

CANADA'S FAILURE TO REDUCE GREENHOUSE GAS EMISSIONS

by
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A. Introduction

Climate change scientific literature accepts that human activity, principally deforestation and the extraction and combustion of fossil fuels, has caused global warming. If allowed to increase by more than 2 degrees Celsius above pre-industrial levels (1850), this will cause dangerous and irreversible climate change that will threaten the environment and human life.¹ To limit global warming to no more than this amount, it has been estimated that global greenhouse gas (GHG) emissions in 2050 need to be reduced by 40%-70% compared with 2010 levels.² However, developed nations' current GHG reduction pledges for 2020 are inconsistent with this long-term goal and, if unchanged, will result in a less than 50% chance of meeting this target.³ Canada's target of reducing GHG emissions by 17% compared with 2005 levels by 2020 is insufficient to avoid catastrophic climate change and inconsistent with climate change science. Moreover, given that Canada is unlikely to even meet this pledge,⁴ it would not be unfair to characterize Canada's climate change policies and performance as ineffective and indeed harmful.

B. Decision of The Hague District Court

The 2015 decision of The Hague District Court in *Urgenda v. The Netherlands*⁵ illustrates how governments can be held accountable for failing to sufficiently reduce GHG emissions. The Urgenda Foundation,⁶ a non-government organization, asked the Dutch court for an order that the Netherlands' policy to reduce GHG and CO₂ emissions to 17% below 1990 emission levels by 2020 did not fulfill the state's legal obligations. On review of the scientific data accepted by the Intergovernmental Panel on Climate Change and the facts regarding the Netherlands' policy and performance on GHG emissions, the District Court accepted that global warming poses an

¹ Victor D. G. et al, eds., *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge and New York: Cambridge University Press, 2014) <https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_chapter1.pdf> [accessed 15 July 2015].

² IPCC, *Summary for Policymakers* in Edenhofer, O. et al, eds., *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge and New York: Cambridge University Press, 2014) <https://www.ipcc.ch/pdf/assessment-report/ar5/wg3/ipcc_wg3_ar5_summary-for-policymakers.pdf> [accessed 15 July 2015].

³ *Ibid*, at 12.

⁴ *Fall 2014 Report of the Commissioner on the Environment and Sustainable Development*, at para.1.80 and para. 1.22. <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201410_e_39845.html>.

⁵ *Urgenda v The Netherlands*, C/09/456689 / HA ZA 13-1396 (English translation), 24 June 2015.

<http://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:RBDHA:2015:7196&keyword=urgenda>

⁶ A citizens' platform that develops plans and measures to prevent climate change and represents 886 individuals.

imminent threat and that the government has a duty to protect and improve the living environment. On 24 June 2015, the Court ruled that the Netherlands has an obligation to exercise care towards third parties (at para. 4.79) and ordered the government to reduce GHG emission by 25% from 1990 levels by 2020. The Court ruled that the Netherlands “has acted negligently and therefore unlawfully towards Urgenda by starting from a reduction target for 2020 of less than 25% compared to the year 1990.” The summary of the decision states,

...that the State must take more action to reduce the greenhouse gas emissions in the Netherlands. The State also has to ensure that the Dutch emissions in the year 2020 will be at least 25% lower than those in 1990.

Current policy below the norm

The parties agree that the severity and scope of the climate problem make it necessary to take measures to reduce greenhouse gas emissions. Based on the State’s current policy, the Netherlands will achieve a reduction of 17% at most in 2020, which is below the norm of 25% to 40% for developed countries deemed necessary in climate science and international climate policy.

State must provide protection

The State must do more to avert the imminent danger caused by climate change, also in view of its duty of care to protect and improve the living environment. The State is responsible for effectively controlling the Dutch emission levels. Moreover, the costs of the measures ordered by the court are not unacceptably high. Therefore, the State should not hide behind the argument that the solution to the global climate problem does not depend solely on Dutch efforts. Any reduction of emissions contributes to the prevention of dangerous climate change and as a developed country the Netherlands should take the lead in this.

With this order, the court has not entered the domain of politics. The court must provide legal protection, also in cases against the government, while respecting the government’s scope for policymaking. For these reasons, the court should exercise restraint and has limited therefore the reduction order to 25%, the lower limit of the 25%-40% norm.

Facts Found by the Court

1. The findings of the Intergovernmental Panel on Climate Change are facts

The Dutch Court accepted as facts the findings of the Intergovernmental Panel on Climate Change (IPCC),⁷ an intergovernmental body under the auspices of the United Nations that reviews and assesses scientific, technical and socio-economic information relevant to climate changes.

4.12. The UN Climate Change Convention also made provisions for the establishment of the IPCC as a global knowledge institute. The IPCC reports have bundled the knowledge of hundreds of scientists and to a great extent represent the current climate science. The IPCC is also an intergovernmental organisation. The IPCC’s findings serve as a starting point for the COP decisions, which are taken by the signatories to the UN Climate Change Convention

⁷ The IPCC is a scientific body formed in 1988 by the [United Nations Environment Programme \(UNEP\)](#) and the [World Meteorological Organization \(WMO\)](#) under the auspices of the United Nations (UN). It reviews and assesses the most recent scientific, technical and socio-economic information produced worldwide relevant to the understanding of climate change. 195 countries, including Canada, are members of the IPCC: <<http://www.ipcc.ch/index.htm>>.

during their climate conferences. Similarly, the Dutch and European decision-making processes pertaining to the climate policies to be pursued are also based on the climate science findings of the IPCC. The court – and also the Parties – therefore considers these findings as facts.

2. Human Action—combustion of fossil fuels and deforestation are the main causes of global warming.

3. Temperature rise of more than 2 °C over pre-industrial level (1850) would cause dangerous and irreversible climate change:

4.14. In [IPCC Fourth Assessment Report – Climate Change 2007, AR4/2007] and [IPCC Fifth Assessment Report – Climate Change 2013, AR5/2013] the IPCC has established that a worldwide climate change is taking place and that it is very probable that human actions, particularly the combustion of fossil fuels (oil, gas, coal) and deforestation, are the main causes of the observed global warming since the middle of the nineteenth century. In AR4/2007, the IPCC furthermore has stated that a temperature rise of more than 2 °C over the pre-industrial level would cause dangerous and irreversible climate change which would threaten the environment and man. This has resulted in the formulation of the aforementioned 2°C target. The IPCC has not changed this target in AR5/2013. The signatories to the UN Climate Change Convention, including, as stated previously, the Netherlands and the EU, have explicitly acknowledged these findings during the climate conference of 2010 (Cancun Agreements). The court therefore finds that the 2 °C target has globally been taken as the starting point for the development of climate policies. ...

4. The court accepts as certain that anthropogenic greenhouse gas (GHG) emissions need to be decreased substantially to prevent dangerous climate change and that they are presently increasing.

4.15. The IPCC reports referred to here also state that the anthropogenic greenhouse gas emissions need to be decreased substantially in order to prevent dangerous climate change. This, too, has been acknowledged by the signatories to the UN Climate Change Convention, including during the 2007 climate conference (Bali Action Plan) and again in 2010 (Cancun). From AR5/2013, supported by publications of other knowledge institutes, such as EDGAR (see 2.25) and UNEP (see 2.29), it is apparent that the global anthropogenic emissions of greenhouse gases is increasing rather than decreasing. The court also considers this information as certain.

5. Anthropogenic GHG emissions are causing climate change that creates a “highly hazardous situation for man and the environment...with a temperature rise of over 2 °C compared to the pre-industrial (1850) level.”

4.18 The aforementioned considerations lead to the following intermediate conclusion. Anthropogenic greenhouse gas emissions are causing climate change. A highly hazardous situation for man and the environment will occur with a temperature rise of over 2 °C compared to the pre-industrial level. It is therefore necessary to stabilise the concentration of greenhouse gases in the atmosphere, which requires a reduction of the current anthropogenic greenhouse gas emissions.

6. In order to maintain a 50% chance of being able to prevent hazardous climate change, the level of CO₂ concentration in the atmosphere may not exceed 530ppm.

4.22 From the IPCC reports listed here, the court concludes that in view of risk management and from scientific considerations, there is a strong preference for the 450 scenario, as the

risks are much higher with a 500 scenario. In order to maintain a 50% chance of being able to prevent hazardous climate change, the current scientific position stipulates that the level of CO₂ concentration in the atmosphere may not exceed 530 ppm.

7. In order to realize the 450 scenario, Annex I countries (Canada and others) need to attain a reduction in emissions in 2020 of 35-40% below the 1990 level.

4.30 The EDGAR database shows that global emissions are increasing substantially despite the measures that have been taken so far. The UNEP reports reveal that the Annex I countries have failed to meet the 25-40% emission reduction target in 2020, which has left a “budget” of about 1,000 Gt. The UNEP has established that there is a discrepancy between the reduction that is required to achieve the climate objective and the reduction promised by the signatories to the UN Climate Change Convention. At the same time, the institute has established that it will still be possible to close this gap in 2030.

The Netherlands Legal Obligations

Urgenda submitted that the state has a duty of care to ensure reduction of emissions in order to prevent dangerous climate change and that the Netherlands was:

- a. Acting contrary to the duty of care arising from the international no-harm principle, the United Nations Framework Convention on Climate Change (UNFCCC) and the Treaty on the Functioning of the European Union (TFEU).
- b. Contravening the European Convention on Human Rights (ECHR), Articles 2 (right to life) and 8 (private and family life).

The court concluded:

- 1. The state is obliged to take measures in its own territory to prevent dangerous climate change (mitigation measures) and such measures must be taken expeditiously (para. 4.65).**
- 2. There is no serious obstacle from a cost consideration point of view to adhere to a stricter reduction target (para. 4.70).**
- 3. Mitigation is most efficient and it is more cost-effective to take adequate action than to postpone. Therefore, the state has a duty of care to mitigate as quickly and as much as possible (para. 4.73).**
- 4. Given the fact that climate change is occurring partly due to the state’s emissions and that negative consequences are being experienced within the state, and given the probability of hazardous climate change occurring in the absence of a substantial decrease in emissions, the state must make an adequate contribution, greater than its current contribution, to prevent hazardous climate change (para. 4.89).**
- 5. Therefore, the state “has acted negligently and therefore unlawfully towards Urgenda by starting from a reduction target for 2020 of less than 25% compared to the year 1990.” (para. 4.93)**

Regarding the right to life (Article 2 ECHR), the Court stated,

4.49. This Article does not solely concern deaths resulting directly from the actions of the agents of a State, but also lays down a positive obligation on States to take appropriate steps to safeguard the lives of those within their jurisdiction. The means that public authorities have a duty to take steps to guarantee the rights of the Convention even when they are threatened by others (private) persons or activities that are not directly connected with the State.

Article 2 of the ECHR provides

1. Everyone's right to life shall be protected by law. No one shall be deprived of his life intentionally save in the execution of a sentence of a court following his conviction of a crime for which this penalty is provided by law.
2. Deprivation of life shall not be regarded as inflicted in contravention of this Article when it results from the use of force which is no more than absolutely necessary:
 - (a) in defence of any person from unlawful violence;
 - (b) in order to effect a lawful arrest or to prevent the escape of a person lawfully detained;
 - (c) in action lawfully taken for the purpose of quelling a riot or insurrection.

The right to life is similarly protected in Canada by Article 7 of the Charter of Rights and Freedoms (Charter), Article 6 of the International Covenant on Civil and Political Rights (ICCPR) and Article I of the American Declaration on the Rights and Duties of Man (American Declaration).

Article 7 of the Charter provides

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.

Article 6.1 of the ICCPR provides

Every human being has the inherent right to life. This right shall be protected by law. No one shall be arbitrarily deprived of his life.

Article I of the American Declaration provides

Every human being has the right to life, liberty and the security of his person.

C. Canada's Profile

C1. International Agreements to Reduce Emissions and Combat Climate Change

- **1986** Canada ratifies the 1985 Vienna Convention on the Protection of the Ozone Layer.
- **1988** At the Toronto Conference on the Changing Atmosphere, Canada and the other participating states agree to a voluntary target of reducing 1988 greenhouse gas emissions by 20% by 2005.
- **1992** Canada signs and ratifies the United Nations Framework Convention on Climate Change (UNFCCC).⁸ Canada signs the UNFCCC on 12 June 1992, ratifies it on 14 December 1992, and it enters into force in Canada on 17 January 1994.
- **1998** Canada signs the Kyoto Protocol.
- **2005** The Kyoto Protocol enters into force. It commits Canada to reducing greenhouse gas emissions to an average of 6% below the 1990 level between 2008-2012.
- **2007** The *Kyoto Protocol Implementation Act*⁹ receives Royal Assent. As required by the *Kyoto Protocol Implementation Act*, Environment Canada releases a first climate change

⁸ UN General Assembly, *United Nations Framework Convention on Climate Change: resolution / adopted by the General Assembly*, 20 January 1994, A/RES/48/189, available at: <<http://www.refworld.org/docid/3b00f2770.html>> [accessed 13 July 2015].

⁹ The [Kyoto Implementation Act](#), S.C. 2007, c. 30 assented to 22 June 2007 required the Environment Minister to publish a climate plan for each year detailing the measures taken to meet Canada's commitment, a forecast of emissions reduction and a review of reductions in the past year and an explanation of the redress for measures not implemented. The National Roundtable on the Environment and the Economy (NRTEE) was to assess each year's plan and offer constructive expert feedback and the Commissioner of the Environment and Sustainable

plan. This sets a target of reducing Canada's greenhouse gas emissions to an average of 6% below the 1990 level over the period from 2008 to 2012.

- **2008** The Group of Eight Industrialized Nations (G8) at the annual summit establish a long-term objective of reducing global emissions by 50% by 2050. A baseline year is not specified. G8 (France, Germany, Italy, Japan, United Kingdom, United States, Canada and Russia) leaders also support a goal for developed countries to reduce their total emissions by 80% or more by 2050, compared to 1990 or more recent years.
- **2009** At the Copenhagen Summit,¹⁰ Canada states that it would agree to a lower emissions reduction target of 17% below 2005 levels by 2020.
- **2010** Under the 2009 Copenhagen Accord, Canada commits to reducing greenhouse gas emissions by 17% below the 2005 level by 2020. This target is to be aligned with the final economy-wide emissions target of the United States in legislation. This is in stark contrast with the majority of other countries, who use 1990 as the reference year; Canada's stated target equates to around a 2.5% reduction of 1990 emission levels.¹¹
- **2010** In its 2010–13 Sustainable Development Strategy, the federal government commits to reducing Canada's greenhouse gas emissions by 17% below the 2005 level by 2020.
- **2011** The UNFCCC signatories agree to launch the Durban Platform for Enhanced Action negotiations, in order to establish by 2015 a new climate change agreement for the post-2020 period.¹²
- **2012** Canada formally withdraws from the Kyoto Protocol. In this year, Canada's greenhouse gas emissions exceeded its commitment made under Kyoto by around 22%.¹³
- **2013** In the Sixth National Communication and First Biennial Report, Canada reiterates its commitments under the Copenhagen Accord.
- **2013** In its 2013–16 Sustainable Development Strategy, the federal government reiterates its commitment to reducing Canada's greenhouse gas emissions by 17% below the 2005 level by 2020.
- **2015** In advance of the Paris Conference of the Parties later this year, Canada announces that it will commit to a reduction in greenhouse gas emissions of 30% below 2005 levels by 2030. This equates to around a 14% reduction of 1990 levels and is the weakest pledge out of all G7 nations.¹⁴ It is unclear, however, by how much CO₂ emissions (the main contributor to greenhouse gases) will be reduced.

C2. Canada's Failure to Meet Emissions Targets

Development was to report regularly on Canada's progress in meeting emissions reduction goals. The Act was repealed in 2012.

¹⁰ The Copenhagen Summit, which was the 15th session of the Conference of the Parties (COP) to the UNFCCC and the 5th session of the COP as the Meeting of the Parties to the Kyoto Protocol, took place December 2009.

¹¹ Jane Matthews Glenn and Jose Otero, "Canada and the Kyoto Protocol: An Aesop Fable" in Erkki J Hollo, Kati Kulovesi, and Michael Mehling, *Climate Change and the Law – Ius Gentium: Comparative Perspectives on Law and Justice*, vol 21 (Springer Science+Business Media Dordrecht, 2013).

¹² Environment Canada, *Canada's Emissions Trends* (Gatineau: Environment Canada, 2014) <https://ec.gc.ca/ges-ghg/E0533893-A985-4640-B3A2-008D8083D17D/ETR_E%202014.pdf> [accessed 10 July 2015].

¹³ Pollutant Inventories and Reporting Division, Environment Canada, *National Inventory Report 1990-2013: Greenhouse Gas Sources and Sinks in Canada, Part 3*, The Canadian Government's Submission to the UN Framework Convention on Climate Change (Gatineau: Environment Canada, 2015) at 16-41 <http://unfccc.int/files/national_reports/annex_i_ghg_inventories/national_inventories_submissions/application/zip/can-2015-nir-17apr.zip> [accessed 1 October 2015].

¹⁴ Margo McDiarmid, "Canada sets carbon emissions reduction target of 30% by 2030", online: Canadian Broadcasting Corporation <<http://www.cbc.ca/news/politics/canada-sets-carbon-emissions-reduction-target-of-30-by-2030-1.3075759>> [accessed 13 July 2015].

The 2014 report of Canada’s Commissioner on the Environment and Sustainable Development concludes, “the measures currently in place are expected to close the gap in greenhouse gas emissions by only 7 percent by 2020”.¹⁵ Before reaching that conclusion it was noted,

In 2012, we concluded that the federal regulatory approach was unlikely to lead to emission reductions sufficient to meet the 2020 Copenhagen target. Two years later, the evidence is stronger that the growth in emissions will not be reversed in time and that the target will be missed. (para. 1.3)

...

We are concerned that Canada will not meet its 2020 emission reduction target and that the federal government does not yet have a plan for how it will work toward the greater reductions required beyond 2020. (para. 1.80)

Factors identified as contributing to Canada’s failure to meet target:

- 1. The federal Government has not coordinated with provinces and territories, and**
- 2. Environment Canada still does not have a planning process for how the federal government will contribute to achieving the national reductions required to meet the 2020 target.**

The report notes at paragraph 1.40:

The absence of effective federal planning, including unclear timelines, leaves responsible organizations at all levels without essential information for identifying, directing, and coordinating their reduction efforts. It also means that there are no benchmarks against which to monitor and report on progress. For example, industries that may be affected by regulations cannot plan their investments effectively. In our view, the lack of a clear plan and an effective planning process is a particularly significant gap given that Canada is currently projected to miss its 2020 emission reduction target.

C3. Emissions Data for Canada

Between 1990 and 2012, Canada’s GHG emissions increased by 16.64% (from 613,000 kt CO₂ eq in 1990 to 715,000 kt CO₂ eq in 2012) and Canada’s CO₂ emissions increase during the same period was 21.38% (see Table I, below). In 2012 per capita emissions in Canada were, for GHG, 20.57 t CO₂ eq/capita and for CO₂ 16.17t CO₂/capita. Per capita emissions levels for 2012 showed a reduction from 1990 levels of 7.06% for GHG and 3.28% for CO₂.

By way of comparison, per capita GHG emissions in 2012 noted in the *Urgenda* decision (at paragraph 4.79) were:

India	2.43 tons CO ₂ eq
China	9.04 tons CO ₂ eq
The Netherlands	11.72 tons CO ₂ eq
Brazil	15.05 tons CO ₂ eq
Russia	19.58 tons CO ₂ eq
United States	19.98 tons CO ₂ eq

On the basis of the above figures the Dutch Court concluded that “it is beyond dispute that the Dutch per capita emissions are one of the highest in the world.” (para. 4.79).

¹⁵ *Fall 2014 Report of the Commissioner on the Environment and Sustainable Development*, at para.1.80 and para. 1.22. <http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201410_e_39845.html>.

Note: Carbon dioxide (CO₂) is measured in “kt”/“t”, which is kilotonnes/tones, whereas greenhouse gases (GHGs) are measured in kt/t “CO₂ eq” which is “carbon dioxide equivalent.” This is a measure of the global warming potential of GHGs and indicates that a given amount of GHG has the equivalent global warming potential as that amount of CO₂.^{16,17}

(a) Table I - Per Country¹⁸

Year	CO ₂ (kt)	Change Year-on-Year (%)	Change Since 1990 (%)	Change Since 2005 (%)	GHG (kt CO ₂ eq)	Change Year-on-Year (%)	Change Since 1990 (%)	Change Since 2005 (%)
2013	570000	1.42	23.11	-1.72	726000	1.54	18.43	-3.07
2012	562000	0.54	21.38	-3.10	715000	0.85	16.64	-4.54
2011	559000	0.54	20.73	-3.62	709000	0.28	15.66	-5.34
2010	556000	2.02	20.09	-4.14	707000	1.14	15.33	-5.61
2009	545000	-5.87	17.71	-6.03	699000	-5.67	14.03	-6.68
2008	579000	-3.18	25.05	-0.17	741000	-2.63	20.88	-1.07
2007	598000	4.00	29.16	3.10	761000	2.84	24.14	1.60
2006	575000	-0.86	24.19	-0.86	740000	-1.20	20.72	-1.20
2005	580000	-1.19	25.27	N/A	749000	-1.19	22.19	N/A
2004	587000	-0.17	26.78	N/A	758000	0.26	23.65	N/A
2003	588000	2.98	27.00	N/A	756000	2.44	23.33	N/A
2002	571000	1.06	23.33	N/A	738000	0.41	20.39	N/A
2001	565000	-1.22	22.03	N/A	735000	-1.34	19.90	N/A
2000	572000	4.19	23.54	N/A	745000	3.19	21.53	N/A
1999	549000	2.81	18.57	N/A	722000	1.83	17.78	N/A
1998	534000	1.91	15.33	N/A	709000	1.14	15.66	N/A
1997	524000	2.75	13.17	N/A	701000	2.34	14.36	N/A
1996	510000	3.24	10.15	N/A	685000	3.16	11.75	N/A
1995	494000	2.49	6.70	N/A	664000	2.79	8.32	N/A
1994	482000	3.21	4.10	N/A	646000	3.36	5.38	N/A
1993	467000	-0.21	0.86	N/A	625000	0.32	1.96	N/A
1992	468000	3.31	1.08	N/A	623000	2.98	1.63	N/A
1991	453000	-2.16	-2.16	N/A	605000	-1.31	-1.31	N/A
1990	463000	N/A	N/A	N/A	613000	N/A	N/A	N/A

¹⁶ United States Environmental Protection Agency, *Glossary of Climate Change Terms* < <http://www3.epa.gov/climatechange/glossary.html> > [accessed 30 October 2015].

¹⁷ Organisation for Economic Co-operation and Development, *Glossary of Statistical Terms: Carbon Dioxide Equivalent* < <https://stats.oecd.org/glossary/detail.asp?ID=285> > [accessed 30 October 2015].

¹⁸ *Supra*, note 13.

(b) Table II - Per Capita^{19,20}

Year	CO2 Per Capita (t CO2 / capita)	Change Year-on-Year (%)	Change Since 1990 (%)	Change Since 2005 (%)	GHG Per Capita (t CO2 eq / capita)	Change Year-on-Year (%)	Change Since 1990 (%)	Change Since 2005 (%)
2013	16.21	0.26	-3.03	-9.87	20.65	0.37	-6.71	-11.10
2012	16.17	-0.65	-3.28	-10.10	20.57	-0.34	-7.06	-11.43
2011	16.28	-0.45	-2.65	-9.52	20.64	-0.70	-6.74	-11.13
2010	16.35	0.89	-2.21	-9.11	20.79	0.02	-6.08	-10.50
2009	16.21	-6.94	-3.07	-9.91	20.79	-6.74	-6.10	-10.52
2008	17.42	-4.22	4.16	-3.19	22.29	-3.68	0.68	-4.05
2007	18.18	3.00	8.75	1.08	23.14	1.85	4.53	-0.39
2006	17.65	-1.86	5.59	-1.86	22.72	-2.20	2.63	-2.20
2005	17.99	-2.13	7.59	N/A	23.23	-2.12	4.94	N/A
2004	18.38	-1.10	9.92	N/A	23.73	-0.67	7.21	N/A
2003	18.58	2.06	11.14	N/A	23.89	1.52	7.93	N/A
2002	18.21	-0.03	8.90	N/A	23.53	-0.67	6.31	N/A
2001	18.21	-2.29	8.93	N/A	23.69	-2.41	7.03	N/A
2000	18.64	3.22	11.49	N/A	24.28	2.23	9.67	N/A
1999	18.06	1.98	8.00	N/A	23.75	1.01	7.28	N/A
1998	17.71	1.07	5.91	N/A	23.51	0.31	6.21	N/A
1997	17.52	1.73	4.79	N/A	23.44	1.32	5.89	N/A
1996	17.22	2.17	3.01	N/A	23.13	2.09	4.50	N/A
1995	16.86	1.43	0.83	N/A	22.66	1.73	2.36	N/A
1994	16.62	2.09	-0.60	N/A	22.28	2.23	0.62	N/A
1993	16.28	-1.30	-2.63	N/A	21.79	-0.78	-1.57	N/A
1992	16.50	2.10	-1.34	N/A	21.96	1.76	-0.81	N/A
1991	16.16	-3.37	-3.37	N/A	21.58	-2.52	-2.52	N/A

C4. Historical Challenges to Canada's Withdrawal from Kyoto

*Friends of the Earth v Canada (Governor in Council)*²¹

The applicants argued that the *Kyoto Protocol Implementation Act (KPIA)* bound the government to honour its climate change commitments and make credible plans to do so. They sought to have judicially reviewed the government's efforts at tackling climate change. The *KPIA* put the majority government under an international reporting regime, and the government in response published a Climate Change Plan which overestimated its emission reduction projections. The

¹⁹ *Ibid.*

²⁰ Statistics Canada, *Table 051-0001 – Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons unless otherwise noted)*, CANSIM (database) <<http://www5.statcan.gc.ca/cansim/a47>> [accessed 1 October 2015].

²¹ 2008 FC 1183 [*Friends of the Earth*].

Federal Court held that it could not “dictate the content of the proposed regulatory arrangement” because the *KPIA* had its own accountability mechanism and it refused to review the reasonableness of the government’s actions regarding its commitments under the Kyoto Protocol.

*Turp v Canada (Attorney General)*²²

The applicants sought a judicial review of the government’s withdrawal from the Kyoto Protocol on the grounds that the *KPIA* prevented withdrawal. The Federal Court held that foreign affairs and international relations (including the making of treaties) fell within the royal prerogative and that *KPIA* was not intended to restrict this. Nevertheless, it stated that a challenge to “a decision made in the exercise of prerogative powers” may be justiciable if such a challenge was premised on a violation of a *Charter* right.

C5. The Existence of Residual Crown Prerogative Post-1982

The issue of whether the royal prerogative – and specifically a residual, non-statutory prerogative – currently exists in Canada is particularly relevant to any potential *Charter* challenge of Canada’s greenhouse gas emission policies and performance. If it can be established that the residual prerogative in fact ceased to exist after the passing of the *Constitution Act, 1982*,²³ a significant barrier to judicial review is removed.

The royal prerogative was perhaps most famously defined by A.V. Dicey as “[t]he residue of discretionary or arbitrary authority, which at any given time is legally left in the hands of the Crown.”²⁴ As this description would suggest, the royal prerogative, unless specifically given statutory footing, has no basis in any democratic process; it is merely a remnant of the authority once exercised unilaterally by the British monarchy.²⁵ However, it constitutes one of the current sources of power of the executive branch of government in the United Kingdom, where it is exercised by the Queen on the advice of Ministers of the Crown. It operates alongside the other main sources of power: statutes, common law, and conventions. Under the royal prerogative, the British executive carries out a multitude of administrative actions such as deploying the armed forces, issuing passports, conducting diplomacy, and entering into and ratifying treaties.²⁶

At first, it would appear that the royal prerogative applies in Canada. Section 129 of the *Constitution Act, 1867* states in part:

“Continuance of existing Laws, Courts, Officers, etc.:

Except as otherwise provided by this Act, all Laws in force in Canada...and all legal Commissions, Powers, and Authorities...existing therein at the Union, shall continue...as if the Union had not been made subject nevertheless (except with respect to such as are enacted by or exist under Acts of the Parliament of Great Britain or of the Parliament of the United Kingdom of Great Britain and Ireland,) to be repealed, abolished, or altered by the Parliament of Canada...according to the Authority of the Parliament...under this Act.”²⁷
[emphasis added]

²² 2012 FC 893 [*Turp*].

²³ (UK), c 11.

²⁴ A.V. Dicey, *Introduction to the Study of the Law of the Constitution*, 10th edn. (London: Macmillan, 1959) at 424.

²⁵ United Kingdom, Secretary of State for Justice and Lord Chancellor, *The Governance of Britain*, CM 7170, Green Paper (London: Ministry of Justice, 2007).

²⁶ *Ibid.*

²⁷ *Constitution Act, 1867* (UK), 30 & 31 Vict, c 3, reprinted in RSC 1985, Appendix II, No 5 [*Constitution Act, 1867*].

Since the royal prerogative could be classified as a “power” and presumably existed in Canada prior to the passing of the above *Constitution Act*²⁸ it could be argued that Ministers of the Crown can still rely on the royal prerogative insofar as it has not been limited by statute, that is, the residual prerogative.

However, it could be argued that this position is incorrect as it does not give proper weight to the Preamble to the *Charter* and the jurisprudence surrounding its interpretation. This section states:

“Whereas Canada is founded upon principles that recognize the supremacy of god and the rule of law.”²⁹ [emphasis added]

The “rule of law” is a multi-layered concept and can refer to both the content of laws as well as the means by which they operate. Specifically, this concept has been elucidated upon in *Re Resolution to Amend the Constitution* (the “*Patriation Reference*” case), where it was stated that:

“[t]he ‘rule of law’ is a highly textured expression...a sense of orderliness, of subjection to known legal rules and of executive accountability to legal authority.”³⁰ [emphasis added]

It has been acknowledged in *Reference re Remuneration of Judges of the Provincial Court (P.E.I.)* (the “*Provincial Judges Reference*” case) that:

“the exercise of all public power must find its ultimate source in a legal rule.”³¹ [emphasis added]

Indeed, the Federal Court in *Pearson v. Canada* approved of A.V. Dicey’s definition of the rule of law as excluding arbitrariness:

“It means, in the first place, the absolute supremacy or predominance of regular law as opposed to the influence of arbitrary power, and excludes the existence of arbitrariness, of prerogative, or even of wide discretionary authority on the part of the government. Englishmen are ruled by the law, and by the law alone.”³² [emphasis added]

The courts have endorsed an interpretation of rule of law that affirms that (a) all power exercised by the executive must be based on legal rules, and (b) that such rules must be known to the public.

If all power exercised by the executive must be based on legal rules, then a non-statutory, residual prerogative cannot properly satisfy this requirement. Firstly, it is clear that the royal

²⁸ Sir Kenneth Roberts-Wray, *Commonwealth and Colonial Law* (New York: Frederick A. Praeger Publishers, 1966) at 557: “...whether a particular Prerogative extends to a country depends (subject to any statutory provision one way or the other)...upon whether the legal system which forms the basic law is or is not English law.”

²⁹ *Canadian Charter of Rights and Freedoms*, Part 1 of the *Constitution Act, 1982*, being Schedule B to the *Canada Act 1982* (UK), c 11.

³⁰ [1981] 1 S.C.R. 753 at pp. 805-806.

³¹ [1998] 1 S.C.R. 3 at para. 10.

³² *Pearson v. Canada*, [2000] FCJ No 1444 (QL) at para. 10.

prerogative does not derive from either statute or common law.³³ As such, it is not in itself based on any form of legislation. It may be argued that since section 129 of the *Constitution Act, 1867* requires that all “Powers, and Authorities...existing therein at the Union, shall continue...”,³⁴ that the residual prerogative must necessarily continue to exist.

This line of reasoning fails to take into consideration the judicial significance of the Preamble to the *Charter*. It has been established that:

“the constitutional status of the rule of law is beyond question. The preamble to the Constitution Act, 1982...is explicit recognition that “the rule of law [is] a fundamental postulate of our constitutional structure (per Rand J., *Roncarelli v. Duplessis*, [1959] S.C.R. 121, at p. 142)”.³⁵ [emphasis added]

While the argument that the rule of law principle does not by itself have any legal effect, it is certainly the case that:

“the rule of law can play a role in influencing the interpretation of constitutional provisions that do operate as direct restraints on legislative action.”³⁶

As such, the position that the Canadian executive can invoke the residual prerogative on the basis of section 129 of the *Constitution Act, 1867* is significantly weakened by Supreme Court Canada and Federal Court jurisprudence on the rule of law principle. As stated by McKeown J. in *Fogal v. Canada*,

“there are some legal issues in the case before me which are not moot, such as the present scope of crown prerogative and whether the executive can use the crown prerogative without parliamentary sanction as a basis to enter treaties under the Constitution, 1981.”³⁷ [emphasis added]

The *Patriation Reference* case made explicit that the rule of law principle is, *inter alia*, based on a system of laws that is known to the public. Even if the residual prerogative is held to pass the first hurdle – that of being based on legal rules – it will have much more difficulty showing that it the public understands what it encompasses:

“the complete class of royal prerogatives is not known. Lawyers are uncertain, in both practical and theoretical terms, as to how to identify that class. The existing justifications of the prerogatives do not address the whole of the acknowledged class, nor do the stipulative criteria to date. This uncertainty may be the most potent argument for reform.”³⁸ [emphasis added]

³³ Sebastian Payne, “The Royal Prerogative” in Maurice Sunkin and Sebastian Payne, *The Nature of the Crown: A Legal and Political Analysis* (Oxford: Oxford University Press, 1999) at 79.

³⁴ *Supra*, note 27.

³⁵ *Supra*, note 30 at 750.

³⁶ Peter W. Hogg and Cara F. Zwibel, “The Rule of Law in the Supreme Court of Canada” (2005) 55:3 *University of Toronto Law Journal* 715.

³⁷ [1999] FCJ No 788 (QL) at para. 9.

³⁸ *Supra*, note 33 at 110.

“The precise scope of the executive powers is uncertain: there is no authoritative list. Conventions exist on the exercise of prerogative executive powers but these remain uncodified.”³⁹ [emphasis added]

“The scope of the Royal prerogative power is notoriously difficult to determine...there are many prerogative powers for which there is no recent judicial authority and sometimes no judicial authority at all. In such circumstances, the Government, Parliament and the wider public are left relying on statements of previous Government practice and legal textbooks, the most comprehensive of which is now nearly 200 years old.”⁴⁰ [emphasis added]

“This uncertainty has been criticised. Professor Rodney Brazier has written, “the demand for a statement of what may be done by virtue of [the Royal prerogative] is of practical importance. Yet it has been said judicially that such a statement cannot be arrived at, because only through a process of piecemeal judicial decisions over the centuries have particular powers been seen to exist, or not to exist, as the case may be.”⁴¹ [emphasis added]

Therefore, it would appear that the scope of the residual prerogative is unclear not only to the public, but also to lawyers, the executive, and the legislative branch. Consequently, it cannot be said that this apparent source of power, referred perhaps indirectly to in section 129 of the *Constitution Act, 1867*, satisfies the rule of law principle – a “fundamental postulate of our constitutional structure.”⁴²

The core of this argument was perhaps most aptly stated in *Reference re Secession of Quebec*, when it was asserted that:

“the relationship between state and the individual must be regulated by law...This court has noted on several occasions that with the adoption of the *Charter*, the Canadian system of government was transformed to a significant extent from a system of Parliamentary supremacy to one of constitutional supremacy. The Constitution binds all governments...including the executive branch (*Operation Dismantle Inc. v. The Queen*, [1985] 1 S.C.R. 441, at p. 455). They may not transgress its provisions: indeed, their sole claim to exercise lawful authority rests in the powers allocated to them under the Constitution, and can come from no other source.”⁴³ [emphasis added]

It is reasonable to argue that the residual prerogative ceased to exist after the adoption of the *Charter*: it is not congruent with jurisprudence on the rule of law principle and as such it should be finally abolished in a future Supreme Court decision.

C6. Potential Grounds of Challenge

³⁹ *Supra*, note 25.

⁴⁰ *Ibid*.

⁴¹ Rodney Brazier, “Constitutional Reform and the Crown” in Maurice Sunkin and Sebastian Payne (eds), *The Nature of the Crown* (Oxford: Oxford University Press, 1999) at 339.

⁴² *Supra*, note 30.

⁴³ [1998] 2 S.C.R. 217 at para. 72.

A recent article “Aboriginal Peoples and Legal Challenges to Canadian Climate Change Policy”⁴⁴ sheds light on the potential grounds that could be relied upon in a *Charter* challenge. Noting that Canada “is one of the top ten carbon emitters in the world”, the authors review the applicable Canadian case law and some known effects of climate change on northern Canada and the Inuit. Their review suggests that given the evidence that Canada’s GHG reduction policies and performance pose a serious threat to *Charter* protected rights, a court challenge is necessary and viable.

D. Reduction Targets and Potential Remedies Sought

D1. Theoretical Basis for Reduction Targets

Even though any *Charter* challenge to Canada’s climate change policy will necessarily be focused on the damage the country’s emissions have had on the applicants, the global nature of climate change cannot be ignored. In other words, it is likely that Canadian courts will consider, at least as one factor, the contribution Canada has made to global carbon emissions relative to other nations. Thus, in order to propose as a remedy any reduction in Canada’s carbon dioxide emissions, it will be necessary to follow a justifiable methodology for quantifying this remedy.

However, there is significant disagreement among developed and developing nations regarding how carbon emission reduction contributions should be allocated. Broadly, two competing theories have been advanced in the literature: firstly, the theory that nations should share this burden according to their current emissions pattern (“inertia”); and secondly, the theory that this should be allocated according to nations’ relative population (“equity”).⁴⁵ Both theories have attracted criticism on fairness grounds: it has been argued that the former disadvantages developing nations as they will effectively be inhibited from pursuing the same development opportunities that developed countries pursued during their industrialization.⁴⁶ On the other hand, it has been argued that implementing the latter theory would require developed nations to reduce their carbon dioxide emissions by potentially unachievable levels.

In an attempt to find a justifiable middle ground, a “blended sharing principle” has been posited.⁴⁷ In brief, this solution assigns each country a carbon dioxide reduction target that would be calculated by weighting at 50% each the targets that would emerge if either the inertia or equity theories were followed independently.

D2. Potential Remedies Sought from Canada

It has been estimated by Raupach et al. that Canada would need to reduce its carbon dioxide emissions by about 5% per year each year until 2020 in order to meet its quota of reductions under the blended sharing principle.⁴⁸ Given that Canada’s carbon dioxide emissions in 2013 totalled 570,000 kt (see Table I, above), this would imply that by 2020, Canada’s CO₂ emissions

⁴⁴ Andrew Stobo Sniderman & Adam Shedletzky, “Aboriginal Peoples and Legal Challenges to Canadian Climate Change Policy”, (2014) 4:2 online: *Western Journal of Legal Studies* <<http://ir.lib.uwo.ca/uwojls/vol4/iss2/1>>.

⁴⁵ Michael R Raupach et al, “Sharing a quota on cumulative carbon emissions”, (2014) 4: October online: *Nature Climate Change* <http://www.globalcarbonproject.org/global/pdf/Raupach_2014_Sharing%20a%20quota%20on%20cumulative%20carbon%20emissions.NatureCC.pdf>.

⁴⁶ John P Weyant, “Costs of Reducing Global Carbon Emissions”, (1993) 7:4 online: *The Journal of Economic Perspectives* <<http://www.jstor.org/stable/2138499>>

⁴⁷ *Supra*, note 46.

⁴⁸ *Ibid.*

should have decreased to around 398,052 kt.⁴⁹ This translates into a 31% reduction in CO₂ emissions compared with 2005 levels and a 29% reduction since 2012.

Canada's Copenhagen Accord target for 2020 is around 621,670 kt CO₂ eq (in GHGs). Applying Raupach et al.'s 5% reduction rate to GHGs instead of just CO₂ emissions, this implies that Canada should have decreased its GHG emissions to around 506,993 kt CO₂ eq by 2020. The shortfall between these targets is 114,677 kt CO₂ eq. Considering that Canada is unlikely to meet its own 2020 target – it has been estimated that Canada might have only reduced its GHG emissions by 7% in 2020 compared with 2005 levels⁵⁰ – the realistic shortfall in Canada's GHG emissions in 2020 may be around 189,577 kt CO₂ eq. This implies that Canada may have to further reduce GHG emissions by around 37% by 2020 compared with 2005 levels, if it does not improve mitigation efforts. This could form the basis of a remedy.

In May 2015, Canada announced that it would likely commit to a 30% reduction in GHG emissions by 2030 compared with 2005 levels. However, it is unclear by how much CO₂ emissions will decrease, and as carbon dioxide is the main contributor to GHG emissions – and is the measurement used by Raupach et al. to calculate their recommended reduction rate –, it is difficult to determine how this announcement will affect Canada's CO₂ reduction targets.

E. Conclusion

In light of this year's Dutch litigation victory, a challenge of Canada's climate change policies and performance appears increasingly feasible. Prominent members of the legal profession have expressed support for this proposition and it has been suggested that any such challenge should target specific aspects of Canada's climate change performance, such as emissions targets.⁵¹ Nevertheless, several obstacles remain: firstly, applicants with sufficient standing will need to be found; secondly, convincing evidence of the harm to life and environment that Canada's policies and performance have caused will be required; and thirdly, it may be necessary to successfully persuade the courts that the residual prerogative – the basis upon which Canada exited from Kyoto – is not in fact a lawful source of power. It remains to be seen exactly how the new Liberal government will strengthen Canada's latest emissions reduction pledge, but a judicial review of Canada's accumulated climate change decisions should be lodged expeditiously.

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⁴⁹ The base year used for the compound percentage reduction calculation is 2013, as there is no official data for emissions after this year.

⁵⁰ *Supra*, note 15.

⁵¹ Jeff Gray, "Canadian courts could face climate-change cases in wake of Dutch ruling", online: The Globe and Mail < <http://www.theglobeandmail.com/report-on-business/industry-news/the-law-page/canadian-courts-could-face-climate-change-cases-in-wake-of-dutch-ruling/article26360947/> > [accessed 30 October 2015].