A Review of the International Law Commission's Guidelines on the Protection of the Atmosphere

Benoit Mayer[1]

Abstract

The International Law Commission (ILC) adopted a set of twelve Draft Guidelines on the protection of the atmosphere on first reading in 2018. This project, led by Special Rapporteur Shinya Murase, could have provided the first authoritative interpretation of the general international law applicable, in particular, to climate change. Yet, the work of the ILC on the topic largely failed to comprehend the relevant rules. This review reveals numerous shortcomings of the Draft Guidelines and makes suggestions for the second reading.

I. Introduction

The International Law Commission (ILC) adopted the Draft Guidelines ('DGs') on the protection of the atmosphere on first reading at its seventieth session held in 2018.[2] This is the culmination of the work that Special Rapporteur Shinya Murase conducted at the ILC for five years. A second reading could be initiated by mid-2020.

The importance of the ILC's project relates to the shortcomings of international negotiations, in particular on climate change. Despite a global scientific[3] and political[4] consensus on the impact of anthropogenic greenhouse gas (GHG) emissions as 'one of the greatest challenges of our time,'[5] and despite three decades of intense negotiations leading to the adoption of three main treaties,[6] efforts promised or implemented have been insufficient to hold global warming within what is largely viewed as an acceptable level of risk.[7] The Doha Amendment to the Kyoto Protocol, adopted on 8 December 2012 to impose quantified emission limitation and reduction commitments on some developed country Parties from 2013 to 2020, has not yet

[1] Assistant Professor, The Chinese University of Hong Kong Faculty of Law, bmayer@cuhk.edu.hk. I am grateful to Alexander Zahar and two anonymous peer-reviewers for useful comments and suggestions. The research for this article was supported by a direct grant project on customary international law and climate change awarded by CUHK's Faculty of Law.

[2] 'Text of the draft guidelines, together with preamble, and commentaries thereto' reproduced in *Report of the International Law Commission at its Seventieth Session*, UN Doc A/73/10 (2018) 161 [78] ('DGs adopted on first reading').

[3] See in particular Rajendra K Pachauri et al (eds), *Climate Change 2014: Synthesis Report* (IPCC, 2014).

[4] See, eg, *United Nations Framework Convention on Climate Change*, opened for signature 4 June 1992, 1771 UNTS 107 (entered into force 21 March 1994) Preamble [2]-[3], art 2 ('*UNFCCC*'); *Paris Agreement*, opened for signature 22 April 2016, 55 ILM 740 (entered into force 4 November 2016) art 2(1).

[5] *Protection of Global Climate for Present and Future generations of Humankind*, GA Res 73/232, UN Doc A/RES/73/232 (11 January 2019, adopted 20 December 2018) [1].

[6] See *UNFCCC* (n 4); *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, opened for signature 16 March 1998, 2303 UNTS 162 (entered into force 16 February 2005) ('*Kyoto Protocol*'); Paris Agreement (n 4).

[7] See *Emission Gap Report 2018* (UNEP, 2018).

entered into force.[8] The United States, which decided not to ratify the Kyoto Protocol,[9] has announced its intention to withdraw from the Paris Agreement.[10] And the Nationally Determined Contributions (NDCs) that States have communicated to date under the Paris Agreement are inconsistent with an emission reduction pathway which would hold global warming 'well below 2°C' and possibly 1.5°C, the objectives endorsed by the Paris Agreement.[11] On States' own assessment, international negotiations are fall short of expectations.

Given the shortcoming of political negotiations, an interpretation of existing norms of general international law is long overdue. Some have argued that, under the prevention principle in international environmental law, States have an obligation to prevent excessive GHG emissions.[12] Likewise, the obligation of States to protect human rights may be construed as implying an obligation to take measures to mitigate climate change because the impacts of climate change hinder the enjoyment of human rights.[13] The obligation of States to conserve biological diversity[14] and to protect and preserve the marine environment,[15] or even their duty to protect, conserve and transmit to future generations the world cultural and natural heritage,[16] could be interpreted in similar ways. States have not excluded the applicability of norms of general international law to climate change by ratifying specific treaties[17]: these treaties are

[8] *Doha amendment to the Kyoto Protocol*, adopted 8 December 2012, UNTC XXVII.7c (not yet in force). As of 28 August 2019, 131 Parties had deposited their instrument of acceptance, out of 144 instruments of acceptance required for the entry into force of the agreement.
[9] S Res 98, 105th Congress, 143 *Congressional Record* S8117 (daily ed, 25 July 1997).
[10] *Communication by the United Nations to the UN Secretary General*, C.N.464.2017.TREATIES-XXVII.7.d (4 August 2017).
[11] *Paris Agreement* (n 4) art 2(1)(a). See Myles R Allen et al, 'Summary for Policymakers' in Valérie Masson-Delmotte et al (eds), *Global Warming of 1.5°C* (IPCC, 2018) 3, 20 [D.1.1], noting that NDCs are 'broadly consistent with cost-effective pathways that result in a global warming of about 3°C by 2100, with warming continuing afterwards.'
[12] See Benoit Mayer, 'The Relevance of the No-Harm Principle to Climate Change Law and Politics' (2016) 19(1) *Asia Pacific Journal of Environmental Law* 79 ('No-Harm principle').
[13] See, eg, *Urgenda v the Netherlands*, Court of Appeal of the Hague (Netherlands), 200.178.245/01 (9 October 2018). See generally Stephen Humphreys, 'Introduction: Human Rights and Climate Change' in Stephen Humpreys (ed), *Human Rights and Climate Change* (Cambridge University Press, 2010) 1.
[14] *Convention on Biological Diversity*, opened for signature 5 June 1992, 1760 UNTS 79 (entered into force 29 December 1993) art 6 ('*CBD*').
[15] *United Nations Convention on the Law of the Sea*, opened for signature 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994) art 192 ('*UNCLOS*').
[16] *Convention Concerning the Protection of the World Cultural and Natural Heritage*, opened for signature 16 November 1972, 11 ILM 1358 (entered into force 17 December 1975) art 4. See, eg, Greg Terrill, 'Climate Change: how Should the world Heritage Convention Respond?' (2008) 14(5) *International Journal of Heritage Studies* 388.
[17] See, eg, Declarations of Kiribati, Fiji, Nauru and Tuvalu upon signature of the UNFCCC (1992), 1771 UNTS 317-318. See generally Christoph Schwarte and Will Frank, 'Reply to Zahar' (2014) 4(3-4) *Climate Law* 234, 236; Benoit Mayer, 'The Applicability of the Principle of Prevention to Climate Change: A Response to Zahar' (2015) 5(1-2) *Climate Law* 1, 15-20; Benoit Mayer, 'The Place of Customary Norms in Climate Law: A Reply to Zahar' (2018) 8(3-4) *Climate Law* 261, 268-275; Leslie-Anne Duvic-Paoli, *The Prevention Principle in International Environmental Law* (CUP, 2018) 78. See however Alexander Zahar, 'Mediated versus Cumulative Environmental Damage and the International Law Association's Legal Principles on Climate Change' (2014) 4(3-4) *Climate Law* 217, 230; Alexander Zahar, 'The Contested Core of Climate Law' (2018) 8(3-4) *Climate Law* 244, 255.

better construed as a gradual attempt to emulate compliance with general norms.[18] Interpreting such general norms in the complex circumstances of climate change is challenging but not necessarily impossible.[19]

Already, domestic courts have started to explore how general norms can be applied to assess the obligation of States to mitigate climate change. The District and Appeal Courts of the Hague in *Urgenda v. the Netherlands* interpreted tort law and human rights law, respectively, as implying an obligation for the national government of the Netherlands to pursue more stringent mitigation action than required under negotiated instruments.[20] Similarly, the Supreme Court of Colombia construed human rights obligations as implying an obligation for the government to take measures to stop deforestation.[21] Many more cases are pending before national courts throughout the world.[22] While rules of international law cannot always be enforced by domestic courts, they are often part of the normative context that these courts take into consideration in interpreting domestic law.[23]

A better understanding of the rights and obligations of States in relation to climate change is necessary for courts to address these cases in a fair and consistent way. It is also needed in the not-so-far-fetched hypothesis of international adjudication, either through contentious or, perhaps more likely, advisory proceedings.[24] Overall, a better understanding of the obligations of States under general international law could promote a common vision of a fair and equitable outcome of negotiations and, thus, facilitate a convergence of views among negotiators – or at least narrow down the argumentative field by excluding untenable positions.[25]

---

[18] See Benoit Mayer, 'Construing International Climate Change Law as a Compliance Regime' (2018) 7(1) *Transnational Environmental Law* 115; Duvic-Paoli (n 17) 78.

[19] See Benoit Mayer, 'Interpreting States' General Obligations on Climate Change Mitigation: A Methodological Review' *Review of European, Comparative & International Environmental Law* (advance) <https://doi.org/10.1111/reel.12285> ('Methodological Review').

[20] See *Urgenda v the Netherlands*, District Court of the Hague (Netherlands), case No C/09/456689 (24 June 2015); *Urgenda v the Netherlands*, Court of Appeal (n 13). See generally Benoit Mayer, 'The State of the Netherlands v. Urgenda Foundation: Ruling of the Court of Appeal of The Hague (9 October 2018)' (2019) 8(1) *Transnational Environmental Law* 167.

[21] *Future Generations v Ministry of the Environment*, Supreme Court (Colombia), STC4360- 2018 (5 April 2018).

[22] See, eg, the memorandum of Klimaatzaak in *Klimaatzaak v Belgium* (1 June 2015) <https://affaire-climat.be/documents/affaire_climat_Citation_fr.pdf>; the memorandum of Notre Affaire à Tous in *Notre Affaire à Tous and Others v. France* (14 March 2019) <https://laffairedusiecle.net/wp-content/uploads/2019/03/ADS-Brief-juridique-140319.pdf>; the memorandum of the applicants in *Carvalho v Parliament and Council* (23 May 2018) <http://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/05/20180524_Case-no.-T-18_application-1.pdf>; and generally Mayer, 'Methodological Review' (n 19).

[23] See for instance *Urgenda v the Netherlands*, District Court (n 20) [4.42]

[24] See, eg, Phlippe Sands, 'Climate Change and the Rule of Law: Adjudicating the Future in International Law' (2016) 28(1) *Journal of Environmental Law* 19; World Conservation Congress of the International Union for the Conservation of Nature (IUCN), 'Request for an Advisory Opinion of the International Court of Justice on the principle of sustainable development in view of the need of future generations', resolution WCC-2016-Res-079-EN (1-10 September 2016); Daniel Bodansky, 'The Role of the International Court of Justice in Addressing Climate Change: Some Preliminary Reflections' (2017) 49 (special issue) *Arizona State Law Journal* 689.

[25] An example of such an untenable position would be that a State has no obligation to regulate GHG emissions except for negotiated, consent-based commitments.

This article argues that, while the ILC's project is important, the DGs do not live up to the mission of the ILC to promote the progressive development of international law and its codification. The DGs' interpretation of the general international law applicable to global environmental concerns such as climate change is incomplete and, at time, regressive. These shortcomings are largely the consequence of the protracted opposition of some ILC Members and some States to the codification of this field of law. The project was carried out on the basis of an 'Understanding' which, on political grounds, excluded any discussion of most relevant legal concepts.[26] But the project also suffered from a lack of expertise, as the analysis prepared by the Special Rapporteur was at times misinformed or weakly argued. A more thorough analysis should be carried during the second reading to avoid the risk of a regressive codification of this field of law.

The article is organized as follows. Section II provides a general overview of the ILC's project by retracing its origin and the process leading to the adoption of the DGs on first reading. Section III analyses the approach followed by the ILC. It reviews the debate on the opportunity of this project and considers its methodology. It then introduces key concepts: 'atmospheric pollution' and 'atmospheric degradation,' which form the backbone of the DGs; and 'common concern of humankind,' which, after long discussions, the ILC did not include in the DGs. Section IV examines the specific rights and obligations that the ILC identified as well as those that it failed to identify. It argues that the DGs provide an incomplete analysis of the obligations to protect the atmosphere and to cooperate, a misleading provision on the regulation of geoengineering, and an incomplete treatment of the consequences of non-compliance, in particular under the law of State responsibility.

II. Overview of the project

Recent years have witnessed several attempts at an authoritative interpretation of general international law in relation to climate change. The 'Oslo Principles on Global Climate Change Obligations,' developed by a dozen judges, advocates and scholars, follows a rather loose methodology;[27] it presents at best a theory about what the law *should* be, rather than a doctrinal analysis of what it *is*.[28] Shinya Murase and Lavanya Rajamani led a more rigorous project under the aegis of the International Law Association (ILA), resulting in the adoption of a 'Declaration of Legal Principles Relating to Climate Change' in 2014. The Declaration largely reflected the content of the UNFCCC as interpreted by subsequent practice, in particular subsequent COP decisions, but it also highlighted the obligation of States to 'exercise due diligence to avoid, minimize and reduce environmental and other damage through climate change.'[29]

---

[26] See *Report of the International Law Commission at its sixty-fifth session*, UN Doc A/68/10 (2013) 115 [168].

[27] Expert Group on Global Climate Obligations, *Oslo Principles of Global Climate Change Obligations* (1 March 2015) <https://globaljustice.yale.edu/oslo-principles-global-climate-change-obligations>. See in particular Commentary, 14, explaining that the project is informed by 'an amalgamation of sources' from domestic, regional and international law.

[28] This theory assumes that everyone should be entitled to an equal quantum of greenhouse gas emissions each year, thus ignoring alternative grounds for differentiation based for instance on States' and individuals' capacity to degrease greenhouse gas emissions.

[29] International Law Association, 'Resolution 2/2014: Declaration of Legal Principles Relating to Climate Change' (2014) 76 *International Law Association Reports of Conferences* 21, draft art 7B. See also ILA Committee on the Legal Principles Relating to Climate Change, 'ILA Legal Principles Relating to Climate Change' (2014) 76 *International Law Association Reports of Conferences* 330 (Commentaries); Christoph Schwarte and Will Frank, 'The International Law Association's Legal

The ILC's project, introduced and carried out by Shinya Murase, largely built on the preliminary study of the ILA. The ILC's broader focus on the protection of the atmosphere, which was recommended by some ILA members,[30] aimed presumably to distinguish the codification process conducted by the ILC from political negotiations on particular issues. The topic of the protection of the atmosphere includes climate change, but also other global and transboundary impacts on the atmosphere, such as the depletion of the ozone layer and transboundary air pollution. This broad conceptual framework favoured cross-fertilization between rather well-established norms on the prevention of transboundary environmental harm and those, little understood, applicable to global environmental harm.

While the ILA is a private association, the ILC was established by the UN General Assembly in 1947 with the aim of promoting 'the progressive development of international law and its eventual codification.'[31] The ILC has carried out authoritative studies of various fields of international law, most notably on the law of State responsibility;[32] its work has led to the adoption of treaties, including on the law of treaties,[33] diplomatic protection[34] and the non-navigational uses of international watercourses.[35] Several recent ILC projects have dealt with environmental issues in a transboundary context,[36] but *global* environmental concerns have largely been left aside. For instance, the study of 'international liability for injurious consequences arising out of acts not prohibited by international law' did not deal with harm caused to the global commons on the ground that this question 'would require different treatment.'[37] Likewise, Special Rapporteur Robert Rosenstock decided that the scope of the work on 'shared natural resources' would focus on 'natural resources within the jurisdiction of

Principles on Climate Change and Climate Liability Under Public International Law' (2014) 4(3-4) *Climate Law* 201.

[30] See in particular the summary record of a working session held on 17 August 2010 at 2:30pm, in (2010) 74 *International Law Association Reports of Conference* 402, at 405, where Osamu Hoshida is reported suggesting that 'the problems on climate change should be addressed in the wider context of the protection of the atmosphere.'

[31] See *Establishment of an International Law Commission*, GA Res 174(II), UN Doc A/RES/174(II) (adopted 21 November 1947), recital 3(a).

[32] 'Draft Articles on the Responsibility of States for Internationally Wrongful Acts' in *Report of the International Law Commission on the Work of its Fifty-Third Session*, UN Doc A/56/10 (2001) 26-143 [76-77] ('*DARSIWA*').

[33] *Vienna Convention on the Law of Treaties*, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980).

[34] *Vienna Convention on Diplomatic Protection*, opened for signature 18 April 1961, 500 UNTS 95 (entered into force 24 April 1964).

[35] *Convention on the Law of the Non-navigational Uses of International Watercourses*, opened for signature 21 May 1997, 36 ILM 700 (entered into force 17 August 2014) ('*Watercourses Convention*').

[36] This includes the work conducted on 'international liability for injurious consequences arising out of acts not prohibited by international law' from 1974 to 1997, on 'international liability in case of loss from transboundary harm arising out of hazardous activities' from 2002 to 2006, and on 'protection of persons in the event of disasters' from 2007 to 2016, as well as the on-going work on the protection of the environment in relation to armed conflicts.

[37] Peemaraju Sreenivasa Rao, Special Rapporteur, *Third Report on International Liability for Injurious Consequences Arising Out of Acts Not Prohibited by International Law*, UN Doc A/CN.4/510 (9 June 2000) [14]. See also ibid [4], footnote 9.

two or more States,' to the exclusion of 'global commons,' on the ground that the latter 'raise many of the same issues but a host of others as well.'[38]

In 2011, following the completion of its works on liability[39] and on natural resources,[40] the ILC endorsed Shinya Murase's proposal for the inclusion of the topic of the 'protection of the atmosphere' on the ILC's long-term programme of work.[41] Murase's syllabus described the atmosphere as 'the planet's largest single natural resource,'[42] thus reflecting the continuity with the work on shared natural resources. Noting the piecemeal approach to the topic in existing treaty regimes, Murase envisaged the drafting of 'a framework convention by which the whole range of environmental problems of the atmosphere could be covered in a comprehensive and systematic manner,'[43] which would be comparable to Part XII of the *UN Convention on the Law of the Sea* ('*UNCLOS*') on protection and preservation of the marine environment.[44]

Strong resistance against this project emerged both among ILC Members and in the Sixth Committee of the UN General Assembly, which reviews the ILC's reports, largely due to concerns that the work of the ILC on the protection of the atmosphere would unduly interfere with ongoing political negotiations.[45] Following informal consultations,[46] the ILC decided in 2013 to go ahead with the project, but on the basis of an 'Understanding' which constrained both the scope of the topic and the nature of its outcome.[47] This Understanding would haunt the conduct of the project for the years to follow.

The work of the ILC on the Protection of the Atmosphere was conducted on the basis of five Reports presented by Special Rapporteur Murase from 2014 to 2018. The First Report announced a 'cautious approach' based on a clear distinction between *lex lata* (law as it is) and *lex ferenda* (law as it ought to be).[48] Overall, the Report suggested that the protection of the atmosphere could be characterized as 'a common concern of humankind,'[49] which could involve *erga omnes* obligations (obligations owed to the international community as a whole),[50]

---

[38] Robert Rosenstock, 'Shared Natural Resources of States' in *Report of the International Law Commission at its Fifty-Second Session*, UN Doc A/55/10 (2000) 141, 141 (syllabus on topic recommended for inclusion in the long-term programme of work of the commission).
[39] 'Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries' in *Report of the International Law Commission at its Fifty-Eighth Session*, UN Doc A/61/10 (2006) 106-182 [66]-[67].
[40] *Report of the International Law Commission at its Sixty-Second Session*, UN Doc A/65/10 (2010) 344 [384], discontinuing the project on shared natural resources (oil and gas).
[41] *Report of the International Law Commission at its Sixty-Third Session*, UN Doc A/66/10 (2011) 7 [32].
[42] Shinya Murase, 'Protection of the Atmosphere' in ibid 315, 315 [1] ('*Syllabus*').
[43] Ibid 317 [5]. See also ibid. 322 [26].
[44] Ibid 317 [5]. See *UNCLOS* (n 15), arts 192-237.
[45] The concerns leading to this controversy are discussed below section III.A.
[46] See ILC, *Summary Record of the 3150th Meeting*, 64th sess, 2nd pt, UN Doc A/CN.4/3150 (held 26 July 2012) 161 [67].
[47] *Report of the International Law Commission at its sixty-fifth session*, UN Doc A/68/10 (2013) 115 [168].
[48] Sninya Murase, Special Rapporteur, *First Report on the Protection of the Atmosphere*, UN Doc A/CN.4/667 (14 February 2014) [15].
[49] Ibid [90], draft guideline 3(a).
[50] Ibid [89].

but these concepts attracted strong criticisms from ILC Members[51] and, then, the Sixth Committee.[52]

The Second Report discussed the obligation of States to protect the atmosphere, which it related to the *sic utere tuo ut alienum non laedas* principle ('use your own property so as not to injure that of another'), a corollary to the principle of territorial sovereignty and equality of States.[53] It also identified the obligation of States to cooperate in good faith, referring in particular to the UN Charter and to the practice of States in addressing transboundary and global environmental concerns.[54] Facing renewed criticisms by other ILC Members, Murase consented to removing the reference to 'common concern of humankind' from the DGs.[55] A part of the Preamble was adopted along with DGs providing definitions of key concepts, determining the scope of the project, and recognizing an obligation of States to cooperate,[56] but discussions on the obligation of States to protect the atmosphere were deferred to the following year.

Murase's Third Report identified the requirement for States to exercise due diligence to protect the atmosphere and to ensure that an environmental impact assessment (EIA) is undertaken for sensitive projects.[57] It also spelled out a principle of 'sustainable and equitable utilization' of the atmosphere.[58] Lastly, it explored the legal limitations to 'activities aiming at intentional modification of the atmosphere,' such as geoengineering.[59] Despite some hesitations, the ILC Members adopted revised versions of five DGs proposed by Murase, recognizing, in particular, the prevention principle as implying an obligation to 'prevent, reduce or control atmospheric pollution and atmospheric degradation.'[60]

Murase's Fourth Report discussed the relations between the international law on the protection of the atmosphere and other fields of international law, namely international trade and investment law, the law of the sea, and international human rights law. In particular, Murase highlighted the need to find 'mutual supportiveness' among these fields of law.[61] This Report attracted little enthusiasm among ILC Members. Dire Tladi, for instance, questioned 'whether the issues covered ought to have been covered,' as 'the issues of mutual supportiveness and interrelationships would be just as relevant for any topic seeking to address normative or

[51] See infra section III.C.2.
[52] See, eg, ILC, *Provisional Summary Record of the 3210th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3210 (held 23 May 2014) at 4 (Kittichaisaree).
[53] Sninya Murase, Special Rapporteur, *Second Report on the Protection of the Atmosphere*, UN Doc A/CN.4/681 (2 March 2015) [41]-[59], in particular [51].
[54] Ibid [60]-[77].
[55] See ILC, *Provisional Summary Record of the 3249th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3249 (held 12 May 2015) 10 (Murase); ILC, *Provisional Summary Record of the 3260th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3260 (held on 2 June 2015) 6 (Forteau, presenting the statement of the Chairman of the Drafting Committee).
[56] *Report of the International Law Commission at its Sixty-Seventh Session*, UN Doc A/70/10 (2015) 22-37 [53]-[54].
[57] Sninya Murase, Special Rapporteur, *Third Report on the Protection of the Atmosphere*, UN Doc A/CN.4/692 (25 February 2016) 9 [17]-[19].
[58] Ibid 33-42 [62]-[78].
[59] Ibid 44-51 [84]-[91].
[60] *Report of the International Law Commission at its Sixty-Eighth Session*, UN Doc A/71/10 (2016) 282-296 [95]-[96]
[61] Sninya Murase, Special Rapporteur, *Fourth Report on the Protection of the Atmosphere*, UN Doc A/CN.4/705 (31 January 2017), in particular 8-11 [14]-[21].

primary rules.'[62] The Report largely failed to build upon the ILC's previous study on the fragmentation of international law,[63] and most ILC Members doubted that 'mutual supportiveness' constituted a legal principle.[64] The four DGs proposed by Murase were eventually synthetized into a single DG on 'interrelationship among relevant rules.'[65] While this limited the damage, it is not clear what this DG adds to the ILC's far more comprehensive study and general study on the fragmentation of international law.

The last Report discussed questions of implementation, compliance and dispute settlement, with half of the Report focusing on the examination of scientific evidence by international courts and tribunals.[66] During the discussion, ILC Members expressed various reservations regarding the structure and documentation of the Report while also questioning the need for a separate DG on implementation, whose substance appeared partly redundant with the characterization of the obligation of due diligence in a previous DG.[67] After numerous amendments and a significant overhaul by the Drafting Committee, three DGs on implementation, compliance and dispute settlement were adopted.[68]

Having completed the discussion on the five Reports, the ILC concluded the first reading of the twelve DGs and decided to transmit them to Governments and international organizations for comments and observations.[69] A second reading could start as soon as mid-2020, at the 72nd Session of the ILC.[70]

III. The ILC's general approach to the protection of the atmosphere

This section analyses the ILC's approach to the topic. It first reviews the initial debate on whether the project should be conducted at all. A second subsection analyses its methodology. A last subsection examines the conceptual framework progressively established by the ILC.

A. A controversial project

[62] ILC, *Provisional Summary Record of the 3355th Meeting*, 69th sess, 1st pt, UN Doc A/CN.4/SR.3355 (held 10 May 2017) 5.
[63] See ILC, 'Conclusions of the Work of the Study Group on the Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law' (2006) *Yearbook of the International Law Commission* vol. II, pt 2, 177; Martti Koskenniemi, *Fragmentation of International Law: Difficulties Arising From the Diversification and Expansion of International Law: Report of the Study Group of the International Law Commission*, UN Doc A/CN.4/L.682 (13 April 2006).
[64] See, eg, ibid at 5-7 (Tladi), 10 (Wood) and 14 (Ki-Gab Park); ILC, *Provisional Summary Record of the 3356th Meeting*, 69th sess, 1st pt, UN Doc A/CN.4/SR.3356 (held 11 May 2017) 3 (Oral); ILC, *Provisional Summary Record of the 3358th Meeting*, 69th sess, 1st pt, UN Doc A/CN.4/SR.3358 (held 16 May 2017) 9 (Vázquez-Bermúdez).
[65] *Report of the International Law Commission at its Sixty-Ninth Session*, UN Doc A/72/10 (2017) 150 [56] (Guideline 9).
[66] Sninya Murase, Special Rapporteur, *Fifth Report on the Protection of the Atmosphere*, UN Doc A/CN.4/711 (8 February 2018) 26-50 [47]-[102].
[67] See, eg, ILC, *Provisional Summary Record of the 3409th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3409 (held 22 May 2018) 12 (Park).
[68] *Report of the International Law Commission at its Seventieth Session*, UN Doc A/73/10 (2018) 158 [73].
[69] Ibid 158 [73]-[76].
[70] Ibid 158 [76].

From the outset, several ILC Members and State representatives at the Sixth Committee strongly opposed the project on the protection of the atmosphere.[71] A US representative contended for instance that this area of law 'was treaty-based, focused and relatively effective.'[72] Similarly, in ILC member Huang Huikang's view, 'what protection of the atmosphere lacked was not regulations, but concrete commitments and substantive action, which depended to a considerable degree on the political will of States.'[73] Moreover, concerns were expressed that the work of the ILC on the topic could interfere with political negotiations[74] or otherwise 'upset the balance achieved'[75] through such negotiations, in particular in relation to climate change.

Oddly enough, these comments assumed that the current treaty regimes for the protection of the atmosphere were effective, despite States' consensus on the shortcomings of the climate regime.[76] As the project's proponent highlighted, it was unclear whether discussions on general international law in the ILC were likely to have any significant impact on much more specific negotiations in the UNFCCC regime – and, if so, why this impact would be counterproductive.[77] The objective of the project had never been to 'revolutionize law in order to force the hand of States,'[78] but only to 'remind…States that the protection of the atmosphere was not a field governed solely by the law of a few treaties.'[79] As such, the project could contribute to the object of the ILC to promote 'the progressive development of international

[71] A review of the summary records of the 18th to 30th meetings of the Sixth Committee at the 66th Session and its 18th to 25th meetings at the 67th session of the UN General Assembly (2011 and 2012) shows that Japan, Austria, Slovenia and Algeria supported the project; US, France, UK, Netherlands, France and Russia opposed the project; China and Canada (which was supported at first) suggested postponing to a next quinquennium.

[72] GA Sixth Committee, *Summary Record of the 20th Meeting*, 66th session, UN Doc A/C.6/66/SR.20 (held 26 October 2011) [15] (Simonoff). See also GA Sixth Committee, *Summary Record of the 19th Meeting*, 67th session, UN Doc A/C.6/67/SR.19 [118] (Buchwald, USA): 'An overarching legal framework for protection of the atmosphere was unnecessary, since various long-standing instruments already provided sufficient general guidance to States in their development, refinement and implementation of treaty regimes at the global, regional and subregional levels.'

[73] ILC, *Provisional Summary Record of the 3249th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3249 (held 12 May 2015) 5 (Huang).

[74] See, eg, ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 3 (Wood).

[75] GA Sixth Committee, *Summary Record of the 21st Meeting*, 69th sess, UN Doc A/C.6/69/SR.21 (held 29 October 2014) [135] (Zabolotskaya, Russia).

[76] See, eg, Presidents of COP 23 and COP 24, *Talanoa Call for Action* (2018) < https://unfccc.int/topics/2018-talanoa-dialogue-platform>.

[77] See ILC, *Provisional Summary Record of the 3311th Meeting*, 68th sess, 1st pt, UN Doc A/CN.4/SR.3311 (held 7 June 2016) 3 (Niehaus), noting that 'it was difficult to understand how a set of clear, objective, non-binding legal guidelines could conflict with political initiatives in the same area and having the same objectives. On the contrary, it might be assumed that those guidelines would support such negotiations.' See also Peter H Sand and Jonathan B Wiener, 'Towards a New International Law of the Atmosphere' (2016) 7(2) *Goettingen Journal of International Law* 195, 211.

[78] ILC, *Provisional Summary Record of the 3249th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3249 (held 12 May 2015) 6 (Forteau). But see ILC, *Provisional Summary Record of the 3213th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3213 (held 30 May 2014) 10 (Nolte), conceding that '[t]he most important decisions with regard to the protection of the atmosphere must be taken at the political level; the Commission could neither prescribe specific decisions or measures on the matter, nor compensate for the lack thereof.'

[79] ILC, *Provisional Summary Record of the 3213th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3213 (held 30 May 2014) 11 (Nolte).

law and its codification.'[80] It is perhaps unsurprising that the fiercest opponents to the projects were the representatives of some of the most powerful States,[81] who may anticipate better chances for the promotion of their national interests in negotiations than in litigation.

ILC Members also expressed concern that the topic of climate change was simply too 'politically controversial' to permit the ILC to carry out the project.[82] As a matter of principle, however, the applicability of rules of international law is not excluded by the political nature of the matter which involves a legal question.[83] The ICJ is adamant that it has 'never shied away from a case brought before it merely because it had political implications or because it involved serious elements of the use of force.'[84] In particular, 'the fact that negotiations are being actively pursued during the … proceedings before the Court is not, legally, any obstacle to the exercise by the Court of its judicial function.'[85] When the ICJ could decide a dispute related to the protection of the atmosphere, when States have to comply with their obligations under international law, and when domestic courts may also need to interpret international law, the ILC could have a role to play in providing a coherent interpretation of some of the key principles, thus helping organize the debate on the law applicable to the protection of the atmosphere.

From a more practical point of view, however, concerns regarded the *capacity* of the ILC to carry out a rigorous and independent analysis of the topic. The ILC is an expert body,[86] but its Statute does not explicitly guarantee its independence and, in recent practice, a growing number of ILC Members have acted concomitantly as State officials.[87] Moreover, as a result of successive cuts in the UN's budget, ILC Members receive no meaningful compensation[88] – which means that they need to carry out other, remunerative activities – and little assistance from the Secretariat.[89] The project's opponents suggested that the ILC lacked the expertise to deal with the topic's 'scientific and technical aspects,'[90] to the point that this could 'jeopardize

[80] *Statute of the ILC*, art 1(1).
[81] See above note 71. ILC Members often took the same position as their State of nationality, even though they are supposed to act in an individual capacity.
[82] Donald McRae, 'The work of the International Law Commission, 2007-2011: Progress and Prospects' (2012) 160(2) *The American Journal of International Law* 322, 337. See also Alain Pellet, 'The ILC Adrift? Some Reflexions from Inside', in Miha Pogancnik (ed), *Challenges of Contemporary International Law and International Relations: Liber Amicorum in Honour of Ernest Petrič* (Nova Gorica 2011) 299, 309.
[83] The closest equivalent to the US political question doctrine appears to the theories on the concept of sovereignty, such as the theory of the *domaine réservé*, which only apply in relation to internal issues. See generally Katja S Ziegler, 'Domaine Réservé' in Rüdiger Wolfrum (ed), *Max Planck Encyclopedia of Public International Law* (Oxford University Press, 2013).
[84] *Military and Paramilitary Activities in and against Nicaragua (Nicaragua v United States) (Jurisdiction and Admissibility)* [1984] ICJ Rep 392, 435 [96].
[85] *Aegean Sea Continental Shelf (Greece v Turkey)* [1978] ICJ Rep 3, 12 [29].
[86] See *Statute of the ILC*, art 2.1.
[87] See generally discussion in Pellet (n 82) 301-302.
[88] While the Statute of the ILC provide for a 'special allowance,' the General Assembly currently sets this allowance to USD 1 per year. See *Comprehensive study of the question of honorariums payable to members of organs and subsidiary organs of the United Nations*, GA Res 56/272, UN Doc A/RES/56/272 (23 April 2002, adopted 27 March 2002) [1].
[89] See Pellet (n 82) 300.
[90] GA Sixth Committee, *Summary Record of the18th Meeting*, 68th session, UN Doc A/C.6/68/SR.18 (held 29 October 2013) [102] (Válek, Czech Republic Czech.

its own authority.'[91] But the ILC's legitimacy would also fare poorly, on the long-term, if it was to remain entirely silent on the legal aspects of an era-defining issue such as climate change.

Two years of informal negotiations followed the inclusion of the topic on the ILC's long-term programme of work in 2011. Finally, at the last meeting of the 65th session in 2013, the ILC allowed the project to start based on an 'Understanding' regarding its scope and nature. According to this Understanding, the work would 'not interfere with relevant political negotiations, including on climate change, ozone depletion and long-range transboundary air pollution.' Moreover, it would 'not deal with, but be without prejudice to, questions such as liability of States and their nationals, the polluter-pays principle, the precautionary principle, common but differentiated responsibilities and the transfer of funds and technology to developing countries.' Lastly, the project's outcome would consist in 'draft guidelines that do not seek to impose on current treaty regimes legal rules or legal principles not already contained therein.'[92]

Much of the ILC's debates in the following years orbited around the Understanding. Outspoken opponents to the project denounced any allusions to climate change or to the UNFCCC in Murase's Reports as violations of the Understanding and potential interferences with international negotiations,[93] even though such a strict reading of the Understanding would have let very few matters, if any, to be discussed.[94] The frustration this created for the project's proponents was reflected in Enrique Candioti's characterisation of the Understanding as 'a disgrace, signifying a departure by the Commission from its traditional working methods and imposing a number of conditions that curbed the Special Rapporteur's freedom to investigate a subject before he had even started work on it.'[95] Other ILC Members compared the Understanding with 'a straightjacket'[96] or suggested that the Commission 'had chained the Special Rapporteur and asked him to run.[97]

The Understanding hindered the project considerably.[98] Except for some fleeting references smuggled into the Commentaries, the DGs adopted in first reading contain no substantive discussion of the principle of common but differentiated responsibilities and respective capabilities (CBDRRC), the precautionary approach, sustainable development or questions of liability, among other key principles of international environmental law. More generally, long,

---

[91] ILC, *Provisional Summary Record of the 3213th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3213 (held 30 May 2014) [10] (Nolte).
[92] *Report of the International Law Commission at its sixty-fifth session*, UN Doc A/68/10 (2013) 115 [168].
[93] See, eg, ILC, *Provisional Summary Record of the 3244th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3244 (held 4 May 2015) 6 (Park); ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2016) 5 (Murphy).
[94] See ILC, *Provisional Summary Record of the 3245th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3245 (held 5 May 2015) 10 (Tladi), highlighting the importance of respecting the Understanding, yet immediately recommending discussions of the CBDRRC principle, without realizing that this principle is also excluded from the scope of the project.
[95] ILC, *Provisional Summary Record of the 3212th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3212 (held 28 May 2014) 7 (Candioti).
[96] Ibid 9 (Vázquez-Bermúdez).
[97] ILC, *Provisional Summary Record of the 3410th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3410 (held 23 May 2018) 13 (Peter).
[98] ILC, *Provisional Summary Record of the 3413th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3413 (held 29 May 2018) 3 (Murase).

recurring discussions on the interpretation of the Understanding distracted considerable attention away from well-needed substantive discussions on the content of Murase's Reports.[99]

This only exacerbated the lack of thorough preparatory research and analysis. It is unfortunate that large sections of Murase's Reports built heavily on drafts produced by students on only vaguely related topics,[100] but otherwise very sparingly on the secondary literature and previous codifications of international environmental law.[101] A Report presented an extensive review of Singapore's Transboundary Haze Pollution Act only because the State had provided detailed documentation.[102] Several used rather abstruse concepts[103] or presented ideas that were insufficiently documented;[104] they were largely viewed as providing an imbalanced treatment of the topic,[105] containing long discussions of matters unspecific to the topic of the protection of the atmosphere, regarding for instance the fragmentation of international law[106] or the treatment of scientific evidence.[107] Questions arguably more specific and central to the topic, such as the problematic application of the law of State responsibility to global environmental harms, were left entirely unaddressed.[108]

B. A conservative methodology

[99] This applies within the ILC as well as beyond, including in the secondary literature. See, eg, Plakokefalos Ilias, 'International Law Commission and the Topic "Protection of the Atmosphere": Anything New on the Table?' *Shares: Research Project on Shared Responsibility in International Law* (Blog Post, 1 November 2013) <http://www.sharesproject.nl/international-law-commission-and-the-topic-protection-of-the-atmosphere-anything-new-on-the-table/>; Sand and Wiener (n 77).

[100] See in particular Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) [47]-[100], drawing on M Fukasaka, 'The Adversary System of the International Court of Justice: An Analytical Study' (Doctoral Thesis, University College London, 2016).

[101] See generally Sand and Wiener (n 77) 198-208.

[102] See Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) [22]-[29]. See also ILC, *Provisional Summary Record of the 3405th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3405 (held 17 May 2018) 9, where Murase recognizes assistance provided by the Attorney General's Chambers of Singapore; and discussion in ILC, *Provisional Summary Record of the 3410th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3410 (held 23 May 2018) 10 (Murphy).

[103] See for instance Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) [14], referring to a typology between 'obligation of measures,' 'obligation of methods' and 'obligation of maintenance.' See also ILC, *Provisional Summary Record of the 3409th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3409 (held 22 May 2018) 12 (Park), calling this typology 'rather artificial' and subject to diverging interpretation; ILC, *Provisional Summary Record of the 3412th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3412 (held 25 May 2018) 10 (Wood).

[104] See for instance ILC, *Provisional Summary Record of the 3355th Meeting*, 69th sess, 1st pt, UN Doc A/CN.4/SR.3355 (held 10 May 2017) 5 (Tladi), noting that '[t]he only authority for that statement was the Special Rapporteur's own book.'

[105] See, eg, ILC, *Provisional Summary Record of the 3409th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3409 (held 22 May 2018) 6 (Oral), 10 (Peter); ILC, *Provisional Summary Record of the 3409th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3409 (held 22 May 2018) 13 (Park); ILC, *Provisional Summary Record of the 3410th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3410 (held 23 May 2018) 9 (Murphy), noting that 'the analysis in the report was selective and lacking in balance, and that it had ultimately resulted in draft guidelines that were dubious in many, if not most, respects'; ILC, *Provisional Summary Record of the 3412th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3412 (held 25 May 2018) 12 (Petrič), 13 (Šturma).

[106] Murase, *Fourth Report on the Protection of the Atmosphere* (n 61).

[107] Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) 26-48 [47]-[100].

[108] See below section IV.D.

The Statute of the ILC distinguishes works aimed at the 'progressive development' and at the 'codification' of international law,[109] but, in practice, the distinction is rather a matter of degree: any codification implies some 'development' through the systematization of the rules derived from particular authorities. Murase's Second Report suggested that the DGs would reflect existing as well as emerging norms of customary international law,[110] thus suggesting a progressive aspect which would promote the affirmation of international law as a coherent legal system, in line with the ILC's general practice. By contrast, some ILC Members promoted a particularly cautious methodology consisting essentially in an inventory of the rules whose existence is already well-established, highlighting the provision of the Understanding according to which the project would not 'seek to "fill" the gaps in treaty regimes.'[111]

Sean Murphy, in particular, opposed the recognition of States' general obligation to protect the atmosphere on the ground that it 'had no basis in any treaty practice, nor in any State practice, nor in case law' and 'could not be supported with reference to any of the standard sources of law.'[112] Murphy's view was seemingly that no inference could be made from obligations to protect the atmosphere from *specific* types of atmospheric harm (*eg* climate change, depletion of the ozone layer, transboundary air pollution) as to the existence of a *general* obligation to protect the atmosphere.

The codification of a field of law must occasionally rely on inductive reasoning, whereby a general rule is drawn from multiple specific examples, and possibly on analogical reasoning, whereby a rule applicable in some circumstances is applied in analogous circumstances. Contrary to Murphy's contention, the existence of a general obligation to protect the atmosphere could reasonably be inferred from the existence of specific obligations of States to prevent most known forms of atmospheric harm.[113] Likewise, an analogy could be drawn between transboundary environmental harm and global environmental harm: the prohibition of the former, now well recognized by international courts and tribunals,[114] provides some support for the protection of the latter, which can only be of greater concern.[115]

Analysing the debate taking place at the ILC, Georg Nolte justly identified two opposing views of international law, either as essentially 'a body of established rules agreed by States in treaty,' or 'as a body of rules and principles, which were all interlinked and supplemented by rules expressly agreed by States, ensuring their coherence without holding back their development.'[116] The two visions diverge significantly in areas, such as the protection of the

[109] *Statute of the ILC*, arts 16 and 18.
[110] See Murase, *Second Report on the Protection of the Atmosphere* (n 53) [25].
[111] *Report of the International Law Commission at its sixty-fifth session*, UN Doc A/68/10 (2013) 115 [168].
[112] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 5 (Murphy).
[113] See, eg, authorities cited in Murase, *Third Report on the Protection of the Atmosphere* (n 57) [35]-[38].
[114] See, eg, *Trail Smelter (United States v Canada) (Award of 11 March 1941)*, 3 RIAA 1938, 1965; *Legality of the Threat or Use of Nuclear Weapons (Advisory Opinion)* [1996] ICJ Rep 226, 241-242 [29] ('*Nuclear Weapons*'); *Iron Rhine Railway (Belgium v Netherlands) (Award)* (2005) 27 RIAA 35, 116 [222]; *Pulp Mills on the River Uruguay (Argentina v Uruguay) (Judgment)* [2010] ICJ Rep 14, 55-56 [101] ('*Pulp Mills*'); *South China Sea (Philippines v China) (Award)* (Permanent Court of Arbitration, Case No. 2013-19, 12 July 2016) [944].
[115] But see discussion referred to below note 190 and discussed in the accompanying text.
[116] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 10.

atmosphere, which have only partially been addressed by treaties. If international law is to be approached as a coherent normative system, rules applicable to the protection of the atmosphere could not only be induced from the general practice of States accepted as law, but also deduced from general principles. For instance, even if States' obligation to protect the atmosphere could not be inferred from the recognition of their obligation to prevent specific types of atmospheric harm, as Murphy contends, it could be inferred from the principles of territorial sovereignty and equality of States, as Murase suggested:[117] a State that fails to take appropriate measures to protect the atmosphere is potentially encroaching on the territory of other States.

There is nothing new in this deductive approach.[118] When identifying States' obligation to prevent transboundary environmental harm, the ICJ in *Pulp Mills on the River Uruguay* did not undertake a comprehensive survey of State practice and *opinio juris*, nor did it immediately mention its previous decision in *Legality of the Threat or Use of Nuclear Weapons*,[119] as Murphy's contention would suggest it should. Rather, the ICJ noted that the principle '*ha[d] its origins* in the due diligence that is required of a State in its territory,'[120] referring to a State's 'obligation not to allow knowingly its territory to be used for acts contrary to the rights of other States.'[121] A similar reasoning could be applied to deduce the existence of a due diligence obligation of States to protect the atmosphere.[122]

The principles of territorial sovereignty and equality of States are not the only principles from which rules relevant to the project could be inferred. Any degradation of the environment has far-reaching implications not just for States and their territories, but also for the humans and societies that inhabit them; it affects ecosystems as well as biological diversity, the marine environment as well as the world cultural and natural heritage. Commenting on a reference to the *Convention on Biological Diversity* ('*CBD*') in one of Murase's Reports, Murphy stated that this treaty 'had nothing to do with the atmosphere.'[123] To the contrary, the Parties to the *CBD* recognized climate change as 'a major and growing driver of biodiversity loss'[124] based on scientific evidence of climate change's enormous impact on species.[125] As climate change affects biological diversity, the obligation to protect biological diversity certainly implies an obligation to mitigate climate change. Just like the principles of territorial sovereignty and equality of States, obligations under the *CBD*, *UNCLOS* and the *World Heritage Convention*,[126]

---

[117] See Murase, *Second Report on the Protection of the Atmosphere* (n 53) [52].
[118] See Murase, *Second Report on the Protection of the Atmosphere* (n 53) [34]. See also 'Draft Conclusions on Identification of Customary International Law' in *Report of the International Law Commission at its Seventieth Session*, UN Doc A/73/10 (2018) 119-156 [65]-[66], 126, Commentary on Conclusion 2 [5]; Stefan Talmon, 'Determining Customary International Law: The ICJ's Methodology Between Induction, Deduction and Assertion' (2015) 26(2) *European Journal of International Law* 417.
[119] *Nuclear Weapons* (n 114) 241-242 [29].
[120] *Pulp Mills* (n 114) 55-56 [101] (emphasis added).
[121] Ibid, citing *Corfu Channel (United Kingdom v Albania), (Judgment on Merits)* [1949] ICJ Rep 4, 22.
[122] See 'DGs adopted on first reading' (n 2) DG 3.
[123] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 4 (Murphy).
[124] Conference of the Parties ('COP') to the CBD, Decision 14/5, *Biodiversity and Climate Change*, UN Doc CBD/COP/DEC/14/5 (30 November 2018, adopted 17-29 November 2018).
[125] See, eg, Pachauri (n 3) 65.
[126] See *supra* notes 14, 15 and 16.

or under international human rights law,[127] entail a due diligence obligation of States to protect the atmosphere. Regrettably, while the DGs recognize the need for 'harmonization and systemic integration' of rules from various fields of international law 'in order to give rise to a single set of compatible obligations,'[128] neither Murase's Reports nor the DGs nor their commentary analyse the relevance of these legal regimes to the topic.

Overall, ILC Members have repeatedly expressed concerns about the potential implications of the project or its findings. Michael Wood opposed the project by fear that it could 'provide fodder for litigation against States.'[129] Similar concerns were instrumental to the opposition to a characterization of the protection of the atmosphere as a 'common concern of humankind,' with potential implications for the *erga omnes* nature of certain obligations;[130] they were also present in the ILC's analysis of the obligation of States to protect the atmosphere from global environmental harm.[131] Such reasoning represents an appeal to consequences (*argumentum ad consequentiam*), a logical fallacy through which the truth-value of a statement is assessed based on a normative judgment of its consequences. In logic, a factual statement (*eg* the recognition of the existence a rule) is no less true because its consequences are unclear, immense, or viewed (by some) as undesirable. When discussing potential implications as part of the assessment of the law on the protection of the atmosphere, ILC Members threaded in the policy sphere, improvising themselves, without any legitimacy to do so, as decision-makers able to determine what rule *should* or *should not* be recognized.

C. Conceptual framework

The DGs suggests an unneeded new terminology by introducing a distinction between 'atmospheric pollution' and 'atmospheric degradation,' while the ILC rejected the well-accepted idea that the protection of the atmosphere is a 'common concern of humankind.'

1. Atmospheric pollution and atmospheric degradation

The DGs are based on a distinction between the protection of the atmosphere from atmospheric pollution and its protection from atmospheric degradation.[132] Atmospheric *pollution* refers to classical transboundary issues, which affect a specific area outside the state of origin.[133] The affected area can be situated within the territory of another State or beyond national jurisdiction, for instance in the high seas. By contrast, atmospheric *degradation* relates to the 'alteration of the global atmospheric conditions,'[134] for instance through the emissions of substances that cause climate change or the depletion of the ozone layer. The terminology, which is not

[127] See, eg, *International Covenant on Economic, Social and Cultural Rights*, opened for signature 16 December 1966, 999 UNTS 3 (entered into force 3 January 1979) art 2(1) ('*ICESCR*'); *International Covenant on Civil and Political Rights*, opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976) art 2(1). See also Human Rights Committee, General Comment No 31, *The Nature of the General Legal Obligation Imposed on States Parties to the Covenant*, UN Doc CCPR/C/21/Rev.1/Add.13 (26 May 2004, adopted 29 March 2004) [6]-[8].
[128] 'DGs adopted on first reading' (n 2) DG 9(1)
[129] ILC, *Provisional Summary Record of the 3355th Meeting*, 69th sess, 1st pt, UN Doc A/CN.4/SR.3355 (held 10 May 2017) 9 (Wood).
[130] See below note 172 and accompanying text.
[131] See below note 188 and accompanying text.
[132] See 'DGs adopted on first reading' (n 2) DG 2(1).
[133] See 'DGs adopted on first reading' (n 2) Commentary on DG 1 [7].
[134] See ibid [11].

reflective of the predominant usage,[135] is needlessly confusing:[136] terms such as 'transboundary pollution' (or 'transboundary air pollution') and 'global atmospheric degradation,' which are used in the Commentary,[137] would convey the same notions far more effectively.

More specifically, DG 1(b) defines 'atmospheric pollution' as the introduction into the atmosphere of 'substances contributing to deleterious effects extending beyond the State of origin of such a nature as to endanger human life and health and the Earth's natural system.'[138] Although pollution is generally defined as the introduction of 'substances or energy,'[139] the definition only mentions 'substances,' while the Commentary notes that, for the purpose of these DGs, 'the word "substance" includes "energy."'[140] This convoluted terminology reflects the difficulty for the ILC Members to reach consensus on even the most benign and inconsequential questions.[141]

By contrast, DG 1(c) defines 'atmospheric degradation' in relation to '*significant* deleterious effects of such a nature as to endanger human life and the Earth's natural environment.'[142] The addition of the word 'significant' suggests the rather counter-intuitive conclusion that the threshold of harm for atmospheric degradation (*ie* global environmental harm) should be higher than the threshold applicable to atmospheric pollution (*ie* transboundary environmental harm). Presumably, if some 'insignificant' damage must be explicitly excluded from the scope of the DGs, this should be in relation to harm confined to a specific area rather than the harm affecting the entire atmospheric system, which is more serious by nature. Rather inconsistently, DG 4 recognizes the requirement for an EIA to be undertaken for proposed activities 'which are likely to cause *significant* adverse impact on the atmosphere,' whether through atmospheric pollution or degradation.[143]

The distinction between atmospheric pollution and atmospheric degradation is unnecessary because, surprisingly, the DGs make *no* distinction between the rules applicable to atmospheric pollution and those applicable to atmospheric degradation.[144] It is highly unlikely that the exact same rules apply in the exact same way to transboundary and global environmental harm.[145] The obligation to protect the atmosphere, to conduct an EIA and to cooperate, to mention but

---

[135] See, eg, *Massachusetts v Environmental Protection Agency*, 549 U.S. 497 (2007), qualifying GHG emissions as 'air pollutants.' But see 'DGs adopted on first reading' (n 2) Commentary on DG 1 [7], referring to 'existing treaty practice,' of which no specific example is provided. 'Air pollution' (rather than 'atmospheric pollution') is typically used to refer to localized or transboundary concerns, but not specifically to exclude global environmental harm.

[136] While 'DGs adopted on first reading' (n 2) DG 1(b) and 1(c) define these two concepts, they do not explicitly distinguish between territorial and global context in which they take place.

[137] See, eg, ibid, Commentary on DG 2 [2].

[138] Ibid DG 1(b).

[139] See, eg, *UNCLOS* (n 15) art 1(1)(4); *Convention on Long-Range Transboundary Air Pollution*, opened for signature 13 November 1979, 1302 UNTS 217 (entered into force 16 March 1983) art 1(a).

[140] 'DGs adopted on first reading' (n 2) Commentary on DG 1 [9].

[141] Energy, as a source of atmospheric pollution, would most likely refer to light, noise or heat, which may seldom reach the threshold of significant transboundary environmental harm. Radioactive pollution is generally accompanied by the release of radioactive substances.

[142] 'DGs adopted on first reading' (n 2) DG 1(c) (emphasis added).

[143] Ibid, DG 4. See also ibid, Commentary on DG 4 [5] (emphasis added).

[144] Except for their definition in DG 1, every single mention of one concept comes along with that of the other. See ibid, Preamble [4], DGs 2(1), 3, 4, 8(1), 8(2), 9(3), 10(1), 11(1), 12(1).

[145] Duvic-Paoli (n 17) 78.

a few, are likely to have at least some particularities in the two different contexts.[146] In the Commentaries, the distinction is only made to acknowledge stronger evidence of the obligations to protect the atmosphere and to conduct an EIA in relation to atmospheric pollution than in relation to atmospheric degradation.[147]

The division of the protection of the atmosphere between protection from atmospheric pollution and from atmospheric degradation excludes consideration for environmental impacts taking place exclusively within the country of origin. While Murase's First Report may have appeared somewhat ambivalent,[148] several ILC Members were anxious to ensure that the project would not tread into 'purely local' matters,[149] and the Commentaries confirm that the DGs do not 'deal with domestic or local pollution.'[150] This exclusion of domestic environmental harm fails to reflect emerging trends in international environmental law, for instance based on the progressive recognition of a right to a healthy environment.[151] Although the ILC may deem that it is too early to recognize this trend, a no-prejudice clause would ensure that the DGs at least do not hinder the progressive development of international law.

2. Common concern of humankind

Murase's First Report characterized the protection of the atmosphere as a 'common concern of humankind'[152] and suggested that this could imply the existence of *erga omnes* obligations.[153] This characterization revealed extraordinarily divisive within the ILC and the Sixth Committee. Under pressure of his peers, Murase agreed to move the concept of 'common concern of humankind' to the Preamble of the DGs, and then conceded to replace it by the notion of a 'pressing concern of the international community as a whole.'[154] While 'common concern of humankind' is a concept used in several treaties[155] and largely acknowledged as a general principle or concept of international environmental law,[156] 'pressing concern of the international community as a whole' is merely a criterion used by the ILC to identify topics of work.[157]

---

[146] With regard to the obligation to cooperate, see for instance Pierre-Marie Dupuy and Jorge E Vinuales, *International Environmental Law* (Cambridge University Press, 2nd ed., 2018) 74.
[147] See 'DGs adopted on first reading' (n 2) Commentary on DG 3 [7]; Commentary on DG 4 [6].
[148] See DG 2 as proposed in Murase, *First Report on the Protection of the Atmosphere* (n 48) 52 [78], but see ibid 50 [76].
[149] ILC, *Provisional Summary Record of the 3212th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3212 (held 28 May 2014) 10 (Wood). See also ILC, *Provisional Summary Record of the 3211h Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3211 (held 27 May 2014) 9 (Forteau); ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 4 (Wood); ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 6 (Murphy).
[150] 'DGs adopted on first reading' (n 2) Commentary on DG 2 [3].
[151] See, eg, John H Knox and Ramin Pejan (eds), *The Human Right to a Healthy Environment* (Cambridge University Press, 2018). See also, regarding the application of the obligation to protect and preserve the marine environment to territorial seas, *South China Sea* (n 114) [940].
[152] Murase, *First Report on the Protection of the Atmosphere* (n 48) [90].
[153] Ibid [89].
[154] ILC, *Provisional Summary Record of the 3260th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3260 (held on 2 June 2015) 6 (Forteau, presenting the statement of the Chairman of the Drafting Committee).
[155] See *infra* notes 159-160.
[156] See generally Dupuy and Vinuales (n 146) 98.
[157] 'DGs adopted on first reading' (n 2) Commentary on Preamble [9].

At first, ILC Members and State representatives firmly opposed the reference to common concern of humankind by highlighting a lack of legal basis,[158] despite the inclusion of the concept in the *UNFCCC* in relation to climate change and its adverse effects[159] and in the *CBD* in relation to the conservation of biological diversity.[160] By mid-2015, Sean Murphy suggested that the term had enjoyed 'very limited use in treaties'[161] since the adoption of these two treaties in 1992, concluding that 'States no longer wanted to use the phrase.'[162] This position was in tension with the reference to 'global concern' in the Minamata Convention, adopted in 2013, in relation to the long-range atmospheric transport of mercury.[163] Murphy's argument became entirely untenable by December 2015, when the Paris Agreement acknowledged once again climate change as a 'common concern of humankind.'[164] At the following session of the ILC, Donald M McRae noted the 'rather disturbing role reversal,'[165] where the ILC, supposed to promote the progressive development of international law, was actually a step behind States.

The mention of 'common concern of humankind' in the Paris Agreement did not lead to the re-introduction of this concept in the DGs or their Preamble. Unabated, Sean Murphy insisted that 'there was no treaty, whether universal, regional or bilateral, asserting that the *degradation of atmospheric conditions* was a common concern of humankind,' while no international court or tribunal 'had ever asserted such a proposition.'[166] Murphy thus ignored, once again,[167] the possibility of inferring a general rule from multiple consistent cases. As Petrič recognized, the concept of common concern was certainly 'well established in international environmental law,'[168] and in particular in relation to climate change and the protection of biological diversity: absent any contrary evidence, the ILC should have recognized the applicability of this concept,

---

[158] See, eg, ILC, *Provisional Summary Record of the 3211th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3211 (held 27 May 2014) 6 (Tladi) 9 (Forteau); ILC, *Provisional Summary Record of the 3212th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3212 (held 28 May 2014) 6 (Šturma); ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 6 (Hassouna). See also GA Sixth Committee, *Summary Record of the 22th Meeting*, 69th session, UN Doc A/C.6/69/SR.22 (held 29 October 2014) [35] (Alabrune, France).

[159] *UNFCCC* (n 4) Preamble [2]. See also International Law Association (n 29) 22 (Draft Article 2); ILA Committee on the Legal Principles Relating to Climate Change (n 29) 334 (Commentary on Draft Article 2 [4]), characterizing the application of this concept to climate change as 'universally accepted.'

[160] *CBD* (n 14) Preamble [4].

[161] Sean D Murphy, 'Identification of Customary International Law and Other Topics: The Sixty-Seventh Session of the International Law Commission' (2015) 109(4) *American Journal of International Law* 822, 833.

[162] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 4 (Murphy). Murphy mentioned the absence of any mention of the concept in the Kyoto Protocol and its Doha Amendment, but the very short preamble to the Kyoto Protocol 'recall[ed] the provisions of the Convention,' while the Doha Amendment does not have a Preamble. See Kyoto Protocol (n 6) Preamble [4].

[163] *Minamata Convention on Mercury*, opened for signature 10 October 2013, (2016) 55 ILM 582 (entered into force 16 August 2017) Preamble [2].

[164] *Paris Agreement* (n 4) Preamble [12].

[165] ILC, *Provisional Summary Record of the 3311th Meeting*, 68th sess, 1st pt, UN Doc A/CN.4/SR.3311 (held 7 June 2016) 7 (McRae).

[166] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 3 (Murphy) (emphasis added).

[167] See above note 112 and accompanying text.

[168] ILC, *Provisional Summary Record of the 3211th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3211 (held 27 May 2014) 8 (Petrič).

if not to the protection of the atmosphere as a whole, at least in the context of atmospheric degradation.[169]

Eventually, the instrumental ground for the exclusion of 'common concern of humankind' from the DGs and their Preamble is one which should never have been considered in an expert body in charge of the codification of international law: the possible implications of the concept. At the Sixth Committee, France expressed concern that interpreting the concept could lead to the recognition of the protection of the environment as 'an obligation erga omnes, incumbent on all States, and could thus serve as a basis for international contentious proceedings, which would be unacceptable.'[170] Similar concerns were repeatedly voiced by some ILC Members.[171] The Commentary of the DGs acknowledges that concerns regarding 'the legal consequences of the concept' being 'unclear' were the ground on which the ILC decided not to include the concept in the DGs.[172] This reasoning is a clear example of *argumentum ad consequentiam*, as described above.[173] When codifying the law, the ILC should recognize existing rules and concepts notwithstanding whether its members – or the Sixth Committee – like or dislike their implications. When *deciding* to reject the concept of common concern of humankind because of its possible implications, the ILC made a political assessment that it has no legitimacy to make.

The second reading of the DGs will give another chance for the ILC to recognize the protection of the atmosphere as a common concern of humankind.[174] In doing so, the ILC could play a role in interpreting the implications of this concept.[175] This concept certainly implies, as Murase indicated in his Second Report, an obligation of 'cooperation of all States on matters of a similar importance to all nations'[176] (an obligation that the ILC has identified),[177] but also, as Murase's First Report suggested,[178] the existence of *erga omnes* obligations.[179] This does not

[169] But see ibid 8 (Petrič), 9 (Forteau). It is unclear whether the concept applies to *transboundary* issues (atmospheric pollution), absent clear authorities and given the lesser gravity of environmental harm confined to a particular area. See ILC, *Provisional Summary Record of the 3308th Meeting*, 68th sess, 1st pt, UN Doc A/CN.4/SR.3308 (held 1 June 2016) 12 (Wood).

[170] GA Sixth Committee, *Summary Record of the 22nd Meeting*, 69th session, UN Doc A/C.6/69/SR.22 (held 29 October 2014) [35] (Alabrune, France).

[171] See, eg, ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 4-5 (Wood); ILC, *Provisional Summary Record of the 3212th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3212 (held 28 May 2014) 5 (Hmoud). But see also ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 9 (Nolte); ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 6 (Hassouna), 9 (Šturma), 11 (Petrič).

[172] 'DGs adopted on first reading' (n 2) Commentary on Preamble [9].

[173] See above section III.B.

[174] Nadia Sánchez Castillo-Winckels, 'Why "Common Concern of Humankind" Should Return to the Work of the International Law Commission on the Atmosphere?' (2016) 29(1) *The Georgetown Environmental Law Review* 131.

[175] ILC, *Provisional Summary Record of the 3212th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3212 (held 28 May 2014) 9 (Vázquez-Bermúdez).

[176] Murase, *Second Report on the Protection of the Atmosphere* (n 53) 17 [26].

[177] See 'DGs adopted on first reading' (n 2) DG 8.

[178] Murase, *First Report on the Protection of the Atmosphere* (n 48) 57 [89].

[179] See discussion below, section IV.D.

necessarily mean, as some ILC members feared, an unlimited right of any State to invoke the responsibility of any other State (*actio populis*).[180]

IV. The rights and obligations of States in relation to the protection of the atmosphere

This section reviews more specific aspects of the DGs. It first examines the two key obligations recognized by the ILC: the obligation to protect the atmosphere and the obligation to cooperate. It then comments on the ILC's elusive treatment of geoengineering activities. Lastly, it delves into the consequences of non-compliance.

A. The obligation to protect the atmosphere

1. Existence of the obligation

DG 3 recognizes States' obligation 'to protect the atmosphere by exercising due diligence in taking appropriate measures, in accordance with appropriate rules of international law, to prevent, reduce or control atmospheric pollution and atmospheric degradation.' During the ILC's deliberation, this provision appeared uncontroversial inasmuch as atmospheric pollution is concerned.[181] The obligation to prevent transboundary environmental harm is affirmed in prominent international declarations; [182] judicial decisions recognize it as customary international law.[183] Some of the most qualified publicists characterize this obligation as the 'cornerstone' of international environmental law.[184]

By contrast, some ILC Members questioned the application of this obligation to global environmental harm such as atmospheric degradation.[185] A central concern with the application of the obligation to protect the atmosphere to atmospheric degradation related to the possible consequences of the recognition of this obligation. Thus, Parvel Šturma warned about the 'implications' of recognizing an obligation to protect the atmosphere in relation to atmospheric degradation,[186] while Sean Murphy pointed more specifically to the possibility that this may facilitate litigation against developed countries.[187] This is another regrettable example of *argumentum ad consequentiam* in the ILC's deliberation on the protection of the atmosphere.[188]

---

[180] A suggestion that the right to invoke an *erga omnes* obligation could be limited to States with a special interest could be found for instance in I.C.J. Pleadings, *Nuclear Tests case (New Zealand v. France)*, vol. II, 266 (Dr. Finlay, for New Zealand).

[181] See, eg, ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 11 (Petrič).

[182] See in particular *Declaration of the United Nations Conference on the Human Environment*, UN Doc A/Conf.48/14/Rev.1 (adopted 16 June 1972) principle 21 ('*Stockholm Declaration*'); *Rio Declaration on Environment and Development*, UN Doc A/CONF.151/26 (vol. I) (adopted 14 June 1992) principle 2 ('*Rio Declaration*').

[183] See references cited *supra* note 114.

[184] Philippe Sands and Jacqueline Peel, *Principles of International Environmental Law* (Cambridge University Press, 3rd ed, 2012) 191.

[185] See generally Duvic-Paoli (n 17) 96.

[186] ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 9 (Šturma).

[187] See ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 5-6 (Murphy).

[188] See *supra* note 173.

More relevantly, ILC Members also expressed doubts regarding the legal basis of an obligation to prevent atmospheric degradation. Murase's Second Report suggested that this obligation stems from the *sic utere tuo ut alienum non laedas* principle ('use your own property in such a manner as not to injure that of another').[189] Yet, this principle assumes a bilateral relation between two States and most authorities which recognize its existence relate to a transboundary context.[190] On this ground, the Commentary to DG 3 noted that the existence of the obligation to protect the atmosphere 'is still somewhat unsettled for global atmospheric degradation.'[191]

The ILC could have gone considerably further in determining the existence of an obligation to prevent atmospheric degradation, arguably the most important aspect of the entire project. It could, for instance, have identified the elements constitutive of a customary norm, namely *opinio juris* and State practice.[192] Both elements are arguably evidenced, among others, by States' universal or quasi-universal participation in multiple treaties through which they commit to make expensive efforts to address the main global environmental concerns.[193] By contrast, Sean Murphy provided no evidence in support of his contention that States and international courts and tribunals had *deliberately* confined the recognition of the prevention principle to a transboundary context.[194] To the contrary, mention of the prevention principle in the preamble to the Vienna Convention on the Protection of the Ozone Layer and of the UNFCCC suggested that States had agreed to the relevance of the principle to climate change.[195] In *Urgenda v The Netherlands*, both parties to the dispute agreed that the prevention principle was applicable to climate change.[196]

Furthermore, support to the identification of the obligation of States to prevent atmospheric degradation could also be found from a deductive method.[197] Like in a transboundary context, the obligation of States to prevent environmental harm in a global context could be inferred from the premises of general international law. Even beyond the *sic utere* principle, which applies more obviously in a transboundary context, this obligation stems from the principle of

---

[189] See Murase, *Second Report on the Protection of the Atmosphere* (n 53) 32-26 [52]-[58]; Murase, *Third Report on the Protection of the Atmosphere* (n 57) 6-7 [13]. See generally Jutta Brunnée, 'Sic utere tuo ut alienum non laedas' in Wolfrum (n 83).

[190] See discussion in ILC, *Provisional Summary Record of the 3307th Meeting*, 68th sess, 1st pt, UN Doc A/CN.4/SR.3307 (held 31 May 2016) 13 (Hmoud); ILC, *Provisional Summary Record of the 3308th Meeting*, 68th sess, 1st pt, UN Doc A/CN.4/SR.3308 (held 1 June 2016) 4 (Park), 6-7 (Forteau); ILC, *Provisional Summary Record of the 3212th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3212 (held 28 May 2014) 8 (Caflisch); ILC, *Topical summary of the discussion held in the Sixth Committee of the General Assembly during its seventy-first session*, UN Doc A/CN.4/703 (22 February 2017) 6 [18]. See also *supra* note 183.

[191] 'DGs adopted on first reading' (n 2) Commentary on DG 3 [7].

[192] See ICJ Statute, art 38(1)(b); 'Draft Conclusions on Identification of Customary International Law' (n 118) Conclusion 2.

[193] See, eg, *UNFCCC* (n 4); *Vienna Convention for the Protection of the Ozone Layer*, opened for signature 22 March 1985,1513 UNTS 293 (entered into force 22 September 1988; *UNCLOS* (n 15); *CBD* (n 14); *Stockholm Convention on Persistent Organic Pollutants*, opened for signature 22 May 2001, 2256 UNTS 119 (entered into force 17 May 2004); *Minamata Convention on Mercury* (n 163).

[194] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 6 (Murphy).

[195] *Vienna Convention for the Protection of the Ozone Layer* (n 193) Preamble [3]; *UNFCCC* (n 4) Preamble [9]. See also the formal declarations made by some of the most affected States, cited above n 17.

[196] *Urgenda v the Netherlands*, District Court (n 20) [4.42].

[197] See above note 118 and accompanying text. See generally Mayer, 'No-Harm Principle' (n 12).

territorial sovereignty and equality of States.[198] These principles require States to try to avoid harm that would significantly affect the territory or the livelihood of other States and their populations. The fact that atmospheric degradation affects all States, threatening the very existence of some,[199] suggests that the obligation to prevent atmospheric degradation is a corollary of premises of the international legal order.

2. Nature of the obligation

DG 3 justly reflects the nature of the obligation to protect the atmosphere (or, more generally, to prevent transboundary and global environmental harm) as an obligation to exercise 'due diligence.' Consistently, the Commentary characterizes this obligation as an obligation of conduct.[200] As such, the occurrence of atmospheric pollution or degradation does not necessarily reflect a breach of the obligation: environmental harm may occur despite requisite efforts carried out to prevent it. This observation raises essential but thorny questions regarding the standard of care applicable to this obligation: how much efforts and resources must a State invest in trying to protect the atmosphere? Addressing this question in any systematic way would likely involve an interpretation of the CBDRRC principle as well as some reflections on the nature of the precautionary approach, but the Understanding excluded both concepts from the scope of the project. As a result, the project could only engage with this question in the most superficial way.

Thus, Murase's Third Report highlighted the importance of taking into account the capabilities of the State[201] as well as the nature of the harm likely to result from particular activities.[202] Building by analogy on the obligation of States to protect the marine environment under UNCLOS[203] (whose adoption predates the recognition of the CBDRRC principle and the precautionary approach), Murase suggested that States are required to 'use the best practicable means at their disposal and in accordance with their capabilities.'[204] This language had to be watered down significantly for a relative consensus to be reached among ILC Members. As a result, DG 3 refers, in the most evasive way possible, to 'appropriate measures,' while its Commentary suggests, only slightly more precisely, that the requirement extends to '*all* appropriate measures.'[205] Taking stock of the judgment of the ICJ in *Pulp Mills on the River Uruguay*, the Commentary adds that this obligation involves 'not only the adoption of appropriate rules and measures, but also a certain level of vigilance in their enforcement and exercise of administrative control applicable to public and private operators.'[206]

---

[198] Murase, *Second Report on the Protection of the Atmosphere* (n 53) 31-32 [51].
[199] See, eg, Derek Wong, 'Sovereignty Sunk? The Position of "Sinking States" at International Law' (2013) 14(1) *Melbourne Journal of International Law* 346.
[200] See 'DGs adopted on first reading' (n 2) Commentary on DG 3 [5]. See also ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 9 (Nolte); ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) at 6-7 (Kittichaisaree). See generally Benoit Mayer, 'Obligations of Conduct in the International Law on Climate Change: A Defence' (2018) 27(2) *Review of European, Comparative & International Environmental Law* 130, 133 ('Obligation of Conduct'); Duvic-Paoli (n 17) 94.
[201] Murase, *Third Report on the Protection of the Atmosphere* (n 57) 9 [18].
[202] Ibid [19].
[203] *UNCLOS* (n 15) art 194(1).
[204] Murase, *Third Report on the Protection of the Atmosphere* (n 57) 11-12 [24].
[205] 'DGs adopted on first reading' (n 2) Commentary on DG 3 [5] (emphasis added).
[206] Ibid. See also *Pulp Mills* (n 114) 79-80 [197].

3. EIA

DG 4 identifies a particular implication of this due diligence obligation: the obligation of States to ensure that an EIA is undertaken for proposed activities that could impact the atmosphere.[207] This reflects a norm of customary international law whose existence was suggested in 1992 by the *Rio Declaration on Environment and Development*[208] and was identified by the ICJ's 2010 judgment in *Pulp Mills*.[209] Borrowing from the language of the *Rio Declaration*, the ILC suggests that an EIA is required for activities that 'are *likely* to cause a significant adverse impact on the atmosphere.'[210] This phrasing is problematic for two reasons. Firstly, it is not always possible to determine the likelihood or the significance of an impact prior to the conduct of an EIA (this determination is one of the aims of conducting an EIA). Secondly, even highly 'unlikely' impacts should be of great concern, and should therefore be the object of an EIA, if they would be catastrophic and irreversible in nature. Therefore, the ICJ in *Pulp Mills* recognized the requirement of an EIA as applicable whenever '*there is a risk* of' of a significant adverse impact, notwithstanding the *likelihood* of this risk.[211] The ILC should reflect the phrasing used by the ICJ rather than the wording of the *Rio Declaration*.

On the other hand, international courts and tribunals so far have only approached EIA in relation to impacts affecting specific areas, whether these areas are within a State's territory[212] or beyond.[213] In this context, DG 4's progressive contribution, highlighted in its Commentary, lies in its recognition of 'a similar requirement for projects that are likely to have significant adverse effects on the global atmosphere.'[214] The Commentary suggests that this requirement should apply for instance to 'those activities involving intentional large-scale modification of the atmosphere,' a reference to geoengineering activities.[215]

However, neither DG 4, nor its Commentary provide a clear explanation of the legal basis for this extension of the EIA requirement to a global context. The Commentary suggests that the requirement applies '*a fortiori*' to activities that could cause atmospheric degradation on the ground that such activities 'may carry a more extensive risk of severe damage.'[216] However, the validity of this argument rests on the assumption that EIA is as relevant and effective a tool in addressing global environmental harm as it is in relation to transboundary environmental

[207] 'DGs adopted on first reading' (n 2) DG 4.
[208] *Rio Declaration* (n 182) principle 17.
[209] *Pulp Mills* (n 114) 82-83 [204]. See also *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua) and Construction of a Road in Costa Rica along the San Juan River (Nicaragua v Costa Rica) (Judgment)* [2015] ICJ Rep 665, 706-707 [104] ('*Certain Activities*'); *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area (Advisory Opinion)* (Seabed Dispute Chamber of the International Tribunal for the Law of the Sea, Case No 17, 1 February 2011) [147] ('*Activities in the Area*').
[210] 'DGs adopted on first reading' (n 2) DG 4. See also *Convention on Environmental Impact Assessment in a Transboundary Context*, opened for signature 25 February 1991, 1989 UNTS 309 (entered into force 10 September 1997) art 2(2) ('*Espoo Convention*').
[211] *Pulp Mills* (n 114) 82-83 [204] (emphasis added). See also *Certain Activities* (n 209) 706-707 [104]; *Activities in the Area* (n 209) [147].
[212] See *Pulp Mills* (n 114) 82-83 [204]. See also *Certain Activities* (n 209) 706-707 [104].
[213] See *Activities in the Area* (n 209) [148].
[214] 'DGs adopted on first reading' (n 2) Commentary on DG 4 [6].
[215] Ibid.
[216] Ibid.

harm[217] – a question that the ILC left unaddressed. Instead, the Commentary relies on the "*Kiev*" *Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context* as an authority which, in the ILC's view, 'encourages' the assessment of projects likely to cause global atmospheric degradation.[218] Poorly ratified, the Kiev Protocol could only provide limited evidence of a norm of customary international law.[219] It relates to strategic environmental assessment (SEA), a procedure which, unlike EIA, is not generally considered as a requirement under customary international law.[220] Overall, it is not all that clear that the *Kiev Protocol* requires any assessment of global environmental impacts, if only because its very title refers to a 'transboundary context.'[221] On the other hand, the Commentary conveniently omits to mention that the *Espoo Convention on Environmental Impact Assessment*, the only treaty that defines a detailed and general requirement for the conduct of an EIA,[222] explicitly excludes its applicability to impacts 'exclusively of a global nature.'[223]

While the ILC's reasoning is unconvincing, its conclusions may nevertheless be right, and even understated. Most States have treaty obligations to conduct an EIA for some geoengineering activities likely to have far-reaching impacts on planetary systems, as such activities would result in pollution of the marine environment,[224] threats to biological diversity,[225] or even possibly impacts on the Antarctic environment.[226] A recent survey of State practice and *opinio juris* suggested the existence of at least an emerging customary norm requiring the conduct of an EIA as a tool for the mitigation of climate change.[227] This obligation is certainly not limited to geoengineering activities: in many countries, EIAs are conducted when a project is likely to result in substantial amounts of GHG emissions.[228]

---

[217] Some elements of an EIA procedure, such as notification and consultations, cannot directly be transposed from a transboundary to a global context.
[218] Ibid.
[219] *Kiev Protocol on Strategic Environmental Assessment in a Transboundary Context*, opened for signature 21 May 2003, 2685 UNTS 140 (entered into force 11 July 2010). As of June 2019, the Kiev Protocol had been ratified by 33 States, none of which is among the largest contributors to atmospheric degradation.
[220] While EIA applies to projects, SEA relates to policies, plans and programmes. See generally Neil Craik, *The International Law of Environmental Impact Assessment: Process, Substance and Integration* (Cambridge University Press, 2010) 155-159.
[221] See discussion in Benoit Mayer, 'Environmental Assessments in the Context of Climate Change: The Role of the UN Economic Commission for Europe' (2019) 28(1) *Review of European, Comparative & International Environmental Law* 82, 88-90.
[222] See Craik (n 220) 101.
[223] *Espoo Convention* (n 210) art 1(viii).
[224] *UNCLOS* (n 15) art 206.
[225] *CBD* (n 14) art 14.
[226] *Protocol on Environmental Protection to the Antarctic Treaty*, opened for signature 4 October 1991, 30 ILM 1461 (entered into force 14 January 1998) Annex I.
[227] See Benoit Mayer, 'Climate Assessment as an Emerging Obligation under Customary International Law' (2019) 68(2) *International & Comparative Law Quarterly* 271.
[228] Ibid. See, eg, *Parliament and Council Directive 2014/52*, 2014 OJ L124/1, Annex IV [4] (EU); *Impact Assessment Act* (Canada, passed on 21 June 2019) s22(1)(i); *Center for Biological Diversity v National Highway Traffic Safety Administration*, 538 F.3d 1172 (9th Cir 2008); *Gray v Minister for Planning and Others* [2006] NSWLEC 720 (NSW).

Likewise, DG 4 and its Commentary provided few details as to the scope and content of the EIA. The Commentary only noted that 'notification and consultations are key' to EIA,[229] while 'transparency and publication are important.'[230] This does not entirely reflect the decisions of international courts and tribunals. While the ICJ in *Pulp Mills* recognized that customary international law does not 'specify the scope and content' of the EIA, it immediately noted that an EIA must, by nature, 'be conducted prior to the implementation of a project' and that, where necessary, 'continuous monitoring of [the] effects [of the project] on the environment shall be undertaken.'[231] Moreover, the ICJ in *Certain Activities* presented notification and consultations not just as 'key,' but more precisely as legal requirements 'where that is necessary to determine the appropriate measures to prevent or mitigate that risk.'[232] These requirements may not apply in the same way in relation to global environmental harm, where no specific State can be consulted. Treaty practice relating to EIA conducted in relation to impacts that could affect areas beyond national jurisdiction suggests that notification could take place in a multilateral setting[233] and could be channelled by international institutions.[234] The arbitral tribunal in *South China Sea* insisted that the EIA report should, at the very least, be communicated to other States.[235]

4. Sustainable, equitable and reasonable utilization

DG 5 presents the atmosphere as 'a natural resource with limited assimilation capacity'[236] and calls for its 'sustainable utilization,' highlighting 'the need to reconcile economic development with protection of the atmosphere.'[237] The concept of 'sustainable utilization' is borrowed from the *Watercourses Convention*[238] – a treaty based on a previous ILC project[239] – and from the concept of 'sustainable exploitation' of fisheries.[240] However, the concept appears far less relevant in relation to the protection of the atmosphere than it is in relation to non-navigational uses of international watercourses. There is no obvious analytical value added by framing atmospheric pollution and degradation as 'utilization' of the atmosphere rather than merely as harm (or pollution and degradation). To the contrary, reference to an 'assimilation capacity' implies that the atmosphere can be legitimately utilized within some sort of safe carrying capacity, whereas climate scientists are adamant that any amount of atmospheric pollution or degradation causes adverse effects for societies and ecosystems.[241] The concept of 'sustainable utilization' serves seemingly no purpose other than to highlight the need to reconcile economic

[229] 'DGs adopted on first reading' (n 2) Commentary on DG 4 [2].
[230] Ibid [7].
[231] *Pulp Mills* (n 114) 83-84 [205].
[232] *Certain Activities* (n 209) 46 [104].
[233] *Protocol on Environmental Protection to the Antarctic Treaty* (n 226) Annex I, arts 3.3, 3.4.
[234] See ibid art 3.3; *UNCLOS* (n 15) art 205.
[235] *South China Sea* (n 114) [991].
[236] 'DGs adopted on first reading' (n 2) DG 5(1).
[237] Ibid DG 5(2).
[238] *Watercourses Convention* (n 35) Preamble [6], art 15(1).
[239] See 'Draft articles on the law of the non-navigational uses of international watercourses and commentaries thereto' reproduced in *Report of the International Law Commission on the Work of its Forty-Sixth Session*, UN Doc A/49/10 (1994) 88-135 [210]-[222].
[240] Murase, *Third Report on the Protection of the Atmosphere* (n 57) 34 [63]
[241] See, eg, Reto Knutti et al, 'A Scientific Critique of the Two-Degree Climate Change Target' (2015) 9 *Nature Geoscience* 13, 14.

development with protection of the atmosphere without a direct reference to 'sustainable development,' a concept that the Understanding excluded from the scope of the project.[242]

DG 6 recommends that the atmosphere 'should be utilized in an equitable and reasonable manner, taking into account the interests of present and future generations.'[243] Even more than DG 5, it is, as the Commentary acknowledges, 'formulated at a broad level of abstraction.'[244] The Understanding precluded more thorough consideration by excluding the CBDRRC principle from the scope of the project.

B. The obligation to cooperate

To be effective, a State's efforts to protect the atmosphere must often be coordinated with those of other States. Consistently, DG 8 identifies the other key component of the law on the protection of the atmosphere: the obligation of States 'to cooperate, as appropriate, with each other and with relevant international organizations for the protection of the atmosphere from atmospheric pollution and atmospheric degradation.'[245] In support, the Commentary cites cases,[246] declarations[247] and treaties relating to particular aspects of the protection of the atmosphere[248] or other shared natural resources.[249]

This obligation was generally the object of a broad consensus among ILC Members, including those least enthusiastic about the project. Early on in the process, Sean Murphy suggested that the Special Rapporteur could highlight that 'States were cooperating in important ways to address issues relating to atmospheric degradation … and encourag[e] them to pursue such cooperation.'[250] Likewise, Ernest Petrič recognized that 'the obligation to cooperate was well established in international law de lege lata.'[251] States also supported the reference to this obligation, which Spain described as 'obvious.'[252] At the Sixth Committee of the UN General Assembly in its seventieth session, at least 20 States expressed support to the inclusion of the

[242] See 'DGs adopted on first reading' (n 2) Commentary on DG 5 [5], citing *Gabčíkovo-Nagymaros Project (Hungary v Slovakia) (Judgment)* [1997] ICJ Rep 7, 78 [140].
[243] 'DGs adopted on first reading' (n 2) DG 6.
[244] Ibid, Commentary on DG 6 [1].
[245] Ibid, DG 8(1).
[246] Ibid, Commentary on DG 8 [3], citing *Pulp Mills* (n 114) 49 [77].
[247] 'DGs adopted on first reading' (n 2) Commentary on DG 8 [4], citing *Stockholm Declaration* (n 182) and *Rio Declaration* (n 182).
[248] 'DGs adopted on first reading' (n 2) Commentary on DG 8 [4], citing *Vienna Convention for the Protection of the Ozone Layer* (n 193) and *UNFCCC* (4).
[249] 'DGs adopted on first reading' (n 2) Commentary on DG 8 [5], citing *Watercourses Convention* (n 35).
[250] ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 7 (Murphy).
[251] ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 11 (Petrič).
[252] GA Sixth Committee, *Summary Record of the 24th Meeting*, 69th session, UN Doc A/C.6/69/SR.24 (held 31 October 2014) [24] (Martín y Pérez de Nanclares, Spain). See also, eg, GA Sixth Committee, *Summary Record of the 17th Meeting*, 70th session, UN Doc A/C.6/70/SR.17 (held 2 November 2015) [47] (Pang, Singapore), [103] (Galea, Romania).

principle of cooperation in the DGs (although they had various views about its content),[253] while only one, the United States, opposed it.[254]

This relatively broad agreement could only be reached because the obligation was phrased in a vague and undemanding language. As noted in the Commentary, '"as appropriate" denotes a certain flexibility for States in carrying out the obligation to cooperate depending on the nature and subject matter required for cooperation.'[255] This lukewarm phrasing contrasts with the far more pressing language found in relevant authorities. The *UNFCCC*, for instance, calls for 'the widest possible cooperation by all countries and their participation in an effective and appropriate international response.'[256] A provision of *UNCLOS* on pollution from and through the atmosphere requires that States 'endeavour to establish global and regional rules, standards and recommended practices and procedures to prevent, reduce and control such pollution,' in particular by 'acting through competent international organizations or diplomatic conference.'[257] The *International Covenant on Economic, Social and Cultural Rights* calls for each State Party to cooperate 'to the maximum of its available resources' towards the full realization of the rights it recognizes.[258] Soft-law documents also highlighted the duty of States to cooperate in order to promote their common interests.[259] In light of these instruments, the language of DG 8 appears particularly undemanding. It certainly does not reflect the urgency of cooperation against climate change, which States have repeatedly emphasized.[260]

The second paragraph of DG 8 recommends more specifically that States cooperate in 'enhancing scientific knowledge' relating to the protection of the atmosphere, for instance through 'exchange of information and joint monitoring.'[261] This aspect of cooperation also finds strong support in relevant treaties[262] and State practice.[263] Yet, its characterization as a

[253] Finland, Singapore, Italy, Slovenia, Romania and Nicaragua (17th meeting); Israel, Micronesia, Japan, Iran, Sri Lanka, El Salvador, Sudan, Poland, South Africa, Vietnam and South Korea (18th meeting); Russia, Malaysia and Algeria (19th meeting). See generally ILC, *Topical summary of the discussion held in the Sixth Committee of the General Assembly during its Sixty-Eighth Session*, UN Doc A/CN.4/689 (28 January 2016) [12].

[254] GA Sixth Committee, *Summary Record of the 19th Meeting*, 70th session, UN Doc A/C.6/70/SR.19 (held 4 November 2015) [19].

[255] 'DGs adopted on first reading' (n 2) Commentary on DG 8 [2].

[256] *UNFCCC* (n 4) Preamble [7]. See also UNFCCC COP Decision 1/CP.1, *The Berlin Mandate*, UN Doc FCCC/CP/1995/7/Add.1 (6 June 1995, adopted 7 April 1995) 4, 5 [1(e)]; UNFCCC COP Decision 1/CP.17, *Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action*, UN Doc FCCC/CP/2011/9/Add.1 (15 March 2012, adopted 11 December 2011) 2, Preamble [2]; UNFCCC COP Decision 2/CP.18, *Advancing the Durban Platform*, UN Doc FCCC/CP/2012/8/Add.1 (28 February 2013, adopted 8 December 2012) 19, Preamble [3].

[257] *UNCLOS* (n 15) art 212(3).

[258] *ICESCR* (n 127) art 2(1).

[259] See, eg, *Declaration on Principles of International Law Friendly Relations and Co-Operation Among States in Accordance with the Charter of the United Nations*, GA Res 2625(XXV), UN Doc A/RES/2625(XXV) (adopted 24 October 1970).

[260] See, eg, UNFCCC COP Decision 1/CP.21, *Adoption of the Paris Agreement*, UN Doc FCCC/CP/2015/10/Add.1 (29 January 2016, adopted 12 December 2015) Preamble [7].

[261] 'DGs adopted on first reading' (n 2) DG 8(2).

[262] See, eg, references cited *infra* note 265.

[263] The Intergovernmental Panel on Climate Change (IPCC) is a prime example of international cooperation on enhancing and circulating knowledge about climate change.

mere recommendation ('should') is regressive:[264] every single relevant treaty provision mentioned in the Commentary frames cooperation in enhancing scientific knowledge as an obligation ('shall').[265] 'Should' provisions in this respect typically relate to support for capacity-building in the scientific sector,[266] not to efforts towards enhancing and sharing scientific knowledge.

Besides measures to enhance scientific knowledge, DG 8 gives no further indication as to the content of the obligation of States to cooperate. This is regrettable given the importance of the question at a time when some States are reluctant to participate in multilateral negotiations,[267] or, if they participate, are reluctant to commit to sufficient efforts.[268] During the second reading, the ILC should consider implications of the obligation of States to cooperate. In particular, a relevant area of inquiry would question the right of a State not to participate in, or to withdraw from, quasi-universal treaty regimes aimed at addressing major sources of atmospheric degradation. Although treaty participation is based on State's consent,[269] there is a strong argument that a State must not – or, at the very least, *should* not – free-ride on the efforts made by others to address a common concern.[270]

Likewise, the exclusion of the CBDRRC principle from the scope of the project should not prevent the ILC from discussing benchmarks which could help to assess a State's compliance with its obligation to cooperate. For instance, the obligation to negotiate in good faith and the concept of estoppel suggest that a State could be held to account once it has communicated to others what constitutes, in its view, its fair and realistic contribution to global efforts, even if that State was then to withdraw from relevant treaties.[271] Another potential touchstone is the concept of non-discrimination, which requires a State to give no less attention to environmental impacts taking place outside of its territory than to those taking place within its territory.[272]

---

[264] See ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 6 (Hassouna), 11 (Petrič).

[265] See 'DGs adopted on first reading' (n 2) Commentary on DG 8 [8]-[11], citing *Vienna Convention for the Protection of the Ozone Layer* (n 193) art 4(1); *UNFCCC* (n 4) art 4(1); *Watercourses Convention* (n 35) art 9; *Convention on Long-Range Transboundary Air Pollution* (n 139) arts 4, 7, 8. See also 'DGs adopted on first reading' (n 2) Commentary on DG 8 [12], citing the 'Draft articles on the law of the non-navigational uses of international watercourses and commentaries thereto' (n 239) art 8.

[266] See, eg, *Rio Declaration* (n 182) principle 9; *Paris Agreement* (n 4) art 11(1).

[267] The United States is the most obvious example. See *Communication by the United Nations to the UN Secretary General* (n 10).

[268] See, eg, *Emission Gap Report 2018* (n 7).

[269] Jutta Brunnée, 'Consent' in Wolfrum (n 83).

[270] See Evan J Criddle and Evan Fox-Decent, 'Mandatory Multilateralism' (2019) 113(2) *American Journal of International Law* 272; Eric A Posner & David Weisbach, *Climate Change Justice* (Princeton University Press, 2010) 178.

[271] See, eg, *Future Generations v Ministry of the Environment* (n 21); *Indigenous Environmental Network v US Department of State*, 647 F.Supp.3d 561 (D. Mont. 2018). See generally Mayer, 'Methodological Review' (n 19) section 4.1; Benoit Mayer, 'International Law Obligations Arising in relation to Nationally Determined Contributions' (2018) 7(2) *Transnational Environmental Law* 251, 265.

[272] See, eg, *Convention on Third Party Liability in the Field of Nuclear Energy*, opened for signature 29 July 1960, 1041 UNTS 358 (entered into force 1 April 1968) art 14; *Watercourses Convention* (n 35) art 32; OECD Council, *Recommendation on Principles Concerning Transfrontier Pollution*, C(74)224 (14 November 1974) Annex on 'Some Principles Concerning Transfrontier Pollution' [5]; *Convention on the Protection of the Environment*, opened for signature 19 February 1974, 1092 UNTS

Accordingly, a State's efforts to mitigate local air pollution, for instance, could provide an indication of the level of efforts that it could be expected to invest in preventing transboundary atmospheric pollution and global atmospheric degradation.

On the other hand, the ILC should better define the limits of the obligation to cooperate. The Commentary of DG 8 refers to the Preamble to the UNFCCC which 'reaffirm[s] the principle of sovereignty of States in international cooperation to address climate change.'[273] The most likely way to reconcile the obligation to cooperate with the principle of State sovereignty is based on the understanding that, while cooperation is indispensable in addressing transboundary or global environmental problems, it must be promoted in ways that do not unnecessarily restrict States' sovereignty, for instance in determining means of implementation.

C. The regulation of geoengineering

The ILC's project deals separately with 'activities aimed at intentional large-scale modification of the atmosphere,'[274] more commonly referred to as geoengineering activities.[275] These include activities of different natures, which raise distinct legal questions. At the more benign end of the spectrum, Negative Emissions Technologies ('NETs') seek to remove carbon dioxide from the atmosphere in order to mitigate climate change. NETs include afforestation as well as techniques to capture carbon dioxide and store it underground. At the other end of the spectrum lie far more dangerous techniques that seek to 'manage' the Earth's intake of solar radiation, for instance through the injection of particles in the stratosphere or by placing large shades in space, in order to limit global warming. Solar Radiation Management (SRM) could regulate the Earth's *average* temperature, but it would likely cause catastrophic global side-effects, for instance by upsetting regional and seasonal climate systems.[276]

DG 7 deals with these various activities in only one sentence, recommending that they 'should be conducted with prudence and caution, subject to any applicable rules of international law.'[277] The vague concept of 'prudence and caution' is borrowed from three Orders on Provisional Measures of the International Tribunal for the Law of the Sea,[278] each time in response to submissions based on a precautionary principle.[279] The application of this concept to

279 (entered into force 5 October 1976) art 3; 'Draft articles on Prevention of Transboundary Harm from Hazardous Activities' in *Report of the International Law Commission on the Work of its Fifty-Third Session,* UN Doc A/56/10 (2001) 144-170 [78]-[98], 148, art 15. See generally Alan Boyle, 'Human Right and the Environment: Where Next?' (2012) 23(3) *European Journal of International Law* 613, 635; Eyal Benvenisti, 'Sovereigns as Trustees of Humanity: On the Accountability of States to Foreign Stakeholders' (2013) 107(2) *American Journal of International Law* 295, 310; Mayer, 'Methodological Review' (n 19) section 4.3.

[273] 'DGs adopted on first reading' (n 2) Commentary on DG 8 [4], citing UNFCCC (n 4) Preamble [10].

[274] 'DGs adopted on first reading' (n 2) DG 7.

[275] See ibid, Commentary on DG 7 [2].

[276] See, eg, Naomi E Vaughan, 'A Review of Climate Geoengineering Proposals' (2011) 109(3-4) *Climatic Change* 745. See also 'DGs adopted on first reading' (n 2) Commentary on DG 7 [4].

[277] 'DGs adopted on first reading' (n 2) DG 7.

[278] See *Southern Bluefin Tuna (New Zealand v Japan; Australia v Japan)* (Order on Provisional Measures of 27 August 1999) [1999] ITLOS Rep 280, 296 [77]; *MOX Plant (Ireland v United Kingdom)* (Order on Provisional Measures of 3 December 2001) [2001] ITLOS Rep 95, 110 [84]; *Land Reclamation in and around the Straits of Johor (Malaysia v Singapore)*, (Order on Provisional Measures of 8 October 2003) [2003] ITLOS Rep 10, 26 [99].

[279] See *Southern Bluefin Tuna* (n 278) 286 [28]; *MOX Plant* (n 278) 108 [71]; *Land Reclamation in and around the Straits of Johor* (n 278) 23 [74].

international large-scale modification of the atmosphere appears to have been yet another an attempt of the Special Rapporteur to go around the terms of the Understanding, which exclude discussions of the 'precautionary principle.' If so, however, it is unclear why the DG recommend 'prudence and caution' only in relation to intentional large-scale modification of the atmosphere, rather than in relation to any activity that has the potential to impact the atmosphere.

Further analysis in the Commentary of DG 7 is hindered by the great diversity of the activities that it seeks to address. In particular, the Commentary suggests that these activities have 'a significant potential for preventing, diverting, moderating or ameliorating' the impacts of atmospheric degradation,[280] but there is no scientific consensus that SRM has such potential or that the potential of NETs is 'significant,' given land-use and freshwater constraints.[281] Likewise, the Commentary suggests that these techniques 'may have long-range and unexpected effects on existing climatic patterns that are not confined by national boundaries,'[282] which is far more likely concerning SRM than concerning afforestation. Putting all these activities in the same basket and suggesting that they require similar levels of 'prudence and caution' contributes to delegitimizing well-accepted efforts to promote afforestation[283] while also seemingly legitimizing more drastic activities.[284]

Beyond this evasive call for 'prudence and caution,' the ILC could conduct a more systematic analysis of the obligations of States applicable to such activities, including their obligation to protect the atmosphere and to cooperate for the protection of the atmosphere.[285] One hypothesis worth considering is that the unilateral implementation of SRM activities may be entirely prohibited under general international law, given the consequences it would inevitably have on other States. While the Commentary recognizes the existence of related 'activities that are prohibited by international law,'[286] it only mentions 'military activities' banned under the *Convention on the Prohibition of Military or any Hostile Use of Environmental Modification Techniques* and the First Additional Protocol to the Geneva Conventions of 1949.[287] It thus ignores a number of more recent developments which suggest a prohibition of certain activities aimed at intentional large-scale modification of the atmosphere. For instance, the Parties to the *CBD* decided to place a moratorium on 'climate-related geo-engineering activities … that may affect biodiversity … until there is an adequate scientific basis on which to justify such

[280] 'DGs adopted on first reading' (n 2) Commentary on DG 7 [7].
[281] See, eg, David P Keller, Ellias Y Feng and Andreas Oschlies, 'Potential Climate Engineering Effectiveness and Side Effects During a high Carbon Dioxide-Emission Scenario' (2014) 5 *Nature Communications* 3304:1-11.
[282] 'DGs adopted on first reading' (n 2) Commentary on DG 7 [7].
[283] See, eg, Kyoto Protocol (n 6); arts 2(1)(a)(ii), 3(3); Paris Agreement (n 4) art 5(2).
[284] ILC, *Provisional Summary Record of the 3315th Meeting*, 68th sess, 1st pt, UN Doc A/CN.4/SR.3315 (held 5 July 2016) 13 (Forteau).
[285] The Commentary only notes the applicability of the obligation to conduct an EIA. See 'DGs adopted on first reading' (n 2) Commentary on DG 7 [4]; Commentary on DG 4 [6].
[286] 'DGs adopted on first reading' (n 2) Commentary on DG 7 [5].
[287] Ibid, citing *Convention on the prohibition of military or any other hostile use of environmental modification techniques*, opened for signature 10 December 1976, 1108 UNTS 151 (entered into force 5 October 1978) art 1; *Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts*, opened for signature 8 June 1977, 1125 UNTS 3 (entered into force 7 December 1979) arts 35(3), 55.

activities.'[288] States have also endorsed the prohibition[289] of techniques aimed at 'fertilizing' the oceans in order to exploit their capacity to remove carbon dioxide from the atmosphere, or otherwise called for 'utmost caution,'[290] due to concerns for impacts of such techniques on the marine environment. On the other hand, the Commentary also ignores developments through which States have endorsed particular techniques, for instance the decision of the Parties to the Kyoto Protocol to recognize mitigation outcomes from carbon capture and storage projects.[291]

D. Consequences of non-compliance

The DGs discuss non-specific issues of implementation, compliance and dispute settlement, but ignore the unique questions that the protection of the atmosphere raise in relation to the law of State responsibility and, in particular, the right of a State to claim the performance of an obligation.

1. Non-specific observations on implementation, compliance and dispute settlement

Three DGs address questions of implementation,[292] compliance[293] and dispute settlement.[294] As these three themes are not specific to the protection of the environment, it is perhaps unsurprising that these DGs do little more than restating the obvious. Thus, DG 10 acknowledges that national implementation of international law obligations 'may take the form of legislative, administrative, judicial and other actions.'[295] Likewise, DG 11 notes that 'States are required to abide with their obligations … in good faith'[296] and recognizes that, '[t]o achieve compliance, facilitative and enforcement procedures may be used … in accordance with the relevant agreements.'[297] Lastly, DG 12 observes that disputes 'are to be settled by peaceful

[288] CBD COP Decision X/33, *Biodiversity and climate change*, UN Doc UNEP/CBD/COP/DEC/X/33 (29 October 2010, adopted 18-29 October 2010) [8(w)]. See generally Benoit Mayer, *The International Law on Climate Change* (Cambridge University Press, 2018) 155-159.
[289] Resolution LP.4(8) adopted by the Parties to the *London Protocol of 1996 to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter of 1972* regarding the adoption of an amendment to regulate the placement of matter for ocean fertilization and other marine geoengineering activities, UN Doc LC 35/15 (21 October 2013, adopted 18 October 2013) Annex 4, page 3.
[290] *The Future We Want*, GA Res 66/288, UN Doc A/RES/66/288 (11 September 2012, adopted 27 July 2012) [167].
[291] UNFCCC COP Decision 7/CMP.6, *Carbon dioxide capture and storage in geological formation as clean development mechanism project activities*, UN Doc FCCC/KP/CMP/2011/10/Add.2 (15 March 2012, adopted 9 December 2011) [1]; UNFCCC COP Decision 10/CMP.7, *Modalities and procedures for carbon dioxide capture and storage in geological formations as Clean Development Mechanism project activities*, UN Doc FCCC/KP/CMP/2011/10/Add.2 (15 March 2012, adopted 9 December 2011). See generally Meinhard Doelle and Emily Lukawesi, 'Carbon capture and storage in the CDM: Finding its place among climate mitigation options?' (2012) 3(1) C*limate Law* 49.
[292] 'DGs adopted on first reading' (n 2) DG 10.
[293] Ibid DG 11
[294] Ibid DG 12.
[295] Ibid DG 10(1).
[296] Ibid DG 11(1).
[297] Ibid DG 11(2). This DG suggest a dichotomy between 'facilitative procedures' and 'enforcement procedures,' but treaty practice is arguably more complex. See, eg, Alexander Zahar, 'A Bottom-Up Compliance Mechanism for the Paris Agreement' (2017) 1(1) *Chinese Journal of Environmental Law* 69.

means,'[298] highlighting the need to give 'due consideration … to the use of technical and scientific experts' when such disputes are 'fact-intensive and science-dependent.'[299]

It is unclear how the ILC could usefully contribute to the codification or the progressive development of international law regarding these three themes in a project on the protection of the atmosphere. Institutions and processes to promote compliance are treaty-specific: they do not constitute norms of general international law. On the other hand, the topic of the protection of the atmosphere does not seem to raise any clearly distinct legal issue related to implementation or dispute settlement.

2. Unique aspects of the law of State responsibility

By contrast, the DGs include no mention the responsibility of States for internationally wrongful acts. Unlike other omissions, this is not due to the Understanding,[300] but rather to priorities decided by the Special Rapporteur. In the syllabus of the topic, Murase had identified responsibility as 'critical' in the original syllabus of the topic[301] and some States had expressed interest in the question.[302] Yet, whereas Murase's Fifth Report devotes twelve paragraphs to compliance and 60 to dispute settlement, it only had three paragraphs on State responsibility.[303] This Report suggested that the priority should be 'to establish a cooperative framework for atmospheric protection, instead of seeking to mould "shame and blame" matrices under a regime of State responsibility in international law.'[304] A mention of State responsibility in a DG on implementation which Murase had introduced in his Fifth Report was removed during the deliberations of the ILC.[305]

Murase's Fifth Report notes that 'it is difficult, if not impossible, to identify, in the context of global atmospheric degradation, such as climate change, which States are responsible for the causes of the alleged damage.'[306] This remark does not apply to atmospheric pollution, where responsibility is more straightforward.[307] In relation to global environmental impacts, it would have been desirable for the ILC to take stock at least of those rules which it has identified in its prior work on State responsibility, in particular in relation to the plurality of responsible

[298] 'DGs adopted on first reading' (n 2) DG 12(1).
[299] Ibid DG 12(2).
[300] The Understanding excluded State liability and the CBDRRC principle, but not State responsibility. See *Report of the International Law Commission at its sixty-fifth session*, UN Doc A/68/10 (2013) 115 [168].
[301] See, by contrast, Murase, *Syllabus* (n 42) 322 [24].
[302] See, eg, GA Sixth Committee, *Summary Record of the 20th Meeting*, 69th session, UN Doc A/C.6/69/SR.20 (held 28 October 2014) [7] (Tupouniua, Tonga); GA Sixth Committee, *Summary Record of the 22th Meeting*, 69th session, UN Doc A/C.6/69/SR.22 (held 29 October 2014) [20] (Tichy, Austria).
[303] Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) 9-10 [16]-[18].
[304] Ibid 10 [18].
[305] See 'DGs adopted on first reading' (n 2) Commentary on DG 10 [7]. See Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) 16 [31] (proposed DG 10(2)), confusing issues of responsibility and questions of evidence.
[306] Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) 10 [1]7.
[307] See, by analogy, *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua) (Judgment on Compensation)* (International Court of Justice, General List No 150, 2 February 2018).

States,[308] the plurality of injured States,[309] and the invocation of responsibility by a State other than an injured State.[310] The ILC could further have discussed how the unique difficulties of implementing the law of State responsibility in relation to situations as complex as climate change could be approached.[311] This could have been an opportunity for the ILC to address inconsistencies in its treatment of the obligation to prevent environmental harm both as a primary obligation whose breach leads to an obligation to make reparation under the law of State responsibility, and as a question of liability for injurious consequences arising out of acts not prohibited by international law.[312]

Murase's Fifth Report further states that, in relation to a breach of the due diligence obligation of States to protect the atmosphere, '[t]he question of responsibility could not arise in the absence of proven damage or risk.'[313] The only authority cited in support of this proposition is a description of an argument submitted by France in the 1995 *Nuclear Tests* case.[314] This proposition finds no support under the law of State responsibility: the existence of an injury is not generally considered as a condition for a State's responsibility.[315] One could think that the occurrence of a 'harm' is essential to constitute the breach of the principle of prevention (sometimes referred to as the 'no-harm principle'), but this reasoning is inconsistent with the ILC's own characterisation of the obligation to protect the atmosphere as an obligation of conduct (due diligence obligation) rather than an obligation of result.[316] A State would breach its obligation of conduct by failing to take requisite action even if, by luck or due to intervening factors (*eg* voluntary action by non-State actors),[317] no harm unfolds. This analysis is supported

[308] *DARSIWA* (n 32) art 47.
[309] Ibid art 46.
[310] Ibid art 48.
[311] See, eg, Roda Verheyen, *Climate Change Damage and International Law: Prevention Duties and State Responsibility* (Martinus Nijhoff, 2005); Christina Voigt, 'State Responsibility for Climate Change Damages' (2008) 77(2) *Nordic Journal of International Law* 1; Benoit Mayer, 'State Responsibility and Climate Change Governance: A Light through the Storm' (2014) 13(3) *Chinese Journal of International Law* 539; Florentina Simlinger and Benoit Mayer, 'Legal Responses to Climate Change Induced Loss and Damage' in Reinhard Mechler et al (eds), *Loss and Damage from Climate Change: Concepts, Methods and Policy Options* (Springer, 2019) 179.
[312] For instance, the ILC has construed the case of *Trail Smelter* (n 114) as both a matter of State responsibility and State liability. See DARSIWA (n 32) Commentary on Art 14 [14], Commentary on Art 30 [13], Commentary on Art 31 [10] (fn 460), Commentary on Art 36 [15] (fn 539); 'Draft principles on the allocation of loss in the case of transboundary harm arising out of hazardous activities, with commentaries' (n 39) Commentary on Principle 2 [1], Commentary on Principle 3 [3], Commentary on Principle 4 [6]-[7].
[313] Murase, *Fifth Report on the Protection of the Atmosphere* (n 66) 9-10 [16].
[314] See ibid, fn 46, citing Phoebe Okowa, 'Responsibility for environmental damage' in Malgosia Fitzmaurice et al (eds), *Research Handbook on International Environmental Law* (Edward Elgar 2010), 303, 312, who describes France's argument without expressing support to it. See discussion in ILC, *Provisional Summary Record of the 3410th Meeting*, 70th sess, 1st pt, UN Doc A/CN.4/SR.3410 (held 23 May 2018) 6 (Aurescu).
[315] DARSIWA (n 32) art 1. By contrast, the existence of an injury is a condition for the obligation to make reparation under ibid. art 31.
[316] See above note 200 and accompanying text.
[317] The situation of the United States under the Trump administration with regard to the Paris Agreement may be a point in line. While the Federal government has rolled back all efforts to comply with its obligations under its NDC (even before its withdrawal from the treaty is effective), non-State actors and subnational authorities decided to make their best efforts to ensure compliance. As the voluntary contribution of non-State actors is extraneous to the State, it does not bring the State to compliance with its obligation of conduct. The contribution of State and local governments, which is not endorsed by

by the ICJ in *Certain Activities*, which found Costa Rica in breach of its obligation to conduct an EIA, presented as an element of its due diligence obligation, even though the project had not resulted in any significant transboundary environmental impact.[318] Thus, questions of responsibility could arise when a State fails to take appropriate measures to protect the atmosphere, even if this does not result in any significant impact.

3. The right of a State to claim the performance of an obligation

A related question is about the right of States to claim the performance of an obligation. Introducing the concept of 'common concern of humankind,' Murase's First Report noted that it would 'certainly lead to the creation of substantive legal obligations on the part of all States to protect the global atmosphere as enforceable *erga omnes*.'[319] Murase cited the 1970 judgment of the ICJ in *Barcelona Traction*, which distinguishes between 'the obligations of a State towards the international community as a whole' (*erga omnes*) and those obligations that a State incurs 'vis-à-vis another State.'[320] The ICJ observed that obligations *erga omnes* could relate for example to the prohibition of aggression and genocide and the protection of fundamental rights.[321] The consequence of this distinction is that, while only the State concerned by invoke the performance of an obligation owed to it, any State has an interest in the performance of an obligation *erga omnes*.[322] Consistently, the ILC recognized in its Draft Articles on State Responsibility that a State other than an injured State could invoke the responsibility of another State in relation to an *erga omnes* obligation.[323]

Against Murase's suggestion, several ILC Members contended that there was no legal basis for the recognition of an obligation *erga omnes* in relation to the protection of the atmosphere, highlighting the absence of any judicial precedent.[324] This suggested (once again) an extraordinarily conservative approach to the function of the ILC as simply recording rules that had been identified by international courts and tribunals.[325] Other ILC Members suggested that the protection of the atmosphere was not comparable to the cases in which obligations *erga*

---

the Federal government, should likewise be considered as extraneous or, in any case, unable to constitute a requisite level of effort.

[318] *Certain Activities* (n 209) 723 [162], 737 [217]. See also (relating to a different obligation of conduct) *Difference Relating to Immunity from Legal Process of a Special Rapporteur of the Commission on Human Rights (Advisory Opinion)* [1999] ICJ Rep 62, 86 [58]. See discussion in Mayer, 'Obligations of Conduct' (n 200) 137-138.

[319] Murase, *First Report on the Protection of the Atmosphere* (n 48) 57 [89]. Confusingly, the following sentence suggests that this may not create a legal interest of all states in the enforcement of the legal obligation, even though this is precisely the legal consequence of characterizing an obligation as '*erga omnes*.'

[320] Ibid (fn 198), citing *Barcelona Traction, Light and Power Company, Limited (Belgium v Spain)* (Second Phase) [1970] ICJ Rep 3, 32 [33] ('*Barcelona Traction*').

[321] Ibid [34].

[322] Ibid [33].

[323] *DARSIWA* (n 32) art 48(1)(b).

[324] See, eg, ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 7 (Kittichaisaree); ILC, *Provisional Summary Record of the 3213th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3213 (held 30 May 2014) 13 (Hernández); ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 10 (Hmoud); ILC, *Provisional Summary Record of the 3246th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3246 (held 6 May 2015) 5 (Murphy), 9 (Nolte).

[325] See above note 112 and accompanying text.

omnes had been identified,[326] but the distinction they hinted at is all but clear. As environmental harms hinder the enjoyment of fundamental rights (including the right to life), the international community interest in protecting the latter extends arguably to the prevention of the former. A 2005 resolution of the Institut de Droit International recognized 'a wide consensus … to the effect that … obligations relating to the environment of common spaces' as examples of obligations *erga omnes*.[327] Nevertheless, the ILC's Commentary reflected a lack of agreement among ILC members as to a characterization of States' obligations relating to the protection of the atmosphere as an obligation *erga omnes*.[328]

This aspect of the DGs fails to acknowledge the current state of international law. Since *Barcelona Traction*, the ICJ recognized as *erga omnes* the obligations contained in the Genocide Convention,[329] the obligation to respect right of peoples to self-determination[330] and international humanitarian law obligations,[331] while also recognizing obligations under the *Convention against Torture* as *erga omne partes* (owed to every Party to the treaty).[332] Overall, the 2011 Advisory Opinion of the Seabed Dispute Chamber of the International Tribunal for the Law of the Sea on *Activities in the Area* interpreted provisions of UNCLOS on the protection and preservation of the marine environment as entailing obligations *erga omnes*.[333] As such, when the ILC initiated its project on the protection of the atmosphere, no doubt should have remained about the existence of obligations *erga omnes* in relation to environmental protection. Unfortunately, this Advisory Opinion was not mentioned in the ILC's deliberations until Murase's Third Report, in 2015, after an Iranian representative had brought it to the Special Rapporteur's attention.[334] By that time, the concept of obligation *erga omnes* (and that of common concern of humankind) had already been excluded from the text of the DGs.[335]

Having recognized the existence of an obligation of States to prevent global environmental harm, the ILC failed to draw the obvious conclusion: this obligation is not incurred vis-à-vis another State (the avoidance of global environmental harm does not benefit to any individual State in particular), but inevitably towards the international community as a whole.[336] Prevention of global environmental harm is certainly, as the ICJ in *Barcelona Traction* put it, 'the concern of all States.'[337] Likewise, prevention of atmospheric pollution affecting areas

---

[326] See ILC, *Provisional Summary Record of the 3211th Meeting*, 66th sess, 1st pt, UN Doc A/CN.4/SR.3211 (held 27 May 2014) 4 (Murphy), 10 (Forteau).
[327] Institut de Droit International, Resolution, *Obligations* Erga Omnes *in International Law* (27 August 2005) Preamble [3].
[328] 'DGs adopted on first reading' (n 2) Commentary on DG 3 [4].
[329] See *Application of the Convention on the Prevention and Punishment of the Crime of Genocide* (Bosnia and Herzegovina v Yugoslavia) (Preliminary Objections) [1996] ICJ Rep 595, 615 [31].
[330] See *East Timor (Portugal v Australia)* (Judgment) [1995] ICJ Rep 90, 102 [29]; *Legal Consequences of the Construction of a Wall in the Occupied Palestinian Territory (Advisory Opinion)* [2004] ICJ Rep 136, 199 [156] ('*Construction of a Wall*'); *Legal Consequences of the Separation of the Chagos Archipelago from Mauritius in 1965 (Advisory Opinion)* (International Court of Justice, General List No 169, 25 February 2019) [180].
[331] See *Construction of a Wall* (n 331) 199 [157].
[332] *Questions relating to the Obligation to Prosecute or Extradite (Belgium v Senegal) (Judgment)* [2012] ICJ Rep 422, 449-450 [68]-[59].
[333] *Activities in the Area* (n 209) [180].
[334] Murase, *Third Report on the Protection of the Atmosphere* (n 57) 6 [12] (fn 36).
[335] See above note 55 and accompanying text.
[336] See Duvic-Paoli (n 17) 321-323.
[337] *Barcelona Traction* (n 330) 32 [33]. See also ILC, *Provisional Summary Record of the 3247th Meeting*, 67th sess, 1st pt, UN Doc A/CN.4/SR.3247 (held 7 May 2015) 13 (Peter)

beyond national jurisdiction is an obligation *erga omnes*.[338] By contrast, the obligation of a State to prevent atmospheric pollution that would be confined to the territory of another State could be interpreted as an obligation incurred vis-à-vis the State affected, unless the environmental harm in question is such as to, for instance, significantly affect the fundamental rights of the population or the right of the State affected to self-determination, whose protection is arguably an obligation *erga omnes*.

V. Conclusion

The topic of the protection of the atmosphere present important challenges for the ILC. Inasmuch as it concerns global environmental harm, it is a complex topic, largely unexplored in judicial decisions and academic research. To conduct an authoritative analysis of this topic, the ILC should seek to interpret the law as a consistent normative system, independently from any political debates and blind to any national interests. Thorough research and careful analysis are needed.

The outcomes of the project so far have been rather disappointing. The DGs adopted on first reading are at time an evasive summary of the law, for instance regarding the obligation of States 'to cooperate, as appropriate,'[339] and to exercise 'prudence and caution' with regard to geoengineering.[340] At other times, ILC Members displayed an extraordinary reluctance to recognize what States and courts had largely agreed upon, such as the description of atmospheric degradation as a common concern of humankind and the characterisation of the obligation to protect areas beyond national jurisdiction from environmental harm as an obligation *erga omnes*. At yet other times, the ILC threaded into the political arena by deciding to turn a blind eye to legal arguments on the ground of their expected political consequences.[341] All in all, the DGs unfortunately do not, at the moment, contribute to the 'progressive development of international law.'[342]

The topic remains nevertheless more relevant than ever. As climate cases are filed throughout the world, guidance is urgently needed as to the applicable rules of general international law. The ILC has a contribution to make, based on its expertise and its independence, in developing a rigorous and authoritative interpretation of the obligations of States under general international law in relation, in particular, to the major civilizational crisis that climate change represents. The project's second reading should be an opportunity for technical deliberations, conducted without consideration of political interests, whose focus would not be on compliance with a restrictive 'Understanding' about the scope of the project, but solely on the rigour of the analysis of the topic.

[338] *Activities in the Area* (n 209) [180].
[339] 'DGs adopted on first reading' (n 2) DG 8(1).
[340] Ibid DG 7.
[341] See in particular above notes 171, 172, 187 and accompanying text.
[342] *Statute of the ILC*, art 1(1).