Keeping Commitments: Examining the New Principles in the Paris Agreement

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Climate change will profoundly impact the physical and human world well into the 21st century and likely beyond. Since the beginning of international climate change negotiations at the 1992 Earth Summit in Rio De Janeiro, there has been a critical need for international environmental efforts to culminate into an effective global response to climate change. With the adoption of the Paris Agreement in 2015, a new diversified approach was attempted relying on more "bottom up" mitigation measures, taking into account national sovereignty to enhance compliance. The issue of differentiation between the parties is now highly relevant. Specifically, the new terms "progression" and "highest possible ambition" help set the scope for the level of differentiation. However, it is not yet known what the exact scope might be. This article examines these new terms by looking at how they appear in the Paris Agreement and how they can be understood in the wider context. To do this, it examines their textual basis, before regarding the wider international legal framework and norms including those found in human rights law and existing environmental law, ending with a brief overview of the role of litigation attempts post-Paris.

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1. INTRODUCTION

There is now a clear scientific consensus that climate change is occurring due to human causes.[1] These changes will pose a major threat to the physical and human world, leading to increasingly difficult challenges for human affairs and the natural environment well into the 21st century.[2] The Intergovernmental Panel on Climate Change (IPCC) in its most recent report states that changes to the earth's climate since the middle of the 20th century have led to an unequivocal warming of the planet,[3] and that it is extremely likely the dominant cause of this is anthropogenic activities.[4] Predictions from the IPCC suggest with high confidence that worldwide temperatures could rise by approximately 3.7°C to 4.8°C by 2100 if anthropogenic greenhouse gas (GHG) emissions continue largely unabated without additional efforts to mitigate the effects.[5] Even more moderate mitigation scenarios predict at least 2.5°C of warming could occur.[6] It is therefore crucial that mitigation efforts take place well beyond current levels.

Within these effects, GHG emissions are uniquely concerning as the dominant cause of anthropogenic climate change.[7] It is for this reason that global attempts at mitigation have mainly focused on stabilising GHG concentrations in the atmosphere.[8] Beginning with the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, global efforts

1 John Cook and others "Consensus on consensus: a synthesis of consensus estimates on human-caused global warming" (2016) 11(4) Environ Res Lett 1 at 1.
2 Bruce Burson (ed) *Climate Change and Migration: South Pacific Perspectives* (Institute of Policy Studies, Victoria University of Wellington, 2010) at 9; Sara Sminzadeh "A Moral Imperative: The Human Rights Implications of Climate Change" (2007) 30(2) HICLR 231 at 231.
3 Intergovernmental Panel on Climate Change "Summary for Policymakers" in TF Stocker and others (eds) *Climate Change 2013: The Physical Science Basis — Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge and New York, 2013) at 4.
4 At 17.
5 Intergovernmental Panel on Climate Change "Summary for Policymakers" in O Edenhofer and others (eds) *Climate Change 2014: Mitigation of Climate Change — Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge and New York, 2014) at 8.
6 At 8.
7 Intergovernmental Panel on Climate Change "Summary for Policymakers" in Core Writing Team and others (eds) *Climate Change 2014: Synthesis Report — Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (Cambridge University Press, Cambridge and New York, 2015) at 5.
8 United Nations Framework Convention on Climate Change 1771 UNTS 107

at reaching this ultimate objective have only been met with limited success. The Kyoto Protocol attempted to change this with legally binding targets, but only for Annex I countries,[9] in what has been termed a "binary" approach to differentiating each state's responsibility.[10] However, this approach did not put an end to compliance issues.[11] With the adoption of the Paris Agreement,[12] the question is now whether the attempt at a more pragmatic and differentiated approach can ensure greater compliance and ultimately lead to more successful mitigation.

Unlike previous agreements, the Paris Agreement focuses on nationally determined contributions (NDCs) using a more domestically centred approach,[13] with a building ambition over time,[14] coupled with enhanced transparency, in part by way of public NDC submissions.[15] This article explores this approach by examining the level of ambition required by parties when making their NDCs. In particular, the article looks at two new terms — "progression" and "highest possible ambition" — to determine what sort of standard these terms could imply for a party to successfully meet its NDC requirements.

As well as these new terms, the Paris Agreement is also the first international climate change agreement to explicitly acknowledge the link between climate change and human rights.[16] It has become increasingly clear that climate change, as well its physical impacts, will also have profound human rights implications.[17] Until recently there was limited recognition internationally of the humanitarian consequences of climate change,[18] partly due to issues around causality and accountability regarding attribution to specific rights violations

(opened for signature 4 June 1992, entered into force 21 March 1994), art 2 [UNFCCC].

9 Kyoto Protocol to the United Nations Framework Convention on Climate Change 2303 UNTS 148 (1998), art 3.1.

10 Christina Voigt and Felipe Ferreira "Differentiation in the Paris Agreement" (2016) 6(1–2) Climate Law 58 at 61.

11 Tracy Bach "Human Rights in a Climate Changed World: The Impact of COP21, Nationally Determined Contributions, and National Courts" (2016) 40 Vt L Rev 561 at 565.

12 Adoption of the Paris Agreement under the United Nations Framework Convention on Climate Change (signed 22 April 2016, entered into force 4 November 2016) [Paris Agreement].

13 Bach, above n 11, at 563.

14 Paris Agreement, above n 12, art 4.3.

15 Article 13.

16 United Nations Human Rights Council *Report of the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment* HRC Res 28/11, A/HRC/31/52 (2016) at [20].

17 Sminzadeh, above n 2, at 231; Stephen Humphreys (ed) *Climate Change and Human Rights: A Rough Guide* (Rough Guides, London, 2008) at 1–3.

18 Burson, above n 2, at 10.

for the establishing of legal duties or obligations. It is, however, becoming increasingly recognised in the literature especially where violations occur more directly from climate change events.[19] With the explicit mention of human rights in the Paris Agreement, this article also examines the impact or influence this might have on these new terms.

The fact that these principles may help define the scope or limits of differentiation seems evident.[20] However, it is less clear what framework or structures might further quantify the principles themselves, especially given their indeterminate nature. Given their likely importance, it would seem obvious that the scope of these terms should be understood. Yet, this early on after the Paris Agreement, there appears to be some confusion, with several commentators either mistaking progression for simply non-regression,[21] or missing out these qualifiers entirely when examining the provisions on NDC pledges.[22]

However, a recent assessment from the Massachusetts Institute of Technology (MIT) has also revealed that reductions based on current levels of proposed cuts from available NDCs at the time of the COP21 meeting in Paris may only result in a 0.2°C decrease in warming by the end of the century.[23] This level of pledges could result in 2°C of global warming being reached within only 15 to 20 years.[24] This highlights the critical importance of understanding these qualifying new terms, given that the success of the Paris Agreement will in part depend on the NDCs being ambitious enough to ensure that successful mitigation strategies are devised and adhered to. Being able to challenge the standard of the NDCs themselves might also prove critical.

This article does not conduct an exhaustive analysis on the full compliance

19 Humphreys, above n 17, at 3.

20 Voigt and Ferreira, above n 10, at 67–68.

21 See generally Jorge E Viñuales *The Paris Climate Agreement: An Initial Examination* (University of Cambridge, Cambridge Centre for Environment, Energy and Natural Resource Governance: C-EENRG Working Papers, December 2015) at [3.2.1]; Legal Response Initiative "Post-Paris Agreement: New Directions?" (14 January 2016) <www.legalresponseinitiative.org>.

22 See generally Michael Burger and others *Legal Pathways to Reducing GHG Emissions under Section 115 of the Clean Air Act* (Sabin Center for Climate Change Law, Columbia Law School; Emmett Institute for Climate Change and the Environment, University of California-Los Angeles School of Law; Institute for Policy Integrity, New York University School of Law, January 2016) at 29.

23 John Reilly and others *2015 Energy and Climate Outlook: Perspectives from 2015* (Massachusetts Institute of Technology: The Joint Program on the Science and Policy of Global Change, 2015) at 2.

24 At 2.

mechanism architecture in the Paris Agreement, or on the merits of linking human rights and climate change law. It also does not attempt to undermine efforts within climate change law to address the urgent need to mitigate GHG emissions, by treating pressing environmental problems as merely human rights issues. Instead, this article examines the deficits in understanding these new principles and how they may be given meaning using existing structures. This article works on the assumption that where similar aims exist in parallel regimes, such as international human rights and climate change law, comparable structures may be used to address similar processes (the means to an end) even if the end goals are themselves different. For example, human rights law excels at establishing obligations between the state and the individual. Looking at the processes in isolation from the problems they seek to address may therefore help guide interpretation of these new terms.

Thus, the purpose of this article is to understand the potential meaning and scope of these new principles in the Paris Agreement. It is argued that given how critically important they may be to the future of the Paris Agreement and climate change mitigation as a whole, analogous principles should be looked to for meaning.

The article begins by outlining the textual meaning of these new terms in the Paris Agreement and the general context they exist in. Next, the potential relevance of human rights structures is described, assessing their application to these principles and mitigation generally. The article also outlines how advocates, lawyers and policy-makers are currently working on building these links and how this process can be assisted post-Paris. As part of this outline, the article also provides a brief overview of the new wave of litigation attempts, addressing how they may be bolstered by the Paris Agreement.

The article concludes that international due diligence standards and human rights principles such as non-regression and progressive realisation provide one possible avenue for giving these new terms some normative structure. It also finds that the explicit mention of progression may in fact bolster the recognition of non-regression in the environmental context. Equally, the inclusion of human rights in the Paris Agreement as well as its domestically centred "bottom up" nature, combined with the enhanced transparency approach, can quantitatively help by serving as evidence of self-imposed commitments. While this sounds promising, it is still too early to know whether these terms will in fact be interpreted favourably or whether enforcement can match commitment.

2. THE PARIS AGREEMENT

The Paris Agreement attempts a more pragmatic approach, creating new mitigation standards at international law for states to adhere to, with varying

levels of obligations.[25] While all countries are obliged to "prepare, communicate and maintain successive" NDCs,[26] developed countries are encouraged to take the lead regarding economy-wide reductions,[27] while other countries are encouraged to, but afforded greater discretion.[28] This approach to differentiated responsibility is unique. Instead of splitting responsibilities between rich and poor nations, the Paris Agreement is more varied.

These efforts, ranging from mitigation, adaptation, assistance, technology transfer, capacity-building and enhanced transparency, are meant to be ambitious and progressive.[29] Each party sets their own NDC,[30] submitting it to the publicly available UNFCCC website. This NDC is then collectively reviewed on a regular basis, with each party to make a new, more ambitious NDC every five years.[31] The effects of this are meant to be that each party is in control of their own NDC, that the NDC itself will be progressively ambitious, and that the transparency mechanisms can mean that other parties will view and assess the progress of other parties and their own. This overall strategy has been termed a "name and encourage" approach,[32] a "pledge and review" system,[33] or from the Paris Agreement itself, an "enhanced transparency framework".[34]

In terms of differentiation, while all parties take on certain obligations, discretion with implementation is afforded through, among other aspects, the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC), and in light of national circumstance.[35] This naturally means that what constitutes an adequate NDC representing a progression beyond previous ones and reflecting its highest possible ambition will vary. Even so, while the quantum and the nature of target might vary, all parties are still held to the same parameters in theory, simply varied by their individual circumstance.

Further, the transparency mechanisms may aid in ensuring that adequately ambitious NDCs are created and adhered to, by way of the open submission

25 Christina Voigt "The Paris Agreement: What is the standard of conduct for parties?" (2016) 26 QIL 17 at 17.
26 Paris Agreement, above n 12, art 4.2.
27 Article 4.6.
28 Article 4.6.
29 Article 3.
30 Bach, above n 11, at 3.
31 Paris Agreement, above n 12, art 4.9.
32 Pamela Falk "Climate negotiators strike deal to slow global warming" (12 December 2015) CBS News <www.cbsnews.com>.
33 Harro van Asselt "International climate change law in a bottom-up world" (2016) 26 QIL 5 at 10.
34 Paris Agreement, above n 12, art 13.1.
35 Article 2.2.

and review process.[36] While it remains unclear at this stage how this review process might function, it should allow each party to assess other parties' commitments as well as assessing their own. Arguably, the public nature of the process may increase pressure on parties to live up to their self-set standards. Together, this process may help to address the gap in accountability in regard to compliance, by providing more evidence to the parties of how they can improve their commitments collectively and individually.[37] In the absence of clearer guidance on how reviews and compliance might operate, understanding these new terms is crucial.

It follows that the standard of conduct required in achieving these variations in output, progressively and to the highest possible standard, still needs to be qualified from a legal perspective. In other words, understanding the meaning of these new principles is key to understanding the level of ambition these parties might be held to. Although arguably these mechanisms holistically might lead to a "race to the top",[38] conversely, they might simply avoid a "race to the bottom".[39] Knowing this minimum, and recognising how to build arguments around their interpretations, may therefore be crucial to ensuring effective mitigation.

This part of the article outlines the new mitigation standards under the Paris Agreement from a textual basis, before conducting a more detailed analysis of these new provisions by looking at the wider context, from general aspects of existing environmental and human rights law. This can be used to theorise their potential scope, regarding how lawyers, advocates or judges might interpret them in future.

2.1 Progression and Highest Possible Ambition

The Paris Agreement attempts to address compliance issues by what has been described as either a purely "bottom up" approach,[40] or a hybrid approach involving "top down" and "bottom up" aspects.[41] This article does not directly assess the merits of each approach. However, it is sufficient to note, for the purposes of this article, that the Paris Agreement places an increased emphasis

36 Article 13.11.
37 Bach, above n 11, at 565.
38 Voigt and Ferreira, above n 10, at 74.
39 van Asselt, above n 33, at 8.
40 Voigt and Ferreira, above n 10, at 63; van Asselt, above n 33, at 2; Bach, above n 11, at 563.
41 Harro van Asselt and others "Maximizing the Potential of the Paris Agreement: Effective Review of Action and Support in a Bottom-up Regime" (Discussion brief building upon "Reviewing Implementation and Compliance under the Paris Agreement" workshop held at Arizona State University, Arizona, 17 May 2016) at 2.

on "bottom up" domestic pledges, rather than "top down" international prescriptions.

Specifically, art 4.2 provides that a party shall "prepare, communicate and maintain successive" NDCs as well as pursuing domestic mitigation measures with the aim of achieving the objectives from each NDC.[42] Additionally, art 4.3 states that each party's "successive nationally determined contribution will represent a progression beyond the party's then current nationally determined contribution and reflect its highest possible ambition …".[43]

2.1.1 Legal standards

As this article has noted, "progression" and "highest possible ambition" indicate what sort of NDC a party is obliged to make. Together these terms provide boundaries on what is expected from each party in the Paris Agreement.[44] From an ordinary reading of progression this term appears as kind of "ratcheting up" of commitments,[45] or at least making each NDC more ambitious,[46] or "beyond previous ones",[47] with the general idea that some form of enhancement should take place with each NDC. Highest possible ambition is the highest reflecting that party's CBDR-RC "in the light of different national circumstances".[48] Together, these two aspects appear to provide further scope on what constitutes highest possible ambition. An additional potential reading is that the divider "and" between the progressive requirement and highest possible ambition could read as separating the qualifiers CBDR-RC and national circumstances from the obligation to progress, so that while highest possible ambition may be modulated by these qualifiers, the NDC must nevertheless represent a progression on previous NDCs.

Irrespectively, it has been argued,[49] that highest possible ambition implies a standard of conduct, with parallels to due diligence in international law. Yet in an overarching sense, there is currently a lack of cohesion in deducing a common standard of due diligence at an international level.[50] Instead it likely operates on a normative basis,[51] with the general idea that the state is to act

42 Paris Agreement, above n 12, art 4.2.
43 Article 4.3.
44 Voigt and Ferreira, above n 10, at 67–68.
45 van Asselt, above n 33, at 15.
46 Bach, above n 11, at 574.
47 Voigt, above n 25, at 21.
48 Paris Agreement, above n 12, art 4.3.
49 Voigt, above n 25, at 28.
50 Duncan French and Tim Stephens *ILA Study Group on Due Diligence in International Law First Report* (International Law Association, 7 March 2014) at 4.
51 At 31.

according to their available resources and relative to the chance of the adverse event in question occurring.[52]

In environmental law this standard has commonly been applied in relation to transboundary issues rather than issues within a state as in human rights law.[53] In examining highest possible ambition in the Paris Agreement, the wording appears aspirational, implying that parties should do "as well as they can".[54] Indeed this shares some similarities to due diligence's "best possible efforts".[55] It has also typically encompassed a number of aspects including the capacity or opportunity of the state to act, the foreseeability of harm, and measures taken by the state to prevent or minimise that harm.[56]

As highest possible ambition qualifies the level of targets to be set, this last aspect of "measures taken" is relevant for providing guidance on the standard of measures needed for a state to meet their due diligence obligations in the event that damage occurs as a result of climate change.

The fact of a state's agreeing to a specified standard can also evidence their understanding of their due diligence requirements.[57] For example, in a sea mining advisory opinion of the Seabed Disputes Chamber of the International Tribunal for the Law of the Sea (*Sea Mining Advisory Opinion*),[58] it was interpreted that the obligation "to ensure" marine protection was an obligation to "exercise best possible efforts", or, "to do the utmost".[59] This is arguably below the plain and ordinary meaning of "ensure" which is to "make sure" that a thing will occur.[60] The Paris Agreement creates a duty to make a NDC, which is signalled by the word "shall" in art 4.2. It also contains an obligation for future progressive NDCs by using the word "will" in art 4.3.[61] The highest possible ambition standard may also be read as "will … represent" creating an equal obligation, giving a mandatory scope to the standard of the performance.[62] So while "represent" lacks some of the specificity of "ensure" the standard might still share similarities to the obligation as outlined in the *Sea Mining Advisory Opinion*.

52 At 31.
53 At 14.
54 Voigt, above n 25, at 25.
55 French and Stephens, above n 50, at 6.
56 Voigt, above n 25, at 27.
57 French and Stephens, above n 50, at 29.
58 Seabed Dispute Chamber of the International Tribunal of the Law of the Sea *Responsibilities and Obligations of States Sponsoring Persons and Entities with Respect to Activities in the Area* (Case No 17, 1 February 2011).
59 At [110] as cited in French and Stephens, above n 50, at 29.
60 Oxford University Press "Definition — 'ensure'" (2016) Oxford Dictionaries <www.oxforddictionaries.com>.
61 Paris Agreement, above n 12, art 4.
62 Article 4.3.

These varying expressions on "best effort" are clearly not precise terms, but they highlight that it is the level of measures taken, rather than their outcomes, which is most important. At the risk of redundancy by tautology, it may be useful to keep the focus on the context of the dispute, when attempting more precise interpretation. For example, the *Sea Mining Advisory Opinion* also noted that the standard could change depending on available scientific evidence.[63] In light of climate change factors, such a consideration may well factor into any standard derived from the expression "highest possible standard" in its context, as well as by taking account of the usual factors of capacity and foreseeability.[64] Should this term be used to argue a failure of standard, these due diligence cases should at least be examined for their relevance to the particular case in question.

Since due diligence in environmental law has leant more towards transboundary issues,[65] it is also useful to look at factors from other regimes. Due diligence is an important part of human rights law, which shares common features with environmental law.[66] It is also useful given that it concerns within-state issues, making it relevant to the new terms in the Paris Agreement. For example, in economic, social and political rights under the concept of "progressive realisation",[67] states are under an obligation to move towards a full realisation of human rights, coupled with an implicit impermissibility to regress.[68] This concept can be separated further, in terms of the aims of the obligation and the effort that needs to be applied in reaching those aims. This article will explore this concept in more depth. However, in regarding progression and highest possible ambition, it is easy to imagine an analogous standard, whereby obligations are divided between the goal of the term itself in producing a sufficiently high NDC and the obligation to keep striving towards reaching that result.

63 Seabed Dispute Chamber, above n 58, at [110].

64 Voigt, above n 25, at 27.

65 See generally French and Stephens, above n 50, at 14; and, for example, *Trail Smelter Arbitration* (United States v Canada) III RIAA (1941); *Corfu Channel case* (United Kingdom of Great Britain and Northern Ireland v Albania) [1949] ICJ Rep 22.

66 French and Stephens, above n 50, at 12.

67 International Covenant on Civil and Political Rights 999 UNTS 171 (opened for signature 16 December 1966, entered into force 23 March 1976), art 2.

68 United Nations Economic and Social Council *Report of the United Nations High Commissioner for Human Rights* ESC Res 48/141, E/2007/82 (2007) at 19.

3. INTERNATIONAL HUMAN RIGHTS LAW AND THE PARIS AGREEMENT

The Paris Agreement is notable as the first international climate change agreement to explicitly mention human rights, which appears in its preamble.[69] It asks each party to "respect, promote and consider" their human rights obligations, as well as "the right to health, the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity".[70]

While this language has been lauded as both significant and ambitious,[71] it is unclear how instrumental it will be given its placement in the preamble rather than in operational provisions. There is a risk of it leading to no real increases in obligations, nor any meaningful changes in protection standards for those facing rights violations due to climate change.[72] Even so, its inclusion could still have normative value, given that laws representing consolidations of existing law may have enhanced legal force.[73] Indeed, its inclusion in the preamble does not create new standards, but rather acknowledges existing rights obligations, which should apply when taking steps to abate the effects of climate change.[74]

Irrespectively, this inclusion remains significant for being the first formal recognition at an international level of the connection between human rights and climate change. Since human rights norms might be relevant in the climate change context,[75] it is worth assessing its inclusion when examining the scope of the new provisions in the Paris Agreement. Indeed, its inclusion has the potential to help address the current gap between pledges and what must be achieved.[76] Beyond the preamble, there may also be implicit inclusions of human rights in other provisions of the Paris Agreement.[77]

Looking to these provisions, art 4.1 states that parties should aim to reach a global emissions peak followed by rapid reductions,[78] "in order to achieve" the

69 Paris Agreement, above n 12, preamble; United Nations Human Rights Council, above n 16, at [20].
70 Paris Agreement, above n 12, preamble.
71 United Nations Human Rights Council, above n 16, at [22].
72 See Benoit Mayer "Human Rights in the Paris Agreement" (2016) 6 Climate Law 109 at 113.
73 See also *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law — Report of the Study Group of the International Law Commission* A/CN.4/L.702 (2006) at [20].
74 United Nations Human Rights Council, above n 16, at [86].
75 At [21] and [45].
76 At [77].
77 See generally Mayer, above n 72, at 115–117.
78 Paris Agreement, above n 12, art 4.1.

temperature goals in art 2.1(a) of keeping global average temperatures "well below 2°C".[79] It follows that the NDC standards in art 4.3, as well as the aim of reaching a peak followed by a reduction in emissions, are both brought within the temperature aims set out in art 2. The objectives of art 2 are in turn put within the context of "sustainable development and efforts to eradicate poverty" in enhancing the implementation of the UNFCCC.[80] Further, the aims of art 4 are put within the same context of "sustainable development and efforts to eradicate poverty" by art 4.1.[81]

Thus, art 4 together with art 2 put the preparation, communication and maintenance of NDCs, which must already represent progression and each party's highest possible ambition, in the context of sustainable development and the goal of poverty eradication. It follows that there may be a connection between the NDC requirements in art 4 and rights obligations related to the enjoyment of a sustainable and healthy environment. By connecting their aims to these rights concepts, these provisions may therefore provide an avenue for connecting the explicit mention of human rights from the preamble with the more operational elements from the mitigation provisions.

Separate to the Paris Agreement's human rights achievement, these links may also have indirect implications for accountability by forming a connection between human rights and climate change. Given that the inclusion of temperature goals was partly driven by the increasing recognition that climate change will likely have human rights implications,[82] these links may be a useful way of holding the state to account.

3.1 Pursuing a Harmonisation of Norms

While it is unclear at this early stage what impact these provisions will have, the human rights inclusion bolsters advocacy efforts for challenging commitments made domestically, improving accountability.[83] Additionally, the norms available from human rights law could provide new grounds for challenging the state on climate change issues, especially those with potential human rights implications.[84] Further, the inclusion of human rights may also aid in formulating legal arguments under the principle of harmonisation, taking advantage of common structures found in both regimes.

Indeed, the United Nations Human Rights Council (UNHRC) has noted the potential for applying human rights law to climate change realities for

79 Article 2.1(a).
80 Article 2.1.
81 Article 4.1.
82 United Nations Human Rights Council, above n 16, at [21].
83 At [85].
84 At [86].

"promoting policy coherence, legitimacy and sustainable outcomes" by informing and strengthening international, regional and national policy-making within a climate change context.[85] Thus, principles from human rights law, it argues, could assist in national and international climate change policy-making.

The uncoordinated nature of different fields in international law,[86] each with their own principles and structures,[87] is more acutely exposed when attempting to solve the hard problems of climate change, given its inherently interconnected nature.[88] The multifarious interactions of climate change effects may instead require a more integrated approach, capable of reflecting the true nature of these problems more accurately.[89] The longer this is delayed, the increasingly more complex managing mitigation and adaptation is likely to become, ultimately threatening sustainable development and multiple fields, including both human and environmental.[90]

As the solutions are likely to be environmental and legal in nature, a maladaptive legal response may in fact aggravate the effects of climate change as a kind of negative legal feedback, similar to environmental feedbacks in nature.[91] If used effectively, however, international law could more positively align with these environmental mechanisms. Linking the aspirations of the UNHRC may thus be crucial for managing these mitigation and adaptation strategies in the most synchronised way.

To this end, enhanced coordination of principles and norms between fields is in line with the principle of harmonisation, identified by the International Law Commission as an accepted international legal principle,[92] and an avenue for greater coordination.[93] Enhanced alignment should be engaged on this basis to assist with treaty interpretation, climate change policy and the underlying human rights norms inherent in sustainable development.[94] This existing international legal approach can ensure that legal adaptation reflects environmental realities.

85 United Nations Human Rights Council *Human Rights and Climate Change* HRC Res 29/15, A/HRC/29/L.21 (2015) at 1–2.
86 *Fragmentation of International Law*, above n 73, at [5].
87 At [6].
88 Intergovernmental Panel on Climate Change, above n 7, at 31.
89 See generally Jane McAdam "Environmental Migration Governance" (University of New South Wales Faculty of Law Research Series, 2009, No 1) at 6.
90 Intergovernmental Panel on Climate Change, above n 7, at 31.
91 David Caron "When Law Makes Climate Change Worse: Rethinking the Law of Baselines in Light of a Rising Sea Level" (1990) 17 Ecology LQ 621 at 652.
92 *Fragmentation of International Law*, above n 73, at [4]; *Fragmentation of International Law: Difficulties Arising from the Diversification and Expansion of International Law — Report of the Study Group of the International Law Commission* A/CN.4/L.682 (2006) at [37].
93 *Fragmentation of International Law*, above n 73, at [26].
94 Mayer, above n 72, at 114.

3.2 The Principle of Non-regression

As this article has identified, progression and highest possible ambition give boundaries to differentiation, but are themselves relatively indeterminate. The principle of non-regression has seen developments through human rights law and more recently into the field of environmental law. Understanding its development and application may assist in giving these new terms a normative structure aiding in their interpretation. As outlined by the International Law Commission, "open or evolving" concepts, especially if: general in nature; intrinsically constructed to allow for further developments either legally or otherwise; or those explicitly setting up "an obligation for further progressive development", may be interpreted using rules established before or after the formation of the treaty they appear in.[95] Additionally, while progression is not the same as non-regression, for something to progress, this at least implies it should not backtrack, but rather move towards a particular aim.[96] Examining the principle of non-regression may therefore be relevant not so much in establishing the obligations arising from the term progression per se, but rather in understanding what standard of conduct may be implied and how various actors internationally or nationally may draw on this or other concepts going forward post-Paris.

3.2.1 Non-regression in human rights law

The principle of non-regression is a key element of international human rights law.[97] The Universal Declaration of Human Rights (UDHR) promotes "better standards of life in larger freedom" and social progress.[98] Additionally, art 30 states that there may be no right, implied or through interpretation, to engage in any activity or perform any act which is aimed at destroying any of the rights

95 *Fragmentation of International Law*, above n 73, at [23].

96 See generally Kate Cook "The Paris Agreement: Onwards and Upwards?" (paper presented to "The Legal Impact of the Paris Agreement on Climate Change" seminar, British Institute of International and Comparative Law, 27 January 2016); Oxford University Press "Definition — 'progression'" (2016) Oxford Dictionaries <www.oxforddictionaries.com>; Oxford University Press "Definition — 'regression'" (2016) Oxford Dictionaries <www.oxforddictionaries.com>.

97 Rebecca J Cook "Reservations to the Convention on the Elimination of All Forms of Discrimination Against Women" (1990) 30(3) Va J Intl L 643; Michel Prieur "Le Principe de Non Régression 'au cœur' des Droits de l'Homme à l'Environnement" (2015) 1(2) Revista Direito à Sustentabilidade 133 at 135.

98 Universal Declaration of Human Rights GA Res 217 A, A/RES/3/217 A (1948), preamble [Universal Declaration of Human Rights].

and freedoms within the UHDR.[99] These implicitly indicate[100] that there is an obligation against regressing, restricting or erasing the rights contained within the UDHR, once they have been recognised.[101] Variations of the non-regression principle are also present in other international human rights instruments including: the European Convention on Human Rights (ECHR) under arts 17 and 53;[102] the International Covenant on Economic, Social and Cultural Rights (ICESCR);[103] and the International Covenant on Civil and Political Rights (ICCPR).[104]

Many core human rights instruments go even further with variations on the concept of "progressive realisation". This positive obligation or duty to fulfil the rights in question is primarily found in the context of economic, social and cultural rights.[105] Similar to non-regression, progressive realisation relates to the state's obligation to realise the rights in question by making immediate efforts to implement and improve them continuously to the maximum extent possible within its available resources.[106] Similarly the UDHR's "progress" may also hint, as argued by legal academic Professor Michael Prieur, at a more positive articulation of an obligation against regression.[107] Prieur also contends that the UDHR's promotion of "better standards of life in larger freedom" can be viewed as extending the obligation to including environmental considerations.

In the Paris Agreement, progression relates to the level of ambition each NDC should represent — namely a ratcheting up of commitments from the last one.[108] Progressive realisation as a human rights standard relates more to the obligation of states to move towards full realisation of human rights, coupled

99 Article 30.

100 Prieur, above n 97, at 135.

101 Michel Prieur "Non-Regression in Environmental Law" (2012) 5(2) SAPIENS 53 at 54.

102 European Convention for the Protection of Human Rights and Fundamental Freedoms 213 UNTS 221 (opened for signature 4 November 1950, entered into force 3 September 1953), arts 17, 53.

103 International Covenant on Economic, Social and Cultural Rights 993 UNTS 3 (opened for signature 16 December 1966, entered into force 3 January 1976), art 2.1.

104 International Covenant on Civil and Political Rights, above n 67, art 2.

105 For example, International Covenant on Economic, Social and Cultural Rights, above n 103, art 2.1; Convention on the Rights of the Child 1577 UNTS 3 (signed 20 November 1989, entered into force 2 September 1990), art 4; Convention on the Rights of Persons with Disabilities 2515 UNTS 3 (opened for signature 13 December 2006, entered into force 3 May 2008), art 4.2.

106 United Nations Economic and Social Council, above n 68, at 4–6.

107 Universal Declaration of Human Rights, above n 98, preamble; Prieur, above n 97, at 135.

108 Voigt, above n 25, at 21; van Asselt, above n 33, at 15.

with an implicit impermissibility to regress.[109] In this sense, while the former might aim at enhancing commitments every NDC, the latter only obliges the standards to be recognised expeditiously according to maximum available resources, but crucially, not in a compounding way. So while states might face the same human rights obligations, there may be different expectations as to their ability to realise those rights according to their respective resource availabilities.[110] In contrast, progression could imply that the obligations themselves should be continuously increasing, rather than having a fixed maximum.[111] The qualification to this of course is that the ultimate objective of the UNFCCC is to keep warming at a level that would prevent dangerous anthropogenic climate change,[112] with the Paris Agreement furthering this objective by seeking to keep temperatures "well below 2°C" and to pursue efforts to limit the increases to 1.5 °C.[113] At the same time, the science indicates that mitigation efforts are needed beyond current efforts.[114] Further, art 4 recognises that reaching the temperature aims needs to be in "accordance with best available science".[115] So even with these aims, physical realities may dictate a moveable maximum.

Under this view, progressive realisation likely asks for more than mere non-regression where this could lead to inaction,[116] while permitting a state some leniency in realising higher levels of the same right over time.[117] This is still likely below the concept of progression envisaged by the Paris Agreement, where the aim is more that the obligation itself will increase over time, with each new NDC, even if there may not necessarily be an obligation to achieve the commitments themselves.[118]

Alternatively, progression might be viewed in similar terms to progressive realisation, by separating the goals of the obligation itself from the obligation towards an ongoing effort in reaching the eventual goals. In other words, it may be less relevant what the maximum aim of each principle is and more relevant to assess whether the effort in reaching the aim was adequate enough to meet the standard. Under this view, customary international law relating to

109 United Nations Economic and Social Council, above n 68, at 19.
110 At 4.
111 Voigt and Ferreira, above n 10, at 67–68 and 72–73.
112 UNFCCC, above n 8, art 2.
113 Paris Agreement, above n 12, art 2.1(a).
114 Intergovernmental Panel on Climate Change, above n 5, at 8 and 10; see also "*Recognizing* the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge" in the Paris Agreement, above n 12, preamble (emphasis in original).
115 Paris Agreement, above n 12, art 4.1.
116 United Nations Economic and Social Council, above n 68, at 5.
117 At 4.
118 Voigt, above n 25, at 19.

progressive realisation may be of relevance in establishing the level of effort or standard implied by the terms in the Paris Agreement. Thus, it would be less important that progressive realisation works towards a fixed maximum, while for progression the maximum could be moveable. Like progressive realisation, progression implies a positive obligation — namely to produce a NDC which will represent a progression beyond previous NDCs.[119] In this way, separating the end goal from the means to the end reveals a potential commonality between these principles.

Examining the minimum obligation for fulfilment of progressive realisation shows that it likely requires taking "all possible measures".[120] This bears similarities to the qualifier "highest possible ambition". Inspecting "possible" further, this clearly implies that the obligation cannot be "impossible". Indeed, the Vienna Convention on the Law of Treaties (Vienna Convention), which deals with, among other things, the effect of treaties, shows that there is a presumption that the obligations of a treaty will not be impossible for a party to perform, as long as the party has not breached any obligations to lead to the impossibility.[121] This standard, therefore, relates to the effort taken by the party, or the attempt they have made. Like progression, progressive realisation depends on the capacity of the party and not their intent or policies.[122] It follows that the standard each party is held to is not the component which differs, but rather the quantum of the outcome itself. Viewed in this way, it may be arguable that while the highest possible ambition of a party in making a progressive NDC is graduated by CBDR-RC and national circumstances, these cannot themselves be used as an excuse to lower the standard of progression, but rather as evidence of why the target or outcome itself may need to be reduced.

3.2.2 Non-regression in environmental law

As well as its foundations in human rights instruments, the non-regression principle is increasingly entering the context of environmental law, particularly in relation to sustainable development.[123] Examining its expansion from human rights law to the environmental sphere may also provide guidance for establishing the scope of the new principles in the Paris Agreement.

119 Paris Agreement, above n 12, art 4.3.
120 French and Stephens, above n 50, at 17.
121 Vienna Convention on the Law of Treaties 1155 UNTS 331 (opened for signature 23 May 1969, entered into force 27 January 1980), art 61 [Vienna Convention on the Law of Treaties].
122 French and Stephens, above n 50, at 18.
123 See generally Prieur, above n 101, at 54.

Non-regression has gained significant traction in academic circles[124] as a mechanism for preventing environmental reversals in the face of adverse political or economic circumstances,[125] and crucially by acting as a safeguard for enhancing sustainable development in line with environmental protection theories of preserving and protecting the environment.[126]

Even so, full recognition remains limited, possibly due to political implications,[127] concerns over its quasi-constitutional nature,[128] as well as fundamental issues regarding potential encroachment on national sovereignty.[129] While a detailed examination of its pathway to recognition is beyond the scope of this article, tracing aspects of its legal adaptation into the environmental sphere can offer guidance for progression and highest possible ambition post-Paris.

Non-regression has emerged in the environmental context in several ways as identified by Professor Michel Prieur,[130] including through the theory of mutability of laws, legal theories from human rights law, existing and emerging theories in environmental law, European Union laws, through domestic sources such as in constitutions and in national laws, as well as through emerging jurisprudence.

(i) Mutability of laws

To be most effective, laws should be coherently linked to the problems they are meant to fix, and this includes adaptation of laws if necessary. As discussed, maladaptive legal responses can, as with negative natural inputs, aggravate the effects of climate change if they do not adequately address the environmental challenges.[131] Given the unpredictable nature of climate change effects and the changeable nature of increasing scientific knowledge, the theory of mutability of laws seems particularly crucial for ensuring that sustainable development goals can be met and enforced. Indeed, the Vienna Convention states in art 27 that states cannot refer to inadequate national laws to excuse them from

124 For example, Christine Trenorden; Emilie Chevalier; Jean-Pierre Marguénaud; Michel Prieur.

125 Prieur, above n 101, at 53.

126 At 54–55.

127 At 54.

128 See, for example, James L Huffman "The EU's 'Non-Regression' Gambit: Environmentalists have found a way to permanently secure their agenda: laws that can't be repealed" (11 November 2011) The Wall Street Journal <www.wsj.com>.

129 Prieur, above n 101, at 53.

130 See generally Prieur, above n 101; Christine Trenorden "Judicial Review and the Principles of Ecological Sustainable Development: Where are we Going?" (Australian Environmental Law Digest, Special Edition, NELA Conference 2014, ISSN: 2203-935X, December 2014) at 12.

131 Caron, above n 91, at 652.

compliance with treaty obligations.[132] Progression implies at least not regressing or backtracking. Similarly, laws should be kept, including domestically, which at least prevent this from happening. A failure to reach minimum standards could therefore provide an avenue for challenging governments.

(ii) Legal theories from human rights law

In relation to human rights theory this article has outlined how the UDHR promotes "better standards of life in larger freedom" and social progress.[133] This could have an environmental component when considering that problems in a person's environment may impact their standard of living.[134] Clearly, there may also be benefits for interpreting non-regression or indeed progression using human rights theories, given that enhancing mitigation efforts will be necessary beyond current efforts to address the already existing threats from climate change.[135] Human and environmental rights philosophies already share the similar aim of preventing a diminution in their respective protection standards. It may therefore be useful to examine where common standards can inform the interpretation of the new principles in the Paris Agreement. Given the Paris Agreement mentions human rights, NDCs could be challenged where it can be shown that reducing environmental standards would lead to an unacceptable regression of human rights under the human rights agreement or domestic law in question.

For example, the American Convention on Human Rights (ACHR), in its chapter on economic, social and cultural rights, asks states to adopt measures "progressively" to fully realise these rights.[136] Also, the Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights (San Salvador Protocol) requires states to promote the "protection, preservation, and improvement" of the environment, thereby recognising a right to a healthy environment.[137] Additionally, the official commentary from the Organization of American States on the standards required for preparing reports under the San Salvador Protocol states that

132 Vienna Convention on the Law of Treaties, above n 121, art 27.

133 Universal Declaration of Human Rights, above n 98, preamble.

134 Prieur, above n 97, at 135.

135 Intergovernmental Panel on Climate Change, above n 5, at 8 and 10; see also "*Recognizing* the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge" in the Paris Agreement, above n 12, preamble (emphasis in original).

136 American Convention on Human Rights "Pact of San José, Costa Rica" 1144 UNTS 123 (signed 22 November 1969, entered into force 18 July 1978), art 26.

137 Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights ("Protocol of San Salvador") (San Salvador, 17 November 1988) OAS Doc. OAS/Ser.L/V/I.4 rev. 13 (entered into force 16 November 1999).

regressive measures mean "any provision or policies whose application entails a backward step in the enjoyment or exercise of a protected right".[138] Thus, under this Protocol any provision or policy, including those regarding environmental standards, may constitute a regression under human rights grounds.

The commentary also observes that full implementation of the San Salvador Protocol requires each party to take progressive measures — meaning to be proactive and avoid inaction. It also notes that regressive measures are "in principle" incompatible with this Protocol.[139] In other words, the commentary recognises that progression is indeed distinct from non-regression.

Similarly, the Paris Agreement contains the obligations progression and highest possible standard, as well as an explicit mention of human rights in the preamble and implicitly within art 4, through incorporating the aim of sustainable development and through recalling art 2.[140] Included in the human rights provision from the preamble, parties are also asked to respect, promote and consider their obligations regarding the right to health and people in vulnerable situations.[141] However, there is no explicit mention of a right to a healthy environment. Even so, it could be argued that the obligation on parties to submit NDCs representing a progression from previous efforts can be linked to customary human rights law, where failing to act to mitigate the effects of climate change could lead to an unacceptable regression of human rights standards.

As an example, such an argument could be as follows. The commentary to the San Salvador Protocol observes that a difference exists in taking progressive measures compared with taking non-regressive measures. Also, under the international legal principle of harmonisation, there should be a mutual accommodation between different legal regimes for implementing existing norms.[142] Additionally, the inherently interconnected nature of climate change effects[143] requires a progressive response.[144] Further, "open or evolving" concepts, especially if explicitly setting up progressive obligations for further developments, may be interpreted using rules established before or after the formation of the treaty they appear in.[145] Thus, it could be argued that the

138 Permanent Council of the Organization of American States *Standards for the preparation of periodic reports under Art. 19 Protocol of San Salvador* (OEA/Ser.G.CP/CAJP-222604, 17 December 2004) at [11].
139 At [11].
140 Paris Agreement, above n 12, art 4.1.
141 Preamble.
142 *Fragmentation of International Law*, above n 73, at [26].
143 Intergovernmental Panel on Climate Change, above n 7, at 31.
144 See "*Recognizing* the need for an effective and progressive response to the urgent threat of climate change on the basis of the best available scientific knowledge", Paris Agreement, above n 12, preamble (emphasis in original).
145 *Fragmentation of International Law*, above n 73, at [23].

textual context within which art 4.3 appears, as well as the general normative context these terms appear in, implies that they are linked to a right to a healthy environment, or at least that they need to take account of human rights to adhere to a sufficient minimum standard.

Irrespectively, this demonstrates several avenues that could be explored based on human rights theory domestically or internationally to assist in interpreting the scope of these new terms in the Paris Agreement.

(iii) Arguments from environmental law

Under existing international environmental law, the 1992 Rio Declaration on Environment and Development (1992 Rio Declaration) signifies an early emergence of an environmental non-regression principle.[146] In its preamble, it adopts the idea of an interdependence between humans and nature,[147] while throughout, it recognises the role of sustainable development.[148] More importantly, principle 11 states that parties should enact effective environmental legislation reflecting the environmental and developmental context this legislation is to apply in.[149]

Additionally, in the context of economic, social and cultural rights, progressive realisation under art 2 of the ICESCR places a duty on parties to take steps towards full realisation of human rights,[150] coupled with an implicit impermissibility to regress.[151] Viewed within the wider aims of climate change law of preventing dangerous interference with the climate system,[152] as well as looking after and restoring this system,[153] and together with the 1992 Rio Declaration's recognition of the integral role of sustainable development, emerges a principle of non-regression. It suggests an ongoing obligation of states to enact environmental laws effective in their context to prevent any further deterioration of environmental standards and which "ensures the reduction of GHG emissions to desired levels", as argued by a group of legal

146 Report of the United Nations Conference on Environment and Development A/CONF.151/26 (Vol. I) (1992) [1992 Rio Declaration].
147 Preamble.
148 See generally 1992 Rio Declaration.
149 Principle 11.
150 International Covenant on Civil and Political Rights, above n 67, art 2.
151 United Nations Economic and Social Council, above n 68, at 19.
152 UNFCCC, above n 8, art 2.
153 See, for example, parties are to "conserve, protect and restore the health and integrity of the Earth's ecosystem", 1992 Rio Declaration, above n 146, principle 7.

experts in adopting the Oslo Principles in 2015,[154] where they set out these principles based on multiple existing areas of law.[155]

The Paris Agreement's new progressive standard for NDCs obligates parties to set up increasing individual standards. Against this normative background these new terms could bolster the legal arguments mentioned above, as an explicit recognition of the obligation to set progressive NDC standards in the context of sustainable development.

Some other international treaties go further. For example, in the North American Agreement on Environmental Cooperation (NAAEC), parties must ensure that their laws and regulations provide high levels of environmental protection as well as strive to continue improving them.[156] More importantly, the NAAEC also provides that the governing body of the Commission under the Agreement "shall strengthen cooperation on the development and continuing improvement of environmental laws and regulations … without reducing levels of environmental protection".[157]

While the NAAEC is a trilateral as opposed to a multilateral agreement, it is still an example of a treaty involving large nations seeking to prohibit the regression of environmental protection levels, as well as asking parties to continually improve their environmental laws and regulations. In terms of international coherence,[158] this treaty enters international customary law since it reflects similar environmental aims in the same general legal regime as the Paris Agreement. As well as bolstering the recognition of non-regression in the context of sustainable development, it enters the general body of norms and may serve as a tool for policy-makers and lawyers, at least in these three countries,[159] as a way of giving normative value to the new and open principles in the Paris Agreement, which can benefit from this innovative interpretation.[160]

Unfortunately, since the 1992 Rio Declaration there has been insufficient progress towards sustainable development and ensuring accountability.[161]

154 Antonio Benjamin and others *Commentary to the Oslo Principles on Global Climate Change Obligations* (Expert Group on Global Climate Obligations, 1 March 2015) at 2–4.

155 Bach, above n 11, at 582.

156 North American Agreement on Environmental Cooperation, United States–Canada–Mexico 32 ILM 1482 (signed 14 September 1993, entered into force 1 January 1994), art 3.

157 Article 10.3.

158 See generally *Fragmentation of International Law*, above n 73, at [20].

159 At [21].

160 At [23].

161 United Nations Conference on Sustainable Development (Rio+20) *Agenda Item 10 Outcome of the Conference: The Future We Want* A/CONF.216/L.1* (2012) at [19]–[20] [Rio+20 *The Future We Want*].

Acknowledging this,[162] the document *The Future We Want* produced leading up to the United Nations Conference on Sustainable Development (Rio+20 Conference) in 2012 stated that it was critical not to "backtrack" from the commitments made at the Rio+20 Conference,[163] including moving towards the full implementation of the 1992 Rio Declaration.[164] Read together with the 1992 Rio Declaration, this document acknowledges a desire to not backtrack from the duty on states under the 1992 Rio Declaration to enact effective environmental legislation reflecting the environmental and developmental context it is to apply in.[165]

Professor Michel Prieur argues that an examination of the background to the document reveals the true meaning of "do not backtrack" as "non-regression".[166] Indeed, the original recommendation supported by a large portion of the 180 countries involved was "non-regression",[167] simply reworded to "backtrack" in order to achieve consensus from a handful of dissenting countries.[168] Additionally, the parties at the Rio+20 Conference reaffirmed their commitment to the sustainable development action plan Agenda 21,[169] as well as acknowledging subsequent agreements and commitments since then.[170] *The Future We Want* document also recognises non-regression by its reference to the Rio+20 Declaration on Justice, Governance and Law for Environmental Sustainability, which explicitly refers to the principle of non-regression.[171]

While *The Future We Want* is by no means binding on states, it nevertheless evidences an emergence of non-regression in environmental law. This document, in recognising the insufficient progress since the 1992 Rio Declaration, also notes a "need to accelerate progress" to address uneven development, including sustainable development,[172] giving further acknowledgement of a more progressive conception as now found in the Paris Agreement. The effect is that progression may help formalise non-regression in the environmental context,

162 At [19]–[78].
163 At [20].
164 At [15]–[16].
165 1992 Rio Declaration, above n 146, principle 11.
166 Prieur, above n 101, at 55.
167 See Recommendation 12, "Le document final … devra … reconnaître le principe de non régression du droit de l'environnement", Laurence Rossignol *Rio+20: l'emergence d'un nouveau monde* (The French Senate, Report No 545, May 2012) at 12 (Translation: "The final document … will … recognise the principle of non-regression of environmental law" in *Rio+20: The emergence of a new world*).
168 Prieur, above n 101, at 55.
169 Rio+20 *The Future We Want*, above n 161, at [16] and [22].
170 At [22].
171 Trenorden, above n 130, at 12–13; World Congress on Justice, Governance and Law for Environmental Sustainability "Rio+20 Declaration on Justice, Governance and Law for Environmental Sustainability" (17–20 June 2012).
172 Rio+20 *The Future We Want*, above n 161, at [19].

and non-regression may provide a normative background for the interpretation of progression.

(iv) Regional and domestic sources

The European Union already recognises the principle of non-regression in an environmental context. Specifically, art 2 of the Treaty of Lisbon states that the Union shall "work for the sustainable development … and a high level of protection and improvement of the quality of the environment".[173] This, Professor Michel Prieur argues, in the context of the accumulated body of European Union law, makes non-regression an integral component of environmental protection.[174] Indeed, the European Parliament has also linked non-regression to fundamental rights including in the context of environmental protection.[175] These inclusions signify further normative recognition of protection against further reductions of environmental protection standards.

In terms of constitutional arrangements, the protection of existing individual rights by eternal protection clauses may also, Professor Michel Prieur argues,[176] be used to protect against regression of fundamental human rights or for environmental protection. These provisions could be used in the context of the Paris Agreement by lawyers and policy-makers as a way of ensuring adherence to NDC pledges. Similarly, jurisprudence around the world can provide another avenue through which laws and policies can be challenged in regard to the diminution of environmental laws.[177] Together, these foundations for the emergence of non-regression in the environmental context may provide a structure for interpreting progression and highest possible ambition in the Paris Agreement.

3.2.3 Moving forward

In these early stages, it remains unclear what the scope of the new terms in the Paris Agreement will be, or whether they will contribute to the more ambitious responses envisioned.[178] Nor is it a forgone conclusion that progression

173 Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community (13 December 2007, entered into force 1 December 2009), art 2.3.

174 Prieur, above n 101, at 54.

175 *European Parliament resolution of 29 September 2011 on developing a common EU position ahead of the United Nations Conference on Sustainable Development (Rio+20)* P7_TA(2011)0430 (2011) at [97].

176 Prieur, above n 101, at 55.

177 At 55.

178 See, for example, Voigt and Ferreira, above n 10, at 72–73.

requires ever-increasing pledges,[179] above non-regression in human rights and increasingly environmental law. This article has argued that looking to these sources may nevertheless provide some insight into their potential normative scope. Even with the extension of the non-regression principle into the field of climate change mitigation, the core structures of non-regression from human rights foundations have remained. Similarly, applying common aspects to the new principles may allow the use of existing norms to interpret these terms. Given their similar aim of preventing setbacks, using common principles could bolster the effect of both. Success will likely depend on engaging multiple areas of law, including human rights and environmental law.[180]

While concerns have been raised over how the transparency reporting of NDCs might influence countries in their NDC reporting,[181] there are some early promising signs. In New Zealand the office of the Minister for Climate Change Issues noted in its Cabinet Paper from June 2015 on New Zealand's intended contribution to the next climate change agreement several months before Paris: "If we don't submit an INDC [Intended Nationally Determined Contribution] that represents *progression* we risk losing our status as a 'responsible global citizen'."[182] This supports the view that the enhanced transparency afforded by the new agreement has the potential for influencing the behaviour of governments.[183] It remains unclear whether this thinking will influence other countries, or indeed whether it will lead to operative changes in New Zealand's commitments beyond its brief acknowledgement. Even so, its mention and the acknowledgement of progression are both welcome signs.

In another recent development, the World Environmental Law Congress, comprising a large number of judges and environmental legal experts from around the world, met for their inaugural congress in late April 2016 in Rio de Janeiro, producing a World Declaration on the Environmental Rule of Law, comprising a set of principles for improving international environmental law by promoting an environmental "rule of law".[184] Critically, the principles listed

179 See generally possibilities expressed by Voigt, above n 25, at 21 and van Asselt, above n 33, at 15.

180 Benjamin and others, above n 154, at 2–4.

181 van Asselt, above n 33 at 8.

182 Office of the Minister for Climate Change Issues "New Zealand's intended contribution to the new global climate change agreement" (June 2015) at 4 (emphasis added).

183 Bach, above n 11, at 565.

184 World Environmental Law Congress "About the Congress: Environmental Rule of Law, Justice and Planetary Sustainability" (27–29 April 2016) <www.welcongress.org>; World Environmental Law Congress "Inauguration of the Global Judicial Institute for the Environment" (21 June 2016) <www.welcongress.org>.

under "General and Emerging Substantive Principles" set out non-regression and progression as distinct principles:[185]

> **Principle 12 Non-regression**
> States, sub-national entities, and regional integration organisations shall not allow or pursue actions that have the *net effect of diminishing* the legal protection of the environment or of access to environmental justice.
>
> **Principle 13 Progression**
> In order to achieve the *progressive* development and enforcement of the environmental rule of law, States, sub-national entities, and regional integration organisations shall *regularly revise and enhance laws and policies* in order to protect, conserve, restore, and ameliorate the environment, *based on the most recent scientific knowledge and policy developments*.

Moving forward, this demonstrates the potential for a growing recognition that progression means something additional to non-regression. As this article has outlined, this is a worthwhile development given that recognition of non-regression has tended to be implicit in the environmental and sustainable development context. Now, however, progression and highest possible ambition are part of an explicit obligation in the Paris Agreement at least in terms of NDCs and in the context of sustainable development aims. In this way, recognition could even be a "two-way street". Formalising these principles could bolster recognition of the already implicit concept of non-regression in the environmental sphere by demonstrating at a domestic level the standard of commitment voluntarily agreed to. This could then be used, for example, where judges are reviewing issues of domestic compliance. On the other side, these principles may also draw upon the foundations of the concepts in human rights and environmental law, aiding in their interpretation to the specific case in question, given their open and by their very nature evolving status as new concepts.

This section has highlighted how the principles of progression and highest possible ambition are open concepts implying at least a non-regressive standard, whereby parties should not worsen their commitments nor allow them to stagnate.[186] There may be potential for these terms to mean more of a ratcheting up of commitments,[187] and for analogies to be drawn between them and progressive realisation and the standards found in various types of due diligence at international law. With time, these connections, and possibly others,

185 World Environmental Law Congress "World Declaration on the Environmental Rule of Law" (12 February 2017), principles 12 and 13 (emphasis added).
186 See generally Cook, above n 96.
187 van Asselt, above n 33, at 15.

will need to be made to enable the Paris Agreement to become an effective instrument for ensuring compliance.

4. JURISPRUDENCE

As with non-regression, the jurisprudence surrounding climate change litigation can guide interpretation of the new principles in the Paris Agreement, by looking to different approaches already used around the world, especially given their indeterminate nature.[188] Initially, a "first wave" of litigation sought to use domestic law and norms as the source of claim,[189] while a "second wave" attempted engaging a combination of domestic and international sources,[190] with the Oslo Principles mirroring this second wave of litigation.[191]

4.1 *Urgenda Foundation v the State of the Netherlands*

In the Netherlands, *Urgenda Foundation and 886 citizens v the State of the Netherlands* (*Urgenda* case) was an important decision handed down in 2015 by the District Court of The Hague in favour of the plaintiffs, the Dutch Urgenda Foundation (Urgenda) against the State of the Netherlands (Dutch government).[192] This case is instrumental for linking international climate change GHG pledges made by a government to human rights.[193] While this claim also involved aspects of local laws, including the Dutch civil code,[194] its examination of the pledges made by the Dutch government are of particular importance in light of the Paris Agreement.

Article 21 of the Dutch Constitution, which states that the government is to "keep the country habitable and to protect and improve the environment", was cited, with the Court finding that the Dutch government owed a duty of care.[195] Noting the discretion afforded by this provision, however, it turned to answering what standard of care amounted to a neglect of the state's duty. This involved the Court considering international legal principles and norms. The scope of factors included the nature, extent and change of climate change

188 At 14.
189 Bach, above n 11, at 582.
190 At 582.
191 At 582.
192 *Urgenda Foundation and 886 citizens v the State of the Netherlands* Rechtbank Den Haag, 24 June 2015 C/09/456689 / HA ZA 13-1396 (English translation) at [5.1]–[5.5].
193 At [4.1] and [4.48].
194 At [3.2], [4.4], [4.5] and [4.6].
195 At [4.36].

effects, as well as looking to the response taken by the state, with due regard for the latest scientific knowledge, among other factors.[196]

The voluntary pledges were made under the Cancun Agreement 2010 and the Copenhagen Accord.[197] The Court in assessing these, acknowledged that while international law was not itself binding on the Netherlands, it could provide a framework for establishing a standard to hold the Dutch government to account under domestic law,[198] treating it as a factor for determining the scope of the duty of care.[199] Annex I parties, which included the Netherlands, took a voluntary pledge at the Cancun Climate Conference, urging them to raise their level of ambition for GHG reductions with the view of reducing them to 25 to 40 per cent below 1990 levels by 2020.[200] The Court concluded that the Netherlands had committed to reducing their targets by a set amount, thus allowing Urgenda to argue that the issue would likely require further cuts to reach these targets, meaning they had failed to meet their duty of care.[201] Thus in finding negligence in the standard of care by the Dutch government, it was sufficient that the targets did not match the amount actually needed to mitigate the effects of climate change, implicitly acknowledging a changeable and likely increasing standard.

With the adoption of the Paris Agreement countries are now under an obligation to make NDCs representing a progression and made to the highest possible standard. They are also obliged to take measures domestically with the aim of reaching these commitments. Although there is no formal obligation to implement the entire NDC pledge itself,[202] if a court was to take similar factors into account as the *Urgenda* case, NDCs could be used as evidence of whether the appropriate standard has been adhered to,[203] or evidence of a disparity between the pledge and the measures taken.

4.2 *Asghar Leghari v Federation of Pakistan*

In *Asghar Leghari v Federation of Pakistan* (*Leghari* case), the Lahore High Court in Pakistan also took a more combined approach to issues concerning Pakistan's National Climate Change Policy, when it ordered the government to implement its domestic commitments by setting up a Climate Change

196 At [4.63].
197 At [2.49] and [2.63].
198 At [4.63].
199 At [4.55].
200 At [4.23].
201 At [4.32], [4.52]–[4.93].
202 Voigt, above n 25, at 19.
203 Sara Stefanini "Next Stop for Paris Climate Deal: The Courts" (11 January 2016) Politico <www.politico.eu> as cited in Bach, above n 11, at 594.

Commission. Although domestic in nature, the Court in its judgment noted "the international environmental principles of sustainable development, precautionary principle, environmental impact assessment, inter and intra-generational equity and public trust doctrine".[204] While this is another important decision for international climate change law, it is unclear how this case may have differed had it been decided after the adoption of the Paris Agreement, given that the Court did not elaborate on these concepts. Even so, this case is important for its linking of environmental damage to fundamental human rights including the right to life and right to human dignity. With the Paris Agreement now explicitly including human rights, future cases may draw upon this link when considering the scope of the standards for assessing whether the NDCs produced conform with minimum obligations.

4.3 Petition to the Philippines Human Rights Commission

In the Philippines a collection of civil societies led by Greenpeace Southeast Asia and the Philippine Rural Reconstruction Movement filed a petition (Philippines petition) to the Philippines Human Rights Commission against the respondents, representing all the investor-owned Carbon Majors. In this petition, they argued that the Carbon Majors had failed to reduce emissions even though they had knowledge of its impacts on climate change and human rights.[205]

The Philippines petition was initiated on human rights grounds rather than environmental. Even so, it contains similar relevant aspects. For example, it asserts that the violations are based in part on UNHRC resolutions,[206] United Nations guiding principles,[207] and a letter from the UNHRC to the UNFCCC.[208] Although these sources are usually soft law, art 2 of the Philippine Constitution states that it "adopts the generally accepted principles of international law as part of the law of the land".[209]

In terms of the Paris Agreement, this highlights the benefits to using domestic law alongside international law to bring international standards to bear on a domestic dispute. Additionally, given that the Paris Agreement explicitly

204 *Asghar Leghari v Federation of Pakistan* (2015) WP No 22501/2015 (Lahore High Court) at [7].

205 Greenpeace Southeast Asia and Philippine Rural Reconstruction Movement "Petition: To the Commission on Human Rights of the Philippines Requesting for Investigation of the Responsibility of the Carbon Majors for Human Rights Violations or Threats of Violations Resulting from the Impacts of Climate Change" Greenpeace <www.greenpeace.org> at 11 and 17.

206 At 7.

207 At 9.

208 At 8.

209 The Constitution of the Republic of the Philippines 1987 (Philippines), art II.

acknowledges human rights within a climate change context, this once again shows how constitutional or national provisions might be used in conjunction with the Paris Agreement by lawyers and policy-makers, as a way of ensuring adherence to their NDC pledges.

4.4 Litigation Post-Paris

A common theme emerging from these cases is of arguments using domestic law, but also incorporating international legal principles and norms. In future, if a court was to take similar factors into account as in the *Urgenda* case, NDCs could provide useful evidence of whether the appropriate standards had been adhered to.[210] The explicit inclusion of human rights in the Paris Agreement may also assist applicants looking to link climate change to human rights harms as in the *Leghari* case and the Philippines petition. Naturally, each case would vary between jurisdictions and depend on the local laws in question. However, the domestic nature of NDC pledges could help to increase an applicant's chances of success in utilising their state's domestic laws to challenge that state's pledges.

4.4.1 Thomson v The Minister for Climate Change Issues

An early example of how litigation attempts may evolve is a recent application filed in 2015 by law student Sarah Thomson in New Zealand seeking a judicial review of the country's targets under the Climate Change Response Act 2002.[211] This application is notable in not being based on negligence (as available in Dutch law), or an environmentally based duty of care.[212] Instead, the New Zealand Climate Change Response Act provides that the Minister for Climate Change Issues (the Minister) is required under s 224 to set a domestic target for the reduction of greenhouse gas emissions.[213] Section 225 of the Act also requires that the Minister review this target following the publication of any IPCC report.[214] In addition, the Minister may also have regard to any other matters they consider relevant.[215]

210 Sara Stefanini "Next Stop for Paris Climate Deal: The Courts" (11 January 2016) Politico <www.politico.eu> as cited in Bach, above n 11, at 594.

211 *Thomson v The Minister for Climate Change Issues* (10 November 2015) Statement of Claim (HC) at [91] [Original Statement of Claim]; *Thomson v The Minister for Climate Change Issues* [2017] NZHC 733 at [1].

212 Kennedy Warne "Sarah vs the State: Government's climate targets 'unreasonable'" (November–December 2015) New Zealand National Geographic <www.nzgeo.com>.

213 Climate Change Response Act 2002, s 224(1).

214 Section 225(3)(a).

215 Section 225(3)(b)(ii).

In her application, Thomson raised four causes of action relating to a target set by the Minister in 2011 (2050 target) and a subsequent "provisional target" set in 2015 (2030 target).[216] The first cause of action raised the issue of whether the Minister was required to review the 2050 target (or future targets generally), following the release of the 5th IPCC report (or other IPCC reports thereafter).[217] The second and third causes of action related to the 2030 target that was eventually tabled as New Zealand's first NDC,[218] and raised the issues of whether the Minister had failed to take into account several, arguably, relevant considerations in setting the target,[219] and related to this, whether the decision to set the target at the level set was irrational or unreasonable.[220] The fourth cause of action concerned whether a specific level of target was required for the 2050 target to be lawful.[221]

However, on 2 November 2017, Mallon J in the High Court made her decision dismissing Thomson's judicial review application.[222] Her Honour found in regarding the first cause of action that the Minister was required to turn their mind to the 4th and 5th IPCC reports in question, to assess whether there was any material difference in these reports.[223] For the second and third causes of action, however, her Honour was not persuaded that the Minister had made any "reviewable error" in setting their targets, noting that in her view the international framework had been followed.[224] From these findings, her Honour deemed it unnecessary to consider the fourth cause of action.[225]

Although this judicial review application was unsuccessful, the case provides useful early insight into how the principles in the Paris Agreement could be interpreted or assist future domestic efforts going forward.

Looking first to the parties' submissions, although Thomson's original statement of claim was filed before the Paris Agreement, her amended claim and the Minister's amended statement of defence were both filed after the Agreement had entered into force and been ratified by New Zealand.[226] In the amended submissions, the parties referred to arts 3 and 4 of the Paris Agreement

216 *Thomson v The Minister for Climate Change Issues* [2017] NZHC 733 at [48].
217 At [73].
218 At [48].
219 At [99].
220 At [161].
221 At [177].
222 At [1].
223 At [99].
224 At [179].
225 At [177].
226 At [32]. See generally *Thomson v The Minister for Climate Change Issues* (3 March 2017) Statement of Claim (HC) [Amended Statement of Claim]; *Thomson v The Minister for Climate Change Issues* (17 March 2017) Statement of Defence (HC) [Amended Statement of Defence].

concerning the need for state parties to submit ambitious efforts representing a progression over time.[227] Significantly, the Minister in her response also explicitly referenced art 4.3 in full.[228] Although neither party went on to attempt to define the principles in art 4.3 further, its inclusion nonetheless indicates recognition from both sides in a domestic case that NDCs are to represent a progression to a country's highest possible ambition.

At the same time, the significance of this recognition is also limited by parties only referencing these terms in the context of articulating their positions on international legal developments to the extent that they were seen as relevant to the domestic legislation at issue. Section 3 of the Climate Change Response Act provides that the Act's purpose is to enable New Zealand to meet its international obligations under the UNFCCC,[229] with the Paris Agreement entered into in pursuit of the UNFCCC.[230] Hence, the Minister's international obligations, including under the Paris Agreement, were relevant for establishing their positions on the Minister's targets in anticipation of that Agreement. However, since art 4.3 only relates to a party's "successive" NDCs,[231] Thomson and the Minister did not elaborate on the scope of these principles, since the 2030 target was made in relation to the country's first NDC, not successive NDCs. In future, local state actors or lawyers should have additional NDC pledges at their disposal for the courts to assess in establishing whether future governments can justify any failures to meet their own voluntary targets. It is at this stage that the principles of "progression" and "highest possible ambition" might be scrutinised by courts as to their meaning and relevance in holding the state to account.

Irrespective of the High Court's decision to dismiss Thomson's judicial review application, the Court's findings on the role of international law and the Paris Agreement require further examination. In particular, Mallon J expressly confirmed that state parties are obliged to produce a NDC under the Paris Agreement,[232] with successive NDCs representing a progression and to the highest possible ambition.[233] The express acknowledgement of these terms in a domestic High Court decision is highly significant, even as a mere restatement of the principles in the Paris Agreement.

227 Amended Statement of Claim, above n 226, at [94]–[103]; Amended Statement of Defence, above n 226, at [96].
228 Amended Statement of Defence, above n 226, at [96.3].
229 Climate Change Response Act, s 3(1).
230 *Thomson v The Minister for Climate Change Issues* [2017] NZHC 733 at [32] and [88]; Paris Agreement, above n 12, preamble.
231 Paris Agreement, above n 12, art 4.3.
232 *Thomson v The Minister for Climate Change Issues* [2017] NZHC 733 at [35].
233 At [36].

Additionally, in discussing the first cause of action, Mallon J also made several useful remarks on the role of international law generally. On the Minister's obligations under ss 224 and 225, her Honour held that these sections should be interpreted "consistently" with the international obligations established under the UNFCCC pursuant to the purpose of the Act.[234] Her Honour also noted in relation to s 225, that because this section requires that the Minister review its target following the publication of an IPCC report:[235] "Parliament was making it clear that it intends to and will be able to comply with its international obligations."[236] Regarding s 224, her Honour found that while this section gives the Minister a discretionary power to set, amend or revoke an existing target at any time,[237] that power had to be exercised in line with the Act's purpose and hence consistently with New Zealand's international obligations where that interpretation was available. Since the Paris Agreement was entered into in pursuit of the UNFCCC, any exercise of that power under s 224 by the Minister presumably can and must be interpreted consistently with obligations accepted by New Zealand under the Paris Agreement. While this Court was not tasked with examining the new principles in the Paris Agreement, these findings suggest that if in future the Minister was to produce successive NDCs in line with their obligations under the Paris Agreement and pursuant to their discretionary powers under s 224 to set, amend or revoke future targets, then their power to do so would need to be interpreted consistently with the accepted principles in the Paris Agreement.

It is important to note that her Honour also stressed that the Paris Agreement does not set specific criteria on setting target levels themselves.[238] New Zealand also remains free to review its targets as it deems fit.[239] However, this result indicates an acknowledgement by a New Zealand High Court that where targets have been set using a discretionary power, those targets are to be interpreted consistently with the country's international obligations. Since the Paris Agreement requires that parties put forward progressive NDCs representing the country's highest possible ambition, in future this could shift the onus to the Minister to prove that other factual circumstances justified their failure to make progressive targets irrespective of the specific level of target set. This result may also suggest that the "bottom up" nature of the Paris Agreement could indeed facilitate future domestic efforts, by enabling parties to first utilise and rely on their domestic laws, with the Paris Agreement serving as an international aid to

234 At [77].
235 Climate Change Response Act, s 225(3)(a).
236 *Thomson v The Minister for Climate Change Issues* [2017] NZHC 733 at [82].
237 Climate Change Response Act, s 224(2).
238 *Thomson v The Minister for Climate Change Issues* [2017] NZHC 733 at [139] and [158].
239 At [179].

compliance. Additionally, unlike in this case where the targets were themselves scrutinised, parties in future will have mandatory NDC pledges, with the state having more discretion in reaching those targets. This could expose differences between the pledges made and the measures taken, providing another source of potential litigation attempts, with the state having to justify any failure to meet these voluntary goals.

This new wave of litigation attempts may only be beginning. Indeed, a new comprehensive report by the Climate Justice Programme documenting the cases above and many others opines that of 14 cases examined, at least eight are highly replicable, with most others being replicable to some degree.[240] Given recent cases addressing constitutional, human rights and climate change, these efforts should be bolstered in light of the Paris Agreement's mandatory NDC requirements and enhanced transparency mechanisms, so that domestic laws and the standards in the Paris Agreement can be clarified and built on.

5. CONCLUSIONS

The signing of the Paris Agreement represents the culmination of efforts going back to the UNFCCC in 1992. It also represents a potential milestone in the global efforts to address the original objective of "stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system".[241]

This article has argued that the new principles in the Paris Agreement, "progression" and "highest possible ambition", evidence a unique and novel approach. These two principles, while mutually reinforcing, offer distinct components to the greater aim of providing a mechanism for expanding the NDC targets of each state.

This article examined these principles both on a textual basis and by looking to the wider context they appear in, including the background to the Paris Agreement and existing principles, obligations and norms. It is argued that the meaning of these principles might in part be found by looking to other legal regimes such as human rights law, existing elements of international environmental law, domestic sources, and to environmental jurisprudence initiated before the Paris Agreement.

It is also argued that the new principles are normatively linked to human rights law by the inclusion of human rights in the preamble and from the

240 Keely Boom, Julie-Anne Richards and Stephen Leonard *Climate Justice: The international momentum towards climate litigation* (Climate Justice Programme, 2016) at 16.

241 UNFCCC, above n 8, art 2.

sustainable development aims in arts 2 and 4. Further, as an emerging and open principle, the scope of these terms will in a large part depend on how they are used in practice, with this article outlining how advocates, lawyers and policy-makers are currently working on building these links and how this can be assisted post-Paris.

This article looked to human rights law, including non-regression in human rights law and the emergence of non-regression in environmental law, identifying that foundations may be drawn from the theory of mutability of laws, legal theories from human rights law, existing and emerging theories in environmental law, and by looking to domestic sources such as constitutions and national laws, as well as through emerging jurisprudence. This revealed that international due diligence standards and human rights principles such as progressive realisation may provide a possible avenue for giving these new terms some normative structure.

This article also argues that the explicit mention of progression may also help formalise the recognition of non-regression in the environmental context. Equally, the inclusion of human rights in the Paris Agreement as well as its domestically centred "bottom up" nature, combined with the enhanced transparency approach, could help by serving as evidence of self-imposed commitments.

However, the open nature of these principles leaves their ambitious aims far from certain. How they will develop in the coming years will depend on the attention given to them by advocates, lawyers and policy-makers. The possibilities are there to engage these new principles through the harmonisation of existing normative structures, enhanced transparency components, and in the hybrid nature of the Paris Agreement to ensure the accountability of pledges necessary to avoid catastrophic climate change.