Court of Appeal File Numbers: CA45950 and CA45953
Vancouver Registry

COURT OF APPEAL

ON APPEAL FROM the order of The Honourable Mr. Justice Affleck of the Supreme Court of British Columbia pronounced on the 11th day of March 2019

BETWEEN:

REGINA

Respondent

AND:

DAVID ANTHONY GOODERHAM (CA45950)
JENNIFER NATHAN (CA45953)

Appellants

APPELLANTS' SUPPLEMENTARY FACTUM

David Anthony Gooderham

4609 West 11th Avenue
Vancouver, BC V6R 2M6

Tel: (604) 224-3382
Email: dagooderham@gmail.com

Appellant

Jennifer Nathan

908 3rd Avenue
New Westminster, BC V3M 1P3

Email: jennifer_nathan@hotmail.com

Appellant

Lesley Ruzicka

Ministry of Attorney General
Criminal Appeals and Special Prosecutions
3rd Floor, 940 Blanchard Street
Victoria, BC V8W 3E6

Tel:(779) 974-5156
FAX: (250) 387-4262

Counsel

TABLE OF CONTENTS

FOREIGN LAW

Urgenda Foundation v. The State of the Netherlands

1. In *Urgenda Foundation v. The State of the Netherlands*[1], the Supreme Court of the Netherlands upheld a decision by the Hague Court of Appeal that climate change is "a real and imminent threat". The court ordered that the Dutch government must implement more stringent carbon reduction policies to avoid dangerous levels of atmospheric warming. This ruling followed a full trial and detailed assessment of the available scientific evidence in the District Court.

2. The claim by the Urgenda Foundation is based on rights under the European Convention on Human Rights (ECHR), in particular Articles 2 and 8. EU member governments have positive obligations to take action to prevent future violations of those rights (referred to as "a duty of care"). Article 2 involves a positive obligation to protect the lives of citizens. Article 8 concerns a broader category of "the right to home and private life" which, according to the judgment, applies to all activities which could endanger those rights, including "industrial activities" causing serious damage to the natural environment that supports the lives and welfare of citizens.

3. The judgment discusses the threshold test under Dutch law that triggers the government's duty of care – an obligation to take positive action:

> *This general limitation of the positive obligation, which applies here, has been made concrete by the European Court of Human Rights by ruling that the government has only to take concrete actions which are reasonable and for which it is authorized in the case of a real and imminent threat, which the government knew or ought to have known. The nature of the (imminent) infringement is relevant to this. An effective protection demands that the infringement is to be prevented as much as possible through an early intervention by the government.*[2] (emphasis added)

4. The court summarizes the question it is obliged to decide:

---

[1] *Urgenda Foundation v. The State of the Netherlands,* Supreme Court of the Netherlands (January 13, 2020); the Hague Court of Appeal (October 9, 2018) 200.178.245/01; the District Court, [2015] HAZA C/9/00456689 (June 24, 2015).
[2] The Hague Court of Appeal, para. 42.

> *If the government knows that there is a real and imminent threat, the State must take precautionary measures to prevent infringement as far as possible. In light of this, the Court shall assess the asserted (imminent) climate dangers.*[3] (emphasis added)

5. In *Urgenda*, both the Supreme Court and Court of Appeal confirm the findings by the District Court regarding the significance of the atmospheric concentration of greenhouse gases. The Dutch decisions highlight the important correlation between 2°C warming and a concentration level of 450 ppm. A central point established by the evidence in *Urgenda*, citing the IPCC Fifth Assessment Report (AR5), is that as long as the atmospheric carbon concentration level does not exceed 450 ppm, there is a 66% chance that the rise in global temperature can be kept below 2°C.[4] Baseline scenarios reported in the same AR5 Report show that the carbon concentration level is projected to exceed 550 ppm by 2040-2045, and will be more than 750 ppm by 2100.[5]

6. The Dutch Court also cites the *UN Emissions Gap Report 2017*, and addresses the implications if the emissions gap is not bridged by 2030.[6]

7. The focus of the inquiry in both the *Urgenda* case and in the present appeal is on how much time remains to avoid an irrevocable commitment to warming that will exceed 1.5°C and 2°C (assuming that keeping within either of those limits is still possible) and how deep the reductions in global emissions would have to be to stay within those limits – and whether the required deep cuts can be achieved within the time remaining.

8. Given the complex relationships between present industrial activities (present annual levels of emissions) and future consequences (future

---

[3] The Hague Court of Appeal, para. 43.

[4] The Hague Court of Appeal, paragraphs 3.2-3.5; para. 12 citing the IPCC Fifth Assessment Report (AR5); and para. 44. In the judgment of the Supreme Court of the Netherlands, the evidence relating to the significance of the 450 ppm level is considered at pages 9, 10, 16, 21-22, and 33.

[5] The District Court decision in *Urgenda* at paragraph 2.1 cites findings from the IPCC Fifth Assessment Report that baseline scenarios (scenarios without explicit additional efforts to constrain emissions) exceed 450 ppm CO_2eq by 2030 and reach CO_2eq concentrations between 750 and more than 1300 ppm CO_2eq by 2100. The same AR5 findings are set out in Appellants' Outline of Proposed Evidence, Part 15 at paragraphs 15.12-15.13 (AB 101) and Part 16 at paragraphs 16.7-16.18.

[6] The Hague Court of Appeal, para. 14. The District Court, which rendered its decision in 2015, cited earlier Emissions Gap reports, including the *UN Emissions Gap Report 2014* (see section 2.33 of the District Court decision). The 2014 Gap Report estimated that the emissions gap for 2030 was 14 - 17 GtCO2eq, which was stated to be 26-32 per cent of the annual level of global emissions in 2012.

atmospheric warming), expert evidence explains what factors must be taken into account in providing a reasoned answer to those questions.

9. The expert evidence identifies the factors that are driving the heating of the earth and explains why even immediate steps to arrest the continuing rise in the annual level of global emissions (i.e., immediate implementation of absolute reductions) will not halt the continuing rise in the atmospheric carbon concentration level for at least another 30 or 40 years – until global emissions reach net-zero – and why the annual increases in the concentration level, once they occur, are irreversible. The Hague Appeal Court decision[7] at paragraph 44 summarizes what it calls "the most important elements" of the facts and circumstances, including: emitted CO2 lingers in the atmosphere for hundreds of years or longer[8]; emitted greenhouse gases reach their full warming effect only after 30 or 40 years[9]; and the longer it takes to achieve the necessary emission reductions, the greater the total amount of emitted CO2 and the sooner the carbon budget will have been used up.[10]

10. The Supreme Court and the Court of Appeal in *Urgenda* considered, and rejected, an argument advanced by the State of the Netherlands that possible future development of technologies capable of removing CO_2 from the atmosphere ("negative emissions technologies") should be taken into account to support the state's position that there was no pressing need for the Netherlands to adopt more stringent emissions reduction policies:

> *AR5 does contain scenarios to achieve by 2050 and 2100 the reductions in greenhouse gas concentrations deemed necessary. These are largely based on the premise that there will not be a sufficient reduction in greenhouse gas emissions and that <u>the concentration of greenhouse gases will therefore have to be reduced by taking measures to remove those gases from the atmosphere</u> (see 2.1(12) above). It is certain, however,*

[7] The Hague Court of Appeal, paragraph 44.
[8] In the Appellants' Outline of Proposed Evidence, the atmospheric residence time of CO_2 is addressed in Part 15, at paragraph 15.7 (AB 100).
[9] The expert evidence regarding the delay between the increase in the atmospheric concentration level and the full unfolding of the warming effects is set out in the Appellants' Outline of Proposed Evidence, Appendix R at paragraphs R.11-R.14 (AB 167).
[10] The consequences of delaying the start of reductions is addressed in the Appellants' Outline of Proposed Evidence in Part 16 at paragraph 16.6 (AB 103); 16.41 (AB 108); Part 17 at paragraph 17.24 (AB 112); and Appendix S (AB 169).

> *that at the moment there is no technology that allows this to take place on a sufficiently large scale. Therefore, as the Court of Appeal held in para. 49, these new scenarios cannot be taken as a starting point for policy at this time without taking irresponsible risks…*[11] (emphasis added)

11. On a matter of this gravity, courts may not discount future risks based on a contingency that future technologies, which do not yet exist, will solve the problem. At best, a finding on the possible efficacy of future negative emissions technologies is a matter that would require expert evidence. Given the record of adjudicative facts in the present appeal[12], it was not open to Affleck J. to draw any inference that hypothetical future technologies will have the capacity to remove CO_2 from the atmosphere.

Gloucester Resources Limited v. Minister for Planning

12. The Land and Environmental Court of New South Wales in *Gloucester Resources Limited v. Minister for Planning*[13], in considering a proposal for a new coal mine, addressed essentially the same question: how should the judicial process, bound by the need to make reasoned decisions based on evidence, weigh and assess claims (by the proponents of projects or governments) that projected new increases in emissions associated with particular projects can be safely reconciled with exigent reduction targets.

13. In *Gloucester*, the court noted that the mine owner contended the increase in GHG emissions associated with the Project would not necessarily cause the carbon budget to be exceeded because "reductions in GHG emissions by other sources (such as electricity generation and transport sectors) or increases in removals of GHGs by sinks (in the oceans or terrestrial vegetation or soils) could balance the increase in GHG emissions associated with the Project."[14] The court rejected that argument:

---

[11] *Urgenda*, Supreme Court, para. 7.2.5, pp. 33-34.
[12] Outline of Proposed Evidence, Part 16 at paragraphs 16.4-16.6 (AB 102).
[13] *Gloucester Resources Limited v. Minister for Planning* [2019] NSWLEC.
[14] *Gloucester*, at paragraph 529.

> *I do not accept this reason. It is speculative and hypothetical. There is no evidence before the Court of any specific and certain action to "net out" the GHG emissions of the project. A consent authority cannot rationally approve a development that is likely to have some identified environmental impact on the theoretical possibility that the environmental impact will be mitigated or offset by some unspecified and uncertain action at some unspecified and uncertain time in the future …*[15] (emphasis added)

14. The Australian Court was guided by the available expert evidence summarized in the judgment showing the current rate of increase of warming, the relationship between burning fossil fuels and warming, the significance of the rising atmospheric carbon concentration level, and the consequences of delaying the start of absolute reductions of global emissions.[16]

15. Affleck J.'s finding there is a contingency a dire climate outcome will be avoided is a speculation about the likelihood and effectiveness of future mitigation efforts being taken on the scale required to keep warming within the 1.5°C or 2°C limits. It rests on a theoretical possibility there will be some unspecified and uncertain action at some unspecified time in the future.

All of which is respectfully submitted.

Dated at the City of Vancouver, Province of British Columbia, this 22nd day of May 2020.

_____

David Anthony Gooderham

_____

Jennifer Nathan

[15] *Gloucester,* paragraph 530.
[16] *Gloucester*, paragraphs 431-549; in particular, the Court's review of the scientific evidence is found at paragraphs 431-450 (pp. pp. 121 -131).

LIST OF AUTHORITIES

Para. No.