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Suryapratim Roy & Edwin Woerdman Dr

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Situating *Urgenda v the Netherlands* within comparative climate change litigation

Suryapratim Roy ¹ is a lecturer in law and economics and Dr Edwin Woerdman ¹ is an associate professor of law and economics, University of Groningen, Faculty of Law, Department of Law and Economics and co-director, Groningen Centre of Energy Law. Emails: surya.roy@ rug.nl and e.woerdman@rug.nl

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This article situates the judgment of The Hague District Court in Urgenda Foundation v the Kingdom of the Netherlands within the life of global climate change litigation. To do so, the article concentrates on the legal particulars of Dutch law, elements of 'diffused' jurisprudence from other jurisdictions and the reasoning of the judgment that is 'diffusible'. First, the Court's mandate for the State to take more robust and immediate climate mitigation action was informed by particulars of Dutch civil and constitutional law. Such particulars assisted with crossing the hurdles of standing of Dutch citizens in a climate change case, and the imposition of liability on the State for transboundary harm. Secondly, in relation to the separation of powers, there is clearly a marriage of 'diffused' jurisprudence from other jurisdictions and Dutch legal particulars with the primary effect of providing Connecticut v AEP a second life. Thirdly, aspects of the Court's reasoning are 'diffusible' or amenable to transnational borrowing. Notable in this regard is the Court's adoption of a procedural version of the precautionary principle, whereby the onus of proving adequacy and effectiveness of climate policy is shifted on to the State. However, caution must be exercised in adopting the Court's reasoning as to why the international (namely the Intergovernmental Panel on Climate Change) is identified as a preferred benchmark for allocation of climate targets as against the supranational (namely the Effort Sharing Decision of the EU) and the implicit economic reasoning as to why the State's policies are ineffective. To overcome this problem, it is suggested that the appointment of experts by judicial bodies may be the way forward.

Keywords: climate litigation; the Netherlands; *Urgenda* case; precautionary principle; separation of powers; comparative law; cost-benefit analysis

Introduction

On 24 June 2015, the Rechtbank Den Haag (The Hague District Court) agreed with a group of private petitioners¹ represented by the Urgenda Foundation, a non-governmental organisation, that the Dutch government should take more action to combat climate change in keeping with its obligations under the United National Framework Convention on Climate Change (UNFCCC)² (hereinafter 'Urgenda').

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¹ It may be noted that the petition was filed by Urgenda on behalf of itself, and separately on behalf of the private petitioners.

² Stichting Urgenda v Government of the Netherlands (Ministry of Infrastructure and Environment), ECLI:NL:RBDHA:2015:7145, Rechtbank Den Haag, C/09/456689/HA ZA 13–1396 (Urgenda), English translation available at http://uitspraken.rechtspraak.nl/inziendocument?id=ECLI:NL:

The Court substantially granted the reliefs claimed by the petitioners: it passed a Reduction Order requiring the State to reduce its greenhouse gas emissions by at least 25 per cent by the end of 2020.³ However, the Court resisted granting declaratory relief regarding scientific facts, an acknowledgment of the Netherlands' role in climate change, and specifically that the current government would be acting illegally were it to fail to bring into effect a reduction of at least 25 per cent by 2020 and 40 per cent by 2030.⁴ Further, the Court also denied a request for an Information Order, where the petitioners had sought to direct the way the State informs citizens 'about the severity and urgency of climate problems'.⁵ The Reduction Order was given notwithstanding the fact that, as a Member State of the European Union, the Netherlands has adopted climate change targets it seeks to achieve by 2020, and participates in the European Union Emissions Trading Scheme (EU ETS). The Ministry of Infrastructure and the Environment (the respondent in the case) has decided to appeal against this decision, noting that it would contest the understanding of the 'duty of care' by the District Court as well as the way the Court has appreciated international law. Nevertheless, the Ministry has stated that it seeks to commence implementation of the Reduction Order in the interim.⁶

Urgenda has broken new ground in several ways. To begin with, the judgment – as well as the documents submitted by the petitioners (unlike the documents submitted by the State) – have been informally translated into English with a clear attempt to reach an international audience. This is not usual practice in the Netherlands.⁷ Substantively, the suggestion could be made – as is prevalent in media reports⁸ – that Urgenda provides a global precedent that can be transplanted in other legal systems. The decision has been considered to be a 'landmark' judgment, and it seems that unlike other unsuccessful class action lawsuits on climate change, Urgenda appears poised for being viewed as a global precedent. Given this interest, it behoves us to take a close look at particulars of the judgment that would have a bearing on how it may be construed as a precedent. To do so, we look beyond a jurisdictional understanding of the word 'precedent'. As Jan Komarek puts it, a precedent is 'a previous judicial decision that has normative implications beyond the context of a particular case'.⁹ Such 'context' is not limited to the positive or textual law of a particular jurisdiction, and would restrict some aspects of the judgment from being amenable to global diffusion. The exercise of doing comparisons may be restricted to the practice of finding equivalents in different jurisdictions,¹⁰ or it may adopt an approach

RBDHA:2015:7196 last accessed 11 November 2015. For the purposes of this article, the authors have mostly referred to the informal translations provided by the petitioners. The translation has been cross-checked against the original judgment for accuracy.

³ Urgenda, para 5.1.

⁴ *Ibid*, paras 3.1, 4.105.

⁵ *Ibid*, para 4.106.

⁶ The official announcement is available at www.rijksoverheid.nl/documenten/kamerstukken/2015/09/ 01/kabinetsreactie-vonnis-urgenda-staat-d-d-24-juni-jl. It may be noted that the English translation of the official communication regarding the intent to appeal does not mention that the State intends to contest the decision on the way the Court has appreciated international law.

⁷ When cases reach the Court of Justice of the European Union (CJEU) or other EU courts, then translations are required. But other than that, English translations of court proceedings are hard to come by.

⁸ The Urgenda Foundation maintains a repository of the media interest in the case, which can be found at www.urgenda.nl/en/climate-case/.

⁹ Jan Komarek, 'Reasoning with Previous Decisions' in Maurice Adams and Jacco Bomhoff (eds), Practice and Theory in Comparative Law (Cambridge University Press 2012) 67.

¹⁰ This is the approach followed in the existing literature on Urgenda. See Josephine van Zeben, 'Establishing a Governmental Duty of Care for Climate Change Mitigation: Will Urgenda Turn the Tide?' (2015) 4 Transnational Environmental Law 339.

that tries to identify (1) the factors that influence the construction and diffusion of principles articulated in a judgment, and (2) the normative reasoning that may survive particulars and could be of relevance to legal decision-making outside the contingent particulars that inform a judgment. In this article, we aim to follow this two-pronged approach: we first provide an account of some contingent factors that informed *Urgenda* and then proceed to aspects of normative reasoning that may inform climate litigation globally.

Among the aspects of Urgenda that might have normative implications – and this is borne out in the literature that has emerged on the judgment¹¹ - is how a separation of powers may be construed in relation to climate law. It is evident from the judgment that concerns regarding the separation of powers between the *trias politica* (the legislature, executive and the judiciary) weigh heavily on the minds of the petitioners, the State and the Court.¹² As we will show below, such separation is interpreted in a manner that reveals the presence of 'travelling' principles of climate law and may be amenable to further diffusion, in addition to cementing the jurisprudence on environmental protection in the Netherlands. However, we will also show that the way the Court reviews state action on climate change also reveals a 'wound' in climate law: it is difficult to pronounce on *climate law* without indirectly invoking a view on regulatory aspects of *climate policy* despite attempts to keep away from 'political questions'. While both the petitioners and the Court argue that the legislative and executive competence of the Dutch government to formulate and implement appropriate policies would not be interfered with if a Reduction Order is passed, we will demonstrate that they indirectly reason about the appropriateness of the 'reduction efforts of the State'¹³. Specifically, while the Court discusses at length the judicial appreciation of climate science, a cost-benefit analysis (CBA) of relevant policy considerations to meet the science of climate change is done informally, but done all the same. In this regard, rather than lamenting how such reasoning falls foul of the separation of powers, we assess the Dutch doctrine of trias politica and the Court's reasoning on separation of powers to identify elements that led to the judgment, elements that were 'diffused' from outside the Netherlands, and elements that are diffusible in future instances of climate litigation.¹⁴

¹¹ Van Zeben (n 10); Quirin Schiermeier, 'Courts Weigh in on Climate Change' (2015) 523 Nature 18; Jolene Lin, 'The First Successful Climate Negligence Case: A Comment on Urgenda Foundation v The State of the Netherlands (Ministry of Infrastructure and the Environment)' (2015) 5 Climate Law 65; Robert B McKinstry Jr, 'Potential Implications for the United States of the Urgenda Foundation v Netherlands Decision Holding that the UNFCCC and International Decisions Required Developed Nations to Reduce Emissions by 25% from 1990 Levels by 2020' (2015) http://papers.srn.com/ sol3/papers.cfm?abstract id=2632726.

¹² For the Court's appraisal of the arguments presented by the parties, see *Urgenda* paras 4.94–4.102.

¹³ Urgenda, para 4.81.

This line of reasoning is akin to Douglas Kysar's contention that we should be equally interested in how tort law should be altered to grapple with climate change as in how issues pertaining to climate change can be resolved by the current tort system. Douglas Kysar, 'What Climate Change Can Do about Tort Law' (2011) 41 *Environmental Law Review* 1. Analysing the role of climate litigation in Australia, the United States and to a limited extent, the United Kingdom reveals that lawsuits seek to redress the 'institutional failure' of legislative and regulatory bodies through the judiciary. For a review, see Elizabeth Fisher, 'Climate Change Litigation, Obsession and Expertise: Reflecting on the Scholarly Response to *Massachusetts v EPA*' (2013) 35 *Law & Policy* 236. The same could be said for the EU, where climate litigation sought to resolve distributional issues regarding selection of participants and allocation of allowances in the Emissions Trading System in its earlier phases. See Josephine van Zeben, 'Respective Powers of the European Member State and Commission Regarding Emissions

Drawing on the above, our article is divided into two main sections. The first tries to grasp the context within which *Urgenda* is situated and the second focuses on the reasoning about climate policy that is present in the proceedings that may transcend the contextual informants of the judgment, concentrating on the separation of powers, the precautionary principle and the economic reasoning of the Court. A brief conclusion is presented to tie up our article.

Contextualising Urgenda

We cannot be exhaustive on the several public choice reasons as to why *Urgenda* was decided in the manner it was. Some indications of the context, however, can be found in the text of the judgment and the supporting documents – including the Summons filed by the petitioners ('Summons'),¹⁵ the Statement of Defence by the respondents ('Defence')¹⁶ and the Reply by the petitioners ('Reply'),¹⁷ the oral pleadings of the State¹⁸ – as well as in the circumstances in which they were filed.

Background to Urgenda

To begin with, the Urgenda Foundation has a clear public profile. While this is the Foundation's first successful public interest litigation, it has been more or less at the forefront of the sustainable transition movement in the Netherlands since its inception, and it has a reputed team of environmentalists, academics and green companies on board.¹⁹ The Foundation has also been closely associated with Jacqueline Cramer, who was the acting Minister for Planning and the Environment of the earlier government, a coalition between Christian-Democrats and the Labour Party.²⁰ We mention this because the petitioners had argued that when the earlier government was in power, the Dutch cabinet was of the opinion that emissions reductions of 25–40 per cent by 2020 were necessary and were deemed to be cost-effective.²¹ However, these targets were reduced to a proposed attainment of 17–20 per cent by the Ministry of Infrastructure and the Environment of the current government, a coalition between

Trading and Allowance Allocation: Case T-183/07 *Republic of Poland v Commission of the European Communities* and Case T-263/07 *Republic of Estonia v Commission of the European Communities*' (2010) 12 *Environmental Law Review* 216.

¹⁵ A translation of the Summons is available at www.urgenda.nl/documents/FINAL-DRAFT-Translation-Summons-in-case-Urgenda-v-Dutch-State-v.25.06.10.pdf.

¹⁶ http://gallery.mailchimp.com/91ffff7bfd16e26db7bee63af/files/Conclusie_van_antwoord.pdf.

¹⁷ Written reply by Urgenda (10 September 2014) http://www.urgenda.nl/documents/Conclusie-van-Repliek-10-09-2014.pdf last accessed 11 November 2015.

¹⁸ Oral pleadings Dutch government (14 April 2015) www.urgenda.nl/documents/ Staat20150414pleitnotaeindversie.pdf; and oral pleadings Urgenda (14 April 2015) www.urgenda.nl/ documents/PleitnotaVanDenBergUrgendaKlimaatzaak.pdf.

¹⁹ Summons, para 53. See also Derk A Loorbach and Jan Rotmans, 'Urgenda: New Institution to Facilitate Transition to Sustainable Netherlands' (Dutch Research Institute for Transitions) http://hdl.handle. net/1765/34986.

²⁰ 'At the request to the then acting Minister for Planning and Environment, Jacqueline Cramer, Urgenda has participated in the development of an alternative political agenda for climate policy and of "breakthrough programmes" for sustainability in the construction, mobility and food sectors.' Summons, para 52.

²¹ Urgenda, para 4.70.

²² Urgenda, para 2.74. The report titled 'Klimaatagenda: Weerbaar, welvarend en groen' is available at www. rijksoverheid.nl/documenten/rapporten/2013/10/04/klimaatagenda-weerbaar-welvarend-en-groen.

Further, one of the lawyers who argued the case – Roger Cox – was instrumental in the strategy to approach the judiciary for climate action by mobilising citizen support through collecting signatures.²³ The law firm in which he is a partner is also assisting a similar lawsuit in Belgium; the shaping of climate norms, one might say, appears to be strongly influenced by entrepreneurial 'moral agents'²⁴ in the Netherlands. Moreover, there have been popular expressions of comparative inadequacy of climate change leadership from different influential quarters in the Netherlands in relation to its perceived green peers such as the United Kingdom and Denmark.²⁵ This sentiment features heavily in the Summons and finds its way into the final judgment as well, as comparisons between Denmark, Sweden and the United Kingdom influence the Court's opinion about the inadequacy of climate change action by the Netherlands.²⁶

The mobilisation of the public sentiment that the Netherlands is lagging behind in green leadership may provide a snapshot of the political context that informed the filing of the case. In terms of positive law, the petitioners had an enabling provision of the Dutch Civil Code on their side, namely a civil law provision to hold the State responsible for failing in its 'duty of care', supported by a persuasive precedent on transboundary environmental harm by the Dutch Supreme Court, namely the *Potash Mines* ('Kalimijnen') judgment. Both elements allowed the petitioners the opportunity to overcome two of the three primary issues that have thwarted public interest litigation on climate change to date: the issues of *standing* and *national liability of the State for transboundary harm*. The third issue pertains to the political question issue that we subsequently discuss, where we seek to demonstrate that unlike standing and liability for transboundary harm, it was more the diffusion of American law, the persuasive force of international climate governance and an interpretive view of the individual as the principal in climate change constitutionalism that informed the Court.

Legal informants of Urgenda

The petitioners' claim that the State's inadequate action on climate change amounts to the breach of the duty of care, and hence invokes liability under tort law finds its basis in Article 21 of the Dutch Constitution²⁷ and the Dutch Civil Code, specifically Article 6:162.²⁸ To impose this duty on the State required assessment of whether the Urgenda Foundation (being an NGO) can bring claims on behalf of its citizens. In

²³ The CEO of Urgenda Foundation has acknowledged that filing a Public Interest Litigation was the brainchild of Cox: see www.theguardian.com/global-development-professionals-network/2015/jun/25/hagueclimate-change-verdict-marjan-minnesma.

While there is no specific study on climate lawyers or Dutch lawyers in this regard, the creation of transnational norms by lawyers who mobilise some legal institutions in different areas of law is found in Bryant Garth and Yves Dezalay, 'Marketing and Selling Transnational "Judges" and Global "Experts": Building the Credibility of (Quasi)Judicial Regulation' (2010) 8 Socio-Economic Review 113.

²⁵ Dutch newspapers (such as *Volkskrant* or *Trouw*) write frequently about the Netherlands lagging behind internationally in combating climate change, see for instance, www.trouw.nl/tr/nl/13110/ Klimaatverandering/article/detail/3807241/2014/12/09/Nederland-keldert-op-klimaatranglijst.dhtml.

²⁶ Urgenda, paras 4.80 and 4.82.

²⁷ Article 21 states: 'It shall be the concern of the authorities to keep the country habitable and to protect and improve the environment.'

²⁸ Article 6 is as follows: Article 6:162 Definition of a 'tortious act'

this regard, Articles $3:303^{29}$ and $3:305a^{30}$ of the Dutch Civil Code proved to be of assistance. This marks a difference with actions by NGOs and private organisations in the United States where the standing of the representative body to bring private action has been a particularly thorny issue owing to the requirement to demonstrate a 'concrete and particularized injury'.³¹ In fact, even in *Massachusetts* v EPA,³² the State of Massachusetts had to prove direct harm caused to it on bringing an action on behalf of its residents for the Environmental Protection Agency (EPA)'s federal inaction. The fact that Article 3:305a cannot be used to claim monetary compensation³³ precluded the requirement to prove the appropriateness of the relief sought.

In *Urgenda*, the Court clarified the limits of time and space regarding the liability of the State for climate change. The State has no liability for harms suffered by future generations of non-Dutch citizens but is required to exercise a duty of care towards (a) current and future generations of citizens within the Netherlands,³⁴ and (b) people currently residing outside the Netherlands as they would be affected by the transboundary (in)action of the Dutch State.³⁵ These conclusions were arrived at through an

- 2. As a tortious act is regarded a violation of someone else's right (entitlement) and an act or omission in violation of a duty imposed by law or of what according to unwritten law has to be regarded as proper social conduct, always as far as there was no justification for this behaviour.
- 3. A tortious act can be attributed to the tortfeasor [the person committing the tortious act] if it results from his fault or from a cause for which he is accountable by virtue of law or generally accepted principles (common opinion).
- 29 Article 303 states:

Article 303: Sufficient interest needed to start a legal action Without sufficient interest no one has a right of action.

- ³⁰ Article 305a states:
 - Article 3:305a Collective actions ('Class actions')
 - 1. A foundation or association with full legal capacity that, according to its articles of association, has the objection to protect specific interests, may bring to court a legal claim that intents to protect similar interests of other persons.
 - 2. A legal person filing a claim as meant in paragraph 1 is inadmissible if he, in the given circumstances, has made insufficient attempts to reach a settlement over its claim through consultations with the defendant. A period of two weeks after the defendant has received a request for such consultations, indicating what is claimed, shall in any event be sufficient to this end.
 - 3. A legal claim as meant in paragraph 1 may be brought to court in order to force the defendant to disclose the judicial decision to the public, in a way as set by court and at the costs of the persons as pointed out by the court. It cannot be filed in order to obtain compensatory damages.
 - 4. A legal action as meant in paragraph 1 cannot be based on specific behaviour as far as the person who is harmed by this behaviour opposes to this.
 - 5. A judicial decision has no effect with respect to a person whose interests are protected by the legal action, but who has made clear that he does not want to be affected by this decision, unless the nature of the judicial decision brings along that it is not possible to exclude this specific person from its effect.
- ³¹ This is the formulation of standing articulated in *Lujan v. Defenders* of Wildlife 504 US 555, 560-561 (1992). This formulation has been subsequently endorsed in Laidlaw, which is arguably the primary case that establishes the law on standing. See *Friends of the Earth v Laidlaw Environmental Services* 528 US 167 (2000).

- ³⁴ Urgenda, paras 4.5 and 4.8.
- ³⁵ *Ibid*, para 4.79.

^{- 1.} A person who commits a tortious act (unlawful act) against another person that can be attributed to him, must repair the damage that this other person has suffered as a result thereof.

³² 549 US 497 (2007).

³³ Article 3:305a (3).

interpretation of the requirements of the duty of care under Article 162 in the light of precedents, primarily the *Potash Mines* judgment of the Dutch Supreme Court.³⁶ Drawing on this judgment, the Court applied the tort of nuisance ('hinder') with respect to transboundary inaction on climate change.

In Potash Mines, the District Court of Rotterdam - whose decision was subsequently upheld by the Supreme Court – found that the French company Mines Domaniales de Potasse d'Alsace SA unlawfully discharged waste salts into the Rhine River that adversely affected Dutch gardening companies and farmers because of the heavy salinisation of the water. Once the Court of Justice of the European Union (CJEU) had issued a preliminary ruling that both France as well as the Netherlands had jurisdiction,³⁷ the Dutch Court developed a transboundary duty of care and pro rata liability principle drawing on the 'no harm' jurisprudence found in international customary law and the tort of transboundary nuisance initiated in *Trail Smelter.*³⁸ Per the pro rata liability principle, when damage is the result of cumulative pollution from multiple sources, then each source assumes liability for its share. Thus, every state has a duty of care to avoid its individual contribution to cumulative damage, where the damage can be established.³⁹ The case had a substantial effect in both amendments to the Civil Code by way of an insertion of Article 5:37 on transboundary nuisance, as well as the interpretation of Article 162 in a host of cases that were to follow.⁴⁰

Some commentators have assumed that the application of *Potash Mines* in *Urgenda* exposes any company registered in any jurisdiction or any state to a lawsuit in the Netherlands.⁴¹ This is incorrect because were it not for the CJEU, the Dutch Court would not be able to assume jurisdiction in relation to a bilateral dispute. While this is a valid precedent for holding the Dutch State liable for transboundary effects of its emissions, it would be difficult to hold other countries liable for the effects of emissions in the Netherlands without the intervention of a supranational or international court. A more tricky question, in our opinion, is whether a private Dutch entity such as a company could also be brought to book for pro rata liability.⁴² Two qualifications to such lawsuits are clear from the judgment: (1) a 'negligible' contribution per *Potash Mines* seems to be excluded from liability where the assessment of contribution – much like the assessment of harm – is according to the legal framework of the UNFCCC,⁴³ and (2) *Urgenda* connects

³⁶ HR 23 September 1988, NJ 1989.

³⁷ C-21/76 Handelskwekerij Bier v Mines de Potasse d'Alsace [1976] ECR 1735.

³⁸ Trail Smelter Arbitration (United States v Canada) (1905) III Reports of the International Arbitral Awards 1941.

³⁹ For the analogy to climate change, see Summons, paras 314–333.

⁴⁰ See Owen McIntyre, 'A Comparative Analysis of the Legal Frameworks That Govern Europe's Transboundary Waters' in Werner Scholtz and Jonathan Verschuuren (eds), *Regional Environmental Law* (Edward Elgar 2015) 399–400.

⁴¹ If any emission of greenhouse gases creates an unacceptable danger, any company can be the target of a lawsuit in The Netherlands.' Lucas Bergkamp, 'The Urgenda Judgment: A "Victory" for the Climate That Is Likely to Backfire' (*Energypost*, 9 September 2015) www.energypost.eu/urgenda-judgmentvictory-climate-likely-backfire/.

⁴² In brief, whether an analogous fact situation as *Kivalina* could gain traction in Dutch courts. See *Native Village of Kivalina v ExxonMobil Corporation* 09–17490, 2012 WL 4215921, 9th Cir, 21 September 2012.

⁴³ The petitioners acknowledge this as well, see Summons, para 327.

the idea of pro rata liability to 'joint and individual responsibility' of signatories to the UNFCCC, whereby only states appear to fall under the locus of liability.⁴⁴ Thus, it appears that *Urgenda* stops short of assuming jurisdiction against private parties; even private emitters within the Netherlands can only be held vicariously liable through the State.⁴⁵

Separation of powers, European law and international law

Drawing on the role of the CJEU indicated above, it needs to be noted that in addition to the national legal and political particularities that informed the context of Urgenda, the Netherlands is a Member State of the EU and is a signatory to the European Convention on Human Rights (ECHR). EU law as well as interpretations of the ECHR by the European Court of Human Rights (ECtHR) have played a role in the reasoning of the petitioners, the State and the Court. Briefly put, (a) the petitioners relied on an interpretation of Articles 2 and 8 of the ECHR⁴⁶ that allowed for a duty of the State to take adequate steps to protect the right to a healthy private and family life; (b) the State argued that its actions are in compliance with EU law⁴⁷ and therefore adequate; and (c) the Court found EU law to be of minimal importance as Member States enjoy a wide 'margin of appreciation' in implementing climate policy, but implicitly found the interpretations of the ECHR afforded by the petitioners to be persuasive without explicitly relying on the ECHR.⁴⁸ This appears to be more an instance of the horizontal effect of European human rights jurisprudence⁴⁹ rather than an adoption of a vertical obligation as is brought out in the reasoning of the Court: 'Although Urgenda cannot directly derive rights from Articles 2 and 8 ECHR,⁵⁰ these regulations still hold meaning, namely in the question discussed below whether the State has failed to meet its duty of care towards Urgenda.⁵¹ This is not a one-off instance; the role of the ECHR in informing the judicial review of legislative and executive acts in the Netherlands has been of

- 47 Urgenda, para 4.2.
- ⁴⁸ *Ibid*, para 4.52.

⁴⁴ 'In view of the fact that the Dutch emission reduction is determined by the State, it may not reject possible liability by stating that its contribution is minor, as also adjudicated mutatis mutandis in the Potash Mines ruling of the Dutch Supreme Court.' *Urgenda*, para 4.79.

⁴⁵ This view is seconded in Christopher Y Nyinevi, 'Universal Civil Jurisdiction: An Option for Global Justice in Climate Change Litigation' (2015) 8(3) *Journal of Politics and Law* 135, 143.

⁴⁶ Summons, paras 243–257.

⁴⁹ For a recent review of the debates in which the horizontal effect of the ECHR can be found in European and Member State law, see Mary Arden, *Human Rights and European Law: Building New Legal Orders* (Oxford University Press 2015) 224–25. See also Gunther Teubner, 'Transnational Fundamental Rights: Horizontal Effect?' (2011) 40 *Netherlands Journal of Legal Philosophy* 191. There is a distinct advantage to adopting the authoritative reasoning of supranational courts without being bound by the legal culture of such courts. Though in the context of the CJEU rather than the ECtHR, Bogojević argues that 'EU climate change case law projects little concern for the need to mobilise climate change *action* or to shed light on climate change *impacts* during the court proceedings; rather, this jurisprudence focuses on questions about EU environmental competences, which have already been exercised, and which are then tested in the EU courts.' Sanja Bogojević, 'EU Climate Change Litigation, the Role of the European Courts, and the Importance of Legal Culture' (2013) 35 *Law & Policy* 184, 189.

⁵⁰ The Court observed that the Urgenda Foundation is not a 'victim' within the meaning of Article 34 of ECHR and therefore could not directly rely on the provisions of the ECHR. Urgenda, para 4.52.

⁵¹ *Ibid*.

increasing importance especially since the 1980s.⁵² Thus, the use of human rights to prompt regulatory action on climate change, found to be an 'elusive remedy'⁵³ in other jurisdictions, appears to shape state liability on climate change in the European legal order by virtue of the ECHR. The role of international and supranational law can be appreciated better through a discussion on the *trias politica* doctrine in Dutch law.

The Dutch government has intimated that it would file an appeal against Urgenda in the Appeals Court rather than the Supreme Court as it wants to 'challenge the facts upon which the verdict is based'.⁵⁴ This choice was made notwithstanding several requests regarding a speedier process that the Supreme Court may offer.55 It appears that the motivation behind this step is to challenge the bigger picture regarding the separation of powers in relation to climate action.⁵⁶ Although the English translation of Urgenda, the Summons and the Reply use 'separation of powers' and *trias politica* interchangeably, there is a distinction in the trajectory of the *trias politica* doctrine as against the separation of powers doctrine found in American jurisprudence. Unlike the US, the Netherlands did not have its Marbury v Madison⁵⁷ moment⁵⁸ where the logic of checks and balances was built into the idea of judicial review. On the contrary, an 1848 amendment to the Dutch Constitution prohibited judicial review of statutes.⁵⁹ Though this prohibition was maintained in Article 120^{60} in its 1983 revision, a new provision (Article 94) allowed for judicial review of legislative acts to ensure compatibility with treaties.⁶¹ As Adams and van der Schyff notes, reading Articles 94 and 120 together leads to a 'peculiar situation' where

⁵² Petrus van Dijk identifies this period as crucial owing to judgments delivered by the Dutch Supreme Court reviewing national law for their compliance with the ECHR. Petrus van Dijk, 'De houding van de Hoge Raad jegens de verdragen inzake de rechten van de mens' in *De Plaats van de Hoge Raad in het Huidige Staatsbestel: De Veranderingen in de Rol van de Hoge Raad als Rechtsvormer* (Tjeenk Willink 1988) 181.

⁵³ Pamela Stephens, 'Applying Human Rights Norms to Climate Change: The Elusive Remedy' (2010) 21 Colorado Journal of International Environmental Law and Policy 49.

⁵⁴ Urgenda Press Release, 'Despite Pressure from Parliament, the Dutch Government Refuses to Pull Appeal in Landmark Climate Case' www.urgenda.nl/en/climate-case/ linked to http://us1.campaignarchive2.com/?u=91ffff7bfd16e26db7bee63af&id=c5967d141c&e=46588a629e accessed 2 November 2015.

⁵⁵ Ibid.

⁵⁶ We thank the reviewers for bringing this point to our attention.

⁵⁷ 5 US (1 Cranch) 137 (1803).

⁵⁸ It could be argued that the introduction of judicial identification of unwritten law 'pertaining to proper social conduct' in a 1919 judgment of the Dutch Supreme Court regarding what an 'unlawful act' is in the Civil Code was an important moment in the history of judicial review in the Netherlands. Marc de Werd and Reiner de Winter, 'Judicial Activism in the Netherlands: Who Cares?' in Rob Bakker, Aalt Willem Heringa and Frits Stoink (eds), *Judicial Control: Comparative Essays on Judicial Review* (MAKLU Uitgevers Antwerpen 1995) 101–07. This way of reading the law into legislative acts could be an alternative way of explicitly finding a legislative act *ultra vires* the Constitution.

⁵⁹ See Jan Willem Sap, The Netherlands Constitution 1848–1998: Historical Reflections (Purdue University Press 2000).

⁶⁰ Article 120 of the Constitution states: The constitutionality of Acts of Parliament and treaties shall not be reviewed by the courts.

⁶¹ Article 94 of the Constitution states: Statutory regulations in force within the Kingdom shall not be applicable if such application is in conflict with provisions of treaties or of resolutions by international institutions that are binding on all persons.

the judiciary is barred from testing the constitutionality of statutes, but not from reviewing legislation enjoying a lesser status than statutes ... on the other hand however, the judiciary may on the basis of Article 94 review all forms of legislation for compatibility with international treaties and resolutions.⁶²

The Supreme Court of the Netherlands affirmed the primacy of the legislature in interpreting Article 120,⁶³ and therefore save for Article 94, Dutch law accords supremacy to the legislature.⁶⁴

Notwithstanding this preference for legislative supremacy, the role of judicial review of legislative and executive acts has expanded over the years. Ng notes that the parliament 'appears to be hampered and limited by its own peculiarities in coalition politics',⁶⁵ which featured strongly in relation to euthanasia where courts had to step in.⁶⁶ This may partially explain why similar to common law reasoning on checks and balances, there has been a 'cooptation rather than a separation of powers'⁶⁷ in Dutch courts invoking the power of judicial review. We say 'partially' because while Dutch law is still reluctant to allow courts to review statutes, it appears that what is unique to the Dutch legal order is how it is situated vis-à-vis supranational and international law. As Article 94 of the Constitution and the significant role of the ECHR discussed earlier indicate, supranational and international law play a major role in providing a normative basis for the judicial review of legislative and executive acts. Other than the specific role played by the EU and the ECHR, the general prevalence of international law in informing the grounds of review has been far stronger in the Netherlands than in the US, owing to a lack of resistance⁶⁸ regarding the 'originalism' of constitutional interpretation to a specifically national source.⁶⁹ The combination of the increasing prevalence of judicial review in cases where governance and human rights intersect,⁷⁰ coupled with the fidelity of the Dutch judiciary to international norms, informed the way separation of powers was interpreted in Urgenda and (as we show below) allowed Connecticut v AEP a second life.

What we found curiously missing in the role of supranational law in *Urgenda* is an appraisal of EU governance of climate change and interactions between Dutch law and

⁶² Maurice Adams and Gerhard van der Schyff, 'Constitutional Review by the Judiciary in the Netherlands: A Matter of Politics, Democracy, or Compensating Strategy?' (2006) 66 ZaoRV 399, 400.

⁶³ Hoge Raad, 14 April 1989, cited in Adams, *ibid*.

⁶⁴ Jurgen CA de Poorter, 'Constitutional Review in the Netherlands: A Joint Responsibility' (2013) 9(2) Utrecht Law Review 89.

⁶⁵ Gar Yein Ng, 'Judicialisation and the End of Parliamentary Supremacy' (2014) 3 *Global Journal of Comparative Law* 50, 87.

⁶⁶ Ibid.

⁶⁷ Nick Huls, 'The Ebb and Flow of Judicial Leadership in the Netherlands' (2012) 8(2) Utrecht Law Review 129, 130.

⁶⁸ Describing the difference between judicial review in the Netherlands and the US, Besselink notes that 'The most eminent difference being the relative closure of the US towards international law and its relative aloofness from regional forms of legal cooperation and integration in the field of human rights and economic integration which are central to understanding European constitutional development'. Leonard FM Besselink, 'The Proliferation of Constitutional Law and Constitutional Adjudication, or How American Judicial Review Came to Europe After All' (2013) 9(2) Utrecht Law Review 19, 35.

⁶⁹ For the argument that originalism creeps into even the more progressive of American constitutional scholars, see Kim Lane Scheppele, 'Jack Balkin Is an American' (2013) 25 Yale Journal of Law and the Humanities 23.

⁷⁰ Ng (n 65) 85.

EU law regarding administrative action on climate change. Specifically, neither the petitioners, respondents nor the Court explicitly address two aspects of the relationship between the EU and the Netherlands:

(a) Setting emissions targets: While the parties and the Court discussed the role of EU instruments and found that the State was compliant with them.⁷¹ there was hardly any discussion of the fact that the EU plays a major role in the burdens that are assumed by Member States, currently referred to as 'effort sharing'.⁷² The petitioners in effect argued that the Dutch State should shoulder a higher burden *despite* the required mitigation allocated by the EU's political process.⁷³ According to the current EU 'climate package', post-2012, the allocation of the burden is 'sectoral', namely for the sectors covered by the EU ETS⁷⁴ whereas separate targets are made for non-ETS sectors.⁷⁵ The Court clarifies the difference between emissions from the ETS and non-ETS sectors,⁷⁶ and acknowledges the fact that the State's current assumed reduction target of 14–17 per cent is derived from the EU reduction target of 20 per cent by 2020.⁷⁷ As against this derived target from the EU's decision, the petitioners sought to adopt the recommended target of 25-40 per cent reductions for Annex I countries found in the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report.⁷⁸ This was acknowledged⁷⁹ and allowed by the Court for constitutional reasons without a discussion on why the EU may not be the appropriate governance body for shaping the climate action of Member States. It may be noted that such acknowledgment was more an act of interpretation than replication. It is not clear whether the target of 25-40 per cent for Annex I countries that the Court refers to is a target for individual countries, or for Annex I countries as a group. It appears from the IPCC Report the Court refers to that the target for the year 2020 applies to Annex I countries as a group.⁸⁰ If that is the case, then it refers neither to individual Annex I states nor only the EU as a collective. Thus, the question as to

⁷¹ Urgenda, para 4.52.

⁷² Decision No 406/2009/EC of the European Parliament and the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020. Its predecessor was the Burden-Sharing Agreement of 1997. OJ L 140, 5.6.2009, p. 136–148.

⁷³ Kars de Graaf and Jan Jans argue that the Court implicitly ruled that the EU target is unlawful, a decision that should not have been made before referring the matter to the CJEU. Kars de Graaf and Jan Jans, 'The Urgenda Decision: Netherlands Liable for Role in Causing Dangerous Climate Change' *Journal of Environmental Law* (forthcoming).

⁷⁴ http://ec.europa.eu/clima/policies/strategies/progress/kyoto_2/index_en.htm.

⁷⁵ For a review of the current regulatory framework on arresting emissions in the EU ETS and non-ETS sectors, see Edwin Woerdman, Martha Roggenkamp and Marijn Holwerda (eds), *Essential EU Climate Law* (Edward Elgar 2015).

⁷⁶ Urgenda, paras 2.62–2.70.

⁷⁷ *Ibid*, para 4.31 and para 4.41.

⁷⁸ Sujata Gupta, Dennis A. Tirpak and others, 'Policies, Instruments and Co-operative Arrangements' in *Climate Change 2007: Mitigation of Climate Change*, IPCC Fourth Assessment Report, 776 www. ipcc.ch/pdf/assessment-report/ar4/wg3/ar4-wg3-chapter13.pdf.

⁷⁹ *Urgenda*, para 2.15.

⁸⁰ IPCC Fourth Assessment Report (n 78) 775. A list of the Annex I countries is available at http://unfccc. int/parties and observers/parties/annex i/items/2774.php.

whether it is the Netherlands or the EU that is an appropriate unit for meeting this target is a matter of interpretation.

As to whether the Court's reasoning was in conformity with EU law generally, this is also a moot point. Climate change is an area where the EU and the Member States enjoy shared competence,⁸¹ but the compatibility of enhanced targets and additional climate measures adopted by Member States is a contestable issue. On one hand the Effort Sharing Decision contains binding commitments, but on the other hand, there are no explicit restrictions on Member States adopting higher targets.⁸² Higher national targets, however, may affect stakeholders in the EU by virtue of possible leakage, distortions of competition and restrictions on the movement of goods and services.⁸³ Given that EU law may be invoked and the Court's limited engagement with the EU climate package, we anticipate that the move to adopt a higher burden despite the EU's political process will not be taken lightly by the Appeals Court, and may prompt a referral to the CJEU.

(b) *The effectiveness of the EU ETS*: The perceived functioning of the EU ETS assumes paramount importance in the petitioners' as well as the State's assessment of mitigation by 2020. The petitioners expressed a clear scepticism about the functioning of the EU ETS as the primary policy mechanism of dealing with mitigation.⁸⁴ This provides an indication of the fact that it is not so easy to separate the reduction of emissions (or targets) from the manner in which emissions are reduced (or instruments). Political questions and policy choices are implicitly invoked in relation to determining the adequacy and effectiveness of state action. This brings us to the Court's reasoning about climate change mitigation that is not necessarily contingent on jurisdictional particulars. But before we examine this, we would like to hazard a speculation about the possible reason behind the implicit departure from EU climate change governance. Van Zeben notes that the controversies regarding the reluctance of the Dutch government to go beyond EU policy in environmental matters may indicate the petitioners' discontent.⁸⁵ Indeed, scholars have

⁸¹ By virtue of Article 4(2), Treaty of the Functioning of the European Union (TFEU), the EU and Member States enjoy shared competence with respect to areas related to climate change policy including environment, transport and energy.

⁸² Member States may by virtue of Article 193 TFEU 'introduce or maintain more stringent protective measures' in relation to the environment as long as they are 'compatible with the Treaties'.

⁸³ An attempt at a taxonomy of EU environmental law has been made by Matthew Humphreys, 'Consistency in European Environmental Protection – Towards a General Principle' (2012) 19 Columbia Journal of European Law 313. The applicability of the entirety of EU environmental jurisprudence to climate change cases – and whether all environmental law cases are climate change precedents – is yet another contested issue, and is beyond the scope of this article. For an introduction, see Chris Hilson, 'It's All About Climate Change Stupid! Exploring the Relationship between Environmental Law and Climate Law' (2013) 25 Journal of Environmental Law 359.

⁸⁴ In the Summons, the petitioners indicate the possibility of allowances being over-allocated in Phases I and II of the EU ETS, para 304. A more pointed critique of the rationale behind the EU ETS and other emissions trading schemes is found in the Reply, where the petitioners take umbrage regarding the use of financial incentives found in current mitigation policies; they 'find it striking that in terms of policy the State apparently approaches a threatening and dangerous climate change with potentially catastrophic consequences as a "money-making model" [while]... there is no mention of quantified reduction targets or whether the "financial incentives" are effective in reaching such a quantified target'. Reply, para 72.

⁸⁵ Van Zeben (n 10) 340.

critiqued the preference for a 'no gold-plating' attitude in the Netherlands regarding the transposition of EU environmental law into Member State law.⁸⁶ Thus, the sentiment about a lag in Dutch climate change leadership discussed earlier could be complemented by an apprehension that EU climate change governance has informed the dilution of national action. We do not wish to pursue a detailed inquiry into the validity of such an apprehension, but only wish to point out that *Urgenda* was perhaps a mobilisation of a perception of institutional failure⁸⁷ of the EU as much as the current government of the Netherlands.

The political question and the precautionary principle in Urgenda

Above we analysed some particulars that influenced Urgenda, and which may be difficult to replicate in other jurisdictions by way of public interest litigation actions or class action tort claims against a state's inaction. In this section we discuss elements in the reasoning of the Court that may *not* be hostage to particulars, and have implications for future judicial action on climate change. Notably, reasoning about the meeting of targets and properties of instruments to meet such targets is based on policy complexities. The way such complexities are approached in judicial reasoning is by assessment of competence of agencies who handle such complexities, and constitutional tools that would shape the appreciation of such complexities. The two primary reasoning devices that capture these concerns are the political question and the precautionary principle respectively. Drawing on the way these devices are populated in Urgenda, we reconstruct the reasoning of the Court as follows: the Court's primary finding is that the State needs to take more robust and more immediate mitigation action. To arrive at this finding, the Court assumes competence as the question is characterised as a legal question with political consequences. Further, it invokes a version of the precautionary principle whereby it shifts the burden on to the State to show that it has adopted sufficient targets, and is pursuing appropriate policy measures to achieve such targets. However, these legal tools adopted by the Court are not free from controversy, as we shall see below.

Two faces of the political: 'political questions' and 'legal questions with political consequences'

Current scholarship⁸⁸ on *Urgenda* concentrates on the lessons that can be drawn from the judgment, or reasoning that can be replicated in other legal orders, specifically the US. Of primary concern to such scholars is the doctrine of separation of powers, with the prevailing view that the Court in some way or other overstepped its limits in its

⁸⁶ Helle Tegner Anker and others, 'Coping with EU Environmental Legislation – Transposition Principles and Practices' (2015) 27 Journal of Environmental Law 17.

⁸⁷ One of the primary motivations behind climate litigation worldwide has been to address the institutional failure of different branches of government to deal with climate change. See Jacqueline Peel and Hari M Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge University Press 2015) 28–52; Fisher (n 14).

⁸⁸ Van Zeben (n 10); Schiermeier (n 11); Lin (n 11); McKinstry Jr (n 11).

reasoning of the *trias politica*. What such analyses miss is that other than the primacy accorded to international norms by Dutch courts while reviewing legislative and executive acts generally, elements of the reasoning about the separation of powers in *Urgenda* have also been subject to influence by American jurisprudence (or the reasoning has been 'diffused') and it is potentially amenable to influencing the future of climate litigation (or the reasoning is 'diffusible').

The Dutch petitioners relied on *Connecticut v American Electric Power*⁸⁹ to find a basis for overcoming the 'political question' objection,⁹⁰ or the objection that the Court should not encroach into the decision-making power of the State.⁹¹ While the Court did not explicitly use such terminology,⁹² it appears to follow the reasoning of the petitioners in maintaining a distinction between a political decision and a legal decision with political consequences; the Court reasons that 'one or more components of the claim can also have political consequences and in that respect can affect political decision-making'.⁹³ Such reasoning is clearly one that prefers a *balance of powers* to a *separation of powers*⁹⁴ supported by the German influence in Dutch law of arriving at a legal rationality of administrative action.⁹⁵ Such legal rationality is also the basis of proportionality (discussed below) as a standard of review.⁹⁶ Climate change litigation in the US has over the years shifted to a *regulation-forcing role* where courts have been pivotal in shaping the trajectory of climate action.⁹⁷ The idea that courts have a unique role to play in shaping regulatory action – or 'progressive litigation'⁹⁸ as Tim Stephens puts it – may be construed as an American export⁹⁹ that has diffused into *Urgenda*. *Connecticut v AEP* brought about a change in the role of the judiciary in climate

⁸⁹ Connecticut v American Electric Power 582 F3d 309 (2d Cir 2009).

⁹⁰ The idea that some questions are political, and beyond judicial competence is attributed to Chief Justice Marshall's observation in *Marbury v Madison*, the case that effectively established the role of judicial review in the American legal system. Per Marshall: 'Where the heads of departments are the political or confidential agents of the executive, merely to execute the will of the President, or rather to act in cases in which the executive possesses a constitutional or legal discretion, ... their acts are only politically examinable.' *Marbury v Madison* 5 US (1 Cranch) 137 (1803), 166. *Connecticut v AEP* analysed the political question doctrine as articulated in *Baker v Carr* 369 US 186 (1962). In *Baker*, Justice Brennan laid out criteria for identification of what might constitute a non-justiciable political question, thereby allowing judicial review in justiciable political questions.

⁹¹ The petitioners argue that American law is 'instructive' as the *trias politica* doctrine is 'much better thought out and further developed in American law than in the Netherlands'. Reply, para 599.

⁹² This could be due to the fact that it is not part of judicial culture to refer to cases decided in other jurisdictions in its reasoning. As Smits notes: 'Foreign case law and doctrine do not play a big role in Dutch court practice. The Dutch Supreme Court and lower courts do not explicitly refer to it.' Jan Smits, 'The Netherlands' in Jan Smits (ed), *Elgar Encyclopaedia of Comparative Law* (Edward Elgar 2006) 495.

⁹³ Urgenda, para 4.98.

⁹⁴ See Adams (n 62) 408–10.

⁹⁵ CAJM Kortmann, Constitutioneel Recht (Kluwer 2001) 50; Ng (n 65) 81.

⁹⁶ For a comparative perspective, see Moshe Cohen-Eliya and Iddo Porat, 'American Balancing and German Proportionality: The Historical Origins' (2010) 8 International Journal of Constitutional Law 263.

⁹⁷ See for instance, Amelia Thorpe, 'Tort-Based Climate Change Litigation and the Political Question Doctrine' (2008) 24 Journal of Land Use & Environmental Law 79.

⁹⁸ Tim Stephens, 'International Courts and Climate Change: "Progression", "Regression" and "Administration" in Rosemary Lyster (ed), *In the Wilds of Climate Law* (Australian Academic Press 2009) 53– 70.

⁹⁹ Daniel Hare, 'Blue Jeans, Chewing Gum, and Climate Change Litigation: American Exports to Europe' (2013) 5 Legislation and Policy Brief 223.

change issues; judges were no longer content to 'remain on the sidelines while the political branches sorted things out'.¹⁰⁰ The Second Circuit Court of Appeals discussed at length why climate change was a justiciable issue. What may be interesting to note is that reasoning about the political question developed in Connecticut v AEP assumes a second life in the Netherlands, as it is not settled law in the US owing to the reversal of the Second Circuit Court of Appeals decision by the Supreme Court.¹⁰¹ We use the phrase 'not settled' as the Supreme Court found the EPA to be the expert agency that possesses the 'scientific, economic, and technological resources'¹⁰² to decide on climate change issues, but did not reverse the Court of Appeals' finding that climate change is a justiciable issue. How did this come about in Urgenda? One reason, as discussed above, is that some provisions and interpretations of Dutch law and European law lent themselves to the active role the Court played. The Supreme Court in AEP v Connecticut precluded common law claims for those issues that were within the cognisance of the EPA. Dutch law allows for common law claims under the Civil Code to be pursued despite and alongside actions that may be pursued in relation to administrative decisions under the Dutch General Administrative Law Act;¹⁰³ this allowed the Court in *Urgenda* to entertain a civil claim that was not attributed to a particular administrative decision. The other reason, as discussed below, is that the fact that there might be limitations on the State's margin of appreciation allowed for the force of international law to shape the contours of such margin in keeping with Article 94 of the Dutch Constitution discussed earlier.

The Court invokes the authority¹⁰⁴ of the IPCC and other international organisations, such as the United Nations Environment Programme (UNEP), that informs the State's discretion¹⁰⁵ in deciding political questions. Other than the science

¹⁰⁰ Joy C Fuhr, 'Connecticut v AEP: The New Normal?' (2010) 24(4) Natural Resources & Environment 58.

¹⁰¹ AEP v Connecticut, 131 SCt 2527 (2011). The nuances of tort law on climate change in the US are somewhat unclear. Though the Supreme Court reversed the petitioners' nuisance claims against utility companies, it nonetheless did not reverse the Second District Court's jurisprudence on standing and the political question doctrine. The limited point of inquiry was whether the EPA as an executive authority 'occupied the field' of climate action, thereby precluding substantive common law actions. Though the Court answered in the affirmative, there is ambiguity about the political question doctrine. This ambiguity may have been strategic given that there is a possibility that Congress or future presidential candidates may block EPA action, in which case petitioners should not be barred from invoking judicial review by being hit by a definitive ruling that climate change action is a political question. See James R May, 'AEP v Connecticut and the Future of the Political Question Doctrine' (2011) 121 Yale Law Journal 127, 131. The Supreme Court decision did not preclude judicial review of all regulatory action. Justice Ginsburg observed that in relation to federal climate change action, the role of the Court was limited to examining whether the EPA's decisions were 'arbitrary, capricious, [or demonstrated] an abuse of discretion'. AEP v Connecticut, 2359.

¹⁰² AEP v Connecticut, 2539-2540.

¹⁰³ For a review, see Berthy van den Broek and Liesbeth Enneking, 'Public Interest Litigation in the Netherlands: A Multidimensional Take on the Promotion of Environmental Interests by Private Parties through the Courts' (2014) 10(3) Utrecht Law Review 77.

¹⁰⁴ For the role of epistemic authority in interpretative preferences of legal institutions, see Suryapratim Roy, 'Privileging (Some Forms of) Interdisciplinarity and Interpretation: Methods in Comparative Law' (2014) 12 International Journal of Constitutional Law 786.

¹⁰⁵ The Court in Urgenda appears to have found the confidence to impose constraints on state action due to the doctrine of 'margin of appreciation' found in EU and ECHR discourse. Per this doctrine, the State has a broad margin to develop and implement policies, but there *is* a margin. This margin is subject to EU law and the ECHR, but the Court heavily relied on the persuasive power of the international law on climate change to argue in favour of a 'legal' review of political action.

behind climate change, the Court also recognises and endorses in part the economics of climate change chalked out by the IPCC. Notably, it defers to the IPCC for the finding that it is far more cost-effective to take immediate action against climate change,¹⁰⁶ and for its responsibility as an Annex I country under the Kyoto Protocol to reduce emissions by at least 25 per cent and up to 40 per cent by 2020. Following this target would comparatively relieve Dutch citizens from endangerment. Accordingly, the Court dismisses the State's claim that it is directing substantial resources towards adaptation, and directs the State to take more mitigative action.¹⁰⁷ It is in this way that the Court frames the question on adequate and immediate action on climate change as a *legal* question. Given that the basis of the legality of the question is the interaction between the constitutional duty to protect individuals from endangerment and the endorsement of a comparatively higher benchmark found in international law, we do not share the apprehension of some scholars that if the judiciary is given power over climate policy then courts may also be used for pushing 'anti-regulation campaigns'.¹⁰⁸ Rather, what Urgenda may add to the separation of powers doctrine in the global trajectory of climate litigation is that judicial intervention must be supported by a constitutional duty towards the protection of citizens from hazardous climate risks and the complementary assessment of a comparatively superior benchmark for legislative and executive bodies to aspire towards.

Two faces of the precautionary principle: procedural precautionary principle and substantive precautionary principle

As we pointed out above, what the Court misses out in its juxtaposition of the legal and the political is that just as much as the ECHR shapes the legal, the EU shapes the political. Undoubtedly, the Court is correct in observing that when compared to the IPCC benchmark, the Netherlands needs to adopt further targets. However, per the EU Effort Sharing Decision – that may be characterised as a political negotiation – the Netherlands has adopted certain targets within the EU.¹⁰⁹ Indirectly, the Court therefore determines the burden the Netherlands ought to bear despite being a Member State of the EU with its own process for distribution of climate targets among Member States.

The petitioners as well as the Court correctly point out that being a Member State of the EU does not take away the right of the Netherlands to adopt more stringent targets and measures; this is indeed a valid concern given the tendency of the State to avoid going beyond the minimum European standards.¹¹⁰ Given that the Court finds its competence in directing the State to take more immediate action as the duty of care to be

¹¹⁰ Van Zeben (n 10).

¹⁰⁶ Urgenda, para 4.58: 'account can be taken of a cost-benefit ratio.' Urgenda, para 4.71: 'Taking immediate action, as argued by Urgenda, is more cost-effective, is also supported by the IPCC and UNEP.' Urgenda, para 4.77: 'it has neither been argued, nor has it become evident that the State has insufficient financial means to realise higher reduction measures. It can also not be concluded that from a macro economic point of view there are obstructions to choosing a higher emission reduction level for 2020.'

¹⁰⁷ Urgenda, paras. 4.71 and 4.75.

¹⁰⁸ Van Zeben (n 10) 355.

¹⁰⁹ See footnotes 44–49 and accompanying discussion.

taken in a legal question with political consequences, it may be argued that this manner of reasoning is justifiable and replicable. But it may be asked – on what basis does the Court reason about how much and what the State should be doing if it is to go beyond minimum European standards and targets?

Deference to the economics of climate change worked out internationally is only with regard to *the fact of immediate mitigative action*. It appears that the Court recognises institutions that shape international climate governance as appropriate agencies that reduce complex information costs regarding the allocation of mitigation targets. Nevertheless, the *nature of immediate mitigative action* and hence the choice of the appropriate climate policy instruments are relegated both by the Court and by the petitioners to the expertise of the State.¹¹¹ However, we demonstrate below that it would be difficult to arrive at a judgment about whether the State is exercising its duty of care *properly*, or taking *adequate* action without implicitly reasoning about the policies adopted in satisfying its targets. In this regard, the Court's indirect economic reasoning about mitigative action appears to be incompletely theorised and the precautionary principle invoked by the Court does not satisfactorily deal with this issue either, as discussed below.

The procedural version of the precautionary principle and the proportionality principle

Neither the State nor the Court question the petitioners' invocation of the IPCC's finding on the need to take immediate measures (the time window for 'immediate' is the year 2020); rather the discussion shifts to the *adequacy*¹¹² and *effectiveness*¹¹³ of immediate measures. The Court reasons that the adoption of greater measures than what the State currently undertakes would also be *cost-effective*¹¹⁴ (a term the Court uses interchangeably with *efficient*¹¹⁵) and fair towards future generations.¹¹⁶ The conclusion reached by the Court is that the current measures satisfy neither efficiency nor fairness as they are not adequate or effective in preventing hazardous climate change. To arrive at this conclusion, the Court does not explicitly interrogate the current measures taken by the State, and nor do the petitioners seek to prove the inadequacy and ineffectiveness of the current measures. Instead, the Court points out that the State has been unable to demonstrate the adequacy and effectiveness of the current measures to arrest climate change. Thus, there is a shift in the onus of proof on to the State to demonstrate adequacy and effectiveness; and per the Court, the State does not succeed in this endeavour. One may ask on what basis the Court allocates the burden of proof in the judgment. The basis for such allocation is the way the precautionary principle is construed.¹¹⁷

¹¹¹ Urgenda, para 4.72.

¹¹² 'In the opinion of the court, the possibility of damages for those whose interests Urgenda represents, including current and future generations of Dutch nationals, is so great and concrete that given its duty of care, the State *must make an adequate contribution*, greater than its current contribution, to prevent hazardous climate change [emphasis added].' *Urgenda*, para 4.89.

¹¹³ Urgenda, para 4.75.

¹¹⁴ Ibid, para 4.19.

¹¹⁵ *Ibid*.

¹¹⁶ *Ibid*, para 4.57.

¹¹⁷ *Ibid*, para 2.53.

At first glance, using the precautionary principle to allocate the burden to prove the adequacy and effectiveness of policy measures may seem odd. The precautionary principle is usually understood as a tool of both legal decision-making and review where policies are either approved or rejected despite the scientific uncertainty of their impacts. In the context of climate change, the intuitive application of the precautionary principle would be prompt legislative or executive action despite some amount of uncertainty on the science of climate change. As discussed earlier, no party to the proceedings contests the science of climate change. Given this understanding, would the precautionary principle be relevant at all? The way the principle is used in Urgenda is that more action should be adopted despite uncertainty of the effects of additional measures. Thus, the benefit of the doubt is provided to the parties who demand more action (in this case the petitioners), and the burden of proof to displace this benefit is imposed on the parties who resist taking more action based on other considerations (in this case the State). This allocation of the burden of proof to the State is the chosen procedure adopted for the purpose of review; we refer to this as the Court's preferred procedural version of the precautionary principle.¹¹⁸

Following this procedural version of the precautionary principle, the Court held that the Dutch government failed to establish how it was constrained in taking more stringent action to meet the IPCC's recommendations. A similar procedural version involving a shift in the burden of proof to the respondent was adopted in Massachusetts v EPA (cited by the petitioners in support of the arguments in the Summons¹¹⁹). In Massachusetts, the Supreme Court of the US did not peremptorily compel the EPA to regulate carbon dioxide emissions, it declared that the EPA may avoid doing so 'only if it determines that greenhouse gases do not contribute to climate change'.¹²⁰ The burden was put on the EPA to provide a 'reasonable explanation' regarding its inactivity visà-vis mitigation of carbon emissions. Urgenda extended this line of reasoning (i) to a private lawsuit (as state interest needed to be established in *Massachusetts*), and (ii) in relation to enhanced legislative and regulatory action, rather than the mere requirement to take regulatory action. The Court reasons: 'The court has also established that the State has failed to argue that it does not have the *possibility*, at law or *effectively*, to take measures that go further than those in the current national climate policy [emphasis added].¹²¹

The procedural version underlines the reasoning of the Court in relation to whether the State's measures are effective and proportional.¹²² The petitioners draw on proportionality jurisprudence of Article 8 of the ECHR where any legal

¹¹⁸ The conceptualisation of the procedural version of the precautionary principle is found in Alessandra Arcuri, 'The Case for a Procedural Version of the Precautionary Principle Erring on the Side of Environmental Preservation' in Marcel Boyer, Yolande Hiriart and David Martimort (eds), *Frontiers in the Economics of Environmental Regulation and Liability* (Ashgate 2006) 19–63.

¹¹⁹ Summons, paras 393–394.

¹²⁰ Massachusetts v EPA 533.

¹²¹ Urgenda, para 4.99.

¹²² Unlike American jurisprudence, proportionality is one of the two primary justificatory tools in the European legal order (along with subsidiarity for EU law), and is an integral component of judicial review in Dutch law. For a discussion on proportionality as it pertains to the precautionary principle in Dutch and EU environmental law, see Marjan Peeters, 'The Concept of Precaution as Shaped by the Courts' in F Stroink and E van der Linden (eds), *Judicial Lawmaking and Administrative Law* (Intersentia 2005) 57–80.

intervention that interferes with the fundamental right to a private and family life has to be justified.¹²³ Such justification has to be 'in the interests of national security, public safety or the economic wellbeing of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others'. In the context of climate change, it may flow from this provision that proportionality would allow the State to interfere with one's privacy for environmental considerations, but it would need to justify this interference. However, the petitioners argue that the fundamental right to a private and family life confers a positive obligation on the State to take reasonable and appropriate measures to protect such a right. Given the hazards posed by climate change, the State needs to demonstrate that its *limited action* on climate change is justified given its positive obligation to secure the substantive right to a private life. The tables are turned, as it were, with the State being required to demonstrate why it is not doing more, rather than keeping from unduly interfering with the right of individuals to pursue their lives. The Court's interpretation of the State's 'margin of appreciation', which in turn provides a justification for relaxing the political question doctrine, is informed by the nexus between the proportionality principle and the precautionary principle.¹²⁴

Having said the above, would it be possible theoretically and practically to have a solely procedural version of the precautionary principle? Miriam Haritz argues that the preference for a particular procedural version of the precautionary principle rests on the substantive content of the principle,¹²⁵ to which we now turn.

The substantive content of the precautionary principle and the prevention principle

To begin with, the contours of the procedural version of the precautionary principle are shaped by the economics of climate change devised by the IPCC. Such findings translate into the amount of care owed to Dutch citizens and the responsibility for emissions that needs to be adopted by the State. In other words, following the procedural approach to the precautionary principle, the onus of proof is shifted to the State to demonstrate why it falters in its duty of care. The benchmark for the *amount* of care required to be taken is decided at an international level by the IPCC.¹²⁶ It would be a mistake, however, to view this procedural preference as one without substantive preferences.¹²⁷

¹²³ See Reply, paras 315–438 for an extended discussion.

¹²⁴ This nexus – or rather the influence of the precautionary principle on how the proportionality principle is construed – is supported by the CJEU in Case C-343/09 *Afton Chemical Limited v Secretary of State for Transport* [2010] ECR I-7027. Given that the proportionality principle is the primary reasoning mechanism for a judicial assessment of regulatory action in the EU, the way the precautionary principle is construed heavily influences the reasoning about separation of powers. See Maria Lee, *EU Environmental Law, Governance and Decision-Making* (Hart Publishing 2014) 9.

¹²⁵ Miriam Haritz, An Inconvenient Deliberation: The Precautionary Principle's Contribution to the Uncertainties Surrounding Climate Change Liability (Kluwer Law International 2011) 129–38.

¹²⁶ The endorsement of a 'comply unless justified' principle also applies to other areas of expert international governance, such as credit ratings. See Giulia Mennillo and Suryapratim Roy, 'Ratings and Regulation: A Case of an Irreversible Marriage?' (2014) Harvard Weatherhead Center Working Paper 14–004, 18.

¹²⁷ Ambrus makes a similar argument in relation to the effect of the precautionary principle on the allocation of the burden of proof in international environmental dispute settlement: 'the procedural

In case of the economics of climate change, the petitioners and the Court endorse the epistemic authority of the IPCC in figuring out the economics of climate change. The reason why a 25 per cent target is considered to be worth pursuing for Annex I countries is because this is the recommended target ferreted out in international climate governance.

While the State has indicated that it finds the Court's endorsement of international law worthy of appeal, we do not find the Court's reasoning necessarily problematic here. Scholars have taken pains to point out that unlike the operation of international law in other domains where the focus is on the maintenance of peace by amicably settling disputes, the international governance of climate change is quite different as it seeks to govern a global risk to all individuals.¹²⁸ Thus, to invoke the language of constitutional law and economics, the *principal* here is neither the IPCC nor the Dutch State but the individual, and the selection of an appropriate *agent* is one where comparatively superior benefits can be reaped by the individual.¹²⁹ In this case, the benefits are the reduction of hazardous climate risks.

Further, even if we were to assume that international authorities do feature heavily in the reasoning of the Court, the Court does not blindly defer to the findings of the IPCC or the requirements of the UNFCCC. As discussed above, the Court does so because it believes that the citizens' right to a private and family life can be best satisfied by adhering to such a benchmark. In addition, the Court does not defer to the force of international law in assuming responsibility for emissions within its territory, but defers to the *Potash Mines* jurisprudence of taking precautions against transboundary harm. The mediated appreciation of international law does not, however, take away from the fact that opting for an international standard as the default standard is a substantive preference endorsed in fleshing out the precautionary principle.

The second instance where substantive concerns are implicitly invoked is an assessment of whether the State is justified in deviating from the international benchmark, that is, whether it is taking sufficient and 'effective' action in relation to mitigation given its constraints. The way the procedural version of the precautionary principle plays out is that the *burden of production* of evidence as well as the *burden of persuasion*¹³⁰ is put on the State to demonstrate that its deviation from the IPCC's benchmark climate targets for Annex I countries is justified. The next step – that we think lacks and deserves attention – is an assessment or review of such evidence and arguments made by the State. Unlike some other commentators,¹³¹ we do not take issue with the Court engaging with substantive concerns regarding the economics of climate change as well as the impacts of policies; such engagement appears to be inevitable if the Court were to take cognisance of constitutional questions related to climate

understanding is not an alternative, but rather a complementary version of the precautionary principle'. Monika Ambrus, 'The Precautionary Principle and a Fair Allocation of the Burden of Proof in International Environmental Law' (2012) 21 *Review of European Community and International Environmental Law* 259, 261.

¹²⁸ See Hari M Osofsky, Elizabeth Fisher, Jacqueline Peel, Douglas Kysar, among others.

¹²⁹ See the contribution by Eric Posner in Douglas G Baird (ed), *The Future of Law and Economics: Essays by Ten Law School Scholars* www.law.uchicago.edu/alumni/magazine/fall11/lawandecon-future.

¹³⁰ For the distinction between the two, see Ambrus (n 127) 263–65.

¹³¹ See James Huffman, 'Global Warming Goes to Court' www.hoover.org/research/global-warming-goescourt.

change. Rather, it is the implicit expert reasoning of the Court regarding whether the State has acquitted itself in taking adequate and effective action that we find problematic.

Take for instance the Court's usage of the phrase 'waterbed effect' interchangeably with 'carbon leakage' in relation to the relationship between the Netherlands and the rest of Europe.¹³² These two concepts are not the same. The distinction between the two might matter because it is possible to have a 'waterbed effect' without there being any problems with carbon leakage. Carbon leakage mainly refers to climate policies that trigger the undesirable moving of companies, and thus emissions, to countries without an emissions trading scheme (hence outside the EU). The waterbed effect usually refers to climate policies achieving emission reductions that free up emission rights which can be sold and used to cover emissions elsewhere in the EU ETS (hence within the EU). Evidence of the absence of carbon leakage does not prove the absence of a waterbed effect. Further, the Court refers to the petitioners' arguments about national measures adopted in Denmark and the UK as possible mechanisms, such as 'increasing the share of sustainable energy in national electricity networks', the introduction of a carbon price floor, or even a national ETS-sector policy.¹³³ It is unclear on what basis the Court is inclined to believe that such policies are more 'cost-effective' over current policies that exist in the Netherlands. Another instance is the Court's rejection¹³⁴ of the State's argument that it is taking adequate substantive measures by diverting its resources to adaptation as well as mitigation. The Court relies on reports by the IPCC and the UNEP to conclude that mitigation is more 'cost-effective' and 'is the only really effective tool'.¹³⁵ We think that such a conclusion is a matter of interpretation; given that the motivating constitutional reasoning in Urgenda is the protection of its citizens (as against global citizens) from the risk of climate change endangerment, the geological particulars of the Netherlands – a significant portion of Dutch territory is flood-prone 136 – may prompt a greater diversion of resources to adaptation. Having said that, following *Potash Mines*, the finding that the State assumes pro rata liability for global emissions demands mitigation action as against adaptation action. Avoiding an adaptation v mitigation impasse requires a substantive inquiry¹³⁷ into

¹³² Urgenda, para 4.81.

¹³³ *Ibid*, para 4.80.

¹³⁴ Ibid, para 4.71.

¹³⁵ *Ibid*.

¹³⁶ See the flooding report prepared by the Environment Assessment Agency. Planbureau voor de Leefomgeving, Overstromingsrisicozonering in Nederland (2010) www.pbl.nl/publicaties/2010/ Overstromingsrisicozonering-in-Nederland.

¹³⁷ See for instance Alan Ingham, Jie Ma and Alistair M Ulph, 'How Do the Costs of Adaptation Affect Optimal Mitigation When There Is Uncertainty, Irreversibility and Learning' (Tyndall Centre for Climate Change Research, Report 74, 2005). The next question is how economic models can be translated into the interaction between mitigation instruments and adaptation measures. For an example of some of the concerns, see Samuel Fankhauser, Cameron Hepburn and Jisung Park, 'Combining Multiple Climate Policy Instruments: How Not to Do It' (2010) 1 *Climate Change Economics* 209. Reliance on economic expertise in effective policy is a bias that needs negotiation, even in the IPCC framework. See David Victor, 'Climate Change: Embed the Social Sciences in Climate Policy' (2015) 520 *Nature* 27. For judges to assess and appreciate multiple forms of expertise is not an insurmountable task, as what is needed is principles of 'gatekeeping' expertise. Take for instance the approach suggested in Carolyn Brickey and others, 'How to Take Climate Change into Account: A Guidance Document for Judges Adjudicating Water Disputes' (2010) 40 *Environmental Law Reporter* 11215.

the relationship between precautionary measures taken towards both prongs of climate action.

The petitioners argue that there is no need to rely on a substantive precautionary principle; rather the 'prevention principle' drawing on the *Cellar Hatch* criteria is enough.¹³⁸ *Cellar Hatch* ('Kelderluik') refers to a Dutch Supreme Court judgment¹³⁹ where 'special precautionary' criteria regarding the probability of risk and costs of precaution were adopted, akin to the Learned Hand negligence calculus adopted in *United States v Carroll Towing*,¹⁴⁰ which thus implicitly endorses a substantive test for negligence. Per both *Carroll Towing* and *Cellar Hatch*, the economics of precaution does not entail the requirement to take infinite precautions, but one that makes sense on conducting a CBA. Similar to *Carroll Towing*, *Cellar Hatch* articulated economic rules of thumb or heuristics in a judicial determination of negligence, with the probability that a potential victim would disregard a risk, the likelihood of accidents, the gravity of consequences on one side of a balancing exercise, and the burden of precautions on the other.¹⁴¹ However, as is well known, the rules of thumb articulated in the Learned Hand formula are heavily contested, and may fare better by being subject to positive analysis.¹⁴²

Further, the value of *Carroll Towing* or *Cellar Hatch* as appropriate precedents for a climate change 'due care standard' is questionable: there is no concern here regarding the allocation of precautionary costs between an identifiable injurer and injured in anticipation of accidents.¹⁴³ In appreciating the extent and nature of precautions in a nuisance tort claim, a negligence standard involving concerns of finding a balance between no liability and strict liability of a tortfeasor may not be an appropriate normative principle. We think it might be more fruitful to inquire into how the maximisation of welfare (proxied by the minimisation of risk) of citizens could be reached by effective instruments, which would in turn inform how the allocation of the State's resources towards climate change should be structured.¹⁴⁴ This indicates the reason why a compelling debate rages between the substantive content of the precautionary principle and

¹³⁸ 'Without detracting from the reliance by Urgenda c.s. on the precautionary principle via (in this order) the ECHR, the UNFCCC, and finally the EU treaties, the plaintiffs are of the opinion that for most parts of its claim it is unnecessary to base their arguments on the precautionary principle and that it is sufficient to base them on the prevention principle (i.e. the Cellar Hatch criteria).' Reply, para 428.

¹³⁹ Hoge Raad 5 November 1965, NJ 1966, 136.

¹⁴⁰ For the similarity between the two tests, see Jaap Hage and Bram Akkermans (eds), *Introduction to Law* (Springer 2014) 109–10; Jef PB De Mot, Anita Canta and Vandena Gangapersadsing, 'The Learned Hand Formula: The Case of the Netherlands' (2004) 4(2) *Global Jurist Advances*, Article 1 (online edition). Gerrit van Maanen, David Townend and Almaz Teffera, 'The Dutch "*Cellar Hatch*" Judgment as a Landmark Case for Tort Law in Europe: A Brief Comparison with English, French and German Law with a Law and Economics Flavour' (2008) 16 *European Review of Private Law* 871.

¹⁴¹ Kelderluik, NJ 1966, 136.

¹⁴² Notably, there is a possibility of selecting an optimal cost of precaution by taking a 'minimum total cost' rather than an optimal marginal cost approach. JP Brown, 'Toward an Economic Theory of Liability' (1973) 2 Journal of Legal Studies 323.

¹⁴³ Davidson argues that the impressionistic Learned Hand quantitative formula is not suitable for the intergenerational problems of climate change, for which a qualitative social discount rate would be more appropriate. Marc D Davidson, 'A Social Discount Rate for Climate Damage to Future Generations Based on Regulatory Law' (2006) 76 *Climatic Change* 52, 61.

¹⁴⁴ This is contradistinguished against a liability rule for the allocation of responsibility; such a rule would be more contentious for allocating responsibility between different parties within the State. See Joni Hersch and W Kip Viscusi, 'Allocating Responsibility for the Failure of Global Warming Policies' (2007) 155 University of Pennsylvania Law Review 1657.

whether it should collapse into a CBA,¹⁴⁵ including what sort of CBA is germane to the precautionary principle as applied to climate change.¹⁴⁶

This debate may be of particular relevance to *Urgenda*: in the matter of reasoning about regulatory action on climate change, as indicated earlier, *Urgenda* goes a step further than *Massachusetts v EPA*. In deciding on the appropriateness of regulatory action in *Massachusetts v EPA*, the Supreme Court did not need to implicitly reason about the adequacy of targets adopted by the legislature or effectiveness of policy options adopted by the executive, as the question was not whether state action was enough, but whether greenhouse gases contribute to climate change. The unique interpretation given to the precautionary principle in *Urgenda* is to require more action even if there is uncertainty about the effectiveness of current state action, as against uncertainty about scientific questions about climate change, or whether carbon dioxide deserves to be categorised as a pollutant. The argument seems to be that following the precautionary principle, the State should take more immediate preventive action even if it has not been established by the petitioners (or there is uncertainty) as to whether the current action is 'adequate and effective'.

To clarify, our argument is not that the Court should refrain from undertaking any implicit assessments of the appropriateness of the State's mitigation measures. Rather, we wish to point out that assessments of appropriateness are inevitable for assessments of adequacy. Admittedly, per the procedural version, it is up to the State to demonstrate whether it is taking enough action. However, there is a substantive assessment made of such adequacy or inadequacy, and it is there that the competence and reasoning of the Court become questionable. Basically, the information costs of reviewing the effectiveness of state action are too high for the Court to bear.

This, therefore, raises the question: is there any way for the Court to deal with this problem without collapsing into the expertise of the State to deal with complexity? In this regard the outcome of the judgment has pointed the way forward: *Urgenda* has already prompted a review of the policy decisions made by the government by putting in place a new inquiry into existing climate action.¹⁴⁷ Thus, *Urgenda* has achieved a policy effect, and the role of the Court may therefore be limited to initiate a regulatory review process. As discussed earlier, there was a lowering of climate change targets by the incumbent government, and the Court's intention may merely have been to seek a justification (that the information-forcing role of the procedural precautionary principle provided) and if necessary an administrative review of current climate policies. Should the intention of the Court be to review the adequacy and effectiveness of state action itself to ensure conformity with the constitutional imperative to mitigate the risk of endangerment, we think it would be apposite for the Court to

¹⁴⁵ See Cass Sunstein, Laws of Fear: Beyond the Precautionary Principle (Cambridge University Press 2006); Dan Kahan and others, 'Fear of Democracy: A Cultural Evaluation of Sunstein on Risk' (2006) 119 Harvard Law Review 1071; Cass Sunstein, 'Misfearing: A Reply' (2006) 119 Harvard Law Review 1110.

¹⁴⁶ See Jacqueline Peel, 'Precaution – A Matter of Principle, Approach or Process?' (2004) 5 Melbourne Journal of International Law 483; Amy Sinden, 'Formality and Informality in Cost-Benefit Analysis' (2015) 1 Utah Law Review 93.

¹⁴⁷ See https://www.rijksoverheid.nl/documenten/kamerstukken/2015/09/01/kabinetsreactie-vonnisurgenda-staat-d-d-24-juni-jl, last accessed 11 November 2015.

appoint experts and *amicus curiae* to assist with conducting assessments of the adequacy and effectiveness of state action.

The European legal order is no stranger to the utilisation of court-appointed experts in complex cases, and this practice is percolating into Member State courts where it is not uniformly popular. The Rules of Procedure of the CJEU – which borrow heavily from both the court-appointed 'neutral expertise' paradigm of the French and German systems as well as adversarial challenges to expertise from common law¹⁴⁸ - contain a basis for such engagement.¹⁴⁹ While it is not common for the Dutch Supreme Court to do so, there are no restrictions on hearing evidence of external experts in civil law disputes.¹⁵⁰ The Commission on the Normative Role of the Supreme Court has, in fact, explored the utilisation of such a process.¹⁵¹ Issues regarding the selection of experts and judicial appreciation of expert testimony for assessing climate policies are beyond the scope of this article, but given the precedent-setting potential of *Urgenda*, it may be worthwhile to invest in addressing such questions. This suggestion may be considered when the Appeals Court hears the appeal against Urgenda. We realise that this is not an easy claim to make, as normative decisionmaking cannot be outsourced to experts. As discussed earlier, the Court explicitly mentioned that it would not direct the State on how to deal with climate change, but it implicitly reviews how it is dealing with climate change in order to satisfy constitutional requirements. We do not suggest that the Court should defer to experts in arriving at decisions on constitutional questions. The use of experts would not replace the normative force of the precautionary principle, the duty of care as analysed by judges or the international scientific consensus on climate change. On the contrary, the focus is to have a reasoned basis for assessing policies that seek to achieve such norms. We also think that such a step of calling in experts would avoid allegations of the Court interfering with the State: such interference is inevitable, and should be supported by a reasoned inquiry.

Conclusion

We set out to perform two primary tasks: first, to contextualise *Urgenda* within the legal particulars that informed the judgment, and secondly, to find elements of legal reasoning that survive the positive law and legal culture within which it is situated.

In relation to the first, we identified legal as well as political informants of the judgment that allowed crossing the hurdles of standing and the imposition of liability on the State for transboundary harm (such as the *Potash Mines* judgment of the Dutch Supreme Court). A more tricky issue was the separation of powers; while Dutch law

¹⁴⁸ For a review, see Eric Barbier de la Serre and Anne-Lise Sibony, 'Expert Evidence before the EC Courts' (2008) 45 Common Market Law Review 941.

¹⁴⁹ Article 25 of the Statute of the CJEU; Article 45(2)(d) of the Rules of Procedure of the CJEU; Article 65 (d) of the Rules of Procedure of the General Court and Article 57(e) of the Rules of Procedure of the European Union Civil Service Tribunal.

¹⁵⁰ FF Langemeijer, JE van de Bunt and S Sierksma, 'Het raadplegen van externe deskundigen in burgerlijke zaken door de Hoge Raad of het parket' (2009) 4 Trema 129.

¹⁵¹ Rapport van de Commissie normstellende rol Hoge Raad (Kamerstukken II 2007/08, 29 279, no 69). For a discussion on the use of expertise in civil cases in the Dutch Supreme Court, see Zeeshan Mansoor, 'Article 3:40(1) – Some Concerns and a Recommendation' in RJC Flach and others, Dwingend privaatrecht op maat (Boom Juridische Uitgevers 2015) 59.

conventionally restricts judicial review of legislative action, the persuasiveness of international and supranational law influenced the 'margin of appreciation' enjoyed by the State. We were puzzled, however, as to why the international (the IPCC) was identified as a preferred benchmark for allocation of climate targets over the supranational (the EU). Reasoning about the separation of powers in *Urgenda* was heavily informed by diffusion, namely the suggestion that review of climate action was in furtherance of addressing 'a legal question with political consequences'. We think this was not entirely uncalled for, as a constitutional 'duty of care' was identified. Given the fact that governments can choose their course of action in relation to climate policy, the only recourse available to the petitioners was to allege a violation of the duty of care. In this sense the *Urgenda* judgment serves a crucial informational function: the hazardous risks of climate change should not be left to the whims of particular legislative changes or the possibility of 'politicised expertise' of regulators.¹⁵² It is possible to envisage constitutional doctrines in other jurisdictions that may lend themselves to such reasoning.

The second aspect of the Court's reasoning we highlighted was the central place occupied by the precautionary principle, and cognate legal devices, namely the proportionality principle and the prevention principle. We suggested that the Court innovatively adopted a *procedural* version of the precautionary principle, whereby the onus of proving adequacy and effectiveness was shifted on to the State. A clear positive outcome of the Reduction Order was prompting a review of existing climate policies by the Dutch government against the benchmarks suggested by the IPCC. This way of reasoning may indeed be diffusible for future climate litigation around the globe. However, difficulties were encountered in the Court's implicit and informal economic reasoning in assessing the complexities of whether the State's actions were adequate and effective. To overcome this problem, we suggest that in order to assist judges with the inevitable appreciation of such complexities in constitutional reasoning (as may be the case in deciding on the appeal against *Urgenda*), the appointment of experts may be the way forward.

ORCID

Suryapratim Roy D http://orcid.org/0000-0003-4804-2640 Dr Edwin Woerdman D http://orcid.org/0000-0003-2883-160X

¹⁵² This phrase is borrowed from Freeman and Vermeule's analysis of *Massachusetts v EPA* that revolves around the idea that the Supreme Court stepped in to ensure that 'agencies exercise expert judgment free from outside political pressures'. Jody Freeman and Adrian Vermeule, '*Massachusetts v EPA*: From Politics to Expertise' [2007] Supreme Court Review 51.