

BALANCING EQUITY AND EFFECTIVENESS: THE PARIS AGREEMENT & THE FUTURE OF INTERNATIONAL CLIMATE CHANGE LAW

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International climate change law is approaching its third decade of existence, yet global greenhouse gas emissions continue to increase. Absent more effective efforts to limit emissions, the range and magnitude of negative impacts climate change gives rise to will continue to deepen, posing pervasive threats to human and natural systems worldwide. The 2015 Paris Agreement offers the parameters for a new approach to climate change law premised on inclusiveness and voluntary cooperation, but it continues to reflect collective discord over how to achieve progress in a fair and equitable way. This Article examines the normative framework underlying the international climate change regime and the way in which the Paris Agreement seeks to create a more cohesive and cooperative strategy to simultaneously mitigate climate change and move towards a more just world. This Article suggests that the Paris Agreement signals a modest but important shift in the normative framework of international climate change law and argues that this shift creates an opportune moment to examine the degree to which evolving concepts of justice, equity, and fairness underlie and advance the goals of international climate change law. In key part, this Article suggests that the exclusion of justice from international climate change law

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undermines efforts to conceptualize the collective and individual equity concerns that climate change poses. The new framework, even if only nominally different, provides more expansive opportunities to integrate considerations of climate justice and fairness into the institutional structure of the regime by creating a more open and transparent forum within which parties can formally stake out their positions on both the substantive and normative dimensions of climate change. In so doing, this Article shows that although the Paris Agreement falls short of offering a precise roadmap forward, it represents a more effective model for international cooperation.

TABLE OF CONTENTS

INTRODUCTION	109
I. WHAT'S IN A NAME: JUSTICE, EQUITY, AND FAIRNESS IN INTERNATIONAL CLIMATE CHANGE LAW	115
A. <i>Bracketing Justice</i>	119
B. <i>The Equity Principle</i>	124
C. <i>The Movement Towards Fairness</i>	129
II. THE PARIS AGREEMENT AND THE NATIONALLY DETERMINED CONTRIBUTIONS	135
A. <i>Getting to Paris</i>	137
B. <i>An Introduction to the Nationally Determined Contributions</i>	141
1. <i>"Fair and Ambitious"</i>	142
2. <i>Varying Structures and Emphasis on Fairness</i>	144
C. <i>Expressions of Fairness and Ambition in the Nationally Determined Contributions</i>	146
1. <i>Industrialized States</i>	146
2. <i>Developing States</i>	149
a. <i>Rapidly Developing Economies</i>	149
b. <i>Other Developing Countries</i>	154
3. <i>Small Island Developing States (SIDS)</i>	155
D. <i>A Bird's Eye View of the Relative "Fairness" of Nationally Determined Contributions</i>	157
1. <i>Evaluating Fairness or Equity</i>	158
2. <i>Re-envisioning Equity</i>	163
III. THE ARTICLE 6 MECHANISMS	164

A. <i>The Sustainable Development Mechanism in Context</i>	166
B. <i>Perceptions of the SDM</i>	172
C. <i>Equity and Effectiveness: The Challenge Moving Forward with Cooperative Approaches</i>	176
CONCLUSION: INCLUSIVITY AND EQUITY IN THE PARIS AGREEMENT	178

INTRODUCTION

In 1858, Theodore Parker, a nineteenth-century Unitarian minister and abolitionist, opined:

I do not pretend to understand the moral universe, the arc is a long one, my eye reaches but little ways. I cannot calculate the curve and complete the figure by the experience of sight; I can divine it by conscience. But from what I see I am sure it bends towards justice.¹

Later, of course, the Reverend Martin Luther King Jr. famously drew upon this idea to declare, “the arc of the moral universe is long, but it bends toward justice.”² Justice and morality are inevitably complex concepts intertwined with the wrongs that one confronts and the ways that the legal and social systems of the time enshrines these wrongs as legally and normatively acceptable or unacceptable.³ For King, at a minimum, “[a]ny law that uplifts human personality is just. Any law that degrades human

¹ THEODORE PARKER, TEN SERMONS OF RELIGION 84–85 (Boston, Crosby, Nichols, & Co. 1853).

² Martin Luther King, Jr., Address at the Conclusion of the Selma to Montgomery March (Mar. 25, 1965), <https://kinginstitute.stanford.edu/king-papers/documents/address-conclusion-selma-montgomery-march> (last visited Nov. 3, 2018).

³ See Jason Michael Williams, *Martin Luther King, Jr. and the Definition of Justice*, THE HAMPTON INST. (Jan. 22, 2014), <http://www.hamptoninstitution.org/mlk-definition-of-justice.html#.W928phNKjUJ> (offering thoughts on how the state of the modern criminal justice system might influence King’s definition of justice in the modern era). Parker’s and King’s concepts of justice and morality were also intertwined with their individual views on religion and morality. King, of course, as a Baptist minister, grounded his conception of justice in moral law, or the law of God. See Martin Luther King, Jr., Letter from a Birmingham Jail 7 (Apr. 16, 1964), http://okra.stanford.edu/transcription/document_images/undecided/630416-019.pdf [hereinafter Letter from a Birmingham Jail] (“A just law is a man-made code that squares with the moral law, or the law of God. An unjust law is a code that is out of harmony with the moral law. To put it in the terms of St. Thomas Aquinas, an unjust law is a human law that is not rooted in eternal and natural law.”).

personality is unjust.”⁴ Moreover, King cautioned that, “[i]njustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly affects all indirectly.”⁵

King’s reflections on, and actions to realize justice resonate sharply in the contemporary era, particularly with respect to one of the greatest threats to human well-being today: climate change. Climate change reflects the extent to which humankind is inescapably entangled in a network of mutuality, and the varying degrees to which our individual actions and the individual harms we suffer affect one another both directly and indirectly.

In common with Parker’s remarks as to the obscurity of the moral universe, we cannot pretend to fully grasp or be able to map the complex pathways of change in the global atmosphere. The arc of climate change is long, the variables are complex, and our models reach only so far and offer only so much clarity. We find ourselves at a moment in time, however, when our collective understanding of anthropogenic climate change reveals both the inescapable network of mutuality and the reality that, if the arc of the moral universe is to bend towards justice, our time frame for bending the arc is growing short.⁶

Within this constrained arc, humanity confronts the acute question of how to simultaneously achieve meaningful progress towards mitigating climate change and creating a more just world—goals that are not necessarily either complementary or collectively shared.

Presuming that the goals of mitigating climate change and moving towards a more just world sit at the heart of efforts to advance the international climate change framework, the 2015

⁴ Letter from a Birmingham Jail, *supra* note 3, at 7–8 (“Let us turn to a more concrete example of just and unjust laws. An unjust law is a code that a majority inflicts on a minority that is not binding on itself. This is difference made legal. On the other hand, a just law is a code that a majority compels a minority to follow, and that it is willing to follow itself. This is sameness made legal. . . . Let me give another explanation. An unjust law is a code inflicted upon a minority which that minority had no part in enacting or creating because it did not have the unhampered right to vote.”).

⁵ *Id.* at 2.

⁶ See, e.g., INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C: SUMMARY FOR POLICYMAKERS (2018), http://report.ipcc.ch/sr15/pdf/sr15_spm_final.pdf (detailing the steps that would need to be taken to keep warming to 1.5°C above pre-industrial levels and the short-timeframe remaining in which to take the steps to do so).

Paris Agreement⁷ represents a step forward and provides a framework within which cooperative change appears possible. In moving away from the preexisting paradigm that splits the world into two categories of actors with vastly different global obligations, the Agreement offers the parameters for a new approach to climate change premised on inclusiveness⁸ and voluntary cooperation. Both of these are essential, and the latter—embracing a more pluralistic form of global cooperation—enables states to experiment and be more ambitious in their individual and collective efforts to address climate change.

One key way in which the Paris Agreement is both more inclusive and more permissive than its predecessor, the Kyoto Protocol, is that it invites all parties to the United Nations Framework Convention on Climate Change (UNFCCC)⁹ to participate through the submission of Nationally Determined Contributions (NDCs).¹⁰ That is, it is the first international climate change agreement to require all parties to “undertake ...ambitious efforts” to address climate change.¹¹ As Dimitrov describes it, “[t]he new climate deal is a laissez-faire accord among nations that leaves the content of domestic policy to governments but creates international legal obligations to develop, implement, and regularly strengthen actions.”¹² In their respective NDCs, each

⁷ U.N. Framework Convention on Climate Change, *Report of the Conference of the parties on its Twenty-First Session*, U.N. Doc. FCCC/CP/2015/10/Add.1, Annex (Jan. 29, 2016) [hereinafter *Paris Agreement*].

⁸ Here focusing on inclusiveness with respect to State parties; participatory avenues for non-State based actors are also increasing under the umbrella of the UNFCCC as systems of transnational governance expand, e.g., through the Green Climate Fund and the Climate Technology Centre and Network. *See id.*

⁹ U.N. Framework Convention on Climate Change, May 9, 1992, 1771 U.N.T.S. 107 [hereinafter UNFCCC].

¹⁰ *See Paris Agreement*, supra note 7, art. 3. NDCs are the formal documents that parties to the Paris Agreement submit as part of the process of ratifying, accepting, or approving the Agreement. In contrast, Intended Nationally Determined Contributions are the submissions that parties made pursuant to the Lima Call for Climate Action prior to the negotiation of the Paris Agreement. The INDCs do not become formal until a nation becomes a Party to the Agreement and officially submits its NDC. Henceforth, the terminology of NDC will be used to discuss the submissions of parties to the Agreement, while INDC will be used to discuss the pre-Paris submission. *See NDC Interim Registry*, UNFCCC (May 6, 2016), <https://unfccc.int/news/ndc-interim-registry>.

¹¹ *See Paris Agreement*, supra note 7, arts. 3 & 4 (laying out the obligation for all parties to prepare, communicate, and maintain successive NDCs).

¹² Radoslav S. Dimitrov, *The Paris Agreement on Climate Change: Behind Closed Doors*, 16 GLOBAL ENVTL. POL. 1, 2 (2016).

party sets out individualized goals for mitigating and adapting to climate change that it believes to be “fair and ambitious.”¹³ Parties have approached this task differently. Some parties have submitted narrow and concise statements; others are using the NDC process as a platform for talking more broadly about national circumstances and addressing, with specificity, what they believe fairness and ambition mean.

At its core, embracing the aspirational goal of holding warming to within 1.5°C,¹⁴ this more inclusive vision centers on a cooperative worldwide effort to dramatically reduce greenhouse gas (GHG) emissions. The future that the Paris Agreement envisions is one in which climate change is constrained and, yet, access to energy is universal. In contemplating the pathway towards a sustainable future, the Paris Agreement prioritizes equity in access as well as process, emphasizing both the “imperatives of a just transition of the workforce and the creation of decent work and quality jobs.”¹⁵ It also accentuates the continuing need for richer countries to take a greater role in facilitating the full range of efforts that will be needed to adequately address climate change.

Notably, the Paris Agreement also embraces the idea that market-based mechanisms, or what Article 6 of the Agreement refers to as “cooperative approaches,”¹⁶ are a fundamental part of a low-emissions development pathway. By embracing cooperative mechanisms, the Agreement builds upon the flexibility mechanisms created by the Kyoto Protocol—including the Clean

¹³ See *Paris Agreement*, supra note 7, arts. 3, 4 & 27.

¹⁴ Importantly, however, the actual stated goal is to “hol[d] the increase in the global average temperature to well below 2°C above pre-industrial levels and pursu[e] efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change,” suggesting that limiting temperatures to 2°C is the primary goal, with the 1.5°C mark being a more ambitious, but less firm goal—instead, an “effort”—that was included in the text largely at the urging of the small island nations. *Paris Agreement*, supra note 7, art. 2. See Chris Mooney & Joby Warrick, *How Tiny Islands Drove Huge Ambition at the Paris Climate Talks*, WASH. POST (Dec. 12, 2015), <https://www.washingtonpost.com/news/energy-environment/wp/2015/12/11/how-tiny-islands-drove-huge-ambition-at-the-paris-climate-talks/>.

¹⁵ *Paris Agreement*, supra note 7, pmbl.

¹⁶ See *Paris Agreement*, supra note 7, art. 6.

Development Mechanism (CDM),¹⁷ Joint Implementation,¹⁸ and Emissions Trading¹⁹—but differs from these previous tools in significant ways. Paralleling the inclusive model embodied by the NDC approach to state-based commitments, the Paris Agreement designs the cooperative approaches to be fully open to all state parties. This approach expands the scope of potential carbon markets and mitigation cooperation and creates a more open field than existed under the Kyoto Protocol, where developing state participation was limited to hosting CDM mitigation projects.²⁰

As a result, with respect to both state-based mitigation commitments and cooperative mitigation strategies, the Paris Agreement opens up participation to all state actors. This level of inclusivity in emissions reductions commitments and cooperative mitigation strategies is unprecedented. If all works well, the hope is that inclusivity in both mitigation goals and complementary cooperative mitigation strategies will facilitate a more effective shift towards a sustainable, low-carbon future and a more equitable framework within which climate-limiting efforts can take place.

The concern, of course, is that at both steps—and especially in tandem—this model could also deepen existing patterns of global inequity by shifting greater relative mitigation responsibility to developing countries while many developed countries continue to do relatively little. Simultaneously, the model creates the parameters for a global climate market that could sit astride existing economic structures in ways that further concentrate prevailing systems of power.

For context, even in a highly globalized world, the GHG emissions of the top ten emitters equal 60 percent of net global emissions, and yet the highest emitting states also tend to be among the “least vulnerable to the impacts of climate change,

¹⁷ See Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 2303 U.N.T.S. 148, art. 12 [hereinafter Kyoto Protocol].

¹⁸ *Id.* art. 6.

¹⁹ *Id.* art. 17.

²⁰ As will be discussed *infra* in Part III(A), while the CDM has been one of the most active areas of climate change mitigation, it has been fraught with distributive and procedural justice challenges, as well as with substantive questions about the effectiveness of the program in achieving real, lasting emissions reductions.

[with] this inequality [holding] true for both 2010 and 2030.”²¹ Further, only twenty-eight countries have relatively equal levels of GHG emissions when compared to their climate vulnerability,²² because higher GDP tends to correlate positively with lower levels of climate vulnerability. To put it simply, wealthier countries continue to produce the majority of GHG emissions and to benefit economically from their high-emissions activities, while poorer countries produce disproportionately lower emissions per capita but face the most serious negative consequences of climate change. The reality that climate change threatens to multiply existing patterns of global economic disparity, by now, is well understood.

Consequently, after twenty-five years of climate change negotiations, it should be evident to any keen observer that taking a stand in favor of any particular climate change policy involves making a normative commitment—implicit if not explicit. From a global equity perspective, the inclusive policies the Paris Agreement embodies have some fundamental appeal, but also some implicit bias towards business-as-usual power and economic relations between states. At a basic level, by adopting the Paris Agreement, the parties have moved towards an ambitious and inclusive set of general global climate goals. By relying on voluntary contributions and continuing to premise efforts on unarticulated notions of equity, however, it is unclear to what extent this new architecture enables, much less ensures, movement towards more effective and just climate policies, however conceived.

Fundamentally, of course, in order to engage with the questions that arise at the intersection of inclusivity, effectiveness, and equity, it is necessary to examine the initial questions of how international efforts to address climate change situate notions of equity, fairness, and justice and how this framework influences perspectives on what counts as “global justice.”

The Paris Agreement signals a modest, but important shift in the normative framework of international climate change law. This shift creates an opportune moment to examine the degree to which evolving concepts of justice, equity, and fairness advance the goals

²¹ Glenn Althor et al., *Global Mismatch Between Greenhouse Gas Emissions and the Burden of Climate Change*, 6 NATURE: SCI. REP. 1, 2–3 (2016).

²² See *id.*

of international climate change law. This Article suggests that the exclusion of justice, equity, and fairness from international climate change law undermines efforts to more fully conceptualize the collective and individual equity concerns that climate change poses. The new framework, even if only nominally different, provides more expansive opportunities to integrate considerations of climate justice and fairness into the institutional structure of the regime by providing a more open and transparent forum within which parties can formally stake out their positions on both the substantive and normative dimensions of climate change.

This Article explores the challenges and opportunities associated with using the Paris Agreement model to attempt to achieve a safe and equitable future. It proceeds in four parts. Part I develops a clearer view of how the language of justice, equity, and fairness has been used in international climate change law and how understanding and use of these terms have evolved over time. Part II explores the new modes of inclusiveness embodied by the Paris Agreement, focusing on the NDC process. Part III briefly examines the emerging Article 6 mechanisms with an eye towards understanding how those mechanisms might interact with the evolving system to advance justice, equity, and fairness. The Conclusion follows.

I. WHAT'S IN A NAME: JUSTICE, EQUITY, AND FAIRNESS IN INTERNATIONAL CLIMATE CHANGE LAW

Justice, equity, and fairness are thick, contested concepts.²³ Each of these terms has been the subject of great thought and inquiry across disciplines, with scholars from the fields of moral philosophy, political theory, and jurisprudence paying particular attention to the ways in which they are used and understood. As distinct and overlapping concepts, they are laden with meaning, the understanding and consistency of which varies, and are inevitably highly contextual. Despite great inquiry, the concepts continue to be deployed in distinct ways in different settings, including within the field of international environmental law.

²³ See generally W.B. Gallie, *Essentially Contested Concepts*, 56 MEETINGS ARISTOTELIAN SOC'Y 167, 169 (1956) (stating that essentially contested concepts are "concepts the proper use of which inevitably involves endless disputes about their proper uses on the part of their users").

As Brunnée notes, within the field of international environmental law:

[T]he term ‘justice’ is often used in conjunction with other terms, such as equity, fairness, procedural justice, distributive justice, or corrective justice. However, the linkages and distinctions between these concepts are not always drawn very clearly. The concept of ‘equity,’ for example, is sometimes conflated with ‘justice’. . . . Fairness is another term that is often employed in relation to distributive questions.²⁴

Emerging under the umbrella of international environmental law, it is no surprise that international climate change law similarly draws upon the concepts of justice, equity, and fairness. Also in common with the larger body of international environmental law, these concepts are used in various contexts in international climate change law without taking great care to explore the meaning, overlap, or consistency of the terms. Much of the reticence to engage in more in-depth discussions about the use of these terms results from longstanding disagreements over precisely what equity requires, and uncertainty as to whether its demands are purely distributive or also imply a corrective element.

Equity sits at the very heart of the international climate change regime. In key part, the UNFCCC provides that parties to the Treaty “should protect the climate system . . . on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.”²⁵ This provision sets the parameters for one of the most central and, yet, divisive ethics-based climate debates: what does “common but differentiated responsibilities and respective capabilities” (CBDRRC) mean and what does it reveal about the principle of equity, as understood in the climate context?

Arguably, the principle of CBDRRC, as embodied within the climate regime,²⁶ suggests that the international community shares a common responsibility to protect the global atmosphere, but that the responsibility for taking steps to limit the causes and effects of

²⁴ Jutta Brunnée, *Climate Change, Global Environmental Justice and International Environmental Law*, in ENVIRONMENTAL LAW AND JUSTICE IN CONTEXT 316, 319 (Jonas Ebbesson & Phoebe Okowa eds., 2009).

²⁵ UNFCCC, *supra* note 9, art. 3.

²⁶ For a more thorough review of the history of the principle of CBDRRC, see Christopher Stone, *Common but Differentiated Responsibilities in International Law*, 98 AM. J. INT’L L. 276, 278 (2004). See also Rep. of the U.N. Conference on the Human Env’t, U.N. Doc. A/CONF.48/14 (1972).

climate change should be differentiated among states based on factors such as historical contribution to atmospheric concentrations of GHGs and relative capacities to take steps to address climate change. Understood in this way, the principle of CBDRRC reflects a concept of equity perhaps most closely aligned with principles of distributive justice, in that it seeks to fairly distribute the burden of addressing climate change with the goal of improving conditions for all humankind.²⁷ On the other hand, from the perspective of the global south, CBDRRC “unequivocally mandates” that northern countries “accept responsibility for historical acts of environmental degradation” through binding, affirmative, and, according to at least one prominent scholar, *corrective* commitments to ambitious mitigation and adaptation assistance for the global south.²⁸

Yet, as central as the twin principles of equity and CBDRRC are to the climate regime, very little has been done to clarify what these concepts mean independently, or in relation to one another.²⁹

²⁷ See Catherine Redgwell, *Principles and Emerging Norms in International Law: Intra- and Inter-Generational Equity*, in THE OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW 186, 193 n.50 (Cinnamon Carlarne et al. eds., 2016) (citing Jutta Brunnée to emphasize that “when . . . used in conjunction with justice, [equity] is correctly limited to matters of distributive justice, the broader notion of justice also embracing corrective justice and procedural justice”); see also Brunnée, *supra* note 24, at 319. Distributive justice principles relate both to the consideration of the rights and responsibilities of present generations and as between present and future generations. See, e.g., PETER LAWRENCE, JUSTICE FOR FUTURE GENERATIONS: CLIMATE CHANGE AND INTERNATIONAL LAW 46 (2014); see also Cinnamon P. Carlarne & Mohamed S. Helal, *A Conversation about Climate Change Law and the ‘International Community’*, 8 CLIMATE L. 229 (2018) (deconstructing the idea of a cooperative, international community as an operative basis for international climate change law and discussing how this intersects with the principle of CBDR).

²⁸ Carmen G. Gonzalez, *Environmental Justice and International Environmental Law*, in ROUTLEDGE HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 77, 91–92 (Shawkat Alam et al. eds., 2013) (citing Dinah Shelton, *Describing the Elephant: International Justice and Environmental Law*, in ENVIRONMENTAL LAW AND JUSTICE IN CONTEXT 62, Jonas Ebbesson & Phoebe Okowa, eds., 2000); see also LAVANYA RAJAMANI, DIFFERENTIAL TREATMENT IN INTERNATIONAL ENVIRONMENTAL LAW 138–44 (2006) (confronting the “ignorance challenge” associated with assigning blame to developed countries on the basis of historical contributions to environmental degradation even when the impact of GHGs on climate change was not fully known or understood).

²⁹ That being said, “no matter how contested or how imperfectly implemented, [CBDRRC] serves as a reminder of the historic and contemporary unequal contributions to global environmental degradation and as an important

As a result, debates over both how to understand and achieve equity and CDDRRC—as well as how to view these concepts in relation to other fundamental principles, such as justice and fairness—remain at the heart of ongoing international negotiations.³⁰ Recognizing the inevitability of ambiguity and controversy surrounding questions of ethics and morality, Dworkin suggests that any “government that makes such principles part of its law must decide whose interpretation and understanding will be authoritative.”³¹

Few governments, however, have followed Dworkin’s suggestion. If one attempts to follow Dworkin’s suggestion, as we do here, several central questions emerge. How are the terms justice, equity, and fairness deployed in the context of international climate change law? How has practice within the climate change community resulted in these concepts evolving in particular ways? And what does this ongoing process of dynamic interpretation³² mean for efforts to center more expansive notions of fairness and climate justice in international responses to climate change?

vehicle for securing North-South environmental justice.” Gonzalez, *supra* note 28, at 92.

³⁰ See, e.g., Cinnamon Carlarne et al., *International Climate Change Law: Mapping the Field*, in THE OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW 4, 14 (Cinnamon Carlarne et al. eds., 2016). As Rajamani states, however, even absent clarity around CDDRRC, it remains the “overall principle guiding the future development of the climate regime.” Lavanya Rajamani, *The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime*, 9 REV. EUR. COMMUNITY & INT’L ENVTL. L. 120, 124 (2000). Of course, Brunnée reminds us that while CDDRRC “sketches the parameters of a debate about global climate justice . . . it does not currently constitute a genuine principle of global justice.” Brunnée, *supra* note 24, at 329.

³¹ Ronald Dworkin, *The Moral Reading of the Constitution*, N.Y. REV. BOOKS (Mar. 21, 1996), <http://www.nybooks.com/articles/1996/03/21/the-moral-reading-of-the-constitution>.

³² See, e.g., William N. Eskridge Jr., *Dynamic Statutory Interpretation*, 135 U. PA. L. REV. 1479, 1482 (1987) (describing his own and Dworkin’s models of dynamic interpretation of law thusly: “Dworkin, too, argues for dynamic interpretation, in which statutes change as ‘law’s integrity’ develops and changes. My approach is more cautious and conventional than that of Dworkin. He envisions judges performing the truly herculean task of reading magisterial coherence into the law. I envision judges as diplomats, whose ordering authority is severely limited but who must often update their orders to meet changing circumstances.”).

A. *Bracketing Justice*

Justice, as a guiding moral principle, has played a remarkably limited role in state-based negotiations and the resulting system of international climate change law. Brunnée notes that, “[p]erhaps surprisingly, the legal literature has not devoted much detailed attention to the ‘justice’ dimension of climate change issues and its implications for international environmental law.”³³ The relative dearth of attention paid to justice within the legal literature reflects a similar lack of focus on the concept within mainstream climate negotiations, where questions of “climate justice,” to use the language of the negotiations, have been “bracketed.” Negotiators bracket language when they disagree about what terms and provisions are acceptable. Some of the bracketed language makes its way into the final text, but much of it is cut and abandoned on the drafting table.³⁴

Justice, for example, does not appear in the text of the two original climate change instruments, the UNFCCC and the Kyoto Protocol. Nor is justice used in any of the Conference of the parties (COP)³⁵ decisions between COP 1 and COP 20. Similarly, in the UNFCCC’s document search engine, justice does not appear as a keyword search option, but equity does. In contrast, however, if the term justice is entered into the general search function for the entire UNFCCC website, thousands of entries appear, with most of these representing submissions and presentations from individual state and civil society actors, rather than formal UNFCCC documents or decisions.³⁶ It was not until 2015, in the preamble to

³³ See Brunnée, *supra* note 24, at 317.

³⁴ See Daniel Bodansky, *The Paris Climate Change Agreement: A New Hope?*, 110 AM. J. INT’L L. 288, 293 (2016) (“In the UN climate change regime, the end game of conferences of the parties (COPs) is typically a process of trench warfare, in which virtually every word is fought over, and gains and losses are measured in brackets and commas.”).

³⁵ The authors reviewed all of the primary decisions from the annual COP meetings. The exception to the inclusion of the word “justice” in these texts only occurred with reference to a list of non-governmental organization that participated in the meeting, among which was a group with “justice” in its name.

³⁶ See, e.g., Submission to the ADP by the Mary Robinson Foundation – Climate Justice (2013) <http://unfccc.int/resource/docs/2013/smsn/un/306.pdf>; Submission by Pan African Climate Justice Alliance (PACJA) (2016), https://unfccc.int/files/adaptation/application/pdf/pacja_submission_for_scf_2016_forum_input.pdf; The Plurinational State of Bol., The Mechanism of Climate Justice (2012), https://unfccc.int/files/bodies/awg-lca/application/pdf/20120518_bolivia_2100.pdf.

the Paris Agreement, that justice finally made its first formal appearance in a primary instrument of international climate change law. In key part, the preambular provision notes “the importance for some of the concept of ‘climate justice’, when taking action to address climate change.”³⁷ The brackets are gone and the term makes it into the text but it is conditioned, rather unusually, by the limitation that the concept is only of importance for “some.”³⁸

In international law, the preamble creates the foundations upon which the more detailed provisions of a legal agreement rest. These foundations often include facts, principles, or ideas that are widely recognized and shared by all of the parties to the agreement.³⁹ The conditional language that the Paris Agreement adopts in its preamble is unusual and reflects a concession to a small handful of actors—driven, in part, by India as well as by a group of countries known as the Like-Minded Developing Countries (LMDC) on Climate Change⁴⁰ —whose agreement could not be secured absent inclusion of the specific language at issue.⁴¹

³⁷ *Paris Agreement*, *supra* note 7, pmbl.

³⁸ *Id.*

³⁹ See, e.g., Makane Moïse Mbengue, *The Notion of Preamble*, in *The Max Planck Encyclopedia of Public International Law* (Online Edition), Rüdiger Wolfrum ed., (2008).

⁴⁰ See, e.g., Implementation of all the elements of decision 1/CP.17, (a) Matters related to paragraphs 2 to 6; Ad-Hoc Working Group on the Durban Platform for Enhanced Action (ADP), Submission by the Like-Minded Developing Countries on Climate Change (LMDC) (2013), https://unfccc.int/files/documentation/submissions_from_parties/adp/application/pdf/adp_lmhc_workstream_1_20130313.pdf; see also Lili Fuhr et al., *COP 21 and the Paris Agreement: A Force Awakened*, HEINRICH BÖLL STIFTUNG (Dec. 15, 2015), <https://us.boell.org/2015/12/15/cop-21-and-paris-agreement-force-awakened> (last visited Jan. 27, 2018) (“Throughout the year, a cross-constituency coalition representing human rights groups, indigenous peoples, women and gender groups, trade unions, youth, faith-based, environmental and climate justice groups had worked in solidarity to anchor strong language on the protection of rights and the integrity of the planet in the operative part of the agreement as a mandate for its implementation, arguing that the Paris COP was the right time and place.”).

⁴¹ This is true with respect to the other conditioned term, “Mother Earth.” *Paris Agreement*, *supra* note 7, pmbl. In earlier part, the same provision that references climate justice reads: “[n]oting the importance of ensuring the integrity of all ecosystems, including oceans, and the protection of biodiversity, recognized by some cultures as Mother Earth.” *Id.* Here again, the conditioning takes the form of narrowing the pool of interested or concerned parties to “some.” *Id.* Presumably, this is a general indicator that not all of the parties are signaling their support of either the concept of Mother Earth or the climate

Notably, the reference in the Paris Agreement is not merely to justice but is, instead, to “climate justice,”⁴² which reflects the growth, parallel to the state-based negotiations, of a social movement motivated by “issues and concerns that arise from the intersection of climate change with race, poverty, and preexisting environmental risks.”⁴³ As Burkett notes, the field of climate justice

takes, as a basic premise, that the disadvantaged in the United States stand to suffer the risks of warming more severely than others, as do their counterparts in the global South. Climate justice also recognizes the direct kinship between social inequality and environmental degradation, which is not isolated to the global south.⁴⁴

justice. The draft text for the Paris Agreement contained multiple references to justice, including provisions calling for the creation of an International Tribunal of Climate Justice. *See* U.N. Framework Convention on Climate Change Ad Hoc Working Group on the Durban Platform for Enhanced Action, *Draft Paris Agreement*, U.N. Doc. FCCC/ADP/2015/L.6 (Dec. 5, 2015), https://unfccc.int/files/bodies/awg/application/pdf/draft_paris_agreement_5dec15.pdf.

⁴² The concept of climate justice is, of course, rooted in moral philosophy and political theory. In political theory, for example, Shue argues there are four questions central to exploring concerns about climate justice:

1. What is a fair allocation of the costs of preventing the global warming that is still avoidable? 2. What is a fair allocation of the cost of coping with the social consequences of global warming that will not in fact be avoided? 3. What background allocation of wealth would allow international bargaining [about topics like issues one and two] . . . to be a fair process? And: 4. What is a fair allocation of emission of greenhouse gases (over the long term and during the transition to the long term allocation)?

HENRY SHUE, *CLIMATE JUSTICE: VULNERABILITY AND PROTECTION* 68–69 (2014). Within the realm of philosophy, there is a rich and evolving literature exploring concepts of climate justice, with much of the focus being on either distributional justice, within and across generations, or taking a human rights approach that would emphasize the essential nature of protecting and preserving universal rights. *See* DARREL MOLLENDORF, *THE MORAL CHALLENGE OF DANGEROUS CLIMATE CHANGE* 5–6 (2014); *see generally*, STEPHEN M. GARDINER, *A PERFECT MORAL STORM: THE ETHICAL TRAGEDY OF CLIMATE CHANGE* (2011) (providing a thoughtful exploration from a philosophical perspective of the ethical challenges associated with climate change).

⁴³ Maxine Burkett, *Just Solutions to Climate Change: A Climate Justice Proposal for a Domestic Clean Development Mechanism*, 56 *BUFF. L. REV.* 169, 170 (2008); *see also id.* at 189–93 (providing a helpful overview of the environmental justice framework from which the concept of climate justice, at least in part, emerged).

⁴⁴ *Id.* at 192–93.

The climate justice movement seeks greater emphasis on, and involvement by, those peoples most affected by climate change in climate governance processes. The movement emerged from the longer-standing environmental justice movement, that is focused on “the interplay of race, poverty, and environmental risk” and was spurred by “findings that poor and of-color communities suffer from pollution more frequently and severely than their white counterparts.”⁴⁵

Unlike the environmental justice movement, which was built upon a grassroots framework and focused on discrete environmental issues, such as the siting of heavily polluting facilities, the climate justice movement emerged at the global level, reflecting the scale of the climate change challenge. Both the environmental and climate justice movements stand somewhat apart from more “mainstream” environmental and climate activism. Climate action and scholarship, in particular, has tended to focus on distributive issues, such as those embodied by the principles of equity and CBDRRC, to the neglect of other principles at the heart of the environmental justice movement including concerns about corrective, procedural, and social justice.⁴⁶ The climate justice movement simultaneously acknowledges the global nature of the problem and draws attention to precise person and populations most vulnerable to harm, combining grassroots activism with a broad-level vision transcending not only borders, but also the confines of “environmental issues” and “environmental law.”⁴⁷ Accordingly, proponents of climate justice emphasize both mitigation and adaptation goals, with increasing emphasis on urgent, and often existential, adaptation, as well as loss and damage needs.⁴⁸

⁴⁵ *Id.* at 188; see also Rebecca Tsosie, *Indigenous People and Environmental Justice: The Impact of Climate Change*, 78 U. COLO. L. REV. 1625, 1629 (2007) (emphasizing the disproportionate impact on indigenous peoples in particular).

⁴⁶ For an excellent discussion of the distributive, participatory and social justice goals that drive the environmental justice movement and how these goals have come to influence the emerging conversation on climate justice, see Alice Kaswan, *Environmental Justice and Domestic Climate Change Policy*, 38 ENVTL. L. REP. 10287, 10289 (May 2008).

⁴⁷ See generally Burkett, *supra* note 43.

⁴⁸ See ROSEMARY LYSTER, CLIMATE JUSTICE AND DISASTER LAW 131 (2015) (“[A] weakness of existing theories is that they are focused largely on mitigation rather than on the impacts of climate change on the most vulnerable in order to assist with crafting justice approaches to adaptation. If they do discuss

The climate justice movement and the dialogue that it facilitates are largely external to the state-based discourse that takes place under the auspices of the UNFCCC. From early on in the state-based negotiations, justice as a framing concept was essentially excluded. As a result, for many years, conversations around climate justice have existed primarily as a parallel process and frequent counterpoint to state negotiations. The language of justice has been minimized largely in order to avoid engaging with potentially intractable questions of moral responsibility.

Justice is associated with both the administration of law as well as systems of accountability and retribution for injustice.⁴⁹ In contrast to concepts of equity and fairness, justice connotes accountability for, and the necessity to remedy an injustice. As Shklar suggests, “an important difference between [misfortune and injustice] involves agency—if there is no causative *and* blameworthy agent, there can be no injustice.”⁵⁰ Thus, as frequently understood, questions of justice arise in contexts where there is a causative force that has brought about an injustice that needs to be addressed in some way.⁵¹ The concept of justice,

adaptation, the focus is on an equitable distribution of the costs of adaptation rather than the specific vulnerabilities and needs experienced by those at risk.”); *see also* Fredericka Whitehead, *The First Climate Justice Summit: A Pie in the Face for the Global North*, THE GUARDIAN (Apr. 16, 2014), <https://www.theguardian.com/global-development-professionals-network/2014/apr/16/climate-change-justice-summit> (suggesting that “the ‘nub of ‘climate justice’” is the idea that the developed world made the mess and therefore the developed world should pay the price for fixing the problem” and describing the emerging climate justice movement as a “radical alternative to the official talks”); *see generally* Alice Kaswan, *Climate Adaptation and Theories of Justice*, in PHILOSOPHY, LAW AND ENVIRONMENTAL CRISIS 97 (Alain Papaux & Simone Zurbuchen eds., 2016).

⁴⁹ This is true of recent movements focused on transitional justice, as well. *See, e.g.*, MELISSA WILLIAMS ET AL., TRANSNATIONAL JUSTICE (2012); David C. Gray, *Extraordinary Justice*, 62 ALA. L. REV. 55 (2010); Sonja Klinsky, *Why Explore “Transitional Justice” in the Climate Context?*, CLIMATE STRATEGIES 4 (Nov. 2016), <http://climatestrategies.org/wp-content/uploads/2016/10/Why-Explore-Transitional-Justice-in-the-Climate-Context.pdf>.

⁵⁰ Rob Verchick, *Disaster Justice: The Geography of Human Capability*, 23 DUKE ENVTL. L. & POL’Y F. 23, 52 (2012) (emphasis in original) (referring to Judith Shklar’s seminal work on injustice, JUDITH N. SHKLAR, THE FACES OF INJUSTICE (1990)).

⁵¹ Another dominant approach to framing questions of global justice views justice through a human rights lens; as viewed through this moral lens, the current world order violates the rights of the poor as they are becoming poorer and more marginalized as a result of the existing paradigm. As represented by scholars such as Pogge, this approach to understanding global justice sees the

particularly as deployed within lawmaking contexts, is linked with notions of causation, wrongdoing and responsibility, and resulting mechanisms for accountability, reconciliation, and remediation.⁵² Justice, therefore, is less amenable than fairness or equity to being used in an abstract and less threatening way, as a framing tool for conversations about roles and responsibilities in the climate law context.⁵³ Thus, justice is disfavored within complex state-based climate law negotiations where concepts of wrongdoing, injustice, and liability complicate, if not completely bring to a standstill, efforts to engage the biggest emitters in ongoing processes of international cooperation.

B. *The Equity Principle*

In contrast to justice, the concept of equity has provided the dominant normative framework for climate change law. As discussed, equity is situated at the heart of the UNFCCC and the

present global institutional world order as manifesting an “ongoing human rights violation—arguably the largest such violation ever committed in human history” and envisions remedying this violation as necessitating fundamental paradigm shifts in power and economic relations. Thomas Pogge, *Severe Poverty as a Human Rights Violation* 52, in *FREEDOM FROM POVERTY AS A HUMAN RIGHT: WHO OWES WHAT TO THE VERY POOR* (Thomas Pogge ed., 2007). This approach to global justice brings the stakes of using the language of “justice” as a framing mechanism into sharp relief and offers insight into why Westphalian-style state-based negotiations may avoid such a frame.

⁵² As Brunnée points out, “[t]he predominant focus in the international environmental justice literature, and certainly in the literature on climate change, from both Southern and Northern perspectives, is upon matters of distributive justice.” Brunnée, *supra* note 24, at 319. The distributive justice frame likely further entrenches opposition to “justice” as a predominant framing mechanism for equity discussions in the context of UNFCCC negotiations since it connotes the centrality of redistributing rights and responsibilities (primarily rooted in economics) in ways that would disrupt the existing global order and paradigm. *See id.* Other forms of justice, however, entail different but equally onerous challenges to existing patterns of behavior. Procedural justice, for example, demands rethinking existing patterns of representation and participation in decision-making processes so as to assure fair and representative decision-making processes. Corrective justice, in turn, which “encompasses . . . concepts of ‘retributive justice,’ ‘compensatory justice,’ [and] ‘restorative justice’” seeks to identify the entity responsible for harm and hold it accountable through punishment and restitution to the victims. Robert R. Kuehn, *A Taxonomy of Environmental Justice*, 30 ENVTL. L. REP. 10681, 10688, 10693–94 (2000).

⁵³ This hold true even when justice is understood as a tool for “maintaining or restoring a *balance or proportion*” with respect to the social distribution of burdens. *See* H.L.A. HART, *THE CONCEPT OF THE LAW* 159 (3d ed. 2012).

Kyoto Protocol.⁵⁴ The Paris Agreement, in turn, references equity in five separate places and identifies equity as a guiding principle.⁵⁵

The Paris Agreement,⁵⁶ in common with both the UNFCCC⁵⁷ and the Kyoto Protocol,⁵⁸ couples equity with the principle of CDRRC.⁵⁹ The two concepts are intertwined and understood in relation to one another.⁶⁰ The principle of equity, while never being defined institutionally, has consistently been read as being essentially coterminous with or, at a minimum, complementary to the principle of CDRRC. While similarly evading any formal institutional definition, for many years CDRRC has been widely understood as delineating responsibilities among countries based on their level of economic development and historical GHG footprint. The basic premise is that developed countries should take the lead in reducing emissions and supporting both mitigation and adaptation efforts in developing countries, with developing country participation being largely contingent on such support.

Despite this general frame, disagreements persist as to how to understand the principles of equity and CDRRC both independently and in relation to one another. Some commentators, for example, argue that the principle of equity can be broken down into discrete components, such as responsibility, capacity, and

⁵⁴ See *supra* note 25 and associated text (citing UNFCCC); UNFCCC, *supra* note 9, art. 3. The Kyoto Protocol does not restate that equity-oriented normative frame; instead it simply denotes that the parties to the Protocol are “guided by Article 3 of the Convention.” See Kyoto Protocol, *supra* note 17, pmb1.

⁵⁵ See *Paris Agreement*, *supra* note 7, art. 2 (“This Agreement will be implemented to reflect equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.”).

⁵⁶ See *id.*

⁵⁷ UNFCCC, *supra* note 9, art. 3(1) (stating that: “The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.”).

⁵⁸ As discussed, *infra* note 54, the Kyoto Protocol does not restate the equity and CDRRC framework, but instead states that the Parties to the Protocol are guided by UNFCCC Article 3. See Kyoto Protocol, *supra* note 16, pmb1.

⁵⁹ See *id.*

⁶⁰ See, e.g., Edward Cameron, *What Is Equity in the Context of Climate Negotiations?*, WORLD RES. INST. (Dec. 14, 2012), <http://www.wri.org/blog/2012/12/what-equity-context-climate-negotiations> [hereinafter Cameron, *Equity*] (noting that the UNFCCC “ties equity to common but differentiated responsibilities and respective capabilities (CBDR-RC)”).

need,⁶¹ with each of these categories capable of being numerically quantifiable tools for “measuring” equity.⁶² Others view equity as systemic and would argue that there are many equity principles embodied within the UNFCCC, including but not limited to CDDRRC.⁶³ These other equity principles might include, for example, the emphasis on the “specific needs and special circumstances of developing country parties,” the importance of “precautionary measures,” “cost-effectiveness,” and the right to “sustainable development.”⁶⁴ As Cameron notes:

There are many legitimate views of what equity means in the context of the UNFCCC, reflecting sharp contrasts on how to share both the burdens and opportunities of the global transition to low-carbon development. . . . The current approach to equity has become a tug-of-war between countries that are reluctant to make greater climate change action commitments without assurances that others will also act.⁶⁵

⁶¹ See CLIMATE EQUITY REFERENCE PROJECT, FAIR SHARES: A CIVIL SOCIETY EQUITY REVIEW OF INDCs 6 (2015), http://civilsocietyreview.org/wp-content/uploads/2015/11/CSO_FullReport.pdf [hereinafter FAIR SHARES].

⁶² See *id.*

⁶³ See CLIMATE ACTION NETWORK, CAN Fair EFFORT SHARING PRINCIPLES POSITION PAPER 2 (2011), http://www.climatenetwork.org/sites/default/files/CAN_effort_sharing_principles_position_paper_22September2011.pdf (noting that “[t]he overarching principle that parties act ‘on the basis of equity’ (Article 3.1) is not explicitly defined, but the UNFCCC does provide guidance as to differential treatment that may be required in order to achieve it. In this regard, one could say that ensuring equity means, inter alia: Common but differentiated responsibilities and respective capabilities (3.1) Developed countries should take the lead (3.1) Full consideration for needs and circumstances of developing country parties, especially those that are particularly vulnerable to the adverse effects of climate change (3.2) Precautionary approach to avoiding climate change and its adverse effects. (3.3) Approach is cost-effective, and comprehensive, while accounting for different socio-economic contexts (3.3) Approach is appropriate given parties conditions and development needs (3.4) Preserves the right to sustainable development (3.4) Supports sustainable economic growth and development (3.5).”).

⁶⁴ CLIMATE ACTION NETWORK, CAN Fair EFFORT SHARING PRINCIPLES POSITION PAPER 2 (2011), http://www.climatenetwork.org/sites/default/files/CAN_effort_sharing_principles_position_paper_22September2011.pdf.

⁶⁵ Cameron, *Equity*, *supra* note 60 (further suggesting that “[s]ome countries emphasize ‘responsibilities,’ usually explained as the historical responsibilities developed countries have because of the greenhouse gases they emitted in the process of growing economically. Other countries focus on ‘capabilities,’ the capacity countries have now to deal with climate change, such as their financial and technological resources to reduce domestic emissions or support adaptation research and activities. Several options for ‘differentiation’ have been suggested

This view is shared by many in the field, with another prominent climate organization characterizing the situation thusly: “[w]e’ve seen dozens of equity principles proposed, and little effort to evaluate and prioritize them. This has led to a situation in which the entire equity agenda can be and is dismissed as unhelpful and counter-productive.”⁶⁶

The malleability of the equity principle allows the term to be used to advance different normative principles that often stand in tension with one another. Scholtz, for example, interprets equity to mean “the right of developing states to pursue development in the same manner as developed states did,” but notes that this understanding of equity is in tension with reality and “the urgent need for all states to take action” on climate change.⁶⁷ The elasticity of the term, however, is also what makes it useable in a context where any normative frame that is too rigid or too tightly bound up with existing systems of liability or accountability is rendered politically untenable.

The concept of equity, however understood, is used in the climate change context to refer to questions concerning present generations (intra-generational equity) and future generations (inter-generational equity).⁶⁸ Equity, therefore, is understood in relation to the rights and responsibilities among existing humans, as well as the rights and responsibilities between present and future generations. Within this broader context, examining how different groups of states understand and emphasize equity helps reveal the contours of the concept. Developing countries, for example, often prioritize intra-generational justice concerns, emphasizing the urgency of the basic development and adaptation needs of existing populations. Many industrialized countries, in contrast, “have emphasised in their rhetoric the need to take action now for the

over the years, including historical responsibility, levels of economic development, and vulnerabilities and needs.”).

⁶⁶ CLIMATE ACTION NETWORK, CAN BRIEFING: EQUITY 1 (2012), http://www.climatenetwork.org/sites/default/files/CAN_Equity_Briefing_May2012_0.pdf.

⁶⁷ Werner Scholtz, *Equity as the Basis for a Future International Climate Change Agreement: Between Pragmatic Panacea and Idealistic Impediment. The Optimisation of the CBDR Principle via Realism*, 42 THE COMP. & INT’L L. J. OF SOUTHERN AFR. 166, 166 (2009).

⁶⁸ See generally Redgwell, *supra* note 27 (defining and explaining the origins of inter-generational equity, as distinguished from *intra*-generational equity, and illustrating where this concept has gone and where it has yet to go).

benefit of future generations.”⁶⁹ This frame for equity conversations focuses less on the challenges faced by current generations, which tend to be concentrated most acutely in developing countries, and more on the long-term challenges for the global population as a whole.⁷⁰

Moreover, given that equity closely aligns with principles of distributive justice, it is frequently mobilized within the state-based climate negotiations as a frame for thinking about the morality of tasking different categories of states with varying levels of legal responsibility. Until 2015, when the Paris Agreement was adopted, equity provided a useful normative tool for dictating top-down approaches to addressing climate change that split the world into the two relatively clean categories of parties: developed and developing. For example, within the system of equity embraced by the Kyoto Protocol, developed countries bore primary responsibility for mitigating climate change and providing technical and financial support to developing countries in their efforts to mitigate and adapt to climate change. This approach framed an equitable solution to climate change as one that put the initial burden of addressing climate change on the shoulders of the parties that, collectively, accounted for the majority of present and historical anthropogenic GHG emissions and that, at least in theory, could more easily distribute the burden of addressing climate change among themselves so as to minimize the impacts of doing so.

This formulation of equity focuses on the primary distribution of burdens within a conventional worldview that situates states above and below a U.N.-designated development line. If you sit above the line, you are a developed state and the principle of equity dictates that you have a certain set of obligations. If you fall below that line, you have a separate, more limited set of obligations and a more expansive set of rights. Within those two

⁶⁹ LAWRENCE, *supra* note 27 (referencing Scholtz, *supra* note 67).

⁷⁰ Lawrence highlights different ways of understanding approaches to the deployment of moral terms noting, in part, that “[s]o-called ‘realist’ approaches to international relations regard reference to justice or fairness in international negotiations as self-serving, with outcomes determined by power relations,” while noting that new research shows that employing the concept of “fairness can play a significant role in influencing what is feasible,” making agreements “more likely to be adopted and complied with,” and moving negotiations from self-serving to a more “balanced settlement of conflicting claims” based on improved agreement over what is fair. *Id.* at 174.

categories, the principle of equity tells us little about how rights and responsibilities should be distributed among different groups of citizens. It also is silent on other moral questions, such as how procedural rights influence equity or the degree to which systems of corrective justice are compatible with the dominant view of equity.

Equity, as deployed within the framework of international climate change law, is a blunt tool capable only of drawing rudimentary lines in the sand. As the sharpness of the lines between developed and developing countries as causal agents and capable contributors blurs, and as faith in adherence to a cleanly-structured, top-down system of legal obligations fades, the value of equity as a normative framing tool is called into question. Thus, just as understanding of the principle of equity coalesces, even if broadly so, around CBDRRC and a bifurcated worldview, this understanding is being questioned and reexamined as the international community begins to deploy a new normative framework calling for an emphasis on fairness and, to a lesser degree, justice.

C. *The Movement Towards Fairness*

In 2014, at the last COP (COP 20) before the meeting in Paris, the parties to the treaty issued the Lima Call for Climate Action.⁷¹ The Lima Call for Climate Action built upon an earlier decision, the 2013 Warsaw decision on “Further Advancing the Durban Platform.” As Bodansky describes it, the Warsaw decision “first articulated the hybrid structure of the new agreement and called on states to submit their intended nationally determined contributions (INDCs) well in advance of the Paris conference.”⁷² The new INDC framework “abandons the static, annex-based approach to differentiation in the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol, in favor [of] a more flexible, calibrated approach, which takes into account a country’s circumstances and capacities and is operationalized

⁷¹ See U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its Twentieth Session*, U.N. Doc. FCCC/CP/2014/10/Add.1 (Feb. 2, 2015), [hereinafter Lima Call for Climate Action].

⁷² See Bodansky, *supra* note 34, at 293 (further noting that the Lima Call for Climate Action “elaborated informational norms for [P]arties’ INDCs”).

differently for different elements of the regime.”⁷³ This framework moves international climate change law away from the dominant paradigm that defined the first twenty years of its existence.

This shift disrupts the structural and normative frame of debate, not only as to what type of system facilitates effective actions to address climate change, but also as to what types of actions and relationships advance equity, or—through a reformulated frame—fairness. With respect to fairness, countries are invited to describe how their INDC is “fair and ambitious, in light of national circumstances.”⁷⁴ The emphasis on “fairness” as a tool for evaluating state-based climate commitments is new but it is situated within a continuing emphasis on equity.⁷⁵

The introduction of a new normative tool for assessing state actions is noteworthy, but the implications are unknown. Much like equity, there is no institutional effort to define the parameters for fairness. Unlike equity, however, parties are tasked with interpreting and sharing what fairness means as part of the INDC process. The Lima Call for Climate Action invites them to explain “how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances.”⁷⁶ This call invites greater transparency, participation, and exchange about the different factors that parties consider in making such judgments. As such, this process “provides an opportunity for each country to reflect on how it perceives fairness and ambition for itself and for others, as well as

⁷³ *Id.* at 290; see also Anne-Sophie Tabau, *Current Development in Carbon and Climate Law*, 9 CARBON & CLIMATE L. REV. 85, 85 (2015) (providing a brief overview of the Lima Call for Climate Action). Bodansky further notes that “the real paradigm shift occurred at the 2009 Copenhagen Conference, when states abandoned the Kyoto Protocol’s architecture in favor of a more flexible approach.” Bodansky, *supra* note 34, at 289–90.

⁷⁴ Lima Call for Climate Action, *supra* note 71, ¶ 14.

⁷⁵ See, e.g., Eliza Northrop & David Waskow, *A Framework for Describing Fairness and Ambition in Intended Nationally Determined Contributions*, WORLD RES. INST. 3 (Aug. 2015), <http://www.wri.org/sites/default/files/framework-fairness-indc.pdf> (“The term ‘fair’ is used, as in the Lima Call for Climate Action, to broadly reflect issues of equity. Considerations of equity have frequently focused on comparisons among countries to assess the appropriate level of climate action they should undertake.”).

⁷⁶ Lima Call for Climate Action, *supra* note 71, ¶ 14.

how it measures its contribution. This is important for enhanced clarity, greater understanding and evaluation among countries.”⁷⁷

The process initiated by the Lima Call for Climate Action added both a new way to assess state behavior—fairness—and a new process for engaging in conversations around equity and fairness in a direct and transparent manner. The invitation to engage in a more intentional, collective institutional discussion about how parties perceive fairness (and, thus, to some extent equity) represents a significant change from past practice. This level of participatory inclusiveness and transparency in the debate about the normative foundations for addressing climate change re-configures the parameters of the equity and fairness conversation. Critically, the mingling of narrative and legal text opens new avenues for dialogue and mobilization around questions of climate justice.

But, what does it mean for an NDC⁷⁸ to be “fair and ambitious” and how do individual party discussions around fairness and ambition advance a more widely shared collective understanding of equity and fairness in the context of global climate change negotiations?⁷⁹ The section that follows looks to specific state submissions to consider how the NDC mechanism operates and how parties are using their NDCs to frame notions of fairness.

⁷⁷ WORLD RES. INST., *DECODING INTENDED NATIONALLY DETERMINED CONTRIBUTIONS (INDCs): A GUIDE FOR UNDERSTANDING COUNTRY COMMITMENTS 4* (2015) [hereinafter *DECODING INDCs*], http://wriorg.s3.amazonaws.com/s3fs-public/uploads/Decoding_INDCs.pdf.

⁷⁸ For clarity, the difference between an INDC and NDC is that parties use the INDC process to outline their intended efforts to reduce national emissions and facilitate adaptation pursuant to what would eventually become the Paris Agreement; an INDC becomes a party’s NDC at the point at which the party ratifies the Paris Agreement. See UNFCCC, *Nationally Determined Contributions (NDCs)*, <https://unfccc.int/process/the-paris-agreement/nationally-determined-contributions/ndc-registry#eq-4> (providing an overview of the NDC and INDC processes).

⁷⁹ Hart suggests that references to fairness, as opposed to morality, are primarily relevant in two contexts: first, “when we are concerned not with a single individual’s conduct but with the way in which *classes* of individuals are treated, when some burden or benefit falls to be distributed among them,” and second, “when some injury has been done and compensation or redress is claimed.” HART, *supra* note 53, at 158. Understood thusly, fairness offers a vehicle for framing, or reframing the core distributive and restorative, or even retributive questions at the heart of climate change conversations. Contextually situated, however, it is more likely that the term fairness will serve the primary function of framing states’ differing perspectives on the distributive questions that define the climate change debate.

Outside of specific party submissions, overarching descriptions of fairness and ambition have been advanced. One view suggests that “fair and ambitious contribution[s] can be described in terms of the country’s potential to act to the greatest extent possible given its emissions responsibility, its emissions projections (including planned actions), its capabilities, and its vulnerability and capacity to adapt to climate impacts.”⁸⁰ Another view posits that fair means that:

the industrialised countries have to play a leading role as regards the development of decarbonisation technologies. It was us who caused the emissions of the past. Now we have to develop the technology needed to reduce emissions in the future and to make it possible for developing countries to reduce their emissions.⁸¹

Frequently, early discussions around fairness and ambition situate understandings of these terms within a framework that draws from the overarching principles of CDRRC, but a version of CDRRC that operates in a less binary and fixed world than the one envisioned by the Kyoto Protocol.

At this early point, fairness remains open to interpretation and subject to fewer historical constraints than equity. In critical part, because it first appears in an agreement that invites collective participation without the traditional dividing lines, fairness, while linked to CDRRC, is less closely entangled with the longstanding view that a party’s position as either a developed or developing state⁸² defines the basic parameters of its equity-based obligations. That is, while equity has become closely tied with party identities, fairness is a more universal and, potentially, even more malleable

⁸⁰ DECODING INDCs, *supra* note 77, at 4 (adding that a fair and ambitious contribution should “maximize[] the opportunities presented by climate action in a way that is in line with broader sustainable development goals”). Further, “[c]ountries may explain **fairness** through multiple criteria, such as emissions responsibility (such as historical, current or projected future emissions per capita or total emissions), economic capacity and development indicators (such as GDP per capita), and relative costs and benefits of action in line with their potential to act.” *Id.* at 5 (emphasis in original).

⁸¹ Angela Merkel, Fed. Chancellor of Ger., Statement at the United Nations Climate Change Conference (Nov. 30, 2015), https://unfccc.int/files/meetings/paris_nov_2015/application/pdf/cop21cmp11_leaders_event_germany.pdf.

⁸² Within the developing state category, particular state-based identity arguments also centered around levels of development and levels of exposure (e.g., the least developed countries and small island developing states, respectively).

of a term than equity.⁸³ Additionally, the universal character of the term allows greater flexibility for parties to interpret fairness distinctively, taking into consideration more than macro-level differences in economic development and including, for example, levels of risk and vulnerability that parties face at the domestic level.⁸⁴ This openness gives parties a potentially more effective lever for identifying and targeting the macro- and micro-level structures that lead to and exacerbate inequality in the climate change context.⁸⁵ Moreover, using fairness as a tool for shifting the equity conversation away from the identity of a state as the central factor—towards consideration of universally-shared conditions like vulnerability—has an “expressive and symbolic value” that “avoid[s] essentializing identity characteristics and instead emphasize[s] human commonality across groups.”⁸⁶ Focusing on shared conditions rather than emphasizing state-based identities as the primary entry point for approaching equity and fairness analysis is not without its risks, of course, because focusing on shared conditions and more generalized norms may also provide tools for repressing or hiding bias.⁸⁷

⁸³ An apt analogy here is that the concept of equity as an identity politics term, in that it points to the identities of states (developing vs. developed) as critical to understanding and framing normative conversations, whereas fairness is a universalist term that moves the conversation away from identity-based politics and, thus, affords more flexibility to consider normative questions in a less historically constrained and contentious environment.

⁸⁴ Thus, for example, fairness allows the conversation to shift away from the axis of emphasis of state-based identity to universal conditions such as vulnerability that vary within and across states. *See, e.g.*, Jessica A. Clarke, *Beyond Equality? Against the Universal Turn in Workplace Protections*, 86 *IND. L.J.* 1219, 1240 (2011). For a more nuanced discussion of the implications of using identity-based or universalist frames, see generally Samuel R. Bagenstos, *Universalism and Civil Rights (with Notes on Voting Rights After Shelby)*, 123 *YALE L.J.* 2574 (2014).

⁸⁵ *See e.g.*, Bagenstos, *supra* note 84, at 2841–51.

⁸⁶ Charlotte S. Alexander, Zev J. Eigen, & Camille Gear Rich, *Post-Racial Hydraulics: The Hidden Dangers of the Universal Turn*, 91 *N.Y.U. L. REV.* 17–18 (2016).

⁸⁷ *See id.* at 13; *see* Clarke, *supra* note 84, at 1223. In common with the colorblindness critiques of the universalist turn in civil rights, a critique of using a more universalist term, such as fairness is that the frame it provides is so broad and, at times, ambiguous and malleable that it can also be used as a shield for advancing hidden agendas. Bagenstos discusses this trade-off in the context of civil rights: “Universalist responses have many possible strengths: tactically, in securing political support for and broader judicial implementation of laws that promote civil rights interests; substantively, in aggressively attacking the structures that lead to inequality; and expressively, in emphasizing human

Regardless of how the use and interpretation of fairness unfolds, the invitation to parties to focus on fairness as a cornerstone of the NDC process is notable because it disrupted the twenty-plus year frame for state-based climate negotiations. The extent and impact of this disruption will play out in the coming years. Focusing on fairness creates room to shift the conversation away from a monolithic vision of the state as an economic entity whose level of development is the primary indicator of its ability to address climate change. It creates space within which to develop a more nuanced understandings of the distinct attributes of each state and how these characteristics shape the ability of the state with respect to mitigation and adaptation capabilities and needs. Within this space, perhaps many of the least-developed countries will use fairness as a vehicle to advocate for greater consideration of variations in responsibility, risk, and vulnerability among and within states. Perhaps small island states will effectively use fairness as a tool to encourage parties to consider procedural and corrective dimensions of justice. Perhaps a handful of developed countries will latch onto the malleable nature of the concept to convert fairness into an even flimsier version of equity that lessens the demands made on industrialized state parties and masks increasing inequities in effort and impact among the parties. Or, perhaps understandings of fairness will vary so dramatically among the parties that the concept will be swallowed up into the equity void and will fail to offer anything new or additional.

At a minimum, the appearance of fairness as a tool for analyzing NDCs disrupts the existing discourse and creates opportunities to engage in more transparent conversations about the normative groundings and the implicit and explicit assumptions that are being made about the relative roles and responsibilities of parties. From a procedural justice perspective, creating a

commonality across groups. But they have possible drawbacks along all three of these dimensions as well.” Bagenstos, *supra* note 84 at 2841. *See also* Alexander et al., *supra* note 86 at 17, noting that

In response to the rising tide of post-racial skepticism about civil rights claims, some scholars have argued that plaintiffs’ lawyers should, when possible, reframe race discrimination claims as race-neutral dignity, fairness, and liberty claims. These scholars call on lawyers to adopt what Jessica Clarke calls the universal turn as a litigation strategy. Universalist claims guarantee a minimum floor of rights or benefits for all persons, or at least guarantee a set of rights or benefits to a broad group of people not defined according to identity axes.

framework that not only enables, but also mandates that each party have a formal, public voice on questions of justice, equity, and fairness widens avenues for participation in a way that limits opportunities for bracketing controversial perspectives. It also expands opportunities for more inclusive conversations about the macro and micro impacts of climate change for parties at both the state and sub-state levels. Within this more transparent dialogue, statements (and silence) on issues of justice, equity, and fairness help define the parameters of the inter-state conversation on climate change roles and responsibilities.

II. THE PARIS AGREEMENT AND THE NATIONALLY DETERMINED CONTRIBUTIONS

The Paris Agreement represents the culmination of efforts, begun in Copenhagen in 2009, to create a more flexible, bottom-up model for addressing climate change. Bodansky describes the result as “a Goldilocks solution that is neither too strong (and hence unacceptable to key states) nor too weak (and hence ineffective).”⁸⁸

At its core, the Agreement commits the parties to “holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels.”⁸⁹ Additionally, parties to the Agreement commit to increasing pathways towards adaptation, and to improving climate finance, all within a framework focused on reflecting “equity and the principle of common but differentiated responsibilities and respective capabilities, in the light of different national circumstances.”⁹⁰ The primary way the Agreement envisions meeting these goals is through the submission of NDCs that reflect each Party’s highest possible ambition within the CBDRRC framework.⁹¹ Each round of NDC submissions must be progressively more ambitious.⁹²

Despite these forward-looking developments, when assessing the Paris Agreement based on expected effectiveness to limit climate change, even if parties fulfill the commitments they make

⁸⁸ Bodansky, *supra* note 33, at 289.

⁸⁹ *Paris Agreement*, *supra* note 7, art. 2.

⁹⁰ *Id.*

⁹¹ *See Paris Agreement*, *supra* note 7, art. 4.

⁹² *See id.*

in their NDCs, it is unlikely that this would hold global warming below 2°C, much less 1.5°C. In fact, one estimate suggests that policies existing as of November 2017 would achieve warming of about 3.6°C, but that if parties fulfilled all of the commitments they have made it would “limit warming to about 3.16°C above pre-industrial levels, or in probabilistic terms, likely limit warming below 3.5°C.”⁹³ Thus, a significant mitigation ambition gap remains.

If, from a pure mitigation-effectiveness perspective, the Paris Agreement falls short, even assuming full Party compliance—which is naïve, especially given recent U.S. recalcitrance⁹⁴—what then makes the Agreement a historic and effective tool for preventing climate disaster? Perhaps it is because, “[r]emarkably, all major protagonists endorsed the deal, and countries with diametrically opposed interests supported it,”⁹⁵ and thus it provides the momentum and the platform states need to cooperate and move towards increasingly meaningful and ambitious change. Arguably, however, the greatest success of the Paris Agreement is disrupting the previous paradigm of international climate law that has been unsuccessful for twenty-plus years. That paradigm was static and envisioned big solutions facilitated by high levels of consensus-based state cooperation. That model made sense at the time it was crafted but ultimately did not respond to the political or physical realities of climate change. The Paris framework recognizes those deficiencies and provides room to rethink modes of cooperation

⁹³ See *Temperatures*, CLIMATE ACTION TRACKER, <https://climateactiontracker.org/global/temperatures> (last visited Nov. 5, 2018); U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its Twenty-First Session*, U.N. Doc. FCCC/CP/2015/10/Add.1, addendum ¶ 17, (Jan. 29, 2016). In key part the decision “[n]otes with concern that the estimated aggregate greenhouse gas emission levels in 2025 and 2030 resulting from the intended nationally determined contributions do not fall within least-cost 2 °C scenarios but rather lead to a projected level of 55 gigatonnes in 2030, and also notes that much greater emission reduction efforts will be required than those associated with the intended nationally determined contributions in order to hold the increase in the global average temperature to below 2 °C above pre-industrial levels by reducing emissions to 40 gigatonnes or to 1.5 °C above pre-industrial levels by reducing to a level to be identified in the special report referred to in paragraph 21 below.” *Id.*

⁹⁴ See President Donald Trump, Statement on the Paris Climate Accord (June 1, 2017), <https://www.whitehouse.gov/briefings-statements/statement-president-trump-paris-climate-accord/>.

⁹⁵ Dimitrov, *supra* note 12, at 2.

and diversified strategies for mitigation. It provides a more realistic platform for progress. That is its greatest strength.

The Paris Agreement also doubles down on the importance of adaptation and places greater emphasis on loss and damage, climate finance, inclusive mitigation mechanisms, and other measures linked to efforts to promote equity and fairness. The extent to which the Paris Agreement promotes greater equity and fairness with respect to climate change and the degree to which the two central pillars of climate efforts—effectiveness and equity—are compatible requires further analysis.

A. *Getting to Paris*

In addition to effectiveness and equity, another set of twin pillars has long characterized international environmental law: “contribution and capacity.”⁹⁶ Rajamani traces the lineage of these principles, as embodied by CDRRC and advanced through its system of “differential treatment” between developed and developing countries, to the Montreal Protocol in 1987, and the Kyoto Protocol in 1997.⁹⁷

The Kyoto Protocol, building on the success of the Montreal Protocol on Ozone Depleting Substances, adopted a top-down, targets and timetables approach to controlling global GHG emissions.⁹⁸ In the most basic terms, this approach divided states

⁹⁶ RAJAMANI, *supra* note 28, at 133.

⁹⁷ *See id.*

⁹⁸ *See* Kyoto Protocol, *supra* note 17, art 3 (laying out the overarching target and timetable for the Agreement). For a description of the way in which the Montreal Protocol provided an early model for the Kyoto Protocol, see, for example, Cinnamon Carlarne, *Delinking International Environmental Law and Climate Change*, 4 MICH. J. ENVTL. & ADMIN. L. 1, 33–34 (2014):

The [Montreal Protocol] ‘targets and timetables’ approach ostensibly created a structure that reflected both the fact that ozone depletion was a problem of the global commons that required collective action, and that the differences between developing and developed [sic] countries must be accommodated in various ways. . . . Given the similarities between the ozone depletion problem and the climate change problem and, in particular, the fact that they were both global collective action problems, it is not surprising that early discussion about climate change held the Montreal Protocol up as a model for efforts within the climate context. As late as 1997, when the parties to the UNFCCC negotiated the Kyoto Protocol, the global community still held out hope that some version of an internationally-defined emissions reductions ‘targets and timetables’ approach could mobilize states into adopting the types of national policies necessary to address the problem.

into two broad categories—industrialized and developing countries—and assigned a series of obligations, including specific, time-fixed mitigation obligations, to the industrialized countries.⁹⁹ In contrast, the developing countries were not assigned any emissions reductions obligations or even any limits on the growth of their emissions.¹⁰⁰ This approach reflected the fact that industrialized states were responsible for the majority of accumulated GHGs in the atmosphere and assumed that a top-down emissions reductions model could be expanded—both in terms of the stringency of the targets and the pool of states to which the targets apply—over time to incrementally address the climate change challenge.

Addressing climate change, however, proved to be very different from controlling ozone-depleting substances. Differences included the ease with which the offending substances could be eliminated, the economic incentives for doing so, and the equity implications of the failure to do so.¹⁰¹ Reflecting growing recognition of the unique challenges of climate change and the changing profile of global emissions, after almost twenty years of climate negotiations, at the 2011 COP in Doha, the parties to the Convention began to rethink the wisdom and necessity of sticking with a conventional, top-down framework containing legally-binding emissions reductions obligations. As a result, the parties to the Convention tasked the Working Group on the Durban Platform for Enhanced Action with the job of developing a pathway towards a new agreement to supplement the Kyoto Protocol. The charge

Id.

⁹⁹ See Kyoto Protocol, *supra* note 17, arts. 3, 5 (identifying a timetable and monitoring requirements for industrialized nations only).

¹⁰⁰ See *id.* at art. 10 (recognizing “differentiated responsibilities” between Annex I and Annex II parties, and not assigning emissions reductions or limitations on growth to developing nations in Annex II).

¹⁰¹ See Richard B. Stewart et al., *Building Blocks for Global Climate Protection*, 32 STAN. ENVTL. L. J. 341, 349–51 (2013). Stewart et al. note that while:

[g]lobal atmospheric ozone depletion provides an environmental example of a situation in which it was in the self-interest of major jurisdictions to unilaterally take action that would provide global benefits[,] . . . [m]ost developed country governments have concluded that the discernible national benefits from unilateral action to mitigate climate change are unlikely to outweigh the national costs over a politically relevant timeframe, notwithstanding the fact that the long-term benefits appear to be large.

Id.

was to “develop a protocol, another legal instrument or a legal outcome under the Convention applicable to all parties” no later than 2015 in order for that agreement to come into effect and begin to be implemented in 2020.¹⁰² The first part of this charge envisioned a conventional legal instrument, but the broader reference to a “legal outcome” suggests that the parties recognized that a new model of cooperation might be in order.

As discussed in Part I(C), it was two years later, in Warsaw, through the decision on “Further Advancing the Durban Platform,” that the parties to the Convention first created the outline for what would become the Paris Agreement. One year later, the Lima Call for Climate Action formalized the move towards a new bottom-up, inclusive mitigation model. The Lima Call for Climate Action reiterated the “invitation to each Party to communicate to the secretariat its intended nationally determined contribution towards achieving the objective of the Convention.”¹⁰³ It further specified that each party’s submission should represent a progression beyond the current undertaking of that party and “shall address in a balanced manner, inter alia, mitigation, adaptation, finance, technology development and transfer, and capacity-building, and transparency of action and support.”¹⁰⁴

The cooperative approach embodied by the Lima Call for Climate Action creates the flexibility for each country to assess its overall situation, set targets that best suit its national circumstances, and allow it to be ambitious in ways that are compatible with individual state characteristics (e.g., addressing deforestation, peaking emissions, increasing renewable energy capacity, or aiming for absolute emissions reductions). The individualized nature of the process also creates room for parties to lay out what they think of as their successes to date, the areas that they perceive to be the most critical for international attention, particular domestic concerns, and any other matters that they believe should be highlighted. Parties have the flexibility to approach the INDC submission process as a platform for submitting clean and simple commitment statements or as a

¹⁰² U.N. Framework Convention on Climate Change, *Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action*, U.N. Doc. FCCC/CP/2011/L.10 ¶¶ 2, 4 (Dec. 11, 2011).

¹⁰³ See Lima Call for Climate Action, *supra* note 71, ¶ 10.

¹⁰⁴ *Id.*

vehicle for submitting comprehensive statements about national circumstances and perspectives on climate change.

By the time the Paris meeting began in late November 2015, more than 180 states, including all of the top GHG emitters, had submitted INDCs.¹⁰⁵ Notably, the two largest net GHG emitters, the United States and China, issued a joint announcement sharing their respective commitments and their renewed commitment to bilateral cooperation.¹⁰⁶ High levels of participation set the stage for success in Paris.

The Paris Agreement was opened for signature on April 22, 2016 at which time 175 parties signed the Agreement.¹⁰⁷ By October 5, 2016, the ratification threshold was met,¹⁰⁸ allowing the Paris Agreement to enter into force, which it did on November 4, 2016, less than a year after it was adopted.¹⁰⁹ The rapid approval of the Paris Agreement stands in stark contrast to the nearly eight-year ratification process for the Kyoto Protocol. The relative ease of the ratification process—coupled with the widespread positive reaction from world leaders, who dubbed the Agreement everything from “a new covenant for the future,”¹¹⁰ to

¹⁰⁵ See Bodansky, *supra* note 34, at 293.

¹⁰⁶ The White House: President Barack Obama, White House Press Release, *U.S.-China Joint Presidential Statement on Climate Change* (Sept. 25, 2015), <https://www.whitehouse.gov/the-press-office/2015/09/25/us-china-joint-presidential-statement-climate-change>.

¹⁰⁷ See UNFCCC, *Announcement: 175 States Sign Paris Agreement* (April 22, 2016), <https://unfccc.int/news/175-states-sign-paris-agreement>.

¹⁰⁸ Article 21 specifies that the Agreement will come “into force on the thirtieth day after the date on which at least 55 parties to the Convention accounting in total for at least an estimated 55 per cent of the total global greenhouse gas emissions have deposited their instruments of ratification, acceptance, approval or accession.” *Paris Agreement*, *supra* note 7, art. 21. At the time of writing, 184 of the 197 parties to the Convention have ratified the Agreement. See UNFCCC, *Paris Agreement - Status of Ratification*, <https://unfccc.int/process/the-paris-agreement/status-of-ratification> (last visited Jan. 28, 2019).

¹⁰⁹ See UNFCCC, *Marrakech Climate Change Conference - November 2016*, <https://unfccc.int/process-and-meetings/conferences/past-conferences/marrakech-climate-change-conference-november-2016/marrakech-climate-change-conference-november-2016> (last visited Nov. 5, 2018). The first session of the Conference of the parties serving as the meeting of the parties to the Paris Agreement (CMA 1) took place shortly thereafter, from November 7–18, 2016, in Marrakech, Morocco. *See id.*

¹¹⁰ Matt McGrath, *Nations Sign Historic Paris Climate Deal*, BBC NEWS (Apr. 22, 2016), <https://www.bbc.com/news/science-environment-36108194> (quoting then-U.N. Secretary-General Ban Ki-moon).

“historic,”¹¹¹ to “the day that countries of the world shut the door on inevitable climate disaster”¹¹²—suggested progress towards international efforts to address climate change.

In the wake of the struggle to ratify and implement the Kyoto Protocol and the failed efforts to develop a comprehensive new international agreement in Copenhagen in 2009, the simple fact that the parties to the UNFCCC succeeded in agreeing upon a new framework for addressing climate change was, in itself, significant. Additionally, the Agreement renews and deepens commitments to adaptation, loss and damage, technology transfer, transparency and accountability, climate finance, and measures designed “to prod states to progressively ratchet up their efforts,”¹¹³ reinforcing a vision of progress and momentum.

B. *An Introduction to the Nationally Determined Contributions*

Through their respective NDCs, parties demonstrate a commitment to helping meet the 2°C goal. In key part, through the submission of NDCs, parties define their ambitions for emissions reductions. Pursuant to the Lima Call for Climate Action, mitigation goals in the NDCs “may include, as appropriate, . . . quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions.”¹¹⁴ Beyond laying out mitigation commitments, parties may also use their NDCs to define how they plan to “adapt to climate change impacts, and what support they need from, or will provide to, other countries to adopt low-carbon pathways and to

¹¹¹ Alister Doyle & Roberta Rampton, *Paris Climate Accord to Take Effect; Obama Hails ‘Historic Day’*, REUTERS (Oct. 5, 2016), <https://www.reuters.com/article/us-climatechange-paris-idUSKCN12523G>.

¹¹² Mariette Le Roux & Catherine Hours, *The Historic Paris Climate Change Agreement Just Became International Law*, PRI (Nov. 5, 2016), <https://www.pri.org/stories/2016-11-05/historic-paris-climate-change-agreement-just-went-effect> (quoting U.N. climate chief Patricia Espinosa and Moroccan Foreign Minister Salaheddine Mezouar; also noting that the office of President Francois Hollande of France described the event as a “historic day for the planet”).

¹¹³ Bodansky, *supra* note 34, at 289.

¹¹⁴ Lima Call for Climate Action, *supra* note 71, ¶ 14.

build climate resilience.”¹¹⁵ NDCs are flexible tools that allow nations to communicate their overarching resource needs and climate goals.

1. “*Fair and Ambitious*”

As discussed in Part I(C), *supra*, the Lima Call for Climate Action emphasizes two key components that every NDC should embody: fairness and ambition.¹¹⁶ Specifically, parties are tasked with describing why they consider their NDCs to be fair and ambitious.¹¹⁷ In this way, these two concepts become the pillars for assessing the adequacy of party submissions, with ambition relating to mitigation effectiveness and fairness presumably relating to evolving notions of equity.

The ambition of an NDC can be keyed to the Paris objective of limiting the increase in the global average temperature to well below 2°C. Collective ambition, therefore, is “lacking when the aggregate policies and actions of all countries are deemed insufficient to meet the 2°C goal.”¹¹⁸ Individual party NDCs, on

¹¹⁵ *What is an INDC?*, WORLD RES. INST., <https://www.wri.org/indc-definition> (last visited Nov. 5, 2018).

¹¹⁶ Lima Call for Climate Action, *supra* note 71, ¶ 14. A third important element is transparency. *See id.* Transparency is important “so that stakeholders can track progress and ensure countries meet their stated goals” and can be achieved, in part, through making the NDCs public, thus providing other interested parties with the ability to track progress and ensure countries meet their stated goals. WORLD RES. INST., *supra* note 115. Of course, publishing an NDC is only one element of transparency; transparency also requires continuing access to information in order to track compliance or implementation of proposed strategies.

¹¹⁷ *See id.* ¶ 14. In full, paragraph 14 states:

Agrees that the information to be provided by parties communicating their intended nationally determined contributions, in order to facilitate clarity, transparency and understanding, may include, as appropriate, inter alia, quantifiable information on the reference point (including, as appropriate, a base year), time frames and/or periods for implementation, scope and coverage, planning processes, assumptions and methodological approaches including those for estimating and accounting for anthropogenic greenhouse gas emissions and, as appropriate, removals, and how the Party considers that its intended nationally determined contribution is fair and ambitious, in light of its national circumstances, and how it contributes towards achieving the objective of the Convention as set out in its Article 2.

Id. ¶ 14.

¹¹⁸ Edward Cameron, *What is Ambition in the Context of Climate Change?*, WORLD RES. INST. (Nov. 26, 2012), <http://www.wri.org/blog/2012/11/what-ambition-context-climate-change> [hereinafter Cameron, *Ambition*].

the other hand, should be viewed within a context of CBDRRC—that is, whether the party’s commitment to reducing (or peaking or otherwise limiting) GHG emissions is in line with its respective position within the international community. This assessment, of course, is complicated by the indeterminacy surrounding understandings of CBDRRC and the interplay between CBDRRC and equity. At a minimum, a party’s level of ambition should be assessed based on its particular historic, economic, political, and environmental attributes. Other factors relevant to the assessment of ambition include the real and anticipated level of implementation of climate policies, as well as “the finance, capacity building, and technology transfer support offered to help developing nations—arguably the countries that are most vulnerable to climate change—mitigate and adapt to global warming’s impacts.”¹¹⁹

Ambition and fairness are, of course, linked. Assessing ambition entails considering questions of CBDRRC and analyzing the extent to which a party commits to facilitating climate finance, technology transfer, and other forms of capacity building. As Cameron notes, ambition and equity are “two sides of the same coin,” because “until countries address the equity issue, ambition is likely to remain low.”¹²⁰

Within this context, what does it mean for a contribution to be fair, and what (if anything) does the addition of the term fair, as an independent assessor, add to the equation? As discussed, the word fair is broadly linked to the concepts of equity and CBDRRC. Thus, there continues to be a strong comparative dimension inherent in the analysis.¹²¹

Much like with equity, there are no firmly defined markers for identifying fairness. Asking parties to share why they consider their individual NDCs to be fair creates an open invitation to engage in a transparent conversation about the ways in which states see climate change as creating near- and long-term threats for their citizens and the pathways for alleviating the range and extent of harms. As a result, “[a]ny evaluation of fairness must consider the collective need for significant emission reductions to prevent the worst impacts of climate change affecting those most

119 *Id.*

120 Cameron, *Equity*, *supra* note 60.

121 See Northrop & Waskow, *supra* note 75, at 4–5.

vulnerable and thus creating further inequality,” as well as the degree to which contributions help “ensure that all countries are able to adapt to the impacts of climate change.”¹²² Evaluating whether a contribution is fair may take into consideration a number of factors, including:

emissions responsibility (for example, historical, current, or projected future emissions per capita or total emissions); economic capacity and development indicators (for example, GDP per capita, indicators related to health, energy access, etc.); vulnerability and capacity to adapt to physical and social impacts of climate change; relative costs of action and mitigation potential; benefits of action (co-benefits); or other factors.¹²³

Furthermore, assessing fairness requires examining the expected impacts of climate change and proposed climate actions not just among states, but also within states, with particular emphasis on how actions will affect those communities most vulnerable to the negative effects of climate change.

2. *Varying Structures and Emphasis on Fairness*

To exemplify different perceptions of fairness, it is helpful to explore how parties among different categories of states approach fairness in their NDCs. Given that the invitation to submit NDCs in the Lima Call for Climate Action contained broad language about the content of the plans, and that the Paris Agreement did little to narrow or add detail to the desired format, it should come as no surprise that parties have adopted very different approaches to structuring their NDCs. These varied approaches are strategic and often reflect the tactics countries have used during climate negotiations, as exemplified by the submissions described below.

¹²² *Id.* at 4.

¹²³ *Id.* at 7. The authors further note that:

Developing a fair contribution is not a zero sum endeavor; climate action can provide significant health, development, and economic benefits to countries that may outweigh the cost of taking action. Thus, key factors in evaluating the fairness of a country’s INDC include its:

- Historical, current, and projected emissions, and the level and type of action given its emission responsibility and profile,
- capabilities, and development needs.
- Vulnerability and capacity to adapt.
- Potential and opportunities for action.

Id. at 4.

The United States' NDC is five pages long and contains concise and precise overviews of what the country is willing to do and why; there is no excessive detail or justification offered for what and why the United States commits to doing.¹²⁴ In contrast, India's NDC is thirty-eight pages long, and it offers a highly detailed, intricately contextualized picture of India's economic and environmental history and uses this detailed picture to frame its NDC.¹²⁵

Standing somewhat on its own, the Plurinational State of Bolivia's submission is seventeen pages long and can be described as a climate manifesto. Bolivia declares respect for the UNFCCC but then offers a fundamental critique of current international approaches to climate change by declaring the need to address the "structural cause that has triggered the climate crisis," which Bolivia believes to be "the failed capitalist system" that "promotes consumerism, warmongering and commercialism, causing the destruction of Mother Earth and humanity."¹²⁶ As a result, Bolivia's NDC rests on the assumption that "for a lasting solution to the climate crisis we must destroy capitalism."¹²⁷

Then, there are a number of submissions from small island states such as Tuvalu, Nauru, and Niue. These submissions tend to run roughly ten pages,¹²⁸ and to offer relatively straightforward goals. These goals, however, are contextualized by reference to the statistically insignificant role that the small island states play in contributing to global emissions and the seemingly existential

¹²⁴ See UNFCCC NDC Registry, U.S.A First NDC Submission (Mar. 31, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/U.S.A.%20First%20NDC%20Submission.pdf> [hereinafter United States INDC].

¹²⁵ See UNFCCC NDC Registry, India's Intended Nationally Determined Contribution: Working Towards Climate Justice (Oct. 1, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/India%20First/INDIA%20INDC%20TO%20UNFCCC.pdf> [hereinafter India INDC].

¹²⁶ UNFCCC NDC Registry, Intended Nationally Determined Contribution from the Plurinational State of Bolivia, 1–2 (Oct. 12, 2015), [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Bolivia%20\(Plurinational%20State%20of\)%20First/INDC-Bolivia-english.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Bolivia%20(Plurinational%20State%20of)%20First/INDC-Bolivia-english.pdf) [hereinafter Bolivia INDC].

¹²⁷ *Id.* at 2.

¹²⁸ The submissions of some other small island states are longer, such as Kiribati's NDC, which is 27 pages long. See UNFCCC NDC Registry, Republic of Kiribati Intended Nationally Determined Contribution (Sept. 26, 2015), https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kiribati%20First/INDC_KIRIBATI.pdf [hereinafter Kiribati INDC].

threat that the islands face if climate change is not limited and adaptation and loss and damage are not prioritized.

These examples represent just a handful of the structural approaches that parties take to crafting their NDCs. What is evident is that the NDCs represent much more than simple statements of what parties are willing to do to address climate change. They represent an opportunity for parties to share how climate change shapes the past, present, and future of their economic, political, cultural, and sovereign well-being.

C. *Expressions of Fairness and Ambition in the Nationally Determined Contributions*

In common with the variety of overarching approaches parties take to designing the overall structure of their NDCs, there is significant variety in how parties approach fairness concerns. The following discussion examines how representative states among several key groups, including top global GHG emitters, smaller industrialized countries, key developing countries, and a handful of the least-developed and small island states, integrate considerations of fairness into their NDCs. Each party's NDC is distinct in focus, tone, and goals, but the NDCs examined here offer a glimpse into some representative approaches. From this pool, a few trends emerge.

1. *Industrialized States*

Key industrialized parties, such as the United States and the European Union, approach the NDC submission process with caution, crafting submissions that are concise, focused, and do little to address fairness concerns, largely sticking to a broad, normative CBDRRC framing.¹²⁹ A handful of small, progressive, industrialized states do modestly more to engage with the invitation to consider how their submissions are fair and ambitious, with at least some of these parties using this invitation as an

¹²⁹ It should be noted that the Paris Agreement calls for all developed country parties to adopt economy wide absolute emissions reductions. Article 4, paragraph 4 states: "Developed country parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances." *Paris Agreement*, *supra* note 7, art. 4.

opportunity to broaden the discussion beyond the CBDRRC mitigation framework and to more directly integrate questions of adaptation, assistance, and capacity into the equation.

The United States is the largest historical emitter of GHGs and ranks second only to China in current emissions levels.¹³⁰ At the heart of the U.S.' NDC is an intention "to achieve an economy-wide target of reducing its greenhouse gas emissions by 26-28 per cent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28%."¹³¹ The NDC does little to engage with the nuances of fairness, merely stating that its target "is fair and ambitious," citing the steps that the United States has taken to limit emissions and achieve its goal.¹³² The discussion of fairness is sparse and focuses exclusively on the United States' own objective and the likelihood of achieving it. The NDC neither situates fairness within a larger, comparative global context that engages with equity or evolving understandings of CBDRRC, nor integrates considerations of domestic or global adaptation, loss and damage, climate finance, or other harm-minimizing and equity-increasing measures.¹³³ Put simply, the United States uses the language of fairness but does little to demonstrate how its NDC is fair and, thus, to elucidate its understanding of the concept.

The submission of the European Union is similarly concise—running less than five pages—and precise about its global

¹³⁰ See Mengpin Ge et al., *6 Graphs Explain the World's Top 10 Emitters*, WORLD RES. INST. (Nov. 25, 2014), <https://wri.org/blog/2014/11/6-graphs-explain-world%E2%80%99s-top-10-emitters>.

¹³¹ United States INDC, *supra* note 124, at 1. In addition, of course, on June 1, 2017, President Trump declared that the United States would "cease all implementation of the nonbinding Paris Accord and the draconian financial and economic burdens the agreement imposes on our country." President Donald Trump, *supra* note 94. While the United States is still formally a party to the Paris Agreement, its de facto withdrawal from the Agreement suggests that, at least in the short-term, the United States will not be taking any formal steps at the federal level to fulfill the commitments set out in the NDC.

¹³² United States INDC, *supra* note 124 at 1.

¹³³ Notably, the United States' NDC arguably is weak not only in relation to other countries but also with respect to its own vulnerable populations. "The existential threats posed to other parts of the world find their counterparts in U.S. territory. Rising sea levels, accompanied by poor infrastructure and lack of disaster preparation, made Hurricane Katrina into a catastrophe. On Alaskan islands and on the coasts, climate-caused land loss is beginning to displace people." Gabby Colavecchio, *Climate Justice in the U.S.: A Global Problem and a Grassroots Social Movement* 6–7 (June 30, 2015) (unpublished manuscript) (on file with authors).

commitment. The European Union, however, offers more insight into why it believes its NDC to be fair and, thus, what fairness might mean. To begin, the European Union offers an economy-wide absolute emissions reduction commitment based on a 1990 baseline.¹³⁴ Specifically, the European Union and its member states commit “to a binding target of an at least 40% domestic reduction in greenhouse gas emissions by 2030 compared to 1990, to be fulfilled jointly.”¹³⁵

The E.U. NDC also includes a subsection titled “Fair and ambitious.”¹³⁶ Within that subsection, the European Union notes that its emissions reduction target represents a “significant progression” beyond its current commitment.¹³⁷ It then contextualizes its commitment within “the context of necessary reductions according to the IPCC by developed countries as a group, to reduce its emissions by 80-95% by 2050 compared to 1990,” and suggests that the commitment is “consistent with the need for at least halving global emissions by 2050 compared to 1990.”¹³⁸ The E.U. submission then highlights the absolute emissions reductions as well as the reductions in average per capita emissions that the European Union and its individual member states have achieved, even as GDP in the European Union has grown. While the European Union does not directly use the term “fairness” (or “equity”), it seems to suggest that its record of emissions reductions and its commitment to continued absolute emissions reductions demonstrate that it is pulling its relative weight and leading developed country efforts to achieve the dramatic reductions necessary to meet the 2°C goal.¹³⁹

¹³⁴ See UNFCCC NDC Registry, Submission by Latvia and the European Commission on Behalf of the European Union and its Member States, 1 (Mar. 6, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/European%20Union%20First/LV-03-06-EU%20INDC.pdf>.

¹³⁵ *Id.*

¹³⁶ *Id.* at 2.

¹³⁷ *Id.*

¹³⁸ *Id.* at 3.

¹³⁹ In a “follow up” page to its submission, the E.U. appears to validate this general approach to fairness, stating that “[t]he EU and its Member States look forward to discussing with other parties the fairness and ambition of INDCs in the context of the below 2°C objective, their aggregate contribution to that objective and on ways to collectively increase ambition further.” *Id.* at 5. While most European submissions are similar in flavor to that of the E.U., Switzerland’s NDC emphasizes that the capacity to address climate change is linked to a state’s ability to invest in mitigation measures: “[h]ence, one aspect of

2. *Developing States*

The rapidly developing economies of China and India adopt highly individualized goals and, at times, engage more directly with the concept of fairness. These states are fairly consistent in adopting an approach that embraces what the countries perceive of as substantive goals that, often, amount to more than their “fair share,” but with a parallel emphasis on the importance of developed countries stepping up with respect to mitigation and all forms of capacity building and assistance. For other developing countries, such as South Africa and Bangladesh, mitigation goals and understandings of fairness are framed by an emphasis on the exigent development and adaptation needs that both amplify climate threats and intensify the urgency of addressing critical threats to vulnerable communities, important economic sectors, and sensitive ecosystems. Addressing these development needs is understood to be vital to human well-being. As a result, prioritizing these needs, and receiving assistance in doing so, sits at the heart of many developing country NDCs, even when they take on symbolically disproportionate ambitious mitigation goals.

a. *Rapidly Developing Economies*

Like the United States, China engages little with the idea of fairness, only employing the concept with respect to carbon markets by committing to ensuring “openness, fairness and justice in the operation of the carbon emission trading market.”¹⁴⁰ China, however, offers a more engaged discussion about equity, emphasizing that “China is among those countries that are most severely affected by the adverse impacts of climate change” and, thus, is driven to address climate change not only by its own

capacity is to take into account GDP per capita in fairness considerations.” UNFCCC NDC Registry, Switzerland’s Intended Nationally Determined Contribution (INDC) and Clarifying Information, 3 (Feb. 27, 2015), https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Switzerland%20First/15%2002%2027_INDC%20Contribution%20of%20Switzerland.pdf. By focusing not merely on emissions levels but also on emissions per capita and GDP per capita, Switzerland contextualizes fairness in a broader context that recognizes how variations in social and economic well-being influence a state’s vulnerability to, and capacity to respond to climate change.

¹⁴⁰ UNFCCC NDC Registry, Enhanced Actions on Climate Change: China’s Intended Nationally Determined Contributions, 14 (June 30, 2015), <http://www4.unfccc.int/ndcregistry/PublishedDocuments/China%20First/China%27s%20First%20NDC%20Submission.pdf>.

domestic economic and sustainability needs but also “by its sense of responsibility to fully engage in global governance, to forge a community of shared destiny for humankind and to promote common development for all human beings.”¹⁴¹ China’s NDC then sets out both mitigation and adaptation goals, including peaking carbon dioxide (CO₂) emissions around 2030 and improving disaster preparedness.¹⁴²

China approaches the question of equity by framing itself as “a responsible developing country” that seeks to “stand for the common interests of all humanity and actively engage in international cooperation to build an equitable global climate governance regime that is cooperative and beneficial to all.”¹⁴³ While China does not seek to define equity, it reaffirms a general commitment to the principles of equity and CBDRRC, while also

urg[ing] developed countries to fulfill their obligations under the Convention to take the lead in substantially reducing their emissions and to provide support of finance, technology and capacity building to developing countries, allowing developing countries more equitable access to sustainable development and more support of finance, technology and capacity building and promoting cooperation between developed and developing countries.¹⁴⁴

In this way, China frames its own goals as broadly equitable while emphasizing that advancing equity requires industrialized countries to take substantive steps not only to reduce their emissions, but also to facilitate developing country efforts to limit and adapt to climate change. China emphasizes the importance of

¹⁴¹ *Id.* at 2.

¹⁴² China’s full list of mitigation and adaptation goals is as follows: To achieve the peaking of carbon dioxide emissions around 2030 and making best efforts to peak early; To lower carbon dioxide emissions per unit of GDP by 60% to 65% from the 2005 level; To increase the share of non-fossil fuels in primary energy consumption to around 20%; and To increase the forest stock volume by around 4.5 billion cubic meters on the 2005 level. Moreover, China will continue to proactively adapt to climate change by enhancing mechanisms and capacities to effectively defend against climate change risks in key areas such as agriculture, forestry and water resources, as well as in cities, coastal and ecologically vulnerable areas and to progressively strengthen early warning and emergency response systems and disaster prevention and reduction mechanisms.

Id. at 5.

¹⁴³ *Id.* at 15.

¹⁴⁴ *Id.* at 15-16.

parties taking on international commitments that match their “national circumstances, current development stage and actual capabilities.”¹⁴⁵ This more nuanced framing of equity and CBDRRC reflects a shift away from the developed versus developing country framework. Instead, China’s position advances efforts to define roles and responsibilities more precisely, focusing on the position of the relevant state at a particular point in time, while still stressing that most of the responsibility falls on the shoulders of the developed countries. China also stresses throughout the NDC the importance of collaboration and cooperation, including the importance of “further strengthening south-south cooperation on climate change.”¹⁴⁶

India’s NDC, at thirty-eight pages, is one of the longer submissions and is characterized by an emphasis on the intimate relationship between humans and nature, a descriptive contextualization of the challenges that climate change poses for India, and a discussion of the numerous steps that India has taken to address climate-related challenges. The title of India’s NDC, “Working Towards Justice,” signals India’s distinctive approach to climate change. In the opening paragraph, India frames the importance of the natural environment, noting that Indian culture “calls our planet Mother Earth” and that “[e]nvironmental sustainability, which involves both intra-generational and inter-generational equity, has been the approach of Indians for very long.”¹⁴⁷

¹⁴⁵ *Id.*

¹⁴⁶ And additionally notes:

It will establish the Fund for South-South Cooperation on Climate Change, providing assistance and support, within its means, to other developing countries including the small island developing countries, the least developed countries and African countries to address climate change. China will thereby promote mutual learning, mutual support and mutual benefits as well as win-win cooperation with other developing countries. China will engage in extensive international dialogue and exchanges on addressing climate change, enhance policy coordination and concrete cooperation in related areas, share positive experiences and good practice, promote climate friendly technologies and work together with all parties to build a beautiful homeland for all human beings.

Id. at 16.

¹⁴⁷ India INDC, *supra* note 125 at 1 (further stating that “[m]uch before the climate change debate began, Mahatma Gandhi, regarded as the father of our nation had said that we should act as ‘trustees’ and use natural resources wisely

The NDC also emphasizes that there are great economic disparities in the world and that existing patterns of economic disparity are intimately linked to ongoing patterns of climate change. Emphasizing the distributional justice issue implicated in addressing climate change, India notes:

While a few fortunate fellow beings have moved far ahead in this journey of progress, there are many in the world who have been left behind. Nations that are now striving to fulfill this ‘right to grow’ of their teeming millions cannot be made to feel guilty of their development agenda as they attempt to fulfill this legitimate aspiration.¹⁴⁸

Framed by this reality, the submission reflects the challenges India confronts in trying to address climate change while also facilitating economic development for its “vast” population.¹⁴⁹

India’s NDC commitment focuses on limiting the growth of fossil fuels primarily through a shift towards reduced emissions intensity and greater reliance on clean energy and climate-friendly development. Recognizing that it sets forth a less emphatic mitigation commitment than some of its heavy-emitter counterparts, India emphasizes that its commitments represent “the utmost ambitious action in the current state of development,” further noting that “[b]oth in terms of cumulative global emissions (only 3%) and per capita emission . . . , India’s contribution to the problem of climate change is limited but its actions are fair and ambitious.”¹⁵⁰ The NDC is fair, India suggests, because it must be

as it is our moral responsibility to ensure that we bequeath to the future generations a healthy planet”).

¹⁴⁸ *Id.*

¹⁴⁹ *See id.* at 2.

¹⁵⁰ *Id.* at 33. In a supplement to its INDC, Brazil similarly emphasizes the importance of emissions per capita as an important metric for assessing fairness and responsibility, noting that “Brazil’s per capita emissions are already equivalent to what some developed countries have considered fair and ambitious for their average per capita emissions by 2030,” and emphasizing that “[i]n order to build a fair and equitable global response to climate change, it is . . . of central importance to link cause (net anthropogenic greenhouse gas emissions) and effect (temperature increase and global climate change).” UNFCCC NDC Registry, Federative Republic of Brazil Intended Nationally Determined Contribution, 2 (Sept. 27, 2015), <http://www4.unfccc.int/ndcregistry/PublishedDocuments/Brazil%20First/BRAZIL%20iNDC%20english%20FINAL.pdf>. Brazil’s focus on aligning responsibility with historic responsibility for emissions is in line with traditional notions of CBDRRC, but its willingness simultaneously to commit to emissions reductions and accompanying statements expressing a willingness to do more than it thinks of as its fair share suggests that while Brazil wants to delineate its

viewed in context, taking into account “the fact that India is attempting to work towards low carbon emission pathway while endeavoring to meet all the developmental challenges the country faces today.”¹⁵¹

The objective at the heart of India’s NDC is to “establish an effective, cooperative and equitable global architecture,” not only reflecting principles of equity and CBDRRC, but also “climate justice.”¹⁵² Achieving equity and fairness, from this perspective, requires more than looking into historic and contemporary responsibilities; it requires taking steps to remove the barriers that prevent millions of people from being able to achieve healthy and sustainable lifestyles.¹⁵³

understanding of fairness along historic responsibility lines, it also appreciates the need for collective, ambitious action even if it does not fit neatly within the fairness parameters it has outlined. *See id.* at 6.

¹⁵¹ India INDC, *supra* note 147, at 34. More than thirty years after the UN Declaration on the Right to Development, the existence of a human right to development remains contested. Both the UNFCCC and the Paris Agreement, however, recognize parties’ right to promote sustainable development. *See, e.g.*, Niene Suzanne van der Have, *The Right to Development: Can States be Held Responsible?*, in DEVELOPMENT AND EQUITY (Dick Foeken et al. eds., 2014) (discussing the evolving notion of the right to development); *Paris Agreement*, *supra* note 7, pmbl:

[a]cknowledging that climate change is a common concern of humankind, parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, 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.

Id. (emphasis omitted).

¹⁵² India INDC, *supra* note 147, at 3.

¹⁵³ The NDC emphasizes this point by repeating a quote by the Prime Minister of India, who when addressing the United Nations in September 2015, said:

We all believe that international partnership must be at the centre of our efforts, whether it is development or combating climate change. And, the principle of common but differentiated responsibilities is the bedrock of our collective enterprise. When we speak only of climate change, there is a perception of our desire to secure the comforts of our lifestyle. When we speak of climate justice, we demonstrate our sensitivity and resolve to secure the future of the poor from the perils of natural disasters.

Id. at 4.

b. *Other Developing Countries*

Looking beyond the big emitters, emerging economies such as South Africa situate climate change within a development-focused framework. South Africa explains that it confronts climate change “as a developing country, with overriding priorities to eliminate poverty and eradicate inequality.”¹⁵⁴ Within these constraints, South Africa seeks to “[p]eak, plateau and decline (PPD)” its GHG emissions, aiming to peak its emissions by 2020 and decline thereafter.¹⁵⁵ Breaking from the pattern of many of the industrialized countries, South Africa specifically highlights that it considers equity considerations to apply not only to mitigation, but also to adaptation,¹⁵⁶ stating that “[e]quity relates to adaptation, mitigation and all forms of investment and support.”¹⁵⁷ South Africa also specifically calls out the absence of an agreed equity reference framework. It notes that, in the absence of clearly defined equity principles, it used the markers of responsibility, capability, and access to equitable sustainable development to define a carbon budget and then set a trajectory that is lower than its allowed carbon budget, thus making its NDC both fair and ambitious.¹⁵⁸

Within the U.N. category of Least Developed Countries (LDC),¹⁵⁹ Bangladesh experiences high levels of risk and vulnerability to climate change. For Bangladesh, like many small island states, climate impacts could be devastating. As a result, in the “fair and ambitious goal” section of its INDC, Bangladesh highlights that it is responsible for less than 0.35 percent of global emissions.¹⁶⁰ Despite being both economically vulnerable and minimally responsible for global emissions, Bangladesh

¹⁵⁴ UNFCCC NDC Registry, South Africa’s Intended Nationally Determined Contribution, at 2 (Sept. 25, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/South%20Africa%20First/South%20Africa.pdf>.

¹⁵⁵ *Id.* at 6.

¹⁵⁶ *See id.* at 8.

¹⁵⁷ *Id.* at 10.

¹⁵⁸ *See id.* at 8.

¹⁵⁹ *See, e.g., About LDCs*, UN OFFICE OF THE HIGH REPRESENTATIVE OF LEAST DEVELOPED COUNTRIES, <http://unohrrls.org/about-ldcs> (last visited Jan. 29, 2019).

¹⁶⁰ *See* UNFCCC NDC Registry, Government of the People’s Republic of Bangladesh Intended Nationally Determined Contributions (INDC), at 2 (Sept. 25, 2015), https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Bangladesh/1/INDC_2015_of_Bangladesh.pdf.

acknowledges that limiting warming to 2°C requires all countries to engage in mitigation activities to the degree that they are able to.¹⁶¹ Similar to other LDCs, however, Bangladesh emphasizes that in order to follow through on its commitments it will “require international support in the form of *finance, technology transfer* and *capacity building*.”¹⁶² As will be demonstrated by examining the NDCs of several small island states, the more extreme and existential the threat of climate change is for a state, the more likely that state will be to engage in substantive mitigation efforts, even when their net emissions are extremely low on a global scale.

3. *Small Island Developing States (SIDS)*

The NDCs of many of the small island developing states (SIDS) are striking in their willingness to offer mitigation commitments that are, at times, vastly disproportionate to their global GHG footprints. They do so in such a way as to signal that these goals are intended to demonstrate the seriousness of the problem and the urgency of those with the power and the capacity to do so stepping up to offer more ambitious mitigation and adaptation strategies.

Emphasizing the existential nature of the threat that climate change poses for many SIDS, Micronesia, “stress[es] that the very survival of many SIDS is at stake without ambitious global emissions reductions.”¹⁶³ Following this pattern, many of the SIDS, which collectively are responsible for a miniscule component of global greenhouse gas emissions, offer aggressive mitigation strategies alongside an emphasis on the extensive needs of these states with respect to mitigation, adaptation, and loss and damage assistance—both now and in the future. Nauru, for example, commits to replacing “a substantial part of electricity generation with the existing diesel operated plants with a large scale grid connected solar photovoltaic (PV) system.”¹⁶⁴ Nauru offers this mitigation goal because it “wishes to play its part in the

¹⁶¹ *See id.* at 9.

¹⁶² *Id.* (emphasis in original).

¹⁶³ Federated States of Micronesia Intended Nationally Determined Contribution, at 3–4 (Nov. 24, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Micronesia%20First/Micronesia%20First%20NDC.pdf>.

¹⁶⁴ Republic of Nauru Intended Nationally Determined Contribution (INDC) Under the UNFCCC, at 7 (Nov. 17, 2015), https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Nauru%20First/Nauru_NDC.pdf.

enormous challenge presented to the world by threat of global warming” which, in its case, is a “threat is to its very existence.”¹⁶⁵ Nauru argues, however, that on the basis of fairness and equity it “cannot be expected to mitigate out of its own resources and would need extensive international assistance.”¹⁶⁶

Tuvalu, similarly, commits to reducing greenhouse gas emissions from the electricity generation sector “by 100%, i.e. almost zero emissions by 2025.”¹⁶⁷ Underscoring that its emissions are globally negligible, accounting for less than 0.000005 percent of global emissions, and that it “is the world’s second lowest-lying country and sea level rise poses a fundamental risk to its very existence,” Tuvalu asserts that its contribution “cannot be more ambitious.”¹⁶⁸

Similarly, Kiribati emphasizes that it is one of the smallest contributors to global greenhouse gas emissions “by any measurable indicator and yet it is at the frontline of the wrath of climate change and sea level rise.”¹⁶⁹ As a result, Kiribati suggests it has a right to develop and focus on improving the economy and well-being of its population, but because of its current predicament, its primary focus must be on adapting to climate change “by addressing the adverse impacts of climate change and its consequent sea-level rise.”¹⁷⁰ With respect to fairness, Kiribati stresses that, “ANY contribution from Kiribati is more than fair, and must be considered ambitious, given the extraordinary circumstances of Kiribati.”¹⁷¹

Coupled with ambitious commitments to mitigation, which, as suggested, amount to more than their “fair share,” the SIDS’ accounts of imminent, existential harm bring to light a distinctive perspective on fairness or equity; they point to substantive inequities that must inform measures of fairness and ambition more generally. Precisely measuring out fairness or ambition, however, proves complicated.

¹⁶⁵ *Id.*

¹⁶⁶ *Id.* at 9.

¹⁶⁷ Government of Tuvalu Intended Nationally Determined Contributions, at 1 (Nov. 27, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Tuvalu%20First/TUVALU%20INDC.pdf>.

¹⁶⁸ *Id.* at 4.

¹⁶⁹ Kiribati INDC, *supra* note 128, at 27.

¹⁷⁰ *Id.*

¹⁷¹ *Id.* at 8 (emphasis in original).

D. *A Bird's Eye View of the Relative "Fairness" of Nationally Determined Contributions*

The Paris Agreement came into force quickly and with a high level of participation. As a result, it is still in its early days and there is still much work that needs to be done to assess the substance and viability of the first round of NDCs. Given the variety of approaches parties have taken, it is difficult to determine what indicators should be used for comparative purposes. That is, how can we compare the various mitigation goals of different parties when some contributions focus on economy-wide absolute emissions reductions and others integrate a combination of strategies, such as peaking emissions, addressing deforestation, limiting growth in emissions per capita, increasing renewable capacity, or even, "propagat[ing] a healthy and sustainable way of living based on traditions and values of conservation and moderation?"¹⁷²

Assuming it is possible (or even wise) to develop a set of comparative measures for evaluating mitigation efforts,¹⁷³ what is the baseline against which contributions will be measured? That is, what are the parameters for weighing ambition and fairness? One of the stated objectives of the NDC submission process is to elicit parties' ideas about this particular question but, in the interim, how can existing submissions be assessed?¹⁷⁴ One way, of course, is to

¹⁷² India INDC, *supra* note 147, at 29 (emphasis omitted).

¹⁷³ For a good overview of thinking through how to assess mitigation efforts focusing on effectiveness in limiting climate change, transparency and comparability, see JOSEPH E. ALDY, *EVALUATING MITIGATION EFFORT: TOOLS AND INSTITUTIONS FOR ASSESSING NATIONALLY DETERMINED CONTRIBUTIONS* iii (2015), https://www.belfercenter.org/sites/default/files/legacy/files/evaluating-mitigation-effort-aldy_web.pdf [hereinafter *EVALUATING MITIGATION EFFORT*]. See also Joseph Aldy et al., *Economic Tools to Promote Transparency and Comparability in the Paris Agreement*, 6 *NATURE CLIMATE CHANGE* 1000, 1000 (2016). There are also reviews of the Paris Agreement that focus on other dimensions such as the credibility of the pledges. See ALINA AVERCHENKOVA & SAMUELA BASSI, *BEYOND THE TARGETS: ASSESSING THE POLITICAL CREDIBILITY OF PLEDGES FOR THE PARIS AGREEMENT* 3 (2016), <http://eprints.lse.ac.uk/65670/1/Averchenkova-and-Bassi-2016.pdf>.

¹⁷⁴ Paragraph 31 of the Paris COP decision:
call[ed] for further guidance to ensure that parties: use methodologies and common metrics assessed by the IPCC and adopted by the CMA; ensure methodological consistency between the communication and implementation of their NDCs; strive to include all emissions and removals in their NDCs; and explain any exclusions. This guidance is to apply to second and subsequent NDCs.

analyze the submissions collectively to estimate how far they go (assuming full implementation) towards meeting the goal of limiting warming to 2°C.¹⁷⁵ Based on this measure, early analyses suggest that, from a collective ambition—and thus, a collective fairness, standpoint—the NDCs fall short.¹⁷⁶

This collective perspective, while important, does not speak to the deep equity issues that characterize climate change and demand closer scrutiny of fairness and ambition with respect to individual Party submissions and inter-state relations. As a reminder, the top ten emitters produce roughly 60 percent of total global GHG emissions.¹⁷⁷ These top emitters are also among the parties least vulnerable to climate change.¹⁷⁸ There is, therefore, a distinct and deep disconnect between those actors contributing to, and benefitting from, the processes of industrialization and economic activity that are intimately linked to anthropogenic climate change and those experiencing the harms and development limitations associated with resulting patterns of climate change.¹⁷⁹

1. *Evaluating Fairness or Equity*

With these cause-and-effect disconnects in mind, how can the fairness of individual contributions be assessed? As a starting point, “[r]egardless of a country’s perspective . . . most notions of

C2ES: Center for Climate and Energy Solutions, *Essential Elements of the Paris ‘Rulebook’ 2* (2018), <https://www.c2es.org/site/assets/uploads/2018/11/essential-elements-paris-rulebook.pdf>. Pursuant to this call, at COP 24 in Katowice, Poland, the parties adopted a series of implementing decisions as part of the Paris Agreement Work Programme (PAWP), the goal of which was to develop a rulebook for the Paris Agreement that would give meaning and content to the provisions of the Agreement. With respect to assessing the NDCs (beginning with the second round of submissions in 2020), the parties developed a detailed set of rules for “Transparency and Accountability” designed to help track progress and hold countries accountable to delivering on the commitments that they make in their NDCs. See UNFCCC, Decision –CMA.1 (Advanced unedited version), *Modalities, Procedures and Guidelines for the Transparency Framework for Action and Support Referred to in Article 13 of the Paris Agreement*, https://unfccc.int/sites/default/files/resource/cp24_auv_transparency.pdf.

¹⁷⁵ See Cameron, *Ambition*, *supra* note 118.

¹⁷⁶ See CLIMATE ACTION TRACKER, *supra* note 93.

¹⁷⁷ See Althor et al., *supra* note 21, at 2–3.

¹⁷⁸ See *id.*

¹⁷⁹ See *Global Mismatch*, *supra* note 21, at 1. This is especially true because higher GDPs positively correlate with lower levels of vulnerability, thus nations with lower GDP that are already facing development challenges are generally those most vulnerable to climate change, which then sits astride and multiplies existing challenges creating a compounding effect.

fairness involve some consideration of (and thus a need for assessing) relative contributions,”¹⁸⁰ which is to say that most parties would consider current, historic and, sometimes, projected emissions as key components of assessing fairness. Other relevant indicators might include levels of risk and vulnerability, development indicators, and capacity for action.¹⁸¹ Bosetti and Frankel would condense these considerations to focus on “1990 emissions, emissions in the year of the negotiation, population, and income,”¹⁸² while still emphasizing that to be regarded as fair there must also be a focus on equalization or finding tools to “incrementally mov[e] per-capita emissions in each country toward a common global average over time.”¹⁸³ To be clear, it is not just least developed countries and SIDS that focus on the perceived fairness of individual and collective approaches. As Aldy notes, “[w]hen most large emitters perceive the climate-change regime as fair, there is at least the possibility of countries and groups of countries increasing their mitigation contributions over time.”¹⁸⁴ As a result, perceptions of fairness are central across party lines for a multitude of reasons—as a means of rectifying perceived distributive justice challenges as well as incentivizing participation and thus incrementally effective cooperation.

¹⁸⁰ EVALUATING MITIGATION EFFORT, *supra* note 173, at 6.

¹⁸¹ See *CAIT Climate Data Explorer: Equity Explorer*, WORLD RES. INST., <http://cait.wri.org/equity/> (last visited Nov. 8, 2018) (laying out different equity indicators, including: current emissions; historical emissions; projected emissions; development indicators; vulnerability; potential for action).

¹⁸² Valentina Bosetti & Jeffrey Frankel, *Politically Feasible Emission Targets to Attain 460 ppm CO₂ Concentrations*, 6 REV. ENVTL. ECON. & POL’Y 86, 90 (2012).

¹⁸³ Valentina Bosetti & Jeffrey Frankel, *Global Climate Policy Architecture and Political Feasibility: Specific Formulas and Emission Targets to Attain 460 ppm CO₂ Concentrations*, HARV. PROJECT ON INT’L CLIMATE AGREEMENTS, https://www.belfercenter.org/sites/default/files/legacy/files/frankel_bosetti_2-page_summary_2.pdf (suggesting that “[t]o be regarded as ‘fair,’ the formulas used to set future emission caps should incorporate three elements: a Progressivity Factor, a Latecomer Catch-up Factor, and a Gradual Equalization Factor. The Progressivity Factor is based on emission targets under Kyoto, adjusted for income; it requires richer countries to make larger cuts relative to BAU. The Latecomer Catch-up Factor requires nations that did not agree to binding targets under Kyoto to make gradual reductions to account for their additional emissions since 1990. It is designed to avoid rewarding latecomers with higher targets or creating incentives for countries to ramp up emissions before signing the agreement. The Gradual Equalization Factor addresses equity concerns by incrementally moving per-capita emissions in each country toward a common global average over time.”).

¹⁸⁴ EVALUATING MITIGATION EFFORT, *supra* note 173, at 7.

In one early effort to assess equity and fairness in the context of the evolving climate regime, the Civil Society Organization (CSO) judged countries' commitments "against their 'fair share' of the global mitigation effort (carbon budget) needed to maintain a minimal chance of keeping warming below 1.5°C, and a 66 percent chance of keeping it below 2°C."¹⁸⁵ To define "fair share" the CSO used an "equity range" taking into account, on an equal basis, countries' historic responsibility for cumulative emissions and their capacity to take climate action.¹⁸⁶ Capacity focuses on national income compared to what is needed to provide basic living standards.¹⁸⁷ These principles can be distilled to a focus on responsibility, capacity, and need.

After reviewing the INDCs submitted prior to the Paris COP, the report found that based on these equity principles, not only are there critical ambition and finance gaps, but also, closing the "gap in ambition can only be [accomplished] through significantly scaled up cooperation among countries, especially between developed and developing countries."¹⁸⁸ In addition, employing a "fair shares" approach, the report concludes that many developing countries have been ambitious, while many wealthier countries lag far behind.¹⁸⁹ The report also indicates that many developed countries cannot fulfill their fair shares within their own borders, which means that they will need to look outside for investment opportunities.¹⁹⁰ This creates opportunities for those countries where investment can take place, but also profit-based exploitation risks, making the construction of an equitable market-based system extremely important.

¹⁸⁵ FAIR SHARES, *supra* note 61, at 2.

¹⁸⁶ *See id.*

¹⁸⁷ *See id.* (noting "[o]ur 'equity range' uses historic responsibility start dates of 1850 and 1950, and capacity settings that are no lower than a development threshold of \$7500 per person per year, in order to exclude the incomes of the poor from the calculation of national capacity. Our 'equity range' does not include a 1990 benchmark. The large volume of historical emissions from which many countries benefited during the decades of unrestricted high-carbon development prior to the UN Convention cannot be ignored from both a moral and legal standpoint. Nevertheless, we have included comparisons to a 1990 benchmark in order to show that our key findings apply even to such a benchmark.").

¹⁸⁸ *Id.* at 1.

¹⁸⁹ *See id.* at 2.

¹⁹⁰ *See id.*

The report concludes that in order to affect a fair shares approach to mitigation, wealthier countries should pledge approximately twenty-six gigatonnes (Gt) of mitigation by 2030, while poorer countries should pledge nine Gt.¹⁹¹ Based on the initial INDCs, poorer countries collectively have met their fair share by committing to nine Gt of mitigation, while wealthier countries collectively have fallen short, only pledging around six Gt of mitigation capacity, creating an ambition gap of roughly twenty Gt.¹⁹² Thus, while most developing countries have made pledges that equal or exceed their fair shares, the failure of the industrialized countries to take on their fair shares of the mitigation burden means that, even if fully implemented, the current NDCs would not hold warming to 2°C, much less 1.5°C.¹⁹³ Further compounding the equity challenges created by mitigation goals that fall short of global goals is the absence of clear and ambitious commitments from developed countries for climate finance.¹⁹⁴ This finance gap intensifies equity issues and undermines efforts in developing countries to implement mitigation and adaptation measures.¹⁹⁵

In a more recent effort to unpack climate equity in the context of the Paris Agreement, in a 2016 paper published in *Nature: Scientific Reports*, Althor et al. assess the latest data on global greenhouse gas emissions¹⁹⁶ in conjunction with vulnerability variables to attempt to measure current patterns of global climate

¹⁹¹ See *id.* at 17.

¹⁹² See *id.* (for purposes of this analysis, the report defines wealth thusly: “‘wealthier countries’ are those with a fair share in excess of their domestic mitigation potential, and that therefore need to meet parts of their fair share through international action (financial, technological, and capacity building) to enable mitigation elsewhere. ‘Poorer countries’ have domestic mitigation potential larger than their fair share. *Id.* at 6).

¹⁹³ See *id.* at 2.

¹⁹⁴ See *id.* at 2–3.

¹⁹⁵ See *id.* at 3, 7, 18 (noting that many developing countries have a potential for negative emissions with adequate financing from wealthier countries and many developing countries have conditioned their INDC actions upon the receipt of climate finance).

¹⁹⁶ See Althor et al., *supra* note 21, at 2, 4 (considering not only CO₂ but also other major GHGs, using “data from two publicly available datasets and national GDP data[,]” and noting that “[n]ational level data sets suffer from some weaknesses such as a lack of accounting for sub-national variability and scaling. Nonetheless, they are still highly useful as global metrics as they provide aggregated assessments at the national level, which is the most meaningful for international policy negotiations.”).

change equity.¹⁹⁷ The authors understand equity as broadly correlated to “the distribution of climate change benefits and burdens.”¹⁹⁸ In order to break down the benefits and burdens of climate change, they used data on national vulnerability to the negative impacts of climate change extracted from a key source of vulnerability data, DARA’s Climate Vulnerability Monitor (CVM).¹⁹⁹ The CVM evaluates climate vulnerability across four impact areas—“Environmental Disasters, Habitat Change, Health Impact, and Industry Stress”—in order to “calculate[] vulnerability projections for 2030 using human population growth, mortality, and GDP predictions.”²⁰⁰ While Althor et al. note that the CVM categories only offer a partial picture of climate vulnerability, they argue that using the data from CVM is still of value in understanding the distribution of relative benefits and burdens in the climate context.²⁰¹

Comparing levels of emissions and climate vulnerability, the authors determine that “[c]limate change inequity is globally pervasive, and correlated with economic output,”²⁰² and argue that there is a pressing need for parties to do more now to minimize free-rider problems and resulting climate inequities.²⁰³ Emphasizing that the value of the Paris Agreement lies in its effective implementation and evolution, Althor et al. suggest that there is an “exceptional opportunity” to minimize climate inequity and “a moral impetus to use these results to address climate change equity in a meaningful manner.”²⁰⁴ For Althor et al., the disconnect between national emissions and climate vulnerability contributes to rampant inequity in the climate change context. Addressing equity, thus, requires aligning mitigation requirements with a

¹⁹⁷ *See id.* at 2.

¹⁹⁸ *Id.* at 4.

¹⁹⁹ *See id.*

²⁰⁰ *Id.* at 4 (noting that “[t]he CVM uses 22 climate vulnerability indicators across four impact areas (Environmental Disasters, Habitat Change, Health Impact, and Industry Stress) to evaluate the vulnerability of 184 countries to climate change impacts for the years 2010 and 2030. . . . The CVM calculates vulnerability projections for 2030 using human population growth, mortality and GDP predictions. The CVM uses five vulnerability categories (low, medium, high, severe and acute).”).

²⁰¹ *See id.*

²⁰² *Id.* at 3.

²⁰³ *See id.* at 4.

²⁰⁴ *Id.*

state's contribution to the global emissions burden, but it also requires aligning responsibility for mitigation with responsibility for adaptation efforts that minimize climate vulnerability.

2. *Re-envisioning Equity*

As parties continue to join the Paris Agreement and submit subsequent rounds of NDCs, the extent to which there is a shared vision of fairness and equity will become more evident. There is little doubt that the basic principle of common but differentiated responsibilities and respective capacities continues to underpin notions of interstate roles and responsibilities. Twenty-five years after the adoption of the UNFCCC, however, we have a more nuanced understanding of the historic and current contributors to climate change. We also have a much more sophisticated understanding of the ways in which climate change is impacting different states, and different communities within states, to varying degrees and the extent to which there is a misalignment between those contributing to (and benefiting from) the causes of climate change and those most harmed by its consequences.

In contrast to a quarter-century ago, when the equity principles of the climate change regime were largely deployed to configure mitigation responsibilities within a constrained and bifurcated view of the world, in the wake of the Paris Agreement, equity and fairness are the tools that states are using to frame global and interstate relations in the context of mitigation, adaptation, and loss and damage.

Keeping with the vision created in 1992 by the UNFCCC, the Paris Agreement is grounded in principles of equity and CDBRR. The Paris Agreement also reflects the past failure of states to recognize and respond to notions of fairness that embody more expansive notions of roles and responsibilities. Within this more expansive realm, parties are focused on issues relating to, for example, adaptation, financing, loss and damage, and technology transfer actions. Parties are also interested in the ways in which climate action hampers the ability of developing states to advance sustainable development strategies.

To a significant extent, the use of the concept of fairness in the NDCs reflects this shift in understanding of the stakes of international cooperation on climate change. Conceptually, fairness allows a strategic turn, even if slight, away from a vision of equity that emerged from and continues to be tied to a top-

down, distributive model predicated on a dichotomous worldview. The Paris Agreement responds to the rigidity and deficiencies of the previous approach and abandons the top-down mitigation framework, while inviting a more transparent and inclusive discussion of fairness and centering that discussion as the frame for global cooperation. At a minimum, the strategic use of the fairness frame, as distinct from the concept of equity, which remains deeply embedded in the previous paradigm, creates the opportunity for a more deliberate and inclusive conversation about how to balance equity and effectiveness when developing individual and collective climate strategies.

Disrupting the conventional approach is no small accomplishment. This model emerged from and reflected a traditional form of multilateral environmental agreement. Before the Paris Agreement, inertia kept the international community rooted within this conventional form of cooperation even as its utility faltered in the wake of the struggles first to ratify and later to implement and move beyond the limited commitments embodied by the Kyoto Protocol. The inclusivity of the Paris Agreement, particularly in its reliance on NDCs, represents an important step forward for international climate change law, and for advancing procedural justice in this context. As much as the free-form nature of the NDCs invites uncertainties and disparities, it also provides a platform for states to speak to their needs and to ground their contributions in the context of their circumstances. Although a top-down prescriptive consensus may be simpler and more efficient, it is also prone to neglecting and suppressing the voices of the most vulnerable. Even if the substantive goals of the Paris Agreement at first fall short, the parties that have the most to lose, and the least capacity to limit climate change will at least have a platform to say so, and to play an active part in defining “fairness” and “ambition.” Many of these appraisals will revolve around the ways in which countries develop and deploy Article 6 mechanisms and, in key part, the Sustainable Development Mechanism. The following section introduces these mechanisms and examines how they contribute to efforts to conceptualize and achieve equity and fairness in the climate change context.

III. THE ARTICLE 6 MECHANISMS

As envisioned by the Paris Agreement, the Article 6 mechanisms are broad and allow parties to cooperate, potentially

using market and non-market tools, to address climate change. Section 1 of Article 6 begins by recognizing that “some parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity.”²⁰⁵ It then sets out what appear to be parameters for tradable units, a cooperative mechanism similar to the Kyoto Protocol’s Clean Development Mechanism (CDM), and a framework for non-market cooperative approaches. Focusing here on the creation of a tradable unit and the creation of a new mitigation mechanism, Article 6 provides, in relevant part:

parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the parties serving as the meeting of the parties to this Agreement.²⁰⁶

This provision creates an “internationally transferred mitigation outcome” (ITMO). ITMOs are envisioned as a form of tradable credit. Section 4 of Article 6 provides for a second form of flexible mitigation by establishing a “mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development.”²⁰⁷ The objectives of this new mechanism, which colloquially is being referred to as the Sustainable Development Mechanism (SDM), are to: promote the mitigation of GHG emissions while fostering sustainable development; incentivize and facilitate participation in the mitigation of GHG emissions by public and private entities; reduce emission levels in the host party while also allowing another Party to fulfill its NDC; and deliver an overall mitigation in global emissions.²⁰⁸

²⁰⁵ *Paris Agreement*, *supra* note 7, art. 6(1).

²⁰⁶ *Id.* art. 6(2). Article 6(3) then states that: “The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating parties.” *Id.* art. 6(3).

²⁰⁷ *Id.* art. 6(4).

²⁰⁸ *See Id.*

Together, these two provisions of Article 6, while not yet fully developed by the parties to the Agreement, are generally understood to create: first, units that could be traded or otherwise transferred among countries, potentially allowing for the creation of an international trading mechanism; second, the framework for a new cooperation mechanism that mirrors, but expands upon the CDM.

A. *The Sustainable Development Mechanism in Context*

Before exploring ongoing efforts to develop the SDM, it is important to understand how economic flexibility mechanisms became a central part of the global climate regime and how the CDM in particular revealed the complex interplay between equity and efficiency in the mitigation context.

During negotiations for the Kyoto Protocol, drawing from domestic experience under the Clean Air Act, the United States negotiated the inclusion of provisions within the treaty that would allow international trading in carbon allocations as a way to improve the cost-effectiveness of the climate regime.²⁰⁹ The United States' efforts to integrate economic flexibility mechanisms into the Protocol were criticized on numerous grounds, including the morality of conferring a transferable right to pollute, the practicality of devising such a complex mechanism during negotiations, and the concern that emissions trading offered a way for developed states to avoid investing in domestic emissions reduction measures, which some critics characterized as "cheating on the basic commitment."²¹⁰ Despite these concerns, the Kyoto Protocol ultimately ended up providing for the creation of three

²⁰⁹ See, e.g., Patrick Parenteau, *Anything Industry Wants: Environmental Policy under Bush II*, 14 DUKE ENVTL. L. & POL'Y F. 363, 365 (noting that "the U.S. got exactly what it had demanded in the negotiations—namely, a cap and trade program to reduce greenhouse gases . . . and the use of 'carbon sinks' to generate credits for emission offsets.").

²¹⁰ MICHAEL GRUBB ET AL., *THE KYOTO PROTOCOL: A GUIDE AND ASSESSMENT* 93 (1999). For descriptions, and various critiques, of early efforts to develop and integrate flexibility mechanisms into the Kyoto Protocol, see generally Daniel A. Farber, *Pollution Markets and Social Equity: Analyzing the Fairness of Cap and Trade*, 39 ECOLOGY L.Q. 1 (2012); Susan J. Kurkowski, *Distributing the Right to Pollute in the European Union: Efficiency, Equity and the Environment*, 14 NYU ENVTL. L.J. 698 (2006). See also David W. Childs, *The Unresolved Debates that Scorched Kyoto: An Analytical Framework*, 13 UNIV. OF MIAMI INT'L & COMP. L. R. 233, 254 (2005).

different types of economic flexibility mechanisms: emissions trading; joint implementation; and the CDM.

For purposes of thinking about the intersections of efficiency and equity, experiences implementing the CDM are instrumental. In the early-days of efforts to implement the Kyoto Protocol, many public and private actors turned to the CDM as an important tool for reaping the economic benefits associated with being a “first mover” in efforts to limit GHG emissions.²¹¹ The CDM is the only Kyoto Protocol flexibility mechanism that allows developing countries to participate in emissions reduction projects. The mechanism was designed to allow developed countries to achieve emissions reductions effectively while also promoting sustainable development in developing countries. One of the principle architects of the CDM, José Goldemberg, characterized the CDM as “a new channel for financial assistance and investments to promote sustainable development—not only emissions reductions—and consequently it is a means of technology transfer and promotion of equity.”²¹² Pursuant to this vision, the CDM would operate to advance both environmental effectiveness and equity. Implementation, however, proved procedurally and substantively challenging.

Early in the operation of the CDM it became apparent that projects were heavily concentrated in only a handful of developing countries, primarily the rapidly developing economies, and that the projects were skewed towards short-term, high-profit projects.²¹³

²¹¹ See Robyn Eckersley, *Soft Law, Hard Politics, and the Climate Change Treaty*, in *THE POLITICS OF INTERNATIONAL LAW* 80, 88–89 (Christian Reus-Smit ed., 2004).

²¹² Robert Repetto, *The Clean Development Mechanism: Institutional Breakthrough or Institutional Nightmare*, 34 *POL’Y SCI.* 303, 306 (2001).

²¹³ See Cinnamon Carlarne, *Risky Business: The Ups and Downs of Mixing Economics, Security and Climate Change*, 10 *MELBOURNE J. INTL. L.* 439, 452 n.69 (2009) (“For example, by region, at the end of October 2009, Asia and the Pacific had 1401 registered CDM projects (74.01 per cent), Latin America and the Caribbean had 445 (23.51 per cent), and Africa had 36 (1.9 per cent).”); see also Michael Wara, *Measuring the Clean Development Mechanism’s Performance and Potential*, 55 *UCLA L. REV.* 1759, 1764, 1800–02 (2008) (noting that “from an environmental perspective” the CDM is “highly imperfect,” and discussing the complex case of HFC-23 projects in China and how the regulation of these types of projects revealed the growing pains that the CDM experienced in the early days).

There were additional concerns about the substantive effectiveness of the CDM from an emissions mitigation perspective.²¹⁴

As a result, the ability to leverage the CDM to reduce net emissions, and to do so equitably and in a way that advanced sustainable development, was called into question. One particularly acute equity problem was the concentration of projects in countries with rapidly developing economies and the overwhelming absence of projects in the LDCs, states that could have benefitted significantly from sustainability-focused mitigation projects. As one example of this distribution, of the 1,893 CDM projects registered by the end of October 2009, only 13 (0.69%) were hosted by LDCs. In contrast, in March of 2009 alone, China registered fifty-five projects, India registered fourteen projects, and Uzbekistan and Malaysia registered four projects each.²¹⁵

As CDM projects proliferated, uneven project concentration became a critical challenge.²¹⁶ In 2006, then-U.N. Secretary-General Kofi Annan sought to address this problem through the introduction of the Nairobi Framework, an initiative by six U.N. agencies to help developing countries—especially those in Africa—participate in the CDM.²¹⁷

²¹⁴ See Michael W. Wara & David G. Victor, *A Realistic Policy on International Carbon Offsets* 8, 20 (Stanford Univ. Program on Energy and Sustainable Dev., Working Paper No. 74, 2008), <https://law.stanford.edu/wp-content/uploads/sites/default/files/publication/258646/doc/slspublic/Wara%20Victor%20Realistic%20Policy.pdf>. For example, core questions of additionality surrounded implementation of the CDM. Early critics of the CDM framework argued that a vast majority of pending and approved CDM projects are non-additional, meaning that the project would not achieve net emissions reductions as a primary result of the carbon credit income associated with the classification as a CDM project.

²¹⁵ See Carlame, *supra* note 213, at 453 & nn.77, 78 (summarizing data then available on two different UNFCCC CDM project sites: UNFCCC, Registered Project Activities by Host Party, <http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPieChart.html>, and UNFCCC, CDM Project Search, <http://cdm.unfccc.int/Projects/projsearch.html>).

²¹⁶ See Wytze van der Gaast et al., *Promoting Sustainable Energy Technology Transfers to Developing Countries Through the CDM*, 86 APPLIED ENERGY 230, 235 (2009).

²¹⁷ See Press Release, UN Secretary-General Announces 'Nairobi Framework' to Help Developing Countries Participate in the Kyoto Protocol (Nov. 15, 2006), http://unfccc.int/files/press/news_room/press_releases_and_advisories/application/pdf/061115_cop12_pressrel_1.pdf. The Nairobi Framework identified various substantive and procedural impediments to the growth of CDM projects in LDCs and has initiated steps to try to overcome these impediments.

Uneven geographic distribution was not the only challenge that plagued early efforts to make the CDM effective. A second serious issue surrounded distorted patterns of project distribution by sector of investment. Given the sustainable development focus, there was an expectation that the CDM would facilitate numerous small-scale renewable energy projects.²¹⁸ In the early years, however, projects clustered around co-generation, biomass, methane capture, fuel switching (for example, coal to gas), heat recovery, and phasing out hydrofluorocarbons (HFCs).²¹⁹ Each of these categories offers opportunities for reducing GHG emissions, but many of the projects are difficult to verify, offer modest opportunities for technology transfer and infrastructure revitalization, and create problems of pollution leakage.²²⁰ That is, the categories of projects favored by investors due to high profit margins did not align with the categories of projects perceived to be most conducive to facilitating sustainable development and a long-term shift towards a low carbon future. As a result, uneven

See generally UNFCCC, NAIROBI FRAMEWORK PARTNERSHIP 2016 REPORT (2016), https://unfccc.int/files/secretariat/partnerships/nairobi_framework_partnership/application/pdf/2_2016_nfp_status_report_edited.pdf (detailing the progress and challenges to date in improving sub-Saharan levels of participation in the CDM).

²¹⁸ *See* Wara, *supra* note 213 at 1778–79.

²¹⁹ One of the concerns about HCFCs was that these were gases that would have to be phased out in China pursuant to domestic and international law within a few years, meaning that the additionality of these emissions reductions was questionable. *See* UNFCCC, *Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on its First Session, Addendum — Part Two: Action Taken by the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol at its First Session*, U.N. Doc. FCCC/KP/CMP/2005/8/Add.1, at 100 (Mar. 30, 2006), <http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf> (discussing the relationship between the Montreal Protocol on Substances That Deplete the Ozone Layer, *opened for signature* Sept. 16, 1987, 1522 U.N.T.S. 3 (entered into force Jan 1, 1989), and the control of HCFCs under the CDM).

²²⁰ *See* Jennifer P. Morgan, *Carbon Trading Under the Kyoto Protocol: Risks And Opportunities For Investors*, 18 *FORDHAM ENVTL. L. REV.* 151, 174, 178–79 (2006) (defining leakage as “the net change of emissions by sources of GHG which occurs outside the project boundary and is measurable and attributable to the CDM project activity. In other words, if GHG increase outside the project boundary, this amount is subtracted from a project’s emission reductions and thus the amount of CERs issued is lower.”); *see* Frank Vöhringer, Timo Kuosmanen & Rob B. Dellink, *A Proposal for the Attribution of Market Leakage to CDM Projects 1* (Hamburg Inst. of Int’l Econ., Working Paper No. 262, 2004), http://www.hwwa.de/Publikationen/Discussion_Paper/2004/262.pdf (finding that leakage rates for CDM projects can be high, with estimates ranging between 5 and 20 percent).

geographic and sectoral distribution of projects combined to undercut the stated equity objectives of the CDM. Economic efficiency goals trumped competing sustainable development objectives.

Over the years, the parties to the Convention updated the rules and modalities governing the CDM to balance effectiveness and equity concerns but, even today, imbalances persist—albeit in less acute ways. Both early and continuing experiences with the CDM suggest frequent tensions between efficiency and equity goals. Addressing this tension requires constant attentiveness to substantive questions of effectiveness and equity, and the intersection between the two.

As in the early days of the CDM, and as with the other Kyoto Protocol flexibility mechanisms, the rules for the Article 6 mechanisms will be developed and modified over time. Efforts to operationalize these mechanisms must be attentive to the ways in which tensions between mitigation effectiveness and equity emerge and evolve.²²¹

Notably, the envisioned Article 6 mechanisms differ from the Kyoto mechanisms in that the Paris Agreement provides for a fully open and inclusive system. That is, while the CDM only allowed developing countries to participate as host states, the Article 6

221 While this article focuses on the CDM, emissions trading schemes also pose accountability, transparency, legitimacy and equity—especially environmental justice—challenges that create opportunities for abuse, particularly among entities with the experience and resources to identify systemic loopholes and weaknesses. Problems of accountability, transparency, equity and legitimacy further embed power and wealth inequalities in particularly problematic ways in the global context. Given that ITMOs are envisioned as being a tradable commodity, understanding that emissions trading poses similar efficiency-equity issues to the CDM is important. *See, e.g.*, Michael B. Gerrard, *What Does Environmental Justice Mean in the Era of Climate Change*, 19 J. ENVTL. & SUSTAINABILITY L. 278, 290–93 (2013); Alice Kaswan, *Environmental Justice and Domestic Climate Change*, 38 ENVTL. L. REP. NEWS & ANALYSIS 10287, 10288 (2008). Current popular and political depictions of emissions trading tend to minimize regulatory flaws, economic weaknesses and equity problems. From a fairness perspective, emissions trading systems tend to concentrate wealth and power, with the effect that “trades of rights in the marketplace may lead to a concentration of property and market power, denying small businesses and poor people access rights to necessary resources (eg [sic] water).” ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, IMPLEMENTING DOMESTIC TRADEABLE PERMITS: RECENT DEVELOPMENTS AND FUTURE CHALLENGES 20 (2002).

mechanisms, at least in theory, are designed to allow all parties to be able to fully participate in all aspects of cooperative efforts.

Bearing in mind that the International Energy Agency has estimated that the Paris Agreement would “need to create policy frameworks that can mobilize \$1 trillion in new funding annually by 2020 and up to \$2 trillion annually worldwide by 2035” and that \$666 billion of that investment by 2020 will need to be in developing countries, creating opportunities for market-based investment as a complement to other methods of financing is, theoretically, a good idea.²²² The history of the CDM, however, demonstrates the complexities involved in establishing a global market-based regime. If there is anything that the evolution of the CDM has demonstrated, it is that, absent clear rules, markets follow money—preferably quick and easy money—hence, the massive investment in HFC projects and the disproportionate concentration of CDM projects in a small handful of states.

Experience with the CDM also reveals that it is difficult to create incentives for equitable distribution of projects and investment, especially outside of the rapidly developing economies, and to create incentives for projects that support long-term sustainable development. When focusing on the energy context, for example, promoting sustainable development-oriented projects requires finding ways to incentivize projects that allow for the development of clean energy systems and provide access to energy where it is lacking and that accomplish these goals in a way that is socially responsible. These are challenges that parties identified through experience with the CDM and remain concerns moving forward with efforts to ensure that the new mechanisms promote both effectiveness and equity—twin goals that remain firmly situated at the heart of the Paris Agreement broadly, and the Article 6 mechanisms specifically.

The open-endedness of the Paris Agreement “cooperative approaches” leaves many opportunities for negotiations amongst parties with respect to issues such as transparency and equity. In the end, however, businesses looking for market opportunities will be looking for security and profit; making that work within an equitable framework poses tremendous challenges. As a result, this is a critical time for assessing party perceptions about the use of

²²² FAIR SHARES, *supra* note 61, at 21.

cooperative mechanisms and for exploring how perceptions and expectations ultimately shape both efficiency and equity concerns.

B. *Perceptions of the SDM*

When parties submitted their INDCs prior to the meeting in Paris, many included language that demonstrated an intent to participate in market mechanisms if such mechanisms were included within the text of the then-forthcoming Agreement. Morocco, for example, shared that it “considers the establishment of an international market mechanism vital to reduce the total costs to achieve the target of limiting the temperature increase to 2°C.”²²³ Other states connected international market mechanisms directly to the concept of “carbon markets.” Tunisia, for example, stated that it “would like to use carbon market mechanisms.”²²⁴

Following adoption of the Paris Agreement and leading into the subsequent meeting of the Conference of the Parties (COP 22) in November 2016, parties began to express varying views with respect to what role market mechanisms should play under the new regime and, thus, how the new Article 6 mechanisms should be developed. The African Group of Negotiators, for example, asked that cooperative approaches under Section 2 of Article 6 be developed to allow all parties “to engage on a voluntary basis in cooperative approaches that involve the use of ITMOs towards NDCs without any restrictions based on the type of NDCs,”²²⁵ and emphasized that the use of ITMOs “will lead to higher ambition in their mitigation and adaptation actions and promote sustainable development.”²²⁶

Other negotiation groups, such as Ecuador and the LMDCs, expressed support for Article 6 while simultaneously voicing

²²³ UNFCCC NDC Registry, Morocco: Intended Nationally Determined Contribution Under the UNFCCC, at 11 (Jun. 5, 2015), <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Morocco/1/Morocco%20INDC%20submitted%20to%20UNFCCC%20-%205%20june%202015.pdf>.

²²⁴ UNFCCC NDC Registry, Intended Nationally Determined Contribution of Tunisia, at 7 (Sept. 16, 2015) <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Tunisia/1/INDC-Tunisia-English%20Version.pdf>.

²²⁵ Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, of the Paris Agreement (Agenda Sub-Item 11(a)), Mali on Behalf of the African Group of Negotiators (AGN), at 1 (2016).

²²⁶ *Id.* at 1.

concern about the ambiguity of the existing language.²²⁷ Specifically, the LMDCs emphasized the need for “concrete measures and controls” to define what constitutes an ITMO.²²⁸

Despite hesitations, many parties—both developed and developing—indicated not only that they were open to the development of market mechanisms, but also that they would actively rely on market mechanisms for their conditional, and sometimes unconditional, contributions to the Paris Agreement. Turkey, for example, stated that it would “use carbon credits from international market mechanisms to achieve its 2030 mitigation target in a cost effective manner.”²²⁹ Similarly, Albania expressed that it intended to sell carbon credits to achieve its “low emission development pathway.”²³⁰ Mexico declared that achieving its conditional INDC goal depended upon having “fully functional bilateral, regional and international market mechanisms.”²³¹ Even when parties have not expressed the intent to use the Article 6 mechanisms, with the exception of Bolivia,²³² most countries have not resisted ongoing efforts to develop international market mechanisms. Some countries, for example, include a statement similar to that of the United States’: “At this time, the United States does not intend to utilize international market mechanisms to implement its 2025 target.”²³³ This statement suggests that the United States does not need to use international market mechanisms to make its 2025 target, but allows the United States to change its mind or to use market mechanisms to exceed its goal or fulfill other objectives.

²²⁷ See Submission on Articles 6.2, 6.4 and 6.8 of the Paris Agreement, Ecuador on Behalf of the Like Minded Developing Countries (LMDC), 1 (2016).

²²⁸ See *id.* at 2.

²²⁹ UNCCC NDC Registry, Republic of Turkey: Intended Nationally Determined Contribution, 2 (Sept. 30, 2015), https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Turkey/1/The_INDC_of_TURKEY_v.15.19.30.pdf.

²³⁰ UNCCC NDC Registry, Intended Nationally Determined Contribution (INDC) of Albania Following Decision 1/CP.19 and Decision 1/CP.20, Alb., at 2 (Sept. 24, 2015), <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Albania%20First/Albania%20First.pdf>.

²³¹ UNCCC NDC Registry, Intended Nationally Determined Contribution, Mexico, 5 (Mar. 30, 2015), <https://www4.unfccc.int/sites/submissions/INDC/Published%20Documents/Mexico/1/MEXICO%20INDC%2003.30.2015.pdf>.

²³² In its INDC, Bolivia states: “Eradication of commodification of nature and carbon markets, promoting business climate millionaires, which do not solve the problem of the climate crisis.” Bolivia INDC, *supra* note 126, at 6.

²³³ United States INDC, *supra* note 124, at 4.

As part of the Paris Rulebook process, work intensified to develop the Article 6 mechanisms. At COP 22, for example, the Subsidiary Body for Scientific and Technological Advice (SBSTA) considered comments from countries across the world on their perspectives on the implementation of mechanisms under Article 6 but then postponed any decisions until SBSTA 46, which took place in May 2017.²³⁴

Leading up to the 2017 meeting, a number of parties submitted comments reflecting their position on Article 6. These comments varied in focus. Many of the parties put forth questions for discussion and called for further discussion on the framework, procedures, and definitions of the Section 4 Article 6 SDM mechanism.²³⁵ No decisions on the core components of the Article 6 rules were reached during this interim period, however.

Discussions continued leading up to COP 24, at which point the parties to the Agreement sought to finalize the Rulebook for the Agreement, including the rules applicable to Article 6. These negotiations, referred to as the Paris Agreement Work Programme (PAWP), took place in December 2018 in Katowice, Poland.²³⁶

²³⁴ See U.N. Subsidiary Body for Sci. and Tech. Advice, *Guidance on Cooperative Approaches Referred to in Article 6, Paragraph 2, of the Paris Agreement*, U.N. Doc. FCCC/SBSTA/2016/L.28, at 1 (2016), <https://unfccc.int/resource/docs/2016/sbsta/eng/l28.pdf>; U.N. Subsidiary Body for Sci. and Tech. Advice, *Rules, Modalities and Procedures for the Mechanism Established by Article 6, Paragraph 4, of the Paris Agreement*, U.N. Doc. FCCC/SBSTA/2016/L.29, at 1 (2016), <https://unfccc.int/resource/docs/2016/sbsta/eng/l29.pdf>.

²³⁵ See, e.g., Norwegian Ministry of Climate and Environment, *Norway's Views on Article 6(4) of the Paris Agreement* (Nov. 4, 2017), https://unfccc.int/sites/default/files/presentasjon_6.4_cop23.pdf; see also, Andrei Marcu, International Centre for Trade and Sustainable Development, *Article 6 of the Paris Agreement: Reflections on Party Submissions before Marrakech* (March 2017), https://www.ictsd.org/sites/default/files/research/article_6_of_the_paris_agreement_ii_final_0.pdf (summarizing all of the submissions and identifying key areas of focus and concern highlighted by the party submissions). A common concern that parties highlighted regarded double counting—i.e., making sure that both the host and sponsoring parties do not count the emissions reductions or adaptation actions toward their individual NDCs. Equally, many countries viewed the CDM as a good starting point upon which to build the new SDM. *Id.* at 7–8, 10.

²³⁶ See UNFCCC, *Katowice Climate Change Conference – December 2018*, <https://unfccc.int/katowice>.

During the COP 24 negotiations, the parties made significant progress towards developing the Paris Rulebook.²³⁷ The parties to the Agreement successfully developed a complex set of rules applicable to the majority of key provisions in the Paris Agreement, including key provisions on transparency that will have important implication for the Article 6 mechanisms.²³⁸ The parties, however, failed to develop the rules applicable to implementing Article 6, particularly the SDM.²³⁹ In relevant part,

²³⁷ See UNFCCC, *Proposal by the President: Informal Compilation of L-Documents* (Dec. 14, 2018), https://unfccc.int/sites/default/files/resource/Informal%20Compilation_proposal%20by%20the%20President_rev.pdf (compiling all of the draft decisions agreed upon during COP 24 with respect to development of the rules and modalities for implementing the Paris Agreement); see also, CARBONBRIEF, *COP 24: Key Outcomes Agreed at the UN Climate Talks in Katowice* (Dec. 16, 2018), <https://www.carbonbrief.org/cop24-key-outcomes-agreed-at-the-un-climate-talks-in-katowice>.

²³⁸ See *Proposal by the President: Informal Compilation of L-Documents*, *supra* note 237. With respect to the transparency rules for Article 13 of the Paris Agreement – which provides for an enhanced transparency framework – the parties agreed upon guidance as to how countries will report on the use of ITMOs under Article 6. In key part, paragraph 77 of the Rulebook provides that:

(d) Each Party that participates in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards an NDC under Article 4, or authorizes the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC shall also provide the following information in the structured summary consistently with relevant decisions adopted by the CMA on Article 6:

(i) The annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC on an annual basis reported biennially;

(ii) An emissions balance reflecting the level of anthropogenic emissions by sources and removals by sinks covered by its NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for internationally transferred mitigation outcomes first-transferred/transferred and a subtraction for internationally transferred mitigation outcomes used/acquired, consistent with decisions adopted by the CMA on Article 6;

(iii) Any other information consistent with decisions adopted by the CMA on reporting under Article 6;

(iv) Information on how each cooperative approach promotes sustainable development; and ensures environmental integrity and transparency, including in governance; and applies robust accounting to ensure inter alia the avoidance of double counting, consistent with decisions adopted by the CMA on Article 6.

Id. art 77. These basic reporting guidelines for using ITMOs are important, but only represent the first step towards developing more comprehensive implementation provisions.

²³⁹ See UNFCCC, *Draft decisions 1/CP.24 and 3/CMA.1, Matters relating to Article 6 of the Paris Agreement and paragraphs 36-40 of decision 1/CP.21*, U.N. Doc. FCCC/CP/2018/L.27 annex III, <https://unfccc.int/sites/default/files/>

the parties were unable to agree on a number of different facets of how the Article 6 mechanisms would work, including how to develop basic accounting rules to prevent the “double counting” of emissions reductions,²⁴⁰ as required by the Agreement.²⁴¹ The task of completing the section of the Rulebook applicable to Article 6, therefore, was deferred to COP 25 (2019).²⁴²

As a result, following COP 24, efforts to develop implementation guidance for the Article 6 mechanisms remained a work in progress.²⁴³

C. *Equity and Effectiveness: The Challenge Moving Forward with Cooperative Approaches*

The open-endedness of the Paris Agreement’s cooperative approaches leaves many unanswered questions that the parties

resource/Informal%20Compilation_proposal%20by%20the%20President_rev.pdf
The relevant provision of the decision is as follows:

Requests the Subsidiary Body for Scientific and Technological Advice to continue consideration of the mandates referred to in paragraph 1 above, taking into consideration the draft decision texts referred to in paragraphs 1 and 2 above, with a view to forwarding a draft decision for consideration and adoption by the Conference of the parties serving as the meeting of the parties to the Paris Agreement at its second session.

Id. ¶ 3.

²⁴⁰ See e.g., CENTER FOR CLIMATE AND ENERGY SOLUTIONS, OUTCOMES OF THE U.N. CLIMATE CHANGE CONFERENCE IN KATOWICE 3 (Dec. 2018), <https://www.c2es.org/site/assets/uploads/2018/12/cop-24-katowice-summary.pdf>.

Negotiators struggled with a host of issues, including how to account for ITMOs among such a diversity of NDC types and whether transfers under Article 6.2 would be required to dedicate a “share of proceeds” to support adaptation in developing countries. In the end, the negotiation stalled over Brazil’s insistence that units generated under the Article 6.4 mechanism not be subject to the Article 6.2 rules prohibiting double counting. The draft decisions were carried over to next year, with a new deadline of finalizing them at COP 25.

Id. at 3.

²⁴¹ See Paris Agreement, *supra* note 7, art. 4(13).

²⁴² See CARBONBRIEF, *supra* note 237 (noting that, with respect to the Article 6 rules, “[i]n the end, it was not to be and the whole section was deferred to COP25.”); see also *Outcomes of the U.N. Climate Change Conference in Katowice, 24th Session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 24)*, CTR. FOR CLIMATE & ENERGY SOL.’S 3, <https://www.c2es.org/site/assets/uploads/2018/12/cop-24-katowice-summary.pdf> (last visited Mar. 7, 2019).

²⁴³ See UNCCC, Paris Agreement Work Programme Document Compilation, 18, 47 (Sept. 9, 2018), https://unfccc.int/sites/default/files/resource/Latest%20PAWP%20documents_9Sep.pdf.

have struggled to address. Experience with the CDM demonstrates that there are efficiency, effectiveness, and equity challenges inherent in using market mechanisms to limit climate change. Ongoing efforts to develop the Article 6 mechanisms in a way that is fair and equitable requires the parties to the Agreement to recognize that existing economic systems embed economic and power imbalances that create competitive advantages for developing and rapidly developing countries as market participants.

Efforts to balance economic development, environmental protection, and equity considerations are not new to climate change negotiations. The dual shift towards a more inclusive system of climate commitments and cooperative mechanisms, however, changes the nature of the playing field. For the first time, countries define for themselves what their contribution to the international response to climate change should be and why it is fair and ambitious. Also, for the first time, developing countries likely will have the ability to either host or sponsor cooperative climate mitigation actions and participate in global climate markets. This inclusivity treats developed and developing countries equally.

Equal is, of course, different from equitable. The fact that all countries are likely to have an equal opportunity to participate in climate-limiting actions tells us little about how cooperation will work to alleviate or exacerbate existing inequities and impediments to equitable market participation. At this point, only a skeletal frame for the new cooperative mechanism exists. Past experience demonstrates that creating an international mitigation mechanism gives rise to significant equity and distributional challenges and, once created, the mechanism may offer the fewest opportunities for those states (e.g., LDCs and SIDS) who are most at risk and least responsible in the climate change context.

Moreover, early analysis of the NDCs suggests that many developing countries are willing to step up and do potentially more than their fair share for the sake of global cooperation and limiting climate change, suggesting that imbalances in global cooperation on climate change already exists. This imbalance could be exacerbated by the creation of economic flexibility mechanisms that, absent well-thought out rules of operation could further

embed the equity²⁴⁴ and transparency²⁴⁵ deficiencies that are already present in many global systems.

The Article 6 mechanisms could be a powerful tool for opening up financing, investment, and environmental opportunities for developing countries but could also exacerbate existing climate inequities, if poorly constructed. As the parties to the Agreement continue working to structure the mechanisms, the lessons of the CDM are instructive. It is also critical that the parties consider the relationship between the Article 6 mechanisms and the NDCs in order to explore how varying levels of commitments among different groups of states influence the effectiveness and equity of the Article 6 mechanisms.

Ultimately, if we want to chip away at climate change inequities—and, normatively, the Paris Agreement embodies this goal—the way cooperative mitigation measures are structured matters enormously. The Paris Agreement offers a more open and democratic approach to negotiations. Transparency can be a powerful tool and can counterbalance the historical dominance that the industrialized countries have had in climate negotiations. Transparency and inclusiveness, however, do not equate to improved equity in effort, in access to finance, or in access to the markets that can enable positive change. With the development of the Article 6 mechanisms, there is a moral imperative to use this process to address climate change equity in a meaningful manner. As the negotiations among the parties to the Agreement continue, this is one of the most complex and potentially high stakes equity and fairness challenges that the parties face and, thus, is an area that requires continuing discussion and theorization.

CONCLUSION: INCLUSIVITY AND EQUITY IN THE PARIS AGREEMENT

When, in 1965, the Reverend Martin Luther King Jr wrote, “the arc of the moral universe is long, but it bends toward justice,”²⁴⁶ he was focused on the pressing, pervasive, and violent injustices that sat at the heart of the civil rights movement. The complex challenges that climate change poses for inter- and intra-

²⁴⁴ See Frank J. Garcia, *Trade and Inequality: Economic Justice and the Developing World*, 21 MICH. J. INT'L L. 975, 980 (2000).

²⁴⁵ See Steve Charnovitz, *Transparency and Participation in the World Trade Organization*, 56 RUTGERS L. REV. 927, 928 (2004).

²⁴⁶ King, *supra* note 2.

generational equity were, at the time, distant and inchoate. King's words, however, had both contemporary reverberance and prescience for future justice challenges, including climate change. As the patterns of climate change have progressed and institutional efforts to curb climate change have failed to make meaningful progress, the layers of inequity and injustice intrinsic to climate change have become increasingly visible as states confront extinction, populations face displacement,²⁴⁷ and communities encounter vast climate-related challenges to fundamental human rights.²⁴⁸ For the Paris Agreement and international efforts that follow to successfully integrate effectiveness and equity, what is fair and ambitious to those who are most vulnerable, at a minimum, must be visible when determining the metrics for justice.

Justice, however, is an elusive concept in international climate change law. As a result, justice as a conceptual framing tool has largely been excluded from formal negotiations, and there has been a preference for framing normative conversations using the language of equity and, more recently, fairness. In order to understand whether and how the Paris Agreement advances the normative goals it embraces, we must ask what the relationship is between justice, equity, and fairness, how the concepts of equity and fairness are understood in the climate change regime, whether the move towards fairness is a move towards a more justice-oriented framework, and whether the Agreement moves international climate change law towards a vision of the future that aligns with evolving understandings of equity and fairness.

At a very basic level, in order to minimize climate change injustices, it is necessary to limit climate change. The greater the extent of climate change, the greater the harms of climate change will be. Any climate conversation about justice, equity, or fairness, therefore, must engage with the reality that the dual goals of achieving meaningful progress towards mitigating climate change

²⁴⁷ See Jane McAdam, *Climate Change-Related Displacement of Persons*, in *THE OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW* 519, 520 (Kevin R. Gray et al. eds., 2016).

²⁴⁸ See John Knox, *Human Rights Principles and Climate Change*, in *THE OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW* 213, 215 (Kevin R. Gray, et al. eds., 2016).

and meaningful progress towards creating a more just world are both necessary,²⁴⁹ but are not necessarily complementary.

A more nuanced understanding of the normative foundations that the Paris Agreement simultaneously rests upon and disrupts is critical for gauging whether the Agreement is, in fact, meaningful progress or at least holds out the potential for more concerted and equitable efforts going forward. Within this context, the Agreement seeks to be effective and equitable by creating a more inclusive, transparent, bottom-up, facilitative model for climate action, as well as a more inclusive set of cooperative mechanisms for effectively implementing NDCs.

While each NDC varies in structure, length, and perceptions of fairness and equity, patterns emerge upon close examination of several representative countries' NDCs. Key industrialized parties, for instance, distance themselves from historical narratives and opt not to define fairness or ambition in any explicit way. This approach stands in contrast to many developing states, and SIDS in particular, who leverage the NDCs as a platform for describing their unique national circumstances and challenges, particularly related to pressing adaptation needs and the need to balance mitigation with sustainable development goals. At the same time, this more inclusive model creates fairness and equity challenges by allowing the industrialized countries to continue to bear less than their fair share of the climate burden, while many developing countries have committed—out of sheer necessity, desperation, or an effort to motivate their more industrialized counterparts—to take on more than their fair share of the burden.

NDCs provide the focal point for discussions of equity and fairness, but only by viewing the NDCs in the context of Article 6 is it possible to develop a more robust understanding of the challenges the parties face in implementing the Paris Agreement in such a way as to achieve meaningful emissions reductions while also promoting equity and fairness. This is the case because Article 6 envisions creating inclusive economic flexibility mechanisms to achieve NDC goals. Past practices demonstrate that while using

²⁴⁹ See Richard O. Brooks, *A New Agenda for Modern Environmental Law*, 6 J. ENVTL. L. & LITIG. 1, 26–27 (1991) (stating that “the proper goal of environmental law is not only effectiveness nor efficiency but also environmental justice — the proper distribution of environmental amenities, the fair correction and retribution of environmental abuses, the fair restoration of nature, and the environmentally fair exchange of resources”).

economic flexibility mechanisms to facilitate emissions reductions may reduce the short-term economic costs of limiting climate change, the use of these tools creates new social and environmental costs and benefits. The distribution of these costs and benefits often is unrelated to the initial set of privileges and obligations, and arguably exacerbates existing inequities while skewing assessments of equity by placing efficiency and economic rationality at the center of decisionmaking.

When viewed in tandem, the NDCs and evolving Article 6 mechanisms advance a more inclusive and transparent approach to addressing climate change, but enhanced inclusivity and transparency does not automatically equate to enhanced equity or fairness. As parties continue to submit NDCs, discussions about fairness and ambition will take place in a more open forum and with greater depth in relation to the specific goals parties set out in their NDCs. To the extent that this conversation offers insight into an emerging collective vision of fairness that is different than, or more nuanced than, existing understandings of the principle of equity, this new vision of fairness should be the frame within which the Article 6 mechanisms are developed and the gauge against which individual party goals are assessed.

Returning to Theodore Parker, whose vision of the arc of justice informed Reverend King's leadership in the civil rights movement, Parker professed an inability to understand the moral universe or to see the precise pathway for reaching justice. Instead, for Parker, the arc of justice could only be divined by conscience but, from what he could see, he was "sure it bends towards justice."²⁵⁰ Today, efforts to view the pathway towards justice in the climate change context are clouded by failed efforts to mitigate climate change and failed efforts to develop a shared understanding of state roles and responsibilities grounded in notions of justice, equity, or fairness. Despite these failures, the Paris Agreement represents a step forward towards recognizing disparate capabilities and vulnerabilities as the forces that strain and sharpen the arc of justice.²⁵¹ The ability to leverage the Paris

²⁵⁰ PARKER, *supra* note 1, at 85.

²⁵¹ For a complementary call to "bend the curve" of human influence on key planetary systems, including the climate system, to achieve a safe operating space for humanity, see Johan Rockström, TEDGLOBAL 2010, *Let the Environment Guide our Development* (July 2010), https://www.ted.com/talks/johan_rockstrom_

Agreement to contract the bend of the arc requires more than embracing inclusivity; it requires understanding and responding to the promises and perils of inclusivity within a context defined by existing patterns of disproportionate power, risk, and responsibility.