. But Ontario’s conduct does just the opposite. Pursuant to legislation, Ontario has adopted a target that, in its own words, reflects Ontario’s “commitment” to allowable emissions between now and 2030. In the process, Ontario repealed an old target that committed Ontario to significant emission reductions over the same period. The new target is way above Ontario’s fair share of global emissions. If other countries adopted the same approach when setting their own targets, the result would be global warming of at least 3°C and potentially as much as 5.1°C.

5. Such a result, or anything close to it, would be catastrophic for Ontario, Canada, and the world. The scientific consensus is clear that once global temperatures rise beyond 1.5°C, disastrous

¹ *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶171.

and potentially irreversible impacts will occur. That is why the Paris Agreement — a landmark treaty signed by almost 200 parties, including Canada — commits parties to holding the increase in global average temperature to “well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C”. Ontario’s dangerously high target undermines this critical objective by authorizing emissions well in excess of what is necessary to avert disaster.

6. For current and future Ontarians, the largely uncontested expert evidence in this case shows how the disaster will manifest. Hundreds to thousands more deaths due to heat waves and extreme heat events, with a similarly major increase in severe health impacts and bodily harm due to increased heat. The spread of potentially deadly infectious diseases borne by ticks and mosquitos, including Lyme disease and West Nile virus. Far more (and more major) wildfires, with commensurate increases in mortality and morbidity rates from exposure to wildfire smoke. An increase in historic and massive flooding events in major Ontario cities. More harmful cyanobacterial blooms, and more mercury in the water. And the growing trend of negative mental health effects due to climate change will continue, including post-traumatic stress disorder and suicide ideation. While these devastating impacts will be broadly felt, youth, future generations, and Indigenous Peoples will be uniquely and disproportionately impacted by climate change.

7. In Ontario’s preliminary motion to strike this Application, Ontario argued that the issues raised are not justiciable and that the Applicants ought not be granted public interest standing. Both arguments were rejected for good reason. The alleged constitutional violations raised here are plainly justiciable, and the Applicants easily satisfy the test for public interest standing. And while the request for standing on behalf of “future generations” may be novel, so too is the existential nature of the threat at the core of this case. If the necessary actions to address the dangers of climate change are not taken by the time these generations arrive, it will be too late.

8. The impacts of climate change on the life and health of Ontarians engage the life and security of the person interests protected under s. 7 of the *Charter*. Ontario's setting of the target, pursuant to legislation, has a sufficient causal connection to these impacts: it allows for a dangerously high level of greenhouse gas emissions from the province between now and 2030. The s. 7 deprivations caused by Ontario's conduct in this case are not in accordance with the principles of fundamental justice, as they are both grossly disproportionate and arbitrary. The deprivations also violate the principle of societal preservation — i.e. that a government cannot engage in conduct that will, or could reasonably be expected to, result in the future harm, suffering, or death of a significant number of its own citizens — which the Applicants submit ought to be recognized as a new principle of fundamental justice and an unwritten constitutional principle.

9. Ontario's conduct in enacting the target also violates s. 15 of the *Charter*. Youth — and, in particular, youth under 18 years old — and future generations will bear a disproportionate burden of climate change's most devastating impacts due to their unique characteristics, and the fact that the escalating nature of the impacts of climate change means the most devastating effects will occur during their lifetimes. This distinction is discriminatory as it reinforces, perpetuates, and exacerbates the existing disadvantages of these already highly vulnerable groups.

10. Ontario's violations of ss. 7 and 15 of the *Charter* cannot be saved under s. 1.

11. The Applicants seek declaratory relief recognizing Ontario's role in these constitutional violations, as well as an order requiring Ontario to set a target that reflects its fair share of greenhouse gas emission reductions (while leaving the means selected to achieve those reductions as a matter for Ontario to determine). The Applicants respectfully request that this Application be allowed, and the relief sought be granted, in order to address the unprecedented and existential threat climate change poses to current and future Ontarians.

PART II - THE FACTS

A. THE APPLICANTS

12. The Applicants are seven young Ontarians between the ages of 15 and 27. These youth have demonstrated a longstanding commitment to fighting climate change and have shown genuine interest and concern in preventing catastrophic global warming that poses pervasive and serious risks to the health and wellbeing of present and future generations of Ontarians.

13. Sophia is 15 years-old and lives in Sudbury. She was the first youth outside Europe to join Greta Thunberg's Fridays for Future movement. Sophia is frightened that the impacts of climate change will harm or even kill her. Her fear drives her to regularly strike and protest with Fridays for Future, speak up in all forms of media and events, and regularly plead her case with politicians.²

14. Zoe, a 15-year-old Torontonion, is a member of Fridays for Future, and speaks at rallies and press conferences out of a deep sense of responsibility to act on climate change. Zoe worries climate change will cause massive human suffering and the extinction of species that she loves.³

15. Shaelyn is a 25-year-old Algonquin woman and member of the Caribou clan from Timiskaming First Nation, living in Peterborough. Her work on biodiversity and Indigenous-led conservation flows from the fears she has for her future and that of future generations.⁴

16. Shelby is a 25-year-old Anishinaabe and Cree artist living in Thunder Bay, and a member of Aroland First Nation. Working on Indigenous food sovereignty and sustainability, including in her own community, is her response to climate change. Shelby fears climate change will harm traditional harvesting, hunting and fishing.⁵

² **Affidavit of Sophia Mathur**, sworn Feb 1/21, Application Record ("AR") Vol 1, Tab 2, at p 34, ¶¶3, 5, 27, 49-53.

³ **Affidavit of Zoe Keary-Matzner**, sworn Jan 22/21, AR Vol 1, Tab 3, at p 175, ¶¶2, 4, 10, 23-25, 27-37.

⁴ **Affidavit of Shaelyn Hoffman-Menard**, sworn Feb 10/21, AR Vol 1, Tab 4, at p 197, ¶¶2, 5, 13-17, 21-22.

⁵ **Affidavit of Shelby Gagnon**, sworn Jan 26/21, AR Vol 1, Tab 5, at p 229, ¶¶2, 4, 12.

17. Alexandra, who is 26 years old and lives in Ottawa, has been actively involved with Citizens Climate Lobby Canada. Alexandra fears dying a premature death from extreme weather events or losing her business due to climate change disrupting supply chains.⁶

18. Madison is 26 years old and lives in Thunder Bay. She has sailed Lake Superior giving presentations on climate change impacts and helped two Indigenous Tribal Councils prepare submissions for the United Nations Framework Convention on Climate Change Conference. The impacts of climate change make her feel like she is losing a loved one, her home and her future.⁷

19. Beze is 27 years old and two-spirit Anishinaabe from Aamjiwanaang First Nation, living in the Township of Tiny. Beze is a community organizer, and fears that climate change will damage and disrupt Aamjiwanaang lands, depriving its youth of their Indigenous culture and language.⁸

B. ONTARIO PASSES THE CTCA AND ESTABLISHES THE TARGET

20. The focus of this Application is the 2030 greenhouse gas emissions (“**GHG**”) reduction target, as set by the Respondent (“**Ontario**”) under s. 3(1) of the *Cap and Trade Cancellation Act, 2018*, S.O. 2018, c. 13 (“**CTCA**”), and articulated in “Preserving and Protecting our Environment for Future Generations, A Made-in-Ontario Environmental Plan” (“**Plan**”), which is to reduce GHG by only 30% below 2005 levels by 2030 (“**Target**”).⁹ The Target represents Ontario’s allowable GHG up until 2030 across all sectors, actors, and individuals in the province.¹⁰

⁶ Affidavit of Alexandra Neufeldt, sworn Jan 25/21, AR Vol 1, Tab 6, at p 242 at ¶¶2, 7, 10, 16-19, 28-29.

⁷ Affidavit of Madison Dyck, sworn Jan 25/21, AR Vol 1, Tab 7, at p 329 at ¶¶2, 11, 18, 25.

⁸ Affidavit of Lindsay ‘Beze’ Gray, sworn Feb 16/21, AR Vol 1, Tab 8, at p 339 at ¶¶ 2, 9, 18.

⁹ Preserving and Protecting our Environment for Future Generations: A Made-in-Ontario Environmental Plan (“**Plan**”), Ex “Y” to the Affidavit of Charlotte Ireland, sworn Jan 15/21 (“Jan 15 Ireland Affidavit”), AR Vol 2, Tab 9Y, at p 3433.

¹⁰ **Plan**, AR Vol 2, Tab 9Y, at pp 3433-36.

21. Previously, Ontario’s response to climate change was governed by the *Climate Change Mitigation and Low-carbon Economy Act, 2016*¹¹ (“*Climate Change Act*”). Section 6(1) of the *Climate Change Act* established targets for reducing GHG emissions, including reducing emissions by 37% below 1990 levels by 2030, to approximately 113 million tonnes (“Mt”) CO_{2e}¹². The *Climate Change Act* permitted Ontario to *increase* the stringency of targets, or set interim ones, having “regard to any temperature goals” recognized by the Paris Agreement.¹³
22. Ontario repealed the *Climate Change Act* through s. 16 of the *CTCA* in 2018. In place of the legislated targets in s. 6 of the *Climate Change Act*, s. 3(1) of the *CTCA* reads: “The Government shall establish targets for the reduction of greenhouse gas emissions in Ontario and may revise the targets from time to time”. Pursuant to s. 4(1), the Minister of the Environment, Conservation and Parks must prepare “a climate change plan”. The Target is Ontario’s GHG reduction target under s. 3(1) and the Plan serves as the “climate change plan” under s. 4(1). The Plan itself states that the Target “fulfills our commitment under the [*CTCA*]”.¹⁴
23. Unlike the *Climate Change Act*, the *CTCA* does not require that Ontario have any regard to the Paris Agreement, or any kind of science-based process, in setting GHG reduction targets.

¹¹ SO 2016, c 7. This translates to 44-45% below 2005 levels. The previous target required a 37% cut by 2030 compared to 1990, when Ontario emitted 179-180 Mt CO_{2e}. The new Target uses 2005 as the baseline year, when Ontario had 203-206 GHG. See **Report of Dr. Sara Hastings-Simon (“Hastings-Simon Report”)**, Ex “B” to the Affidavit of Dr. Sara Hastings-Simon, sworn Feb 18/21, AR Vol 3, Tab 22B, at p 6788. See also **Report of Dr. H. Damon Matthews (“Matthews Report”)**, Ex “B” to the Affidavit of Dr. H. Damon Matthews, sworn Feb 12/21, AR Vol 3, Tab 10B, at p 5663; **Affidavit of Dr. William van Wijngaarden**, sworn Feb 25/22 (“**van Wijngaarden Affidavit**”), at p 44 (Table 2).

¹² CO_{2e} is the carbon dioxide equivalent used to compare emissions from different GHG on the basis of their global-warming potential. This is done by converting the masses of other GHG to the mass of CO₂ with the same global warming potential; see **Hastings-Simon Report**, AR Vol 3, Tab 22B, at p 6788, footnote 26.

¹³ *Climate Change Act*, s 6(2)-(4), referring to the Paris Agreement, being an Annex to the *Report of the Conference of the parties on its twenty-first session, held in parties from 30 November to 13 December —15--Addendum Part two: Action taken by the Conference of the parties at its twenty-first session*, 12 December 2015, UN Doc FCCC/CP/2015/10/Add.1, 55 ILM 740 (entered into force 4 November 2016) [*Paris Agreement*].

¹⁴ **Plan**, AR Vol 2, Tab 9Y, at p 3433 (emphasis added).

24. Ontario consistently confirms that the Plan and Target govern and will continue to direct Ontario's actions in reducing GHG. As set out above, it is Ontario's "commitment" under the *CTCA*. By its own terms, the Plan states that it "will ensure" that Ontario achieves emission reductions in line with the Target, sets out various policies designed to "put us on the path to meet our 2030 target", and states that it will be reflected in the Statements of Environmental Values of various Ontario ministries¹⁵ — which government decision makers are legally required to consider when exercising powers that may impact the environment.¹⁶ Consistent with these statements, Ontario has relied heavily on the Plan in court proceedings as a resolute "commitment" when it comes to GHG reductions.¹⁷ A series of recent public statements from Ontario relating to emissions modelling reaffirm its "commitment" to meeting the Target.¹⁸

25. Prior to the introduction of the Target, Ontario's GHG had been on a downward trajectory. Between 2005 and 2017, Ontario's emissions were reduced from over 203 Mt to 158 Mt CO_{2e}.¹⁹ After the Target and Plan were issued in 2018, however, Ontario's emission reduction progress stalled: in both 2018 and 2019, Ontario exceeded the GHG levels from 2017.²⁰

¹⁵ **Plan**, AR Vol 2, Tab 9Y, at pp 3415, 3434, 3447.

¹⁶ *Environmental Bill of Rights, 1993*, SO 1993, c 28, s 11.

¹⁷ *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶¶57-58 (Ontario's position, based on the Plan, is "committed to reducing its emissions by 30 percent below 2005 levels by 2030").

¹⁸ **Ontario Emissions Scenario as of March 25, 2022**, Appendix 1 to the **(Reply) Report of David Sawyer ("Sawyer Reply Report")**, Ex "B" to the Reply Affidavit of David Sawyer, affirmed Apr 14/22, Reply AR, Tab 6B, at p 3157 ("the province remains steadfast in its commitment to meet the 2030 emissions reduction target" and is "confident in the plan and trajectory to get there", which Ontario claims to be "working" and "on track"); **Ontario's responsible and balanced approach**, Appendix 2 to the **Sawyer Reply Report**, Reply AR, Tab 6B, at p 3161 (Ontario remains "committed to meeting our 2030 reduction target").

¹⁹ The GHG for 2005 differs slightly (203-206 Mt) from year to year in National Inventory Reports from 2018-2021 from our sources on record: **Mathews Report**, AR Vol 3, Tab 10B, at p 5663; **Hastings-Simon Report**, AR Vol 3, Tab 22B, at p 6788; **van Wijngaargen Affidavit**, at p 44 (Table 2), Respondent's Record ("RR"), Tab 2, p 1282.

²⁰ GHG levels were 163 Mt in 2018 and 2019: **van Wijngaargen Affidavit**, at p 44 (Table 2), and forecasted to be 159.4 Mt in 2020: **Ontario Emissions Scenario as of March 25, 2022**, Appendix 1 to the **Sawyer Reply Report**, Reply AR, Tab 6B, at p 3158. Note that Ontario and the world's emissions totals may be lower in 2020 due to economic decline during COVID-19: see **van Wijngaargen Affidavit**, at ¶54, RR, Tab 2, p 1279

C. ONTARIO'S AUTHORITY AND CONTROL OVER GHG

26. Ontario is responsible for the level of GHG in the province. It exercises authority over GHG by setting the Target and by regulating the conduct and consequences of emitters and emissions under a variety of statutory and regulatory schemes; through subsidies, spending programs, investments, tax exemptions and other incentives; and by emitting GHG through its own facilities and activities. Virtually all activities leading to significant GHG in the province are in some way caused, authorized, facilitated, or regulated by Ontario.²¹ As Ontario put it, GHG “are caused by an extremely wide range of activities that have always been provincially regulated.”²² And as the undisputed evidence shows, we can quantify those massive contributions to GHG.

27. GHG from the **transportation** sector are caused mainly by vehicles, on roads, both of which are regulated, facilitated, and subsidized by Ontario.²³ They are the largest provincial source of GHG at 62.8 Mt CO₂e in 2019.²⁴ The Ministry of Transport is responsible for the construction and maintenance of the > 40,000 km of highway lanes in the province. Ontario also subsidizes the construction of local roads and is expanding provincial highways. A 2019 report by the Auditor General found that Ontario’s policies favouring urban sprawl were driving up the use of fossil fuels in the transportation sector and that Ontario was “doing little” to reduce their consumption.²⁵

28. Ontario also authorizes, regulates and subsidizes **industrial activities** which accounted for 47 Mt in 2017. Industrial GHG arise most from the mining, smelting, pulp and paper, steel, cement,

²¹ **Affidavit of Charlotte Ireland (supplemental)**, sworn Jul 2/21 (“**July 2 Ireland Affidavit**”), Supp AR, Tab 2, at pp 85-124.

²² Ontario’s Factum on the *Reference re Greenhouse Gas Pollution Pricing Act* before the ONCA at ¶57. See also ¶¶3, 12-20, 22, 87, 90.

²³ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at pp 91-6, ¶¶20-29; see also [Highway Traffic Act](#), RSO 1990, c H.8, ss 7, 32; [Environmental Protection Act](#), RSO 1990, c E.19 at Part III [“EPA”]; [Motor Vehicles](#), O Reg 361/98; [Vehicle Emissions](#), O Reg 457/19.

²⁴ **National Inventory Report 1990-2019: Greenhouse Gas Sources and Sinks in Canada, Part 3**, Exhibit “B” to the July 2 Ireland Affidavit, Supp AR, Tab 2B, at p 144.

²⁵ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at pp 86-91, at ¶¶8-32.

and other industries.²⁶ Industrial activities that discharge contaminants into the environment cannot operate in Ontario without provincial approval, which permits such activities subject to certain terms and conditions.²⁷ In addition, Ontario facilitates industrial operations through subsidies in high-emitting industries, including mining and chemical manufacturing.²⁸

29. Ontario causes, contributes, and regulates GHG from **buildings** through Ontario's *Building Code*, the subsidizing of natural gas systems, and through the operation of public sector government buildings. GHG from buildings were 35 Mt in 2017 and increased by 23% from 1990-2016.²⁹ GHG from Ontario's own public sector buildings were 2.586 Mt in 2018.³⁰ The *Building Code* regulates the use of energy in new buildings.³¹ Most GHG from buildings are from natural gas heating,³² but Ontario recently announced a program that seeks to *expand* natural gas access.³³

30. Another source of GHG that Ontario regulates and subsidizes is **agricultural activities**, which were responsible for 12 Mt in 2017.³⁴ Ontario also regulates and approves **waste disposal** facilities, which emit GHG such as methane. In 2017, waste facilities generated 6 Mt of GHG.³⁵

31. GHG from the **electricity sector** were 4.4 Mt in 2018, and are anticipated to increase to 11 Mt by 2030.³⁶ Ontario regulates and approves electricity power generation and distribution in the

²⁶ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at pp 98-9, at ¶¶36-38.

²⁷ EPA, ss 9, 20; Ontario Water Resources Act, RSO 1990, c O.40.

²⁸ See for example **July 2 Ireland Affidavit**, Supp AR, Tab 2, at pp 102-109, at ¶¶46-59.

²⁹ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at pp 85 (at ¶4) and 114 (at ¶77).

³⁰ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at p 116 at ¶82.

³¹ **A Healthy, Happy, Prosperous Ontario**, Ex "M" to the July 2 Ireland Affidavit, Supp AR, Tab 2M, at p 266; Building Code, O Reg 332/12.

³² **July 2 Ireland Affidavit**, Supp AR, Tab 2, at p 114, at ¶76; **A Healthy, Happy, Prosperous Ontario**, Supp AR, Tab 2M, at p 267.

³³ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at p 118 at ¶86; **Natural Gas Expansion Program**, Ex "FFF" to the July 2 Ireland Affidavit, Supp AR, Tab 2FFF, at pp 703-8.

³⁴ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at pp 109-111, at ¶¶ 60-65.

³⁵ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at p 111 at ¶66; **Landfill standards: A guide on the regulatory and approval requirements for new or expanding landfilling sites**, Ex "VV" to the July 2 Ireland Affidavit, Supp AR, Tab 2VV, at p 631; see also Landfilling Sites, O Reg 232/08, s 15.

³⁶ **July 2 Ireland Affidavit**, Supp AR, Tab 2, at p 120-21, at ¶93.

province.³⁷ Moreover, between 1983 and 2005, Ontario Power Generation (OPG)—which is wholly owned by Ontario³⁸—had annual GHG of between 15-35 Mt.³⁹ Similarly, Hydro One—49.9% of which is owned by Ontario—emitted over 300,000 tonnes CO₂e in 2019.⁴⁰

32. Ontario has also contributed to the creation of GHG through decisions favouring fossil fuel use. For example, in 2018, Ontario canceled 752 renewable electricity contracts, resulting in climate impacts as some of this renewable electricity will be replaced with fossil fuels.⁴¹ Ontario also subsidizes fossil fuel use, including through half a billion dollars in tax concessions annually.⁴² Finally, Ontario has a number of regulatory and administrative powers relating to GHG⁴³, as well as the general authority to establish programs and other measures for the use of economic and financial instruments and market approaches to regulate GHG in the province.⁴⁴

33. Again, the Target establishes Ontario’s “commitment” to the total amount of authorized GHG from these various sectors and activities, and other GHG producing activity in the province.

D. HUMAN-CAUSED CLIMATE CHANGE AND THE REMAINING CARBON BUDGET TO AVOID CLIMATE DISASTER

(i) Human GHG Emissions Unequivocally Cause Climate Change

34. “Climate change is real. It is caused by greenhouse gas emissions resulting from human activities, and it poses a grave threat to humanity’s future.”⁴⁵ This unequivocal statement from the

³⁷ [Ontario Energy Board Act](#), 1998, SO 1998, c 15, Sch B, s 57; [Environmental Assessment Act](#), RSO 1990, c E.18, s 9; [Electricity Projects](#), O Reg 116/01

³⁸ **Ontario’s clean energy provider**, Ex “GGG” to the July 2 Ireland Affidavit, [Supp AR](#), Tab 2GGG, at p 710.

³⁹ **Ontario Power Generation’s Sustainable Development Report of 1999**, Ex “B” to the Affidavit of Charlotte Ireland, affirmed August 27, 2021, [2nd Supp AR Vol 2](#), Tab 2B, at p 3981; **Ontario Power Generation’s Sustainable Development Report of 2005**, Ex “C” to the Affidavit of Charlotte Ireland, affirmed August 27, 2021, [2nd Supp AR Vol 2](#), Tab 2C, at p 4030.

⁴⁰ **July 2 Ireland Affidavit**, [Supp AR](#), Tab 2 at p 121, at ¶¶93-5.

⁴¹ **Climate Action in Ontario: What’s Next?**, Ex “Z” to the Jan 15 Ireland Affidavit, [AR Vol 2](#), Tab 9Z, at p 3543.

⁴² **July 2 Ireland Affidavit**, [Supp AR](#), Tab 2, at p 123, at ¶100.

⁴³ See for example [Greenhouse Gas Emissions: Quantification, Reporting and Verification](#), O Reg 390/18; [Greenhouse Gas Emissions Performance Standards](#), O Reg 241/19.

⁴⁴ [EPA](#), s 176.1.

⁴⁵ [References re Greenhouse Gas Pollution Pricing Act](#), 2021 SCC 11 at ¶2.

Supreme Court of Canada is supported by virtually every reputable scientist and scientific body in the world, including the United Nations’ Intergovernmental Panel on Climate Change (“**IPCC**”) — an intergovernmental body that draws on the world’s leading experts to provide objective, scientific information relating to climate change.⁴⁶ These experts are “unequivocal that human influence has warmed the atmosphere, ocean and land”,⁴⁷ inducing changes that cause weather and climate extremes, such as heatwaves, heavy precipitation, and droughts.⁴⁸

35. IPCC reports are written by hundreds of leading climate scientists, who assess thousands of peer-reviewed scholarly studies to compile draft reports. The drafts are subject to another round of peer-review by external subject-matter experts. All 195 government members of the United Nations Framework Convention on Climate Change (“**UNFCCC**”), including Canada, review and approve line-by-line the “Summary for Policymakers,” the reports’ key findings document.⁴⁹ IPCC reports are accurate, reliable, as thorough as possible, and are the best available, scientifically grounded synthesis of existing knowledge about climate change and its impacts.⁵⁰ The IPCC process is more thorough than standard peer-review of scientific reports.⁵¹

36. The human influence unequivocally driving warming is GHG. Since the industrial revolution, GHG (and particularly CO₂) have enhanced a “greenhouse effect”, causing global temperatures to increase at a rate unprecedented in the past roughly 66 million years.⁵²

⁴⁶ See, for example, [Reference re Greenhouse Gas Pollution Pricing Act](#), 2019 SKCA 40 at ¶16

⁴⁷ **Climate Change 2021: the Physical Science Basis (“IPCC AR6 WGI”)**, Ex “A” to the Affidavit of Dr. Robert McLeman, affirmed Aug 25/21, [2nd Supp AR Vol 1](#), Tab 1A, at p 10.

⁴⁸ **IPCC AR6 WGI**, [2nd Supp AR Vol 1](#), Tab 1A, at p 15.

⁴⁹ **Matthews Report**, Ex “B” to the Affidavit of Dr. H. Damon Matthews sworn February 12, 2021, [AR Vol 3](#), Tab 10B, at p 5650; **(Reply) Report of Dr. Robert McLeman (“McLeman Reply Report”)**, Ex “B” to the (Reply) Affidavit of Robert McLeman, affirmed Apr 6/22, [Reply AR](#), Tab 3B, at p 121.

⁵⁰ **Report of Dr. Robert McLeman (“McLeman Report”)**, Ex “B” to the Affidavit of Dr. Robert McLeman, [AR Vol 4](#), Tab 24B, at p 6979.

⁵¹ **McLeman Reply Report**, [Reply AR](#), Tab 3B, at p 121.

⁵² **Matthews Report**, [AR Vol 3](#), Tab 10B, at p 5650; **Global warming of 1.5°C (“IPCC SR 1.5”)**, Ex “E” of the Affidavit of Dr. Robert McLeman, sworn February 5, 2021, [AR Vol 4](#), Tab 24E, at p 8693.

(ii) *Failure To Meet the Paris Standard Will Result in Climate Catastrophe*

37. Recognizing that “climate change represents an urgent and potentially irreversible threat to human societies and the planet and thus requires the widest possible cooperation by all countries”⁵³, 194 countries and the European Union signed the Paris Agreement under the aegis of the UNFCCC in 2015. This Agreement commits parties to holding the increase in global average temperature to “well below 2°C above pre-industrial levels⁵⁴ and pursuing efforts to limit the temperature increase to 1.5°C” (the “**Paris Standard**”).⁵⁵ The Paris Standard translates the UNFCCC’s goal to stabilize GHG concentrations at a level that would prevent dangerous human-caused climate change into a temperature target.⁵⁶ Canada ratified the Paris Agreement in 2016.⁵⁷

38. The Paris Standard is closely tied to the IPCC’s scientific analysis: limiting warming to 1.5°C instead of 2.0°C could reduce — by several hundred million — the number of people exposed to climate-related risks by 2050.⁵⁸ The Applicants’ expert evidence, detailed below, sets out the similarly devastating impacts on the life and health of Ontarians if warming exceeds 1.5°C.

(iii) *Meeting the Paris Standard Requires Staying Within the Carbon Budget*

39. If meeting the Paris Standard is the goal, and GHG reductions are the means, a “carbon budget” is the key concept linking the two. CO₂ emissions are by far the most dominant component of overall GHG.⁵⁹ Each tonne of CO₂ emitted by humans leads to a quantifiable increase in global

⁵³ *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶13; citing to *Report of the Conference of the Parties on its twenty-first session*, UNFCCC, UN Doc FCCC/CP/2015/10/Add.1, Jan 29, 2016, at p 2.

⁵⁴ Note: “pre-industrial” refers to the mean global temperatures recorded between 1850-1900; see **Matthews Report**, *AR Vol 3*, Tab 10B, at p 5650. All references to warming in this factum refer to levels of warming above that pre-industrial norm, unless otherwise indicated.

⁵⁵ *Paris Agreement*, at art 2.1. Note: while there is no clear definition or interpretation of “well below 2°C”, 2°C is not in line with the Paris Standard: see **Matthews Report**, *AR Vol 3*, Tab 10B, at p 5653.

⁵⁶ *United Nations Framework Convention on Climate Change*, 9 May 1992, 1771 UNTS 107, art 2, 31 ILM 849 (entered into force 21 March 1994); *Paris Agreement*, at art 2.

⁵⁷ *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 10 at ¶13 (emphasis added).

⁵⁸ **IPCC SR 1.5**, *AR Vol 4*, Tab 24E, at p 8665.

⁵⁹ Carbon budgeting figures focus on CO₂ given its dominant role in climate change. Carbon budgeting scenarios will, however, often also require ambitious reductions in other GHG (such as methane and nitrous oxide) to stay

temperatures that is essentially irreversible on human timescales.⁶⁰ Once emitted, GHG remain in the atmosphere and continue causing climate change effects for hundreds to thousands of years.⁶¹ The more CO₂, the higher global temperatures climb. A finite quantity of CO₂ can be emitted before global warming exceeds 1.5°C: this is the global 1.5°C carbon budget.

40. Carbon budgets are a widely recognized tool for determining the allowable level of global emissions for maintaining a safe climate, and such an approach has been adopted by various European courts.⁶² Climate scientists, such as Dr. Damon Matthews, calculate global carbon budgets.⁶³ Dr. Matthews is the Concordia University Research Chair in Climate Science and Sustainability, an author of more than 100 peer-reviewed articles, and a contributing author on the last three IPCC reports, with particular expertise calculating carbon budgets.⁶⁴

41. According to Dr. Matthews and the IPCC, the *global* carbon budget from 2018 onwards is 420 billion tonnes of CO₂ for a 67% chance⁶⁵ of remaining within 1.5°C of warming (“**Global Carbon Budget**”). Assuming a linear decrease, this Global Carbon Budget amounts to a “prescription” requiring a 63% decrease from 2018 levels by 2030, according to Dr. Matthews.⁶⁶

below 1.5°C. If those other GHG are not successfully mitigated, the CO₂ carbon budget will be even smaller: see **Matthews Report**, AR Vol 3, Tab 10B, at p 5653.

⁶⁰ **Matthews Report**, AR Vol 3, Tab 10B, at p 5651. Also: **IPCC AR6 WGI**, 2nd Supp AR Vol 1, Tab 1A at p 42.

⁶¹ **Climate Change 2022: Mitigation of Climate Change**, Appendix 2 to the Reply Affidavit of Dr. Sara Hastings-Simon, affirmed April 13, 2022 (“Hastings-Simon Reply Affidavit”), Reply AR, Tab 2, at p 2645.

⁶² Hoge Raad der Nederlanden [Supreme Court of the Netherlands], 20 December 2019, *The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Stichting Urgenda*, (2019) 19/00135 at ¶5.7.8 (Netherlands) [unofficial English Translation]; Bundesverfassungsgericht [Federal Constitutional Court], 24 March 2021, *Neubauer et al v Germany*, (2021) Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Germany) [unofficial English Translation]; Trib admin Paris, 14 October 2021, *Notre Affaire à Tous et al v France*, [2021] No 1904967, 1904968, 1904972, 1904976/4-1 [unofficial English translation]; *R (Friends of the Earth, ClientEarth, Good Law Project) v Secretary of State for Business, Energy and Industrial Strategy*, [2022] EWHC 1841 (UK).

⁶³ **Matthews Report**, AR Vol 3, Tab 10B, at p 5651; see also **IPCC SR 1.5**, AR Vol 4, Tab 24E, at p 8668.

⁶⁴ **Matthews Report**, AR Vol 3, Tab 10B, at p 5649.

⁶⁵ The confidence levels attributed to the carbon budget reflect known uncertainties associated with the climate response to CO₂ emissions. An estimate with a 67% confidence level means that there is still a 33% chance of exceeding the temperature target even if total emissions do not exceed the budget: see **Matthews Report**, AR Vol 3, Tab 10B, at p 5651. In this factum, each carbon budget estimate reflects a 67% confidence level.

⁶⁶ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5651, 5653.

Once the Global Carbon Budget is depleted, Ontario (and the world) will have to reach “net zero” GHG — i.e. where GHG are balanced and offset by GHG removed from the atmosphere.⁶⁷

42. Humans have already emitted 2 trillion tonnes of CO₂ since 1894.⁶⁸ If annual global emissions remain unchecked, the Global Carbon Budget will run out by 2028.⁶⁹ At the current rate of warming, the temperature increase of 1.5°C is expected to occur by 2040.⁷⁰

(iv) *Ontario’s Attempt to Challenge IPCC Science Should be Dismissed*

43. Ontario’s expert, Dr. William van Wijngaarden, has outlier views when it comes to climate change. In particular, he questions the reliability of the IPCC’s use of Global Climate Models (“GCMs”), arguing that they “systematically overestimate global warming”.⁷¹

44. Dr. van Wijngaarden is wrong. There is no evidence that GCMs “systematically overestimate global warming”. Across the full 170-year temperature record, there are 10-15 year periods where climate models have slightly under or overestimated warming trends — but that is expected variability in a complex system, and not evidence of a systemic flaw in the modelling. Overall, the models align well in the full 170-year record:⁷² as Dr. Matthews explains, “all available evidence indicates a high degree of fidelity between model simulations and observed trends.”⁷³ He was not cross-examined on this statement. Similarly, in awarding the Nobel Prize in Physics to the originator of GCMs in 2021, the Nobel committee noted that “our knowledge about the climate rests on a solid scientific foundation, based on rigorous analysis of observations.”⁷⁴

⁶⁷ **IPCC SR 1.5**, AR Vol 4, Tab 24E, at p 7704.

⁶⁸ **Matthews Report**, AR Vol 3, Tab 10B, at p 5650.

⁶⁹ **Matthews Report**, AR Vol 3, Tab 10B, at p 5651.

⁷⁰ References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11 at ¶8.

⁷¹ **van Wijngaarden Affidavit**, at pp 27-9, at ¶¶38-9, Figures 10 (a)-(b), RR, Tab 2, p 1267.

⁷² **(Reply) Report of Dr. Damon H Matthews (“Matthews Reply Report”)**, Ex “B” to the Reply Affidavit of Dr. Damon H Matthews, affirmed April 14, 2022, Reply AR, Tab 1B, at p 19, Figure 4.

⁷³ **Matthews Reply Report**, Reply AR, Tab 1B, at p 17.

⁷⁴ **Matthews Reply Report**, Reply AR, Tab 1B, at pp 10-11.

45. In making his claim to the contrary, Dr. van Wijngaarden uses misleading data, relying on a comparison between modelled and observed temperatures that included observations only up until 2012.⁷⁵ An updated version of that same figure, provided by Dr. Matthews, shows that the longer-term trend “is very consistent with model simulations”.⁷⁶

46. Not surprisingly, Dr. van Wijngaarden’s body of work in assessing GCMs and climate science has not been rigorously peer-reviewed like the work of Dr. Matthews or the hundreds of IPCC scientists around the world who rely on GCMs. Not one of Dr. van Wijngaarden’s recent climate “publications” has been published in a peer-reviewed scientific journal.⁷⁷ Instead, his work has been disseminated by groups like the CO2 Coalition,⁷⁸ an organization that “informs the public about...the net beneficial impact of carbon dioxide emissions on the atmosphere” and of which Dr. van Wijngaarden is a member.⁷⁹ Most of his recent work is with frequent collaborator, Dr. William Happer, who is Co-Founder and Chair of the CO2 Coalition.⁸⁰ Dr. van Wijngaarden has never contributed to an IPCC report, has signed a declaration that “there is no climate emergency [and] therefore, there is no cause for panic and alarm,” and does not think that “the data” agrees with the IPCC’s conclusion that “it is unequivocal that human influence has warmed the atmosphere, ocean and land” — one unanimously endorsed by 195 parties to the UNFCCC.⁸¹

47. This Court ought to prefer the IPCC’s views and Dr. Matthews’ evidence that GCMs are “unanimously accepted in the field of climate science as the state-of-the art tool to model climate

⁷⁵ **van Wijngaarden Affidavit**, at ¶39, Figure 10 (a), RR, Tab 2, p 1266

⁷⁶ **Matthews Reply Report**, Reply AR, Tab 1B, at p 18, Figure 3.

⁷⁷ **Transcript of Dr. William van Wijngaarden Cross-Examination on June 17, 2022** (“**van Wijngaarden Cross**”), at p 29, 3rd Supp AR, Tab 1.

⁷⁸ **“Methane and Climate,” Van Wijngaarden and Happer for CO2 Coalition**, Ex “12” to the **van Wijngaarden Cross**, 3rd Supp AR, Tab 2.

⁷⁹ **van Wijngaarden Cross**, at pp 97-100, 3rd Supp AR, Tab 1; see also **CO2 Coalition, William van Wijngaarden**, Ex “13” to the **van Wijngaarden Cross**, 3rd Supp AR, Tab 3.

⁸⁰ **CO2 Coalition, William Happer**, Ex “17” to the **van Wijngaarden Cross**, 3rd Supp AR, Tab 4.

⁸¹ **van Wijngaarden Cross**, at pp 33, 102-105 and 109-10, 3rd Supp AR, Tab 1; **CLINTEL, World Climate Declaration**, Ex “15” to **van Wijngaarden Cross**, 3rd Supp AR, Tab 5.

system process and generate projections of future climate changes”.⁸² Dr. Matthews and hundreds of IPCC-contributing scientists trust GCMs to project future climate change in recent, vigorously peer-reviewed work. Moreover, GCMs are just one scientific method the IPCC uses, alongside direct observations, inferences from ice cores and tree rings, and refinements in climate theory.⁸³

E. THE TARGET EXCEEDS ONTARIO’S SHARE OF THE CARBON BUDGET

(i) *Canada’s Share of the Global Carbon Budget Is Based on Fairness Principles*

48. With 195 government members of the UNFCCC and countless more sub-national jurisdictions in play (each with their own important GHG regulatory and policy powers), the question becomes how to subdivide the remaining Global Carbon Budget among jurisdictions.

49. The first step, dividing the remaining carbon budget between nations, is informed by the fairness principles underpinning the UNFCCC and the Paris Agreement. Dr. Matthews sets out three key considerations of fairness: (i) the equal-per-capita fairness principle (which allocates emissions on an equal per-capita basis); (ii) historical responsibility (which debits nations for emissions from a point in history when the world knew about the dangers of climate change); and (iii) capacity (which includes factors like national wealth and access to low carbon energy).⁸⁴

50. Although there are a variety of ways to apply these principles to allocate the remaining Global Carbon Budget, only one approach that reflects these principles to any extent leaves Canada with a share of the budget: an equal-per-capita share of the remaining Global Carbon Budget using a 2018 base year (when the IPCC published its Special Report on 1.5°C warming). *Using this approach, Canada’s share of the Global Carbon Budget is 2.0 billion tonnes of CO₂.*⁸⁵

⁸² **Matthews Reply Report**, Reply AR, Tab 1B, at p 11.

⁸³ **Matthews Reply Report**, Reply AR, Tab 1B, at p 12-13.

⁸⁴ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5655-58; *Paris Agreement*, at art 2.2 which states “This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.”

⁸⁵ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5655-57.

51. As a country with high historical responsibility, high capacity and high access to renewable energy resources, the equal-per-capita allocation from 2018 onward represents the largest and most permissive carbon budget for Canada that includes *some* aspect of the fairness principles underpinning the UNFCCC.⁸⁶ Only a grossly unfair allocation method would grant Canada more.⁸⁷

(ii) Target Exceeds Ontario’s Fair Share of the Global Carbon Budget

52. Allocating Canada’s portion of the Global Carbon Budget intra-nationally is different from the international exercise. The “grandfathering” or “emissions shares” approach — where one simply takes the existing shares of emissions and grants a jurisdiction that share of the remaining carbon budget — is unfair on an international level because the current emissions distribution across countries reflects a history of unequal access to the means of development, and maintaining that distribution would perpetuate that inequality.⁸⁸ Within Canada, however, that same history does not exist. Instead, the range in per capita emissions across Canada reflects regional differences in resource availability. Canada also has explicit mechanisms to equalize wealth across the country. Thus, the grandfathering approach is a fairer way of allocating emissions within Canada.⁸⁹

53. This approach requires all provinces to achieve the same relative or proportionate emissions decrease compared to a historic baseline and distributes the emissions reductions required equally among provinces, with the effect of distributing the mitigation effort equally

⁸⁶ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5656-58.

⁸⁷ For example, allocating a country its current share of global emissions, known as grandfathering, gives Canada 1.6% of the global 1.5°C carbon budget. This approach perpetuates Canada’s disproportionate allocation of emissions and does nothing to correct for the large disparities in historical emissions among countries: see **Matthews Report**, AR Vol 3, Tab 10B, at pp 5657-58. The UNFCCC does not recognize grandfathering or emissions shares as a valid or fair approach, see the Paris Agreement, at arts. 2.2 and 4.3.

⁸⁸ **Matthews Report**, AR Vol 3, Tab 10B, pp 5657-58.

⁸⁹ **Matthews Report**, AR Vol 3, Tab 10B, pp 5658-59; **Cross-examination of Dr. Damon Matthews** (“**Matthews Cross**”) at Q 71, pp 28-31, 3rd Supp AR, Tab 6, p. 79. (Note that Matthews misspeaks on p 30, line 6, referring to “countries” instead of “provinces”.)

among provinces.⁹⁰ Ontario represented 24% of Canada’s emissions in 2018 (the year Ontario established its Target and Plan) and 30% in 2005 (the baseline year for Ontario’s Target). Using those historic baselines and an equal emissions shares allocation, Ontario’s share of Canada’s share of the remaining Global Carbon Budget from 2018 onwards is 0.5-0.7 billion tonnes of CO₂.⁹¹

54. If Ontario met its current Target, then its total emissions between 2018-2030 would be well in excess of Ontario’s share of the Global Carbon Budget (as seen in the 1.5°C column below):

Temperature Goal	1.5°C	1.75°C	2°C
Remaining global carbon budget (from 2018)	420	800	1170
Max fair share for Canada (0.48%)	2.0	3.8	5.6
Ontario share (24-30% of national)	0.5 - 0.7	0.9 - 1.2	1.4 - 1.7
Ontario emissions from 2018–2030 under the Target	1.7		
Ontario 2018-2030 emissions as % of Ontario’s share	354 – 280%	186 – 147%	127 – 100%

*Table taken from Matthews report. Emissions and budget shares in billions of tonnes of CO₂.*⁹²

55. Ontario would also exceed its fair share of the carbon budget for the 1.75°C and 2°C global temperature goals. This illustrates the dangerous arbitrariness of the Target: while the world recommits to the Paris Agreement and “resolves to pursue efforts to limit the temperature increase to 1.5°C”, Ontario has put in place a Target that exceeds its fair share of emissions under a 1.75°C carbon budget, and even a 2°C budget — one which does comply with the Paris Standard.⁹³

56. Allocating Canada’s share of the Global Carbon Budget on a per-capita basis (rather than the “grandfathering” approach) would lead to almost the same results shown above.⁹⁴ Even

⁹⁰ **Matthews Report**, AR Vol 3, Tab 10B, at p 5659. So, for example, if Canada’s emissions need to decrease by 60%, then all provinces would need to achieve the same 60% decrease over the same period of time.

⁹¹ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5659, 5661.

⁹² **Matthews Report**, AR Vol 3, Tab 10B, p 5661 (Table 2).

⁹³ **Matthews Report**, AR Vol 3, Tab 10B, at p 5653; *Glasgow Climate Pact*, UNFCCC, UN Doc FCCC/PA/CMA/2021/L.16, s 21 (entered into force 13 Nov 2021); *Paris Agreement*, at art. 2.1.

⁹⁴ Ontario’s per capita share would still be exceeded by 2030 under every scenario except a 2.0°C carbon budget, where Ontario would consume any remaining budget in the 3-4 years after 2030, and then exceed the budget in the years to follow: **Matthews Cross** at Q71, 3rd Supp AR, Tab 6, p 79.

assuming Ontario’s emissions by 2030 were at or just below 100% of Ontario’s share of global carbon budget emissions for a given temperature goal, that would still put Ontario in the nearly impossible position of having to abruptly eliminate emissions following 2030 (since it would have little or no remaining share of its carbon budget remaining).⁹⁵

F. THE TARGET IS ALIGNED WITH CLIMATE DISASTER

(i) *Ontario’s Target Matters in the Global Fight Against Climate Change*

57. No one province, territory, or country can act alone to address climate change. As the expert evidence in this case illustrates, as the Supreme Court has recognized, and as the Paris Agreement makes clear, collective action is required.⁹⁶ Only five countries individually emit more than 2% of global GHG,⁹⁷ meaning most jurisdictions could paralyze the required global effort by claiming that their emissions are of little consequence. But all jurisdictions must reduce their GHG with the aim of keeping total emissions within the Global Carbon Budget to achieve the Paris Standard. For its part, Canada is one of the world’s top 10 emitters and has high per capita emissions.⁹⁸

58. The need for concerted, global, and collective action is driven by the physics of GHG and climate change. Again, every tonne of CO₂ Ontario emits adds to global warming and leads to a quantifiable increase in global temperatures that is essentially irreversible on human timescales.⁹⁹ Climate change is not an “all or nothing risk”: every incremental tonne of GHG leads to additional climate change and resulting damage and harm.¹⁰⁰ This impact is also recognized in the field of

⁹⁵ **Matthews Report**, AR Vol 3, Tab 10B, at p 5660.

⁹⁶ *Paris Agreement*, at Preamble, arts 2.2, 4.4; *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶¶12, 188-89; *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶76. See also (**Reply**) **Report of Dr. Sara Hastings-Simon (“Hastings-Simon Reply Report”)**, Ex “B” to the Hastings-Simon Reply Affidavit, Reply AR, Tab 5B, at pp 213.

⁹⁷ **Hastings-Simon Reply Report**, Reply AR, Tab 5B, at pp 213-17.

⁹⁸ **Affidavit of Philip Cross**, sworn Feb 28/22 (“**Cross Affidavit**”), at pp 7-9, RR, Tab 1, pp B-1-20.

⁹⁹ **Matthews Report**, AR Vol 3, Tab 10B, at p 5651; **Matthews Reply Report**, Reply AR, Tab 1B, at p 23, citing to **IPCC AR6 WGI**, 2nd Supp AR Vol 1, Tab 1A, at p 42.

¹⁰⁰ **Hastings-Simon Reply Report**, Reply AR, Tab 5B, at pp 214.

economics and by governments: the damage caused by each incremental tonne of CO₂ can be quantified in terms of a dollar value, known as the social cost of carbon.¹⁰¹

59. Ontario’s Plan acknowledges that its GHG matter for reducing climate change, stating that Ontario has “played an important role in fighting climate change”, seeks to “slow down climate change”, and recognizes that Ontario’s actions “are important in the global fight to reduce emissions”.¹⁰² This is not surprising: Ontario’s current GHG¹⁰³ are similar to that of countries like the Netherlands, Argentina, and Algeria, which all have larger populations, and its per capita GHG are significantly higher than major countries like China, India, Germany, and the UK.¹⁰⁴

60. Ontario’s impact is a measurable one: it has contributed at least 0.6% to global historical GHG.¹⁰⁵ Given the near linear relationship between global temperature increase and the increase in extreme weather, this means that Ontario has contributed to causing at least 0.6% of climate caused extreme weather globally, while containing less than 0.002% of the population.¹⁰⁶

61. Without Ontario doing its part, Canada cannot do its fair share when it comes to reducing GHG. Ontario has the largest population and economy of all the provinces and the second largest GHG at 22% of Canada’s total. How Ontario deals with GHG will dictate whether Canada achieves its current 2030 target of 40-45% below 2005 levels and its “net zero” by 2050 target.¹⁰⁷ The

¹⁰¹ **Hastings-Simon Report**, AR Vol 3, Tab 22B, at p 6787; **Hastings-Simon Reply Report**, Reply AR, Tab 5B, at p 214. This methodology is used by the Governments of Canada and the US, for instance.

¹⁰² **Plan**, AR Vol 2, Tab 9Y, at pp 3429-30.

¹⁰³ Ontario’s emissions represent 0.3-0.4% of current global emissions: see **Plan**, AR Vol 2, Tab 9Y, at p 3428; **van Wijngaarden Affidavit**, at ¶8, RR, Tab 2, p B-1-1294 ; **Cross Affidavit**, at ¶14, RR, Tab 1, p B-1-23.

¹⁰⁴ **Hastings-Simon Reply Report**, Reply AR, Tab 5B, at p 213.

¹⁰⁵ **Matthews Reply Report**, Reply AR, Tab 1B, at p 23. Historical GHG includes past and present emissions.

Ontario’s share of current global emissions (which does not include past emissions) is 0.3-0.4%: see footnote 103.

¹⁰⁶ **Matthews Reply Report**, Reply AR, Tab 1B, at pp 21-3.

¹⁰⁷ **Sawyer Reply Report**, Reply AR, Tab 6B, at pp 3152-53, citing to **Ontario Emissions Scenario as of March 25, 2022**, Appendix 1 to the **Sawyer Reply Report**, Reply AR, Tab 6B, at pp 3157-59. Note: Canada’s target was recently increased to 40-45% below 2005 levels by 2030. Accordingly, some reports such as the **Matthews Report**, AR Vol 3, Tab 10B, refer to Canada’s previous 2030 target of a 30% reduction from 2005 levels.

federal Emissions Reduction Plan recognizes that provinces control the policy levers for many key GHG sources, such as most industries and associated GHG, and that provincial efforts to reduce GHG are fundamental to meeting Canada’s 2030 target.¹⁰⁸ To reach its target, Canada’s plan relies on Ontario reducing GHG by *at least* 36% from 2005 levels (the same baseline as the Target).¹⁰⁹

62. Finally, Ontario’s conduct may impact how other jurisdictions behave. A lack of leadership from jurisdictions such as Ontario can lead to a lack of collective action to reduce emissions.¹¹⁰

(ii) Ontario’s Target is Aligned with Climate Disaster

63. The Target represents a significant increase in GHG over Ontario’s previous 2030 target. By reducing the percentage of GHG reduced (from 37% to 30%) and changing the reference year from 1990 to 2005—a period during which Ontario’s emissions rose by 14%¹¹¹—the Target will allow for an additional 200 Mt of GHG by 2030, as compared to the previous target.¹¹²

64. This dramatic regression is in line with a dangerous degree of global warming. If the world adopted targets aligned with Ontario’s Target, the result would be global warming of at least 3°C and potentially as much as 5.1°C.¹¹³ As discussed further below, the impacts of such temperature rises would be catastrophic for current and future generations of Ontarians.

(iii) Ontario’s Suggestion That Its Emissions Don’t Matter Is Not Credible

65. Ontario’s affiants fail to recognize the collective action aspect of the global warming problem. They focus on the relatively small fraction of Ontario’s GHG on the global scale instead of the fact that jurisdictions like Ontario must take action in order to avert climate disaster.

¹⁰⁸ **Canada’s Emissions Reduction Plan**, Exhibit “4” to the Transcript of Sara Hastings-Simon Cross-Examination on May 26, 2022, at pp 87, 89, 91-92, 96, Third Supp AR, Tab 8, pp 105-109 (excerpts).

¹⁰⁹ *Ibid.*, see Table 6.10 at p 222.

¹¹⁰ **Hastings-Simon Reply Report**, Reply AR, Tab 5B, at pp 213-14.

¹¹¹ **Hastings-Simon Report**, AR Vol 3, Tab 22B, at 6788.

¹¹² **Matthews Report**, AR Vol 3, Tab 10B, at p 5663.

¹¹³ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5652, 5664.

66. One of Ontario’s two affiants, Philip Cross, questions the significance and impact of Ontario’s emissions on Canadian and global GHG.¹¹⁴ Mr. Cross — whose only purported area of expertise is macroeconomics (but has no formal education in that area)¹¹⁵ — does not have any specific expertise on the significance or impact of Ontario’s GHG on climate change. Moreover, there is good reason to doubt Mr. Cross’s objectivity: he is an advisor to CPC leadership candidate Pierre Poilievre¹¹⁶, advocates for more oil and gas development in Canada, and defends the oil and gas industry against “unfair demonization”.¹¹⁷ He refused to even directly acknowledge the basic truth that climate change is an urgent threat to human societies and the planet.¹¹⁸

67. As one of the Applicants’ experts, Dr. Hastings-Simon, explains, much of Mr. Cross’s opinion reflects “climate delay” discourse tactics that seek to delay climate action by redirecting responsibility for emissions reductions to other jurisdictions such as China, India, and the US and raising doubts as to the feasibility of addressing GHG.¹¹⁹

68. Dr. van Wijngaarden makes a similar assertion as Mr. Cross: in his view, any attempts by Ontario to reduce its GHG would be inconsequential.¹²⁰ As noted, Dr. van Wijngaarden has unorthodox views on climate change and has limited qualifications to speak on this topic as compared to experts such as Dr. Matthews and Dr. Hastings-Simon. Fundamentally, Dr. van Wijngaarden fails to recognize that every tonne of CO₂ emissions adds to global warming¹²¹, and

¹¹⁴ **Cross Affidavit**, at p 1, ¶¶16, 32, 36, 51-54, **RR**, Tab 1, pp B-1-24, 1-31, 1-33, 1-40-42.

¹¹⁵ **Cross Affidavit**, at p 1, at ¶1; **Transcript of Philip Cross Cross-Examination on May 30, 2022 (“Cross CX”)**, at pp 9-11, 16-7, 19-21, **Third Supp AR**, Tab 7, pp 85-92.

¹¹⁶ **Cross CX**, at pp 59-62, **Third Supp AR**, Tab 7, pp 93-96..

¹¹⁷ **Cross CX**, at pp 87-88, **Third Supp AR**, Tab 7, pp 98-99..

¹¹⁸ **Cross CX**, at pp 133-35, **Third Supp AR**, Tab 7, pp 100-102..

¹¹⁹ **Hastings-Simon Reply Report**, **Reply AR**, Tab 5B, at pp 214-16.

¹²⁰ **van Wijngaarden Affidavit**, at p 1, at ¶¶8 (b)-(c), **RR**, Tab 2, pp B-1-1294.

¹²¹ **IPCC AR6 WGI**, **2nd Supp AR Vol 1**, Tab 1A at p 42.

that climate change is a collective problem. Again, all jurisdictions — from the five largest emitters to those emitting only a fraction of global GHG — must reduce their fair share of emissions.

69. Finally, Dr. Matthews’ carbon budgeting accounts for the fact that Ontario’s GHG only represent a fraction of global totals. He calculates Ontario’s *proportionate share* of the remaining Global Carbon Budget, which takes into account its size and share of world emissions.

G. THE DEVASTATING IMPACTS OF CLIMATE CHANGE FOR ONTARIO

70. The Supreme Court has recognized that “[a]s a result of the current warming of around 1°C, the world is already experiencing more extreme weather, rising sea levels and diminishing Arctic sea ice”; that if warming should “reach or exceed 1.5°C, the world could experience even more extreme consequences”; and that these impacts “have been and will be particularly severe and devastating in Canada” given that temperatures in Canada and Ontario have and will continue to increase much faster than the global average.¹²²

71. The extensive expert evidence adduced in this case — most of which was unchallenged by Ontario, and much of which is confirmed by Ontario’s own government reports — confirms this to be true, as detailed further below. From extreme heat to vector-borne diseases, and from flooding to forest fires, the impacts of climate change are already escalating and will increase in frequency and severity as global temperatures rise — especially if they exceed 1.5°C. As set out in detail by the Applicants’ experts and discussed further below, *every additional increment of global warming will intensify these impacts*.¹²³ Again, if the world adopted targets aligned with Ontario’s approach, global warming between 3-5°C would result.¹²⁴

¹²² *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶¶9-10.

¹²³ **Matthews Reply Report**, Reply AR, Tab 1B at pp 21-2, citing **IPCC AR6 WGI**, 2nd Supp AR Vol 1, Tab 1A, at p 28.

¹²⁴ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5664.

(i) *Increases in Heat Waves and Higher Overall Temperatures*

72. As the Court of Appeal for Ontario has recognized, climate change is “causing or exacerbating increased frequency and severity” of “extreme weather events” including “heat waves.”¹²⁵ The Supreme Court found that warming at or in excess of 1.5°C could lead to “negative effects on human health, including heat-related... morbidity and mortality.”¹²⁶

73. The expert evidence in this case demonstrates that Ontarians will experience two types of temperature rise as the global climate warms. First, mean temperatures will increase at *twice* the global rate in Canada as a whole.¹²⁷ Secondly, the frequency and intensity of extreme heat — unusually hot temperatures and/or humidity¹²⁸ — will almost certainly rise as well, with research by Ontario finding a “very strong trend” towards more heat waves province-wide.¹²⁹

74. Both of these shifts are disastrous for human life and health. Dr. David Kaiser, director of Public Health and Preventative Medicine at McGill University, explains that there is a sharp rise in mortality (death) and morbidity (non-lethal health impacts) with extreme heat, or unusually hot or humid days.¹³⁰ Periods of extreme heat or “heat waves” are particularly dangerous.¹³¹

75. The fatal impacts of extreme heat can be seen in examples like the 156 excess deaths recorded during an extreme heat event in British Columbia in summer 2009. A year later in

¹²⁵ *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶11.

¹²⁶ *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶10.

¹²⁷ *Canada’s Changing Climate Report 2019 (“CCCR 2019”)*, Ex “A” to the Jan 15 Ireland Affidavit, *AR Vol 2*, Tab 9A, at p 381.

¹²⁸ *Report of Dr. David Kaiser (“Kaiser Report”)*, Ex “B” to the Affidavit of Dr. David Kaiser, sworn February 11, 2021, *AR Vol 3*, Tab 13B, at p 5746.

¹²⁹ *Kaiser Report*, *AR Vol 3*, Tab 13B, at p 5758; *Report of Dr. Yuen Tung Eunice Lo (“Lo Report”)*, Ex “B” to the Affidavit of Dr. Yuen Tung Eunice Lo, sworn February 4, 2021, *AR Vol 3*, Tab 11B, at pp 5712-13.

¹³⁰ *Kaiser Report*, *AR Vol 3*, Tab 13B, at pp 5746-47. Many more Ontarians will suffer and die with increases in mean temperature across average summer days simply because there are far more average summer days than extreme heat days, even if the impact of each of those days is not as profound as an extreme heat day.

¹³¹ *Kaiser Report*, *AR Vol 3*, Tab 13B, at p 5751. While the increase will mean less cold-related harm, this does not offset the heat-related toll: see *Kaiser Report*, *AR Vol 3*, Tab 13B, at pp 5758-59; *Lo Report*, *AR Vol 3*, Tab 11B, at p 5708.

Montreal, extreme heat over about one week resulted in an estimated 106 deaths, and in 2018, Montreal had 66 heat-related deaths over nine days.¹³² The big picture is just as troubling: in 2018 alone, there was a record high of over 2,700 heat-related deaths in people over 65 nationwide.¹³³ These kinds of extreme heat events can be directly attributed to climate change.¹³⁴

76. If global temperatures rise above 1.5°C, deaths in Ontario are projected to increase significantly. Dr. Lo is a contributing author to the IPCC Sixth Assessment Report, specializing in extreme weather events and their impacts on human health.¹³⁵ Using a peer-reviewed technique, she modelled mortality rates during extreme heat events in Toronto, Ottawa, Sudbury and Windsor.¹³⁶ She uses the standard of 1-in-5 hottest years — how many people can be expected to die from heat during each of the two hottest years in a decade.¹³⁷

Increase in number of annual deaths due to 1-in-5 year extreme heat events (Percentage increase in deaths from 2006-2015 baseline shown in brackets) ¹³⁸				
City	2006-2015	1.5°C	2°C	3°C
Toronto	352	528 (50%)	683 (94%)	1131 (221%)
Ottawa	53	90 (70%)	122 (130%)	212 (300%)
Sudbury	2	5 (150%)	8 (300%)	19 (850%)
Windsor	45	66 (47%)	86 (91%)	146 (224%)
Total	452	689	899	1508

77. Dr. Lo also projected the impact of more extreme 1-in-30 year events (i.e. the hottest year in three decades). For the same four cities her data shows totals of 1073, 1361, and 2110 deaths

¹³² **Kaiser Report**, AR Vol 3, Tab 13B, at p 5754.

¹³³ **Kaiser Report**, AR Vol 3, Tab 13B, at pp 5755.

¹³⁴ For example, the deadly “heat dome” experienced in British Columbia in June 2021 would have been virtually impossible without human caused global warming: **Matthews Reply Report**, Reply AR, Tab 1B, at p 24.

¹³⁵ **Eunice Lo Curriculum Vitæ**, Appendix 1 to the **Lo Report**, AR Vol 3, Tab 11B, at p 5717.

¹³⁶ **Lo Report**, AR Vol 3, Tab 11B, at pp 5706-7. Dr. Lo applied the same techniques in her expert reports as she used in the peer-reviewed *Science Advances* article from June 2019 titled “Increasing mitigation ambition to meet the Paris Agreement’s temperature goal avoids substantial heat-related mortality in U.S. cities.”

¹³⁷ **(Supplemental) Report of Dr. Yuen Tung Eunice Lo (“Lo Supplemental Report”)**, Ex “B” to the Affidavit of Dr. Yuen Tung Eunice Lo, sworn February 4, 2021, AR Vol 3, Tab 12B, at p 5732.

¹³⁸ **Lo Supplemental Report**, AR Vol 3, Tab 12B, at pp 5733-34.

under 1.5°C, 2°C, and 3°C warming scenarios, respectively, from a baseline of 757 total deaths in 2006-2015.¹³⁹ Put simply, each incremental rise in temperature above 1.5°C is projected to cost *hundreds to thousands of lives from heat-related mortality across these four Ontario cities alone.*

78. While the dramatic projected increase in deaths is jarring, it is just the ‘tip of the iceberg’ of heat-related harm. Beneath mortality rates is a *much* larger “iceberg of morbidity.” This human suffering shows up in ambulance transports and health-phone line calls that increase significantly during extreme heat events because people require hospitalization or medical assistance. Dr. Kaiser details how these morbidities impact humans including heat stroke, considered a medical emergency which can rapidly lead to the failure of multiple organ systems. Following a similar distribution to mortality, these morbidity impacts rise with temperature.¹⁴⁰

79. Ontario did not cross-examine Dr. Lo or Dr. Kaiser, nor did it offer any contradictory evidence on the heat-related impacts of climate change. In fact, the Ontario government has found that climate change has led to more common prolonged heat waves,¹⁴¹ and that an increase in extreme-heat-related harm, including death, is expected with higher temperatures, particularly for the most vulnerable, such as those with breathing problems and cardiovascular issues.¹⁴²

(ii) Increased Infectious Diseases

80. The Supreme Court of Canada found that the effects of climate change include “the spread of potentially life-threatening vector-borne diseases like Lyme disease and West Nile virus.”¹⁴³

¹³⁹ **Lo Report**, AR Vol 3, Tab 11B, at pp 5712-13.

¹⁴⁰ **Kaiser Report**, AR Vol 3, Tab 13B, at pp 5744, 5750; see also Figure 2, at p 5751, which illustrates the “Iceberg of morbidity”, being the heat-related suffering people experience that is less visible than direct death from heat.

¹⁴¹ **Plan**, AR Vol 2, Tab 9Y, at p 3428.

¹⁴² **Why we need to address climate change**, Ex “GG” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9GG, at p 4553-4.; **Ontario Climate Change and Health Toolkit**, Ex “EE” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9EE, at p 4373.

¹⁴³ References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11 at ¶10. See also Reference re Greenhouse Gas Pollution Pricing Act, 2019 ONCA 544 at ¶11.

81. The expert evidence in this case confirms and expands upon this finding. Dr. David Fisman, an expert on infectious diseases and Professor at the Dalla Lana School of Public Health at the University of Toronto, explains that climate change has already likely cost lives in Ontario as a result of causing an increased prevalence of infectious diseases.¹⁴⁴ These infectious diseases come from different “vectors”, such as ticks or mosquitoes, as well as through food and water.

82. Climate change has had a “profound effect” on the risk of serious and potentially deadly tick-borne diseases in Ontario — and continued global warming will increase this risk further.¹⁴⁵ Warming temperatures have allowed these ticks to establish themselves in new areas.¹⁴⁶ For example, cases of Lyme disease, which can cause serious illness and death, have increased by 1000% across Canada since 2009 with the habitat expansion of the carrier *Ixodes* tick. This tick also transmits other serious diseases, such as encephalitis (which can cause neurological disability, coma, and death) and vasculitis (which can cause dysfunction of major organ systems).¹⁴⁷

83. Ticks are not the only vector of concern when it comes to deadly diseases. The same dynamics apply to diseases transmitted by mosquitos, such as West Nile virus, with more warming “likely to markedly increase the risk” even further.¹⁴⁸ Earlier springs have increased mosquito populations in Ontario, increasing the risk of contracting certain endemic viruses that can manifest in the central nervous system, causing debilitating conditions, such as meningitis, myelitis, or encephalitis.¹⁴⁹ Increasing temperatures are also expected to bring new mosquito species into

¹⁴⁴ **Report of Dr. David Fisman (“Fisman Report”)**, Ex “B” to the Affidavit of David Fisman, sworn February 26, 2021, AR Vol 3, Tab 16B, at p 5974-5.

¹⁴⁵ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5974-81, 5992.

¹⁴⁶ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5975-76.

¹⁴⁷ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5975-77, 5979-80 (Table 1). Encephalitis is a brain infection, and vasculitis is an infection of small blood vessels.

¹⁴⁸ **Fisman Report**, AR Vol 3, Tab 16B, at p 5981.

¹⁴⁹ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5981-83. Meningitis can inflame the membranes covering the brain and spinal cord. Myelitis can inflame and destroy a spinal cord. Encephalitis can cause neurological disability, coma, and death.

Ontario carrying pathogens like dengue, which can cause fatal hemorrhagic fever, and Zika virus, which can cause severe developmental consequences through microcephaly.¹⁵⁰

84. Finally, food and waterborne diseases, like *Salmonella*, *E. coli*, and the highly fatal Legionnaire’s disease from *Legionella* bacteria, will likely increase as a result of climate change.¹⁵¹

85. Ontario did not challenge Dr. Fisman’s evidence nor provide any expert evidence on this topic. In fact, Ontario itself reported that climate change could cause longer disease transmission seasons, faster maturation for pathogens in insect and tick vectors, increased incidence of vector-borne diseases native to Canada, the introduction of new diseases or re-emergence of previously eradicated diseases, and the outbreak of food and water-borne diseases.¹⁵²

(iii) Increases in Wildfires

86. The Supreme Court of Canada and Court of Appeal for Ontario both accepted that climate change contributes to an increase in the frequency and severity of wildfires.¹⁵³

87. The expert evidence confirms this is true for Ontario.¹⁵⁴ Dr. Michael Flannigan, a Research Chair in Fire Science at Thompson Rivers University and Leader of the NSERC Canada Wildfire Network¹⁵⁵, projects that even if global warming is kept to 1.5°C, Ontario will experience a 33% increase in area burned by wildfire, a 2-week increase in fire season length and a 50% increase in wildfire starts. At 2°C, Dr. Flannigan projects close to a 65% increase in area burned, an over 3-week increase of fire season length and a 100% increase in fire starts in Ontario. At 3°C, significant

¹⁵⁰ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5985-87. Microcephaly causes a small head with devastating developmental consequences in infants carried by an infected mother.

¹⁵¹ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5987-92.

¹⁵² **Ontario Climate Change and Health Toolkit**, Ex “EE” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9EE, at p 4374.

¹⁵³ *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶10; *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶¶10-11, 19.

¹⁵⁴ **Report of Dr. Michael Flannigan (“Flannigan Report”)**, Ex “B” to the Affidavit of Dr. Michael Flannigan, sworn February 11, 2021, AR Vol 3, Tab 14B, at pp 5781-82, 5785-86.

¹⁵⁵ **(Reply) Affidavit of Dr. Michael Flannigan, affirmed April 13, 2022, Reply AR**, Tab 4, at p 186, ¶2.

increases in all three factors in Ontario are projected.¹⁵⁶ With each temperature increase, the future impacts will worsen: at 1.5°C warming, twice as much of Ontario may burn by 2040, while 3°C warming suggests eight-times as much by 2100.¹⁵⁷ More communities will be at risk of wildfire, with up to 60% of cities, towns, settlements and reservations in Canada threatened.¹⁵⁸

88. To reverse the saying, where there is fire there is also smoke. The consequences for human health from smoke are severe. Dr. Michael Brauer, a Professor in the School of Population and Public Health at the University of British Columbia, is an expert on the health impacts of wildfire smoke exposure.¹⁵⁹ He explains that as wildfires increase, exposure to their smoke will cause increasing mortality and morbidity for Ontarians, including a worsening of asthma and chronic obstructive pulmonary disease (COPD) for those with pre-existing respiratory disease, and an increased incidence of fatal and non-fatal stroke and heart attacks.¹⁶⁰ Particulate matter air pollution from wildfire smoke has already caused a significant increase in deaths and child respiratory issues in Canada. The annual nationwide impact of that exposure has been estimated as 54-240 additional deaths due to short-term exposure; 570-2,500 additional deaths resulting from longer-term increases in exposure; 100,000-420,000 additional days of asthma symptoms for children aged 5-19; and 2,600-10,000 additional bronchitis episodes amongst children.¹⁶¹

89. Dr. Brauer was not cross-examined by Ontario. Dr. Flannigan was not cross-examined on his projections of the increase of the severity and frequency of wildfires in Ontario under future

¹⁵⁶ **Flannigan Report**, AR Vol 3, Tab 14B, at p 5785.

¹⁵⁷ **Flannigan Report**, AR Vol 3, Tab 14B, at pp 5785-86. The estimates for the increase of area burned at 3°C ranged between a doubling and an eightfold increase between the different studies Dr. Flannigan cited to.

¹⁵⁸ **Flannigan Report**, AR Vol 3, Tab 14B, at pp 5787.

¹⁵⁹ **Affidavit of Dr. Michael Brauer**, sworn Feb 11/21 (“**Brauer Affidavit**”), AR Vol 3, Tab 15, at pp 5840-1; **Report of Dr. Michael Brauer (“Brauer Report”)**, Ex “B” to the Brauer Affidavit, AR Vol 3, Tab 15B, at pp 5849; **Michael Brauer Curriculum Vitæ**, Appendix 1 to **Brauer Report**, AR Vol 3, Tab 15B, at pp 5863-5957.

¹⁶⁰ **Brauer Report**, AR Vol 3, Tab 15B, at pp 5852-56.

¹⁶¹ **Brauer Report**, AR Vol 3, Tab 15B, at pp 5855.

global warming scenarios, or his evidence relating to wildfire impacts. And while Dr. van Wijngaarden claims that there is no significant increasing trend in area burned by fire in Ontario to date, that misses the point: wildfires are *projected* to increase based on future climate models, and not the assumption that the area burned has already increased. Notably, Ontario’s own projections show a doubling of area burned by fire in northern Ontario by the end of this century.¹⁶²

(iv) *Increases in Flooding*

90. Both the Supreme Court and the Court of Appeal for Ontario recognized that climate change is linked to increased flooding events.¹⁶³ As the Court of Appeal put it, “Recent manifestations of the impacts of climate change in Canada include... major flood events in Ontario and Québec in 2017, and in British Columbia, Ontario, Québec and New Brunswick in 2018. The recent major flooding in Ontario... in 2019 was likely also fuelled by climate change.”¹⁶⁴

91. The expert evidence and government reports offer further support for this conclusion. Canada is expected to see an increased risk of future urban flooding due to extreme precipitation brought on by climate change.¹⁶⁵ Ontario’s own studies indicate that temperatures in Ontario are expected to rise by as much as 3 to 8°C over the next century due to climate change, leading to a “higher frequency of severe weather events” including “record-breaking storms [and] floods”.¹⁶⁶

92. More detailed projections can be seen in the evidence of Dr. Slobodan Simonovic, Professor Emeritus and Director of Engineering Studies at The Institute for Catastrophic Loss reduction at the University of Western Ontario. Dr. Simonovic models how climate change will

¹⁶² **Climate Change, Carbon Sequestration, and Forest Fire Protection in the Canadian Boreal Zone – MNRF**, Ex “XX” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9XX, at p 5075.

¹⁶³ References re Greenhouse Gas Pollution Pricing Act, 2021 SCC 11 at ¶10; Reference re Greenhouse Gas Pollution Pricing Act, 2019 ONCA 544 at ¶¶10-11.

¹⁶⁴ Reference re Greenhouse Gas Pollution Pricing Act, 2019 ONCA 544 at ¶11.

¹⁶⁵ **CCCR 2019**, AR Vol 2, Tab 9A, at p 641.

¹⁶⁶ **Ontario Climate Change and Health Modelling Study**, Ex “FF” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9FF, at p 4524.

increase the frequency of what were previously once in 100 or 250-year floods in many Ontario cities.¹⁶⁷ These historic and massive 100 and 250-year flooding events are projected to become more frequent in certain Ontario cities as temperatures rise, with a temperature rise of over 3.2°C increasing flood frequency in nearly every large Ontario city.¹⁶⁸

93. Even if warming is kept below 2°C, 100-year floods are projected to happen every 37 years in 12 of the 21 most populated Ontario cities, with 250-year flood events projected every 56 years in 11 of the 21 cities. Some cities could see these major floods as frequently as every six years at this level of warming. With warming over 3.2°C, 18 of the 21 most populated Ontario cities are projected to face increased frequencies of 100 and 250-year flood events, with some cities projected to experience these floods as frequently as every three years.¹⁶⁹

94. Such major flood events would inflict physical and mental harm on Ontarians.¹⁷⁰ Dr. Melissa Généreux, the Medical Advisor for Estrie Public Health and the *Institut national de santé publique du Québec*,¹⁷¹ has found that flood victims are more likely to develop mental health disorders, such as post-traumatic stress disorder or anxiety disorder,¹⁷² as well as harmful physical

¹⁶⁷ **Report of Dr. Slobodan Simonovic (“Simonovic Report”)**, Ex “B” to the Affidavit of Dr. Slobodan Simonovic, sworn February 3, 2021, AR Vol 3, Tab 21B, at pp 6651-2.

¹⁶⁸ Dr. Simonovic used Representative Concentration Pathways (RCPs) presented in IPCC data to conduct his modelling. RCPs represent the range of potential climate change impacts, from low to high severity, depending on the level of emissions and subsequent temperature increases: see **Simonovic Report**, AR Vol 3, Tab 21B, at p 6657. The lower emission RCP2.6 scenarios examined by Dr. Simonovic would be consistent with holding warming to below 2°C, the middle RCP4.5 scenarios represent estimated warming of 1.7-3.5°C (best estimate 2.5°C), and the higher emission RCP8.5 scenarios represent a future with estimated 3.2°C-5.4°C of warming by 2100: see **Simonovic Report**, AR Vol 3, Tab 21B, at p 6658; **Lo Report**, AR Vol 3, Tab 12B, at p 5714; **Climate Change 2013: The Physical Science Basis**, Ex “F2” to the Affidavit of Dr. Robert McLeman, sworn February 5, 2021, AR Vol 5, Tab 25F2, at pp 9477, 10488. RCP8.5 represents a global temperature increase similar to what would happen if the worldwide targets were aligned with Ontario’s Target: see **Matthews Report**, AR Vol 3, Tab 10B, at p 5664.

¹⁶⁹ **Simonovic Report**, AR Vol 3, Tab 21B, at p 6668 (Table 3), 6669 (Table 4).

¹⁷⁰ **Report of Dr. Mélissa Généreux (“Généreux Report”)**, Ex “B” to the Affidavit of Dr. Mélissa Généreux, sworn June 30, 2021, Supp AR, Tab 1B, at pp 13-14.

¹⁷¹ **Généreux Report**, Supp AR, Tab 1B, at p 11.

¹⁷² **Généreux Report**, Supp AR, Tab 1B, at p 18.

conditions, such as frequent respiratory symptoms and asthma.¹⁷³ Ontario’s own reports confirm that such an increase in extreme flooding events will result in stress-related mental health issues.¹⁷⁴

95. Ontario did not cross-examine either Dr. Simonovic or Dr. Généreux. While Dr. van Wijngaarden opined on this issue—claiming that Ontario does not have a sufficiently long historical rainfall record to predict once-in-a-century downpours¹⁷⁵—Dr. Simonovic, who has actual expertise in this area, refutes this assertion. He explains that climate models are better suited to project changes in the frequency of major flooding events than historical data because climate change will affect important variables, such as maximum and minimum annual precipitation.¹⁷⁶

(v) *Other Devastating Climate Impacts*

96. The disastrous impacts of climate change for Ontario extend beyond deadly heat waves, infectious diseases, wildfires and floods. Dr. Frances Pick, Professor of Biology at the University of Ottawa, explains that climate change is increasing the frequency and severity of harmful cyanobacterial (blue-green algae) blooms in Ontario, producing more cyanotoxins that pose a threat to human life and health. Algal blooms also threaten water quality and fish stocks.¹⁷⁷

97. Dr. Amanda Giang, Assistant Professor of Environmental Modelling and Policy at the University of British Columbia, explains that as temperatures rise, higher concentrations of mercury will enter waterways and the fish within them, putting at risk the food security of

¹⁷³ **Généreux Report**, Supp AR, Tab 1B, at pp 17-21. The physical conditions were often caused by mold and humidity in homes after flooding.

¹⁷⁴ **Adapting to Climate Change in Ontario: Report of the Expert Panel on Climate Change**, Ex “ZZ” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9ZZ, at p 5201.

¹⁷⁵ **van Wijngaarden Affidavit**, RR, Tab 2, p B-1-1324 at ¶44.

¹⁷⁶ **Reply Report of Dr. Slobodan Simonovic**, Ex “B” to the Reply Affidavit of Dr. Slobodan Simonovic, affirmed April 7, 2022, Reply AR, Tab 2B, at p 67.

¹⁷⁷ **Report of Dr. Frances Pick (“Pick Report”)**, Ex “B” to the Affidavit of Dr. Frances Pick, sworn February 18, 2021, AR Vol 3, Tab 20B, at pp 6269, 6270-71, 6279, 6281.

communities that rely on fish, including many Indigenous communities in Ontario. Even modest mercury exposure can lead to neurodevelopmental, cardiovascular, and immunologic effects.¹⁷⁸

98. Climate change is also leading to wide-ranging negative mental health effects in Ontario. Dr. Ashlee Cunsolo, Founding Dean of the School of Arctic and Subarctic Studies of the Labrador Institute of Memorial University¹⁷⁹, explains that the physical impacts of climate change have already increased incidents of mental effects such as stress and anxiety, post-traumatic stress disorder, suicide ideation and suicide. These mental health impacts can cut an individual's life expectancy by an average of 10 to 20 years.¹⁸⁰ Global warming above 1.5°C will increase the incidence and severity of these negative mental health outcomes for Ontarians.¹⁸¹

99. Each degree of global warming will also increase the probability of global societal breakdowns causing large-scale displacement, regional food security crises, and increasing conflict and violence. Dr. Robert McLeman, a Professor of Geography and Environmental Studies at Wilfred Laurier University and a Convening Lead Author in the IPCC's 6th Assessment Report, explains that if global warming is in the range of 2-3°C, involuntary displacement is expected to double or triple over current levels, including within Canada. At 3°C warming and above, worldwide displacement will be so pervasive that internal displacement alone within countries, including Canada, will be difficult to cope with economically. Above 4°C, the scale of human displacement and the famine and conflict that accompanies it would be unprecedented in human history.¹⁸² These catastrophic societal-level impacts will undoubtedly affect Ontario.

¹⁷⁸ **Report of Dr. Amanda Giang ("Giang Report")**, Ex "B" to the Affidavit of Dr. Amanda Giang, sworn February 12, 2021, AR Vol 3, Tab 19B, at pp 6235, 6242-43.

¹⁷⁹ **Report of Dr. Ashlee Cunsolo ("Cunsolo Report")**, Ex "B" to the Affidavit of Dr. Ashlee Cunsolo, sworn February 3, 2021, AR Vol 3, Tab 18B, at pp 6144.

¹⁸⁰ **Cunsolo Report**, AR Vol 3, Tab 18B, at pp 6147-9.

¹⁸¹ **Cunsolo Report**, AR Vol 3, Tab 18B at pp 6143, 6164-65.

¹⁸² **McLeman Report**, AR Vol 4, Tab 24B, at pp 6973-6, 6983-86

100. Finally, every incremental increase in global temperature increases the likelihood of large-scale, devastating climate tipping points being crossed this century.¹⁸³ A “tipping point” occurs when a small change in the climate, such as temperature, causes a potentially irreversible transition in the state of the climate system.¹⁸⁴ “Positive feedback loops” are a potentially catastrophic outcome of certain tipping points where climate change effects lead to a self-propelling cycle of warming.¹⁸⁵ Dr. Timothy Lenton, Professor and Chair of Climate Change and Earth System Science at the University of Exeter, and a contributing author to multiple IPCC reports, sets out a number of disastrous tipping points impacts due to climate change:¹⁸⁶

Global Warming	1.5°C or below	1.5°C to 2.0°C	2.0°C to 3.0°C	3.0°C to 5.0°C
Tipping Point Impacts	<u>Very likely:</u> 70-90% coral reef decline	<u>As likely as not:</u> Major ice sheet tipping point passed; Arctic summer sea ice is lost; Deep convection in Labrador Sea collapses	<u>Likely:</u> Major ice sheet tipping point passed; <u>Virtually certain:</u> Arctic sea ice lost; Coral reefs lost	<u>Very likely:</u> Major ice sheet tipping point passed; <u>As likely as not:</u> Major reorganization of ocean and atmosphere circulation

101. At warming above 3.0°C, tipping points impacts in Ontario could include permafrost thaw and boreal forest loss, releasing carbon and potentially compromising carbon budgets.¹⁸⁷

102. Ontario did not cross-examine Dr. Pick, Dr. Giang, Dr. Cunsolo, Dr. McLeman, or Dr. Lenton. Nor did Ontario provide any evidence to refute their respective evidence on the impacts flowing from climate change in Ontario.

¹⁸³ **Lenton Report**, AR Vol 3, Tab 24B, at p 6928.

¹⁸⁴ **Lenton Report**, AR Vol 3, Tab 24B, at p 6945.

¹⁸⁵ **Lenton Report**, AR Vol 3, Tab 24B, at pp 6929-30. For example, in the case of ice-melt, it opens up more sea water to absorb heat from sunlight, heating up the water and creating more climate effects that amplify the climate change process in a looping cycle, accelerating global warming and making tipping points more likely.

¹⁸⁶ **Lenton Affidavit**, AR Vol 3, Tab 24, at pp 6920-21; **Curriculum Vitæ Timothy Michael Lenton**, Appendix 1 to the **Lenton Report**, AR Vol 3, Tab 24B, at pp 6958-61; **Lenton Report**, AR Vol 3, Tab 24B, at pp 6928.

¹⁸⁷ **Lenton Report**, AR Vol 3, Tab 24B, at pp 6928-29, 6946-47.

H. DISPROPORTIONATE IMPACTS OF CLIMATE CHANGE ON YOUTH AND INDIGENOUS PEOPLES IN ONTARIO

103. Climate change has and will continue to disproportionately impact Ontario youth¹⁸⁸ and future generations, as well Indigenous peoples, communities, and nations (“**Indigenous Peoples**”) in Ontario, compounding their existing vulnerabilities. These facts have been recognized by the Supreme Court, and are confirmed by the expert evidence in this case, including the reports of Dr. Christopher Buse (an Adjunct Professor in the University of British Columbia’s Northern Medical Program)¹⁸⁹ and Dr. Kyle Powys Whyte (a member of the Citizen Potawatomi Nation and Professor at the University of Michigan’s School for Environment and Sustainability).¹⁹⁰ Neither Dr. Buse, nor Dr. Whyte, were cross-examined.

(i) *Disproportionate Impacts on Youth, Including Indigenous Youth*

104. Youth — and, in particular, youth under the age of 18 (“**young people**”) — are particularly vulnerable to the physical impacts of climate change, both because of their physiological characteristics, and because they will be alive longer and thus face the worsening threat of climate change’s most devastating impacts. Youth, including those under 30 years old, are also particularly vulnerable to the mental health impacts of climate change. Climate change will amplify the existing inequities among these groups, who are already disproportionately affected by environmental impacts leading to preventable illness and death.¹⁹¹

105. As Dr. Buse explains, due to their developing physiology, young people face increased risks from climate change’s impacts. He notes that “[c]hildren’s physiological systems are not

¹⁸⁸ The term “youth” includes individuals under 30, young people (as defined below), children and infants.

¹⁸⁹ **Report of Dr. Christopher Buse (“Buse Report”)**, Ex “B” to the Affidavit of Dr. Christopher Buse, sworn February 17, 2021, AR Vol 3, Tab 17B, at p 6086.

¹⁹⁰ **Report of Dr. Kyle Powys Whyte (“Whyte Report”)**, Ex “B” to the Affidavit of Dr. Kyle Powys Whyte, affirmed August 30, 2021, 2nd Supp AR, Tab 3B, at p 4102; **Kyle Whyte Curriculum Vitæ**, Appendix 1 to the Whyte Report, 2nd Supp AR, Tab 3B, at pp 4119-20.

¹⁹¹ **Buse Report**, AR Vol 3, Tab 17B, at p 6092; **Impacts of Climate Change on Inequities in Child Health**, Appendix 2 to the **Buse Report**, AR Vol 3, Tab 17B, at pp 6122-23.

fully developed” and “create more body heat per body mass making them particularly sensitive to heat and both respiratory (e.g. asthma) and communicable diseases”.¹⁹² Thus, as climate change causes more frequent and severe heat waves, as well as an increase in the transmission of communicable diseases, young people will be especially harmed. In essence, “younger bodies are more susceptible to the existing harms from climate change than adult ones”.¹⁹³ The evidence from the various subject-matter experts in this case confirms that young people are especially at risk from the impacts of wildfire smoke¹⁹⁴, flooding¹⁹⁵, extreme heat¹⁹⁶, vectorborne diseases¹⁹⁷, toxic contamination¹⁹⁸, and algal blooms.¹⁹⁹ Young people are also more vulnerable to climate change-related impacts due to their increased reliance on caregivers for protection and adaptation.²⁰⁰

106. Youth are also particularly vulnerable to and disproportionately affected by climate change impacts on their mental health due to adverse experiences and post traumatic distress following climate-related emergencies; a sense of hopelessness and fear over future security under climate change;²⁰¹ and the psychosocial impacts of watching family members suffer.²⁰² They are more susceptible to serious climate-related mental health impacts such as depression, anxiety, stress, grief, anger, aggression, loss of identity, post traumatic stress disorder (PTSD), sleep disorders,

¹⁹² **Buse Report**, AR Vol 3, Tab 17B, at p 6092.

¹⁹³ N. Chalifour, J. Earle, and L. Macintyre, “[Coming of Age in a Warming World: The Charter’s Section 15\(1\) Equality Guarantee and Youth-Led Climate Litigation](#)”, (2021) 17 J L & Equality 1 at 58.

¹⁹⁴ **Brauer Report**, AR Vol 3, Tab 15B, at pp 5848, 5854-55, 5858 (infants are at risk of lower birthweight for women exposed to wildfire smoke while pregnant, suffer an increased number of respiratory and middle ear infections, and are generally more susceptible to its adverse health effects).

¹⁹⁵ **Généreux Report**, Supp AR, Tab 1B, at pp 14, 22 (children are more vulnerable to floods, are unable or experience great difficulty escaping flooded area, and face higher rates of gastrointestinal symptoms).

¹⁹⁶ **Kaiser Report**, AR Vol 3, Tab 13B, at p 5752 (toddlers have an increased vulnerability to extreme heat).

¹⁹⁷ **Fisman Report**, AR Vol 3, Tab 16B, at pp 5985-87 (infants and children disproportionately killed by Malaria and impacted by devastating developmental consequences due to microcephaly from Zika virus infections).

¹⁹⁸ **Giang Report**, AR Vol 3, Tab 19B, at p 6230 (young children face serious health risks from mercury contamination when consuming top predator fish and marine mammals).

¹⁹⁹ **Guidelines for Canadian Drinking Water Quality**, Appendix 2 to the **Pick Report**, AR Vol 3, Tab 20B, at pp 6306, 6431-32, 6435 (infants have an increased exposure to microcystins).

²⁰⁰ **Buse Report**, AR Vol 3, Tab 17B, at pp 6089, 6093; **Généreux Report**, Supp AR, Tab 1B, at p 22.

²⁰¹ **Buse Report**, AR Vol 3, Tab 17B, at pp 6092-93.

²⁰² **Cunsolo Report**, AR Vol 3, Tab 20B, at p 6167.

cognitive deficits, learning problems, substance use, suicide, and suicide ideation.²⁰³ Climate impacts will worsen an existing mental health crisis among Canadian and Ontarian youth.²⁰⁴ Insufficient government action on climate change combined with a global temperature increase above 1.5°C will cause an increased and significant mental health burden on youth.²⁰⁵

107. Indigenous youth face particular mental health challenges due to their strong ties to the land and existing systemic oppression.²⁰⁶ Indigenous youth in Northern Canada have experienced increased stress, anxiety, and existential concerns about their future under climate change.²⁰⁷

108. Under future global warming scenarios, the mental and physical health impacts faced by youth and young people, respectively, will likely increase in severity and frequency. These disproportionate impacts are expected to worsen at 2-3°C and even further at 3-5°C.²⁰⁸

109. Youth and future generations will also be disproportionately impacted by climate change because they will be alive to experience its most severe climate impacts. Unless there are deep reductions in GHG, warming will worsen in the near future and continue to rise throughout the 21st century.²⁰⁹ As warming increases, the devastating climate impacts detailed above will disproportionately impact Ontarian youth and future generations — despite them having contributed far less to climate change²¹⁰, and despite their limited ability to challenge Ontario's current actions on climate change (since many are unable to vote, for example).²¹¹

²⁰³ **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6166.

²⁰⁴ **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6158, 6168-69.

²⁰⁵ **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6143, 6168.

²⁰⁶ **Buse Report**, AR Vol 3, Tab 17B, at pp 6091-93, 6095.

²⁰⁷ **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6155, 6167.

²⁰⁸ **Buse Report**, AR Vol 3, Tab 17B, at pp 6085, 6092, 6096-97.

²⁰⁹ **IPCC AR6 WGI**, 2nd Supp AR, Tab 1A, at pp 22-23, see B.1 and Table SPM.1.

²¹⁰ **Buse Report**, AR Vol 3, Tab 17B, at p 6088.

²¹¹ The IPCC highlighted that future generations have no voice to address the injustices of intergenerational impacts and cannot defend themselves: see **Climate Change 2014: Impacts Adaptation, and Vulnerability**, Ex “F3” to the Affidavit of Dr. Robert McLeman, sworn February 5, 2021, AR Vol 5, Tab 25F, at p 11217; **Climate**

110. Ontario recognizes that young people are particularly vulnerable to climate-related impacts²¹² and that it will eventually make the world inhospitable for future generations.²¹³

(ii) *Disproportionate Impacts on Indigenous Peoples*

111. The Supreme Court found that climate change has “had a particularly serious effect on Indigenous peoples, threatening the ability of Indigenous communities in Canada to sustain themselves and maintain their traditional ways of life.”²¹⁴ The Court of Appeal for Ontario recognized these impacts flow from “the traditionally close relationship between Indigenous peoples and the land and waters on which they live.”²¹⁵ Ontario itself has recognized Indigenous Peoples, especially in the north, as being particularly vulnerable to climate change.²¹⁶

112. The expert evidence in this case confirms all of this to be true. Indigenous Peoples in Ontario have already observed significant harmful effects of climate change, including disruptions to seasonal weather patterns, higher temperatures, severe weather events such as forest fires and flooding, algal blooms, reduced water quality, and reduced snow and ice cover.²¹⁷ These changes affect traditional and subsistence practices such as fishing, hunting, and plant harvesting, with impacts on food and water security. The loss of traditional foods and cultural practices is impacting

Change 2022: Mitigation of Climate Change, Appendix 2 to the **Hastings-Simon Reply Report**, Ex “B” to the **Hastings-Simon Reply Affidavit**, Reply AR, Tab 5B, at p 481.

²¹² **Ontario Climate Change and Health Toolkit**, Ex “EE” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9EE, at pp 4381, 4383-84; **Ontario’s Climate Act: From Plan to Progress**, Ex “BB” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9BB, at p 3994.

²¹³ **Under 2 MOU**, Ex “FFF” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9FFF, at p 5357. See also **Adapting to Climate Change in Ontario**, Ex “ZZ” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9ZZ, at p 5169. Ontario’s Plan recognizes the need to protect the environment for future generations: **Plan**, AR Vol 2, Tab 9Y, at p 3414.

²¹⁴ *References re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶11; See also ¶¶12, 187 and 206.

²¹⁵ *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶12.

²¹⁶ **Plan**, AR Vol 2, Tab 9Y, at p 3418; **Why we need to address climate change**, Ex “GG” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9GG, at p 4554; **Pan-Canadian Framework on Clean Growth and Climate Change**, Ex “GGG” to the Jan 15 Ireland Affidavit, AR Vol 2, Tab 9GGG, at pp 5369, 5371, 5395, 5400-01.

²¹⁷ **Whyte Report**, 2nd Supp AR, Tab 3B, at pp 4101, 4111. The expert evidence also refers to toxic contamination impacts (see **Giang Report**, AR Vol 3, Tab 19B, at pp 6229-30, 6241-42) and impacts related to algal blooms (see **Pick Report**, AR Vol 3, Tab 20B, at p 6281) on Indigenous Peoples.

Indigenous Peoples' mental and physical well-being.²¹⁸ These impacts will worsen if warming exceeds 1.5°C, and will be worse still further under higher warming scenarios.²¹⁹

113. Indigenous Peoples will experience climate change faster and are more vulnerable to its impacts due, in part, to their strong connection to and reliance on the land.²²⁰ They also face existing issues that exacerbate climate impacts like water quality concerns, institutional barriers, funding deficits, and disrespect for Indigenous self-determination.²²¹

114. Indigenous Peoples are also particularly vulnerable to the mental health impacts of climate change. Climate impacts are leading to anxiety, depression, grief, family stress, loss of identity, increased likelihood of substance usage, and suicide ideation among Indigenous individuals.²²²

115. Finally, Indigenous Peoples are more limited in their ability adapt to climate change: due to factors like colonization, poverty, and dispossession of land, Indigenous Peoples have a higher disease burden, poorer access to quality health care, and are politically marginalized.²²³

I. ONTARIO BRINGS UNSUCCESSFUL MOTION TO STRIKE

116. On April 15, 2020, Ontario brought a motion to strike this Application pursuant to rule 21 of the *Rules of Civil Procedure*. Ontario alleged, amongst other grounds, that the Application disclosed no reasonable cause of action, raised matters that were not justiciable; and that the Applicants lacked standing. The Motion Judge dismissed the motion in its entirety and Ontario's motion for leave to appeal that decision to the Divisional Court was also dismissed.²²⁴

²¹⁸ **Whyte Report**, 2nd Supp AR, Tab 3B, at pp 4101, 4111.

²¹⁹ **Whyte Report**, 2nd Supp AR, Tab 3B, at p 4114; **Buse Report**, AR Vol 3, Tab 17B, at p 6097; **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6164-65.

²²⁰ **Whyte Report**, 2nd Supp AR, Tab 3B, at pp 4111-12; **Buse Report**, AR Vol 3, Tab 17B, at pp 6091, 6095.

²²¹ **Whyte Report**, 2nd Supp AR, Tab 3B, at pp 4112-13.

²²² **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6150, 6153, 6155. For instance, climate impacts on Indigenous Peoples in Northern Canada are exacerbating mental health challenges, magnifying previous traumas and impacts on the social bonds and cohesion within communities leading to mental isolation and distress.

²²³ **Buse Report**, AR Vol 3, Tab 17B, at p 6096.

²²⁴ *Mathur et al. v Ontario*, 2020 ONSC 6918 at ¶¶266-8, leave to appeal dismissed [2021 ONSC 1624](#) (Div Ct).

PART III - STATEMENT OF ISSUES, LAW & AUTHORITIES

117. The Applicants have organized their submissions as follows:

- (i) The issues raised in this Application are justiciable;
- (ii) The Applicants ought to be granted public interest standing;
- (iii) Ontario's conduct violates section 7 of the *Charter*;
- (iv) Ontario's conduct violates section 15 of the *Charter*;
- (v) An appropriate remedy in this case includes declaratory relief and ongoing court supervision.

118. The Applicants submit that Ontario's constitutional violations are not saved under s. 1 of the *Charter*, but will address arguments relating to that issue in more detail in reply.

A. THIS APPLICATION IS JUSTICIABLE

119. The Motion Judge concluded that the Application was *prima facie* justiciable.²²⁵ Nevertheless, given that Ontario pressed the issue of justiciability on the motion to strike and may seek to revisit those arguments here, the Applicants address this issue below.

120. The questions raised in the Application are justiciable. They concern the pressing threat to constitutional rights posed by Ontario's decision to implement the Target — precisely the kind of issue that is not only within this Court's institutional capacity to adjudicate, but which engages this Court's obligation to interpret and apply the *Charter*.

121. Questions are justiciable when they have a “sufficient legal component” to warrant judicial intervention.²²⁶ The category of truly non-justiciable cases is “very small”²²⁷. It is even smaller if violations of *Charter* rights are alleged: “The fact that the matter is complex, contentious or laden

²²⁵ *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶140.

²²⁶ *Reference Re Canada Assistance Plan (B.C.)*, [1991] 2 S.C.R. 525, at p. 545.

²²⁷ *Hupacasath First Nation v. Canada (Foreign Affairs and International Trade Canada)*, 2015 FCA 4, at ¶67.

with social values does not mean that the courts can abdicate the responsibility vested in them by our Constitution to review legislation for *Charter* compliance when citizens challenge it”.²²⁸ In such circumstances, it is the court’s *obligation* to decide the matter.²²⁹ The Federal Court of Appeal has stated that “*Charter* cases are justiciable regardless of the nature of the government action”.²³⁰ Indeed, the Federal Court even indicated that a challenge to Canada’s withdrawal from the Kyoto Protocol would likely be justiciable if framed as a constitutional challenge:²³¹

122. This Application does not fall into that narrow sliver of non-justiciable cases. On the motion to strike, Ontario’s main submission on the issue of justiciability was that the Application does not challenge the constitutionality of any “law” or sufficient state action. As the Motion Judge recognized, this is incorrect: the Application is squarely aimed at the unconstitutional actions of Ontario (through the *CTCA* and the Plan) in implementing the Target²³² making this case “very different”²³³ from the decisions Ontario relied on in the motion to strike, including *Tanudjaja*.²³⁴

123. Importantly, the Target is not some free-standing policy choice: it is a specific government action, mandated and taken pursuant to legislation. As the Federal Court recognized in *La Rose*, “where policy choices are translated into law or state action, that resulting law or state action must not infringe the constitutional rights of the Plaintiffs.”²³⁵ That has happened here.

²²⁸ *Chaoulli v. Quebec (Attorney General)*, 2005 SCC 35, at ¶107 (Deschamps J. also explained that when social policies infringe *Charter* rights, “the courts cannot shy away from considering them” (¶89).)

²²⁹ *Operation Dismantle v. The Queen*, [1985] 1 S.C.R. 441, at p. 472 (per Wilson J.); *Reference Re Canada Assistance Plan (B.C.)*, [1991] 2 S.C.R. 525, at p. 545.

²³⁰ *Hupacasath First Nation v. Canada (Minister of Foreign Affairs)*, 2015 FCA 4, at ¶61.

²³¹ *Turp v. Canada (Justice)*, 2012 FC 893, at ¶18.

²³² *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶140.

²³³ *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶132.

²³⁴ *Tanudjaja v. Canada (Attorney General)*, 2014 ONCA 852. In that case, the claimants “expressly disavow[ed] any challenge to any particular legislation, nor [did] they allege that the particular application of any legislation or policy to any individual has violated his or her constitutional rights”; rather, they alleged that the “social conditions” caused by the governments’ overall approach to homelessness violated their constitutional rights: see ¶10. These standards were not judicially discoverable or manageable because they were infused with subjective considerations and unmoored from any standard that could be established through evidence.

²³⁵ *La Rose v. Canada*, 2020 FC 1008 at ¶45.

124. To find that the Target is non-justiciable in this case is to provide Ontario with a blueprint for shielding itself from constitutional scrutiny. Ontario could violate the *Charter* with impunity, provided that it repeals any specific legislation that may be constitutionally infirm and then (legislatively) bestows upon itself the power to act identically through “policy”. This would be a triumph of form over substance that would eviscerate the constitutional protections of Ontarians.

125. Before the Motion Judge, Ontario also argued (unsuccessfully) that the Application will take this Court beyond its institutional capacity because the relief sought does not encompass judicially manageable standards. But unlike the two main cases cited by Ontario — *Tanudjaja*²³⁶ and *Friends of the Earth*²³⁷ — the Application is asking for something concrete and cognizable that can be determined by this Court with reference to international standards and expert evidence. Indeed, climate change is likely one of the most thoroughly researched issues in recent scientific history, with thousands of scientists from all over the world assessing not only its causes, trajectory and consequences, but also the necessary GHG reductions to avoid its most catastrophic results.

126. The Motion Judge was not alone in her conclusion that the kind of issues raised on this Application are justiciable. Courts around the world have been willing to weigh into the complex issues surrounding climate change.²³⁸ To take but one example, in *Urgenda*, the Hague District

²³⁶ In that case, the claimants sought recognition of a right to “adequate” housing and argued that federal and provincial governments gave the issue “insufficient priority”: see *Tanudjaja v. Canada (Attorney General)*, 2014 ONCA 852, at ¶33.

²³⁷ *Friends of the Earth v. Canada (Governor in Council)*, 2008 FC 1183. That case did not involve a constitutional challenge and instead examined whether a statute created judicially-reviewable obligations. The Court determined that the *statutory language* of “a just transition for workers” or an “equitable distribution” of reduction levels was not meant to invite determination by the courts: see ¶31. As the Motion Judge noted, the result in *Friends of the Earth* has been criticized by Dean Sossin (as he then was) in his leading text on justiciability: see *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶135.

²³⁸ See, for example, *Neubauer et al v Germany*, (2021) Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Federal Constitutional Court of Germany) [[unofficial English Translation](#)] (challenge to government’s insufficient legislated climate target); *Demanda Generaciones Futuras v Minambiente*, STC No. 4360-2018, April 4, 2018 (Supreme Court of Justice of Colombia) [[unofficial English translation \(excerpts\)](#)] (challenge to government’s failure to reach deforestation target linked to climate change); *Friends of the Irish Environment v*

Court ordered the government to comply with a legal duty to reduce the country's GHG emissions by 25% below 1990 levels by 2020.²³⁹ This decision was upheld by the Dutch Supreme Court. The Supreme Court addressed arguments of justiciability, holding that courts can review whether the reduction of GHG is within the limits of the law (even though the target was not codified in legislation), while leaving it to the government to determine what measures to take to achieve a lawful level.²⁴⁰ This is similar to what the Applicants seek to do here.

127. As with so many other courts around the world, this Court also possesses the institutional competency and expertise to adjudicate controversies relating to climate change.

B. THE APPLICANTS OUGHT TO BE GRANTED PUBLIC INTEREST STANDING

128. The Applicants ought to be granted public interest standing to pursue this Application, including the standing to seek remedies on behalf of future generations.

129. As the Supreme Court recently affirmed in *Council of Canadians with Disabilities*, public interest standing requires a contextual analysis of whether: (1) the case raises a serious justiciable issue, (2) the party bringing the action has a real stake or a genuine interest in its outcome, and (3) the proposed suit is a reasonable and effective means to bring the case to court.²⁴¹

Ireland, [2020] IESC 49 (Supreme Court of Ireland) (challenge to level of detail in climate plan); *Notre Affaire à Tous et al v France*, [2021] No 1904967, 1904968, 1904972, 1904976/4-1 [unofficial English translation] (challenge to government failure to meet climate targets); *Thomson v Minister for Climate Change Issues*, [2017] NZHC 733 (a challenge to the adequacy of the government's climate targets for 2030 and 2050). More generally, see cases discussed in the factum of the intervener, Friends of the Earth (FOE).

²³⁹ *Rechtbank Den Haag* [Hague District Court], 24 June 2015, *Urgenda v The State of the Netherlands (Ministry of Infrastructure and the Environment)*, (2015) C/09/456689/HA ZA 13-1396 [unofficial English Translation].

²⁴⁰ *The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Stichting Urgenda*, (2019) 19/00135) at ¶¶2.1(27), 5.3.2, 8.2.7, 8.3.2 [unofficial English Translation]. For lower court discussions on this point, see: *Gerechtshof Den Haag* [Hague Court of Appeal], 9 October 2018, *Urgenda et al. v The State of the Netherlands (Ministry of Infrastructure and the Environment)*, (2018) 200.178.245/01 at ¶67 [unofficial English Translation]; *Rechtbank Den Haag* [Hague District Court], 24 June 2015, *Urgenda et al v The State of the Netherlands (Ministry of Infrastructure and the Environment)*, (2015) C/09/456689/HA ZA 13-1396 at ¶¶4.101, 4.53 [unofficial English Translation].

²⁴¹ *British Columbia (Attorney General) v Council of Canadians with Disabilities*, 2022 SCC 27 at ¶28; *Downtown Eastside Sex Workers United Against Violence Society v. Canada (Attorney General)*, 2012 SCC 45, at ¶2.

130. As noted above and as described by the Motion Judge, “this case raises a serious justiciable issue and a substantial constitutional issue.”²⁴² A serious issue will arise when the proceeding raises at least one issue that is “far from frivolous”²⁴³ — a standard easily satisfied in this case.

131. It is equally clear that the Applicants have a real stake and genuine interest in the outcome of this Application. The unchallenged evidence demonstrates that the Applicants here are not “busybodies”: they reflect a diverse set of youth with “a real stake in the proceedings or is engaged with the issues they raise”²⁴⁴ who care deeply and passionately about the causes and implications of climate change, and Ontario’s role in contributing to the devastating impacts of climate change. They have followed these issues closely, participated in awareness and education campaigns about climate change, and tried to influence policymakers through advocacy work. In short, they are model representatives for public interest standing in this Application.

132. Finally, this Application is a reasonable and effective means to bring the case to Court, including on behalf of future generations. This factor includes consideration of issues such as²⁴⁵:

- (a) *The plaintiff’s capacity to bring the claim forward.* As the Motion Judge recognized, the Applicants are supported by a team of counsel well-versed in the issues raised in this case.²⁴⁶ Those issues have been presented in a sufficiently concrete and well-developed factual setting, with extensive expert evidence.
- (b) *Whether the case is of public interest.* This Application transcends the interests of the Applicants.²⁴⁷ As the Supreme Court has recognized, climate change presents “an existential threat to human life in Canada and around the world.”²⁴⁸

²⁴² *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶250.

²⁴³ *British Columbia (Attorney General) v Council of Canadians with Disabilities*, 2022 SCC 27 at ¶49.

²⁴⁴ *British Columbia (Attorney General) v Council of Canadians with Disabilities*, 2022 SCC 27 at ¶51.

²⁴⁵ *British Columbia (Attorney General) v Council of Canadians with Disabilities*, 2022 SCC 27 at ¶55.

²⁴⁶ *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶250.

²⁴⁷ *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶250.

²⁴⁸ *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶¶2, 167 and 171 (emphasis added).

- (c) *Whether there are alternative means.* There are no realistic alternative means that would favour a more efficient or effective use of judicial resources. As far as the Applicants are aware, the only other proceedings similar to this case are fundamentally distinguishable²⁴⁹, reflect a challenge to federal government conduct, and still remain at the motion to strike phase.²⁵⁰
- (d) *The potential impact of the proceedings on others.* This deals with whether granting public interest standing could prejudice subsequent challenges by parties with “specific and factually established complaints”.²⁵¹ The Motion Judge correctly found that granting standing “does not create a conflict... or affect the rights of others who are equally or more directly affected by climate change”. She also recognized the reality that “future generations are unlikely to be able to bring the same suit as the Applicants... as the state of the world will likely be different.”²⁵²

133. Indeed, granting public interest standing is the *only* way to secure constitutional remedies for the violations of the rights of future generations. As discussed further below (see Parts III.C and D), the Applicants argue Ontario’s conduct will lead future generations to suffer s. 7 deprivations due to the increased risk and prevalence of death, disease, and serious bodily and psychological harm, and that future generations will suffer discrimination simply on account of when they are born. These are serious questions that deserve an answer *today*, before it is too late.

134. To be clear, the claims being advanced in this action on behalf of future generations are narrow, specifically targeted to the devastating threats that climate change poses, and do not require bestowing all manner of individual rights on the unborn. All the Applicants seek to do is to ensure that those in future generations *who will be born* are not deprived of their constitutional

²⁴⁹ *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶¶111 and 132.

²⁵⁰ See, e.g., *La Rose v. Canada*, 2020 FC 1008. The motion to strike decision is under appeal (together with a companion case *Misdzi Yikh v. Canada*, 2020 FC 1059) before the Federal Court of Appeal, but no date for oral argument has been set according to the [court docket](#).

²⁵¹ *British Columbia (Attorney General) v Council of Canadians with Disabilities*, 2022 SCC 27 at ¶55.

²⁵² *Mathur et al. v Ontario*, 2020 ONSC 6918, at ¶250.

rights as a result of Ontario’s contributions to climate change, simply because of when they were born. The Applicants assert a narrow right that arises by virtue of the unique dynamics of climate change and the fact that future generations are members of a cohort that stands to face its most ruinous consequences — they do not seek a series of individualized *Charter* rights for the unborn.

135. Seeking standing on behalf of future generations is novel in Canada. But so too is the nature and severity of the threats posed by climate change. Never before have the rights of future generations been put at risk in such a comprehensive and serious way: that is why the Supreme Court has recognized the climate crisis to be “existential”.²⁵³ In other jurisdictions, courts have factored in the rights of future generations when dealing with climate change and environmental issues.²⁵⁴ The same approach ought to be followed here. Otherwise, Ontario would effectively be allowed to escape review for violating the *Charter* rights of future generations, since those violations would already be locked in before their lifetime even began.

C. ONTARIO’S CONDUCT VIOLATES SECTION 7 OF THE *CHARTER*

136. The expert evidence adduced in this case confirms what many courts, including the Supreme Court of Canada, have already recognized: climate change poses dangerous, and indeed “existential”, risks to the life and well-being of Ontarians (and the world).²⁵⁵ This is sufficient to engage the life and security of the person interests protected under s. 7 of the *Charter*.

137. The state conduct at the heart of this Application — Ontario’s setting of the Target pursuant to the *CTCA* — has a sufficient causal connection to these s. 7 impacts: Ontario is authorizing,

²⁵³ *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶¶2, 167 and 171.

²⁵⁴ N. Chalifour, J. Earle, and L. Macintyre, “[Coming of Age in a Warming World: The Charter’s Section 15\(1\) Equality Guarantee and Youth-Led Climate Litigation](#)”, (2021) 17 J L & Equality 1 at 24-25.

²⁵⁵ *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶¶2, 167 and 171; *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶¶. 2 and 104; *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 SKCA 40 at ¶¶4 and 236.

incentivizing, facilitating, and creating the very level of dangerous GHG that will lead to the catastrophic consequences of climate change for Ontarians. Ontario’s degree of involvement in this regard, and its entry into the realm of regulating overall GHG levels, is sufficient to dismiss concerns that this Application impermissibly seeks to advance “positive rights”. In any event, positive rights claims may be brought under s. 7 in “special circumstances”—a requirement easily satisfied by the widespread and existential threat climate change poses to Ontario and the world.

138. Finally, the s. 7 deprivations caused by Ontario’s conduct in this case are not in accordance with the principles of fundamental justice, as they are both grossly disproportionate and arbitrary. The deprivations also violate the principle of societal preservation.

(i) The Impacts of Climate Change Engage Section 7 Interests

139. The impacts of climate change engage the life and security of the person interests protected under s. 7, which includes the right to be free from state conduct leading to an increased risk of serious harm²⁵⁶, or an increased risk of death “either directly or indirectly”.²⁵⁷ Section 7 also protects against psychological harms that “result from the actions of the state”²⁵⁸, provided that such harms are “serious” in the sense of being “greater than ordinary stress or anxiety”²⁵⁹, but not needing to rise to the level of nervous shock or psychiatric illness.²⁶⁰

140. Thus, the Supreme Court has found that protected s. 7 interests are engaged where the lack of timely healthcare could result in patient deaths or significantly impact their physical or

²⁵⁶ *Victoria (City) v. Adams*, 2009 BCCA 563 at ¶¶102-110.

²⁵⁷ *Carter v. Canada (Attorney General)*, 2015 SCC 5, at ¶62 (emphasis added). See also: *Canada (Attorney General) v. Bedford*, 2013 SCC 72; *Suresh v. Canada (Minister of Citizenship and Immigration)*, 2002 SCC 1; *R v. Morgentaler*, [1988] 1 S.C.R. 30 at pp.58-59; *Singh v. Minister of Employment and Immigration*, [1985] 1 S.C.R. 177.

²⁵⁸ *Blencoe v. British Columbia (Human Rights Commission)*, [2000] 2 S.C.R. 307 at ¶57.

²⁵⁹ *Chaoulli v. Quebec (Attorney General)*, 2005 SCC 35, at ¶116. In that case, the standard was satisfied by a study showing that “roughly 18%” of patients who visited specialists for a new illness reported that “waiting for care adversely affected their lives” and “[t]he majority suffered worry, anxiety or stress as a result” (¶117).

²⁶⁰ *New Brunswick (Minister of Health and Community Services) v. G. (J.)*, [1999] 3 S.C.R. 46 at ¶60.

psychological health²⁶¹; where individuals with drug addictions were denied access to potentially lifesaving medical care²⁶²; where criminal prohibitions heightened the risks of disease, violence or death for sex workers²⁶³; and where extradition could lead to a substantial risk of torture or other forms of mistreatment²⁶⁴, or the risk of being executed.²⁶⁵

141. The security of the person interest is engaged even where the risk of harm is low, where the evidence establishes an increase in that risk as a result of government conduct.²⁶⁶ Courts should be particularly sensitive where applicants “have no choice” about exposure to the risk in question when assessing whether there is a s. 7 deprivation.²⁶⁷

142. The impacts of climate change will materially increase the risk of death and harm to Ontarians — and particularly to Ontario’s youth and future generations — without giving them any choice about whether to face exposure to that threat. Again, the Supreme Court of Canada pithily summarized the situation by stating that climate change “poses a grave threat to humanity’s future”, and is “an existential challenge”, “a threat of the highest order to the country” and “an existential threat to human life in Canada and around the world.”²⁶⁸

²⁶¹ *Chaoulli v. Quebec (Attorney General)*, 2005 SCC 35, at ¶¶38-45 (per Deschamps J), ¶123 (per McLachlin CJC and Major J) and ¶¶191 and 200 (per Binnie and Lebel J).

²⁶² *Canada (Attorney General) v PHS Community Services Society*, [2011] 3 S.C.R. 134 at ¶¶91-92.

²⁶³ *Canada (Attorney General) v. Bedford*, 2013 SCC 72 at ¶¶ 59-60, 88-89 (risk of “disease, violence and death”)

²⁶⁴ *India v Badesha*, 2017 SCC 44 at ¶4.

²⁶⁵ *United States v. Burns*, [2001] 1 S.C.R. 283 at ¶59.

²⁶⁶ See, e.g., *R v. Morgentaler*, [1988] 1 S.C.R. 30 at pp.58-59 (per Dickson CJ, explaining that delayed access to abortions resulted in a security of the person deprivation even where “the overall complication and mortality rates for women who undergo abortions are very low” since “the increasing risk caused by the delay are so clearly established.”). See also similar statements in the opinions of Beetz J (at pp 102-103).

²⁶⁷ H. Stewart, *Fundamental Justice* (2nd ed) at p 102, *Applicants’ Book of Authorities (“ABOA”)*, Tab 1.

²⁶⁸ *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶¶2, 167 and 171. Appellate courts have echoed these conclusions: see *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶¶2 and 104; *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 SKCA 40 at ¶¶4 and 236.

143. Courts and international bodies have reached similar conclusions, recognizing the grave threat that climate change poses to human life and health.²⁶⁹

144. The specific consequences for Ontario from global temperature increases above the Paris Standard have been canvassed above. They fall squarely within the ambit of protected s. 7 interests. In brief, those consequences include the threat of death, serious illness, bodily harm, and serious and profound harms to psychological health due to:

- (a) an increase in the frequency and intensity of acute extreme heat events, which are projected to cause hundreds of deaths and even larger numbers of serious health impacts, bodily harm and hospitalizations (see paras. 72-79, *supra*);
- (b) an increase in the spread of infectious diseases, such as Lyme disease and West Nile Virus, that cause a range of bodily harm, serious illness, and death (see paras. 80-85, *supra*);
- (c) an increase in the frequency and intensity of wildfire activities, threatening communities and, through wildfire smoke, causing widespread increases in serious medical conditions and mortalities (see paras. 86-89, *supra*);
- (d) an increase in the frequency and intensity of major flooding events inflicting physical and serious psychological harm and disorders (see paras. 90-95, *supra*);
- (e) an increase in other outcomes detailed above that threaten drinking water, food security, and physical health, and will lead to serious mental health disorders and global instability (see paras. 96-102, *supra*).

²⁶⁹ See for instance, *Friends of the Irish Environment v Ireland*, [2020] IESC 49 (Supreme Court of Ireland) (“the consequences of failing to address climate change are accepted by both sides as being very severe with potential significant risk both to life and health throughout the world”); *Ioane Teitiota v. New Zealand*, CCPR/C/127/D/2728/2016, UN Human Rights Committee (HRC), 7 January 2020 (“environmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life”); *Demanda Generaciones Futuras v Minambiente*, STC No. 4360-2018, April 4, 2018 (Supreme Court of Justice of Colombia) (“The increasing deterioration of the environment [including from the impacts of GHG and resulting climate change] is a serious attack on current and future life and on other fundamental rights [including health]; it gradually depletes life and all its related rights.”).

145. Even where a s. 7 violation has not yet been established, *Charter* remedies may be granted based on a “threat of a violation” or “probable future harm”.²⁷⁰ As Professor Kent Roach explains, this approach recognizes that “threats to a person’s security or life deserve special preventive attention from the courts.”²⁷¹ To be clear, the Applicants submit that a s. 7 violation *has* been established on the record in this case, based on the increased risk of death, serious illness, and severe harm to human health that will result from climate change. But if this Court should take a different view, the Applicants submit that, at the very least, the record establishes a “threat of a violation” or “probable future harm” sufficient to attract a constitutional remedy at this juncture.

(ii) *Sufficient causal connection between Ontario’s conduct and the s. 7 impacts*

146. In *Bedford*, the Supreme Court held that to engage s. 7 interests, a “sufficient causal connection” must be established between government conduct and anticipated harm. This is a “flexible standard, which allows the circumstances of each particular case to be taken into account” and “is satisfied by a reasonable inference, drawn on a balance of probabilities.”²⁷²

147. By stressing the need for an approach that is “sensitive to the context of the case”, the Court expressly rejected the more rigorous and less flexible causation standard urged upon them by the state. Speculation will not suffice, but causation does not require the state’s role to be “the only or the dominant cause” of any harm, or a “necessary link” to that harm. Nor does the prejudice to s. 7 interests have to be “active” or “foreseeable”. Causation is only the “port of entry” for s. 7 claims and thus “set[ting] the bar too high risks barring meritorious claims.”²⁷³

²⁷⁰ *New Brunswick (Minister of Health and Community Services) v. G. (J.)*, [1999] 3 S.C.R. 46, at ¶51; *United States v. Kwok*, 2001 SCC 18 at ¶66; *F.H. v. McDougall*, 2008 SCC 53, at ¶40; *Frank v. Canada (Attorney General)*, 2019 SCC 1, at ¶43.

²⁷¹ Roach, *Constitutional Remedies in Canada*, 2nd ed., at s. 5:15, *ABOA*, Tab 2.

²⁷² *Canada (Attorney General) v. Bedford*, 2013 SCC 72, at ¶¶75-76.

²⁷³ *Canada (Attorney General) v. Bedford*, 2013 SCC 72, at ¶¶76-78.

148. A sufficient causal connection will be made out even if third parties in the causal chain may be more directly responsible for the s. 7 deprivations. In *Bedford*, for example, causation was established despite the fact “the conduct of pimps and johns is the immediate source of the harm suffered by prostitutes” since “[t]he violence of a john does not diminish the role of the state in making a prostitute more vulnerable to that violence.”²⁷⁴

149. In this case, the record establishes a sufficient causal connection between the impugned state conduct — that is, the setting of the Target pursuant to the *CTCA* — and the s. 7 deprivations. There can be no dispute that Ontario has the main levers of power when it comes to authorizing, controlling, and regulating the level of allowable GHG in the province. Ontario has also supported, incentivized, and contributed to GHG in significant ways, as outlined above. Against this backdrop, the Target reflects Ontario’s “commitment” to allowable GHG between now and 2030: that is the entire purpose of the Target, and that is what the Plan says by its own terms. In short, Ontario has set a legislatively mandated Target for allowable GHG, it has all the authority to satisfy that Target, and has stated its Plan is working to achieve the Target.²⁷⁵

150. That Target is anathema to a safe climate. In 2015, 194 countries and the European Union agreed that GHG had to be stabilized with the aim of keeping warming to “well below 2°C” and to pursue efforts “to limit the temperature increase to 1.5°C”.²⁷⁶ In 2018, the year Ontario set the Target, the IPCC concluded that limiting warming to 1.5°C instead of 2.0°C could reduce the number of people exposed to climate-related risks by 2050 by several hundred million.²⁷⁷ And in

²⁷⁴ *Canada (Attorney General) v. Bedford*, 2013 SCC 72, at ¶89. Similarly, in *Suresh*, the Court held that s. 7 was engaged “even to deprivations of life, liberty or security effected by actors other than our government, if there is a sufficient causal connection between our government’s participation and the deprivation ultimately effected.”: see *Suresh v. Canada (Minister of Citizenship and Immigration)*, 2002 SCC 1 at ¶54.

²⁷⁵ **Ontario Emissions Scenario as of March 25, 2022**, Appendix 1 to the Sawyer Reply Report, Reply AR, Tab 6B, at p 3157.

²⁷⁶ *Paris Agreement*, at art 2.1

²⁷⁷ **IPCC SR 1.5, AR Vol 4**, Tab 24E, at p 8665.

2021 the world “resolved” to pursue the 1.5°C temperature goal, recognizing that climate impacts will be much lower at 1.5°C versus 2°C.²⁷⁸ Meanwhile, as Dr. Matthews’ uncontradicted evidence shows, the Target exceeds Ontario’s share of the 1.5°C Global Carbon Budget, and even exceeds Ontario’s share under a 1.75°C or 2°C temperature goal (which is clearly not compliant with the Paris Standard). It represents 3-5°C of warming if other jurisdictions took the same approach.²⁷⁹

151. Ontario may argue that since it contributes only a small percentage of global GHG, it is not responsible for any resulting harms. This ‘*de minimis*’ argument must fail, for several reasons.

152. **First**, common sense tells us — and expert evidence confirms²⁸⁰ — that global warming is a collective action problem. As the Supreme Court put it, “[N]o one province, territory or country can address the issue of climate change on its own. Addressing climate change requires collective national and international action. This is because the harmful effects of GHG are, by their very nature, not confined by borders.”²⁸¹ All jurisdictions must do their fair share in order to keep climate change to within the Paris Standard and avoid the catastrophic impacts of climate change. The expert evidence on this point is clear and unchallenged: by any reasonable measure, Ontario’s Target falls well short of the mark. As outlined above, jurisdictions with emissions profiles like Ontario must reduce their emissions in order to avoid the worst impacts of climate change.

153. Not surprisingly, the *de minimis* argument has fared poorly in both domestic and foreign courts. The Supreme Court has expressly rejected “the notion that because climate change is ‘an inherently global problem’, each individual province’s GHG emissions cause no measurable harm or do not have tangible impacts on other provinces”, recognizing that “[t]he underlying logic of

²⁷⁸ *Glasgow Climate Pact*, at s 21.

²⁷⁹ **Matthews Report**, *AR Vol 3*, Tab 10B, at pp 5661 (Table 2), 5664.

²⁸⁰ **Hastings-Simon Reply Report**, *Reply AR*, Tab 5B, at pp 213-14.

²⁸¹ *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶12.

this argument would apply equally to all individual sources of emissions everywhere, so it must fail.”²⁸² Similarly, in *Urgenda*, the Supreme Court of the Netherlands — a jurisdiction with a similar emissions profile as Ontario²⁸³ — rejected the *de minimis* argument, noting that accepting such a proposition “would mean that a country could easily evade its partial responsibility by pointing out other countries or its own small share.”²⁸⁴ Based on the same fundamental reasoning, other foreign courts have found causal links between local government policies, emissions levels, and increased risks of harm from climate change, regardless of the emissions of others.²⁸⁵

154. **Second**, the *de minimis* argument fails to recognize that Ontario contributes to the s. 7 deprivations resulting from climate change, *regardless* of the actions of other states. As set out above, climate change is not an “all or nothing risk”: GHG released *today* pursuant to the Target will remain in the atmosphere for hundreds of years, with each additional molecule of GHG causing additional damage resulting from climate change. This was also recognized in *Urgenda*.²⁸⁶

155. **Third**, the Plan itself effectively acknowledges that the *de minimis* argument is without foundation when it states that Ontario has “played an important role in fighting climate change”, proposes to find ways to “slow down climate change”, and recognizes that Ontario’s actions “are

²⁸² [Reference re Greenhouse Gas Pollution Pricing Act](#), 2021 SCC 11 at ¶187.

²⁸³ **Hastings-Simon Reply Report**, Reply AR, Tab 5B, at pp 213.

²⁸⁴ [The State of the Netherlands \(Ministry of Economic Affairs and Climate Policy\) v Stichting Urgenda](#), (2019) 19/00135) at ¶5.7.8 [unofficial English Translation].

²⁸⁵ *Ibid.* at ¶¶ 5.7.1, 5.7.7-5.7.8. See also [Neubauer et al v Germany](#), (2021) Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Germany) [unofficial English Translation] at ¶¶202-203; [Massachusetts v Environmental Protection Agency](#), 549 US 497 (2007), at pp. 21-23; [Gloucester Resources Limited v. Minister for Planning](#) [2019] NSWLEC 7, at ¶¶515-516; [Genesis Power Ltd. and the Energy Efficiency and Conservation Authority v. Franklin District Council](#), [2005] NRRMA 541, at ¶223; [Future Generations v Ministry of the Environment and Others \(Demanda Generaciones Futuras v. Minambiente\)](#), (2018) 11001 22 03 000 2018 00319 00 (Supreme Court of Justice of Colombia), at pp. 34-37 [unofficial English Translation of Excerpts of Supreme Court Decision];

²⁸⁶ [The State of the Netherlands \(Ministry of Economic Affairs and Climate Policy\) v Stichting Urgenda](#), (2019) 19/00135) at ¶5.7.8 [unofficial English Translation]. (“each reduction of greenhouse gas emissions has a positive effect on combating dangerous climate change, as every reduction means that more room remains in the carbon budget ... no reduction is negligible.”).

important in the global fight to reduce emissions”.²⁸⁷ If Ontario’s contributions to climate change were truly *de minimis*, then none of these representations — which Ontario has relied on before both the public and the courts — could possibly be true.²⁸⁸

156. Quite apart from the *de minimis* argument, Ontario may argue, as it did on the motion to strike, that GHG resulting from the Target may theoretically be offset by possible future developments such as technological advances. As a factual matter, the record offers little support for relying on future technological advances in this way; indeed, the expert evidence points in the opposite direction.²⁸⁹ As a legal matter, this position is impermissibly speculative, and inconsistent with the flexible and context-driven causation analysis under s. 7. An existential threat cannot be ignored in the hope that some untested and unanticipated technology will save us at the 11th hour.

157. If adopted, Ontario’s arguments insulate the Target from constitutional scrutiny until it is too late. Such an outcome offends *Bedford*’s instruction to analyze causation in a way that avoids the risk of barring meritorious claims and is sensitive to the circumstances. Here, those circumstances include the fact climate change is an unprecedented threat, unlike anything seen in human history — and one that requires immediate action on a global scale in order to be avoided.

(iii) This Application Challenges State Conduct

158. At its core, the Application concerns Ontario’s conduct in establishing the Target and the Plan, pursuant to the *CTCA*. It is a challenge to legislative action, and conduct taken pursuant to that legislation, which together establish the amount of GHG Ontario has committed to producing and allowing to be produced between now and 2030 — including through activities Ontario itself has subsidized, undertaken, financed, facilitated, or authorized.

²⁸⁷ **Plan**, AR Vol 2, Tab 9Y, at pp 3429-30.

²⁸⁸ See, for example, *Reference re Greenhouse Gas Pollution Pricing Act*, 2019 ONCA 544 at ¶¶55-57.

²⁸⁹ **Matthews Report**, AR Vol 3, Tab 10, at p 5654.

159. Ontario may argue, as it did on the motion to strike²⁹⁰, that this Application impermissibly seeks to impose “positive obligations” on the state. It does not. In any event, this case falls squarely within the “special circumstances” that courts have recognized can ground a positive rights claim.

(A) *Not a ‘positive rights’ case*

160. Courts have typically characterized cases as involving “positive rights” where claimants call upon the state to improve a social welfare problem in an arena that has yet to be the subject of any kind of comprehensive regulatory scheme, or to extend a social assistance program to help address underlying problems or circumstances the state did not create. As the Motion Judge recognized, such cases “arise in contexts very different from the case before this Court.”²⁹¹

161. The key distinction here arises from Ontario’s profound involvement in the sphere of GHG. Ontario is causing, authorizing, facilitating, and regulating GHG, and the Target represents what Ontario has committed to allow in terms of GHG. Ontario’s participation in creating the underlying harms, and its creation of the Target and the Plan pursuant to the *CTCA*, triggers an obligation to ensure the resulting scheme is constitutionally compliant. As the Supreme Court put it in *Chaoulli*: “The *Charter* does not confer a freestanding right to health care. However, where the government puts in place a scheme to provide health care, that scheme must comply with the *Charter*.”²⁹² Similarly, in *Canadian Foundation*, the Supreme Court held that the state deprived children of their s. 7 interests through a provision that “removed the protective force” of the criminal law where parents or teachers used “corrective force”.²⁹³ Having chosen to put in place a criminal law scheme regulating assault, the state was obliged to do so in a manner compliant with s. 7.

²⁹⁰ *Mathur v. Ontario*, 2020 ONSC 6918 at ¶196.

²⁹¹ *Mathur v. Ontario*, 2020 ONSC 6918 at ¶228 (and see earlier cases discussed at ¶¶198-213).

²⁹² *Chaoulli v. Quebec (Attorney General)*, 2005 SCC 35, at ¶104. See also *Gosselin v. Québec (Attorney General)*, [2002] 4 S.C.R. 429 at ¶328 (per Arbour J., dissenting):

²⁹³ *Canadian Foundation for Children, Youth and the Law v. Canada (Attorney General)*, [2004] 1 S.C.R. 76 at ¶176 (per Arbour J., dissenting but not on this point).

162. The logic from *Chaoulli* and *Canadian Foundation* applies here: Ontario has “thoroughly and vigorously occupied the field” when it comes to regulating, authorizing, incentivizing, and contributing to GHG, which makes any concerns about positive rights “largely moot”.²⁹⁴

163. The Divisional Court’s decision in *Dixon* illustrates this principle in action.²⁹⁵ In that case, a residents’ group appealed the authorization of wind turbine farms to the Environmental Review Tribunal, which dismissed the appeals. The residents brought a further appeal to the Divisional Court, arguing that the Tribunal erred by failing to find certain statutory provisions violated s. 7 of the *Charter*. Echoing Ontario’s submissions on the motion to strike, the respondent submitted that “the Appellants’ claim is fundamentally a positive rights claim to a regulatory regime of their choosing” and that “there is no state imposed deprivation of security of the person”.²⁹⁶ The Court unanimously rejected this argument: “The government’s authorization of a construction activity which the Appellants allege will cause them harm constitutes a sufficient causal connection between the government activity and the alleged prejudice to embark on a review and consideration of their *Charter* claims-i.e. the Appellants asserted a reasonable *Charter* cause of action at law.”²⁹⁷

164. *Dixon*’s reasoning applies with even greater force here. As in *Dixon*, the Target under the *CTCA* effectively authorizes an overall amount of GHG that, in turn, will lead to s. 7 deprivations. But Ontario’s involvement here goes beyond mere authorization of activities that emit GHG or even a commitment to allowing dangerous levels of GHG: again, Ontario is actively creating, incentivizing, and facilitating GHG through its various agencies, programs, and policies.

²⁹⁴ See, by close analogy, L. M. Collins, “[An Ecologically Literate Reading of the Canadian Charter of Rights and Freedoms](#)” (2009) 26 Windsor Rev Legal Soc Issues 7 at 16 (discussing field of “environmental protection”).

²⁹⁵ *Dixon v. Director, Ministry of the Environment*, 2014 ONSC 7404 (Div Ct).

²⁹⁶ *Dixon v. Director, Ministry of the Environment*, 2014 ONSC 7404 (Div Ct) at ¶53.

²⁹⁷ *Dixon v. Director, Ministry of the Environment*, 2014 ONSC 7404 (Div Ct) at ¶58. Similarly, the British Columbia Supreme Court quickly dispensed with ‘positive rights’ concerns when it held that the province’s decision to cancel a discretionary “Mother-Baby Program”, and the resulting separation of mothers from their children, constituted a s. 7 breach: see *Inglis v. British Columbia*, 2013 BCSC 2309 at ¶¶394 and 655.

165. That is a key feature that distinguishes this case from *Barbra Schlifer*, a ss. 7 and 15 challenge to legislation amending the long-gun registry that Ontario relied on heavily in the motion to strike. In *Barbra Schlifer*, the sole state conduct at issue was the repeal of legislation (and not, as here, the replacement of that legislation with a Target that authorizes a dangerously high level of GHG). The connection between that conduct and the s. 7 deprivations was found to be too remote, since the immediate cause of any harm was “violence perpetrated by persons with firearms”.²⁹⁸ In *Barbra Schlifer*, however, the government did not in any way authorize the violence causing harm — and in fact expressly prohibited it under the *Criminal Code*. The scheme at issue in this Application does exactly the opposite: it authorizes and commits to allowing harmful levels of GHG. That makes this case like *Dixon* and unlike *Barbra Schlifer*.

166. Finally, this Application is not an attempt to set a “constitutional baseline” (a phrase that Ontario borrowed from *Barbra Schlifer* on the motion to strike). The legislature is entitled to change its approach, but its actions still “[have] to be constitutionally compliant”.²⁹⁹ The Target falls well short of that mark by committing Ontario to allowing dangerously high levels of GHG.

(B) In any event, this Application reflects “special circumstances”

167. Ontario’s anticipated line of argument regarding a positive rights claim depends on a positive/negative rights dichotomy that has been criticized as artificial and problematic³⁰⁰ — and one that the Supreme Court itself recently noted was “not always clearly made, nor always helpful.”³⁰¹

²⁹⁸ *Barbra Schlifer Commemorative Clinic v. Canada*, 2014 ONSC 5140 at ¶31.

²⁹⁹ *Quebec (Attorney General) v. Alliance du personnel professionnel et technique de la santé et des services sociaux*, 2018 SCC 17, at ¶36.

³⁰⁰ See, e.g., N. Chalifour & J. Earle, “Feeling the Heat: Climate Litigation under the Canadian Charter’s Right to Life, Liberty, and Security of the Person” (2018) 42:4 Vermont L Rev 689, at p. 742 (and sources cited therein).

³⁰¹ *Toronto (City) v. Ontario (Attorney General)*, 2021 SCC 34 at ¶20. The four dissenting judges went further, calling the positive/negative rights distinction “an unhelpful lens for adjudicating Charter claims”(¶152).

168. But even if it can be said that this Application advances a kind of so-called positive rights claim, it does so in “special circumstances” that warrant the claim being allowed.

169. In *Gosselin*, the Supreme Court explicitly recognized “the possibility that a positive obligation to sustain life, liberty, or security of the person may be made out in special circumstances.”³⁰² *Gosselin* was a challenge to Quebec’s social assistance scheme, with the claimant arguing that her s. 7 rights were deprived due to the lower amount of base welfare payments she received due to her age. The majority found that “the frail platform provided by the facts of this case cannot support the weight of a positive state obligation of citizen support.”³⁰³

170. Some guidance as to what constitutes “special circumstances” can be found in *Dunmore*, where the Supreme Court observed that positive obligations “may be required where the absence of government intervention may in effect substantially impede the enjoyment of fundamental freedoms.”³⁰⁴ This is such a case: unlike the “frail” record in *Gosselin*, the extensive and largely unchallenged evidentiary record of multiple renowned experts demonstrates the death, disease, and serious harm that will result from climate change in Ontario if GHG are not reduced. The basic thrust of this evidence — that climate change poses a grave and existential threat — has been accepted by the Supreme Court and the IPCC. In this fundamental way, the issues and relief sought in this Application engage the very precondition to the enjoyment of *all* fundamental freedoms enshrined in Canada’s constitutional order. That makes this case unlike any of the so-called “positive rights” cases that have been considered by Canadian courts to date.

171. For example, in *ETFO*, the Divisional Court held that there were no “positive obligations on the Minister to provide particular course content” relating to gender identity, sexual orientation,

³⁰² *Gosselin v. Québec (Attorney General)*, [2002] 4 S.C.R. 429 at ¶¶82-83 (*per* McLachlin C.J., for the majority).

³⁰³ *Gosselin v. Québec (Attorney General)*, [2002] 4 S.C.R. 429 at ¶83.

³⁰⁴ *Dunmore v. Ontario*, 2001 SCC 94, at ¶25.

and other issues.³⁰⁵ But in reaching that conclusion, the Court considered whether the case fell into the “special circumstances” category, and concluded that it did not because there were already statutory protections in place to address the claimants’ concerns, the Minister provided an assurance that the topics in question could be addressed in the classroom, and there was no evidence of harm.³⁰⁶ In the present case, all of these considerations militate in the opposite direction: there are no other existing protections in place to adequately address the issue of GHG in Ontario³⁰⁷, there is no suggestion that GHG will be reduced to reflect Ontario’s fair share, and there is ample evidence — and judicial recognition — of the harms that will follow.

172. Simply put, the stakes could not be higher. If the widespread, grave, and existential dangers of climate change do not qualify as “special circumstances”, then the door for positive rights under s. 7 of the *Charter* that was left open in *Gosselin* may as well be slammed shut.

(iv) *The s. 7 Deprivations Are Grossly Disproportionate and Arbitrary*

173. To establish a s. 7 violation, the deprivation of life or security of the person must be shown to be contrary to the principles of fundamental justice—including the principles against gross disproportionality and arbitrariness. The Target violates both of these principles.

(A) *Gross disproportionality*

174. The test for gross disproportionality is whether “the seriousness of the deprivation is totally out of sync with the objective of the measure.”³⁰⁸ That seriousness can be established by the effect of the impugned measure on even a single person.³⁰⁹ In *Bedford*, the Supreme Court held that two

³⁰⁵ *ETFO et al. v. Her Majesty the Queen*, 2019 ONSC 1308 (Div Ct) at ¶¶4 and 144.

³⁰⁶ *ETFO et al. v. Her Majesty the Queen*, 2019 ONSC 1308 (Div Ct) at ¶145.

³⁰⁷ The federal Emissions Reduction Plan relies on Ontario’s policies to sufficiently reduce emissions in the province, which reflects the fact that provinces control the policy levers for many key emissions sources. See **Canada’s Emissions Reduction Plan**, Exhibit “4” to the Transcript of Sara Hastings-Simon Cross-Examination on May 26, 2022, at pp 87, 89, 183-84, 196, 3rd Supp AR, Tab 8, pp 105-106, 110-112.

³⁰⁸ *Canada (Attorney General) v. Bedford*, 2013 SCC 72, at ¶120.

³⁰⁹ *Canada (Attorney General) v. Bedford*, 2013 SCC 72, at ¶¶122-123.

criminal offences relating to prostitution failed the test for gross disproportionality: given the evidence that these provisions increased the risk of danger to sex workers, their effect was “grossly disproportionate to the deterrence of community disruption that is the object of the law.”³¹⁰

175. A similar conclusion follows in this case. However one chooses to characterize the objective of the Target, the seriousness of the s. 7 deprivations that will result are totally out of sync with that objective. Again, the Target commits Ontario to GHG that will take it well beyond its share of the remaining Global Carbon Budget, and which is consistent with a level of global emissions well beyond the Paris Standard — one reaching as high as 3-5°C. The unchallenged evidence is that based on extreme heat events alone, such a temperature increase will result in *hundreds to thousands of additional deaths across just four Ontario cities*. The threat is not just serious; it is existential. That is particularly true for youth such as the Applicants and the future generations that will follow them: they will bear the brunt of the increased death, disease and severe harm that will result from the catastrophic impacts of climate change in Ontario.

(B) Arbitrariness

176. The test for arbitrariness is “not entirely settled”. On one approach, the inquiry is whether limiting s. 7 interests was “necessary” to further the state objective; the competing approach asks whether “a deprivation of a right... bears no relation to, or is inconsistent with” the state objective.³¹¹ The Applicants submit that the “necessity” standard ought to be preferred, as it is more consistent with a s. 7 framework that seeks to impose principled limits on the deprivations of life, liberty, or security of the person. On either approach, however, the Target is arbitrary.

³¹⁰ *Canada (Attorney General) v. Bedford*, 2013 SCC 72, at ¶136.

³¹¹ *Canada (Attorney General) v PHS Community Services Society*, [2011] 3 S.C.R. 134 at ¶132.

177. The starting point for the arbitrariness analysis is to define the Target’s objective. In so doing, three principles must be kept in mind. First, the relevant objective is that of the *specific impugned measure* — in this case, the Target passed pursuant to the *CTCA* — as opposed to other elements of the Plan or the *CTCA* more broadly.³¹² Second, the objective must be “defined precisely” instead of adopting an “animating social value”; otherwise the selection of the objective “has the potential to short-circuit the analysis” and “immunize the law from challenge under the *Charter*”. Thus, in *Carter*, the Supreme Court rejected the argument that the objective of the prohibition on physician-assisted dying could properly be framed as “the preservation of life.”³¹³ Third, the arbitrariness analysis is “not concerned with competing social interests or public benefits conferred by the impugned law”; the state should not be “attempting to bring social interests into the principles of fundamental justice” analysis and thereby limit s. 7 rights. Those are matters to be addressed as part of the s. 1 analysis.³¹⁴

178. By the very terms of the Plan, the Target is part of Ontario’s effort to “do our share to address climate change and protect our environment”³¹⁵, which also reflects Ontario’s objective of ensuring “we pass on a cleaner environment to future generations.”³¹⁶ In an arbitrariness analysis, the court’s task is to “evaluate the issue in the light, not just of common sense or theory, but of the

³¹² See, for example, *Carter v. Canada (Attorney General)*, 2015 SCC 5, at ¶¶76-78 (focusing specifically on the purpose of s. 241(b) of the *Code*).

³¹³ *Carter v. Canada (Attorney General)*, 2015 SCC 5, at ¶¶76-78. Thus, in *Carter*, the Supreme Court rejected the argument that the objective of the prohibition on physician-assisted dying could properly be framed as “the preservation of life.”

³¹⁴ *Carter v. Canada (Attorney General)*, 2015 SCC 5, at ¶¶79-80.

³¹⁵ **Plan**, AR Vol 2, Tab 9Y, at p 3419 (emphasis added). See also **Plan**, AR Vol 2, Tab 9Y, at pp 3414 (the Plan will “support[t] Ontarians to continue to do their share to reduce greenhouse gas emissions”), 3415 (under the Plan, Ontario will “continue to do our share to reduce greenhouse gases”), 3418 (the Plan will “support Ontarians to continue to do their share to reduce greenhouse gas emissions”), and 3447 (“Ontario is committed to doing its part to address climate change”).

³¹⁶ **Plan**, AR Vol 2, Tab 9Y, at p 3419. See also **Plan**, AR Vol 2, Tab 9Y, at pp 3414 (“We recognize the importance of a clean environment to our health, our wellbeing and our economic prosperity for future generations”), and 3458 (conserving “healthy natural spaces for future generations to use and enjoy”).

evidence.”³¹⁷ The evidence in this case establishes that the Target bears no relationship to, and is inconsistent with, the objectives of Ontario doing its “share” to reduce GHG and protecting the environment for future generations. The Target does not reflect Ontario’s fair “share” of the GHG reductions required to meet the Paris Standard: Dr. Matthews’ evidence on this point is clear and stands uncontradicted. The record is equally clear that even at a 2°C carbon budget — one that is plainly not compliant with the Paris Standard³¹⁸ — Ontario will have used, if not exceeded, its full share of emissions by 2030 under the Target. In short, the Target allows for GHG far in excess of Ontario’s share of the Global Carbon Budget, leading to environmental destruction, not protection, and placing “future generations” at heightened risk of death, illness, and serious harm. This is the very definition of arbitrariness, under either approach adopted by the Supreme Court.

(v) *The s. 7 Deprivations Do Not Accord with the Principle of Societal Preservation*

179. The s. 7 deprivations in this case are not only grossly disproportionate and arbitrary, but they also violate the societal preservation principle: a government cannot engage in conduct that will, or could reasonably be expected to, result in the future harm, suffering, or death of a significant number of its own citizens. The Applicants respectfully submit this Court should recognize the societal preservation principle as a principle of fundamental justice.

180. A principle of fundamental justice must: (i) be a legal principle; (ii) enjoy “significant societal consensus” that it is fundamental to the way the legal system ought fairly to operate; and (iii) “be sufficiently precise so as to yield a manageable standard against which to measure deprivations of life, liberty or security of the person”.³¹⁹ The process of determining principles of

³¹⁷ *Chaoulli v. Quebec (Attorney General)*, 2005 SCC 35, at ¶150 (per McLachlin CJC and Major J). See also: *Canada (Attorney General) v PHS Community Services Society*, [2011] 3 S.C.R. 134 at ¶132.

³¹⁸ **Matthews Report**, AR Vol 3, Tab 10B, at p 5653; *Glasgow Climate Pact*, UNFCCC, UN Doc FCCC/PA/CMA/2021/L.16, s 21 (entered into force 13 Nov 2021); *Paris Agreement*, at art. 2.1.

³¹⁹ *Canada (Attorney General) v. Federal of Law Societies of Canada*, [2015] 1 S.C.R. 401 at ¶87.

fundamental justice is one of “identifying and giving legal recognition to those values that are appropriate to a constitutional order founded upon principles that include respect for human freedom and dignity, the recognition of basic human rights, and the rule of law.”³²⁰

181. The societal preservation principle satisfies the three requirements for a principle of fundamental justice, and more generally reflects the kind of values that are appropriate to—and, indeed, inherent in—the Canadian constitutional order.

182. The societal preservation principle is a “**legal principle**”. Prof. Stewart notes this requirement is “not especially restrictive” and “does not exclude legal principles that have some moral content or that have parallels in morality.”³²¹ Standards emanating from “the realm of general public policy” will fall short, but those reflecting “a normative legal principle” or “the basic tenets of our legal system” will qualify.³²² The societal preservation principle falls in the latter camp. It is deeply rooted in, and flows directly from, the most fundamental values underlying s. 7 and the *Charter* more generally, including the respect for human dignity³²³ and the sanctity of life.³²⁴ Indeed, the principle goes straight to the core of why a government even *exists*, which is to preserve the security and posterity of the society being governed.³²⁵ And while it has not been expressly codified, the societal preservation principle is analogous to similar existing domestic³²⁶ and international legal doctrines³²⁷ prohibiting conduct by the state that inflicts harm on its own

³²⁰ H. Stewart, *Fundamental Justice* (2nd ed) at p 119, ABOA, Tab 1.

³²¹ H. Stewart, *Fundamental Justice* (2nd ed) at p 124, ABOA, Tab 1.

³²² *Canada (Attorney General) v. Federal of Law Societies of Canada*, [2015] 1 S.C.R. 401 at ¶89.

³²³ *Rodriguez v. British Columbia (Attorney General)*, [1993] 3 S.C.R. 519 at 592 (“Respect for human dignity underlines many of the rights and freedoms in the *Charter*... [it] is the genesis for many principles of fundamental justice...”)

³²⁴ *Carter v. Canada (Attorney General)*, 2015 SCC 5, at ¶63 (“The sanctity of life is one of our most fundamental societal values. Section 7 is rooted in a profound respect for the value of human life.”)

³²⁵ See, for example, *Reference re Assisted Human Reproduction Act*, [2010] 3 S.C.R. 457 at ¶58 (“To preserve human life and security is the state’s most fundamental concern”).

³²⁶ See, for example, *United States v. Johnstone*, 2013 BCCA 2 at ¶50; *Suresh v. Canada (Minister of Citizenship and Immigration)*, 2002 SCC 1 at ¶56.

³²⁷ See, for example, *Steen v. Islamic Republic of Iran*, 2013 ONCA 30 at ¶30.

people, such as torture, genocide, and extradition to face torture. Chief Justice McLachlin, writing extrajudicially, has gone even further, writing that “legal systems must adhere to certain basic norms” and identified the assertion in human rights law that states “should avoid killing [their citizens] indirectly by famine, medical neglect, and degradation of the environment.”³²⁸

183. The societal preservation principle also finds support in Indigenous legal doctrines, such as the “Seventh Generation Principle” of the Iroquois Confederacy, which demands that present-day decisions be made in order to provide an environmentally sustainable world for the next seven generations.³²⁹ The United Nations Declaration on the Rights of Indigenous Peoples echoes the Seventh Generation Principle, setting out that Indigenous peoples have the right to “uphold their responsibilities to future generations” in maintaining and strengthening the health of the environment in accordance with traditional beliefs.³³⁰

184. The societal preservation principle also satisfies the “**sufficient consensus**” requirement. The proper analysis is not based on empirical data or a strictly historical review, but rather a normative approach recognizing that the principles of fundamental justice ought to reflect “a legal order committed to respecting human dignity and the rule of law” and that “these values themselves constitute the societal consensus necessary to the recognition of a principle of fundamental justice.”³³¹ As set out above, the societal preservation principle reflects, is grounded

³²⁸ Beverley McLachlin, “[Unwritten Constitutional Principles: What is Going On?](#)” (2006) 4 NZJPIL 147 at 150.

³²⁹ See N. Chalifour, J. Earle & L. Macintyre, “[Coming of Age in a Warming World: The Charter’s Section 15\(1\) Equality Guarantee and Youth-Led Climate Litigation](#)” (2021) 17 1 J L & Equality 1 at 62. See also David W-L Wu, “[‘Tsilhqot’in Nation as a Gateway Towards Sustainability: Applying the Inherent Limit to Crown Land](#)” (2015) 11 2 JSDLP 124 at 130. See also *R. v. Tommy*, 2008 BCSC 1095 at ¶¶57-58 (using 7th generation principle as interpretive aid to determine that “sustainability” is integral to the legal concept of “conservation”).

³³⁰ [United Nations Declaration on the Rights of Indigenous Peoples](#), 13 September 2007 (A/RES/61/295) [UNDRIP], art 25. UNDRIP is a valid source of interpretation in Canadian law: see *Attawapiskat First Nation v Ontario* 2022 ONSC 1196 (Div Ct.) at ¶96. The use of UNDRIP to interpret Canadian law has also been endorsed in the federal [United Nations Declaration on the Rights of Indigenous Peoples Act](#), S.C. 2021, c. 14 (s. 4(a) affirms UNDRIP as a “universal human rights instrument with application in Canadian law”).

³³¹ H. Stewart, *Fundamental Justice* (2nd ed) at p 125, [ABOA](#), Tab 1.

in, and is a natural extension of the fundamental values underlying the Canadian constitutional order and the essence of the state's role in that order, including a respect for human dignity and the sanctity of life, and the protection of society. But the societal preservation principle goes even further: it is, in a real sense, the essential underpinning for the *entire* Canadian constitutional order.

185. In arguing for why “ecological sustainability” is an “underlying principle of the Canadian constitutional order”, Professors Collins and Sossin (as he then was) make the following point:

...[P]hysical self-preservation is a fundamental imperative for all human beings, and societal preservation is a fundamental imperative for the state. If our constitutional text fails to protect the ecosystems on which all of the enumerated rights and powers delineated therein depend, **it must be because the principle of environmental protection is so fundamental so as to be both implicit and obvious, much like the principle of democracy—a basic, underlying structure that supports every other provision in the written Constitution.**³³²

186. The same logic applies, *a fortiori*, to the societal preservation principle. What could be more fundamental to constitutional order than the existence and well-being of the sovereign people that are subject to that order? What use is a *Charter* aimed at safeguarding rights and the rule of law for a “free and democratic society” if a government is free to place the very existence of that society at risk? Seen in this light, the societal preservation principle is the bedrock upon which the constitutional order rests. It is a principle that supports not just the values reflected in the Canadian constitutional order, but the very existence of that order itself.

187. Finally, the societal preservation principle is **sufficiently precise**. The principle must be “sufficiently precise to provide a workable standard in that it can be applied in a manner that provides guidance as to the appropriate result.”³³³ As such, a “generalized assessment of the

³³² L. Collins and L. Sossin, “[Approach to Constitutional Principles and Environmental Discretion in Canada](#)” (2019) 52:1 UBC L Rev 239 at pp 294, 323 (emphasis added).

³³³ [Canada \(Attorney General\) v. Federal of Law Societies of Canada](#), [2015] 1 S.C.R. 401 at ¶92.

injustice of the legislation, or vague generalizations about what our society considers to be ethical or moral” will be inadequate.³³⁴ The societal preservation principle is not a vague generalization or assessment of injustice: it is focused on a specific subset of conduct with specific consequences, framed in terms that are commonplace in terms of judicially cognizable standards (*e.g.* actual or constructive knowledge, and the significance of a particular event or consequence³³⁵). It is just as workable as other legal standards adopted by the Supreme Court under s. 7, including for example a prohibition against government conduct that “shocks the conscience” of Canadians.³³⁶

D. ONTARIO’S CONDUCT VIOLATES SECTION 15 OF THE *CHARTER*

188. There is a two-step test for establishing a claim under s. 15: (i) does the impugned law, on its face *or in its impact*, create a distinction based on a ground enumerated in s. 15 or a ground that is analogous to them?; and (ii) if so, does it impose burdens or deny a benefit in a manner that has the effect of reinforcing, perpetuating, or exacerbating disadvantage?³³⁷

189. Both branches of this test are met in this case. Youth — and, in particular, young people — and future generations will bear a disproportionate burden of climate change’s most devastating impacts, exacerbating the existing disadvantages of these already highly vulnerable groups.

(i) *Youth and Future Generations will be Disproportionately Impacted*

190. This first step of the s. 15 analysis “is not a preliminary merits screen, nor an onerous hurdle designed to weed out claims on technical bases”.³³⁸ Even a facially-neutral law may violate s. 15

³³⁴ H. Stewart, *Fundamental Justice* (2nd ed) at p 124, ABOA, Tab 1.

³³⁵ See, *e.g.*, Winko v. British Columbia (Forensic Psychiatric Institute), [1999] 2 S.C.R. 627 at ¶57 (test of whether someone poses a “significant threat to public safety”); Ezokola v. Canada (Citizenship and Immigration), [2013] 2 SCR 678 at ¶36 (test of whether someone made a “significant contribution” to a crime or criminal purpose of a group).

³³⁶ Suresh v. Canada (Minister of Citizenship and Immigration), 2002 SCC 1 at ¶49.

³³⁷ Ontario (Attorney General) v. G., 2020 SCC 38 at ¶40.

³³⁸ Quebec (Attorney General) v. Alliance du personnel professionnel et technique de la santé et des services sociaux, 2018 SCC 17, at ¶26.

where it has “a disproportionate impact on members of groups protected on the basis of an enumerated or analogous ground”.³³⁹ This can be established in different ways, such as where members of the protected group are “forced to take on burdens more frequently than others”.³⁴⁰

191. This case challenges the adverse effects discrimination flowing from the Target.³⁴¹ The Target, in its effects, creates a distinction based on the enumerated ground of age. It imposes distinct burdens on different Ontarians based on their age and when they are born.

192. Many past cases that have dealt with age discrimination were challenges to legislation that set “cut-off” ages for particular activities and thus created an age-based distinction on their face.³⁴² These cases, which focus heavily on the capacities of the excluded young people, are of limited assistance to a case of adverse-effects age-based discrimination, such as this one. Indeed, the nature of the age-based discrimination claim in this case is one based not only on age, but also on *generation* or birth cohort — that is, one that flows from when an individual was or will be born — and not a particular age cut-off or eligibility requirement.³⁴³

193. On its face, Ontario’s Target and its enabling statutory regime does not distinguish between Ontarians of different ages or generations. However, youth and future generations will be impacted more acutely and more substantially due to their age. This occurs in three distinct ways.

194. **First**, as outlined above, young people are particularly susceptible to negative physical health impacts resulting from climate change. This is true for virtually all of the impacts that have

³³⁹ *Fraser v. Canada (Attorney General)*, 2020 SCC 28 at ¶¶30, 52.

³⁴⁰ *Fraser v. Canada (Attorney General)*, 2020 SCC 28 at ¶55.

³⁴¹ *Mathur v. Ontario*, 2020 ONSC 6918, at ¶180.

³⁴² See, e.g., *A.C. v. Manitoba (Director of Child and Family Services)*, 2009 SCC 30, at ¶110.

³⁴³ The Supreme Court has taken a “robust intersectional” approach when determining the scope of an enumerated ground, rather than requiring claimants to make their arguments on the basis of an analogous ground: see, for example, *Fraser v. Canada (Attorney General)*, 2020 SCC 28 at ¶116 (analyzing gender and parenting considerations under the enumerated ground of “sex”); *Corbiere v. Canada*, [1999] 2 S.C.R. 203 at ¶15 (noting that pregnancy “is a distinct, but fundamentally interrelated form of discrimination from gender”).

been the subject of expert testimony, from heat waves to forest fires to algal blooms.³⁴⁴ Young people will experience these devastating impacts and bear the burdens of climate change differently, more severely, and disproportionately as compared to other Ontarians. Similarly, youth will bear a disproportionate impact of the mental health impacts of climate change.

195. **Second**, the catastrophic impacts of climate change that have been extensively canvassed above will worsen over time as global temperatures continue to rise. Both the frequency and severity of these harms will increase as global warming exceeds 1.5°C in the future, and will continue to worsen over time as temperatures rise beyond that level. By virtue of their age, youth and future generations will bear the brunt of these impacts as they live longer into the future.³⁴⁵

196. **Third**, their liberty and future life choices are being constrained by decisions being made today over which they have no control. Young people have no ability to vote and are thus limited in their ability to shape public policy. By the time they come of age, it may be too late to mitigate climate change, or they may face additional burdens and limits to their freedom related to extreme measures needed if Ontario has already exceeded its share of the Carbon Budget.³⁴⁶ Poor choices being made by today’s adults will hamstring future generations for years to come.

197. In these ways, Ontario’s policies have the adverse effect of disadvantaging a protected group by virtue of an enumerated ground — namely, age. In its motion to strike, Ontario argued that the distinction in this case is not based on the enumerated ground of age, but rather is merely

³⁴⁴ See ¶¶104-110, *supra*.

³⁴⁵ See ¶109, *supra*.

³⁴⁶ See *Neubauer et al v Germany*, (2021) Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Germany) [[unofficial English Translation](#)] at ¶117: “The fundamental freedoms of the [youth] complainants might have been violated on the grounds that the [German] Federal Climate Change Act offloads significant portions of the greenhouse gas reduction burdens required under Art. 20a GG onto the post-2030 period. Further mitigation efforts might then be necessary at extremely short notice, placing the complainants under enormous (additional) strain and comprehensively jeopardising their freedom protected by fundamental rights. Practically all forms of freedom are potentially affected because virtually all aspects of human life involve the emission of greenhouse gases (...) and are thus potentially threatened by drastic restrictions after 2030.”

a temporal distinction from a change in the law.³⁴⁷ This is incorrect. The Target creates a distinction on the basis of age. As discussed above, young people will be disproportionately impacted due to their unique physiology, and circumstances that are directly tied to their age. The same is true for youth as it relates to mental health impacts. Further, the cumulative and compounding effects of climate change will disproportionately harm youth and future generations based on the timing of their birth. This is an age-based distinction.

198. In the alternative, in the event that this Court concludes the distinction in this case based on future generations is not one that is based on the enumerated ground of “age”, it is based on the analogous ground of “generational cohort”. This ground bears very strong similarities to the enumerated ground of age, and therefore should benefit from s. 15’s protection.³⁴⁸ The recognition of analogous grounds “must be undertaken in a purposive and contextual manner”.³⁴⁹ The timing of one’s birth bears the classic hallmark of s. 15’s enumerated and analogous grounds: it is an immutable personal characteristic.³⁵⁰ Just as one cannot change their ethnicity or national origin, they cannot change when they happen to be born. Further, a central characteristic of analogous grounds is whether “those defined by the characteristic are lacking in political power, disadvantaged, or vulnerable to becoming disadvantaged or having their interests overlooked”.³⁵¹ As described further below, this is an apt description of young people and future generations, who lack political power and are vulnerable to having their interests overlooked or disregarded.

³⁴⁷ In support of this point, Ontario relied on a number of cases that held that a s. 15 claim can’t be based on workers who were subject to an old vs. new worker compensation regime. But such cases are readily distinguishable as the claimants did not advance any arguments of age-based discrimination.

³⁴⁸ *Corbiere v. Canada*, [1999] 2 S.C.R. 203 at ¶13 (per McLachlin C.J.). See also: N. J. Chalifour, J. Earle, and L. Macintyre, “[Coming of Age in a Warming World: The Charter’s Section 15\(1\) Equality Guarantee and Youth-Led Climate Litigation](#)”, (2021) 17 J L & Equality 1 at 60-61.

³⁴⁹ *Corbiere v. Canada*, [1999] 2 S.C.R. 203 at ¶59 (per L’Heureux-Dubé J.).

³⁵⁰ *Corbiere v. Canada*, [1999] 2 S.C.R. 203 at ¶13 (per McLachlin C.J.).

³⁵¹ *Corbiere v. Canada*, [1999] 2 S.C.R. 203 at ¶60 (per L’Heureux-Dubé J.).

(ii) *This Differential Treatment Will Heighten Pre-Existing Vulnerabilities*

199. The second step of the s. 15 analysis examines whether the state conduct imposes burdens or denies benefits in a way that reinforces, perpetuates, or exacerbates disadvantage.³⁵² The disproportionate impact of the Target on youth — and, in particular, young people — and future generations produces exactly this result.

200. Substantive equality requires the courts to focus “on the concrete, material impacts the challenged law has on the claimant and the protected group or groups to which they belong in the context of their actual circumstances, including historical and present-day social, political, and legal disadvantage”.³⁵³ The second step of the s. 15 analysis does not involve a “rigid template” of relevant factors; the analysis must remain flexible and can consider a broad range of harms.³⁵⁴

201. The Target imposes burdens on young people and future generations in a manner that reinforces, perpetuates, and/or exacerbates their historic disadvantage. Again, the harms that young people and future generations will experience as a result of climate change are profound. These harms must be viewed in light of the systemic and historical disadvantages faced by these groups.³⁵⁵ Where government conduct “widens the gap between the historically disadvantaged group and the rest of society rather than narrowing it, then it is discriminatory”.³⁵⁶

202. The historic disadvantage of young people is well-established. The Supreme Court has repeatedly found that as a result of their age, young persons have “heightened vulnerability”³⁵⁷

³⁵² *Fraser v. Canada (Attorney General)*, 2020 SCC 28 at ¶27; *Quebec (Attorney General) v. Alliance du personnel professionnel et technique de la santé et des services sociaux*, 2018 SCC 17, at ¶25; *Kahkewistahaw First Nation v. Taypotat*, 2015 SCC 30, at ¶¶19-20. Prejudice and stereotyping are not discrete requirements of the test, though they may be indicia of discrimination: *Quebec (Attorney General) v. A.*, 2013 SCC 5 at ¶325 (per Abella J., dissenting in the result but not on this point).

³⁵³ *Ontario (Attorney General) v. G.*, 2020 SCC 38 at ¶43.

³⁵⁴ *Fraser v. Canada (Attorney General)*, 2020 SCC 28 at ¶76. These include economic exclusion, social exclusion, psychological harms, physical harms, and political exclusion.

³⁵⁵ *Fraser v. Canada (Attorney General)*, 2020 SCC 28 at ¶76.

³⁵⁶ *Quebec (Attorney General) v. A.*, 2013 SCC 5 at ¶332.

³⁵⁷ *R. v. C.P.*, 2021 SCC 19, at ¶¶79, 85 (per Abella J.); *R. v. D.B.*, 2008 SCC 25, at ¶41.

and are “a highly vulnerable group”.³⁵⁸ As McLachlin C.J. wrote, “a court assessing an equality claim involving children must do its best to take into account the subjective viewpoint of the child, which will often include a sense of relative disempowerment and vulnerability”.³⁵⁹

203. Young people have historically been viewed as a powerless and unimportant group, both politically and economically, and have been excluded from consideration and decision-making as a result.³⁶⁰ By virtue of being excluded from being able to cast votes in elections, they are a group “lacking in political power and as such vulnerable to having their interests overlooked and their rights to equal concern and respect violated” and one that is “relatively powerless politically and whose interests are likely to be compromised by legislative decisions”.³⁶¹ Legislators frequently discount or disregard their interests in favour of furthering the interests of others with greater political and economic power. These concerns apply with even stronger force to future generations.

204. The law often approaches young people from a position of paternalism, believing that legislators can decide what is best for them; it may take years or even decades to correct these attitudes and for the law to properly recognize their rights.³⁶² Further, as a result of their limited independence and relative political powerlessness, young people are often dependent on their caregivers and the state to protect them. They must often depend upon the government to “shield [them] from psychological and physical harm”.³⁶³ Again, these considerations also apply to future

³⁵⁸ *Canadian Foundation for Children, Youth & the Law v. Canada (Attorney General)*, 2004 SCC 4 at ¶56. See also ¶225 (per Deschamps J., dissenting).

³⁵⁹ *Canadian Foundation for Children, Youth & the Law v. Canada (Attorney General)*, 2004 SCC 4 at ¶53.

³⁶⁰ Indeed, children have historically been viewed as mere property or chattels of their parents/caregivers: see *Canadian Foundation for Children, Youth & the Law v. Canada (Attorney General)*, 2004 SCC 4 at ¶225 (per Deschamps J., dissenting).

³⁶¹ *Andrews v. Law Society of British Columbia*, [1989] 1 S.C.R. 143, at 152 and 195.

³⁶² *R. v. C.P.*, 2021 SCC 19, at ¶¶68-70 (per Abella J.) and ¶138 (per Wagner C.J.) (re youth criminal justice).

³⁶³ *Canadian Foundation for Children, Youth & the Law v. Canada (Attorney General)*, 2004 SCC 4 at ¶58.

generations, who are *entirely* dependent on the state to protect the world so that it does not pose grave threats to those generations upon their birth.

205. The Target reinforces, perpetuates, and exacerbates these disadvantages in at least two ways. *First*, the Target exacerbates the disproportionate burden young people already bear from environmental hazards leading to preventable illness and death³⁶⁴, as well as the existing mental health crisis among youth.³⁶⁵ By contributing to climate change and the attendant significant physical and psychological harms that will result, the Target will make this existing disproportionate burden on young people and future generations an even heavier one — reflecting an abdication of the state’s role to protect and shield them from the worst possible harms.

206. In so doing, Ontario is sending the message that the lives and health of these already disadvantaged groups are less worthy of protection, particularly when compared to the interests of older generations. This runs directly counter to the purposes of s. 15 of the *Charter* to “promote a society where all persons are considered worthy of respect and consideration”.³⁶⁶

207. *Second*, Ontario’s actions reinforce, perpetuate, and exacerbate the disadvantages experienced by young persons and future generations by making fundamental decisions regarding the world that they will be forced to inhabit without their input and without taking their needs and interests into account. This propagates the patterns of powerlessness and paternalism to which young persons and future generations are already subjected in our society.

208. This aspect of Ontario’s conduct is particularly troubling, since the harms to which Ontario is contributing may soon become irreversible. As discussed above, as global temperatures rise

³⁶⁴ **Buse Report**, AR Vol 3, Tab 17B, at p 6092; **Impacts of Climate Change on Inequities in Child Health**, Appendix 2 to the **Buse Report**, AR Vol 3, Tab 17B, Appendix 2, at pp 6122-23.

³⁶⁵ **Cunsolo Report**, AR Vol 3, Tab 20B, at pp 6158, 6168-69.

³⁶⁶ *Corbiere v. Canada*, [1999] 2 S.C.R. 203 at ¶5.

above 1.5°C, it becomes increasingly likely that the planet will surpass certain climate “tipping points” that accelerate the effects of climate change and “can be very hard, if not impossible, to stop”.³⁶⁷ Since climate change’s impacts may well become irreversible if immediate action is not taken, the Target deprives younger generations of being able to roll back these impacts once they become old enough to truly influence decision-making. Thus, Ontario has made fundamental choices impacting the health and liberty of youth and future generations without giving them the ability to influence that choice or even change it in the future if they disagree with it.

209. Even if a future government wanted to change course and that option remained possible given the state of global warming at that point in time, since the Target burns through Ontario’s share of the Global Carbon Budget, immediate and drastic GHG reductions post-2030 would be required.³⁶⁸ This, in turn, would severely impact youth and future generations by drastically limiting their freedom of choice in the future.³⁶⁹ In this way, the Target is, at the very least, saddling these groups with a greater burden to prevent climate change’s impacts than the one experienced by older generations of Ontarians today.

210. Simply put, the Target not only exacerbates and reinforces the existing powerlessness and vulnerabilities of young people and future generations, but also effectively constrains their ability to address the climate crisis in the future.³⁷⁰ By condemning them to bear the brunt of climate

³⁶⁷ **Lenton Report**, AR Vol 3, Tab 24B, at p 6928, 6945. See also IPCC’s **Climate Change 2022: Impacts, Adaptation and Vulnerability Summary for Policymakers**, Appendix 2 to the Affidavit of Dr. Robert McLeman, affirmed April 6, 2022, Reply AR, Tab 3B, Appendix 2, at pp 142, 152 (expressing “high confidence” that increasing global temperatures has and will lead to “irreversible impacts”).

³⁶⁸ **Matthews Report**, AR Vol 3, Tab 10B, at pp 5660.

³⁶⁹ For instance, see *Neubauer et al v Germany*, (2021) Case No. BvR 2656/18/1, BvR 78/20/1, BvR 96/20/1, BvR 288/20 (Germany) [[unofficial English Translation](#)] at ¶192: “one generation must not be allowed to consume large portions of the CO2 budget while bearing a relatively minor share of the reduction effort, if this would involve leaving subsequent generations with a drastic reduction burden and expose their lives to serious losses of freedom.”

³⁷⁰ See: N. Chalifour, J. Earle, and L. Macintyre, “[Coming of Age in a Warming World: The Charter’s Section 15\(1\) Equality Guarantee and Youth-Led Climate Litigation](#)”, (2021) 17 J L & Equality 1 at 87 (“Children’s inability

change’s harms and burdens—through no fault of their own, due only to when they happen to be born— Ontario has drastically widened the gap between this historically disadvantaged group and the rest of society, rather than narrowing it. That is discrimination.

(iii) *The Discriminatory Impacts are Amplified for Indigenous Young People*

211. The discriminatory effects of the Target will be felt even more acutely by Indigenous young people and future generations. The Supreme Court has explained that “intersecting group membership tends to amplify discriminatory effects”.³⁷¹ That is why substantive equality requires an appreciation for the full context of s. 15 claims.

212. As outlined above, if global warming exceeds 1.5°C, Indigenous Peoples — and Indigenous young people in particular — will experience disproportionate harms and will be negatively impacted by climate change faster and more acutely than other Ontarians.³⁷² The disproportionate impact of climate change on Indigenous Peoples has been recognized by the Supreme Court of Canada.³⁷³ Moreover, much of the distinct harms from climate change that Indigenous Peoples experience are related to, or made worse by, the existing disadvantages and legacies of colonialism that they face. Indigenous youth and future generations are therefore in a unique position to experience the negative impacts of climate change disproportionately due both to their age and their Indigeneity.

213. When assessing the second prong of the s. 15 analysis, these unique experiences and particular vulnerabilities of Indigenous young people when it comes to the devastating impacts of

to influence political decisions through elections creates a powerlessness that is especially stark given that the choices made today—well before youth can exert political influence—have such important irreversible and existential impacts on their future”).

³⁷¹ *Ontario (Attorney General) v. G*, 2020 SCC 38 at ¶47. Intersecting group memberships can also “create unique discriminatory effects not visited upon any group viewed in isolation”.

³⁷² See ¶¶111-115, *supra*.

³⁷³ *Reference re Greenhouse Gas Pollution Pricing Act*, 2021 SCC 11 at ¶206. The increased vulnerability of Indigenous Peoples has also been recognized by Ontario itself: see ¶111, *supra*.

climate change must be considered. The discriminatory effects of the Target are uniquely amplified for Indigenous young people and future generations due to their “intersecting group membership”. In this way, the Target serves to further widen the gap between some of our society’s most disadvantaged members and those who do not share these intersecting identities, and highlights how Ontario’s actions reinforce, perpetuate, and exacerbate existing disadvantages.

E. UNWRITTEN CONSTITUTIONAL PRINCIPLE OF SOCIETAL PRESERVATION

214. The Applicants submit that, in addition to being a principle of fundamental justice, the societal preservation principle is also an unwritten constitutional principle, for the same reasons outlined in Part III.C.v, *supra*. In *Toronto (City)*, the Supreme Court explained that unwritten constitutional principles “may be used in the interpretation of constitutional provisions”, including “to assist with purposive interpretation, informing ‘the character and larger objects of the *Charter* itself [and] the language chosen to articulate the specific right or freedom’”.³⁷⁴

215. In this case, the societal preservation principle supports the interpretation of ss. 7 and 15 of the *Charter* set out above—namely, one that recognizes the *Charter* must protect against state conduct with a sufficient causal connection to the catastrophic impacts of climate change, which will disproportionately impact youth and future generations.

F. REMEDIES

216. The Applicants seek declarations that:

- (a) the Target set pursuant to the *CTCA* is unconstitutional and violates the rights of Ontario’s youth and future generations under ss. 7 and 15 of the *Charter*, in a manner that cannot be saved under s. 1 of the *Charter*; and

³⁷⁴ *Toronto (City) v. Ontario (Attorney General)*, 2021 SCC 34 at ¶55.

- (b) ss. 3(1) and/or 16 of the *CTCA* are unconstitutional and violate ss. 7 and 15 of the *Charter*, in a manner that cannot be saved under s. 1 of the *Charter*, to the extent that they allowed for the imposition of the Target without mandating that it be set with regard to the Paris Standard or any kind of science-based process.

217. The Applicants also seek an order directing Ontario to:

- (a) set a science-based target for the allowable levels of GHG under s. 3(1) of the *CTCA* that is consistent with Ontario’s share of the minimum level of GHG reductions necessary to limit climate change to the Paris Standard (“**Revised Target**”); and
- (b) revise its climate change plan under the *CTCA* once it has set the Revised Target.

218. The declaratory relief sought by the Applicants ought to be granted pursuant to s. 52(1) of the *Constitution Act, 1982*. The Target qualifies as a “law” for the purposes of s. 52(1), such that it can be struck down for inconsistency with the *Charter*. In *GVTA*, the Supreme Court adopted “a broad interpretation of the concept of ‘law’” in the s. 52(1) context, which includes “binding rules of general application” adopted by a government entity (for example, a transit authority’s advertising policy).³⁷⁵ Such rules “can have wide-ranging effects” making them appropriate candidates for a s. 52(1) remedy, and can be distinguished from “an individualized form of government action like an adjudicator’s decision or a decision by a government agency concerning a particular individual or a particular set of circumstances.”³⁷⁶ The Target falls in this same category and squarely engages the policy rationales articulated by the Court in *GVTA*. In the alternative, the same kind of declaratory relief is available pursuant to s. 24(1) of the *Charter*³⁷⁷ and is also available pursuant to this Court’s inherent jurisdiction to grant declaratory relief.³⁷⁸

³⁷⁵ *Greater Vancouver Transportation Authority v. Canadian Federation of Students*, 2009 SCC 31, at ¶¶86-90.

³⁷⁶ *Greater Vancouver Transportation Authority v. Canadian Federation of Students*, 2009 SCC 31, at ¶¶87-88.

³⁷⁷ *Greater Vancouver Transportation Authority v. Canadian Federation of Students*, 2009 SCC 31, at ¶87.

³⁷⁸ *BCCLA v. Canada (Attorney General)*, 2019 BCCA 228 at ¶266.

219. The further remedial orders sought by the Applicants ought to be granted pursuant to a “generous and expansive”³⁷⁹ view of this Court’s ability under s. 24(1) of the *Charter* to grant such relief as is “appropriate and just in the circumstances”, and/or pursuant this Court’s inherent jurisdiction.³⁸⁰ These orders can be fairly characterized as what Prof. Roach has called a “declaration plus”-type remedy³⁸¹: an “intermediate remedy between a general declaration and a specific injunction” that “combines the generality of the declaration with the court’s retention of jurisdiction.”³⁸² The Supreme Court’s decision in *Doucet-Boudreau*—upholding the trial court’s ongoing retention of jurisdiction over an order requiring a province to make “best efforts” to achieve certain French-language education outcomes³⁸³—can be seen as a type of declaration plus relief.³⁸⁴ Indeed, the essence of a declaration plus is that the Court (i) sets “a general goal but then allows the state, ideally in consultation with the parties, to decide the best means to achieve the goal”; and (ii) retains jurisdiction to supervise the process, and can order supplemental relief or process as required (*e.g.* requiring reports, updates, or affidavits to be filed or tested).³⁸⁵

220. The relief sought by the Applicants reflects a “two-track” approach, which has been endorsed by Prof. Roach in the context of climate change litigation.³⁸⁶ Under this approach, the Applicants are not only seeking immediate relief in the form of declaring the Target to be unconstitutional, but also a longer-term, systemic remedy that addresses a new GHG reduction target—the kind of remedy that is “crucial in climate change litigation if we are to make the

³⁷⁹ *Doucet-Boudreau v. Nova Scotia (Minister of Education)*, [2003] 3 S.C.R. 3 at ¶24.

³⁸⁰ *BCCLA v. Canada (Attorney General)*, 2019 BCCA 228 at ¶266.

³⁸¹ “In some cases, it may be appropriate for courts to issue declarations in the form of directions which may have some similarities to mandatory relief”: see Roach, *Constitutional Remedies*, s. 12:12, ABOA, Tab 3.

³⁸² K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 *Journal of Law and Equality* 105 at 126.

³⁸³ *Doucet-Boudreau v. Nova Scotia (Minister of Education)*, [2003] 3 S.C.R. 3 at ¶¶7, 73-74, 87-89.

³⁸⁴ K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 *Journal of Law and Equality* 105 at 126.

³⁸⁵ K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 *Journal of Law and Equality* 105 at 128-129.

³⁸⁶ K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 *Journal of Law and Equality* 105 at 136.

necessary emission reductions in the future to save the planet.”³⁸⁷ Courts outside Canada have adopted similar two-track approaches when dealing with climate change litigation.³⁸⁸

221. A key advantage of the two-track remedial approach in this case is that it avoids dictating how Ontario must arrive at a constitutionally compliant target, or what measures it should take to reach that target. Rather, the Applicants are simply asking this Court to declare the Target unconstitutional and to require Ontario to develop a constitutionally compliant target in line with the scientific evidence, including the evidence before this Court. Policy-laden decisions—particularly those relating to *how* the new target should be met—will remain within the domain of the executive and legislature. This “remedially modest approach” focuses on “the desired outcomes of remedies as opposed to dictating the means to achieve this outcome.”³⁸⁹

222. In the end, the nature, scale, and severity of the rights violations at issue in this case, across multiple generations, are unprecedented. These violations require a meaningful remedy beyond simply declaring Ontario’s actions to be unconstitutional. As in *Doucet-Boudreau*, this Court is being called upon to exercise its role in crafting a creative and effective solution, which includes a component of ongoing supervisory jurisdiction. That does not take this Court beyond its proper institutional bounds. Recognizing constitutional violations, and instituting a fair process to remedy those violations, is well within this Court’s core capacities in constitutional litigation—and that is what the Applicants are respectfully requesting the Court to do in the present case.

³⁸⁷ K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 Journal of Law and Equality 105 at 136.

³⁸⁸ K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 Journal of Law and Equality 105 at 126-12 and 137.

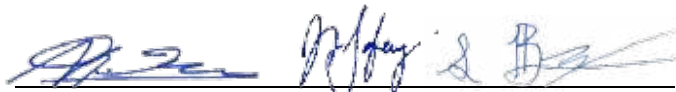
³⁸⁹ K. Roach, “[Judicial Remedies for Climate Change](#)” (2021) 17 Journal of Law and Equality 105 at 109.

PART IV - ORDER REQUESTED

223. The Applicants respectfully request an order:

- (a) declaring that the Target set pursuant to the *CTCA* is unconstitutional and violates the rights of Ontario’s youth and future generations under ss. 7 and 15 of the *Charter*, in a manner that cannot be saved under s. 1 of the *Charter*;
- (b) declaring ss. 3(1) and/or 16 of the *CTCA* are unconstitutional and violate ss. 7 and 15 of the *Charter*, in a manner that cannot be saved under s. 1 of the *Charter*, to the extent that they allow for the imposition of the Target without mandating that it be set with regard to the Paris Standard or any kind of science-based process;
- (c) directing Ontario to set a science-based target for the allowable levels of GHG emissions under s. 3(1) of the *CTCA* that is consistent with Ontario’s share of the minimum level of GHG reductions necessary to limit climate change to the Paris Standard (“**Revised Target**”);
- (d) directing Ontario to revise its climate change plan under s. 4(1) of the *CTCA* once it has set the Revised Target; and
- (e) granting the Applicants their costs of this Application.³⁹⁰

ALL OF WHICH IS RESPECTFULLY SUBMITTED this 23rd day of August, 2022.



STOCKWOODS LLP

Nader R. Hasan / Justin Safayeni / Spencer Bass



ECOJUSTICE

Fraser Andrew Thomson / Danielle Gallant /
Julia Croome / Reid Gomme

Lawyers for the Applicants

³⁹⁰ The Applicants would respectfully request an opportunity to make written submissions on the issue of costs after a decision has been rendered on the merits.

SCHEDULE “A” – LIST OF AUTHORITIES

CASE LAW	
1.	<i>References re Greenhouse Gas Pollution Pricing Act</i> , 2021 SCC 11
2.	<i>Reference re Greenhouse Gas Pollution Pricing Act</i> , 2019 ONCA 544
3.	<i>Reference re Greenhouse Gas Pollution Pricing Act</i> , 2019 SKCA 40
4.	<i>Mathur v. Ontario</i> , 2020 ONSC 6918
5.	<i>Reference Re Canada Assistance Plan (B.C.)</i> , [1991] 2 S.C.R. 525
6.	<i>Hupacasath First Nation v. Canada (Minister of Foreign Affairs)</i> , 2015 FCA 4
7.	<i>Chaoulli v. Quebec (Attorney General)</i> , 2005 SCC 35
8.	<i>Operation Dismantle v. The Queen</i> , [1985] 1 S.C.R. 441
9.	<i>Turp v. Canada (Minister of Justice)</i> , 2012 FC 893
10.	<i>Tanudjaja v. Canada (Attorney General)</i> , 2014 ONCA 852
11.	<i>La Rose v. Canada</i> , 2020 FC 1008
12.	<i>Friends of the Earth v. Canada (Governor in Council)</i> , 2008 FC 1183
13.	<i>British Columbia (Attorney General) v Council of Canadians with Disabilities</i> , 2022 SCC 27
14.	<i>Downtown Eastside Sex Workers United Against Violence Society v. Canada (Attorney General)</i> , 2012 SCC 45
15.	<i>Misdzi Yikh v. Canada</i> , 2020 FC 1059
16.	<i>Victoria (City) v. Adams</i> , 2009 BCCA 563
17.	<i>Carter v. Canada (Attorney General)</i> , 2015 SCC 5
18.	<i>Canada (Attorney General) v. Bedford</i> , 2013 SCC 72
19.	<i>Suresh v. Canada (Minister of Citizenship and Immigration)</i> , 2002 SCC 1
20.	<i>Singh v Minister of Employment and Immigration</i> , [1985] 1 S.C.R. 177
21.	<i>Blencoe v. British Columbia (Human Rights Commission)</i> , [2000] 2 S.C.R. 307
22.	<i>New Brunswick (Minister of Health and Community Services) v. G. (J.)</i> , [1999] 3 S.C.R. 46
23.	<i>Canada (Attorney General) v PHS Community Services Society</i> , [2011] 3 SCR 134
24.	<i>India v Badsha</i> , 2017 SCC 44
25.	<i>United States v. Burns</i> , [2001] 1 S.C.R. 283
26.	<i>R v. Morgentaler</i> , [1988] 1 S.C.R. 30
27.	<i>United States v. Kwok</i> , 2001 SCC 18
28.	<i>F.H. v. McDougall</i> , 2008 SCC 53
29.	<i>Frank v. Canada (Attorney General)</i> , 2019 SCC 1
30.	<i>Gosselin v. Québec (Attorney General)</i> , [2002] 4 S.C.R. 429
31.	<i>Canadian Foundation for Children, Youth and the Law v. Canada (Attorney General)</i> , [2004] 1 S.C.R. 76

32.	<i>Dixon v. Director, Ministry of the Environment</i> , 2014 ONSC 7404 (Div Ct)
33.	<i>Inglis v. British Columbia (Minister of Public Safety)</i> , 2013 BCSC 2309
34.	<i>Barbra Schlifer Commemorative Clinic v. Canada</i> , 2014 ONSC 5140
35.	<i>Quebec (Attorney General) v. Alliance du personnel professionnel et technique de la santé et des services sociaux</i> , 2018 SCC 17
36.	<i>Toronto (City) v. Ontario (Attorney General)</i> , 2021 SCC 34
37.	<i>Dunmore v. Ontario</i> , 2001 SCC 94
38.	<i>ETFO et al. v. Her Majesty the Queen</i> , 2019 ONSC 1308 (Div Ct)
39.	<i>Canada (Attorney General) v. Federal of Law Societies of Canada</i> , [2015] 1 SCR 401
40.	<i>Rodriguez v. British Columbia (Attorney General)</i> , [1993] 3 SCR 519
41.	<i>Reference re Assisted Human Reproduction Act</i> , [2010] 3 SCR 457
42.	<i>United States v. Johnstone</i> , 2013 BCCA 2
43.	<i>Steen v. Islamic Republic of Iran</i> , 2013 ONCA 30
44.	<i>R. v. Tommy</i> , 2008 BCSC 1095
45.	<i>Attawapiskat First Nation v Ontario</i> 2022 ONSC 1196 (Div Ct.)
46.	<i>Winko v. British Columbia (Forensic Psychiatric Institute)</i> , [1999] 2 SCR 627
47.	<i>Ezokola v. Canada (Citizenship and Immigration)</i> , [2013] 2 SCR 678
48.	<i>Ontario (Attorney General) v. G</i> , 2020 SCC 38
49.	<i>Fraser v. Canada (Attorney General)</i> , 2020 SCC 28
50.	<i>A.C. v. Manitoba (Director of Child and Family Services)</i> , 2009 SCC 30
51.	<i>Corbiere v. Canada</i> , [1999] 2 S.C.R. 203
52.	<i>Kahkewistahaw First Nation v. Taypotat</i> , 2015 SCC 30
53.	<i>Quebec (Attorney General) v. A.</i> , 2013 SCC 5
54.	<i>R. v. C.P.</i> , 2021 SCC 19
55.	<i>R. v. D.B.</i> , 2008 SCC 25
56.	<i>Canadian Foundation for Children, Youth & the Law v. Canada (Attorney General)</i> , 2004 SCC 4
57.	<i>Andrews v. Law Society of British Columbia</i> , [1989] 1 S.C.R. 143
58.	<i>Greater Vancouver Transportation Authority v. Canadian Federation of Students</i> , 2009 SCC 31
59.	<i>BCCLA v. Canada (Attorney General)</i> , 2019 BCCA 228
60.	<i>Doucet-Boudreau v. Nova Scotia (Minister of Education)</i> , [2003] 3 S.C.R. 3
INTERNATIONAL JURISPRUDENCE	
61.	<i>Urgenda et al. v The State of the Netherlands (Ministry of Infrastructure and the Environment)</i> , C/09/456689/HA ZA 13-1396 (Rechtbank Den Haag)
62.	<i>Urgenda et al. v The State of the Netherlands (Ministry of Infrastructure and the Environment)</i> , 200.178.245/01 (Gerechtshof Den Haag)

63.	<i>The State of the Netherlands (Ministry of Economic Affairs and Climate Policy) v Stichting Urgenda</i> , (2019) 19/00135
64.	<i>Future Generations v Ministry of the Environment and Others (Demanda Generaciones Futuras v. Minambiente)</i> , (2018) 11001 22 03 000 2018 00319 00 (Supreme Court of Justice of Colombia)
65.	<i>Thomson v The Minister for Climate Change Issues</i> , [2017] NZHC 733
66.	<i>Genesis Power Ltd. and the Energy Efficiency and Conservation Authority v. Franklin District Council</i> , [2005] NRRMA 541
67.	<i>Neubauer et al v Germany</i> , (2021) Case No. BvR 2656/18/1, BvR 78/20/1
68.	<i>Demanda Generaciones Futuras v Minambiente</i> , STC No. 4360-2018, April 4, 2018
69.	<i>Shrestha v Office of the Prime Minister et al.</i> , 074-WO-0283, NKP, Part 61, Vol 3 (Nepal)
70.	<i>Friends of the Irish Environment v Ireland</i> , [2020] IESC 49 (Supreme Court of Ireland)
71.	<i>Notre Affaire à Tous et al v France</i> , (2021) No 1904967, 1904968, 1904972, 1904976/4-1
72.	<i>Massachusetts v Environmental Protection Agency</i> , 549 US 497 (2007)
73.	<i>Gloucester Resources Limited v. Minister for Planning</i> [2019] NSWLEC 7
74.	<i>R (Friends of the Earth, ClientEarth, Good Law Project) v Secretary of State for Business, Energy and Industrial Strategy</i> , [2022] EWHC 1841
INTERNATIONAL AGREEMENTS	
75.	<i>Paris Agreement</i> , being an Annex to the <i>Report of the Conference of the parties on its twenty-first session, held in parties from 30 November to 13 December —15-- Addendum Part two: Action taken by the Conference of the parties at its twenty-first session</i> , 12 December 2015, UN Doc FCCC/CP/2015/10/Add.1, 55 ILM 740 (entered into force 4 November 2016)
76.	<i>Glasgow Climate Pact</i> , UNFCCC, UN Doc FCCC/PA/CMA/2021/L.16, s 21 (entered into force 13 November 2021)
77.	<i>United Nations Framework Convention on Climate Change</i> , 9 May 1992, 1771 UNTS 107, art 2, 31 ILM 849 (entered into force 21 March 1994).
78.	<i>United Nations Declaration on the Rights of Indigenous Peoples</i> , 13 September 2007 (A/RES/61/295)
ARTICLES	
79.	N. Chalifour, J. Earle, and L. Macintyre, “ <i>Coming of Age in a Warming World: The Charter’s Section 15(1) Equality Guarantee and Youth-Led Climate Litigation</i> ”, 2021 17 <i>Journal of Law & Equality</i> 1
80.	L. M. Collins, “ <i>An Ecologically Literate Reading of the Canadian Charter of Rights and Freedoms</i> ” (2009) 26 <i>Windsor Review of Legal and Social Issues</i> 7
81.	N. Chalifour & J. Earle, “ <i>Feeling the Heat: Climate Litigation under the Canadian Charter’s Right to Life, Liberty, and Security of the Person</i> ” (2018) 42:4 <i>Vermont L Rev</i> 689

82.	L. Collins and L. Sossin, “ <i>Approach to Constitutional Principles and Environmental Discretion in Canada</i> ” (2019) 52:1 UBC L Rev 239
83.	Rt Hon Beverley McLachlin, “ <i>Unwritten Constitutional Principles: What is Going On?</i> ” (2006) 4 NZJPIL 147
84.	David W-L Wu, “ <i>Tsilhqot’in Nation as a Gateway Towards Sustainability: Applying the Inherent Limit to Crown Land</i> ” (2015) 11 2 JSDLP 124
85.	K. Roach, “ <i>Judicial Remedies for Climate Change</i> ” (2021) 17 Journal of Law and Equality 105
TREATISES	
86.	H. Stewart, <i>Fundamental Justice</i> (2 nd ed)
87.	K. Roach, <i>Constitutional Remedies in Canada</i> , 2 nd ed

SCHEDULE “B” – TEXT OF STATUTES, REGULATIONS & BY - LAWS

The Constitution Act, 1982

52 (1) The Constitution of Canada is the supreme law of Canada, and any law that is inconsistent with the provisions of the Constitution is, to the extent of the inconsistency, of no force or effect.

Canadian Charter of Rights and Freedoms

7. Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice

15 (1) Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on race, national or ethnic origin, colour, religion, sex, age or mental or physical disability.

24 (1) Anyone whose rights or freedoms, as guaranteed by this Charter, have been infringed or denied may apply to a court of competent jurisdiction to obtain such remedy as the court considers appropriate and just in the circumstances.

Cap and Trade Cancellation Act, 2018, S.O. 2018, c. 13

3 (1) The Government shall establish targets for the reduction of greenhouse gas emissions in Ontario and may revise the targets from time to time.

...

4 (1) The Minister, with the approval of the Lieutenant Governor in Council, shall prepare a climate change plan and may revise the plan from time to time.

...

16 The *Climate Change Mitigation and Low-carbon Economy Act, 2016* is repealed.

Climate Change Mitigation and Low-carbon Economy Act, 2016, S.O. 2016, c. 7

6 (1) The following targets are established for reducing the amount of greenhouse gas emissions from the amount of emissions in Ontario calculated for 1990:

1. A reduction of 15 per cent by the end of 2020.
2. A reduction of 37 per cent by the end of 2030.
3. A reduction of 80 per cent by the end of 2050.

(2) The Lieutenant Governor in Council may, by regulation, increase the targets specified in subsection (1).

(3) The Lieutenant Governor in Council may, by regulation, establish interim targets for the reduction of greenhouse gas emissions.

(4) When increasing the targets specified in subsection (1) or establishing interim targets for the reduction of greenhouse gas emissions, the Lieutenant Governor in Council shall have regard to any temperature goals recognized by the Conference of the Parties established under Article 7 of the United Nations Framework Convention on Climate Change.

Environmental Bill of Rights, 1993, S.O. 1993, c. 28

11 The minister shall take every reasonable step to ensure that the ministry statement of environmental values is considered whenever decisions that might significantly affect the environment are made in the ministry.

SOPHIA MATHUR, et al.

and HER MAJESTY THE QUEEN
IN RIGHT OF ONTARIO

Court File No. CV-19-00631627-0000

Applicants

Respondent

ONTARIO
SUPERIOR COURT OF JUSTICE
Proceeding commenced at TORONTO

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