STATES AND CITIES AS "NORM SUSTAINERS": A ROLE FOR SUBNATIONAL ACTORS IN THE PARIS AGREEMENT ON CLIMATE CHANGE

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President Donald Trump's declared intent to withdraw the United States from the Paris Agreement on climate change has prompted many states and cities in the United States to redouble their efforts on climate change and to pledge support for the international treaty. U.S. subnational states and cities cannot be parties to the Paris Agreement, so what do their declarations of support mean from the perspective of international law? Using Harold Koh's theory of transnational legal process as a framework, I address this question by integrating the literature on international climate law and state and the scholarship on local climate innovation. I argue that subnational actors are "norm sustainers" who can help to ensure the success of the Paris Agreement even if the U.S. withdraws from the treaty.

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When subnational actors pledge to uphold a global treaty, like the Paris Agreement on climate change, they act as norm sustainers and contribute to the transnational legal process in three distinct ways. First, by publicly benchmarking their own progress on the U.S. targets under the Paris Agreement, subnational norm sustainers can signal to other nation-states that a significant portion of the United States is still committed to the goals of the Paris Agreement. Consistent with the treaty's emphasis on transparency for compliance, such subnational disclosure could encourage other countries to achieve their own national targets, or, at the very least, help to prevent a decrease in ambition in the wake of a U.S. withdrawal from the treaty.

Second, states and cities can sustain and strengthen key norms of international environmental law that are embedded within the Paris Agreement. For example, President Trump has essentially repudiated the principle of common but differentiated responsibilities and respective capabilities. I argue that states and cities give this principle meaning when they tie their own climate policies to the Paris Agreement.

Finally, as norm sustainers, states and cities can demonstrate the feasibility of climate actions in a way that lays the groundwork for national policy, as the literature on cooperative federalism in the United States has long recognized. Thus, even if President Trump fulfills his campaign promise of withdrawing the United States from the Paris Agreement on climate change, the sustaining efforts of states and cities could enable a future president to rejoin the treaty.

President Trump's actions threaten to derail global progress on climate change by encouraging other countries to defect from the Paris Agreement. Although U.S. states and cities cannot be parties to the treaty, their actions as norm sustainers can help to ensure the treaty's success and heighten international ambition on climate change.

I. INTRODUCTION

President Donald Trump's declared intent to withdraw the United States from the Paris Agreement on climate change has prompted many states and cities in the United States to redouble their efforts on climate change and to pledge support for the international treaty. It has spurred new initiatives in the United States, such as the U.S. Climate Alliance and We Are Still In, and given momentum to existing domestic efforts, such as Climate Mayors, and to transnational networks, such as the Under2 Coalition and C40 Cities.¹

¹ About, C40 CITIES, https://www.c40.org/about (last visited Aug. 23, 2018); About, WE ARE STILL IN, https://www.wearestillin.com/about (last visited Aug. 23, 2018); About the Under2

From the standpoint of international law, such efforts raise questions about the appropriate role of subnational actors within international agreements. Through the doctrine of state responsibility, countries are responsible for conduct within their territory, even if by subnational actors.² The converse is also true: subnational states are bound by international legal agreements that their national governments enter into, with the exact limits determined with reference to a particular country's political system.³ The foundational premise of international law is state sovereignty. Recognizing subnational actors as separate entities pierces the veil of sovereignty and shatters the legal fiction of the unified state.⁴ Subnational entities have entered into a range of transnational agreements, and in some instances, they have even participated in treaties.⁵ In most instances, however, such participation is premised on the express authorization of the national government.⁶ In contrast, U.S. states and cities are now demonstrating support for a treaty that President Trump has repudiated.

U.S. subnational states and cities cannot be parties to the Paris Agreement, so what do their declarations of support mean from the perspective of international law? Using Harold Koh's theory of transnational legal process as a framework,⁷ I address this question by integrating two distinct bodies of scholarship: the work of international

Coalition, UNDER2 COALITION, https://www.under2coalition.org/about (last visited Aug. 23, 2018); *Alliance Principles*, U.S. CLIMATE ALLIANCE, https://www.usclimatealliance.org/alliance-principles/ (last visited Aug. 3, 2018); *City Officials*, CLIMATE MAYORS, http://climatemayors.org/get-involved/city-officials/ (last visited Aug. 31, 2017). *See also* SUSAN BINIAZ, ACT LOCALLY, REFLECT GLOBALLY (Sabin Ctr. Climate Change L. 2017), http://columbiaclimatelaw.com/files/2017/05/Biniaz-May_2017-Act-Locally-Reflect-Globally-.pdf.

² Benedict Kingsbury, *Global Environmental Governance as Administration: Implications for International Law, in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 63, 67 (Daniel Bodansky et al. eds., 2007).

³ See Joanna Setzer, Testing the Boundaries of Subnational Diplomacy: The International Climate Action of Local and Regional Governments, 4 TRANSNAT'L ENVTL. L. 319 (2015); Johanna Kalb, The Persistence of Dualism in Human Rights Treaty Implementation, 30 YALE L. & POL'Y REV. 71 (2011).

⁴ See ANNE-MARIE SLAUGHTER, A NEW WORLD ORDER 12 (2004).

⁵ Duncan B. Hollis, Why State Consent Still Matters - Non-State Actors, Treaties, and the Changing Sources of International Law, 23 BERKELEY J. INT'L L. 137, 146–47 (2005).

⁶ *Id.* at 147.

⁷ Harold Hongju Koh, *Transnational Legal Process*, 75 NEB. L. REV. 181, 184 (1996) [hereinafter Koh, *Transnational Legal Process*]; Harold Hongju Koh, *Why Transnational Law Matters*, 24 PENN ST. INT'L L. REV. 745, 746 (2006) [hereinafter Koh, *Transnational Law Matters*]; HAROLD HONGJU KOH, THE TRUMP ADMINISTRATION AND INTERNATIONAL LAW 6–7 (2018) [hereinafter KOH, TRUMP ADMINISTRATION].

climate law experts, such as Daniel Bodansky,⁸ Lavanya Rajamani,⁹ and Susan Biniaz,¹⁰ and the literature on state and local climate innovation, including the writing of Vicki Arroyo,¹¹ William Buzbee,¹² Kirsten Engel,¹³ and Hari Osofsky,¹⁴ I argue that subnational actors are "norm

⁹ Lavanya Rajamani, Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics, 65 INT'L & COMP. L.Q. 493 (2016) [hereinafter Rajamani, Ambition]; Lavanya Rajamani, Differentiation and Equity in the Post-Paris Negotiations, in THE PARIS AGREEMENT AND BEYOND: INTERNATIONAL CLIMATE CHANGE POLICY POST-2020 19 (Robert N. Stavins & Robert C. Stowe eds., 2016) [hereinafter Rajamani, Differentiation].

¹⁰ BINIAZ, *supra* note 1; SUSAN BINIAZ, WHAT HAPPENED TO BYRD-HAGEL? ITS CURIOUS ABSENCE FROM EVALUATIONS OF THE PARIS AGREEMENT (Sabin Ctr. Climate Change L. 2018), http://columbiaclimatelaw.com/files/2018/01/Biniaz-2018-1-Byrd-Hagel-article-Working-Paper.pdf [hereinafter BINIAZ, BYRD-HAGEL]; Susan Biniaz, *Comma but Differentiated*

Paper.pdf [nereinatter BINIAZ, BYRD-HAGEL]; Susan Biniaz, Comma but Differentiated Responsibilities: Punctuation and 30 Other Ways Negotiators Have Resolved Issues in the International Climate Change Regime, 6 MICH. J. ENVTL. & ADMIN. L. 37 (2016) [hereinafter Biniaz, Comma].

¹¹ Vicki Arroyo, *State and Local Climate Leadership in the Trumpocene*, 11 CARBON & CLIMATE L. REV. 303 (2017) [hereinafter Arroyo, *Trumpocene*]; Vicki Arroyo et al., *State Innovation on Climate Change: Reducing Emissions from Key Sectors While Preparing for a "New Normal,"* 10 HARV. L. & POL'Y REV. 385 (2016) [hereinafter Arroyo et al., *State Innovation*].

¹² William W. Buzbee, Clean Air Act Dynamism and Disappointments: Lessons for Climate Legislation to Prompt Innovation and Discourage Inertia, 32 WASH. U. J.L. & POL'Y 33 (2010) [hereinafter Bruzbee, Lessons]; William W. Buzbee, Climate Federalism, Regulatory Failure and Reversal Risks, and Entrenching Innovation Incentives, in THE LAW AND POLICY OF ENVIRONMENTAL FEDERALISM: A COMPARATIVE ANALYSIS 145 (Kalyani Robbins ed., 2015) [hereinafter Buzbee, Climate Federalism]; William W. Buzbee, Contextual Environmental Federalism, 14 N.Y.U. ENVTL. L.J. 108 (2005) [hereinafter Buzbee, Contextual]; William W. Buzbee, Federalism Hedging, Entrenchment, and the Climate Challenge, 2017 WIS. L. REV. 1037 (2017) [hereinafter Buzbee, Federalism Hedging].

¹³ Kirsten Engel, State and Local Climate Change Initiatives: What is Motivating State and Local Governments to Address a Global Problem and What Does This Say About Federalism and Environmental Law?, 38 URB. L. 1015 (2006) [hereinafter Engel, Motivating]; Kirsten H. Engel, The Enigma of State Climate Change Policy Innovation, in THE LAW AND POLICY OF ENVIRONMENTAL FEDERALISM: A COMPARATIVE ANALYSIS 169 (Kalyani Robbins ed., 2015) [hereinafter Engel, Enigma].

¹⁴ Hari M. Osofsky, *Climate Change Litigation as Pluralist Legal Dialogue?*, 43A STAN. J. INT'L L. 181 (2007) [hereinafter, Osofsky, *Pluralist*]; Hari M. Osofsky, *Is Climate Change "International"? Litigation's Diagonal Regulatory Role*, 49 VA. J. INT'L L. 585 (2009) [hereinafter Osofsky, *Diagonal*]; Hari M. Osofsky, *Rethinking the Geography of Local Climate Action: Multilevel Network Participation in Metropolitan Regions*, 2015 UTAH L. REV. 173 (2015) [hereinafter Osofsky, *Rethinking Geography*]; Hari M. Osofsky, *Scaling "Local": The Implications of Greenhouse Gas Regulation in San Bernardino County*, 30 MICH. J. INT'L L. 689 (2009) [hereinafter Osofsky, *Scaling Local*]; Hari M. Osofsky, *The Complexities of Multipolar*

⁸ DANIEL BODANSKY ET AL., INTERNATIONAL CLIMATE CHANGE LAW (2017); DANIEL BODANSKY, THE ART AND CRAFT OF INTERNATIONAL ENVIRONMENTAL LAW (Harvard Univ. Press 2010) [hereinafter BODANSKY, ART AND CRAFT]; Daniel Bodansky, *A Tale of Two Architectures: The Once and Future U.N. Climate Change Regime*, 43 ARIZ. ST. L.J. 697 (2011); Daniel Bodansky, *The Copenhagen Climate Change Conference: A Postmortem*, 104 AM. J. INT'L L. 230 (2010) [hereinafter Bodansky, *Postmortem*]; Daniel Bodansky, *The Paris Climate Change Agreement: A New Hope*?, 110 AM. J. INT'L L. 288 (2016) [hereinafter Bodansky, *New Hope*?]; Daniel Bodansky, *The Road Forward from Copenhagen: Climate Change Policy in the 21st Century*, 104 AM. SOC'Y INT'L L. PROC. 538 (2010).

sustainers" who can help to ensure the success of the Paris Agreement even if the U.S. withdraws from the treaty.¹⁵

Although this article was motivated by President Trump's declared intent to withdraw from the Paris Agreement and the examples are primarily drawn from the United States, the analysis of how subnational governments interact with international law is broadly applicable. For example, it could apply to subnational action in other parts of the world where national governments allow subnational units to participate in international agreements.¹⁶ The analysis also lends support to transnational efforts, such as C40 Cities.

Yet, because the examples are from the United States, it is worth recognizing that U.S. states engaged in climate action are often walking a fine line to avoid constitutional infirmities.¹⁷ In particular, subnational action on climate change in the United States is potentially subject to foreign affairs preemption under the U.S. Constitution.¹⁸ Given the scope

¹⁷ A rich and vast literature examines constitutional challenges to state and local climate policy and questions of preemption. See, e.g., Michael Burger, "It's Not Easy Being Green": Local Initiatives, Preemption Problems, and the Market Participant Exception, 78 U. CIN. L. REV. 835 (2010); Kirsten H. Engel, Mitigating Global Climate Change in the United States: A Regional Approach, 14 N.Y.U. ENVTL. L.J. 54 (2005); Steven Ferrey, Carbon Outlasts the Law: States Walk the Constitutional Line, 41 B.C. ENVTL. AFF. L. REV. 309 (2014); Steven Ferrey, Follow the Money! Article I and Article VI Constitutional Barriers to Renewable Energy in the U.S. Future, 17 VA. J.L. & TECH. 89 (2012); Steven Ferrey, Gone with the Wind: State Preemptive Power, 79 ALB. L. REV. 1479 (2015–2016); Steven Ferrey, State Refusal Triggers Constitutional Crisis: Past is Prologue on Energy and Infrastructure, 34 REV. LITIG. 423 (2015); Lisa Heinzerling, Climate, Preemption, and the Executive Branches, 50 ARIZ. L. REV. 925 (2008); Juliet Howland, Comment, Not All Carbon Credits Are Created Equal: The Constitutional and the Cost of Regional Cap-and-Trade Market Linkage, 27 UCLA J. ENVTL. L. & POL'Y 413 (2009); Felix Mormann, Constitutional Challenges and Regulatory Opportunities for State Climate Policy Innovation, 41 HARV. ENVTL. L. REV. 189 (2017); Barry G. Rabe, States on Steroids: The Intergovernmental Odyssey of American Climate Policy, 25 REV. POL'Y RES. 105 (2008); Harvey Reiter, Removing Unconstitutional Barriers to Out-of-State and Foreign Competition from State Renewable Portfolio Standards: Why the Dormant Commerce Clause Provides Important Protection for Consumers and Environmentalists, 36 ENERGY L.J. 45, 66 (2015); Richard B. Stewart, States and Cities as Actors in Global Climate Regulation: Unitary vs. Plural Architectures, 50 ARIZ. L. REV. 681 (2008); Shelley Welton, State Dynamism, Federal Constraints: Possible Constitutional Hurdles to Cross-Border Cap-and-Trade, 27 NAT. RESOURCES & ENV'T 36 (2012); Michael S. Smith, Note, Murky Precedent Meets Hazy Air: The Compact Clause and the Regional Greenhouse Gas Initiative, 34 B.C. ENVTL. AFF. L. REV. 387 (2007); Note, The Compact Clause and the Regional Greenhouse Gas Initiative, 120 HARV. L. REV. 1958 (2007).

¹⁸ See, e.g., Erwin Chemerinsky et al., California, Climate Change, and the Constitution, 25 ENVTL. F. 50 (2008); David R. Hodas, State Law Responses to Global Warming: Is It

Approaches to Climate Change: Lessons from Litigation and Local Action, 107 AM. SOC'Y INT'L L. PROC. 73 (2013).

¹⁵ In contrast, non-state actors are often described as "norm entrepreneurs," and national governments as "norm sponsors." *See, e.g.*, Koh, *Transnational Law Matters*, *supra* note 7, at 746 n4.

¹⁶ See Setzer, supra note 3, at 329 (noting that France, Belgium and Argentina all allow, to varying degrees, subnational governments to engage in international relations).

of that topic, I examine questions of foreign affairs preemption in a companion paper.¹⁹ For the purposes of this article, I assume that U.S. state policies can be crafted in a way that survives constitutional scrutiny.²⁰ I am particularly interested in how even ostensibly political commitments by subnational states and cities to the Paris Agreement can nevertheless strengthen the treaty and the evolution of international environmental law. For example, neither the U.S. Climate Alliance nor the U.S. Climate Mayors imposes binding legal obligations on the participating states and cities.²¹ This article focuses specifically on subnational actors even though under international law, subnational governments are clustered together with nongovernmental organizations ("NGOs"), corporations, and others as "non-state actors."²² As public entities, cities and states represent the interests of the people within their jurisdiction. They necessarily have a broader mandate than corporations or NGOs, and they are beholden to an electorate that has different policy goals than shareholders or donors. As public actors, they can give a sense of the direction of the country-and indeed, that is what some states and localities hope to do by referencing the Paris Agreement. Although state consent remains an important doctrine, international law is changing, which creates a greater role for subnational actors to have influence on the global stage.23

²⁰ Scholars who have studied California's ambitious climate change policies have highlighted constitutional susceptibilities. *See generally*, Kysar & Meyler, *supra* note 18. However, most have concluded that the state's programs could survive scrutiny, especially if certain recommended changes are adopted. *See, e.g.*, Sloss, *supra* note 18, at 526–28; Chemerinsky et al., *supra* note 18, at 53, 55–56, 60–61; Hodas, *supra* note 18, at 79–81.

Constitutional to Think Globally and Act Locally?, 21 PACE ENVTL. L. REV. 53 (2004); Douglas A. Kysar & Bernadette A. Meyler, *Like a Nation State*, 55 UCLA L. REV. 1621 (2008); David Sloss, *California's Climate Diplomacy and Dormant Preemption*, 56 WASHBURN L.J. 507 (2017).

¹⁹ This work-in-progress first examines whether there is actually a conflict between the national "voice" and subnational pledges to uphold the Paris Agreement because the U.S. cannot legally withdraw from the Paris Agreement until 2020. Moreover, it is questionable whether President Trump has the authority to unilaterally withdraw from the Paris Agreement. *See* Harold Hongju Koh, *The Trump Administration and International Law*, 56 WASHBURN L.J. 413 (2017). I then consider state climate policies in light of key Supreme Court cases involving challenges under the express and dormant foreign affairs preemption doctrines, the dormant Foreign Commerce Clause and the Compact Clause.

²¹ Similarly, states like California have entered into numerous memoranda of understanding with other countries and subnational actors, which clearly state that they do not create any legally binding rights or obligations. *See, e.g., Collaboration on Climate Change*, CALIFORNIA CLIMATE CHANGE, https://www.climatechange.ca.gov/climate_action_team/partnerships.html (last visited Jul. 27, 2018) (listing all transnational agreements on climate change).

²² See Thilo Marauhn, Changing Role of the State, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 727 (Daniel Bodansky et al. eds., 2007).

²³ BODANSKY, ART AND CRAFT, *supra* note 8, at 117; Koh, *Transnational Legal Process, supra* note 7, 183–84; Harold Hongju Koh, *Twenty-First Century International Lawmaking Address*, 101 GEO. L J. ONLINE 1 (2012).

In Koh's transnational legal process theory, state and non-state actors play a role in generating norms and in encouraging nation-states to internalize global norms; norm internalization functions as a form of legal compliance.²⁴ However, Koh's theory of norm internalization does not satisfactorily explain what happens when a major superpower like the United States explicitly rejects a globally negotiated treaty and the norms embedded therein, which is what occurred when President Trump publicly declared his intention to withdraw the United States from the Paris Agreement. The concept of subnational "norm sustaining" seeks to fill this gap in transnational legal process theory by describing a way that states and cities can help promote the key values embedded within a globally accepted treaty, even in the face of a unilateral national rejection.

Non-governmental organizations are often called "norm entrepreneurs"²⁵ when they encourage national governments to push new ideas at international negotiations; these nations, in turn, act as "norm sponsors" when they introduce treaty language containing those concepts.²⁶ Here, subnational states and cities are not necessarily doing something "new" nor are they acting in as "official" sponsors. Rather, when subnational actors pledge to uphold the terms of a global treaty, like the Paris Agreement on climate change, they function as "norm sustainers."

Subnational norm sustainers contribute to the transnational legal process in three distinct ways. First, by publicly benchmarking their own progress on the U.S. targets under the Paris Agreement, subnational norm sustainers can signal to other nation-states that a significant portion of the United States is still committed to the goals of the Paris Agreement.²⁷ Consistent with the treaty's emphasis on transparency for compliance,²⁸ such subnational disclosure could encourage other countries to achieve their own national targets, ²⁹ or, at the very least, help to prevent a decrease in ambition in the wake of a U.S. withdrawal from the treaty.

Second, states and cities can sustain and strengthen key norms of international environmental law that are embedded within the Paris

²⁴ Koh, Transnational Legal Process, supra note 7, at 206-07

²⁵ BODANSKY, ART AND CRAFT, *supra* note 8, at 146, 193.

²⁶ Koh, Transnational Law Matters, supra note 7, at 746 n4.

²⁷ See infra Part III.A.

²⁸ Bodansky, *Postmortem*, *supra* note 8, at 291 (noting that the Paris Agreement "establishes an enhanced transparency and accountability framework that reflects Justice Brandeis's admonition, sunlight is the 'best of disinfectants.").

²⁹ All parties to the Paris Agreement agreed to establish voluntary emission reduction targets in the form of "nationally determined contributions" (NDCs). Paris Agreement art. 4(2) (Dec. 13, 2015), *in* U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its Twenty-First Session, Addendum*, Annex, U.N. Doc. FCCC/CP/2015/10/Add.1 (Jan. 29, 2016) [hereinafter Paris Agreement].

Agreement. For example, President Trump has essentially repudiated the principle of common but differentiated responsibilities and respective capabilities. I argue that states and cities give this principle meaning when they tie their own climate policies to the Paris Agreement.³⁰ Consistent with Koh's theory of transnational legal process,³¹ such subnational norm sustaining could contribute to the overall effectiveness of the Paris Agreement.

Finally, as norm sustainers, states and cities can demonstrate the feasibility of climate actions in a way that lays the groundwork for national policy, as the literature on cooperative federalism in the United States has long recognized.³² Thus, even if President Trump fulfills his campaign promise of withdrawing the United States from the Paris Agreement on climate change, the sustaining efforts of states and cities could enable a future president to rejoin the treaty.

This article proceeds in three parts. Part I highlights the key features of the Paris Agreement on climate change and discusses President Trump's repudiation of the Paris Agreement. Part II describes the ways in which states and cities have pledged to uphold the Paris Agreement and summarizes their array of existing climate policies, including greenhouse gas reduction targets, cap-and-trade programs, renewable portfolio standards, and efficiency standards. Part III explains how and why these states and cities function as norm sustainers of the Paris Agreement on climate change.

President Trump's actions threaten to derail global progress on climate change by encouraging other countries to defect from the Paris Agreement. Although U.S. states and cities cannot be parties to the treaty, their actions as norm sustainers can help to ensure the treaty's success and heighten international ambition on climate change.

II. THE PARIS AGREEMENT

A. Key Features of the Paris Agreement

The Paris Agreement on Climate Change represented an important diplomatic triumph after many years of failed climate negotiations. The

³⁰ See infra Part III.B.

³¹ Koh, Transnational Legal Process, supra note 7, at 206.

³² See infra Part III.C.

treaty³³ was adopted in December 2015 by 195 countries, and entered into force on November 2016.³⁴

The Paris Agreement rejected the clear Annex I/non-Annex I divide that had made the Kyoto Protocol so problematic and adopted more nuanced forms of differentiation based on mitigation, adaptation, finance, capacity building, technology and transparency.³⁵ All parties to the Paris Agreement agreed to establish voluntary emissions targets in the form of "nationally determined contributions" ("NDCs") and to adopt "domestic mitigation measures, with the aim of achieving the objectives of such contributions."³⁶

Each party sets NDCs that it "intends to achieve,"³⁷ which means that even unambitious targets are not legally binding. While parties such as the European Union and the small island developing nations had sought to impose binding obligations "of result" on all the parties, others, including the United States, India and China, opposed this; they only agreed to obligations "of conduct."38 In fact, the intentionally vague term "contributions" was adopted instead of "commitments," a term that would have implied mandatory actions instead of weaker voluntary targets.³⁹ Because the key mitigation measures are voluntarily set by each country, they have been characterized as "soft law" embedded within a hard law treaty.40 The Paris Agreement's "bottom-up" process of allowing countries to set their own targets contrasts with the "top-down" approach of Kyoto, where the targets for Annex I countries had been determined at the international level.⁴¹ The "bottom-up" approach meant that the targets would likely be weaker, but, on the other hand, it also ensured greater participation by all nations.

³³ The Paris Agreement is considered a treaty under international law because it meets the requirements set forth under the Vienna Convention on the Law of Treaties. Vienna Convention on the Law of Treaties, May 23, 1969, 1155 U.N.T.S. 331 [hereinafter Vienna Convention].

³⁴ Paris Agreement, *supra* note 29, arts. 4, 13.

³⁵ Rajamani, *Differentiation, supra* note 9, at 19; Rajamani, *Ambition, supra* note 9, at 494; Koh, *supra* note 19, at 435; SUSAN BINIAZ, I BEG TO DIFFER: TAKING ACCOUNT OF NATIONAL CIRCUMSTANCES UNDER THE PARIS AGREEMENT, THE ICAO MARKET-BASED MEASURE, AND THE MONTREAL PROTOCOL'S HFC AMENDMENT 12–17 (Sabin Ctr. Climate Change L. 2017), *available at* https://papers.ssrn.com/abstract=2897024.

³⁶ Paris Agreement, *supra* note 29, arts. 4, 13.

³⁷ Id.

³⁸ Rajamani, Ambition, supra note 9, at 498.

³⁹ Nathan Hultman & Claire Langley, *Climate Change Negotiations in Warsaw Result in a Timeline for Agreement in 2015*, BROOKINGS (Nov. 27, 2013), https://www.brookings.edu/blog/up-front/2013/11/27/climate-change-negotiations-in-warsaw-result-in-a-timeline-for-agreement-in-2015/.

⁴⁰ Peter Lawrence & Daryl Wong, *Soft law in the Paris Climate Agreement: Strength or Weakness*?, 26 REV. EUR. COMP. INT'L ENVTL. L. 276, 277 (2017).

⁴¹ See Bodansky, New Hope?, supra note 8, at 300-01.

The Paris Agreement has a "hybrid architecture" because it combines the bottom-up process of setting emissions reduction targets with topdown global requirements for monitoring, reporting and verification.⁴² This evolution in the climate regime has also been described as moving away from a "global deal' model, in which countries negotiate emissions targets, to a 'pledge-and-review' model, in which each country defines its own goals, subject to some form of intergovernmental review."⁴³

The Paris Agreement has several features that are designed to "ratchet up" the scale of climate action.⁴⁴ The agreement requires parties to establish NDCs, publicly communicate their progress towards these targets every five years,⁴⁵ and then record the results in a public registry maintained by the Secretariat.⁴⁶ It is expected that each successive NDC will represent a progression beyond the previous NDC.⁴⁷ On a five-year basis, the parties will collectively assess progress through comprehensive "global stocktakes," which will encompass efforts on mitigation, adaptation, and means of implementation and support; the first global stocktake will take place in 2023.⁴⁸

The Paris Agreement also contains numerous other provisions. For example, it allows the parties to engage in different forms of voluntary cooperation, such as emissions trading, to achieve their own NDCs.⁴⁹ It

⁴² Id.; Rajamani, Ambition, supra note 9, at 502; Christina Voigt, The Compliance and Implementation Mechanism of the Paris Agreement, 25 REV. EUR. COMP. INT'L ENVTL. L. 161 (2016).

⁴³ Sander Chan et al., *Reinvigorating International Climate Policy: A Comprehensive Framework for Effective Nonstate Action*, 6 GLOBAL POL'Y 466, 469 (2015).

⁴⁴ Bodansky, *New Hope?*, *supra* note 8, at 306; Rajamani, *Ambition, supra* note 9, at 503–06; Elizabeth Burleson, *Climate-Energy Sinks and Sources: Paris Agreement & Dynamic Federalism Symposium: Global Challenges and Local Solutions: The Role of Municipalities in the Fight against Climate Change*, 28 FORDHAM ENVTL. L. REV. 1, 2–3 (2016).

⁴⁵ Paris Agreement, *supra* note 29, arts. 4, 13.

⁴⁶ *Id.* art. 4(12).

⁴⁷ Id. art. 4(3); Bodansky, New Hope?, supra note 8, at 306.

⁴⁸ Paris Agreement, *supra* note 29, art. 14.

⁴⁹ The Paris Agreement does not continue the Kyoto flexibility mechanisms, but instead, outlines three different types of voluntary cooperation in Article 6. Articles 6.2 and 6.3 use new jargon—internationally transferred mitigation outcomes—to describe emissions trading. *See* Andrei Marcu, *Governance of Carbon Markets under Article 6 of the Paris Agreement, in* THE PARIS AGREEMENT AND BEYOND: INTERNATIONAL CLIMATE CHANGE POLICY POST-2020 47, 48–49 (Robert N. Stavins & Robert C. Stowe eds., 2016). BENITO MULLER, ARTICLE 6: MARKET APPROACHES UNDER THE PARIS AGREEMENT 7 (Eur. Capacity Bldg. Initiative, April 2018), https://www.ecbi.org/news/article-6-market-approaches-under-paris-agreement. Articles 6.4–6.7 create "a mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development." MULLER, *supra*, at 9. *See also* ASIAN DEV. BANK, DECODING ARTICLE 6 OF THE PARIS AGREEMENT 6 (April 2018), https://www.adb.org/publications/decoding-article-6-paris-agreement (last visited Jul 30, 2018). Finally, in an apparent compromise between countries favoring market-based approaches and those that did not, Articles 6.8–6.9 also specifically recognize the importance of developing a framework to promote "non-market approaches, in the

contains measures on enhancing carbon sinks, such as forests; on promoting adaptation; and on loss and damage.⁵⁰ Developed countries also agreed to provide financial resources to help developing nations with mitigation and adaptation plans, technology transfer, and capacity building.⁵¹

Despite being hailed as a success, the reality is that the Paris Agreement is a compromise document that may or may not be successful. Internationally-mandated reductions for all countries combined with a detailed compliance scheme and penalties for non-compliance no doubt would have enabled the world to make better progress at addressing climate change and preventing the persistent rise of the Earth's temperature.⁵² Treaties with hard obligations and precise standards, such as those on ozone depletion, arms control, and international trade, tend to be more effective at generating compliance.⁵³ Yet, given global realities, namely the positions of the United States and countries like China and India, such an agreement was not politically feasible. The Paris Agreement's hybrid structure allowed for participation by almost all countries in the world, covering ninety-seven percent of global emissions, as compared to the fourteen percent covered by the current Kyoto Protocol period.⁵⁴ The parties can certainly comply with the requirements to set NDCs and report on progress towards them.⁵⁵ The challenge is that even if the parties achieve their current NDCs, it will not be enough.

context of sustainable development and poverty eradication." Paris Agreement, *supra* note 29, art. 6.8.; *see* Robert Stavins, *Will the Paris Agreement Help or Hinder Cooperation among Nations?* An Economic View of the Environment, AN ECON. VIEW OF THE ENV'T (May 2018), http://www.robertstavinsblog.org/2018/05/16/will-the-paris-agreement-help-or-hinder-

cooperation-among-nations. These approaches also aim to "[e]nhance public and private sector participation in the implementation of nationally determined contributions." Paris Agreement, *supra* note 29, art. 6.8. The parties delegated the details for operationalizing Article 6 to the Subsidiary Body for Scientific and Technological Advice (SBSTA). As of the writing of this article, the details for each of the three approaches were being developed. *See Cooperative Implementation*, UNFCCC, https://unfccc.int/process/the-paris-agreement/cooperative-implementation (last visited Jan 14, 2019); U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its Twenty-First Session, Addendum* ¶ 34 U.N. Doc. FCCC/CP/2015/10/Add.1 (Jan. 29, 2016) [hereinafter 2015 U.N. Climate Change Report].

⁵⁰ See generally Biniaz, Comma, supra note 10, at 57, 60; Bodansky, New Hope?, supra note 8, at 308–10; Rajamani, Ambition, supra note 9, at 497, 502; Burleson, supra note 44, at 2–3, 8–10, 15–16.

⁵¹ Biniaz, *Comma*, *supra* note 10, at 59–60 (noting that due to an aversion to including quantified figures in the actual agreement, the decision of the COP extends the Copenhagen's Accord goal of mobilizing \$100 billion per year to the year 2025).

⁵² Lawrence & Wong, *supra* note 40, at 281–82.

⁵³ Id. at 277.

⁵⁴ Stavins, *supra* note 49.

⁵⁵ As discussed in the next section, this is why it would be difficult to argue that the U.S. is currently violating the principle of *pacta sunt servanda*.

Most experts recognize that despite the aspirational goals in the Paris Agreement, the current efforts will not be sufficient to keep the Earth's temperature from rising more than two degrees Celsius, let alone one and a half degrees Celsius, above pre-industrial levels.⁵⁶ For example, in 2017, the U.N. Environment Program concluded that "[t]he NDCs that form the foundation of the Paris Agreement cover only approximately one third of the emissions reductions needed to be on a least-cost pathway for the goal of staying well below two degrees Celsius. The gap between the reductions needed and the national pledges made in Paris is alarmingly high."⁵⁷ What is needed is "deep decarbonization," a term that refers to massive reductions in carbon dioxide emissions from fossil fuel combustion.⁵⁸ Moreover, some scholars suggest that countries will become less ambitious in achieving and setting NDCs once the details of the accountability and transparency systems are put in place.⁵⁹

A key question that also looms over the Paris Agreement is whether the bottom-up process that enabled buy-in from all the parties will in fact incentivize greater global action on climate change.⁶⁰ Disclosure has long been a feature of the climate regime,⁶¹ but it has taken on a new prominence in the Paris Agreement.⁶² The theory behind the Paris structure is that self-initiated efforts, combined with disclosure and transparency, will encourage compliance with the existing NDCs and also heighten the participating countries' ambitions with respect to setting future NDCs.⁶³ Under the right conditions, the disclosure of information

⁵⁶ Paris Agreement, *supra* note 29, art. 2.

⁵⁷ UNITED NATIONS ENVIRONMENT PROGRAMME, THE EMISSIONS GAP REPORT 2017 xiv (Nov. 2017), https://wedocs.unep.org/bitstream/handle/20.500.11822/22070/EGR_2017.pdf? sequen%E2%80%A6. *See also* INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, GLOBAL WARMING OF 1.5°C (2018), http://www.ipcc.ch/report/sr15/ (stating in headline D1 that the NDCs submitted under Paris "would not limit global warming to 1.5°C, even if supplemented by very challenging increases in the scale and ambition of emissions reductions after 2030").

⁵⁸ To actually limit the increase of the Earth's temperature to no more than 2 degrees Celsius, developed countries, like the U.S., will need to reduce their greenhouse gas emissions by 80% below 1990 levels by 2050. James H. Williams et al., *Technical and Economic Feasibility of Deep Decarbonization in the United States, in* LEGAL PATHWAYS TO DEEP DECARBONIZATION IN THE UNITED STATES: SUMMARY & KEY RECOMMENDATIONS 4 (Michael B. Gerrard & John C. Dernbach eds., 2018).

⁵⁹ David G. Victor, *Making the Promise of Paris a Reality, in* THE PARIS AGREEMENT AND BEYOND: INTERNATIONAL CLIMATE CHANGE POLICY POST-2020 13, 17 (Robert N. Stavins & Robert C. Stowe eds., 2016).

⁶⁰ Id. at 15.

⁶¹ The UNFCCC required all countries to disclose their sources and sinks of greenhouse gases and their existing efforts to mitigate and adapt to climate change. *See United Nations Framework Convention on Climate Change* art. 4.1., U.N. Doc. A/AC.237/18, Annex I, reprinted in 31 I.L.M. 849 (1992) [hereinafter UNFCCC].

⁶² See Voigt, supra note 42, at 166–67; ASIAN DEVELOPMENT BANK, supra note 49, at 6.

⁶³ Paris Agreement, *supra* note 29, art. 13. See Victor, *supra* note 59, at 14.

can promote compliance with legal norms, even absent legal penalties.⁶⁴ By promoting a supply of information, the NDCs and the global stocktake could increase the reliability and availability of information, which could motivate other countries to take further action, either individually, bilaterally or in small groups.⁶⁵

Whether the Paris Agreement will have the intended governance effect depends largely on whether disclosure and monitoring are enough to inspire increased national ambition. As of this writing, the modalities and procedures for the Paris Agreement's transparency system are still being negotiated.⁶⁶ Similarly, the rules for the five-year global stocktake are currently being developed.⁶⁷

B. President Trump's Intended Withdrawal

On September 3, 2016, the United States deposited an instrument showing its "acceptance" of the Paris Agreement.⁶⁸ The Paris Agreement was adopted under the auspices of the U.N. Framework Convention on Climate Change ("UNFCCC"), which the United States had already ratified. Because the Paris Agreement arguably did not commit the United States to any new internationally-mandated binding requirements, President Barack Obama accepted the terms of the treaty on behalf of the United States as an executive agreement without sending it to the U.S. Senate for advice and consent to ratification.⁶⁹ In fact, the Paris Agreement negotiations almost unraveled at the last minute due to phrasing, which was later declared a typo, but which would have potentially created new legal obligations and thereby prevented President

⁶⁴ See Sharmila L. Murthy, *Translating Legal Norms into Quantitative Indicators: Lessons from the Global Water, Sanitation, and Hygiene Sector*, 42 WM. & MARY ENVTL. L. POL'Y REV. 385, 388 (2017) (discussing how the large monitoring apparatus that developed to track progress on global declarations to expand access to water and sanitation generated compliance with soft law).

⁶⁵ Victor, *supra* note 59, at 14. See also Voigt, *supra* note 42, at 166.

⁶⁶ Rajamani, Ambition, supra note 9, at 489–99.

⁶⁷ *Global Stocktake*, UNFCCC, https://unfccc.int/topics/science/workstreams/global-stocktakereferred-to-in-article-14-of-the-paris-agreement (last visited Aug 24, 2018). The fact that these rulebooks have not yet been developed highlights how decisions by the Conference of the Parties can effectively paper over key differences. *See* Stephen J. Toope, *Formality and Informality, in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 107, 112 (Daniel Bodansky et al. eds., 2007).

⁶⁸ Status of Treaties: Paris Agreement, U.N. TREATY COLLECTION, https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-

d&chapter=27&lang=_en&clang=_en (last visited Dec. 19, 2018).

⁶⁹ Harold Hongju Koh, *Triptych's End: A Better Framework to Evaluate 21st Century International Lawmaking* 126 YALE L.J.F. 337 (2017); Daniel Bodansky & Peter Spiro, *Executive Agreements*+, 49 VAND. J. TRANSNAT'L L. 885 (2016).

Obama from accepting the agreement.⁷⁰ Although the Paris Agreement complies with the parameters of a prior U.S. Senate resolution known as the Byrd-Hagel Resolution, discussed in Part III.B, President Obama recognized that the U.S. Senate would never ratify it. Of course, had the U.S. Senate ratified the Paris Agreement, it would have been much more difficult for President Trump to attempt to withdraw the country from it.

In June 2017, President Trump announced that he would withdraw the United States from the Paris Agreement, despite vigorous advocacy from other nations, industries, and NGOs.⁷¹ The U.S. Ambassador to the United Nations then deposited a "communication" with the Secretary-General of the United Nations that stated in part:

Unless the United States identifies suitable terms for reengagement, the United States will submit to the Secretary-General, in accordance with Article 28, paragraph 1 of the Agreement, formal written notification of its withdrawal as soon as it is eligible to do so.⁷²

Under the terms of the Paris Agreement, a party may withdraw at any time "after three years from the date on which this Agreement has entered into force for a Party."⁷³ Given that the agreement entered into force on November 4, 2016, after the United States had already acknowledged its acceptance of the treaty, the United States technically is not permitted to give written notification of its intent to withdraw until November 2019. The withdrawal would then take effect after one year, or on November 4, 2020,⁷⁴ which is ironically the day after the United States will hold its next presidential election. In light of this, Koh has suggested that "Trump's withdrawal announcement has no more legal meaning than one of his tweets."⁷⁵ If the United States does in fact withdraw from the Paris

⁷⁰ John Vidal, *How a "Typo" Nearly Derailed the Paris Climate Deal*, THE GUARDIAN (Dec. 16, 2015), https://www.theguardian.com/environment/blog/2015/dec/16/how-a-typo-nearly-derailed-the-paris-climate-deal. Biniaz, *Comma, supra* note 10, at 57–58.

⁷¹ Donald Trump, President of the United States, Statement by President Trump on the Paris Climate Accord (June 1, 2017), https://www.whitehouse.gov/briefings-statements/statement-president-trump-paris-climate-accord/.

⁷² Letter from Nikki R. Haley, U.S. Ambassador to the United Nations, to António Guterres, Sec'y Gen., United Nations (Aug. 4, 2017), https://treaties.un.org/doc/Publication/CN/2017/ CN.464.2017-Eng.pdf.

⁷³ Paris Agreement, *supra* note 29, art. 28.

⁷⁴ *Id. See also Paris Agreement Ratification Tracker*, CLIMATE ANALYTICS, https://climateanalytics.org/briefings/ratification-tracker/ (last visited Dec 19, 2018).

⁷⁵ Koh, *supra* note 19, at 436–47 (suggesting that Trump may not be able to unilaterally withdraw from the Paris Agreement). *See also* Harold Hongju Koh, *Presidential Power to Terminate International Agreements*, 128 Yale L.J.F. 432 (2018). *Cf.* Susan Biniaz, *Trump vs. International Law: Thoughts on the Paris Agreement and U.S. Climate Diplomacy*, OPINIOJURIS (March 10, 2018), http://opiniojuris.org/2018/10/03/trump-vs-international-law-thoughts-on-the-

Agreement, the share of global greenhouse gas emissions covered by the treaty will fall from ninety-seven percent to eighty-two percent.⁷⁶

President Trump's professed reasons for withdrawing from the Paris Agreement do not make sense in light of the bottom-up nature of the NDCs. He claims to want to "begin negotiations to reenter either the Paris Accord or a really entirely new transaction on terms that are fair to the United States, its businesses, its workers, its people, its taxpayers."⁷⁷ However, these supposedly "unfair" terms were not imposed internationally, but were instead proposed by the Obama administration in the form of its first NDC. While President Trump claims that a withdrawal from the Paris Agreement would be a way to reassert America's sovereignty, in reality, all the United States has done is reduce its bargaining power vis-à-vis other countries.⁷⁸ For example, in the wake of his announcement, the European Union and China together pledged to fill the void and "'lead the energy transition' toward a low-carbon economy."⁷⁹

The United States could arguably remain in the Paris Agreement but submit a NDC that is weaker on climate change.⁸⁰ There is no doubt that the parties to the Paris Agreement expected that each subsequent NDC would be more ambitious than the last.⁸¹ The question is, whether a more ambitious subsequent NDC is a legally binding obligation, or simply an expectation. The Paris Agreement states that "each Party's successive nationally determined contribution will represent a progression beyond the Party's then-current nationally determined contribution and reflect its highest possible ambition."⁸² As Bodansky explains, the use of the word "will" instead of "shall" means that this was intended as an expectation, not a legally binding obligation.⁸³ This interpretation is consistent with another provision of the Paris Agreement, which states that a "[p]arty may at any time adjust its existing nationally determined contribution

paris-agreement-and-u-s-climate-diplomacy/ (suggesting that domestic litigation to stop the withdrawal of the U.S. from the Paris Treaty would be counter-productive).

 $^{^{76}\,}$ Michael A. Mehling et al., Linking Heterogeneous Climate Policies (Consistent with the Paris Agreement) 1, n2 (2017).

⁷⁷ Trump, *supra* note 71.

⁷⁸ Koh, *supra* note 19, at 437.

⁷⁹ Daniel Boffey & Arthur Neslen, *China and EU Strengthen Promise to Paris Deal with US Poised to Step Away*, THE GUARDIAN (June 1, 2017), https://www.theguardian.com/environment/2017/may/31/china-eu-climate-lead-paris-agreement.

 $^{^{80}}$ See BINIAZ, supra note 75 (outlining options that were available to the Trump administration).

⁸¹ See Rajamani, Ambition, supra note 9, at 501; Burleson, supra note 44, at 3.

⁸² Paris Agreement, *supra* note 29, art. 4.

⁸³ Bodansky, New Hope?, supra note 8, at 306.

with a view to enhancing its level of ambition."⁸⁴ The use of the terms "may" and "with a view to" in this paragraph also suggests that while ambitious climate efforts are encouraged, they are not legally required. Some experts familiar with the Paris Agreement negotiations have also pointed out that the parties considered, but explicitly rejected, a prohibition on "downward" revisions of NDCs out of concern that the parties would be less ambitious if they did not have an "out."⁸⁵ Thus, although President Trump would like to take credit for renegotiating the Paris Agreement, he would probably only be successful in revising down the voluntary goals stated in the U.S. NDC,⁸⁶ which is to reduce the economy-wide greenhouse gas emissions twenty-six percent to twenty-eight percent below their 2005 level by 2025.⁸⁷

Until November 2020, however, the United States is still technically "in" the Paris Agreement and must adhere to its obligations. Under the doctrine of *pacta sunt servanda*, "[e]very treaty in force is binding upon the parties to it and must be performed by them in good faith."⁸⁸ Given the hybrid architecture of the Paris Agreement, however, it would be difficult to argue that the United States is in violation. Although President Trump's dismantling of environmental protections certainly undermines the country's ability to achieve its NDCs, the U.S. NDC only states that the United States "intends" to achieve its emissions reduction targets.⁸⁹ In other words, it uses aspirational, rather than binding language. Also, because the U.S. NDC is still listed on the U.N. website, the United States appears to be in compliance with the Paris Agreement's legally binding requirement to "prepare, communicate and maintain" a NDC⁹⁰ As long as the United States complies with the disclosure requirements of the

⁸⁴ Paris Agreement, *supra* note 29, art. 4.11.

⁸⁵ CTR. FOR CLIMATE & ENERGY SOLUTIONS, LEGAL ISSUES RELATED TO THE PARIS AGREEMENT (May 2017), https://www.c2es.org/site/assets/uploads/2017/05/legal-issues-related-paris-agreement.pdf (incorporating legal opinions of former U.S. State Department Deputy Legal Adviser Susan Biniaz and Daniel Bodansky, Foundation Professor Law, Arizona State University).

⁸⁶ Justin Worland, *Trump is Telling Foreign Leaders That the U.S. May Rejoin the Paris Climate Agreement, Ex-Aide Says*, TIME (Feb. 23, 2018), http://time.com/5171805/paris-agreement-united-states-david-banks/.

⁸⁷ UNITED STATES OF AMERICA, FIRST INTENDED NATIONALLY DETERMINED CONTRIBUTION SUBMISSION (March 31, 2015), https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/United%20States%20of%20America%20First/U.S.A.%20First%20NDC%20Submission.pdf.

⁸⁸ Vienna Convention, *supra* note 33, art. 26. The U.S. signed the treaty in 1970 but never ratified it. *Status of Treaties: Vienna Convention on the Law of Treaties*, U.N. TREATY COLLECTION, https://treaties.un.org/pages/ViewDetailsIII.aspx?src=TREATY&mtdsg_no=XXIII-1&chapter=23&Temp=mtdsg3&clang=_en (last visited Dec. 19, 2018). However, the doctrine of *pacta sunt servanda* is considered to be part of customary international law. Hans Webberg, *Pacta Sunt Servanda*, 53 AM. J. INT'L L. 775, 782–83 (1959).

⁸⁹ UNITED STATES, *supra* note 87.

⁹⁰ Paris Agreement, *supra* note 29, art. 4.2.

rulebook that is currently being developed, it will not be violating the technical terms of the treaty.⁹¹ In addition, the United States has continued to attend climate-related U.N. negotiations⁹² and has "not been the bomb-thrower many feared."⁹³

II. STATE AND LOCAL ACTION ON CLIMATE CHANGE

A. Pledges to Paris and Earlier Transnational Efforts

In the wake of President Trump's announcement, many U.S. states and cities have expressly pledged to help the United States maintain its original target under the Paris Agreement.⁹⁴ The governors of New York, California, and Washington founded the U.S. Climate Alliance as a "bipartisan coalition of states . . . committed to the goal of reducing greenhouse gas emissions consistent with the goals of the Paris Agreement."⁹⁵ The Climate Alliance currently consists of sixteen states plus the territory of Puerto Rico.⁹⁶ The bipartisan alliance represents more than forty percent of the U.S. population and an economy worth nine trillion dollars—which is larger than all other countries in the world, except for China and the United States.⁹⁷ Other states have also pledged to support the Paris Agreement, although they have not formally joined the Alliance.⁹⁸

In addition, the Mayor's National Climate Action Agenda was created to help cities sign up to the "spirit and goals of the Paris Climate Agreement" and the organization's website includes a "Paris Agreement

⁹¹ The Paris Agreement does not have any penalties for such violations. Rather, the U.S. would be recognized in the international community as in violation.

⁹² Press Release, U.S. State Dept., Communication Regarding Intent to Withdraw from Paris Agreement (Aug. 4, 2017), http://www.state.gov/r/pa/prs/ps/2017/08/273050.htm.

⁹³ Timmons Roberts, *Still Uncertain, But Still Distracting: The US Under Trump at the UN Climate Negotiations*, BROOKINGS (Nov. 20, 2017), https://www.brookings.edu/blog/future-development/2017/11/20/still-uncertain-but-still-distracting-the-us-under-trump-at-the-unclimate-negotiations/.

⁹⁴ See Arroyo, Trumpocene, supra note 11, at 305–06. BINIAZ, supra note 1, at 5.

⁹⁵ Alliance Principles, supra note 1.

⁹⁶ The members of the US Climate Alliance are California, Colorado, Connecticut, Delaware, Hawaii, Maryland, Massachusetts, Minnesota, New Jersey, New York, North Carolina, Oregon, Puerto Rico, Rhode Island, Vermont, Virginia, and Washington. *About Us*, U.S. CLIMATE ALLIANCE, https://www.usclimatealliance.org/about-us/ (last visited Dec. 22, 2018).

⁹⁷ Jerry Brown, Andrew Cuomo & Jay Inslee, *We're Keeping Our Paris Climate Change Commitments and Our Economies are Booming: Governors*, USA TODAY (June 1, 2018), https://www.usatoday.com/story/opinion/2018/06/01/climate-change-work-continues-trumps-paris-retreat-governors-column/661059002/.

⁹⁸ Michael Greshko, *Map Shows Growing U.S. "Climate Rebellion" Against Trump*, NAT'L GEOGRAPHIC (June 8, 2017), http://news.nationalgeographic.com/2017/06/states-cities-usa-climate-policy-environment/.

Adoption Toolkit."⁹⁹ As of June 2018, 407 mayors, representing seventy million Americans, have joined this alliance and committed to upholding the Paris goals.¹⁰⁰ For example, the day after President Trump announced his intention to withdraw the United States from the Paris Agreement, New York City Mayor Bill de Blasio signed a Climate Action Executive Order that directed city agencies to create a citywide plan to advance the Paris Agreement's goal of keeping anthropogenic climate change below one and a half degrees Celsius.¹⁰¹

We Are Still In is an example of a broader coalition of non-state actors. It includes "mayors, county executives, governors, tribal leaders, college and university leaders, businesses, faith groups, and investors" who have made "a promise to world leaders that Americans [will] not retreat from the global pact to reduce emissions and stem the causes of climate change."¹⁰²

Moreover, state and local leaders have become more engaged in "shuttle diplomacy."¹⁰³ For example, Governor Jerry Brown of California met with Chinese national and provincial leaders and signed collaboration agreements to work together on addressing climate change.¹⁰⁴ He also served as the Special Advisor for States and Regions at the 2017 Conference of the Parties ("COP").¹⁰⁵ The former mayor of New York City, Michael Bloomberg, has also been designated as the U.N. Special Envoy for Cities and Climate Change.¹⁰⁶

Yet, it would be an overstatement to suggest that these efforts were created solely as a result of President Trump's intended withdrawal from Paris. Rather, these recent initiatives build on early efforts.¹⁰⁷ Beginning

⁹⁹ City Officials: Paris Agreement Adoption Toolkit, supra note 1.

¹⁰⁰ Press Release, Climate Mayors, 407 US Climate Mayors Commit to Adopt, Honor and Uphold Paris Climate Agreement Goals (updated June 1, 2018), http://climatemayors.org/actions/paris-climate-agreement/.

¹⁰¹ City of New York, Office of the Mayor, Exec. Order No. 26, Climate Action Executive Order (June 2, 2017), http://www1.nyc.gov/assets/home/downloads/pdf/executive-orders/2017/eo_26.pdf. *See also* Rebecca Bratspies, *Protecting the Environment in an Era of Federal Retreat: The View from New York City*, 13 FIU L. REV. 5, 13 (2018).

¹⁰² WE ARE STILL IN, *supra* note 1.

¹⁰³ Arroyo, *Trumpocene*, *supra* note 11, at 306.

¹⁰⁴ China and California Sign Deal to Work on Climate Change Without Trump, THE GUARDIAN (June 6, 2017), https://www.theguardian.com/us-news/2017/jun/07/china-and-california-sign-deal-to-work-on-climate-change-without-trump.

¹⁰⁵ Press Release, Office of Governor Edmund G. Brown Jr., Governor Brown to Represent World's States and Regions Committed to Climate Action at UN Climate Conference, European Union and the Vatican (Oct. 31, 2017), https://www.gov.ca.gov/2017/10/31/news20053/.

¹⁰⁶ Press Release, United Nations, Secretary-General Appoints Michael R. Bloomberg of United States Special Envoy for Climate Action (Mar. 5, 2018), https://www.un.org/press/en/2018/ sga1791.doc.htm.

¹⁰⁷ See, e.g., Setzer, supra note 3, at 319–20, 326.

in the early 1990s, transnational municipal networks that encouraged cities to adopt targets and timetables for reducing greenhouse gas emissions began to emerge.¹⁰⁸ Around the time that the Kyoto Protocol entered into force in 2005, the U.S. Conference of Mayors adopted a Climate Protection Agreement and the C40 Cities Climate Leadership Group was created.¹⁰⁹ States also entered into transnational agreements on climate change. For example, in 2001, the New England Governors and Eastern Canadian Premiers adopted a Climate Change Action Plan.¹¹⁰ In addition, Virginia, Florida, Wisconsin, Michigan and California each entered into bilateral Climate Change Action Agreements with the United Kingdom.¹¹¹

B. State and Local Climate Policies

The U.S. states and cities that have pledged to uphold the U.S. targets under the Paris Agreement are able to do so because they have already enacted a variety of laws and policies to address climate change. These subnational efforts initially developed to fill the void left by the national government's failure to meaningfully address climate change in the 1990s and 2000s.¹¹² Indeed, when one considers the widening gap in climate action on the national and state and local levels, "[i]t is as though we live in two different countries."¹¹³

Twenty states plus the District of Columbia have adopted specific targets to reduce greenhouse gases.¹¹⁴ For instance, the Massachusetts Global Warming Solutions Act requires that the state reduce 1990 greenhouse gas emission levels between ten percent and twenty-five percent by 2020 and 80 percent by 2050.¹¹⁵

¹⁰⁸ Heike Schroeder & Harriet Bulkeley, *Global Cities and the Governance of Climate Change:* What Is the Role of Law in Cities? 36 FORDHAM URB. L.J. 313, 315–16 (2009).

¹⁰⁹ *Id.* at 317.

¹¹⁰ CONFERENCE OF NEW ENGLAND GOVERNORS AND EASTERN CANADIAN PREMIERS, CLIMATE CHANGE ACTION PLAN (Aug. 2001), https://www.novascotia.ca/nse/climate.change/docs/NEG-ECP.pdf.

¹¹¹ Press Release, Office of Governor Tim Kaine, Governor Kaine, United Kingdom Forge New Agreement to Address Climate Change Issues (Feb. 12, 2009) (on file with author).

¹¹² Engel, *Enigma, supra* note 13, at 169; Arroyo et al., *State Innovation, supra* note 11, at 386; Kirsten H. Engel & Scott R. Saleska, *Subglobal Regulation of the Global Commons: The Case of Climate Change*, 32 Ecology L.Q. 183, 184–86 (2005); Kirsten H. Engel & Barak Orbach, *Micro-Motives and State and Local Climate Change Initiatives*, 2 HARV. L. & POL'Y REV. 119, 122–27 (2008); Bruzbee, *Lessons, supra* note 12, at 61–62.

¹¹³ Hodas, *supra* note 18, at 53.

¹¹⁴ State Climate Policy Maps, C2ES, https://www.c2es.org/content/state-climate-policy/ (last visited Aug. 14, 2018).

¹¹⁵ MASS. GEN. LAWS ch. 21N, §§ 3, 4 (2018). See also Global Warming Solutions Act Background, MASS.GOV, https://www.mass.gov/service-details/global-warming-solutions-act-background (last visited Aug. 15, 2018).

Some states engage in cap-and-trade programs that effectively put a price on carbon production.¹¹⁶ Nine states in New England and the mid-Atlantic region participate in the Regional Greenhouse Gas Initiative ("RGGI"), which is a market-based program designed to reduce emissions from the power sector.¹¹⁷ Each RGGI member state has adopted laws or regulations creating standards and a carbon dioxide budget trading program that follows the RGGI model rule.¹¹⁸ On the West Coast, California has a cap-and-trade program covering most of its economy that was adopted pursuant to its Global Warming Solutions Act.¹¹⁹ The California cap-and-trade system creates greenhouse gas allowances and offset credits, which are given to qualified projects that remove carbon dioxide from the atmosphere.¹²⁰ In 2013, California and the province of Quebec,¹²¹ entered into an agreement to harmonize and integrate their respective cap-and-trade programs.¹²² The joint auctions and trades are administered by the Western Climate Initiative, Inc.123 The province of Ontario joined this linked cap-and-trade program in 2017,¹²⁴ but, due to a change in provincial leadership in 2018, subsequently withdrew.¹²⁵

¹¹⁸ State Statutes & Regulations, RGGI, https://www.rggi.org/program-overview-and-design/state-regulations (last visited Aug 17, 2018).

¹¹⁹ California Global Warming Solutions Act of 2006, CAL. HEALTH & SAFETY CODE §§ 38500, 38570 (West 2007); California Cap on Greenhouse Gas Emissions and Market-based Compliance Mechanisms, CAL. CODE REGS., tit. 17, §§ 95801–96022 (2018).

¹²¹ Quebec established its cap-and-trade program in 2011. Regulation Respecting a Cap-and-Trade System for Greenhouse Gas Emission Allowances, C.Q.L.R., c. Q-2, r. 46.1 (2018).

¹²² Agreement Between the California Air Resources Board and the Gouvernement Du Québec Concerning the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions, Cal.-Que., Sept. 27, 2013.

¹²³ *Id.* pmbl., art 11.

¹¹⁶ See Frequently Asked Questions, WESTERN CLIMATE INITIATIVE, http://www.westernclimateinitiative.org/the-wci-cap-and-trade-program/faq (last visited Aug. 2, 2018); Sloss, *supra* note 18, at 511.

¹¹⁷ The cooperating states are Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont. *Elements of RGGI*, RGGI, https://www.rggi.org/program-overview-and-design/elements (last visited Aug 16, 2018). *See also* Arroyo et al., *State Innovation, supra* note 11, at 387, 403–04; Engel, *Enigma, supra* note 13, at 174–75.

¹²⁰ See CAL. CODE REGS., tit. 17, § 95820 (2018).

¹²⁴ Agreement on the Harmonization and Integration of Cap-and-Trade Programs for Reducing Greenhouse Gas Emissions between, Cal.-Que.-Ont., Sept. 22, 2017, *available at* https://news.ontario.ca/opo/en/2017/09/agreement-on-the-harmonization-and-integration-of-cap-and-trade-programs-for-reducing-greenhouse-gas.html.

¹²⁵ Cindy Vaillancourt et al., *Love Them and Leave Them: Taking a Closer Look at the Implications of Ontario's Announcement to Cancel its Cap-and-Trade Program*, LEXOLOGY (June 22, 2018), https://www.lexology.com/library/detail.aspx?g=98845668-cc2f-4da2-a9b7-70149d13583f; Press Release, Office of the Premier-Designate, Ontario, Premier-Designate Doug Ford Announces an End to Ontario's Cap-and-Trade Carbon Tax (June 15, 2018), https://news.ontario.ca/opd/en/2018/06/premier-designate-doug-ford-announces-an-end-to-ontarios-cap-and-trade-carbon-tax.html.

To reduce greenhouse gas emissions from the electricity sector, twenty-nine states plus the District of Columbia have enacted renewable portfolio standards, which require electric utilities to deliver a certain amount of electricity from renewable or alternative energy sources, such as solar or wind; another ten states have voluntary programs.¹²⁶ For example, the Massachusetts Renewable Portfolio Energy Standard annually increases the minimum percentage of the electricity used in the state that must be supplied by clean energy.¹²⁷ Other states have adopted more ambitious standards, with Vermont requiring that seventy-five percent of its energy come from renewable sources by 2032¹²⁸ and Hawaii establishing a 100 percent renewable standard by 2045.¹²⁹

Twenty-six states have adopted energy efficiency standards, which involve reducing demand for electricity, such as by changing building codes and appliance efficiency standards.¹³⁰ For example, in 2008 Massachusetts enacted the Green Communities Act, which provides financial and technical support to municipalities that seek to become designated green communities by meeting certain criteria, including a pledge to cut municipal energy use by twenty percent over five years.¹³¹

¹²⁸ VT. STAT. ANN. tit. 30, § 8005 (2018).

¹²⁶ State Climate Policy Maps, supra note 114. See also Arroyo et al., State Innovation, supra note 11, at 397–401; Engel, Enigma, supra note 13, at 177–79; Michael B. Gerrard, Legal Pathways for a Massive Increase in Utility-Scale Renewable Generation Capacity, 47 ENVTL. L. REP. 10591, 10598–99 (2017).

¹²⁷ MASS. GEN. LAWS ch. 25A, § 11F (2018) (Renewable energy portfolio standard for retail electricity supplies); 225 Mass. Code Regs. 14 (2016) (Renewable Energy Portfolio Standard-Class I); 225 Mass. Code Regs. 15 (2014) (Renewable Energy Portfolio Standard-Class II). *See also* PAT KNIGHT ET AL., AN ANALYSIS OF THE MASSACHUSETTS RENEWABLE PORTFOLIO STANDARD ii (prepared for NECEC & Mass. Energy, May 2017), http://www.synapse-energy.com/sites/default/files/Analysis-MA-RPS-17-004.pdf (noting that the rate in 2016 was 11% with an annual rate of increase was 1%); Alyssa Rayman-Reed, *The Massachusetts Legislative Session: An Anticlimactic Finish*, CONSERVATION LAW FOUNDATION (Aug. 8, 2018), https://www.clf.org/blog/2018-massachusetts-legislative-session/ (noting that the Massachusetts legislature just adopted a rate increase of two percent per year).

¹²⁹ HAW. REV. STAT., § 269-92 (2018). See also Arroyo et al., State Innovation, supra note 11, at 412.

¹³⁰ AMERICAN COUNCIL FOR AN ENERGY-EFFICIENT ECONOMY, STATE ENERGY EFFICIENCY RESOURCE STANDARDS (EERS) 1 (Jan. 2017), https://aceee.org/sites/default/files/state-eers-0117.pdf.

¹³¹ MASS. GEN. LAWS. ch. 25, § 21 (2018); MASSSAVE, 2016–2018 MASSACHUSETTS JOINT STATEWIDE THREE-YEAR ELECTRIC AND GAS ENERGY EFFICIENCY PLAN (Oct. 1, 2015), http://ma-eeac.org/wordpress/wp-content/uploads/Exhibit-1-Gas-and-Electric-PAs-Plan-2016-2018-with-App-except-App-U.pdf; *Building Energy Codes*, MASS.GOV, https://www.mass.gov/service-details/building-energy-codes (last visited Aug 16, 2018); *Becoming a Designated Green Community*, MASS.GOV, https://www.mass.gov/guides/becominga-designated-green-community (last visited Aug 16, 2018).

States also incentivize consumers to purchase more energy efficient products through tax credits, rebates, and other inducements.¹³²

The transportation sector is a large emitter of greenhouse gases in the United States, constituting twenty-eight and a half percent of overall emissions in 2016.¹³³ While emissions from new motor vehicles are set by the national government under the Clean Air Act, California is authorized to set its own standards since obtaining a waiver of preemption from the EPA; other states can then adopt the California standard.¹³⁴ However, the Trump administration has proposed withdrawing the waiver granted to California in 2013, and the status of these efforts remain uncertain as of the writing of this article.¹³⁵

In addition, California and Oregon have adopted low-carbon fuel standards.¹³⁶ States can also place emissions limits on vehicles owned by the state¹³⁷ and enact clean car programs requiring manufacturers to purchase a certain number of zero-emission vehicles¹³⁸ or incentivizing the purchase of electric cars.¹³⁹

At the local level, municipalities and metropolitan planning organizations, often with state support, make land use and public

¹³⁸ Engel, *Enigma, supra* note 13, at 175.

¹³⁹ See, e.g., MOR-EV, https://mor-ev.org/ (last visited Aug 16, 2018).

¹³² See, e.g., Energy Efficiency for Your Home, MASS.GOV, https://www.mass.gov/energy-efficiency-for-your-home (last visited Aug 16, 2018). See also Arroyo et al., State Innovation, supra note 11, at 390–91, 412–13.

¹³³ Sources of Greenhouse Gas Emissions, EPA (Oct. 9, 2018), https://www.epa.gov/ ghgemissions/sources-greenhouse-gas-emissions (noting that the other major sources are: electricity production (28.4%); industry (22%); commercial and residential use (11%); and agriculture (9%)).

¹³⁴ "The Clean Air Act allows California to seek a waiver of the preemption which prohibits states from enacting emission standards for new motor vehicles. EPA must grant a waiver, however, before California's rules may be enforced . . . The Clean Air Act allows other states to adopt California's motor vehicle emission standards under section 177. Section 177 requires, among other things, that such standards be identical to the California standards for which a waiver has been granted. States are not required to seek EPA approval under the terms of section 177." *Vehicle Emissions California Waivers and Authorizations*, EPA (June 23, 2017), https://www.epa.gov/state-and-local-transportation/vehicle-emissions-california-waivers-and-authorizations. *See also* Arroyo et al., *State Innovation, supra* note 11, at 389–90; Engel, *Motivating, supra* note 13, at 1017 (noting that 9 states adopted a "copycat" of California's greenhouse gas regulations for cars and trucks).

¹³⁵ EPA & U.S. DEP'T. TRANSP., EPA-420-F-18-903, FACT SHEET: PROPOSED CALIFORNIA WAIVER WITHDRAWAL (Aug 2, 2018), https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100V26M.pdf.

¹³⁶ State Climate Policy Maps, supra note 114. See also Arroyo et al., State Innovation, supra note 11, at 391–92; Engel, Enigma, supra note 13, at 176–77.

¹³⁷ For example, Massachusetts has enforceable limits on carbon dioxide from mobile sources owned by the state Department of Transportation and the Massachusetts Bay Transportation Authority. *See* MASS. DEP'T ENVTL. PROTECTION, FACT SHEET: 310 CMR 60.05: GLOBAL WARMING SOLUTIONS ACT REQUIREMENTS FOR TRANSPORTATION (Aug. 2017), https://www.mass.gov/files/documents/2017/08/zr/3dfs-massdot.pdf.

transportation decisions that influence the carbon footprint.¹⁴⁰ Cities have also made greenhouse gas reduction pledges. For example, with its large population and high vulnerability as a coastal city, New York City has been at the forefront of climate change policy.¹⁴¹ In 2007, the City Council enacted the New York City Climate Protection Act, which required the city to take concrete steps to reduce its citywide greenhouse gas emissions thirty percent below 2005 levels by 2030.¹⁴² In 2014, New York City adopted an even more ambitious plan by pledging to achieve an 80 percent reduction in its greenhouse gas emissions by 2050.¹⁴³

Finally, over half of U.S. states along with some localities are trying to proactively develop climate change adaptation and resilience plans.¹⁴⁴ For example, through the Global Warming Solutions Act and an executive order, Massachusetts state agencies are now planning and preparing for the effects of climate change.¹⁴⁵

States and cities are in a position to declare progress on the U.S. targets under Paris because of these previously-adopted policies. In fact, the U.S. Climate Alliance released a report in 2017 with a joint accounting of their emissions reductions progress showing that the state members were "collectively on track to meet and possibly exceed their portion of the U.S. commitment under the Paris Agreement."¹⁴⁶ These states, which at that point represented thirty-six percent of the U.S. population and over seven trillion dollars in Gross Domestic Product ("GDP"), were "collectively on track to reach a twenty-four to twenty-nine percent reduction below 2005 levels emission rates by 2025."¹⁴⁷

However, as Arroyo has explained, it would be an overstatement to suggest that these subnational efforts alone can meet the U.S. goals under the Paris Agreement.¹⁴⁸ If higher polluting states take no action, it will be more difficult for the states pledging to uphold the Paris Agreement to actually meet the U.S. NDC, especially because they have already addressed the low-hanging fruit in their climate and energy policies. In addition, although states like California have shown that climate action

¹⁴⁰ Arroyo et al., *State Innovation, supra* note 11, at 393, 415–18; Michael B. Gerrard, *United States Climate Change Law, in* INTERNATIONAL CLIMATE CHANGE LAW 608, 625 (Cinnamon Carlarne et al. eds., 2016).

¹⁴¹ See, e.g., Bratspies, supra note 101, at 10.

¹⁴² N.Y.C Admin. Code §§ 24-24-802, 24-803 (2019); Bratspies, *supra* note 101, at 15.

¹⁴³ N.Y.C. Local Law No. 66 (2014); Bratspies, *supra* note 101, at 16.

¹⁴⁴ State Climate Policy Maps, supra note 114.

¹⁴⁵ Gov. Charles D. Baker, Exec. Order No. 569, Establishing an Integrated Climate Change Strategy for the Commonwealth, Sept. 16, 2016. *See also* Arroyo et al., *State Innovation, supra* note 11, at 415–30.

¹⁴⁸ Arroyo, *Trumpocene*, *supra* note 11, at 307.

can go hand-in-hand with economic productivity, green states could face a loss of industry and jobs to other states with fewer restrictions.¹⁴⁹ The ability of states to develop clean energy policies is also constitutionally constrained and potentially subject to federal preemption challenges.¹⁵⁰ Nevertheless, as I discuss in the next section, states and cities play a valuable role in the transnational legal process by acting as norm sustainers of the Paris Agreement on climate change.

III. "NORM SUSTAINERS" IN THE TRANSNATIONAL LEGAL PROCESS

Calls by U.S. states and cities to fulfill the U.S. pledges under the Paris Agreement are not so unusual when one considers that the historically clear divide between national and international law has become increasingly blurred.¹⁵¹ Under the traditional view of international law, also known as the Westphalian model after the Treaty of Westphalia, nation-states are the only actors with legal personality.¹⁵² As Anne-Marie Slaughter observes, "in international law, the foundational premise of state sovereignty traditionally assumed that members of the international system have no right to pierce the veil of statehood."¹⁵³ Yet it is a legal fiction to conceive of nation-states as simply unitary actors;¹⁵⁴ states are complex entities comprised of different actors and institutions that are not necessarily united in belief.¹⁵⁵

Koh's theory of transnational legal process posits that international law is no longer only law between sovereign nation-states.¹⁵⁶ Rather, it "has evolved into a hybrid body of international and domestic law developed by a large number of public and private transnational actors."¹⁵⁷ This hybrid law generates "interactions that lead to interpretations of international law that become internalized into, and thereby binding

¹⁴⁹ *Id.* at 308.

¹⁵⁰ See supra note 17.

¹⁵¹ See Jose E. Alvarez, The New Treaty Makers Symposium: Globalization & the Erosion of Sovereignty in Honor of Professor Lichtenstein, 25 B.C. INT'L. & COMP. L. REV. 213, 214 (2002).

¹⁵² Hari M. Osofsky, Multiscalar Governance and Climate Change: Reflections on the Role of States and Cities at Copenhagen Symposium: Multilateralism and Global Law: Evolving Conceptions of International Law and Governance, 25 MD. J. INT'L. L. 64, 76 (2010) [hereinafter Osofsky, Multiscalar Governance].

¹⁵³ SLAUGHTER, *supra* note 4, at 12.

¹⁵⁴ *Id.* at 12–13 (arguing that international law is better conceived as a system of horizontal networks between disaggregated government institutions across borders and vertical networks between national government officials and their supranational counterparts).

¹⁵⁵ BODANSKY, ART AND CRAFT, *supra* note 8, at 112–13.

¹⁵⁶ KOH, TRUMP ADMINISTRATION, *supra* note 7, at 67 (noting that it is no longer what Jeremy Bentham described as "inter-national law").

¹⁵⁷ Koh, *supra* note 19, at 415.

under, domestic (in this case, U.S.) law."¹⁵⁸ Transnational legal process theory helps to explain the increasingly broad range of ways that subnational units engage across nations and within international law. For example, some have entered into legal agreements with subnational units of other countries on various transborder issues,¹⁵⁹ and self-declared "human rights cities" have taken steps to implement human rights treaties at the local level, even absent national ratification.¹⁶⁰

Koh's theory of transnational legal process is not without critique.¹⁶¹ Nevertheless, it provides a compelling way to understand the role of subnational actors in the international climate regime. He identifies four key characteristics of the transnational legal process:

First, [transnational legal process] is nontraditional: it breaks down two traditional dichotomies that have historically dominated the study of international law: between domestic and international, public and private. Second, it is nonstatist: the actors in this process are not just, or even primarily, nation-states, but include nonstate actors as well. Third, transnational legal process is dynamic, not static. Transnational law transforms, mutates, and percolates up and down, from the public to the private, from the domestic to the international level and back down again. Fourth and finally, it is normative It focuses not simply upon how international interaction among transnational actors shapes law, but also on how law shapes and guides future interactions: in short, how law influences why nations obey.¹⁶²

The transnational legal process shapes and transforms interactions among this diverse set of actors. Koh's transnational legal theory

¹⁵⁸ Id.; Koh, Transnational Law Matters, supra note 7, at 746.

¹⁵⁹ NANDASIRI JASENTULIYANA, PERSPECTIVES ON INTERNATIONAL LAW 76 (1995).

¹⁶⁰ See generally BARBARA OOMEN ET AL., GLOBAL URBAN JUSTICE: THE RISE OF HUMAN RIGHTS CITIES (2016).

¹⁶¹ See, e.g., Andrew T. Guzman, A Compliance-Based Theory of International Law, 90 CAL. L. REV. 1823, 1835–36 (2002) ("Transnational legal process theory provides no explanation for why or how certain legal norms are internalized."); Anne-Marie Slaughter, Sovereignty and Power in a Networked World Order, 40 STAN. J. INT'L L. 283, 324 (2004) (noting that Koh "does not specify the underlying conditions that make [transnational legal process] work"); Jeffrey L. Dunoff & Joel P. Trachtman, Economic Analysis of International Law, 24 YALE J. INT'L L. 1, 29 (1999) ("Recent alternatives to consent-based theories of international law—such as ... Harold Koh's transnational legal process approach—pay little attention to the law of treaties"). In addition, OpinioJuris recently hosted an online symposium to discuss Harold Koh's new book, The Trump Administration and International Law, which feature a host of critiques of Koh's theory. See Symposium on Harold Hongju Koh's New Book, OPINIOJURIS (Jan. 10, 2018), http://opiniojuris.org/2018/10/01/symposium-on-harold-kohs-new-book/.

¹⁶² Koh, *Transnational Legal Process, supra* note 7, at 184. Koh's theory of transnational legal process also explains the influence of private transnational actors, such as corporations and NGOs, on international law. However, the focus of this article is on public subnational actors and not non-state actors generally, as I explain in the Introduction.

"predicts that nations will come into compliance with international norms if transnational legal processes are aggressively triggered by other transnational actors in a way that forces interaction in forums capable of generating norms, followed by norm-internalization."¹⁶³ In other words, compliance with law can be attributed more to "patterns of obedience" that derive from actors adopting norms voluntarily, rather than external coercion.¹⁶⁴ In this respect, Koh's theory helps to explain Louis Henkin's famous observation that "[i]t is probably the case that almost all nations observe almost all principles of international law and almost all of their obligations almost all of the time."¹⁶⁵

However, Koh's theory of norm internalization as compliance does not provide a satisfactory explanation for when a major superpower like the United States explicitly rejects a globally negotiated treaty and the norms embedded therein.¹⁶⁶ This occurred when President Trump publicly declared his intention to withdraw the United States from the Paris Agreement; it also occurred two decades ago when the United States rejected the Kyoto Protocol. In these contexts, looking behind the "veil of sovereignty" to subnational actors reveals that the norms have not been completely rejected at all levels. Rather, when subnational actors tie their own actions to an international treaty or re-cast their existing initiatives in a global perspective, they help to sustain those global norms even in the face of national rejection.

This analysis builds on Koh's work by explaining how state and local governments are uniquely positioned to contribute to the transnational legal process by serving as "norm sustainers." Non-state actors are often described as "norm entrepreneurs" when they introduce a concept and persuade some government to push it internationally.¹⁶⁷ National governments act as "norm sponsors" when they introduce treaty language containing those concepts.¹⁶⁸ In contrast, subnational states and cities cannot be "official" sponsors. They can, however, function as norm sustainers. In performing this role, subnational state and local governments are arguably participating in "what international-relations theorists call 'regime-building'—in the sense of fostering discussion and

¹⁶³ *Id.* at 206.

¹⁶⁴ Koh, *supra* note 19, at 415–16; Koh, *supra* note 23, at 9.

¹⁶⁵ LOUIS HENKIN, HOW NATIONS BEHAVE: LAW AND FOREIGN POLICY 47 (2d ed. 1979).

¹⁶⁶ See Guzman, supra note 161, at 1836 ("When international legal norms are at odds with the self-interest of the state, it is difficult for transnational legal process theory to explain why international norms would triumph.").

¹⁶⁷ BODANSKY, ART AND CRAFT, supra note 8, at 146, 193.

¹⁶⁸ Koh, Transnational Law Matters, supra note 7, at 746 n4.

building consensus about a set of norms, rules, principles, and decisionmaking procedures that converge and apply in a particular issue area."¹⁶⁹

As a thought experiment, consider how customary international law evolves. International law gains customary status when countries act in a particular way out of a sense of legal obligation and *opinio juris* as derived from official statements.¹⁷⁰ If subnational actors act in a particular way out of a sense of moral or legal obligation, transnational legal process theory suggests that they have the potential to influence the conduct of other actors. As norm sustainers, their actions can transfuse across borders and reinforce key tenets of international law through the scaling up and scaling down of ideas.¹⁷¹

The concept of norm sustaining is particularly relevant to international environmental law, which, as Bodansky notes, functions as a "system of norms."¹⁷² While a norm can be broad or specific, formal or informal, the key is that a norm seeks to influence conduct and shape behavior.¹⁷³ Some norms are regulatory because they seek to permit or restrict specific conduct; others are constitutive because they "provide a model of action that can be used to evaluate (justify and criticize) behavior."¹⁷⁴ An actor might accept a norm as a standard of conduct because he believes in the values and ideas symbolized by the norm or because the norm serves his own interest. Alternatively, an actor may not necessarily agree with the content of the norm, but may accept it because it was adopted through a legitimate manner. Social factors, such as the desire for esteem can also foster acceptance of a norm.¹⁷⁵

¹⁶⁹ Koh, *supra* note 23, at 16.

¹⁷⁰ See Military and Paramilitary Activities in and Against Nicaragua (Nicar. v. U.S.), Judgment, 1986 I.C.J. Rep. 14 (June 27). See also Marauhn, supra note 22, at 733; BODANSKY, ART AND CRAFT, supra note 8, at 194. Rebecca Bratspies, Reasoning Up, in THE HUMAN RIGHT TO A HEALTHY ENVIRONMENT 122, 124, 129 (John Knox & Ramin Pejan eds., 2018). Cf. JACK GOLDSMITH & ERIC A. POSNER, THE LIMITS OF INTERNATIONAL LAW 23–43 (2005) (suggesting that customary international law occurs not out of a sense of legal obligations but out of behavioral regularities that coincide with instrumentalist outcomes).

¹⁷¹ See Koh, Transnational Legal Process, supra note 7, at 184. See also Osofsky, Diagonal, supra note 14, at 634–38; Hari M. Osofsky, The Complexities of Multipolar Approaches to Climate Change: Lessons from Litigation and Local Action Divergent Responses to Climate Change in a Multipolar World, 107 AM. SOC'Y INT'L L. PROC. 73, 73 (2013) [hereinafter, Osofsky, Complexities]; Osofsky, Rethinking Geography, supra note 14, at 175; Osofsky, Multiscalar Governance, supra note 152, at 66–75; Hari M. Osofsky, Climate Change and Crises of International Law: Possibilities for Geographic Reenvisioning Climate Change - What Does Hope Look Like, 44 CASE W. RES. J. INT'L L. 423, 427–30 (2011).

¹⁷² BODANSKY, ART AND CRAFT, *supra* note 8, at 86.

¹⁷³ Toope, *supra* note 67, at 107.

¹⁷⁴ BODANSKY, ART AND CRAFT, *supra* note 8, at 88.

¹⁷⁵ Id. at 89–90.

International regimes can help with the creation and diffusion of norms and the building of normative consensus about possible outcomes.¹⁷⁶ Bodansky's discussion of norms within international environmental law resonates with Koh's understanding of how norms can generate compliance:

Ultimately, what makes a norm "hard" is not that violations can be sanctioned, at least in the way that we ordinarily mean, or that the norm can be applied by courts. Instead, what matters is the state of mind of the actors that comprise the relevant community—what we referred to earlier as the actor's internal point of view—a sense that the norm represents an obligation and that compliance is therefore required rather than optional.¹⁷⁷

Norms play an important role because, as Bodansky, Brunée, and Hey write, "in most international environmental regimes, the treaty text itself represents just the tip of the normative iceberg. The majority of norms develop through more flexible and dynamic processes, which result in formally non-legally binding decisions."178 Given the dynamic nature of environmental problems, most international treaties incorporate iterative processes, which enables international environmental law to develop more rapidly in response to new problems.¹⁷⁹ The Paris Agreement illustrates this point, with its reviews of the NDCs and the global stocktakes. Norms can function as informal codes of conduct, not unlike more formalized business codes of conduct, which are normative because they seek to influence behavior by providing a reason for action. They can be legal or non-legal instruments that provide a standard of evaluation.¹⁸⁰ In the words of Stephen Toope, norms in the field of international environmental law are in "the no-man's land between international law and politics."181

Climate change is a fruitful area to explore the concept of norm sustaining because it is a massive collective action problem that implicates all levels of governance from the supranational down to the

¹⁷⁶ *Id.* at 152; Pierre-Marie Dupuy, *Customary Law and General Principles, in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 449, 458–59 (Daniel Bodansky et al. eds., 2007).

¹⁷⁷ BODANSKY, ART AND CRAFT, *supra* note 8, at 101.

¹⁷⁸ Daniel Bodansky, Jutta Brunnée & Ellen Hey, *International Environmental Law: Mapping the Field*, *in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 1, 21 (Daniel Bodansky et al. eds., 2007).

¹⁷⁹ BODANSKY, ART AND CRAFT, *supra* note 8, at 136–37.

¹⁸⁰ Id. at 99.

¹⁸¹ Toope, *supra* note 67, at 107.

local.¹⁸² Climate change has been described as a "super wicked problem" that "defies resolution because of the enormous interdependencies, uncertainties, circularities, and conflicting stakeholders implicated by any effort to develop a solution."¹⁸³ Academic commentators and policymakers have debated which level of governance is best suited to address climate change.¹⁸⁴ But as the scholarship on multi-level and multi-regime models of environmental governance emphasizes, modern environmental governance is polycentric.¹⁸⁵ Scholars increasingly recognize that climate change action cannot be governed by a single institution like the UNFCCC, but rather must be addressed through a "regime complex" or "global climate-governance landscape."¹⁸⁶ As a result, I illustrate how the international climate change legal regime creates space for subnational norm sustainers to contribute to the success

¹⁸⁵ See, e.g., Michele M. Betsill, Cities and the Multilevel Governance of Global Climate Change, 12 GLOBAL GOVERNANCE 141 (2006); Michele M. Betsill & Barry G. Rabe, Climate Change and Multilevel Governance: The Transition and Transformations in Environmental Policy, in TOWARD SUSTAINABLE COMMUNITIES: TRANSITION AND TRANSFORMATIONS IN ENVIRONMENTAL POLICY 201 (Daniel A. Mazmanian & Michael E. Kraft eds., 2009); Susana Galera, Global and Local: Climate Change Policies as a Paradigm of Multilevel Governance, in CARBON FOOTPRINT & THE INDUSTRIAL LIFE CYCLE 289 (Roberto Álvarez Fernández et al. eds., 2017); Schroeder & Bulkeley, supra note 108; Sander Chan & Pieter Pauw, A Global Framework for Climate Action (GFCA): Orchestrating Non-State and Subnational Initiatives for More Effective Global Climate Governance (German Dev. Inst., Discussion Paper No. 34, 2014); Jacqueline Peel et al., Climate Change Law in an Era of Multi-Level Governance, 1 TRANSNAT'L ENVTL. L. 245 (2012); CHANGING CLIMATES IN NORTH AMERICAN POLITICS: INSTITUTIONS, POLICYMAKING, AND MULTILEVEL GOVERNANCE (Henrik Selin & Stacy D. VanDeveer eds., 2009); Elinor Ostrom, A Polycentric Approach for Coping with Climate Change (World Bank, Pol'y Res. Working Paper No. 5095, 2009); Elinor Ostrom, A Multi-Scale Approach to Coping with Climate Change and Other Collective Action Problems, SOLUTIONS, Mar. 2010, at 27–36.

¹⁸⁶ Matthew Paterson, *Networks and Coordination in Global Climate Governance, in* THE PARIS AGREEMENT AND BEYOND: INTERNATIONAL CLIMATE CHANGE POLICY POST-2020 83, 83 (Robert N. Stavins & Robert C. Stowe eds., 2016).

¹⁸² See Osofsky, Diagonal, supra note 14, at 587; Osofsky, Complexities, supra note 171, at 73–75; see also Chan et al., supra note 43, at 467 (noting that cities account for approximately 70% of global greenhouse gas emissions).

¹⁸³ Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1159–60 (2008).

¹⁸⁴ See, e.g., Jeffrey L. Dunoff, Levels of Environmental Governance, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 85, 88–89 (Daniel Bodansky et al. eds., 2007); Jonathan B. Wiener, Think Globally, Act Globally: The Limits of Local Climate Policies, 155 U. PA. L. REV. 1961 (2007); Engel, Enigma, supra note 13, at 170, 179–86; Buzbee, Climate Federalism, supra note 12, at 146; William W. Buzbee, State Greenhouse Gas Regulation, Federal Climate Change Legislation, and the Preemption Sword, 1 SAN DIEGO J. CLIMATE & ENERGY L. 23 (2009); David E. Adelman & Kirsten H. Engel, Reorienting State Climate Change Policies to Induce Technological Change Symposium—Federalism and Climate Change: The Role of the States in a Future Federal Regime, 50 ARIZ. L. REV. 835, 842–43 (2008) [hereinafter Adelman & Engel, Reorienting]; David E. Adelman & Kirsten H. Engel, Adaptive Federalism: The Case against Reallocating Environmental Regulatory Authority, 92 MINN. L. REV. 1796 (2007) [hereinafter Adelman & Engel, Adaptive Federalism].

of the Paris Agreement, even if the United States withdraws from the treaty.

The concept of norm sustaining could include all non-state actors. The actions of large corporations (e.g. Microsoft), wealthy individuals (e.g. Michael Bloomberg), and non-profit organizations (e.g. Greenpeace) also help to keep norms alive. They are transnational actors capable of triggering norm development and the internalization of norms by other actors. In the current situation where the U.S. national government has repudiated the Paris Agreement, multi-actor and multi-sector coalitions such as "We Are All In" provide momentum and support to climate efforts, and thereby help to sustain these global norms. Given the multiscalar and complex nature of climate change, mitigation efforts by all actors are critical. In this respect, climate change differs from other areas of international law, such as arms control, where nation-states are the key actors. Yet, as discussed in the introduction, there is something particular about subnational governments that may make their role as norm sustainers unique and distinct from other non-state actors. Subnational states and cities are political entities that represent the interests of a group of geographically situated individuals. While a future article could extend the norm sustainer concept to other non-state actors, this article focuses on subnational states and cities.

I suggest that when subnational actors act as norm sustainers, they contribute to the transnational legal process in three distinct ways. First, by disclosing their own progress on the U.S. targets under the Paris Agreement, subnational norm sustainers can encourage other countries to achieve their own NDCs, or, at the very least, help to prevent a ratcheting down of ambition in the wake of a U.S. withdrawal from the treaty. By incentivizing other countries to maintain ambitious NDCs, these actions can help promote compliance with the treaty.

Second, states and cities can strengthen key norms of international environmental law that are embedded within the Paris Agreement, such as the principle of common but differentiated responsibility and respective capabilities. Consistent with Koh's theory of transnational legal process, such subnational norm-internalization could lead to greater norm-internalization, and thus compliance, by other nation-states.

Finally, as norm sustainers, states and cities can play a role that the literature on cooperative federalism in the United States has long recognized. Subnational actors can demonstrate that climate actions are achievable and their actions pave the way for national policy. Thus, even if President Trump fulfills his campaign promise of withdrawing the United States from the Paris Agreement on climate change, the sustaining

actions of states and cities on climate change could enable a future president to rejoin the treaty.

Each of these three norm sustainer functions is discussed in the following sections.

A. Enhancing Compliance through Disclosure

States and cities act as norm sustainers when they publicly disclose their own progress towards the U.S. targets under the Paris Agreement on climate change. To the extent that subnational actors incorporate the U.S. NDCs into their own policies or re-cast their existing laws in terms of this international standard, they are engaging in a process that Koh would describe as "downloading."187 When transnational legal theory works properly and nation-states comply with international law through a process of norm internalization, then the download of international law into subnational units would be expected; if subnational actors did not download directly, then it would be up to the nation-state to take steps to ensure compliance, such as by enacting national legislation.¹⁸⁸ As explained earlier, however, most state and local efforts on climate change in the United States did not result because of international law.¹⁸⁹ Instead, in response to Trump's intended withdrawal from the Paris Agreement, subnational states and cities are now publicly re-casting their existing policies in light of the U.S. NDC and referencing the Paris Agreement's goal of keeping the Earth's temperature to well below 2°C above preindustrial levels. In this respect, they are acting as norm sustainers of the Paris Agreement and their actions could be conceptualized as engaging in a "retroactive downloading" of international norms.¹⁹⁰

The concept of norm sustaining recognizes that the transnational legal process is a two-way dialogue and builds on the literature on multi-level and multi-scalar nature of the climate lawmaking process.¹⁹¹ For example, Osofsky has described how cities localize international standards, influence other municipalities across borders, and informally act in international venues in a continuous process of scaling up and scaling

¹⁸⁷ Koh, Transnational Law Matters, supra note 7, at 745–46.

¹⁸⁸ See LORI FISLER DAMROSCH & SEAN D. MURPHY, INTERNATIONAL LAW: CASES AND MATERIALS 621–22 (6th ed. 2014).

¹⁸⁹ See supra Part II.B.; see also Biniaz, supra note 75.

¹⁹⁰ But, as Susan Biniaz observes, "[w]ere the current Administration to browbeat the rest of the world into an agreement that promoted coal and a future Democratic Administration walked away from it, many would presumably welcome the lack of non-State actor absorption." Biniaz, *supra* note 75.

¹⁹¹ Osofsky, *Diagonal, supra* note 14, at 634–38.

down.¹⁹² In addition, Osofsky and Janet Levit have described "bottom-up lawmaking" as a participatory organic process in which "microdecisions" by a diverse array of public and private actors at the "bottom" coalesce over time to shape norms, and, at times, harden into law.¹⁹³ Osofsky and Levit suggest that "[w]hile isolated 'practitioner' [i.e. local] decisions are not initially international 'law,' according to a rather formal, narrow taxonomy, these decisions ultimately become law, either by embedding directly in formal legal instruments or by collectively placing pressure on and shaping legal outcomes."¹⁹⁴ I suggest in this article that by disclosing their own progress towards the U.S. NDCs, states and cities can help to create the pressure needed to shape legal outcomes.

President Trump's goal of withdrawing the United States from the Paris Agreement threatens to derail progress under the Agreement by encouraging other nations to reduce the ambition of their NDCs. As discussed *supra* in Section I.A, the theory behind the Paris Agreement is that by disclosing progress on their NDCs and engaging in the global stocktake, countries will be motivated to make their pledges more ambitious.¹⁹⁵ The "ratcheting up" feature of the Paris Agreement is an expectation of the parties, but not a binding legal obligation.¹⁹⁶ An open question therefore remains: if the United States "ratchets down" the ambition of its NDC or withdraws from the treaty, will other countries be less motivated to comply with their own voluntary pledges?

That scenario might be avoided altogether if subnational actors publicly benchmark their actions against the original U.S. NDCs, signaling to other countries that a significant portion of the United States is still committed to the goals of the Paris Agreement. If this occurs, then the bottom-up process of mutual motivation could validate the theory behind the Paris Agreement's hybrid architecture and result in real progress on climate change. As Kysar and Meyler observed back in 2008,

To be clear, no one in California is under the illusion that the state can address global climate change adequately on its own; instead, the very premise of California's climate change policy is that the

¹⁹² See, e.g., *id.* at 637–38; Osofsky, *Multiscalar Governance*, *supra* note 152, at 72–75; Osofsky, *Complexities*, *supra* note 171, at 74–75. Osofsky uses the term "modified Westphalian" to describe her view of international law. Osofsky, *Pluralist*, *supra* note 14, at 186.

¹⁹³ Hari M. Osofsky & Janet Koven Levit, *The Scale of Networks: Local Climate Change Coalitions Symposium: Global Networks: The Environment and Trade*, 8 CHI. J. INT'L L. 409, 429 (2007).

¹⁹⁴ Id. at 429–30.

¹⁹⁵ See Rajamani, Ambition, supra note 9, at 501; Burleson, supra note 44, at 3.

¹⁹⁶ See Paris Agreement, *supra* note 29, art. 3; Bodansky, *New Hope?*, *supra* note 8, at 306 (explaining that the use of the word "will" instead of "shall" in Article 3 meant that this was intended as an expectation, not a legally binding obligation).

state will be able to inspire, cajole, and cooperate with other political jurisdictions in order to achieve a coordinated solution.¹⁹⁷

Disclosure by subnational actors increases the information available about actions being taken in the United States. Although U.S. states and cities are not substitutes for the national government, the public disclosure of their climate actions pierces the "veil of sovereignty" by creating a more complex understanding of the dynamics in the country. Such disclosure can promote norm-internalization by other nation-states by encouraging them to comply with their own pledges, or at the very least, by discouraging those countries from "ratcheting down" their goals. But, even if subnational actors are not successful in promoting norminternalization and compliance by other countries, their disclosure efforts will, at the very least, enhance the availability of information generally. Civil society organizations can then use this information to verify and monitor what is being officially reported via the NDC and the global stocktake processes.¹⁹⁸ These enhanced advocacy and monitoring efforts can further foster compliance and greater ambition to address climate change.199

Consistent with the Paris Agreement's recognition of the importance of non-state action on climate change,²⁰⁰ the parties created several forums for non-parties to disclose their climate efforts. Launched at the 2014 Conference of the Parties in Lima, the Non-State Actor Zone for Climate Action ("NAZCA") is a platform for recording climate change commitments by companies, cities, subnational regions, investors and

¹⁹⁷ Kysar & Meyler, *supra* note 18, at 1623.

¹⁹⁸ Jonathan W. Kuyper et al., Non-State Actors in Hybrid Global Climate Governance: Justice, Legitimacy, and Effectiveness in a Post-Paris Era, 9 WIRES CLIMATE CHANGE e497, at 6 (2018).

¹⁹⁹ For example, the emissions targets and reporting approach in the international climate regime is similar to the information-based approach at the heart of the U.S. Toxics Release Inventory. Engel, *Enigma, supra* note 13, at 183. Civil society groups have also used the data disclosed by facilities through the Toxics Release Inventory to create more user-friendly information, which has strengthened advocacy efforts by communities seeking to put pressure on polluters. Murthy, *supra* note 64, at 397.

²⁰⁰ See Paris Agreement, supra note 29, arts. 7(2) & 11(2). Moreover, the decision by the Conference of the Parties adopting the Paris Agreement makes clear that the parties "welcome[d] the efforts of all non-Party stakeholders to address and respond to climate change, including those of civil society, the private sector, financial institutions, cities and other subnational authorities." 2015 U.N. Climate Change Report, supra note 49, pmbl., ¶¶ 116–23, 133–36; see also Harro van Asselt & Stefan Bößner, *The Shape of Things to Come: Global Climate Governance After Paris*, 10 CARBON & CLIMATE L. REV. 46, 56–57 (2016); Biniaz, supra note 75 ("Perhaps this is the ultimate reflection of non-State actor absorption of international law, but it might also be viewed as the direct engagement of non-State actors in the international process, rather than as the indirect engagement of those actors in law/norms directed at States.").

civil society organizations.²⁰¹ NAZCA seeks "to play a key role in providing visibility and tracking the diversity of climate action and mobilizing broader engagement to help countries achieve and exceed their national commitments."²⁰²

Building on an exhortation in the Paris Agreement for parties to "strive to formulate and communicate long-term greenhouse gas emission development strategies" by mid-century,²⁰³ another initiative known as the 2050 Pathways Platform was launched at the Conference of the Parties in Marrakesh in 2016.²⁰⁴ It provides an additional way for parties and non-state actors to publish their low-emissions strategies. In fact, U.S. states and cities have already begun to participate.²⁰⁵ In addition, through the Momentum for Change Initiative, UNFCCC secretariat also highlights non-state actions on climate change mitigation and adaptation.²⁰⁶ These disclosure opportunities create space for public norm sustaining by non-state actors, including states and cities.

The global stocktake, which is central to the Paris Agreement's goal of ratcheting up ambition, presents another potential opportunity for subnational actors to disclose their progress.²⁰⁷ Each member state of the U.S. Climate Alliance has already committed to "[t]rack and report progress to the global community in appropriate settings, including when the world convenes to take stock of the Paris Agreement."²⁰⁸ Although the global stocktake is generally aimed at heightening the ambition of the parties' NDCs, it is possible that the rules could provide a means for non-party efforts to be recorded.²⁰⁹

²⁰¹ 2015 U.N. Climate Change Report, *supra* note 49, ¶¶ 117, 133, 134.

²⁰² Press Release, UNFCCC, Revamped UN Climate Action Portal to Capture and Drive Climate Action (Sept. 14, 2018), https://unfccc.int/news/revamped-un-climate-action-portal-to-capture-and-drive-climate-action. The NAZCA portal draws data from several existing registries (such as the Carbon Disclosure Project and the carbon*n* Climate Registry). Chan et al., *supra* note 43, at 469; *see also* BINIAZ, *supra* note 1, at 2–3.

²⁰³ Paris Agreement, *supra* note 29, art. 4.19. The related COP decision invites parties to communicate this "mid-century" strategy by 2020. 2015 U.N. Climate Change Report, *supra* note 49, ¶ 35.

²⁰⁴ Press Release, UNFCCC, High-Level Climate Champions Launch 2050 Pathways Platform (Nov. 17, 2016), https://unfccc.int/news/high-level-climate-champions-launch-2050-pathways-platform.

²⁰⁵ BINIAZ, *supra* note 1, at 4.

²⁰⁶ Chan et al., *supra* note 43, at 468.

²⁰⁷ Paris Agreement, *supra* note 29, art. 14.

²⁰⁸ Alliance Principles, supra note 1.

²⁰⁹ The text of Article 14 of the Paris Agreement does not explicitly prevent such an interpretation. *See* Paris Agreement, *supra* note 29, art. 14; *see also* Manjana Milkoreit & Kate Happala, Designing the Global Stocktake: A Global Governance Innovation 6–7 (C2ES, Working Paper, 2017), https://www.c2es.org/site/assets/uploads/2017/11/designing-the-global-stocktake-a-global-governance-innovation.pdf.

In envisioning a role for non-state actors, the Paris Agreement is not unique. ²¹⁰ Although international environmental law remains largely state-centric,²¹¹ the field generally features an abundance of non-state participation by scientists and stakeholders, including regulated industries, citizen groups and subnational actors.²¹² The UNFCCC specifically allows non-state actors to be recognized as "observers" at the Conferences of the Parties.²¹³ Although described as "observers," many are active participants, seeking to influence negotiations directly through lobbying ("insider advocacy").²¹⁴ For example, at the climate change Conferences of the Parties, non-state representatives meet formally and informally with national delegations, hold parallel sessions, and use a variety of strategies to gain the confidence of government delegates.²¹⁵ Non-state actors can also play a role in monitoring compliance with international agreements and helping with implementation.²¹⁶

By encouraging non-state participation in the international climate regime, the parties to the Paris Agreement sought to heighten the ambition of climate change commitments.²¹⁷ Non-state actors can innovate, experiment, and share best practices that diffuse transnationally, catalyze supportive political coalitions, and help to create normative expectations around climate action.²¹⁸ However, there are also potential downsides to increased reliance on non-state and subnational actors. They can increase the fragmentation of efforts, crowd out more innovative approaches, pass off business-as-usual activities as climate-friendly behavior ("greenwashing"), pick low-hanging fruit instead of addressing the most urgent issues, exacerbate asymmetrical power imbalances between organizations based in the Global North and South,

²¹⁰ See Karin Bäckstrand et al., Non-State Actors in Global Climate Governance: From Copenhagen to Paris and Beyond, 26 ENVTL. POL. 561 (2017); Kuyper et al., supra note 198, at 1–3.

²¹¹ BODANSKY, ART AND CRAFT, *supra* note 8, at 109; Marauhn, *supra* note 22, at 736.

²¹² BODANSKY, ART AND CRAFT, *supra* note 8, at 124; Bodansky, Brunnée & Hey, *supra* note 178, at 16. Indeed, "the proliferation and influence of nonstate actors has 'gone viral' in recent years." Koh, *supra* note 23, at 16.

²¹³ UNFCCC, supra note 61, art. 7.6. See Chan & Pauw, supra note 185, at 7.

²¹⁴ C. Betzold, Business Insiders and Environmental Outsiders? Advocacy Strategies in International Climate Change Negotiations, 2 INT. GROUPS & ADVOC. 302 (2013).

²¹⁵ Elisabeth Corell & Michele M. Betsill, A Comparative Look at NGO Influence in International Environmental Negotiations: Desertification and Climate Change, 1 GLOB. ENVTL. POL. 86, 93 (2001). See generally Peter J. Spiro, Non-Governmental Organizations and Civil Society, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 770 (Daniel Bodansky et al. eds., 2007); Steven R. Ratner, Business, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 807 (Daniel Bodansky et al. eds., 2007).

 $^{^{216}\,}$ David Hunter et al., International Environmental Law and Policy 260–61 (5th ed. 2015).

²¹⁷ Chan & Pauw, *supra* note 185, at 7.

²¹⁸ Chan et al., *supra* note 43, at 467.

and, serve as an excuse for nations to avoid taking ambitious action.²¹⁹ Nevertheless, in the wake of a potential U.S. withdrawal from the Paris Agreement, heightened attention is now on the role that subnational actors in the United States can play.

One key lesson from earlier efforts is that merely recording pledges without any benchmarking, monitoring or verification may not be effective.²²⁰ Thus, it is important for subnational actors, such as those states in the U.S. Climate Alliance, to specifically benchmark their efforts against the U.S. NDC of reducing economy-wide greenhouse gas emissions by twenty-six percent to twenty-eight percent below the 2005 nationwide level by 2025 and to make best efforts to reduce emissions by twenty-eight percent.²²¹ For example, as noted earlier, the Massachusetts Global Warming Solutions Act adopted in 2008 requires that the state reduce 1990 greenhouse gas emission levels between ten percent and twenty-five percent by 2020 and 80 percent by 2050.²²² As this example illustrates, the emission reduction targets and the baseline years for a state's greenhouse gas targets may be different than what the United States has specified in its first NDC.

The key is for states to translate their own progress into the formula used in the NDC, as the U.S. Climate Alliance has begun to do.²²³ One initiative known as America's Pledge is already seeking to standardize the disclosure of information from non-state actors. Launched in 2017 by former New York City Mayor Michael Bloomberg and California Governor Jerry Brown, it seeks to quantify the climate actions of non-state actors and report on progress made toward the U.S. NDC.²²⁴ Another pre-existing initiative is the Climate Registry, a non-profit organization governed by U.S. states and Canadian provinces and territories to assist

²¹⁹ Chan & Pauw, *supra* note 185, at 1. For example, 200 nonstate and public-private partnerships resulted from the 2002 World Summit on Sustainable Development in Johannesburg, but due to poor screening, monitoring and supervising, these partnerships overall did not have a measurable impact. Chan et al., *supra* note 43, at 468.

²²⁰ Chan et al., *supra* note 43, at 469 (noting that across the globe, few non-state and subnational pledges have set quantitative emission reduction targets or financial goals).

²²¹ Information disclosure tends to be most effective when benchmarked against a simple metric that promotes comparison. *See* Murthy, *supra* note 64, at 397–402.

²²² MASS. GEN. LAWS ch. 21B, §§ 3, 4 (2018); see also Global Warming Solutions Act Background, supra note 115.

²²³ A recent report by the U.S. Climate Alliance indicates that it was prepared in a manner that was consistent with the UNFCCC guidance on international emissions inventory. *See* Press Release, U.S. Climate Alliance, Governors Report 14 States and Puerto Rico are 'On Track' to Hit Paris Climate Targets, New Report (Sept. 20, 2017), https://static1.squarespace.com/static/5936b0bde4fcb5371d7ebe4c/t/59c2c1b9914e6b97756f833a/1505935801920/USCA+Press+Relea se-+9.20.pdf.

²²⁴ About America's Pledge, AMERICA'S PLEDGE ON CLIMATE, https://www.americaspledgeonclimate.com/about/ (last visited Aug 16, 2018).

with the measuring, reporting and verifying of greenhouse gas reduction programs.²²⁵ Given that the rulebook for transparency is only currently being developed by the parties, there may also be an opportunity for subnational actors to influence the development of the rules.

In short, the disclosure of emissions reductions by subnational actors in the United States could be effective in shaping global behavior and in softening the negative impact of a potential U.S. withdrawal from the Paris Agreement.

B. Strengthening Principles of International Environmental Law

Building on the literature on transnational legal process theory and the multi-level nature of the international climate lawmaking process, I argue that subnational states and cities can strengthen key norms of international environmental law when they re-cast their own climate policies in light of the Paris Agreement on climate change.

Within the field of international environmental law generally, and international climate law in particular, certain principles of ill-defined legal status play a central role.²²⁶ These principles do not have the status of customary international law, such as the supra-norms of *jus cogens* and *erga omnes*, or of ordinary norms, such as state responsibility.²²⁷ Rather, because complex and dynamic environmental problems require access to a range of normative strategies, both formal and informal, these principles often first arise in "soft law" documents, thereby enabling countries with heterogeneous interests to enter into agreements that might not otherwise be politically feasible.²²⁸ But, such principles, which have legal meaning but are not per se binding, can also be embedded within "hard law" treaties.²²⁹ Over time, they can even develop into customary international law.²³⁰

Certain well-known principles of international environmental law have been described as "twilight norms" because they do "not clearly set out

²²⁵ About Us, THE CLIMATE REGISTRY, https://www.theclimateregistry.org/who-we-are/about-us/ (last visited Aug 17, 2018).

²²⁶ HUNTER ET AL., *supra* note 216, at 433–39; BODANSKY, ART AND CRAFT, *supra* note 8, at 96.

²²⁷ Ulrich Beyerlin, *Policies, Principles, and Rules, in* THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 425, 426 (Daniel Bodansky et al. eds., 2007).

²²⁸ Toope, *supra* note 67, at 116.

²²⁹ BODANSKY, ART AND CRAFT, *supra* note 8, at 98. For example, the UNFCCC's Article 3 outlines a series of principles intended to guide "the Parties"—a term deliberately chosen instead of "States" to clarify that there was no intention to codify customary international law. Biniaz, *Comma, supra* note 10, at 41.

²³⁰ For example, in his concurring opinion in the case concerning the Gabčíkovo–Nagymaros Project, Justice Weeramantry argued that the concept of sustainable development had evolved into customary international law. *See* HUNTER ET AL., *supra* note 216, at 335–45.

the legal consequences that follow automatically from the presence of all stipulated facts."²³¹ These include "precaution," "common concern of mankind," "common but differentiated responsibilities and respective capabilities," and "sustainable development."²³² The way in which these abstract principles are applied in practice gives them meaning, but also reveals potentially different interpretations.

I focus my analysis on the principle of common but differentiated responsibilities and respective capabilities ("CBDR/RC") because I believe that the nebulous meaning of this norm has created the greatest roadblock in the climate change system. However, this also creates an opportunity for subnational actors to influence its interpretation through the transnational legal process.²³³

CBDR/RC first appeared in Principle 7 of the 1992 Rio Declaration on Environment and Development, ²³⁴ which was not a treaty but a seminal soft law instrument that laid the groundwork for subsequent international action on the environment. The principle embodies a historical view that recognizes that developed countries have contributed more to environmental degradation than developing countries. It also embraces a contemporary perspective by acknowledging that developed countries are better situated to address the problem.

The UNFCCC, which was also adopted at the 1992 Rio Summit, featured several key references to CBDR/RC.²³⁵ In the Preamble, which is not legally binding but gives context for interpretation,²³⁶ the parties agreed that climate change was a global problem that necessitated an approach in accordance with the principle of "common but differentiated responsibilities and respective capabilities." Article 3 of the UNFCCC articulated a series of principles²³⁷ designed to guide the implementation of the Convention, which included protecting "the climate system for the benefit of present and future generations of humankind, on the basis of

²³¹ Beyerlin, *supra* note 227, at 428.

²³² *Id.* at 426.

²³³ Biniaz, *Comma, supra* note 10, at 40.

²³⁴ U.N. Conference on Environment and Development, *Rio Declaration on Environment and Development*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), annex I (Aug. 12, 1992).

²³⁵ The UNFCCC also referenced other principles of international environmental law, including common concern of humankind, precautionary principle and intergenerational equity. UNFCCC, *supra* note 61, pmbl., arts. 3, 4.

²³⁶ Toope, *supra* note 67, at 117.

²³⁷ UNFCCC included a footnote at the beginning of the Convention to explain that "[t]itles of articles are included solely to assist readers." This footnote allowed Article 3 to be entitled "Principles," but addressed the U.S.'s concern that "precautionary principle" is not a "principle" but an "approach." In contrast, the Paris Agreement does not have titles for the articles as a result of a controversy over how to characterize the issue of "loss and damage." Biniaz, *Comma, supra* note 10, at 56–57.

equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof." ²³⁸

The commitments of the parties, set forth in Article 4 of the UNFCCC, were undertaken with respect to their "common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances." The tweaking of the principle's language allowed all countries to believe that the commitments could be appropriately tailored to meet their individual needs. Except with respect to finance,²³⁹ countries did not have significantly different obligations under the UNFCCC.²⁴⁰ All countries were required to track and publish information on carbon emissions and sinks. Although only Annex I countries, i.e. industrialized countries plus those with economies in transition, agreed to adopt national policies and measures on mitigation,²⁴¹ this provision was aspirational.²⁴²

The Kyoto Protocol, adopted in 1997, "radically changed the differentiation narrative."²⁴³ Developed countries and other countries included in Annex I²⁴⁴ agreed to adopt legally binding targets and timetables for reducing greenhouse gas emissions, with an average target reduction of approximately five percent relative to 1990 levels over a

²³⁸ See id. at 40 (discussing how the constructive ambiguity of the phrasing allowed parties to interpret the reason that developed countries should take the lead as resulting either from their "responsibilities" or their "capabilities" or both).

²³⁹ UNFCCC, *supra* note 61, art. 4. In Article 4.3, developed country Parties and other developed Parties included in Annex II, which consisted of OCED members listed in Annex I but excluded those countries with economies in transition, agreed to assist developing nations with financing, technology and adaptation costs.

²⁴⁰ BINIAZ, *supra* note 35, at 1.

²⁴¹ UNFCCC, *supra* note 61, art. 4 (requiring Annex I parties to communicate their progress "with the aim of returning individually or jointly to their 1990 levels these anthropogenic emissions of carbon dioxide and other greenhouse gases"). This provision of the UNFCCC, Article 4.2, referred to developed country Parties and other Parties included in Annex I of the Convention. This included "industrialized countries that were members of the OECD (Organisation for Economic Co-operation and Development) in 1992, plus countries with economies in transition (the EIT Parties), including the Russian Federation, the Baltic States, and several Central and Eastern European States." *Parties & Observers*, UNFCCC, <u>https://unfccc.int/parties-observers</u> (last visited Dec. 25, 2018).

²⁴² See HUNTER ET AL., supra note 216, at 672 (noting that article used the word "aim" to make clear that this was an aspirational goal, which was driven in part by U.S. opposition to targets and timetables).

²⁴³ BINIAZ, *supra* note 35, at 1.

²⁴⁴ The UNFCCC had used the phrase "the developed country Parties and other Parties included in Annex I" to address the fact that the European Economic Community was on the list and to alleviate Russia's concerns about being classified as a developed country. *See* Biniaz, *Comma*, *supra* note 10, at 39–40.

five-year period.²⁴⁵ The actual targets themselves were established through international negotiations and not by each individual country, leading the Kyoto Protocol to be described as a "top-down" treaty.²⁴⁶ In contrast, non-Annex I countries (usually described as developing countries) did not have binding emissions limitations.

The way in which the Kyoto Protocol gave meaning to CBDR/RC, i.e. its assignment of binding emissions targets for developed countries but not for developing countries, created a roadblock for U.S. participation. Although the United States had played an active role in negotiating the terms of the Kyoto Protocol, President Bill Clinton did not submit it for ratification because it was clear that the U.S. Senate would not ratify it.²⁴⁷ The Senate was concerned that the country would have legally binding emissions reduction obligations, while our major economic competitors, including China, Mexico and India, would not have similar obligations. In the midst of the Kyoto negotiations, the Senate passed the Byrd-Hagel Resolution, which:

Declare[d] that the United States should not be a signatory to any protocol to, or other agreement regarding, the United Nations Framework Convention on Climate Change of 1992, at negotiations in Kyoto in December 1997 or thereafter which would: (1) mandate new commitments to limit or reduce greenhouse gas emissions for the Annex 1 Parties, unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period; or (2) result in serious harm to the U.S. economy.²⁴⁸

With the Byrd-Hagel Resolution, the U.S. Senate clearly rejected the way in which the Kyoto Protocol applied the CBDR/RC principle.²⁴⁹ Notably, in contrast to the skepticism around climate change that exists today, the Senate resolution did not question the existence of climate change. Rather, in passing Byrd-Hagel, the U.S. Senate was essentially announcing that because climate change is a common problem, the United States would not accept a role that was highly differentiated from

²⁴⁵ Kyoto Protocol to the United Nations Framework Convention on Climate Change, Dec. 11, 1997, 2303 U.N.T.S. 148 [hereinafter Kyoto Protocol]; *see* HUNTER ET AL., *supra* note 216, at 680.

²⁴⁶ Bodansky, *New Hope?*, *supra* note 8, at 300–01; *see also* ASIAN DEVELOPMENT BANK, *supra* note 49, at 6.

²⁴⁷ SUSAN FLETCHER, CONG. RESEARCH SERV., RL 30692, GLOBAL CLIMATE CHANGE: THE KYOTO PROTOCOL (2005).

²⁴⁸ Byrd-Hagel Resolution, S. Res. 98, 105th Cong. (1997); *see also* Gerrard, *supra* note 140, at 609.

²⁴⁹ See generally BINIAZ, BYRD-HAGEL, supra note 10, at 1.

other high-emitting countries—even if those countries were still developing. Indeed, one of the prefatory clauses states, "the exemption for Developing Country Parties is inconsistent with the need for global action on climate change and is environmentally flawed."²⁵⁰

The Byrd-Hagel Resolution did not reject the entire premise of CBDR/RC but, rather, the binary way that Kyoto operationalized the principle by imposing binding targets on only Annex I countries. The resolution did not require that developing countries have the same exact emissions limitations as Annex I parties, but instead stated that the emissions reduction commitments must be "within the same compliance period."²⁵¹ In fact, Byrd-Hagel arguably sought more differentiation between developing country parties because it singled out China, Mexico, India, Brazils and South Korea. By also indicating that the U.S. Senate would not ratify any treaty that "would result in serious harm to the economy of the United States," the resolution appears to have given meaning to the second half of the CBDR/RC principle by defining what the "specific national and regional development priorities, objectives and circumstances" of the United States would be.

The U.S. refusal to ratify the Kyoto Protocol made it harder for the treaty to enter into force.²⁵² The absence of U.S. participation also encouraged defection from the Kyoto Protocol's targets. For example, when Canada withdrew from the Kyoto Protocol in 2011, just prior to the end of the first commitment period, it justified its decision in part by citing the lack of participation by the United States.²⁵³ Moreover, Russia, Japan, and New Zealand, which were all parties to the Kyoto Protocol's original commitment period, refused to sign on to a second commitment period when major emitters like the United States and China did not have binding obligations.²⁵⁴

When President Obama took office, hopes were high that the United States would be able to develop and join a new treaty that would replace

²⁵⁰ Byrd-Hagel Resolution, S. Res. 98, 105th Cong. (1997).

²⁵¹ See BINIAZ, BYRD-HAGEL, supra note 10, at 15.

²⁵² By its own terms, the treaty required that at least 55 Parties to the Convention ratify the treaty and that the parties ratifying the treaty account for at least 55% of total Annex I emissions as of 1990. Kyoto Protocol, *supra* note 245, art. 25. The United States is the largest historical emitter of greenhouse gases (28%), which is important because carbon dioxide remains in the atmosphere for a long time. HUNTER ET AL., *supra* note 216, at 668.

²⁵³ Canada Pulls Out of Kyoto Protocol, THE GUARDIAN (Dec. 13, 2011), https://www.theguardian.com/environment/2011/dec/13/canada-pulls-out-kyoto-protocol.

²⁵⁴ HUNTER ET AL., *supra* note 216, at 685. The second commitment period, which was adopted at the 2012 Conference of the Parties in Doha, lasts from 2013 until the end of 2020. *Id.*; *The Doha Amendment*, UNITED NATIONS CLIMATE CHANGE, https://unfccc.int/process/the-kyoto-protocol/the-doha-amendment (last visited Jan. 18, 2019).

the Kyoto Protocol.²⁵⁵ With Byrd-Hagel still in the backdrop, the United States was mindful that it could not commit to a treaty that maintained a binary interpretation of CBDR/RC.²⁵⁶ At the same time, developing countries were reluctant to give up the "fire wall" that the Kyoto Protocol had created between Annex I and non-Annex I parties.²⁵⁷ Although the UNFCCC parties could only agree to a political agreement,²⁵⁸ the Copenhagen Accord was a seminal turning point because it created a way for the parties to overcome the dualistic divide that Kyoto had created between developed and developing countries.²⁵⁹ In particular, the Copenhagen Accord stated that both Annex I and non-Annex I parties would have obligations to measure, report and verify their mitigation plans.²⁶⁰

The Paris Agreement is a "highly differentiated agreement" that moves "well beyond Kyoto's rigid categorical approach."²⁶¹ It includes the principle of "common but differentiated responsibilities and respective capabilities" but in a slight tweaking of language, also adds "in light of different national circumstances."²⁶² Notably, this additional phrase, which was first introduced at the Lima COP in 2014, "broke a logjam on the contentious issue of how to refer to the principle of 'common but differentiated responsibilities and respective capabilities' by adopting the formulation agreed in the U.S.-China Joint Announcement a month earlier."²⁶³

As implemented in the Paris Agreement, this version of CBDR/RC softened the sharp distinction between developed and developing countries and recognized a "continuum of national circumstances."²⁶⁴ In the Paris Agreement, all nations agreed to take some steps but some differentiation remains. The "common responsibility" of CBDR/RC was

²⁵⁵ HUNTER ET AL., *supra* note 216, at 665.

²⁵⁶ BINIAZ, BYRD-HAGEL, *supra* note 10, at 7.

²⁵⁷ Bodansky, *Postmortem*, *supra* note 8, at 233.

²⁵⁸ U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on Its Fifteenth Session* U.N. Doc. FCCC/CP/2009/11/ADD.1 2/CP.15 (Mar. 30, 2010) [hereinafter 2009 U.N. Climate Change Report]; *see also* Biniaz, *Comma, supra* note 10, at 57 (describing the Copenhagen Agreement as an "extreme example" of a non-legally binding instrument).

²⁵⁹ Bodansky, *Postmortem*, *supra* note 8, at 304.

²⁶⁰ 2009 U.N. Climate Change Report, *supra* note 258, ¶¶ 5, 6. In addition, developed nations also committed to jointly mobilize \$100 billion a year by 2020 to address the needs of developing countries. *Id.* ¶ 8. However, the Copenhagen Accord did not have the support of all parties and only addressed the period through 2020. *See* Bodansky, *A New Hope?*, *supra* note 8, at 292.

²⁶¹ BINIAZ, *supra* note 35, at 12.

²⁶² See Paris Agreement, *supra* note 29, pmbl., arts. 2.2, 4.3 & 4.19. The agreement also embraces other principles, such as sustainable development. *See id.* arts. 2.1, 4.1, 6.1, 6.2, 6.4, 6.8, 7.1.

²⁶³ Biniaz, *Comma*, *supra* note 10, at 56.

²⁶⁴ BINIAZ, supra note 35, at 12; see also Rajamani, Ambition, supra note 9, at 506.

interpreted as requiring all countries to take emissions reductions, but "respective capabilities" meant that each country was given the ability to define its NDC.²⁶⁵ Each country's NDC reflects this differentiation. The Paris Agreement states that developed countries should adopt economy-wide emissions reductions, while developing countries should enhance their mitigation efforts with the goal of making economy-wide reductions.²⁶⁶ It also allows the least developed countries and small island developing nations to develop plans that reflect "their special circumstances."²⁶⁷ The Paris Agreement also adopted more nuanced forms of differentiation on the concepts of mitigation, adaptation, finance, capacity building, technology, and transparency.²⁶⁸

President Trump's intended withdrawal from the Paris Agreement appears to be a complete rejection of CBDR/RC. First, because he and key administration officials have been skeptical of climate change, it is not clear that they even view global warming as a "common" problem.²⁶⁹ If climate change is not a problem that the United States shares with other countries, then the basic premise of the principle vanishes. Second, even if there is a common problem with a shared global responsibility, the United States takes no "differentiated responsibility" for addressing the problem. Rather, the differentiated responsibility is to put "America first." As the principle of CBDR/RC suggests, countries have different respective capabilities in part due to the history of global inequality and the legacy of colonialism that led many developing countries to be weaker economically. President Trump's time lens is, however, current: it does not matter that the United States is the largest historical emitter of greenhouse gases; what matters is that China's current overall emissions are greater than those of the United States. He flatly rejects the idea that the United States may have a "differentiated" role and a different set of "capabilities" than other countries.

Now, consider how the actions of subnational actors can give meaning to the CBDR/RC principle. By connecting their actions to the Paris Agreement through a "retroactive download" of international law, subnational actors reinforce the idea that climate change is a common problem. For example, the very name of the broader non-state coalition "We Are Still In" underscores this call to collective action by suggesting

²⁶⁵ Paris Agreement, *supra* note 29, arts. 4.2, 4.3; Bodansky, *A New Hope?*, *supra* note 8, at 305.

²⁶⁶ Paris Agreement, *supra* note 29, art. 4.4.

²⁶⁷ *Id.* art. 4.6.

²⁶⁸ BINIAZ, *supra* note 35, at 13–16; Rajamani, *Differentiation*, *supra* note 9, at 19; Rajamani, *Ambition*, *supra* note 9, at 494.

²⁶⁹ See Cale Jaffe, Melting the Polarization Around Climate Change Policies, 30 GEO. ENVTL. L. REV. 455, 456–57 (2018).

that climate change is a problem that all of us must face together. By connecting their actions to an international agreement, subnational actors are taking actions that reflect the idea that climate change is a global problem and that we all have a common responsibility to address it.

Action by state and local governments could possibly be explained as mere self-interest.²⁷⁰ The effects of a rapidly changing climate, including greater and more severe droughts, floods, hurricanes and other extreme weather patterns, are felt locally. Investing in adaptation efforts to protect from such impacts makes sense. In some instances, climate action can translate into immediate co-benefits, such as economic development opportunities and healthier air from less toxic pollutants.

However, conventional wisdom suggests that it is economically irrational for state and local actors to enact climate mitigation policies.²⁷¹ Greenhouse gas mitigation requires a certain level of sacrifice in the form of changes to existing modes of energy production and consumption, transportation, and many other aspects of daily life; these benefits do not necessarily accrue locally due to the global nature of climate change.²⁷² Climate change action helps future generations and, more immediately, those in other parts of the world who are even more vulnerable, such as people living on small island nations. In fact, "climate change illustrates the porosity of territorial borders" because greenhouse gas emissions have global impacts regardless of where they originate.²⁷³ Such mitigation efforts can be also offset by increases in emissions elsewhere.

The principle of CBDR/RC helps to explain this phenomenon of state and local action: each state or locality recognizes that there is a larger, common problem that needs to be addressed. The role of each particular actor may be distinct but there is still value in contributing towards a solution to this collective action problem. Indeed, this is why climate action is described as a multi-level, multi-scalar problem. Although subnational actors cannot speak for their national governments, their actions as norm sustainers can demonstrate support for the treaty and thereby enhance the status of those legal norms under international law. I am not suggesting that subnational actors have taken action on climate change because they were explicitly motivated by international law or the principle of CBDR/RC. Rather, their public affirmation of the Paris Agreement helps to sustain the key norms embedded within the treaty. This concept of subnational norm sustaining is premised on the dynamic

²⁷⁰ See Engel, Motivating, supra note 13, at 1023–25.

²⁷¹ See Engel & Saleska, *supra* note 112, at 187; Engel, *Motivating*, *supra* note 13, at 1021–22; Buzbee, *Climate Federalism*, *supra* note 12, at 147–48.

²⁷² See generally Engel & Orbach, supra note 112.

²⁷³ Kysar & Meyler, *supra* note 18, at 1632.

and multi-level nature of transnational legal process theory, where ideas have the potential to transfuse between wide varieties of actors operating at different levels.

Even if some U.S. states and cities can claim proportional achievement towards the U.S. target, the reality is that they cannot alone enable the United States to comply with its NDC. Something else is motivating these states and cities to support the Paris Agreement: a desire to show that we all have a common responsibility to address climate change, even if we all have different capacities to do so. In other words, this something else is an implicit sustaining of the CBDR/RC norm.

Subnational actors could go further to sustain the norm of CBDR/RC by *explicitly* tying their actions to this principle. For example, an economically prosperous state or city could explain why it is doing more than its share to address climate change—and to a certain degree, a state like California already does this. Yet, the harder challenge is for American states and cities to pledge to go beyond the Paris Agreement goals in light of the United States' status as the largest historic emitter of greenhouse gases and the nation's role as a global superpower. As discussed earlier, it will be difficult enough for only a portion of the U.S. states to attempt to meet the existing U.S. NDC. Nevertheless, by pledging to uphold the goals of the Paris Agreement, states and cities can play an important norm sustaining role that may help to mitigate the negative impact of President Trump's actions.

C. Demonstrating the Feasibility of Climate Policy

When states and cities adopt climate policies, they demonstrate the feasibility of such actions by developing relevant legal and physical infrastructure, creating markets, and fostering technological innovations.²⁷⁴ These actions make it easier for climate policies to be adopted at the national level, which in turn, makes it possible for the national government to make commitments to the international community. However, even when the national government rejects a globally-negotiated agreement and rolls back federal policies, state and local climate policies endure. In this situation, states and cities act as norm sustainers because their continued actions make it possible for a future national government to build on their efforts, both in developing national policies and in making pledges to the international community. In other words, even if President Trump fulfills his promise of withdrawing the United States from the Paris Agreement on Climate

²⁷⁴ Adelman & Engel, *Reorienting, supra* note 184, at 835–38; Buzbee, *Federalism Hedging, supra* note 12, at 1045; Gerrard, *supra* note 140, at 621.

Change, the sustaining actions of states and cities on climate change could enable a future president to rejoin the treaty.

The Clean Power Plan ("CPP") illustrates how states can act as norm sustainers by showing that policies to address climate change are feasible. The CPP had been a key mechanism for the Obama administration to achieve the U.S. NDC of an "economy-wide target of reducing its greenhouse gas emissions by twenty-six to twenty-eight percent below its 2005 level in 2025 and to make best efforts to reduce its emissions by twenty-eight percent."275 The CPP required states to cut pollution from existing power plants, which were the largest source of greenhouse gas emissions in the United States.²⁷⁶ It was not crafted out of thin air. Rather, state policies laid an important foundation for the EPA's determination of the appropriate technological and compliance options in the CPP.²⁷⁷ Notably, many of those practices developed at time when the United States refused to be a party to the Kyoto Protocol and when there was a void in leadership on climate action at the national level.²⁷⁸ When President Obama came into office, the EPA was able to justify the design of the CPP based on what it had observed in states and among electric utilities.²⁷⁹ Although the EPA under the Trump administration is replacing the CPP with its own rule,²⁸⁰ many of the practices on which the

²⁷⁵ Bobby Magill, *The Suit Against the Clean Power Plan, Explained*, CLIMATE CENTRAL (April 12, 2016), http://www.climatecentral.org/news/the-suit-against-the-clean-power-plan-explained-20234.

²⁷⁶ Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) [hereinafter Clean Power Plan Final Rule].

²⁷⁷ Arroyo et al., *State Innovation, supra* note 11, at 409–11. However, it would be an overstatement to suggest that all states supported the Clean Power Plan. Indeed, over twenty states, along with coal and industry groups, sued the EPA. *See The Suit Against the Clean Power Plan, Explained*, CLIMATECENTRAL (April 12, 2016), https://www.climatecentral.org/news/the-suit-against-the-clean-power-plan-explained-20234.

²⁷⁸ Gerrard, *supra* note 140, at 621 ("During the G.W. Bush administration, one of the ways that frustration over federal inaction manifested itself was through efforts at subnational levels to adopt climate regulatory programs. These were generally seen as interim measures to pressure Congress to act, and as ways to test out and refine methods such as cap-and-trade on a small scale before they were adopted nationally.").

²⁷⁹ See Clean Power Plan Final Rule, *supra* note 276, at 64,667; Buzbee, *Federalism Hedging*, *supra* note 12, at 1090; Arroyo et al., *State Innovation*, *supra* note 11, at 408–09; *see also* Gabriel Pacyniak, *Making the Most of Cooperative Federalism: What the Clean Power Plan Has Already* Achieved, 29 GEO. ENVTL. L. REV. 301 (2017).

²⁸⁰ Repeal of Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units: Proposed Rule, 82 Fed. Reg. 48,035 (Oct. 16, 2017); *Proposal: Affordable Clean Energy (ACE) Rule*, EPA (Nov. 1, 2018), https://www.epa.gov/stationary-sources-air-pollution/proposal-affordable-clean-energy-ace-rule; Emission Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guideline Implementing Regulations; Revisions to New Source Review Program, 83 Fed. Reg. 44,746 (proposed Aug. 30, 2018) (to be codified at 40 C.F.R. pts. 51, 52 & 60).

CPP was premised are still in place.²⁸¹ Thus, even when the national government rejects global norms around climate change, subnational action keeps those norms alive so that when the national government is ready to engage again, it can build on these efforts and take them to the international stage.

The concept of subnational norm sustaining builds on the extensive scholarship on cooperative federalism.²⁸² State actors can take action in areas where there is concurrent federal jurisdictions and, in some instances, influence the direction of national policies.²⁸³ In contrast to the traditional cooperative federalism model of environmental regulation, where states largely implement standards set by the national government, climate action has largely been bottom-up due to the void in federal climate policy.²⁸⁴ Such dynamism is important because environmental law involves scientific uncertainties and the need for technical and physical solutions that continually evolve.²⁸⁵

Buzbee observes that this fluidity is the benefit of the regulatory concurrence at the heart of "federalism hedging," which he defines as "the retention of potential regulatory roles for both federal and state regulators."²⁸⁶ He argues that "[n]o single governmental actor can destroy the complex web of regulation that catalyzed that progress, nor can any single governmental actor unsettle deeply entrenched shifts in energy production and resulting pollution reductions."²⁸⁷ Due to the dynamic nature of cooperative federalism, subnational actors in the United States have climate policies that now reverberate up to the international level, consistent with Koh's theory of transnational legal process.²⁸⁸ Moreover,

²⁸¹ Buzbee, *Federalism Hedging, supra* note 12, at 1086–91 (noting that clean energy markets hardly reacted when the Supreme Court stayed the Clean Power Plan).

²⁸² See, e.g., Buzbee, Contextual, supra note 12, at 121–22; Kirsten H. Engel, Harnessing the Benefits of Dynamic Federalism in Environmental Law, 56 EMORY L.J. 159 (2006); Hari M. Osofsky & Hannah J. Wiseman, Dynamic Energy Federalism, 72 MD. L. REV. 773 (2012); Erin Ryan, Negotiating Environmental Federalism: Dynamic Federalism as a Strategy for Good Governance, 2017 WIS. L. REV. FORWARD 2, 17 (2017).

²⁸³ Buzbee, *Lessons, supra* note 12, at 76 (arguing that the Clean Air Act's cooperative federalism structure has enabled state climate change leadership); Arroyo et al., *State Innovation, supra* note 11, at 389–90 (noting that current nationwide standards for fuel economy and greenhouse gas emissions for certain new vehicles now match California's more stringent standards); *see generally* John C. Dernbach, *Introduction, in* LEGAL PATHWAYS TO DEEP DECARBONIZATION IN THE UNITED STATES (Michael B. Gerrard & John C. Dernbach eds., 2018).

²⁸⁴ Engel, *Motivating*, *supra* note 13, at 1020–21; *see also* Buzbee, *Dynamism*, *supra* note 12, at 76.

²⁸⁵ See generally Bodansky, Brunnée & Hey, supra note 178, at 7–8; Buzbee, Climate Federalism, supra note 12, at 146; Adelman & Engel, Adaptive Federalism, supra note 184, at 1799-801.

²⁸⁶ Buzbee, Federalism Hedging, supra note 12, at 1057, 1066.

²⁸⁷ Id. at 1088. See also Buzbee, Climate Federalism, supra note 12, at 160.

²⁸⁸ See Koh, supra note 23, at 14.

"federalism hedging" in the United States creates an environment where states and cities can function as norm sustainers. Even when the national government explicitly rejects a national policy, such as the Clean Power Plan, and an international agreement, such as the Paris Agreement, state and local climate practices that are consistent with international norms remain intact.

Subnational norm sustaining simply requires states and cities to enact laws and policies that are consistent with a global norm, i.e. the need to address climate change. Norm sustaining does not require innovating new ideas. In this respect, it is consistent Engel's observation that, contrary to conventional wisdom, states in the climate context have been risk-averse with respect to experimentation and have not necessarily been "laboratories of innovation."289 For example, many aspects of state initiatives-such as "greenhouse gas emission targets, reporting and registries, renewable portfolio standards, emissions caps for electric utility plants, clean car standards, regional greenhouse gas cap-and-trade regime and low-carbon fuel standards-are not really new, but instead have been fixtures of federal environmental policies for decades."290 She argues that, nevertheless, U.S. states play a crucial role as "scale innovators" when they adapt climate policies that have previously been used at the national or international level.²⁹¹ Norm sustaining builds on this idea by illustrating how such actions continue even when there is a dearth of national leadership on climate change.

The concept of norm sustaining blurs the lines between subnational, national, and international lawmaking. But this is not so unusual when one considers how even domestic climate change litigation interacts with international lawmaking processes.²⁹² For example, Osofsky suggests that the seminal case *Massachusetts v. EPA*,²⁹³ where the Supreme Court held that the U.S. Environmental Protection Agency has the statutory authority to regulate greenhouse gases from mobile sources, is relevant to traditional international lawmaking because the United States is a party to the UNFCCC and has a good faith obligation to adopt relevant policies.²⁹⁴ She further demonstrates the blurry, multi-scalar nature of the problem by observing how in a state and federal nuisance law case, California emphasized that the U.S. is a party to the UNFCCC.²⁹⁵

²⁸⁹ Engel, *Enigma*, *supra* note 13, at 187.

²⁹⁰ *Id.* at 186.

²⁹¹ Id. at 171.

²⁹² Osofsky, *Pluralist, supra* note 14, at 184–85.

²⁹³ 519 U.S. 497 (2007).

²⁹⁴ Osofsky, *Pluralist*, *supra* note 14, at 203.

²⁹⁵ Id.

Massachusetts offers another example of how ostensibly state-based litigation now has international ramifications in light of President Trump's intended withdrawal from the Paris Agreement. In 2008, Massachusetts adopted the Global Warming Solutions Act, which sets one of the "most ambitious greenhouse gas reductions for a single state in the entire country."²⁹⁶ When the state's Department of Environmental Protection ("DEP") failed to promulgate comprehensive implementing regulations within the time period specified by the statute, several environmental organizations and individual plaintiffs sued the agency. The Massachusetts Supreme Judicial Court ultimately concluded that the statute required the agency:

[T]o promulgate regulations that address multiple sources or categories of sources of emissions, impose a limit on emissions that may be released, limit the aggregate emissions released from each group of regulated sources or categories of sources, set emissions limits for each year, and set limits that decline on an annual basis.²⁹⁷

It then concluded that the agency's efforts at regulating a few emissions sources did not meet the requisite requirements. The Massachusetts DEP has since promulgated regulations intended to meet the requirements of the Act.²⁹⁸

As Osofsky might suggest, at first glance, *Kain v. DEP* is a subnational matter that has little relevance to international lawmaking. It involves a state court interpreting a state statute and assessing the conduct of a state agency against that statute. The state's Global Warming Solutions Act was not adopted because of international law nor does it make explicit reference to specific international environmental law norms, such as the precautionary principle or common but differentiated responsibilities and respective capabilities. The state law does not incorporate the targets of the Kyoto Protocol and it pre-dates the Paris Agreement. Yet, the fact that the State of Massachusetts is taking steps to implement its binding greenhouse gas emissions targets means that the United States is better positioned to meet its NDCs while it remains a party to the Paris Agreement. Moreover, as a member of the U.S. Climate Alliance,

²⁹⁶ Kain v. Dep't of Envtl. Prot., 49 N.E.3d 1124, 1129 (Mass. 2016).

²⁹⁷ Id. at 1136.

²⁹⁸ Reducing GHG Emissions Under Section 3(d) of the Global Warming Solutions Act, MASS.GOV, https://www.mass.gov/guides/reducing-ghg-emissions-under-section-3d-of-theglobal-warming-solutions-act (last visited Aug 17, 2018); Baker-Polito Administration Issues Regulations to Reduce Greenhouse Gas Emissions and Reach Global Warming Solutions Act Goals, MASS.GOV, https://www.mass.gov/news/baker-polito-administration-issues-regulations-toreduce-greenhouse-gas-emissions-and-reach (last visited Aug 17, 2018).

Massachusetts is able to claim that it is meeting its proportional share of the U.S. NDC target, even while the threat of a withdrawal looms large.

By declaring its support for the Paris Agreement, Massachusetts acts as a norm sustainer, even though its own subnational actions on climate change were not directly motivated by international law. The state keeps alive policies that could make it easier for the United States to remain in the Paris Agreement, to enhance its pledges, or, if a withdrawal does occur, to rejoin the treaty at a later date.

The concept of norm sustaining is consistent with Koh's and Osofsky's writing on the multi-scalar nature of international law, but it provides especially useful explanatory value in the current context: when a nation-state rejects international law and takes actions, such as the rollback of environmental laws, which are inconsistent with global norms. In this instance, subnational units are not simply uploading and downloading ideas; they are serving a valuable role by sustaining global norms at the subnational level.

V. CONCLUSION

The United States has had a challenging relationship with the international climate regime and, in the absence of national leadership, subnational state and local actors have tried to fill the void. With President Trump's plan to withdraw the country from the Paris Agreement, can states and cities adequately take the place of the national government? The short answer is no. Although international law is changing, state sovereignty and the concept of the nation-state remain. No matter how many international meetings Governor Brown of California attends, it does not change the fact that subnational actors cannot be parties to the Paris Agreement. That, however, does not mean the actions of subnational actors are irrelevant. Indeed, this article has argued that states and cities play a valuable role as norm sustainers.

Subnational norm sustaining is part of the dynamic transnational legal process story that Koh describes: "The main message is that the Trump Administration does not own our climate policy. We all do. And if the federal government does not live up to its Paris commitments, many other players can fill the gap."²⁹⁹ When states and cities act as norm sustainers, they promote norm-internalization, even when our national leader has rejected global norms as embodied by the Paris Agreement.

When subnational actors re-cast their own actions in light of a global treaty, like the Paris Agreement on climate change, they act as norm sustainers and contribute to the transnational legal process in three

²⁹⁹ Koh, *supra* note 19, at 442.

distinct ways. First, by quantitatively benchmarking their progress against the U.S. NDC, states and cities can help to incentivize other countries to fulfill and enhance their pledges and mitigate the damage from President Trump's intended withdrawal. The theory of the Paris Agreement's hybrid architecture is that the disclosure of progress towards the voluntary targets will mutually motivate countries towards greater action. Moreover, the parties to the Paris Agreement already created venues for the non-state actors to disclose their climate activities, such as the Non-State Actor Zone for Climate Change.

Second, states and cities can dynamically influence national law and create normative expectations that reverberate up to the international level. Subnational actors who pledge to support the Paris Agreement act as norm sustainers by reinforcing the principle of common but differentiated responsibilities and respective capabilities, which has continued to be a major stumbling block for the United States. In contrast to President Trump's "America first" rhetoric, these subnational states and cities recognize that climate change is common problem and that they have a differentiated responsibility as well as the capacity to address it.

Finally, as norm sustainers, states and cities help to demonstrate the feasibility of climate actions in a way that lays the groundwork for national policy. President Obama's climate efforts built on state and local policies that had developed when there was a lack of national climate leadership. Although the Trump administration is dismantling policies that formed the basis of the U.S. NDC submitted under the Obama administration, such as the Clean Power Plan, decarbonizing efforts continue among the states. State-level policies, such as greenhouse gas reduction targets, cap-and-trade programs, renewable portfolio standards, efficiency standards, as well as other local land use decisions, are not sufficient by themselves to achieve the U.S. NDC. Nevertheless, as norm sustainers, these states and cities make it more likely that the United States will eventually adopt national climate policy. Thus, even if President Trump fulfills his campaign promise of withdrawing the United States from the Paris Agreement on climate change, the sustaining actions of states and cities on climate change could enable a future president to rejoin the treaty.

Subnational action on climate change is not a substitute for national action, but it is an increasingly important element of the transnational legal process. In the face of a U.S. withdrawal from the Paris Agreement, the success of this important treaty will depend in no small part on states and cities acting as global norm sustainers.