

Interpreting the Paris Agreement in its Normative Environment

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Abstract International and regional courts are increasingly being asked to determine the rights and responsibilities of states in relation to climate harm. The context for such requests is that the 2015 Paris Agreement, comprising primarily procedural obligations and obligations of conduct, and premised on national determination, appears by itself radically insufficient to resolve the existential climate crisis the planet is facing. This article explores if this is indeed the case and argues that the 2015 Paris Agreement must be interpreted in its 'normative environment'. The 'normative environment' includes the customary international law principle of harm prevention, other treaties, including human rights ones, and a set of principles of varying legal status but considerable operational relevance and guidance. This article examines specific obligations from the 2015 Paris Agreement and seeks to concretize and strengthen them based on this interpretative approach. While such strengthened obligations might yet be insufficient to decisively resolve the climate crisis, these nevertheless reflect a richer account of international legal resolve relating to climate change—one that is premised on an understanding of international law as a seamless web of inter-locking obligations rather than of treaties functioning as atomistic reflections of state consent in that area.

Key words: Paris Agreement; normative environment; best available science; due diligence; interpretation; national determination

1. Introduction

There are currently two Advisory Opinions on climate change pending in an international and a regional court—the International Court of Justice (ICJ)¹ and the Inter-American Court of Human Rights

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¹ UNGA Res 77/276 (29 March 2023) UN Doc A/RES/77/276; *Obligations of States in Respect of Climate Change* (Request for Advisory Opinion transmitted to the Court pursuant to General Assembly resolution 77/276 of 29 March 2023) <<https://www.icj-cij.org/sites/default/files/case-related/187/187-20230412-app-01-00-en.pdf>> accessed 1 August 2024.

(IACtHR).² A third Advisory Opinion on climate change, from the International Tribunal for the Law of the Sea (ITLOS),³ was delivered earlier this year.⁴ At issue, broadly, although not exclusively, in all three Opinions is the nature and extent of legal obligations that States have in relation to climate harms. The sub-text and context to these requests for Advisory Opinions is that the 2015 Paris Agreement,⁵ comprising primarily procedural obligations and obligations of conduct, and premised on national determination, is radically insufficient to resolve the existential climate crisis the planet is facing. This article explores if this is indeed the case and argues for a strengthened 2015 Paris Agreement based on an interpretation of the Paris Agreement anchored in its normative environment.

Section 2 of this article outlines core greenhouse gases (GHG) mitigation obligations in the Paris Agreement, explores the logic that the Paris Agreement is premised on, and finds that while there are some signs that this logic is beginning to work, it is doing so falteringly and not at pace to seize the narrow window of opportunity left to deliver a stable climate. Section 3 attributes this drag to atomistic interpretations of the Paris Agreement's core GHG mitigation obligations, which are primarily procedural and conduct-based, and privilege national

² *Request for an Advisory Opinion on the Climate Emergency and Human Rights submitted to the Inter-American Court of Human Rights by the Republic of Colombia and the Republic of Chile* (9 January 2023) <https://www.corteidh.or.cr/docs/opiniones/soc_1_2023_en.pdf> accessed 1 August 2024.

³ *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion submitted to the Tribunal)* (Advisory Opinion of 21 May 2024 in Case No. 31) <https://www.itlos.org/fileadmin/itlos/documents/cases/31/Advisory_Opinion/C31_Adv_Op_21.05.2024_orig.pdf> accessed 1 August 2024. See also *Request for an Advisory Opinion submitted by the Commission of Small Island States on Climate Change and International Law (Request for Advisory Opinion submitted to the Tribunal)* (Order of 16 December 2022 in Case No. 31) ITLOS Order 2022/4 <https://www.itlos.org/fileadmin/itlos/documents/cases/31/C31_Order_2022-4_16.12.2022_01.pdf> accessed 1 August 2024.

⁴ In February 2024 when this lecture was presented, the ITLOS Advisory Opinion had not yet been delivered. As this article is intended to be a transcript of the lecture, it does not engage in an in-depth analysis of the Advisory Opinion issued by ITLOS on 21 May 2024. However, it is worth noting that the ITLOS in this Advisory Opinion implicitly endorses the interpretative approach advanced in this article, by interpreting obligations under the 1982 United Nations Convention on the Law of the Sea by reference, *inter alia*, to relevant 'external rules', in particular the Paris Agreement's temperature goal and timeline for emissions pathways. ITLOS Advisory Opinion (n 3) paras 142 and 222. It also drew on 'best available science' to set a 'stringent' standard for due diligence from states in relation to marine pollution from anthropogenic GHGs. *Ibid* (n 3) paras 241 and 243.

⁵ Paris Agreement (adopted 12 December 2015, entered into force 4 November 2016) 3156 UNTS 79.

determination. Section 4 explores the normative environment that the Paris Agreement is set in, by presenting, illustratively, salient features of the normative environment, and argues that the Paris Agreement needs to be interpreted in this normative environment. This section sketches aspects of the normative environment including treaties, such as human rights treaties, the customary principle of harm prevention, a set of principles of varying legal status but considerable operational relevance and guidance, and the salience of ‘best available science’. This section then pulls together an ‘interpretative approach’ that is anchored in this normative environment. Section 5 proceeds to apply this interpretative approach in constructing a ‘standard of due diligence’ that attaches to the obligations of conduct in the core GHG mitigation provision in the Paris Agreement. Section 6 concludes by arguing for such strengthened obligations anchored in the normative environment. It acknowledges that there are limits to such an interpretation, and that these strengthened obligations might yet be insufficient to decisively resolve the climate crisis. However, such an interpretation reflects a richer account of international legal resolve relating to climate change—one that is premised on an understanding of international law as a seamless web of inter-locking norms rather than of particular treaties functioning as atomistic reflections of state consent in that area. This article focuses on core GHG mitigation obligations, but the interpretative approach advanced, could be applied to other areas of climate regulation as well.

2. *The 2015 Paris Agreement: Provisions, Premise, Promise, Performance, and Pace*

The sub-text and context to the three requests for Advisory Opinions from the ICJ, ITLOS, and IACtHR, and indeed the majority of the 2500 odd climate cases that have been filed in courts around the world,⁶ is that the 2015 Paris Agreement is insufficient, by itself, to resolve the existential climate crisis the planet is facing. This bears examination. This section outlines the provisions of the Paris Agreement and explores their underlying premise and beguiling promise. It looks at multiple data

⁶ Joana Setzer and Catherine Higham, ‘Global Trends in Climate Change Litigation: 2023 Snapshot’ (Grantham Research Institute on Climate Change and Centre for Climate Change Economics and Policy) <https://www.lse.ac.uk/granthaminstitute/wp-content/uploads/2023/06/Global_trends_in_climate_change_litigation_2023_snapshot.pdf> accessed 1 August 2024.

sources to determine the extent to which the Paris Agreement has bent the curve of GHG emissions growth, and whether the pace at which it is doing so is sufficient to meet the Agreement's temperature goal.

A. Provisions

Article 2.1 of the Paris Agreement identifies the purpose of the Agreement as '[h]olding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels...'. In order to achieve the long-term temperature goal, Article 4.1 requires Parties to 'aim' to reach global peaking of GHG emissions as soon as possible, and to undertake 'rapid reductions' thereafter so as to achieve a balance between GHG emissions by sources and removals by sinks—popularly characterized as 'net zero'—in the second half of this century.

Towards this end, the Paris Agreement requires Parties to communicate a 'nationally determined contribution' ('NDC')⁷ every five years,⁸ accompanied by information that enhances its clarity, transparency, and understanding,⁹ and to account for it.¹⁰ Parties' contributions are 'nationally determined' rather than internationally negotiated, and not subject to obligations of result. Parties are obliged to *submit* NDCs but not to *achieve* their targets or objectives.¹¹ Parties are obliged, however, to participate in what has come to be characterized as an 'ambition cycle'. The ambition cycle comprises several elements. Parties are obliged to provide information to track progress in implementing and achieving their NDCs, as part of an enhanced transparency framework.¹² Such information flows into a 'global stocktake' scheduled every five years,¹³

⁷ Art 4.2.

⁸ Art 4.9.

⁹ Art 4.8.

¹⁰ Art 4.13.

¹¹ See further for a discussion of the legal character of the provisions in the Paris Agreement, Lavanya Rajamani, 'Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics' (2016) 65(2) ICLQ 493; Daniel Bodansky, 'The Legal Character of the Paris Agreement' (2016) 25(2) Review of European, Comparative and International Environmental Law 142; Ralph Bodle and Sebastian Oberthür, 'Legal Form of the Paris Agreement and Nature of its Obligations' in Daniel Klein and others (eds), *The Paris Agreement on Climate Change: Analysis and Commentary* (OUP 2017) 91.

¹² Art 13.7(b); Decision 18/CMA.1, 'Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement' (19 March 2019) UN Doc FCCC/PA/CMA/2018/3/Add.2, 18.

¹³ Art 14; Decision 19/CMA.1, 'Matters relating to Article 14 of the Paris Agreement and paragraphs 99–101 of decision 1/CP.21' (19 March 2019) UN Doc FCCC/PA/CMA/2018/3/Add.2, 53.

and also into a facilitative implementation and compliance mechanism.¹⁴ Although Parties' contributions are nationally determined, there are normative expectations attached to these NDCs. Parties are expected to ensure that every successive NDC represents a 'progression' on its last, its 'highest possible ambition' and its 'common but differentiated responsibilities and respective capabilities', 'in light of different national circumstances'.¹⁵ Developed countries are also expected to put forward NDCs that reflect their leadership role in the climate regime.¹⁶

B. *Premise*

This regulatory approach is premised on the logic that although the core contributions from states are 'nationally determined', the Paris Agreement's 'ambition cycle' will inspire and encourage actions aligned with its goals. As Parties implement their NDCs, the logic goes, opportunities to enhance ambition will emerge, trigger collaboration, inspire a virtuous cycle to the top, and deliver a stable climate. Nearly a decade out from the adoption of the Paris Agreement, and with one full cycle completed, is such an upward spiral of ambition in evidence? Is the logic of the Paris Agreement working?

C. *Promise*

At first glance, the answer would appear to be, yes. This is a position that countries like the USA take. And, in some respects, it would indeed appear that the Paris Agreement is working. Since the adoption of the Paris Agreement in 2015, Parties have strengthened the global temperature goal, submitted more ambitious and better quality NDCs, and taken on net zero targets.

First, in response to the 2018 Special Report on 1.5°C of the Intergovernmental Panel on Climate Change ('IPCC') that found discernible differences in impacts between 1.5°C and 2°C,¹⁷ Parties

¹⁴ Art 15; Decision 20/CMA.1, 'Modalities and procedures for the effective operation of the committee to facilitate implementation and promote compliance referred to in Article 15, paragraph 2, of the Paris Agreement' (19 March 2019) UN Doc FCCC/PA/CMA/2018/3/Add.2, 59.

¹⁵ Art 4.3.

¹⁶ Art 4.4.

¹⁷ Valérie Masson-Delmotte and others (eds), *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways* (CUP 2018) Summary for Policy Makers ('IPCC, *Global Warming of 1.5°C*').

strengthened the global temperature goal in 2021. The 2021 Glasgow Climate Pact, a decision of the Parties under the Paris Agreement, shifted the emphasis in the 2015 Paris Agreement's temperature goal—from 'well below 2°C' to 1.5°C.¹⁸ This shift in emphasis was confirmed in the 2022 Sharm el-Sheikh Implementation Plan,¹⁹ and the 2023 UAE Consensus.²⁰ The 2021 Glasgow Climate Pact also created additional processes and mid-cycle check-in points for enhancing NDCs.²¹ These decisions, arrived at through consensus, represent the subsequent agreement of the Parties in relation to the interpretation of the Convention.²²

Second, 195 Parties have NDCs in place, with 180 Parties having submitted new or updated NDCs.²³ 94 per cent of these Parties have 'quantified mitigation targets, expressed as clear numerical target', and 80 per cent have 'economy-wide targets', with an increasing number of Parties having moved to absolute emission reduction targets in their new or updated NDC.²⁴ The vast majority of Parties have moved to clearer, more defined, and higher quality NDCs over time reflecting the gradual maturing of domestic processes, experience, and knowledge of GHG mitigation action.

Third, 145 States, covering nearly 90 per cent of global GHG emissions, have announced net zero targets.²⁵ This includes China, the EU, India, and the USA that together account for over 50 per cent of global GHG emissions.²⁶ The 2015 Paris Agreement neither refers explicitly to 'net zero'²⁷ nor requires Parties to submit net zero targets.²⁸

¹⁸ Decision 1/CMA.3, 'Glasgow Climate Pact' (8 March 2022) UN Doc FCCC/PA/CMA/2021/10/Add.1, 2, paras 21 and 22. Paragraph 21 of the Glasgow Climate Pact states that the Conference of Parties: 'Recognizes that the impacts of climate change will be much lower at the temperature increase of 1.5 °C compared with 2 °C and resolves to pursue efforts to limit the temperature increase to 1.5 °C'.

¹⁹ Decision 1/CMA.4, 'Sharm el-Sheikh Implementation Plan' (17 March 2023) UN Doc FCCC/PA/CMA/2022/10/Add.1, 2, paras 8, 15, 23.

²⁰ Decision 1/CMA.5, 'Outcome of the first global stocktake' (15 March 2024) UN Doc FCCC/PA/CMA/2023/16/Add.1, 2 ("UAE Consensus").

²¹ Glasgow Climate Pact (n 18) para 29.

²² Vienna Convention on the Law of Treaties (adopted 23 May 1969, entered into force 27 January 1980) 1155 UNTS 331 (VCLT) art 31.3(a).

²³ FCCC, 'Nationally determined contributions under the Paris Agreement—Synthesis report by the Secretariat' (14 November 2023) UN Doc FCCC/PA/CMA/2023/12, para 1 ("2023 FCCC NDCs Synthesis Report").

²⁴ *Ibid* para 4.

²⁵ Climate Action Tracker, 'CAT net zero target evaluations' <<https://climateaction-tracker.org/global/cat-net-zero-target-evaluations/>> accessed 1 August 2024.

²⁶ *Ibid*.

²⁷ It refers instead to reaching a balance between GHG emissions by sources and removals by sinks by the second half of the century, art 4.1.

²⁸ Art 4.19.

The Glasgow Climate Pact, however, in response to the IPCC's 1.5°C Report,²⁹ recognizes that limiting global warming to 1.5°C requires 'reducing global carbon to net zero around mid-century',³⁰ and urges Parties to submit 'long-term low greenhouse gas emission development strategies towards just transitions to net zero emissions by or around mid-century...'.³¹ Of the 75 Parties that submitted long-term low-emission development strategies, representing 76 per cent of global emissions, 60 per cent of them expressed their long-term mitigation ambition in terms of either net zero GHG or CO₂ emissions.³² The proliferation of mid-century net zero targets, as well as their increasing integration into the Paris Agreement processes, demonstrates that the Paris Agreement is advancing longer-term thinking, and catalysing catalyzing both further concreteness, and transparency in relation to national mitigation strategies.

The International Energy Agency estimates that if the net zero pledges are implemented in 'full', temperature rise can be limited to 1.7°C by 2100.³³ And, the UNFCCC noted that without the Paris Agreement temperature would have risen to around 3.7°C–4.8°C.³⁴ It would appear, therefore, that the Paris Agreement is working. In less than a decade since its adoption, the Paris Agreement has catalysed pledges that have bent estimates of temperature rise downwards by about 3.1°C–2°C.

D. Performance

Yet, even as announced climate pledges become more ambitious and estimates more reassuring, emissions continue to rise, the world continues to warm, and impacts continue to pound vulnerable nations. The

²⁹ IPCC, *Global Warming of 1.5°C* (n 17) statement C.1.

³⁰ Glasgow Climate Pact (n 18) para 22.

³¹ *Ibid* para 32.

³² FCCC, 'Long-term low-emission development strategies—Synthesis report by the Secretariat' (14 November 2023) UN Doc FCCC/PA/CMA/2023/10, para 10.

³³ International Energy Agency (IEA), 'World Energy Outlook, 2022: Key findings' <<https://www.iea.org/reports/world-energy-outlook-2022/key-findings>> accessed 1 August 2024; IEA, 'Credible Pathways to 1.5°C: Four pillars for action in the 2020s' <<https://iea.blob.core.windows.net/assets/ea6587a0-ca87-4a85-8385-6fa668447f02/Crediblepathwaysto1.5C-Fourpillarsforactioninthe2020s.pdf>> accessed 1 August 2024.

³⁴ FCCC, 'Technical dialogue of the first global stocktake—Synthesis report by the co-facilitators on the technical dialogue' (8 September 2023) UN Doc FCCC/SB/2023/9, 13, para 77 ("2023 FCCC Synthesis Report of the Technical Dialogue of the First Global Stocktake").

IPCC's 2022 Mitigation Report, found that '[t]otal net anthropogenic GHG emissions have continued to rise during the period 2010–19, as have cumulative net CO₂ emissions since 1850. Average annual GHG emissions during 2010–19 were higher than in any previous decade.'³⁵ In keeping with this assessment, the 2023 UNFCCC Synthesis Report of the Technical Dialogue of the First Global Stock Take, identified a significant gap in ambition, emissions, and implementation, and noted that: '[g]lobal emissions to date are not in line with modelled global mitigation pathways consistent with the global temperature goal of the Paris Agreement nor are they aligned with longer-term emission reduction goals.'³⁶ The 2023 UNFCCC NDCs Synthesis Report estimates that 'full implementation' of all latest NDCs will lead to a 5.3 per cent emission reduction below 2019 levels by 2030, while implementation of only the unconditional elements will lead to 1.4 per cent *higher* emissions in 2030 than in 2019.³⁷ This is far from what the IPCC has concluded is necessary to limit warming to 1.5°C with no or limited overshoot: GHG emissions reductions of 43 per cent below 2019 levels by 2030.³⁸ Making such deep GHG reductions, the IPCC found, would require 'rapid and far-reaching transitions in energy, land, urban and infrastructure (including transport and buildings), and industrial systems'. These systems transitions 'are unprecedented in terms of scale' and 'imply deep emissions reductions in all sectors'.³⁹ Such systems transitions are not yet in evidence.⁴⁰

The NDCs Synthesis Report estimates, based on an assessment of prevailing policies, that the peak temperature in the twenty-first century is in the range of 2.1°C–2.8°C.⁴¹ At this level of temperature rise, there will be 'serious, pervasive, and irreversible' changes, crossing many natural tipping points. And, the impacts even at the current 1.1°C

³⁵ Priyadarshi Shukla and others (eds), *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) Summary for Policymakers, statement B.1 ('IPCC, 2022: *Mitigation of Climate Change*').

³⁶ 2023 FCCC Synthesis Report of the Technical Dialogue of the First Global Stock Take (n 34) 13, para 80.

³⁷ 2023 FCCC NDCs Synthesis Report (n 23) 5, para 11.

³⁸ 2023 FCCC NDCs Synthesis Report (n 23) 5–6, para 12. See also IPCC, 2022: *Mitigation of Climate Change* (n 35) statement C.1.1.

³⁹ IPCC, *Global Warming of 1.5°C* (n 17) statement C.2.

⁴⁰ See IPCC, 2022: *Mitigation of Climate Change* (n 35); 2023 FCCC NDCs Synthesis Report (n 23) among others. The 2023 FCCC Synthesis Report of the Technical Dialogue of the First Global Stock Take (n 34) 15, Key Finding 4, confirms this view.

⁴¹ 2023 FCCC NDCs Synthesis Report (n 23) 29–30, para 151. The IEA projects that prevailing policies place us on a trajectory to a 2.4°C–2.5°C temperature rise by the end of the century. IEA, 'World Energy Outlook 2022' (n 33).

temperature rise⁴² are severe. In 2021, the IPCC's Sixth Assessment Report noted that: '[i]t is unequivocal that human influence has warmed the atmosphere, ocean and land. Widespread and rapid changes in the atmosphere, ocean, cryosphere and biosphere have occurred'.⁴³ 'Each of the last four decades has been successively warmer than any decade that preceded it since 1850'.⁴⁴ There is evidence to suggest that the surface temperature is warming faster than ever before, and faster than the IPCC predicted. Year on year, warming records are being broken. The Copernicus Climate Change Service of the European Union found that 2023 was the hottest year on record, with every day within that year exceeding 1°C above the 1850–1900 pre-industrial level.⁴⁵ Such warming has already 'caused widespread adverse impacts and related losses and damages to nature and people, beyond natural climate variability... The rise in weather and climate extremes has led to some irreversible impacts as natural and human systems are pushed beyond their ability to adapt'.⁴⁶

E. Pace

Arguably, the logic of the regime is beginning to work—estimates of temperature rise are falling—but faltering, and not at pace to reliably secure a climate-safe future in the narrow window of opportunity left to do so. There is a significant temporal dimension to the climate challenge. The IPCC's 2021 Report concluded that: 'Global warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in CO₂ and other greenhouse gas emissions occur in the coming decades.'⁴⁷ The scientific consensus suggests that if global warming

⁴² Hoesung Lee and others (eds), *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II, and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (IPCC 2023), Summary for Policymakers, statement A.1 ("IPCC, 2023: Synthesis Report").

⁴³ Valérie Masson-Delmotte and others (eds), *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2021), Summary for Policymakers, statement A.1 ("IPCC, 2021: Physical Science Basis").

⁴⁴ Ibid statement A.1.2.

⁴⁵ 'Copernicus: 2023 is the hottest year on record, with global temperatures close to the 1.5 °C limit' (9 January 2024) <<https://climate.copernicus.eu/copernicus-2023-hottest-year-record>> accessed 1 August 2024.

⁴⁶ Hans-O. Pörtner and others (eds), *Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (CUP 2022) Summary for Policymakers, statement B.1 ("IPCC, 2022: Impacts, Adaptation and Vulnerability").

⁴⁷ IPCC, 2021: *Physical Science Basis* (n 43) statement B.1.

exceeds 1.5°C, even temporarily, the risks are amplified manifold,⁴⁸ and for every additional increment of global warming during this overshoot period, the risk of severe impacts increases making it increasingly challenging to return to lower levels of warming.⁴⁹ The scientific consensus suggests that ‘the lower the emissions in 2030, the lower the challenge in limiting global warming to 1.5°C after 2030 with no or limited overshoot’.⁵⁰ It is imperative, therefore, that action be taken urgently, and in this critical decade up to 2030. But such urgency and ambition is not reflected in prevailing policies, even if it is in conditional pledges and heavily qualified decisions. Arguably, this drag in the implementation of the Paris Agreement, and mismatch between the collective temperature goal, stated ambition, and real-world action, is due to the primacy of ‘national determination’ in the Paris Agreement.

3. *Primacy of National Determination*

‘National determination’ is a central, cross-cutting, and closely guarded⁵¹ aspect of the Paris Agreement. National determination, and the discretion and autonomy that flows from it, is explicitly and implicitly privileged in the core GHG mitigation provisions of the Paris Agreement, as well as in the Rules operationalizing these provisions.

A. *National Determination in the Core GHG Mitigation Provisions*

The central obligation relating to GHG mitigation in the Paris Agreement, contained in Article 4.2, is a procedural obligation applicable to each

⁴⁸ IPCC, 2022: *Impacts, Adaptation and Vulnerability* (n 46) statement B.6 found that ‘If global warming transiently exceeds 1.5°C in the coming decades or later (overshoot), then many human and natural systems will face additional severe risks, compared to remaining below 1.5°C’. The IPCC also noted that there would be ‘irreversible impacts on certain ecosystems with low resilience such as polar, mountain, and coastal ecosystems, impacted by ice-sheet, glacier melt, or by accelerating and higher committed sea level rise’. Ibid statement B.6.1.

⁴⁹ Ibid statement B.6.2.

⁵⁰ ‘The challenges from delayed actions to reduce greenhouse gas emissions include the risk of cost escalation, lock-in in carbon-emitting infrastructure, stranded assets, and reduced flexibility in future response options in the medium to long term’. IPCC, *Global Warming of 1.5°C* (n 17) statement D.1.3.

⁵¹ That ‘national determination’ is closely guarded by major emitting states is evident in the written statements that the US and China, among other major emitting states, have submitted to the ICJ in the context of the Advisory Opinion on Climate Change.

Party to ‘prepare, communicate and maintain’ successive ‘nationally determined contributions’ (NDCs) that it intends to achieve. In addition to the explicit privileging of ‘national determination’ in the title, the term ‘contributions’ also signals a voluntary offering, as one would at a potluck dinner party, rather than a commitment. Further, Parties are allowed seemingly unlimited discretion to determine the content of their NDCs. There are no prescribed ‘features’ that NDCs need to conform to, either in the 2015 Paris Agreement or in the 2018 Paris Rulebook, an issue that was considered but rejected in the negotiations for the Paris Agreement and the Rulebook. As a result, NDCs take many different forms and reflect a wide range of features.⁵² Targets include economy-wide absolute emission reduction targets, strategies, policies, plans, and actions for low-emission development.⁵³ There is no restriction on adding qualifications and caveats to NDCs, another issue that was considered but rejected in the negotiations for the Paris Agreement. As a result, many NDCs have conditional components, conditional, *inter alia*, on access to support, and availability of market-based mechanisms.⁵⁴ And, estimates of temperature rise vary depending on whether conditional elements are assumed to be fulfilled or not.

The procedural obligation in Article 4.2 is complemented by Article 4.3 which contains the normative expectation that Parties’ successive NDC ‘will represent a progression beyond the Party’s then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances’. These terms—‘progression’, ‘highest possible ambition’, and ‘common but differentiated responsibilities and respective capabilities’—are neither defined nor explained in the Paris Agreement or the 2018 Paris Rulebook, and thus lend themselves to a range of possible interpretations. The Paris Rulebook requires Parties to provide information when submitting their NDCs on how they have addressed the normative expectations of progression, highest possible ambition, common but differentiated responsibilities, and leadership from developed countries.⁵⁵ In the process of negotiating the rules to operationalize the Paris Agreement, a direct trade-off surfaced between the level of detail in the

⁵² 2023 FCCC NDCs Synthesis Report (n 23) 4, para 4.

⁵³ *Ibid.*

⁵⁴ 2023 FCCC NDCs Synthesis Report (n 23) 14, para 66.

⁵⁵ Decision 4/CMA.1, ‘Further guidance in relation to the mitigation section of decision 1/CP.21’ (19 March 2019) UN Doc FCCC/PA/CMA/2018/3/Add.1, 11, Annex I, para 6 (“Paris Rulebook Mitigation Decision”).

rules, and the autonomy that states enjoy. The more detailed the rules the less discretion states have, and vice versa. For instance, to the extent that Parties can elaborate a benchmark against which ‘progression’ or ‘highest possible ambition’ can be measured, states have less autonomy to define these for themselves. Many Parties therefore resisted detailed prescriptive rules to operationalize the Paris Agreement, preferring instead to leave the constructive ambiguity in the Paris Agreement’s terms untouched, or to use discretionary language, in effect leaving operational choices and details to states. As a result, the Rules privilege nationally determined benchmarks for ‘progression’, ‘highest possible ambition’, and ‘leadership’, and self-justified (and self-serving⁵⁶) narratives around the extent to which Parties have complied with these.

In communicating their NDCs, Article 4.8 requires all Parties to provide ‘the information necessary for clarity, transparency, and understanding in accordance with decision 1/CP.21 and any relevant decisions of the Conference of the Parties serving as the meeting of the Parties to this Agreement’. Although this obligation is framed in mandatory terms, the decisions that it refers to privilege national determination and discretion. In decision 1/CP.21 Parties agreed that the information to be provided ‘may include, as appropriate, inter alia...’ a list of informational requirements,⁵⁷ thus allowing Parties to determine the information that they will provide. The subsequent decision 4/CMA.1 that identifies more detailed informational requirements, also privileges national determination in deciding that ‘in communicating their...[NDCs]...Parties shall provide the information...as applicable to their nationally determined contributions...’⁵⁸ It is for Parties to determine the applicability of particular informational requirements to their NDCs.

B. *National Determination in the ‘Ambition Cycle’*

A crucial part of the ‘ambition cycle’ of the Paris Agreement is the five-yearly Global Stocktake that assesses ‘collective progress towards achieving the purpose of this Agreement and its long-term goals’.⁵⁹ The fact

⁵⁶ See Harald Winkler and Lavanya Rajamani, ‘CBDR&RC in a regime applicable to all’ (2014) 14(1) *Climate Policy* 102; Lavanya Rajamani and others, ‘National “fair shares” in reducing greenhouse gas emissions within the principled framework of international environmental law’ (2021) 21(8) *Climate Policy* 983, for a discussion of fairness indicators.

⁵⁷ Decision 1/CP.21, ‘Adoption of the Paris Agreement’ (29 January 2016) UN Doc FCCC/CP/2015/10/Add.1, 5, para 27.

⁵⁸ Paris Rulebook Mitigation Decision (n 55) 6, para 7.

⁵⁹ Art 14.

that the assessment is of collective rather than individual progress is not an oversight. It masks the fact that the Paris Agreement contains no mechanism to review or evaluate the adequacy of an individual Party's action. Further, the outcome of the global stocktake is to 'inform Parties in updating and enhancing, in a nationally determined manner, their actions and support in accordance with the relevant provisions of this Agreement...'.⁶⁰ The outcome is to 'inform' Parties in updating their NDCs, signalling that Parties retain the ultimate discretion to determine how to reflect the outcome of the stocktake in their NDCs. Parties retain the right in any case to do so 'in a nationally determined manner'. The 2023 Outcome of the first Global Stocktake recalled this provision of the Paris Agreement,⁶¹ and called on Parties to 'contribute' to an identified list of 'global efforts'—including tripling renewable energy capacity globally, accelerating efforts towards the phase down of unabated coal power, and transitioning away from fossil fuels in energy systems—but to do so in a 'nationally determined manner'.⁶² The outcome also—in a provision emblematic of the centrality of national determination to the consensus underpinning the Paris Agreement—'reaffirms the nationally determined nature of nationally determined contributions...'.⁶³

National determination is part of the design logic of the Agreement, and is zealously guarded by major emitting states, yet the ability of the international community to reach the long-term temperature goal and to reflect the requisite GHG mitigation ambition in NDCs in the critical decade, hinges on the extent to which national determination and the discretion that flows from it, is constrained and channelled in the operation of the Agreement. But, how is the nature and extent of national determination that underpins the the Paris Agreement to be understood? Should the Paris Agreement—the product of extensive negotiations, reflecting careful compromise between states, and expressing state consent—be the last and only word in relation to the obligations of states to avert climate harms? Should all other norms be interpreted against the benchmark of national determination set in the Paris Agreement, such that there are no constraints on the autonomy of states in relation to climate actions? In other words, should the Paris Agreement be interpreted solely through an atomistic textual reading?

⁶⁰ Art 14.3.

⁶¹ UAE Consensus (n 20) preambular recital 4.

⁶² *Ibid* 5, para 28.

⁶³ *Ibid* 7, para 39.

Or should the Paris Agreement be interpreted in light of its normative environment—such that other norms interlock or intersect with those in the Paris Agreement to guide an interpretation of the Paris Agreement that concretizes and strengthens its core provisions in service of the objectives identified in the Paris Agreement?

4. *The Normative Environment: Aspects and Approach*

The UN Human Rights Committee in its ground-breaking 2022 case *Daniel Billy and others v Australia (Torres Strait Islanders Petition)* noted that: '[t]reaties should be interpreted in the context of their normative environment'.⁶⁴ A 'norm' if understood in its common usage as an 'authoritative standard'⁶⁵ emerging from and resulting in widely shared expectations, rather than as a binding legal obligation, encompasses guidance, whatever its particular character, and set forth in instruments, whatever their legal form. That such an open-textured understanding of norms is engaged in the context of grave environmental harm is evident from the ICJ's judgement in the *Gabčíkovo-Nagymaros* case. The Court noted that: '[i]n order to evaluate the environmental risks, current standards must be taken into consideration'.⁶⁶ The Court proceeded to state that in the context of human interference with nature, 'new norms and standards have been developed, set forth in a great number of instruments during the last two decades. Such new norms have to be taken into consideration, and such new standards given proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past'.⁶⁷ Neither the term 'norms and standards' nor 'instruments' is qualified by a statement as to their legal character. As it will become evident in the following paragraphs, norms and standards, even if not binding, reflect and shape shared expectations of States in the context of averting climate harms.

⁶⁴ UN Human Rights Committee (UNHRC) *Daniel Billy and others v Australia (Torres Strait Islanders Petition)* (Views adopted by the Committee on 21 July 2022 under article 5(4) of the Optional Protocol, concerning communication no. 3624/2019) (18 September 2023) UN Doc CCPR/C/135/D/3624/2019.

⁶⁵ Merriam-Webster, 'norm' <<https://www.merriam-webster.com/dictionary/norm>> accessed 1 August 2024.

⁶⁶ *Case Concerning the Gabčíkovo-Nagymaros Project (Hungary v Slovakia)* (Judgment of 25 September 1997) [1997] ICJ Rep 7, 74–75 [140].

⁶⁷ *Ibid.*

A. *Aspects of the Normative Environment*

The Paris Agreement is set in a rich normative environment. This norm-rich environment includes widely ratified treaties, such as the core human rights instruments,⁶⁸ the customary international law principle of harm prevention,⁶⁹ and a range of principles of differing legal character and gravitas but considerable operational relevance in international environmental law. In addition, underpinning all these norms, is the cross-cutting salience of ‘best available science’ that guides environmental decision-making.

This section and the ones that follow seek to illustrate how an interpretative approach that locates provisions in their wider normative environment operates. The norms identified and discussed below are intended to be illustrative rather than exhaustive. While these norms are likely to be relevant across most contexts, in particular contexts, such as for instance in addressing the impacts of climate change on the marine environment, other norms, such as those relating to the Law of the Sea, will also assume relevance. Different norms—treaties, custom, soft law, others—will assume greater and lesser salience depending on the legal context.

(i) *Human Rights Instruments*

A host of internationally protected rights are at risk from climate impacts, especially at the higher levels of temperature rise that the world is on track for.⁷⁰ Human rights treaty bodies⁷¹ and special procedures

⁶⁸ See, for example, Universal Declaration of Human Rights (adopted 10 December 1948 UNGA Res 217 A(III) (UDHR)); International Covenant on Civil and Political Rights (adopted 16 December 1966, entered into force 23 March 1976) 999 UNTS 171 (ICCPR) (74 signatories, 174 Parties); International Covenant on Economic, Social and Cultural Rights (adopted 16 December 1966, entered into force 3 January 1976) 993 UNTS 3 (ICESCR) (71 signatories, 172 Parties); Convention on the Rights of the Child (adopted 20 November 1989, entered into force 2 September 1990) 1577 UNTS 3 (140 signatories, 196 Parties) with ratification statistics as on 1 August 2024.

⁶⁹ *Pulp Mills on the River Uruguay (Argentina v Uruguay)* (Judgment of 20 April 2010) [2010] ICJ Rep 14.

⁷⁰ There is a vast literature on Human Rights and Climate Change. For an overview see John Knox, ‘Human Rights’ in Lavanya Rajamani and Jacqueline Peel (eds), *Oxford Handbook of International Environmental Law* (2nd edn, OUP 2021) 784; Lavanya Rajamani, ‘Climate Change’ in Daniel Moeckli and others (eds), *International Human Rights Law* (4th edn, OUP 2022) 644.

⁷¹ See, for example, UN Human Rights Office of the High Commissioner (OHCHR), ‘Five UN Human Rights Treaty Bodies’ Issue a Joint Statement on Human Rights and Climate Change’ (16 September 2019) <<https://www.ohchr.org/EN/NewsEvents/Pages/DisplayNews.aspx?NewsID=24998>> accessed 1 August 2024.

mandate holders have cautioned that climate impacts threaten the enjoyment of human rights, especially in relation to life,⁷² health, food,⁷³ water, and sanitation,⁷⁴ and adequate housing,⁷⁵ and that it has particularly severe consequences for women,⁷⁶ children,⁷⁷ vulnerable and marginalized groups including migrants,⁷⁸ indigenous communities,⁷⁹ the internally displaced,⁸⁰ and those living in extreme poverty.⁸¹ Increasingly, judgments from national,⁸² regional,⁸³ and international courts⁸⁴ are beginning to hold states to account for rights violations stemming from insufficient mitigation or adaptation action in relation to climate harms.

⁷² UNHRC, 'General Comment No. 36 (2018) on Article 6 of the International Covenant on Civil and Political Rights, on the right to life' (3 September 2019) UN Doc CCPR/C/GC/36.

⁷³ UNGA, 'Interim report of the Special Rapporteur on the right to food' (5 August 2015) UN Doc A/70/287.

⁷⁴ UN Committee on Economic, Social and Cultural Rights, 'Climate change and the International Covenant on Economic, Social and Cultural Rights' (31 October 2018) UN Doc E/C.12/2018/1.

⁷⁵ UNGA, 'Guidelines for the Implementation of the Right to Adequate Housing' (26 December 2019) UN Doc A/HRC/43/43.

⁷⁶ UN Committee on the Elimination of Discrimination against Women, 'General Recommendation No. 37 (2018) on the gender-related dimensions of disaster risk reduction in the context of climate change' (13 March 2018) UN Doc CEDAW/C/GC/37.

⁷⁷ UN Committee on the Rights of Child, 'General comment No. 26 (2023) on children's rights and the environment, with a special focus on climate change' (22 August 2023) UN Doc CRC/C/GC/26.

⁷⁸ UNGA, 'Report of the Special Rapporteur on the human rights of migrants' (13 August 2012) UN Doc A/67/299.

⁷⁹ UNHRC, 'Report of the Special Rapporteur on the rights of indigenous peoples' (1 November 2017) UN Doc A/HRC/36/46.

⁸⁰ UNHRC, 'Report of the Special Rapporteur on the human rights of internally displaced persons, Chaloka Beyani' (20 December 2010) UN Doc A/HRC/16/43; UNGA, 'Protection of and assistance to internally displaced persons: Note by Secretary-General' (9 August 2011) UN Doc A/66/285.

⁸¹ UNHRC, 'Climate change and poverty—Report of the Special Rapporteur on extreme poverty and human rights' (17 July 2019) UN Doc A/HRC/41/39.

⁸² See, for example, *The State of the Netherlands v Stichting Urgenda* (Supreme Court of Netherlands) (20 December 2019) ECLI:NL:HR:2019:2007 No. 19/00135, *Neubauer, et al v Germany* (Federal Constitutional Court of Germany) (24 March 2021) 1BvR 2656/18, *VZW Klimaatzaak v Kingdom of Belgium and others* (Court of Appeals of Brussels) (30 November 2023) 2021/AR/1589; *Asghar Leghari v Federation of Pakistan, etc.* (Lahore High Court) (25 January 2018) WP No 25501/2015; *Padam Bahadur Shrestha v Office of the Prime Minister et al* (Supreme Court) (25 December 2018) 074-WO-0283 Decision No 10210, NKP, part 61, vol 3; *M K Ranjitsinh & Ors. v Union of India & Ors.* (Supreme Court of India) (21 March 2024) 2024 INSC 280.

⁸³ See, for example, *Case of Verein Klimasenioren Schweiz and others v Switzerland* App no 53600/20 (ECtHR, 9 April 2024).

⁸⁴ See, for example, *Torres Strait Islanders Petition* (n 64).

In addition to core internationally protected rights, Successive UN Special Rapporteurs on Human Rights and the Environment, have also highlighted the right to a healthy environment,⁸⁵ with David Boyd arguing that it encompasses a right to a 'safe climate'.⁸⁶ Although the right to a healthy environment is not yet protected in a binding international legal instrument, General Assembly Resolution 76/300,⁸⁷ and the earlier UN Human Rights Council Resolution 48/13,⁸⁸ recognized the 'human right to a clean, healthy and sustainable environment as a human right'. These resolutions highlight the role that climate impacts play in threatening both the right to a clean, healthy, and sustainable environment as well as other rights.⁸⁹

Underpinning these resolutions, reports, statements, and judgments is a vision of international law as a tapestry of inter-locking obligations and norms, recognizing the interdependence between and weaving human rights protections with international environmental rules, in service of a better, safer world, and future for its inhabitants.

General Assembly Resolution 76/300, notes that the right to a clean, healthy, and sustainable environment is related to 'other rights and existing international law', and that promotion of this right 'requires the full implementation of the multilateral environmental agreements under the principles of international environmental law'.⁹⁰ Similarly in the context of the right to life,

the Human Rights Committee in its General Comment 36 notes that, given '[e]nvironmental degradation, climate change and unsustainable development constitute some of the most pressing and serious threats to the ability of present and future generations to enjoy the right to life' ... 'the obligation of States parties to respect and ensure the right to life should also inform their relevant obligations under international environmental law'.⁹¹

⁸⁵ UNHRC, 'Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment' (1 February 2016) UN Doc A/HRC/31/52.

⁸⁶ See UNGA, 'Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment' (15 July 2019) UN Doc A/74/161.

⁸⁷ UNGA Res 76/300 (28 July 2022) UN Doc A/RES/76/300.

⁸⁸ UNHRC Res 48/13 (8 October 2021) UN Doc A/HRC/RES/48/13.

⁸⁹ *Ibid.*

⁹⁰ UNGA Res 76/300 (n 87) paras 2 and 3.

⁹¹ UNHRC, 'General Comment No. 36' (n 72) para 62.

The recent European Court of Human Rights judgment in the *Klimaseniorinnen* case, premised its interpretation of European Convention rights, on such a dynamic approach. The court noted that, ‘the interpretation and application of the rights provided for under the Convention can and must be influenced both by factual issues and developments affecting the enjoyment of the rights in question and also by relevant legal instruments designed to address such issues by the international community’.⁹² Noting that the ‘Convention should be interpreted, as far as possible, in harmony with other rules of international law’ the court went as far as to state that ‘a failure by the Court to maintain a dynamic and evolutive approach would risk rendering it a bar to reform or improvement...’⁹³ and, further that it could not ‘ignore the pressing scientific evidence and the growing international consensus regarding the critical effects of climate change on the enjoyment of human rights’.⁹⁴

(ii) *Customary International Law—The Principle of Harm Prevention*

In addition to treaties, including human rights one, the norm-rich environment the Paris Agreement is located in, includes the customary international law principle of harm prevention. The harm prevention principle imposes a responsibility on states ‘to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction’.⁹⁵ The principle of harm prevention is a binding rule of customary international law.⁹⁶ This rule imposes on states an obligation of conduct,

⁹² *Case of Verein Klimaseniorinnen* (n 83) [455].

⁹³ *Ibid* [455].

⁹⁴ *Ibid* [456].

⁹⁵ UN, ‘Report of the United Nations Conference on the Human Environment, Stockholm, 5–16 June 1972’ (1973) UN Doc A/CONF/48/14/Rev.1 ‘Declaration of the United Nations Conference on the Human Environment’ 3, 5, Principle 21; UNGA, ‘Report of the United Nations Conference on Environment and Development (Rio de Janeiro, 3–14 June 1992)’ (12 August 1992) UN Doc A/CONF.151/26 (Vol. I) ‘Annex I—Rio Declaration on Environment and Development’ Principle 2.

⁹⁶ See *Legality of the Threat or Use of Nuclear Weapons* (Advisory Opinion) [1996] ICJ Rep 226; *Gabčíkovo-Nagymaros Project* (n 66); *Pulp Mills* (n 69); *Certain Activities Carried Out by Nicaragua in the Border Area (Costa Rica v Nicaragua)* (Judgment of 16 December 2015) [2015] ICJ Rep 665. See also ILC, ‘Report of the International Law Commission on the Work of its 53rd Session’ (23 April–1 June and 2 July–10 August 2001) UN Doc A/56/10 ‘Draft articles on prevention of transboundary harm from hazardous activities: Text of the draft articles with commentaries thereto’ 149.

rather than of result, subject to the exercise of ‘due diligence’, discussed in depth below.⁹⁷

Many of the major emitters argue that the principle of harm prevention cannot be extended to the climate context as climate change—given its global, historical, and cumulative nature—differs from the point source activities or pollution that are at issue in the harm prevention principle. This argument is plausible, even if not persuasive. There is some support for this position from the International Law Commission (ILC) which notes that, ‘[i]n the context of transboundary atmospheric pollution, the obligation of States to prevent significant adverse effects is firmly established as customary international law.... However, the existence of this obligation in customary international law is still somewhat unsettled for global atmospheric degradation’.⁹⁸

In response to this set of arguments, it is worth noting that there is a distinction between the *applicability* or extension of the harm prevention principle to the climate context and the *legal status* of this principle as customary in the context of global atmospheric degradation. While there are differences between the archetypal cases of transboundary environmental harm that led to the emergence of the harm prevention principle and the global commons issue of climate change, the fact that this principle is applicable to and can be adapted to the climate context is evident from the explicit reference to it in the preamble to the UN Framework Convention on Climate Change.⁹⁹ Whether this is a single principle adapted to current environmental challenges, or two distinct harm prevention principles—one in the context of transboundary harm which has attained the status of custom, and one in the context of global atmospheric degradation, which has not—is perhaps a point of academic interest, with limited operational relevance. At its core, the harm principle imposes on States obligations of conduct subject to due diligence requirements, which in the context of climate change, the Paris Agreement, also does. The harm prevention principle strengthens the obligations in the Paris Agreement rather than displaces it.

⁹⁷ See for a full discussion of this principle Jutta Brunnée, ‘Harm Prevention’ in Rajamani and Peel (n 70) 269.

⁹⁸ ILC, ‘Report of the International Law Commission on the Work of its 76th Session’ (26 April–4 June and 5 July–6 August 2021) UN Doc A/76/10 ‘Text of the draft guidelines on the protection of the atmosphere’ 27–28, para 8.

⁹⁹ United Nations Framework Convention on Climate Change (adopted 9 May 1992, entered into force 21 March 1994) 1771 UNTS 107 (UNFCCC) preambular recital 8.

(iii) *Principles of International Environmental Law*

The principles of international environmental law, many first articulated in the 1992 Rio Declaration include principles relating to harm prevention (discussed above), precaution, sustainable development, special circumstances, equity (inter- and intra-generational), common but differentiated responsibilities, public participation, international cooperation, and good faith.¹⁰⁰ Some of these principles are general principles of international law such as the principle of harm prevention, precaution, international cooperation, and good faith. Others are general principles of international environmental law, for instance, the principles relating to special circumstances, common but differentiated responsibilities, and sustainable development (although these have occasionally been applied in areas beyond international environmental law). Some of these principles have found expression in treaty obligations, as for instance principles relating to public participation.¹⁰¹ Yet others are principles of international environmental law that have acquired distinctive content and character in the climate change regime, as for instance the principle of ‘common but differentiated responsibilities’—with the addition of ‘respective capabilities’ in its articulation in the FCCC,¹⁰² and the clause ‘in the light of different national circumstances’ in the 2015 Paris Agreement.¹⁰³

The core content of each of these principles varies, and lends itself to an interpretational range, which fosters dynamism, flexibility, and evolution of the principle. As the context shifts, the principles can adapt, as is evident from the evolution of the CBDR principle in the climate change regime. The formal legal status and operational significance of each principle also differs. While this is not the place for an extensive discussion of the legal status of these principles, it is worth noting that although some of these principles have limited formal legal status, they are nevertheless recognized as salient in international environmental law. Scholars characterize them variously as ‘framework’ principles,¹⁰⁴

¹⁰⁰ Rio Declaration (n 95) Principles 14, 15, 1, 6, 7, 10, 19, 27; International Law Association (ILA) Committee on Legal Principles Relating to Climate Change, ‘Resolution 2/2014—Declaration of Legal Principles relating to Climate Change’ in International Law Association Report of the Seventy-Sixth Conference (Washington DC 2014) <https://www.ila-hq.org/en_GB/documents/conference-resolution-no-2-english-washington-2014> accessed 1 August 2024.

¹⁰¹ Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (adopted 25 June 1998, entered into force 30 October 2001) 2161 UNTS 447.

¹⁰² Art 3.1.

¹⁰³ Art 2.2.

¹⁰⁴ Alan Boyle and Catherine Redgwell (eds), *Birnie, Boyle, and Redgwell's International Law and the Environment* (4th edn, OUP 2021).

‘constitutional’ principles,¹⁰⁵ or ‘orienting’ principles.¹⁰⁶ However these principles are defined and characterized, they form a fundamental part of the ‘conceptual architecture’ of international environmental law and create a strong directional pull by playing a decisive role in the interpretation of obligations in this field.¹⁰⁷ These principles work collectively and in tandem with each other. While the emphasis in each principle is different, these principles, as with other rules of international law, are interpreted harmoniously to give effect to them all. Taken together these principles are the connective tissue that holds international environmental law and governance together and occupies many of the normative gaps in the field.

(iv) *‘Best Available Science’*

Underpinning all these norms, is the cross-cutting salience of ‘best available science’ in addressing climate harms and interpreting climate change obligations. The principal source of ‘best available science’ on climate change are the Reports of the IPCC. These Reports reflect the authoritative and incontrovertible state of scientific knowledge on climate change. IPCC’s reports are produced by a representative and balanced group of experts from around the world, across developed and developing countries, and from a range of disciplines. Each of the three working group reports of the IPCC’s Sixth Assessment Report were produced by approximately 250 authors from over 60 countries.¹⁰⁸ These Reports represent the ‘best available scientific knowledge’ that informs and guides Parties to the UNFCCC and the Paris Agreement. Moreover, the ‘Summary for Policymakers’ of the IPCC’s Reports are adopted by consensus after a painstaking Government ‘approval’ process that entails

¹⁰⁵ Yann Aguila and Jorge E Viñuales, ‘A Global Pact for the Environment: Conceptual Foundations’ (2019) 28(1) *Review of European, Comparative and International Environmental Law* 3.

¹⁰⁶ G. J. Martin, ‘Principles and rules’ in Ludwig Krämer and Emanuela Orlando (eds) *Principles of Environmental Law: Elgar Encyclopaedia of Environmental Law series*. Cheltenham (Edward Elgar 2018) 13, 14.

¹⁰⁷ See Lavanya Rajamani, ‘Common but differentiated responsibilities’ in Ludwig Krämer and Emanuela Orlando (n 106) 291.

¹⁰⁸ IPCC, 2021: *Physical Science Basis* (n 43) 234 experts from 64 countries in Working Group 1 of Sixth Assessment Report (AR) <<https://www.ipcc.ch/report/ar6/wg1/about/authors/>> accessed 1 August 2024; IPCC, 2022: *Impacts, Adaptation and Vulnerability* (n 46) 270 experts from 67 countries in Working Group 2 of Sixth AR <<https://www.ipcc.ch/report/ar6/wg2/about/authors/>> accessed 1 August 2024; IPCC, 2022: *Mitigation of Climate Change* (n 35) 278 experts from 65 countries in Working Group 3 of Sixth AR <<https://www.ipcc.ch/report/ar6/wg3/about/authors/>> accessed 1 August 2024.

‘detailed line-by-line discussion and agreement’.¹⁰⁹ The Summaries for Policymakers thus represent not just consensus among experts but also among governments.

The UNFCCC and the Paris Agreement both stress the importance of being guided by the best available scientific knowledge in addressing climate change. UNFCCC’s preambular recital 16 recognizes that ‘steps required to understand and address climate change will be environmentally, socially, and economically most effective if they are based on relevant scientific, technical, and economic considerations and continually re-evaluated in the light of new findings in these areas’. The Paris Agreement goes further in preambular recital 4 by ‘[r]ecognizing the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge’. Article 4.1 of the Paris Agreement highlights the salience of ‘best available science’ in achieving net zero. And, Article 14 establishing the Global Stocktake to ‘assess the collective progress towards achieving the purpose of this Agreement and its long-term goals’ is to be conducted in the light of ‘the best available science’. Subsequent agreements between the Parties, including the 2021 Glasgow Climate Pact¹¹⁰ and the 2023 UAE Consensus¹¹¹ recognize that accelerated action in this critical decade needs to be on the basis of the best available science. There is overwhelming support, thus, for the proposition that Parties have endorsed a response in line with the best available science, which as the IPCC’s Sixth Assessment Report makes clear requires ‘deep, rapid, and sustained reductions in greenhouse gas emissions’.¹¹²

Of the illustrative norms and contextual elements, discussed above, treaties and custom represent binding legal rules and demand harmonious interpretation with provisions of the Paris Agreement. The principles of international environmental law that have more limited or contested legal status, and ‘best available science’ nevertheless offer a directional pull in interpretation.

¹⁰⁹ IPCC, ‘Appendix A to the Principles Governing IPCC Work: Procedures for the preparation, review, acceptance, adoption, approval and publication of IPCC Reports’ <<https://www.ipcc.ch/site/assets/uploads/2018/09/ipcc-principles-appendix-a-final.pdf>> accessed 1 August 2024, 8, section 4.4.

¹¹⁰ Glasgow Climate Pact (n 18) 4, para 23.

¹¹¹ UAE Consensus (n 20) para 6. See also para 28(d), 39, 55, 61, and 149.

¹¹² IPCC, 2023: *Synthesis Report* (n 42) statement B.1.

B. Interpretational Approach to the Paris Agreement

Although treaty interpretation has been characterized as more of an art than an exact science,¹¹³ the Vienna Convention on the Law of Treaties (VCLT),¹¹⁴ offers a treaty interpretation framework that can assist in settling questions regarding the terms of the Paris Agreement. To begin with, a treaty must be interpreted in good faith, in accordance with the ordinary meaning to be given to its terms. However, the ‘ordinary meaning’ is not simply a literal reading of the text; rather, it emerges from reading the relevant terms in their context and in light of the treaty’s object and purpose.¹¹⁵ The ‘context’ encompasses the text of the entire treaty, including its preamble.¹¹⁶ A treaty’s ‘object and purpose’ too can be gleaned from a treaty’s preamble and full text, as well as from provisions outlining its objectives.¹¹⁷ To confirm the meaning resulting from this approach, recourse can be had to the preparatory work of the treaty and the circumstances of its adoption.¹¹⁸

In determining the ‘context’ of subsequent agreement between the treaty Parties regarding interpretation, or subsequent practice in the application of the treaty establishing such agreement shall be taken into account.¹¹⁹ And, most pertinently, ‘there shall be taken into account’ ‘any relevant rules of international law applicable in the relations between the parties’.¹²⁰ The latter, according to the ILC reflects the objective of ‘systemic integration’¹²¹ which supports the tapestry of inter-locking obligations approach advanced in this research article. General international law is particularly salient in interpretation when the ‘treaty rule is unclear or open-textured’.¹²²

The relevant rules of international law that determine the interpretative context for the Paris Agreement’s provisions, include treaties and custom, such as those sketched out above—human rights instruments and harm prevention. This is a position that some states such

¹¹³ See Anthony Aust, *Modern Treaty Law and Practice* (CUP 2000) 184, quoting the International Law Commission.

¹¹⁴ VCLT (n 22).

¹¹⁵ *Ibid* art 31(1).

¹¹⁶ *Ibid* art 31(2).

¹¹⁷ See Richard K. Gardiner, *Treaty Interpretation* (OUP 2008) 192.

¹¹⁸ VCLT (n 22) art 32.

¹¹⁹ *Ibid* art 31(3).

¹²⁰ Art 31(3)(c).

¹²¹ ILC, ‘Report of the International Law Commission on the Work of its 58th Session’ (1 May–9 June and 3 July–11 August 2006) UN Doc A/61/10, 180, para 17.

¹²² *Ibid* 180, para 20.

as those of the European Union (EU) endorse, but others, such as the US, argue that other rules are either inapplicable, irrelevant, general, or trumped by the Paris Agreement. The VCLT interpretative framework signals that rules of international law need to be interpreted compatibly with each other in a bid to further systemic integration in international law.¹²³ Interpreting the Paris Agreement in its normative environment strengthens rather than weakens such systemic integration. Systemic integration is also advanced when subsequent international law rules are taken into account in interpreting treaty provisions, in particular when the concepts in the treaty are ‘open or evolving’.¹²⁴ It is worth noting, however, that the open-textured provisions in the Paris Agreement and its Rulebook lend themselves to a range of interpretations. An interpretation of the Paris Agreement that is anchored in the normative environment may well lead to perceived (rather than real) conflicts with particular atomistic interpretations of the Paris Agreement that privilege national determination and ignore the larger normative setting.

The larger normative setting, arguably, goes beyond the ‘relevant rules of international law’—binding treaties and custom—to encompass widely shared expectations stemming from norms occupying a spectrum of legal character, such as the principles of international environmental law, and the ‘best available science’. To quote Judge Rosalyn Higgins, ‘if international law was just “rules”, then international law would indeed be unable to contribute to, and cope with, a changing political world. To rely merely on accumulated past decisions (rules) when the context in which they were articulated has changed—and indeed when their content is often unclear—is to ensure that international law will not be able to contribute to today’s problems and, further, that it will be disobeyed for that reason’.¹²⁵ If international law is to play a constructive role in resolving the existential crises presented by climate change, it needs to adapt to the changing reality of the global nature of the problems and solutions needed, and to go beyond rules derived solely and narrowly from state consent. Widely shared expectations stemming from norms occupying a spectrum of legal character and ‘best available science’ offer a strong ‘directional pull’ in interpretation which can take us closer to this richer, more purposive vision of international law.

¹²³ ILC, ‘Work of its 58th Session’ (n 121).

¹²⁴ ILC, ‘Work of its 58th Session’ (n 121) 181, para 23.

¹²⁵ Rosalyn Higgins, *Problems and Process: International Law and How We Use It* (OUP 1995) ch 10.

This richer interpretative approach to the Paris Agreement cannot, to be clear, displace the clear terms of the Paris Agreement, impose obligations where none exist, or replace obligations of conduct with obligations of result. It can, however, strengthen and enhance the interpretation of the Agreement's provisions in service of the ultimate objective of the Agreement to prevent dangerous anthropogenic interference with the climate system.¹²⁶ It can generate a 'standard of due diligence' with associated benchmarks against which compliance with the Paris Agreement's obligations of conduct can be assessed by a range of actors including states, national, regional, and international courts, and non-state actors. It can enhance accountability for the choice of NDCs and constrain unbridled subjective national determination in the implementation of the Paris Agreement.

5. *Identifying a Standard of Due Diligence in the Paris Agreement*

As initially outlined, the central obligation relating to GHG mitigation in the Paris Agreement, contained in Article 4.2, is a procedural obligation applicable to all Parties. Each Party is to 'prepare, communicate and maintain' successive NDC that it intends to achieve. Parties are also obliged to 'pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions'. The obligation to pursue domestic measures with the aim of achieving the objectives of the NDC is a binding substantive obligation in that Parties are obliged ('shall') to pursue domestic measures. However, Parties are required only to 'aim' at achieving the objectives of their NDCs through their domestic measures, and not obliged to meet the objectives, targets, or goals identified in their NDCs. This is an obligation of conduct, an obligation to exercise best efforts¹²⁷ and is subject to due diligence requirements.¹²⁸

The standard of due diligence required of states varies across different areas of international law, and in differing contexts.¹²⁹ As the ITLOS

¹²⁶ UNFCCC, art 2.

¹²⁷ See Rajamani, 'Ambition and Differentiation' (n 11); Bodansky (n 11); Bodle and Oberthür (n 11).

¹²⁸ See also Benoit Mayer, 'Obligations of conduct in the international law of climate change' (2018) 27(2) *Review of European, Comparative and International Environmental Law* 130.

¹²⁹ ILA, Tim Stephens (Rapporteur) and Duncan French (Chair), 'Study Group on Due Diligence in International Law' (Second Report, July 2016) <https://www.ila-hq.org/en_GB/documents/draft-study-group-report-johannesburg-2016> accessed 1 August 2024.

noted in the *Seabed Mining Advisory Opinion*, “due diligence” is a variable concept. It may change over time as measures considered sufficiently diligent at a certain moment may become not diligent enough in light, for instance, of new scientific or technological knowledge. It may also change in relation to the risks involved in the activity’.¹³⁰

In identifying a standard of due diligence for States the elements of the normative environment discussed in Section 4—the ‘relevant rules of international law’, principles of international environmental law, and ‘best available science’, among others—play a complementary and contributory role both in strengthening the ambition in the Paris Agreement, as well as in concretizing the benchmarks against which states’ contributions are to be tested.

The UNFCCC and the Paris Agreement can thus be interpreted as setting a high standard for the due diligence required of States, shaped by the following objective indicators. This is an ‘objective’ standard¹³¹ for due diligence in that it generates concrete benchmarks and functions to constrain the autonomy that states have, their unbridled national determination, as it were, in choosing and implementing their contributions under the Paris Agreement. The standard of due diligence is not a subjective self-determined standard, because if it were so, it would be indistinguishable from national determination, and meaningless.

A. *The Objective, Purpose, and Goals of the UNFCCC and the Paris Agreement*

A part of the ‘context’ identified in the VCLT interpretative framework, these are contained in UNFCCC Article 2, and Paris Agreement’s Articles 2 and 4.1. The clear consensus among Parties on the 1.5°C temperature goal and on reaching ‘net zero’ by or around mid-century generates a normative expectation that Parties’ actions will be aligned with these goals. The 2021 Glasgow Climate Pact, in line with this interpretation, requests Parties ‘to revisit and strengthen the 2030 targets in their nationally determined contributions as necessary to align with the Paris Agreement temperature goal...’.¹³² This was taken further in the

¹³⁰ *Responsibilities and obligations of States sponsoring persons and entities with respect to activities in the Area (Request for Advisory Opinion submitted to the Seabed Disputes Chamber)* (Advisory Opinion of 1 February 2011) ITLOS Rep 2011, 10 [117].

¹³¹ The ITLOS Advisory Opinion recognized the need for such an ‘objective’ standard of due diligence. ITLOS, *Climate Change Advisory Opinion* (n 3) para 257.

¹³² Glasgow Climate Pact (n 18) para 29.

2023 UAE Consensus that encouraged all Parties to submit ‘ambitious, economy-wide emission reduction targets, covering all [GHGs], sectors and categories and aligned with limiting global warming to 1.5°C, as informed by the latest science, in the light of different national circumstances’.¹³³ Human rights treaty bodies have also endorsed the lower end of the temperature goal in the Paris Agreement as the level at which the most egregious impacts on human rights will be contained. In their joint statement in 2019, five human rights treaty bodies noted with concern that states’ current contributions were insufficient to limit global warming to 1.5°C.¹³⁴ Using 1.5°C as the standard of assessment in the human rights context effectively operationalizes the lower end of the temperature goal identified in the Paris Agreement. Arguably, the Paris Agreement interpreted in its normative environment, and in light of the best available science, requires states to submit NDCs that contribute to ‘deep, rapid and sustained reductions in global greenhouse gas emissions of 43 per cent by 2030 and 60 per cent by 2035 relative to the 2019 level and reaching net zero carbon dioxide emissions by 2050’, as this is what is required to reach 1.5°C with limited or no overshoot.¹³⁵

B. *The Expectation of ‘Highest Possible Ambition’ from Parties*

Paris Article 4.3 expects Parties’ NDCs to reflect their ‘highest possible ambition’. While this term is not defined, and the assessment of what constitutes ‘highest possible ambition’ is left to states to determine in light of their national circumstances, there is a strong normative expectation that Parties will do their utmost to address climate harms. This expectation shapes the due diligence expected of states in relation to addressing climate harms.¹³⁶ The rules relating to provision of information with NDCs require Parties to provide information on how their contribution is ‘fair and ambitious’,¹³⁷ and addresses Article 4.3 (‘progression’, ‘highest possible ambition’),¹³⁸ thus instilling transparency and accountability in the delivery of highest possible ambition from Parties. Human rights treaty bodies have also found that compliance

¹³³ UAE Consensus (n 20) para 39.

¹³⁴ OHCHR, ‘Treaty Bodies’ Issue a Joint Statement’ (n 71).

¹³⁵ UAE Consensus (n 20) para 27.

¹³⁶ Christina Voigt and Felipe Ferreira, “Dynamic Differentiation”: The Principles of CBDR-RC, Progression and Highest Possible Ambition in the Paris Agreement’ (2016) 5(2) Transnational Environmental Law 285.

¹³⁷ Paris Rulebook Mitigation Decision (n 55) 11, Annex I, para 6.

¹³⁸ *Ibid.*

with human rights treaty obligations would require states to adopt and implement mitigation policies that reflect the ‘highest possible ambition’.¹³⁹ In identifying what this level of ambition translates into in terms of domestic mitigation targets, states must be guided by the ‘best available science’. As above, the concrete benchmark this provides for NDCs is that these contribute ‘deep, rapid and sustained reductions in global greenhouse gas emissions of 43 per cent by 2030 and 60 per cent by 2035 relative to the 2019 level and reaching net zero carbon dioxide emissions by 2050’.¹⁴⁰ What this means for individual countries will depend on what their ‘fair share’ of the global GHG mitigation burden is.

C. The Expectation That Parties’ Actions Will Reflect Their Common But Differentiated Responsibilities and Respective Capabilities, in Light of Different National Circumstances

The ILC recognizes that one of the factors in determining the standard of due diligence required of a state is its ‘economic level’ or capacity, but notes however that ‘a State’s economic level cannot be used to dispense the State from obligation under the present Articles’.¹⁴¹ Differentiation in the climate change regime, however, is based not just on disparities in economic levels but also on differences in relation to responsibilities for causing climate harm. The principle of common but differentiated responsibilities and respective capabilities, the principled basis for differentiation in the climate change regime, differentiates between states both in relation to capacities (‘respective capabilities’) as well as to contributions to climate harm (‘responsibilities’). The standard of due diligence in relation to specific obligations of conduct placed on a state is shaped thus both by differences in capacities as well in responsibilities for causing climate harms.

The standard of due diligence in the climate change regime is shaped by the resources and capacities that states have. The climate regime

¹³⁹ UN, ‘Statement on human rights and climate change: Joint statement by the Committee on the Elimination of Discrimination against Women, the Committee on Economic, Social and Cultural Rights, the Committee on the Protection of the Rights of All Migrant Workers and Members of Their Families, the Committee on the Rights of the Child and the Committee on the Rights of Persons with Disabilities’ (14 May 2020) UN Doc HRI/2019/1.

¹⁴⁰ UAE Consensus (n 20) para 27.

¹⁴¹ ILC, ‘Draft articles on prevention of transboundary harm’ (n 96) 155, art 3, para 13.

has, since its inception, recognized the vast disparities between developed and developing countries, and differentiated between them with respect to implementation. This takes the form of differentiation in relation to stringency or timing of implementation, such as delayed compliance schedules,¹⁴² permission to adopt subsequent base years,¹⁴³ delayed reporting schedules,¹⁴⁴ flexibility in implementation,¹⁴⁵ and softer approaches to non-compliance;¹⁴⁶ and, provisions that differentiate among countries in relation to assistance, that is, commitments to provide, and eligibility to receive, financial¹⁴⁷ and technological assistance.¹⁴⁸ Such flexibilities and support for developing countries form a fundamental part of the normative architecture of the climate change regime, and thus shape the standard of due diligence required of states in relation to obligations of conduct in the climate regime.

The standard of due diligence in the climate change regime is also shaped by the different contributions of states to climate harm. Thus, the climate regime contains differentiation between developed and developing countries in relation to the central obligations of the regime. The UNFCCC's GHG stabilization targets,¹⁴⁹ and the Kyoto Protocol's GHG mitigation targets,¹⁵⁰ apply to developed countries alone. And the Paris Agreement recognized the importance of the common but differentiated responsibilities and respective capabilities principle, and the 'leadership' role of developed countries.¹⁵¹ Article 2.2, a cross-cutting provision, states that the Paris Agreement 'will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in light of different national circumstances' (CBDRRC). The qualification of the CBDRRC principle by a reference to 'national circumstances' introduced in the Paris Agreement, introduces a dynamic element to the interpretation of the principle—as

¹⁴² See, for example, Kyoto Protocol to the United Nations Framework Convention on Climate Change (adopted 10 December 1997, entered into force 16 February 2005) 2303 UNTS 162, art 3.5.

¹⁴³ See, for example, UNFCCC, art 4.6.

¹⁴⁴ UNFCCC, art 2.5.

¹⁴⁵ See, for example, Paris Agreement, art 13.2.

¹⁴⁶ See, for example, Decision 24/CP.7, 'The Marrakesh Accords: Procedures and mechanisms relating to compliance under the Kyoto Protocol' (21 January 2002) UN Doc FCCC/CP/2001/13/Add.3.

¹⁴⁷ See, for example, Paris Agreement, arts 9.1, 9.3; UNFCCC, art 4.3.

¹⁴⁸ See, for example, Paris Agreement, art 10.6.

¹⁴⁹ Paris Agreement, arts 4.2(a), (b).

¹⁵⁰ Kyoto Protocol, art 3.

¹⁵¹ Paris Agreement, arts 4.4, 4.1.

national circumstances evolve, so too will the common but differentiated responsibilities of states. However, this clause does not seek to shift the bases for differentiation in the climate change regime. Thus, differentiation based on contributions to environmental harm, is part of the normative architecture of the climate change regime and influences the standard of due diligence in relation to the obligations of conduct it contains. As contributions and capacities differ, so do states' fair shares in addressing climate harms. There are operational challenges in identifying each Party's 'fair share' of the climate effort, however, there is extensive emerging scholarship on methodologies to determine 'fair shares',¹⁵² variously presented by litigants in national¹⁵³ and regional courts.¹⁵⁴

This position is endorsed in the UN Human Rights Committee in the *Torres Strait Islanders* case which noted that: 'States should act with due diligence when taking mitigation and adaptation action, based on the best science. This is an individual responsibility of the State, relative to the risk at stake and its capacity to address it. A higher standard of due diligence applies with respect to those States with significant total emissions or very high per capita emissions (whether these are past or current emissions), given the greater burden that their emissions place on the global climate system, as well as to States with higher capacities to take high ambitious mitigation action'.¹⁵⁵

The rules relating to provision of information with NDCs require Parties to provide information on how their contribution is 'fair and ambitious',¹⁵⁶ and addresses Article 4.3 ('progression', 'highest possible ambition', and 'common but differentiated responsibilities and respective capabilities in light of different national circumstances') and Article 4.4 ('developed country leadership') thus bolstering these normative expectations with enhanced transparency and accountability.

¹⁵² Climate Action Tracker <<https://climateactiontracker.org/>> accessed 1 August 2024; Rajamani and others, 'National "fair shares"' (n 56).

¹⁵³ *A Sud et al v Italy* (2021) (Civil Court of Rome (pending)) <<https://climatecasechart.com/non-us-case/a-sud-et-al-v-italy/>> accessed 3 August 2024; *Client Earth v Poland (on behalf of M.G.)* (2021) (District Court (pending)) <<https://climatecasechart.com/non-us-case/clientearth-v-poland-acting-on-behalf-of-mg/>> accessed 3 August 2024; *Case of Górska v Poland* App no 53698/00 (ECtHR, 3 June 2003).

¹⁵⁴ *Case of Cláudia Duarte Agostinho and Others v Portugal and 32 Other States* App No 39371/20 (ECtHR, 9 April 2024); *Case of Verein Klimaseniorinnen* (n 83).

¹⁵⁵ *Torres Strait Islanders Petition* (n 64) para 6.

¹⁵⁶ Paris Rulebook Mitigation Decision (n 55) 11, Annex I, para 6.

D. *The Nature and Degree of Harm That Would Be Suffered in the Absence of Due Diligence*

In determining the due diligence required of states, the nature and degree of harm that would be suffered in the absence of due diligence by states or the ‘risks involved in the activity’¹⁵⁷ are relevant factors. The ILC notes that the standard for due diligence should be ‘appropriate and proportional to the degree of risk of the transboundary harm’.¹⁵⁸ This builds on the *Alabama Claims* decision that due diligence ought to be exercised in ‘exact proportion to the risks’.¹⁵⁹ The ‘risks involved in the activity’ also engage the precautionary principle, which falls within the scope of due diligence.¹⁶⁰ The *ITLOS Seabed Mining Advisory Opinion*, found the precautionary approach to be ‘an integral part of the general obligation of due diligence’.¹⁶¹ The duty of due diligence in relation to environmental harm is broader than the prevention principle in that it is not limited to harm of a certain magnitude (material harm or significant harm), rather even harm falling below this threshold of magnitude is governed by the duty of due diligence.¹⁶² These elements of due diligence in general international law apply to the climate change regime’s obligations of conduct. The risks of climate change far exceed the threshold of significant harm, and there is unequivocal scientific evidence as to the existence of risk of significant harm. The enormous risk of potentially irreversible climate impacts at temperatures above 1.5°C suggests a correspondingly high standard of due diligence.

E. *The Expectation of Good Faith*

The ILA notes that ‘[a] State cannot be considered to have acted diligently when the State has acted in bad faith or has knowingly refused to take any measures whatsoever’.¹⁶³ Good faith, implicit in all treaties,

¹⁵⁷ ITLOS, *Seabed Mining Advisory Opinion* (n 130) [117].

¹⁵⁸ ILC, ‘Draft articles on prevention of transboundary harm’ (n 96) 154, art 3, para 11.

¹⁵⁹ *Alabama Claims of the United States of America against Great Britain* (Award of 14 September 1872) UNRIAA 29, 124, 129. See Jorge E. Viñuales, ‘Due Diligence in International Environmental Law: A Fine-grained Cartography’ in Heike Krieger and others (eds), *Due Diligence in the International Legal Order* OUP 2021) 111, section 2.1: The Characterisation of Due Diligence in the Alabama Arbitration.

¹⁶⁰ See discussion on the scope of due diligence being broader than the prevention principle, by Viñuales (n 168) section 3.2.1.

¹⁶¹ ITLOS, *Seabed Mining Advisory Opinion* (n 130) [131].

¹⁶² Ibid.

¹⁶³ ILA, ‘Study Group on Due Diligence’ (n 129).

generates expectations in relation to performance of treaty obligations that permeate through the entire UN climate change regime.¹⁶⁴ Thus, although NDCs under the Paris Agreement are not subject to obligations of result, there is a good faith expectation that Parties, will, nevertheless, take all appropriate steps—given the objective of the Paris Agreement and the risks involved in runaway climate change—to the extent their resources and capacities permit, to achieve their self-selected contributions. This expectation is bolstered by decisions taken by Parties that specify the rules for identifying the information necessary to track the progress made by Parties in implementing and achieving their NDCs.¹⁶⁵

The expectation that states' contributions will reflect the 'best available science': Given the cross-cutting importance of 'best available science' in understanding the causes of climate change, the warming trajectory we are on, the impacts at different levels of warming, and the range of time-bound solutions to minimize harm, the standard of due diligence requires that every aspect of a state's contribution will reflect 'best available science'. This includes reflecting the 'best available science' in determining the highest possible ambition of a state's NDC, reflecting its 'fair share' (based on objectively selected, international environmental law-compliant, objective indicators), and implementing its domestic mitigation measures.

6. Conclusion

UN Secretary-General, António Guterres, famously warned in 2022 that '[w]e are on a highway to climate hell with our foot on the accelerator', adding that '[a] window of opportunity remains open, but only a narrow shaft of light remains', and '[t]he global climate fight will be won or lost in this crucial decade—on our watch'.¹⁶⁶ This is not climate alarmism. The ability of the international community to win the global climate fight in this decade places a daunting burden on international law—that of aligning norms, actors, and actions in a disparate and increasingly desperate world, in service of a climate-safe future.

¹⁶⁴ ILA Committee on Legal Principles Relating to Climate Change (n 100) arts 8, 9.

¹⁶⁵ Decision 18/CMA.1 (n 12) 20, Annex, section I.C.

¹⁶⁶ UN, 'Secretary-General's remarks to High-Level opening of COP27: António Guterres' (7 November 2022) <<https://www.un.org/sg/en/content/sg/speeches/2022-11-07/secretary-generals-remarks-high-level-opening-of-cop27>> accessed 3 August 2024.

Can international law discharge this burden? The Paris Agreement generated norms that have in the last decade catalysed pledges that have brought estimates of temperature rise down from 3.7°C–4.8°C¹⁶⁷ to 2.1°C–2.8°C.¹⁶⁸ But, 2.1°C–2.8°C is still far from the temperature goal of the Paris Agreement, which Parties have settled through subsequent agreement at the lower end of the range at 1.5°C. At the temperatures we are on track to, there will be devastating existential consequences for vulnerable communities, including the loss of entire island nations. As the IPCC notes, '[t]here is a rapidly closing window of opportunity to secure a liveable and sustainable future for all'.¹⁶⁹ It is imperative that action be taken urgently and in this critical decade up to 2030. But such urgency and ambition is not reflected in prevailing policies, even if it is reflected in conditional pledges and heavily qualified decisions.

This article argues that the drag in the implementation of the Paris Agreement, and mismatch between the collective temperature goal, stated ambition, and real-world action, can be traced to the primacy of 'national determination' in the Paris Agreement, to the fact that States consistently reaffirm 'the nationally determined nature of nationally determined contributions...',¹⁷⁰ and are resistant to efforts to constrain or limit their discretion in any way.

This article argues that while national determination is a crucial part of the design logic of the Agreement, the ability of the international community to reach the long-term temperature goal and to reflect the requisite GHG mitigation ambition in NDCs in the critical decade, hinges on the extent to which national determination and the discretion that flows from it, is constrained and channelled in the operation of the Agreement. The extent to which national determination in the Paris Agreement can be constrained in service of a climate-safe future is proving to be a site of intense interpretative battles. These interpretative battles are playing out in various fora, including in the multilateral negotiations and international climate litigation. This article argues that at the heart of this interpretative battle are competing visions of international law. One that envisions a more constrained role for international law and privileges state consent reflected in narrow textual readings of the Paris Agreement. And the other that envisions a more robust role for

¹⁶⁷ See above 2023 FCCC Synthesis Report of the Technical Dialogue of the First Global Stock Take (n 34) 13, para 77.

¹⁶⁸ See above 2023 FCCC NDCs Synthesis Report (n 23) 29–30, para 151.

¹⁶⁹ IPCC, 2023: *Synthesis Report* (n 42) statement C.1.

¹⁷⁰ UAE Consensus (n 20) 7, para 39.

international law in resolving pressing global challenges, such as climate change, reflected in a holistic, purpose-driven interpretation of the Paris Agreement in light of its normative environment. This article advances this robust, holistic approach that recognizes that norms—including non-binding ones—are woven into the tapestry of international law that guides and constraints states. While obligations elsewhere, such as in human rights treaties interlock with those in the Paris Agreement, even widely shared expectations stemming from norms occupying a spectrum of legal character and ‘best available science’ offer a strong directional pull in interpretation of core GHG mitigation obligations which take us closer to this richer, more purposive vision of international law.

This article drew from this rich normative environment to develop an objective standard for the due diligence expected of states in relation to climate harms, with benchmarks for progression, ambition, and fairness in NDCs. This objective standard and its associated benchmarks can be used by states, national, regional, and international courts, and non-state actors to assess compliance with the Paris Agreement’s obligations of conduct. This will, it is hoped, lead to strengthened NDCs that begin to bridge the gap between current NDCs and global goals, enhance accountability for the choice of NDCs and constrain unbridled subjective national determination in the implementation of the Paris Agreement.

There are limits to what even such a richer interpretative approach can deliver. This approach cannot displace the clear terms of the Paris Agreement,¹⁷¹ impose obligations where none exist, or replace obligations of conduct with obligations of result. It can, however, strengthen, and enhance the interpretation of the Agreement’s provisions in service of the ultimate objective of the UN climate regime to prevent dangerous anthropogenic interference with the climate system. Admittedly, these strengthened obligations might yet be insufficient to decisively resolve the climate crisis. However, such an interpretation reflects a richer account of international legal resolve relating to climate change—one that is premised on an understanding of international law as a seamless web of inter-locking norms—and one that offers much-needed hope that international law might yet align norms, actors, and actions to capture the narrow window of opportunity left to deliver a climate-safe future.

¹⁷¹ In *Interpretation of Peace Treaties with Bulgaria, Hungary and Romania (2nd phase)* (Advisory Opinion of 30 March 1950) [1950] ICJ Rep 65, 221 the court noted that: ‘It is the duty of the Court to interpret the Treaties, not to revise them’.