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SEPARATING CONTROVERSY AND CLIMATE CHANGE: HOW THE UNITED STATES COULD LEAD CLIMATE CHANGE AND ENERGY REFORM WITH THE GROWTH OF RENEWABLE ENERGY SOURCES GLOBALLY

INTRODUCTION

In the United States, individual states and their political leaders often view climate change and energy independence as disputable topics in a political debate.¹ Nonetheless, scientific consensus remains that climate change occurs due to human emissions of greenhouse gases,² creating the need for collaboration among states, tailored to each state's capacity to contribute. Due to differing capacities and access to energy resources,³ states have developed distinct strategies for obtaining energy, potentially with individualized cost-benefit analyses for producing energy—specifically renewable energy. An increased reliance on renewable energy sources could decrease imports of petroleum and increase the energy independence of the United States as a whole, providing an opportunity for the United States to be an innovative world leader and a responsible state in the international community.

¹ Cary Funk & Brian Kennedy, *The Politics of Climate*, PEW RES. CTR. (Oct. 4, 2016), <http://www.pewinternet.org/2016/10/04/the-politics-of-climate/> (“Specifically, the survey finds wide political divides in views of the potential for devastation to the Earth’s ecosystems and what might be done to address any climate impacts.”). For California, this meant hiring former Attorney General of the United States Eric Holder to challenge policies on environmental issues, among other issues. See Adam Nagourney, *California Hires Eric Holder as Legal Bulwark Against Donald Trump*, N.Y. TIMES (Jan. 4, 2017), <http://www.nytimes.com/2017/01/04/us/california-eric-holder-donald-trump.html>.

² MARK WESTON JANIS & JOHN E. NOYES, INTERNATIONAL LAW CASES AND COMMENTARY 692, 699 (American Casebook Series 5th ed. 2014); *Scientific Consensus: Earth’s Climate Is Warming*, NASA, <http://climate.nasa.gov/scientific-consensus/> (last visited Jan. 30, 2018); Justin Gillis, *Climate Panel Cites Near Certainty on Warming*, N.Y. TIMES (Aug. 19, 2013), <http://www.nytimes.com/2013/08/20/science/earth/extremely-likely-that-human-activity-is-driving-climate-change-panel-finds.html> (last visited Jan. 30, 2018); Chelsea Harvey, *The Research Shows – Yet Again – That There’s No Scientific Debate About Climate Change*, WASH. POST (Apr. 15, 2016), https://www.washingtonpost.com/news/energy-environment/wp/2016/04/15/research-shows-yet-again-that-theres-no-scientific-debate-about-climate-change/?utm_term=.c08f8ba2b96a (last visited Jan. 30, 2018) (explaining scientific consensus on the issue).

³ Some areas produce more coal, natural gas, or renewable energy sources than others, and these energy sources emit different levels of greenhouse gases. *Renewable Energy Production by State*, U.S. DEPT. OF ENERGY, <https://energy.gov/maps/renewable-energy-production-state> (last visited Jan. 30, 2018); *U.S. States, State Profiles and Energy Estimates: U.S. Overview*, U.S. ENERGY INFO. ADMIN., <http://www.eia.gov/state/> (last visited Jan. 30, 2018) [hereinafter *U.S. Overview*]; *What is Energy? Explained: Energy Can be Categorized as Renewable or Nonrenewable*, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/energyexplained/index.cfm?page=about_home (last updated Sept. 2, 2016) [hereinafter *What is Energy? Explained*].

Though individual states may reduce emissions separately, it is more difficult to impact global emissions absent federal action. Further, while states acting unilaterally in the international arena may give rise to concerns about federalism, there is an avenue for states to change international efforts legally without implicating federalism concerns. This Comment proposes that each state willing to commit to combatting climate change and promoting energy independence reform should first act through its applicable state department,⁴ with citizens and politicians making their intent known to local and state officials and representatives.⁵ Next, a meeting of Congress should occur where states with populations in favor of reform will announce their intentions and volunteer for greater responsibility and accountability by entering into a new interstate agreement. Then, the President, with the Senate's approval, may enact an enforceable, binding treaty⁶ on behalf of the United States,⁷ with specific, volunteering states held to a higher standard from the new interstate agreement described above.⁸

Thus, with the divide in the recent election,⁹ President Donald J. Trump would balance concerns on both sides¹⁰ and will escape controversy¹¹ by

⁴ *Does EPA Handle All Environmental Concerns?*, ENVTL. PROT. AGENCY, <https://publicaccess.zendesk.com/hc/en-us/articles/212071687-Does-EPA-handle-all-environmental-concerns-> (last visited Jan. 30, 2018) (explaining states' environmental agencies or health departments).

⁵ This means convincing mayors and governors to enforce state action and members of Congress to approve interstate agreements, as discussed *infra* Part II(A).

⁶ "The usual attitude is to call for extensive regulation and then be quite content with the emergence of regulatory instruments which remain merely rhetorical—un-ratified conventions, disregarded resolutions, litigation that only enriches the lawyers, ineffectual and in reality unenforceable prohibitions and even less respected general commands to do something." Thomas W. Wälde, *Natural Resources and Sustainable Development: From "Good Intentions" to "Good Consequences"*, in NICO SCHRIJVER & FRIEDL WEISS, *INTERNATIONAL LAW AND SUSTAINABLE DEVELOPMENT* 119, 141–142 (Martinus Nijhoff Publishers 2004).

⁷ Current negotiations exist for an Environmental Goods Agreement, which will be discussed *infra* Part I(D).

⁸ This Comment proposes that the United States would still enter an agreement as a nation when entering enforceable, binding treaties and the United States will be held accountable to other nations like any other treaty. However, within the United States, states not meeting the higher standard will be held accountable to the other states participating in the interstate agreement and to the United States.

⁹ John Schwartz & Tatiana Schlossberg, *For Clinton and Trump, There's Little Debating a Climate Change Divide*, N.Y. TIMES (Oct. 17, 2016), https://www.nytimes.com/2016/10/18/science/hillary-clinton-donald-trump-global-warming.html?_r=0&module=ArrowsNav&contentCollection=Science&action=keypress®ion=FixedLeft&pgtype=article.

¹⁰ Funk & Kennedy, *supra* note 1 (explaining divides among beliefs for dealing with climate change, but "the strong bipartisan support for expanding solar, wind energy production" and the majority of Americans' concern for the environment).

¹¹ President Donald J. Trump's pick for leading a transition team for the Environmental Protection Agency, Myron Ebell, denounces climate change and has been labeled a "climate criminal" by activists, leading to controversy already. Nell Greenfieldboyce, *Trump Says He Has 'Open Mind' On*

allowing individual volunteering states to be accountable through an interstate agreement, acting congruent with federalism concerns. Further, in accordance with state responsibility, through an enforceable, binding treaty entered into after the interstate agreement, the United States will join international efforts, easing international tension from countries displeased with the United States' past failure to engage in more climate change initiatives.¹² Therefore, this Comment focuses on how the United States can commit to reducing our contribution to climate change and increasing energy independence by specific states taking more responsibility in order for the United States to commit to an internationally binding, enforceable treaty that increases renewable energy sources while balancing domestic concerns.

This Comment will proceed as follows. Part I will describe the current situation of uncertainty in the United States on climate change, individual state contributions, interstate organizations, international agreements, and the impetus for a treaty based off of an interstate agreement. Part II contains an analysis for the interstate agreement and an analysis for a treaty based on an interstate agreement. Under the interstate agreement, this Comment will focus on potentially implicated laws in the United States, congressional consent, voluntary state action, and translocal organizations of government actors and uncooperative federalism. Under the treaty, this Comment will focus on obtaining senatorial consent and alternatives in the event this consent is not obtained. Part III will propose the solution and describe remaining challenges, followed by a summary of this Comment.

I. BACKGROUND

To explain the necessity for the United States to address climate change, this Comment begins by discussing the current situation in the United States regarding climate change that gives rise to complexity in proposing a solution. This Comment then provides how individual states, interstate organizations, and international agreements each either attempt or avoid climate change reform. Lastly, this Comment describes the current international situation that could motivate the United States to enter future treaties, as proposed.

Climate, But Staff Pick Raises Questions, NPR (Nov. 23, 2016), <http://www.npr.org/sections/thetwo-way/2016/11/23/503156456/trump-says-he-has-open-mind-on-climate-but-staff-pick-raises-questions>; Henry Fountain, *Trump's Climate Contrarian: Myron Ebell Takes On the E.P.A.*, N.Y. TIMES (Nov. 11, 2016), <http://www.nytimes.com/2016/11/12/science/myron-ebell-trump-epa.html>; Michael Shnayerson, *A Convenient Untruth*, VANITY FAIR (May 2007), <http://www.vanityfair.com/news/2007/05/skeptic200705>.

¹² See *infra* Part I(E).

A. *Current Situation of Uncertainty in the United States*

During the recent presidential election, state officials realized how the election could affect climate change policies.¹³ Now, uncertainty among climate change policies exists throughout the United States with state officials¹⁴ taking a firm stance against regulation, while other state officials call for more stringent regulations.¹⁵ Some states want fewer emissions standards¹⁶ while other states push for higher standards.¹⁷ Thus, the divide among states regarding policies on renewable energy sources currently leaves a gap in regulation.

Regrettably, the United States has been one of the top carbon dioxide¹⁸ emitters for the past five years,¹⁹ with the greatest contribution coming from

¹³ Coral Davenport, *Fighting Obama's Climate Plan, but Quietly Preparing to Comply*, N.Y. TIMES (July 19, 2016), <https://www.nytimes.com/2016/07/20/us/obama-clean-power-plan.html> (“Republicans in Congress and their party’s presidential nominee, Donald J. Trump, have vowed to scrap the climate change rules Governors like Mr. Mead and state-level environment officials are making a political calculation: If Hillary Clinton is elected president and appoints a new Supreme Court justice, Mr. Obama’s climate plan will probably survive.”).

¹⁴ *Id.* (“Republican governors in some states, including Indiana, New Jersey and Wisconsin, have issued ‘pencils down’ orders to state regulators to stop work on the Clean Power Plan In some cases, the governors moving forward with drafting state-level climate change plans are Democrats in places that have some form of climate policy in place, like California and New York. But in some Republican-led states, even those with ‘pencils down’ orders, regulators are sketching out how they might eventually comply.”).

¹⁵ Mary Esch & Jason Dearen, *States Face Off Over Future of Obama Global Warming Plan*, SEATTLE TIMES (Dec. 29, 2016), <http://www.seattletimes.com/seattle-news/environment/states-face-off-over-future-of-obama-global-warming-plan-2/>.

¹⁶ Texas’ Governor Greg Abbott called on the Environmental Protection Agency to refrain from issuing new ozone standards. *See* Press Release, Governor Abbott Meets with Senators McConnell, Cornyn and Cruz to Discuss Texas Response to EPA Overreach (May 7, 2015), <http://gov.texas.gov/news/press-release/20848>.

¹⁷ California Governor Jerry Brown expressed a continued commitment in reducing carbon emissions. Adam Nagourney & Henry Fountain, *California, at Forefront of Climate Fight, Won’t Back Down to Trump*, N.Y. TIMES (Dec. 26, 2016), http://www.nytimes.com/2016/12/26/us/california-climate-change-jerry-brown-donald-trump.html?_r=0 (discussing California leaders’ remarks on continued policies to fight climate change); *see also* Jasmine C. Lee & Adam Pearce, *How Trump Can Influence Climate Change*, N.Y. TIMES (Dec. 8, 2016), <http://www.nytimes.com/interactive/2016/12/08/us/trump-climate-change.html?action=click&contentCollection=U.S.&module=RelatedCoverage®ion=EndOfArticle&pgtype=article> (“California state policy on greenhouse gases gets national emissions 5 percent of the way to the pledge.”).

¹⁸ Carbon dioxide is a key greenhouse gas emitted by human activities through fossil fuel and industrial processes and is the largest percentage of global greenhouse gas emission. *Global Greenhouse Gas Emissions Data*, ENVTL. PROT. AGENCY, <https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data> (last visited Jan. 30, 2018).

¹⁹ *Id.* (citing Thomas A. Boden, Gregg H. Marland, and Robert J. Andres, *National CO2 Emissions from Fossil-Fuel Burning, Cement Manufacture, and Gas Flaring: 1751-2011*,

energy and heat production.²⁰ Carbon dioxide and other greenhouse gas emissions produced by the United States, as well as other countries, currently exceed the capacity of natural processes to absorb carbon, resulting in an increase in atmospheric greenhouse gases warming the planet.²¹ However, renewable energy²² does not release the same emissions²³ as fossil fuels.²⁴ Accordingly, renewable energy provides a path to sustainable development²⁵ through “sustained economic growth that is environmentally sustainable.”²⁶

CARBON DIOXIDE INFO. ANALYSIS CTR., OAK RIDGE NAT’L LAB., U.S. DEP’T OF ENERGY, doi 10.3334/CDIAC/00001_V2015 (2015).

²⁰ *Id.*

²¹ *Energy and the Environment Explained*, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/energyexplained/index.cfm?page=environment_how_ghg_affect_climate (last updated Aug. 17, 2017). The risks of climate change include: “higher global temperatures, sea level rise . . . and more severe storms, droughts, heat waves, and floods.” JANIS & NOYES, *supra* note 2, at 692, 699; *Explore: Earth Minute Videos*, NASA http://climate.nasa.gov/climate_resource_center/earthminute/ (last visited Jan. 30, 2018).

²² Renewable energy includes energy produced from five main renewable energy sources: solar, geothermal, wind, biomass, and hydropower. *What is Energy? Explained*, *supra* note 3.

²³ *Renewable Energy Explained*, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/energyexplained/index.cfm?page=renewable_home (“Renewable energy plays an important role in reducing greenhouse gas emissions . . . Unlike fossil fuels, non-biomass renewable sources of energy (hydropower, geothermal, wind, and solar) do not directly emit greenhouse gases.”).

²⁴ Most nonrenewable energy sources in the United States come from petroleum products, hydrocarbon gas liquids, natural gas, coal, and nuclear energy. *See What is Energy? Explained*, *supra* note 3. The term “fossil fuels” includes crude oil, coal, and natural gas “formed over millions of years by the action of heat from the earth’s core and pressure from rock and soil on the remains (or fossils) of dead plants and creatures like microscopic diatoms.” *Id.*

²⁵ The most widely accepted definition of sustainable development is: “development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.” NICO SCHRIJVER & FRIEDL WEISS, INTERNATIONAL LAW AND SUSTAINABLE DEVELOPMENT, at xii (Martinus Nijhoff Publishers 2004) (quoting the Brundtland Report of 1987); RABIA FERROUKHI ET AL., RENEWABLE ENERGY BENEFITS: MEASURING THE ECONOMICS 1–2 (2016), http://www.irena.org/DocumentDownloads/Publications/IRENA_Measuring-the-Economics_2016.pdf (last visited Jan. 30, 2018) (Renewable energy specifically has provided “improved energy security, fewer adverse climate change impacts and broader energy access” and “could balance the demand for sufficient energy to power economic growth and development with the urgent need to sharply reduce carbon emissions.”).

²⁶ *Compare* Janet L. Sawin, Freyr Sverrisson & Anna Leidreiter, *Renewable Energy and Sustainable Development: Accounting for Impacts on the Path to 100% RE* 4, 10–11 (World Future Council, 2016), https://www.worldfuturecouncil.org/file/2016/08/WFC_2016_Renewable-Energy-and-Sustainable-Development.pdf (listing and explaining economic drivers of renewable energy including: the improved balance of trade and reduced price volatility, creation of jobs and the development of new industries and skills, energy revenue kept locally, increased tax revenue by decreasing government expenditure, and reduced public health costs), *with* *Power Sector Employment Declines, Except for Renewable Electricity Generators*, U.S. ENERGY INFO. ADMIN. (Dec. 19, 2014), <http://www.eia.gov/todayinenergy/detail.php?id=19271> (“The overall decline in electric power generation jobs coincides with a period in which the United States has seen declining year-over-year electricity sales, driven by energy efficiency improvements, and growth in distributed generation, such as behind-the-meter rooftop solar, among other factors. Additionally, the growth in some types of non-hydro renewable generation,

Notwithstanding benefits of sustainable development relating strictly to climate change, renewable energy offers potential energy independence.²⁷ Currently, the United States produces about eighty-six percent of the energy consumed in the United States²⁸ but imports petroleum,²⁹ mainly for electricity and fuel for vehicles.³⁰ However, with a focus on new technology related to renewable energy, the United States could use a Smart Grid³¹ to incorporate domestic renewable energy production from wind or solar energy sources to be used for electricity.³² As the cost for electric vehicles decreases, renewable energy may also be used to fuel electric vehicles³³ in more ways than simply using biomass fuels for transportation.³⁴ Therefore, while the presidential transition in the United States led to different reactions by different states with respect to climate change and renewable energy sources, the urgency for the United States to participate in reducing our contribution to climate change and the continued interest in innovation for renewable energy sources remains.

particularly wind and solar, brings relatively few ongoing operations and maintenance jobs [The Bureau of Labor Statistics] first provided separate data series for renewable generation job categories in 2011. All four categories of non-hydro renewables have seen gains in power generation jobs since 2011.”).

²⁷ Renewable energy specifically has provided “improved energy security, fewer adverse climate change impacts and broader energy access” and “could balance the demand for sufficient energy to power economic growth and development with the urgent need to sharply reduce carbon emissions.” FERROUKHET AL., *supra* note 25, at 13.

²⁸ U.S. Energy Facts Explained, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/energyexplained/index.cfm?page=us_energy_home (last updated May 19, 2017).

²⁹ *Id.* (“In 2016, energy produced in the United States was equal to about 83.9 quadrillion Btu, which was equal to about 86% of U.S. energy consumption. The difference between production and consumption was mainly in net imports of petroleum.”).

³⁰ *Id.* (illustrating petroleum as the source for approximately twenty-eight percent of the United States’ energy consumption with about thirty-nine percent going toward electric power and about twenty-nine percent going toward transportation).

³¹ Alison C. Graab, *The Smart Grid: A Smart Solution to a Complicated Problem*, 52 WM. & MARY L. REV. 2051, 2054–55 (2011) (“The Smart Grid is a transmission grid that integrates ‘sophisticated sensing and monitoring technology’ and ‘cutting-edge power engineering,’ essentially superimposing the Internet on the grid.”).

³² *Id.* at 2051, 2057–58.

³³ *Id.* (“First, the Smart Grid can provide infrastructure for electric vehicles so that the transportation sector can transition away from using oil as its primary source of fuel Second, the Smart Grid has the ability to decrease oil consumption by replacing electricity generated from oil with electricity generated from alternative energy sources.”).

³⁴ Biomass fuel is a renewable energy source that provided about five percent of the energy in the United States with forty-eight percent of that five percent from biofuels like ethanol. *Biomass Explained*, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/energyexplained/index.cfm?page=biomass_home (last updated May 16, 2017).

B. Individual States' Contributions

Despite contributions by the United States to greenhouse gas emissions and the benefits of renewable energy for climate change and energy independence, renewable energy in the United States accounts for approximately ten percent of energy consumption and approximately twelve percent of energy production.³⁵ One reason renewable energy sources make up such a small part of overall energy use is that, in general, cost creates a significant barrier³⁶ to its use.³⁷ A scheme is needed that gives priority to renewable energy investments,³⁸ creates efficient incentives, and strengthens the state's role.³⁹ In order for more states to choose renewable energy, the marginal benefits of the total renewable energy solution (not simply the benefits for reducing the effects of climate change) have to be greater than the marginal costs for participation, so that the utility is maximized and the risk is minimized.⁴⁰ Natural resource economics suggests that discounted total annual cost savings from switching to active solar or windmill power must be greater than the capital cost⁴¹ or that a backstop price⁴² must be reached before renewable energy sources will be used.⁴³

States' programs differ in mandating or incentivizing renewable energy sources.⁴⁴ States' options include tax subsidies,⁴⁵ regulatory approaches,⁴⁶ and

³⁵ This data is from 2016. *U.S. Energy Facts Explained*, *supra* note 28.

³⁶ Other barriers to renewable energy include: utility rate structures, lack of interconnection standards, barriers to environmental permitting, and lack of transmission. See *Climate and Energy Resources for State, Local, and Tribal Governments: State Renewable Energy*, ENVTL. PROT. AGENCY, <https://www.epa.gov/statelocalenergy/state-renewable-energy-resources> [hereinafter *Climate and Energy Resources*].

³⁷ *Renewable Energy Explained*, *supra* note 23.

³⁸ Marco Citelli, Marco Barassi & Ksenia Belykh, *Renewable Energy in the International Arena: Legal Aspects and Cooperation*, 2(1) GRONINGEN J. OF INT'L L.: ENERGY & ENVTL. L. 1, 33 (2014).

³⁹ Wälde, *supra* note 6, at 119, 141–42, 145, 149.

⁴⁰ HENRY N. BUTLER, CHRISTOPHER R. DRAHOZAL & JOANNA SHEPHERD, *ECONOMIC ANALYSIS FOR LAWYERS* 6, 6–10 (3d ed. 2014).

⁴¹ JOHN C. BERGSTROM & ALAN RANDALL, *RESOURCE ECONOMICS: AN ECONOMIC APPROACH TO NATURAL RESOURCE AND ENVIRONMENTAL POLICY* 291, 300–02 (3d ed. 2010).

⁴² The backstop price is the price where non-renewable sources meet renewable sources. BARRY C. FIELD, *NATURAL RESOURCE ECONOMICS* 169, 181–83 (2d ed. 2008).

⁴³ *Id.*

⁴⁴ *Environmental Law: State Law*, LEGAL INFO. INST., https://www.law.cornell.edu/wex/environmental_law (last visited Jan. 30, 2018).

⁴⁵ BERGSTROM & RANDALL, *supra* note 41, at 309–10 (“Tax subsidy approaches attempt to restore efficiency by manipulating the price of residuals[, and] provide a continuing incentive for improved abatement [of emissions] performance.”).

cap-and-trade programs⁴⁷ to decrease the costs of renewable energy and increase the use of renewable energy sources. More specifically, to encourage investment in renewable energy sources, states have adopted other strategies, including: renewable portfolio standards,⁴⁸ public benefits funds for renewable energy,⁴⁹ output based environmental regulations,⁵⁰ net metering,⁵¹ feed-in tariffs,⁵² property assessed clean energy (PACE),⁵³ financial incentives,⁵⁴ and Power Purchase Agreements (PPA).⁵⁵ For example, California⁵⁶ “has a cap and trade system in which electric utilities, fuel distributors and other businesses buy emission permits through auctions or from one another. New York and

⁴⁶ *Id.* at 309–14 (“Regulatory approaches directly or indirectly attack the quantity of residuals released [I]n the case of the tax, all unabated emissions are taxed. On the other hand, with a regulatory approach, there is no incentive for abatement beyond that required by the standard.”).

⁴⁷ *Id.* (“Cap-and-trade programs use government authority to establish the total quantity of residuals, but use markets to allocate residuals production among the various potential polluters [T]he pollution control agency determines the total permissible emissions of a given pollutant in a geographic region—this is the “cap”. . . . [T]he pollution permits would be freely transferable—this is the “trade” component This trade component encourages innovation in pollution abatement, because innovators are rewarded by income from the sale of permits no longer needed.”).

⁴⁸ *Climate and Energy Resources*, *supra* note 36 (“Renewable Portfolio Standards (RPS) require electric utilities and other retail electric providers to provide a specified percentage or amount of customer electricity with eligible renewable resources.”).

⁴⁹ *Id.* (“Public Benefits Funds for Renewable Energy are a pool of resources used by states to invest in clean energy supply projects. Funds are typically created by levying a small charge on customers’ electricity rates (i.e., a system benefits charge).”).

⁵⁰ *Id.* (“Output-Based Environmental Regulations establish emissions limits per unit of productive energy output of a process (i.e., electricity, thermal energy, or shaft power), with the goal of encouraging fuel conversion efficiency and renewable energy as air pollution control measures.”).

⁵¹ *Id.* (“Net Metering enables residential or commercial customers who generate their own renewable electricity (e.g., solar photovoltaic panels) to receive compensation for the electricity they generate.”).

⁵² *Id.* (“Feed-In Tariffs encourage the development of renewable energy by obligating electric utilities to establish above-market rates for renewable power fed onto the grid.”).

⁵³ *Id.* (“Property Assessed Clean Energy (PACE) is a financing option that attaches the obligation to repay the cost of renewable energy installations or energy efficiency retrofits to a residential property rather than an individual borrower.”).

⁵⁴ *Id.* (“Financial Incentives—such as grants, loans, rebates, and tax credits—are provided in some states to encourage renewable energy development.”).

⁵⁵ *Energy Analysis: Fact Sheet Series on Financing Renewable Energy Projects: Power Purchase Agreement Checklist for State and Local Governments*, NAT’L RENEWABLE ENERGY LAB. (Oct. 2009), <http://www.nrel.gov/docs/fy10osti/46668.pdf> (explaining PPAs as providing financing from a third-party investor who is the system owner that the government agency enters an agreement with to provide investment capital in return for tax benefits through federal tax incentives and revenue from electricity sales, while a developer structures the deal and is paid for services, and the governmental agency is the contact for both the system owner and the developer).

⁵⁶ California also has linked the carbon-and-trade program with Quebec. Jean-Yves Benoit & Claude Côte, *Essay by the Québec Government on Its Cap-and-Trade System and the Western Climate Initiative Regional Carbon Market: Origins, Strengths and Advantages*, 33 UCLA J. ENVTL. L. & POL’Y 42, 52–55 (2015).

eight other Eastern states have a similar program for power plants.”⁵⁷ For wind and solar energy, factors like government investment and tax credits reduce the cost of production.⁵⁸

States also face the challenge of handling environmental concerns alongside cities or counties, state environmental agencies or health departments, and federal agencies.⁵⁹ States are required to follow federal mandates⁶⁰ but are not required to set up extensive programs for renewable energy.⁶¹ This Comment assumes factors—such as suitability of a region for renewable energy and cost-benefit analyses for states influenced by climate change—may affect states’ willingness to participate in global renewable energy solutions. Different regions are more suitable for different types of renewable energy production⁶² and could lead to those states naturally being more willing to talk about renewable energy solutions. Climate change risks are also different for different states.⁶³ While New York faces the challenge of

⁵⁷ The Editorial Board, *States Will Lead on Climate Change in the Trump Era*, N.Y. TIMES (Dec. 26, 2016), <http://www.nytimes.com/2016/12/26/opinion/states-will-lead-on-climate-change-in-the-trump-era.html>.

⁵⁸ *Revolution . . . Now: The Future Arrives for Five Clean Energy Technologies – 2016 Update*, U.S. DEPT. OF ENERGY, 2, 2–4 (Sept. 2016), <https://energy.gov/eere/downloads/revolution-now-future-arrives-five-clean-energy-technologies-2016-update> (“Power purchase agreements for wind have fallen from rates of up to 7 cents/ kilowatt-hour (kWh) in 2009 to an average of 2 cents/kWh today in certain regions of the country. This significant reduction in cost and massive increase in deployment in a few years is a result of multiple factors, including government investments, infrastructure development, and federal and state incentives Since 2008, installation of [solar] utility-scale PV costs have fallen 64%, to a new low of \$2.08/Watt As of 2015[,] average prices are well below €5/kWh It’s important to note that these low costs are reflective in part of the location of projects in excellent solar resource locations and of the federal investment tax credit (ITC).”).

⁵⁹ *Does EPA Handle All Environmental Concerns?*, *supra* note 4.

⁶⁰ The Office of the United States Trade Representative’s (USTR) Office of Environment and Natural Resources (ENR) negotiates environmental chapters in agreements and works with the State Department for cooperation mechanisms. *Environment and Natural Resources*, OFF. U.S. TRADE REPRESENTATIVE, <https://ustr.gov/issue-areas/environment> (last visited Jan. 30, 2018).

⁶¹ *Does EPA Handle All Environmental Concerns?*, *supra* note 4.

⁶² *Renewable Energy Production by State*, *supra* note 3; *U.S. Overview*, *supra* note 3.

⁶³ *Climate Change Impacts by State*, ENVTL. PROT. AGENCY, https://19january2017snapshot.epa.gov/climate-impacts/climate-change-impacts-state_html (Jan. 19, 2017) (“Increased rainfall intensity will cause more flooding in some states, while increasingly severe droughts may threaten water supplies in other states. Farms and forests will be less productive in some states, but warmer temperatures may extend growing seasons in others.”). After President Donald J. Trump took office, this link on the EPA website was changed to state:

This is not the current EPA website. To navigate to the current EPA website, please go to www.epa.gov. This website is historical material reflecting the EPA website as it existed on January 19, 2017. This website is no longer updated and links to external websites and some internal pages may not work.

Id.

adapting to sea level raises, California faces severe drought and competition for water resources.⁶⁴ Meanwhile, the Pacific Northwest acts as a climate refuge due to less extreme heat and less water stress.⁶⁵ Those states that do not encourage renewable energy growth are unlikely to agree to an international solution to increase renewable energy production and could prevent other states from doing so by blocking congressional approval of the compact among states.⁶⁶

Despite some states' unwillingness to join global solutions, other states⁶⁷ want to join in efforts to produce more renewable energy to mitigate climate change and create energy independence.⁶⁸ To illustrate, California has land suitable for renewable energy,⁶⁹ faces high risks associated with climate change,⁷⁰ and creates climate and energy policies popular among Californians.⁷¹ Already, California has begun building international relations through a cap-and-trade program linked with Quebec.⁷² California state officials also included Mexico and China in discussions on cap-and-trade policies.⁷³ Thus, for California, the costs from not creating renewable energy incentives are likely higher than the risks, and have prompted California to link with outside countries and programs. This Comment proposes that the United States should support states that want to be leaders in climate change and

⁶⁴ *Id.*

⁶⁵ Jennifer A. Kingson, *Portland Will Still Be Cool, but Anchorage May Be the Place to Be: On a Warmer Planet, Which Cities Will Be Safest?*, N.Y. TIMES (Sept. 22, 2014), https://www.nytimes.com/2014/09/23/science/on-a-warmer-planet-which-cities-will-be-safest.html?_r=0.

⁶⁶ The Senate blocked the Clean Power Plan. See Jeremy Symons, *The Senate Just Voted to Block the Clean Power Plan. Here's the Good News.*, ENVTL. DEFENSE FUND (Nov. 18, 2015), <https://www.edf.org/blog/2015/11/18/senate-just-voted-block-clean-power-plan-heres-good-news>.

⁶⁷ Iowa will soon have forty percent of its electricity from wind power and Governor Kasich from Ohio vetoed rollback mandates on renewable energy. Justin Gillis, *Weak Federal Powers Could Limit Trump's Climate-Policy Rollback*, N.Y. TIMES (Jan. 2, 2017), <http://www.nytimes.com/2017/01/02/science/donald-trump-global-warming.html>.

⁶⁸ Energy independence with renewable energy sources could help other countries that rely on nonrenewable energy sources because those nonrenewable energy sources do not naturally replenish in a short period of time. See *Nonrenewable Energy Explained*, U.S. ENERGY INFO. ADMIN. (Oct. 27, 2015), http://www.eia.gov/energyexplained/?page=nonrenewable_home.

⁶⁹ *Renewable Energy – Overview*, CALIFORNIA ENERGY COMM'N, www.energy.ca.gov/renewables/tracking_progress/documents/renewable.pdf (last visited Jan. 30, 2018).

⁷⁰ *Climate Change Impacts by State*, *supra* note 63.

⁷¹ Nagourney & Fountain, *supra* note 17.

⁷² This will be discussed further *infra* Part II.

⁷³ Nagourney & Fountain, *supra* note 17; see also Lee & Pearce, *supra* note 17 (“California state policy on greenhouse gases gets national emissions 5 percent of the way to the pledge.”).

energy policy because it affects all states,⁷⁴ albeit some more than others, and some states are more willing to accept the challenge.⁷⁵

C. *Interstate Organizations*

By providing predictable rules and avoiding duplicative processes, “[m]ulti-state initiatives can be more effective and efficient in reducing greenhouse gases across a broad area”⁷⁶ Among interstate renewable energy initiatives are the Interstate Renewable Energy Council (IREC), the Regional Greenhouse Gas Initiative (RGGI), the Transportation Climate Initiative (TCI), and the Pacific Coast Collaborative (PCC). While the IREC, the RGGI, the TCI, and the PCC are all beneficial interstate organizations for climate change in general, none of these are suitable for the proposed solution under this Comment. The differences between these organizations and the proposed solution in this Comment are addressed to establish that this interstate agreement would not simply take away the function of an organization already formed and to show the current gaps that the proposed interstate agreement will address.

First, the IREC is an independent non-profit organization⁷⁷ focused on consumer access to renewables and consumer rights to encourage investment while committed to regulatory reform, workforce development, and consumer education across the United States, though the IREC is concentrated more in certain regions.⁷⁸ “The IREC’s work is visible in nearly every state, with rules and practices that make it easier to connect to a reliable modern utility grid prepared to handle increased distributed energy.”⁷⁹ While this Comment’s

⁷⁴ Greenhouse gases and other emissions travel in the atmosphere, so these states should be able to promote agreements with other countries whose pollution still affects the population of each state. *Overview*, NAT’L CLIMATE ASSESSMENT, <http://nca2014.globalchange.gov/highlights/overview/overview#menu-highlights> (last visited Jan. 30, 2018).

⁷⁵ States should not refrain from leading the United States just because other states have different cost-benefit analyses.

⁷⁶ *Multi-State Climate Initiatives*, CTR. FOR CLIMATE AND ENERGY SOL., <https://www.c2es.org/us-states-regions/regional-climate-initiatives> (last visited Jan. 30, 2018).

⁷⁷ This distinguishes it from the proposal.

⁷⁸ *About IREC*, INTERSTATE RENEWABLE ENERGY COUNCIL, <http://www.irecusa.org/about-irec/> (last visited Jan. 30, 2018); *Regulatory Reform*, INTERSTATE RENEWABLE ENERGY COUNCIL, <http://www.irecusa.org/regulatory-reform/interconnection/> (last visited Jan. 30, 2018) (“[W]e have helped more than 25 states adopt and improve their state interconnection standards, and in doing so, helped establish a critical foundation for clean energy growth across the country. . . . Whether serving as an active intervenor in a regulatory proceeding or by providing technical assistance and support to stakeholders, IREC engages on interconnection matters in a number of states. Most recently, IREC has been involved in California, Iowa, Minnesota, and New York.”).

⁷⁹ *About IREC*, *supra* note 78.

proposed interstate agreement overlaps with the IREC's agenda to increase renewable energy sources,⁸⁰ the proposed interstate agreement differs from the IREC. The IREC focuses on consumers as a non-profit organization, making renewable energy more practical. However, this Comment's proposal suggests an agreement among state governments with certain states committing to a higher standard of renewable energy growth for the ultimate goal of creating an enforceable agreement between the United States and other countries.

Second, the RGGI was "the first United States cap-and-trade program to reduce carbon dioxide (CO₂) emissions from the power sector . . . [and is] composed of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont."⁸¹ "The program is administered through RGGI, Inc., but individual state governments have enforcement authority."⁸² However, this Comment's proposed interstate agreement suggests state and federal governments administer and enforce the interstate agreement, and attempts to cover all of the United States—not just northeastern states.

Third, the TCI consists of "twelve Northeast and Mid-Atlantic jurisdictions launched in 2010, to develop a clean energy economy and reduce greenhouse gas emissions in the transportation sector The TCI consists of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and the District of Columbia."⁸³ The TCI only covers certain northeastern states—instead of all of the United States—and only covers a narrow agenda.⁸⁴ This Comment's proposed interstate agreement contains a broader agenda for all renewable energy sources but is more specific to each states' capacity for renewable energy.

Lastly, the Pacific Coast Collaborative (PCC) "is a cooperative agreement among the leaders of Alaska, British Columbia, California, Oregon, and Washington to leverage clean energy innovation and low-carbon development

⁸⁰ *Id.*

⁸¹ *Multi-State Climate Initiatives*, *supra* note 76; *Welcome*, REGIONAL GREENHOUSE GAS INITIATIVE: AN INITIATIVE OF THE NORTHEAST AND MID-ATLANTIC STATES OF THE U.S., <https://www.rggi.org> (last visited Jan. 30, 2018).

⁸² *Multi-State Climate Initiatives*, *supra* note 76.

⁸³ *Transportation and Climate Initiative*, CTR. FOR CLIMATE AND ENERGY SOL., <https://www.c2es.org/us-states-regions/regional-climate-initiatives#NA2050> (last visited Jan. 30, 2018); *About Us*, TRANSPORTATION AND CLIMATE INITIATIVE, <http://www.transportationandclimate.org/content/about-us> (last visited Jan. 30, 2018).

⁸⁴ *About Us*, *supra* note 83.

to reduce the effects of climate change on the regional economy.”⁸⁵ The PCC “signed the Pacific Coast Action Plan on Climate and Energy, a nonbinding agreement to align climate regulations and market-based measures in each member jurisdiction” that establishes targets for greenhouse gas reduction from an integrated electrical smart-grid and low-carbon transportation with a high-speed regional rail line along the Pacific Coast.⁸⁶ The PCC’s Pacific Coast Action Plan on Climate and Energy (PCC’s Plan) is regional but also includes British Columbia; this Comment’s proposed interstate agreement covers all of the United States—and only the United States—before creating a treaty.⁸⁷ As an interstate agreement, the proposal suggests a binding enforcement mechanism whereas the PCC’s Plan is non-binding.⁸⁸

These interstate agreements help reduce emissions, impact climate change, show that using interstate agreements to increase renewable energy sources is feasible, and could provide guidance in creating the proposed interstate agreement. However, these interstate agreements do not represent a comprehensive interstate agreement across the country⁸⁹ and do not represent the United States as a whole. Therefore, an interstate agreement among state governments is still necessary for the proposed interstate agreement introduced in this Comment.

D. International Agreements

Before discussing how states may work together to represent the United States as a leader in climate change and energy policy, it is important to look at how the United States has been a part of international agreements in the past so the United States will be equipped to commit to more effective international agreements in the future. Currently, there are cooperative agreements among the United States, Canada, and other countries to reduce emissions. North America 2050 (NA 2050)⁹⁰ was the successor of the 3-Regions Initiative—

⁸⁵ *Multi-State Climate Initiatives*, *supra* note 76.

⁸⁶ *Id.*

⁸⁷ This Comment’s proposed interstate agreement only includes states in the United States so that the United States as a whole will be able to commit to an enforceable, binding treaty with other countries.

⁸⁸ *Id.*

⁸⁹ These are regional agreements. *Id.*

⁹⁰ *Id.* (The NA 2050 includes three regional initiatives: Midwestern Greenhouse Gas Reduction Accord, Regional Greenhouse Gas Initiative, and Western Climate Initiative. Some of these initiatives include areas of Canada.).

including the Midwestern Greenhouse Gas Reduction Accord (MGGRA),⁹¹ the Regional Greenhouse Gas Initiative (RGGI),⁹² and the Western Climate Initiative (WCI)⁹³—but the NA 2050 became inactive.⁹⁴ Likewise, the Midwestern Greenhouse Gas Reduction Accord members are “not currently pursuing their greenhouse gas goals through the accord.”⁹⁵ However, the WCI still operates through California and the province of British Columbia to link cap-and-trade programs⁹⁶ as discussed in Part I(B) and has been controversial.⁹⁷ The RGGI only pertains to states in the United States, as discussed in Part I(C).

While there are many international conferences,⁹⁸ governmental organizations,⁹⁹ and non-governmental organizations¹⁰⁰ that deal with

⁹¹ *Id.* (“[A] commitment launched in 2007 by the governors of six Midwestern states and the premier of one Canadian province to reduce greenhouse gas emissions through a regional cap-and-trade program and other complementary measures.”).

⁹² *Id.* (The RGGI “is the first U.S. cap-and-trade program to reduce carbon dioxide (CO₂) emissions from the power sector. Currently, the program is composed of Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont.”).

⁹³ *Id.* (The WCI was enacted by governors of Utah and Montana, and the premiers of British Columbia, Manitoba, Ontario, and Quebec joined as partners. An additional fourteen jurisdictions joined as observers, including Alaska, Colorado, Idaho, Kansas, Nevada, and Wyoming in the United States; Nova Scotia, and Saskatchewan in Canada; and Baja California, Chihuahua, Coahuila, Nuevo Leon, Sonora, and Tamaulipas in Mexico.).

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ *Id.*; Benoit & Côté, *supra* note 56, at 52–54 (describing the linked cap-and-trade program).

⁹⁷ Shelley Welton, *State Dynamism, Federal Constraints: Possible Constitutional Hurdles to Cross-Border Cap-and-Trade*, 27 NAT. RESOURCES & ENV'T 36, 39 (2012); *California Cap-and-Trade, Table 1: California Cap-and-Trade Details*, CTR. FOR CLIMATE AND ENERGY SOL., <https://www.c2es.org/us-states-regions/key-legislation/california-cap-trade> (last visited Jan. 30, 2018) (describing lawsuits).

⁹⁸ To illustrate the many conferences, here is a list: U.N. Conference on the Human Environment (1972), the World Commission on Environment and Development (1987), the U.N. Conference on Environment and Development (1992), the General Assembly Special Session on the Environment (1997), the World Summit on Sustainable Development (2002), the U.N. Conference on Sustainable Development (2012), the Aarhus Convention (2001), Copenhagen Climate Change Conference (2009), and the Paris Agreement (2016), the Kyoto Protocol and the Clean Development Mechanism (1997), the Montreal Protocol (1987) and the London Amendments (1990 and 1992), the Vienna Convention on the Law of Treaties (1969), and the Declaration of Principles of International Law Relating to Sustainable Development in New Delhi (2002).

⁹⁹ To illustrate the many governmental organizations, here is a list: the Intergovernmental Panel on Climate Change, the U.N. Environmental Programme, the U.N. Development Programme, the U.N. Industrial Development Organization, and the International Energy Agency.

¹⁰⁰ To illustrate the many non-governmental organizations, here is a list: the Renewable Energy Policy Network for the 21st Century and the Renewable Energy and Energy Efficiency Partnership, the Sierra Club, the Natural Resources Defense Council, the Environmental Defense, National Audubon Society, and the National Wildlife Federation, Environmental Law Institute and the EarthJustice Legal Defense Fund, WorldWatch, World Resources Institute, and the Center for International Environmental

renewable energy sources, climate change, and energy in general, I will focus on the United Nations Framework Convention on Climate Change (UNFCCC), the World Trade Organization (WTO), and an absent World Environmental Organization (WEO). While pledges for the growth of renewable energy sources and climate change reform advance discussion and research, a legally binding and enforceable agreement among major players to international relations and major emitters of emissions is missing.

1. UNFCCC

The UNFCCC is a Rio Convention created to avert human interference from threatening the climate system.¹⁰¹ The United States signed and ratified the UNFCCC in 1992, and the UNFCCC entered into force in 1994 in the United States.¹⁰² However, the United States refused to commit to a legally binding agreement to reduce greenhouse gases, weakening the UNFCCC.¹⁰³ Five years after establishing the UNFCCC, the Kyoto Protocol formed internationally binding emission reduction targets¹⁰⁴ that entered into force in

Law, International Union for the Conservation of Nature, Greenpeace International, the World-Wide Fund for Nature, and the Environmental Law Alliance Worldwide.

¹⁰¹ *First Steps to a Safer Future: Introducing the United Nations Framework Convention on Climate Change*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/convention/items/6036.php (last visited Jan. 30, 2018) (“The UNFCCC is a ‘Rio Convention’, one of three adopted at the ‘Rio Earth Summit’ in 1992. Its sister Rio Conventions are the UN Convention on Biological Diversity and the Convention to Combat Desertification. The three are intrinsically linked. It is in this context that the Joint Liaison Group was set up to boost cooperation among the three Conventions, with the ultimate aim of developing synergies in their activities on issues of mutual concern.”); United Nations Framework on Climate Change art. 2, May 9, 1992, 1771 U.N.T.S. 107 http://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf (“The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve, in accordance with the relevant provisions of the Convention, stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time-frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.”).

¹⁰² *Status of Ratification of the Convention*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/essential_background/convention/status_of_ratification/items/2631.php.

¹⁰³ Donald Goldberg, *As the World Burns: Negotiating the Framework Convention on Climate Change*, 5 GEO. INT’L ENVTL. L. REV. 239, 244–51 (1993), in DAVID HUNTER, JAMES SALZMAN & DURWOOD ZAEKLE, INTERNATIONAL ENVIRONMENTAL LAW AND POLICY: CHAPTER ELEVEN THE LAW OF CLIMATE CHANGE 630, 667–70 (Foundation Press 3d ed. 2007) (“The commitment section of the Chairman’s text acknowledge the fact that a legally binding commitment to reduce greenhouse gases was beyond reach, if the U.S. was to be a signatory Had the U.S. not taken such a hard line on commitments, the Convention would no doubt have been stronger.”).

¹⁰⁴ *Id.* (“Under Articles 4(2)(d) and 7(2)(a), the Conference of the Parties is charged with periodically evaluating implementation of the Convention to ensure that commitments are adequate to

2005 with developed countries¹⁰⁵ taking “common but differentiated responsibilities” to address the high levels of greenhouse gas emissions.¹⁰⁶ While the United States signed the Kyoto Protocol in 1998, the United States never ratified it,¹⁰⁷ meaning the United States does not abide by this binding commitment to reduce emissions using a target and timetable.¹⁰⁸ When the first commitment period for the Kyoto Protocol ended, the Doha Amendment to the Kyoto Protocol¹⁰⁹ was adopted for a second commitment period but has not been entered into force yet.¹¹⁰ The United States has not signed the Doha Amendment.¹¹¹

While the United States refrained from ratifying the Kyoto Protocol and from signing the Doha Amendment, the United States signed and ratified the Paris Agreement.¹¹² However, after taking office, President Donald J. Trump

meet this overall objective. It was just such an evaluation that would ultimately lead to the recognition that binding targets were necessary in the Kyoto Protocol.”); The Marrakesh Accords provides detailed rules for implementing the Kyoto Protocol for the first commitment period. *Kyoto Protocol*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/items/2830.php (last visited Jan. 30, 2018).

¹⁰⁵ *Kyoto Protocol*, *supra* note 104.

¹⁰⁶ *Id.*

¹⁰⁷ *Status of Ratification of the Kyoto Protocol*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/kyoto_protocol/status_of_ratification/items/2613.php (last visited Jan. 30, 2018). President George W. Bush became President in 2001 and “announced that the United States would no longer support the Kyoto Protocol. The Bush administration offered neither an apology nor an alternative, leaving Europeans and others furious at the unilateral shift.” DAVID HUNTER, JAMES SALZMAN & DURWOOD ZAELKE, *INTERNATIONAL ENVIRONMENTAL LAW AND POLICY: THE LAW OF CLIMATE CHANGE* 689 (Foundation Press 3d ed. 2007). Instead, the Bush administration developed bilateral climate initiatives and partnerships with other countries with no required emissions reductions or specific policies, mirroring domestic policy “by reduction in the growth of emissions by improving energy intensity, supporting voluntary initiatives by the private sector, and expanded funding into scientific research and research into alternative energy.” *Id.* at 700.

¹⁰⁸ HUNTER, SALZMAN & ZAELKE, *supra* note 107, at 680 (“The core of the Kyoto Protocol is targets and timetables, or ‘quantified emissions limitation and reduction objectives’ (QELROs), for industrialized (Annex I) Parties to reduce their net emissions of greenhouse gases.”).

¹⁰⁹ *Kyoto Protocol*, *supra* note 104 (“The amendment includes: [n]ew commitments for Annex I Parties to the Kyoto Protocol who agreed to take on commitments in a second commitment period from 1 January 2013 to 31 December 2020; [a] revised list of greenhouse gases (GHG) to be reported on by Parties in the second commitment period; and [a]mendments to several articles of the Kyoto Protocol which specifically referenced issues pertaining to the first commitment period and which needed to be updated for the second commitment period.”).

¹¹⁰ The first commitment period lasted from 2008–2012 and the second commitment period lasts from 2013–2020. *Kyoto Protocol*, *supra* note 104; *see also* CHAPTER XXVII ENVIRONMENT 7.c., UNITED NATIONS TREATY COLLECTION, https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-c&chapter=27&clang=_en (last visited Jan. 30, 2018).

¹¹¹ CHAPTER XXVII ENVIRONMENT 7.c., *supra* note 110.

¹¹² *Paris Agreement – Status of Ratification*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/paris_agreement/items/9444.php (last visited Jan. 30, 2018).

then began the process to withdraw from the Paris Agreement, though the earliest date the United States will be formally removed is November 2020.¹¹³ The United States will continue to participate in international climate negotiations and the U.S. Senate Appropriations Committee chose to continue to fund the United Nations' climate change body overseeing the Paris Agreement.¹¹⁴ Thus, the withdrawal process is largely a symbolic gesture by the United States.

The Paris Agreement requires best efforts through Nationally Determined Contributions (NDC),¹¹⁵ which means it requires preparation, communication, and maintenance of NDCs the state *intends* to achieve.¹¹⁶ While the Paris Agreement brought together almost 200 countries and regional economic integration organizations¹¹⁷ to combat and adapt to climate change,¹¹⁸ the major drawback of the Paris Agreement is that it contains no enforcement measures.¹¹⁹ Speculation on what will happen in the event that the United States fails to comply or withdraws from the Paris Agreement has ensued with consideration such as trade wars, individual government or multiple governments' trade sanctions, and carbon tariffs.¹²⁰

The need for an agreement on climate change mitigation is great, but there is also a need to go back to enforcement mechanisms to avoid more consequences. "The usual attitude is to call for extensive regulation and then be quite content with the emergence of regulatory instruments which remain merely rhetorical—un-ratified conventions, disregarded resolutions, litigation

¹¹³ Ari Natter, *Trump Notifies UN of Paris Exit While Keeping Option to Return*, BLOOMBERG (Aug. 4, 2017), <https://www.bloomberg.com/news/articles/2017-08-04/trump-notifies-un-of-paris-exit-while-keeping-option-to-return>.

¹¹⁴ Valerie Volcovici, *Defying Trump, Senate Panel Approves Funding for U.N. Climate Body*, REUTERS (Sept. 8, 2017), <https://www.reuters.com/article/us-usa-congress-climatechange/defying-trump-senate-panel-approves-funding-for-u-n-climate-body-idUSKCN1BJ1LA>.

¹¹⁵ *The Paris Agreement*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/paris_agreement/items/9485.php (last visited Jan. 30, 2018).

¹¹⁶ *NDC Registry*, UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE, http://unfccc.int/focus/ndc_registry/items/9433.php (last visited Jan. 30, 2018).

¹¹⁷ *Paris Agreement – Status of Ratification*, *supra* note 112.

¹¹⁸ *The Paris Agreement*, *supra* note 115.

¹¹⁹ Coral Davenport, *Diplomats Confront New Threat to Paris Climate Pact: Donald Trump*, N.Y. TIMES (Nov. 18, 2016), <http://www.nytimes.com/2016/11/19/us/politics/trump-climate-change.html>; Andrew Revkin, *Probing Worst-Case Environmental Outcomes Under Trump and the G.O.P.*, N.Y. TIMES (Nov. 15, 2016), <http://dotearth.blogs.nytimes.com/2016/11/15/probing-worst-case-environmental-outcomes-under-trump-and-the-g-o-p/> ("[T]he climate system and energy needs of the planet's are not in anyone's direct control—that was what made Paris such a sort of flexible non-binding agreement in many ways and that's why it's vulnerable to this kind of fluctuation in policy in a country like the United States.").

¹²⁰ Davenport, *supra* note 119.

that only enriches the lawyers, ineffectual and in reality unenforceable prohibitions and even less respected general commands to do something.”¹²¹ While the Kyoto Protocol’s enforcement mechanisms have been criticized as requiring self-inflicted punishment that allows the escape of compliance,¹²² the WTO’s enforcement provides both non-self-inflicted punishment¹²³ and a strong incentive to participate.¹²⁴ Not only does the WTO provide an example for potential enforcement mechanisms, but also the UNFCCC and the WTO already cooperate with one another, knowing both regimes overlap.¹²⁵

2. WTO

The WTO is separated into topics with agreements (such as goods, services, intellectual property), and other topics generally (such as the environment).¹²⁶ The first three major topics correspond to major agreements, including the General Agreement on Tariffs and Trade (GATT), the General Agreement on Trade in Services (GATS), and the Trade-Related Aspects of Intellectual Property Rights (TRIPS), respectively.¹²⁷ While there is not yet a specific WTO agreement dealing with the environment,¹²⁸ these different agreements influence the protection and preservation of the environment. For example, Article XX of the GATT¹²⁹ is used frequently for environmental protection.¹³⁰ Further, “[t]he WTO contributes to protection and preservation

¹²¹ Wälde, *supra* note 6.

¹²² International law requires states’ consent. Hannah Chang, *A “Legally Binding” Climate Agreement: What Does It Mean? Why Does It Matter?*, STATE OF THE PLANET EARTH INST. COL. U. (Feb. 23, 2010), <http://blogs.ei.columbia.edu/2010/02/23/a-%E2%80%9Clegally-binding%E2%80%9D-climate-agreement-what-does-it-mean-why-does-it-matter/>.

¹²³ While consent is still required, states consent to punishment by another state or international body under the WTO and are willing to consent because of incentives to participate. *Id.*

¹²⁴ *Id.*

¹²⁵ *Activities of the WTO and the Challenge of Climate Change*, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/envir_e/climate_challenge_e.htm (last visited Jan. 30, 2018).

¹²⁶ *WTO Trade Topics*, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/tratop_e.htm (last visited Jan. 30, 2018).

¹²⁷ *Id.*

¹²⁸ Andrew Green & Tracey Epps, *Is There a Role for Trade Measures in Addressing Climate Change?*, 15 U.C. DAVIS J. INT’L L. & POL’Y 1, 2 (2008) (“Others have warned that the use of trade measures to force action on climate change could negatively impact global economic growth and even lead to a trade war.”).

¹²⁹ The chapeau to Article XX requires that “countries may use trade measures to promote the objectives listed in Article XX, but must not do so in a way that is arbitrary or unjustifiable, or disguised restrictions on international trade.” HUNTER, SALZMAN & ZAELEKE, *supra* note 107, at 1284.

¹³⁰ ALEXANDRE KISS & DINAH SHELTON, *GUIDE TO INTERNATIONAL ENVIRONMENTAL LAW* 242, 243–45, 249 (2007). “[M]easures to conserve exhaustible natural resources, whether living or non-living, may fall within Article XX (g).” This is demonstrated by the Tuna-Dolphin and Shrimp-Turtle cases. See Appellate Body Report, *United States-Import Prohibition of Certain Shrimp and Shrimp*

of the environment through its objective of trade openness, through its rules and enforcement mechanism, through work in different WTO bodies, and through ongoing efforts under the Doha Development Agenda.”¹³¹ The Doha Development Agenda, also known as the Doha Round,¹³² was formed to “improve the trading prospects of developing countries”¹³³ and “includes specific negotiations on trade and environment and some tasks assigned to the regular Trade and Environment Committee.”¹³⁴

In 2014, negotiations for the Environmental Goods Agreement (EGA) began among ministers and state officials from eighteen participants, representing forty-six WTO members.¹³⁵ During the past negotiations, the EGA participants “engaged in negotiations to slash duties on products used in a variety of environmentally-related functions including: generating clean and renewable energy; improving energy and resource efficiency; reducing air, water and soil pollution; managing solid and hazardous waste; noise abatement; and monitoring environmental quality.”¹³⁶ The United States¹³⁷ is a

Products, WTO Doc. WT/DS58/AB/R, 38 ILM 118 (1999), reprinted in JANIS & NOYES, INTERNATIONAL LAW CASES & COMMENTARY, *supra* note 2, at 423, 427; John H. Knox, *The Judicial Resolution of Conflicts Between Trade and Environment*, 28 HARV. ENVTL. L. REV. 1, 41 (2004) (“[The Appellate Body] allows the chapeau to justify unilateral measures—even a unilateral measure identical in many respects to the law that led to the Tuna-Dolphin decisions—as long as they are applied flexibly and in connection with good-faith efforts to reach a multilateral agreement.”); see also HUNTER, SALZMAN & ZAELEKE, *supra* note 107, at 1284–86 (“[Noted trade scholar John Jackson] argues that the Shrimp/Turtle decision’s reliance on the chapeau language served as: a constitutional door opener for approaches that require a broader perspective than just the four corners of the very extensive GATT/WTO treaty language. This consideration of non-trade policy goals in juxtaposition with the trade goals (in Shrimp/Turtle) then led logically to the Appellate Body’s inference that it had to ‘balance’ various goals.”).

¹³¹ *Trade and Environment*, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/envir_e/envir_e.htm (last visited Jan. 30, 2018).

¹³² *The Doha Round*, WORLD TRADE ORG., https://www.wto.org/english/tratop_e/dda_e/dda_e.htm (last visited Jan. 30, 2018) (“The Doha Round is the latest round of trade negotiations among the WTO membership. Its aim is to achieve major reform of the international trading system through the introduction of lower trade barriers and revised trade rules The Round was officially launched at the WTO’s Fourth Ministerial Conference in Doha, Qatar, in November 2001. The Doha Ministerial Declaration provided the mandate for the negotiations, including on agriculture, services and an intellectual property topic, which began earlier.”).

¹³³ *Id.*

¹³⁴ *Trade and Environment*, *supra* note 131.

¹³⁵ *Progress Made on Environmental Goods Agreement, Setting Stage for Further Talks*, WORLD TRADE ORG. (Dec. 4, 2016), https://www.wto.org/english/news_e/news16_e/ega_04dec16_e.htm.

¹³⁶ *Id.*

¹³⁷ The USTR, under President Barack H. Obama, participated in negotiations during the World Trade Organization (WTO) Doha negotiations. *Weekly Trade Spotlight: Trade and Climate Change*, USTR TRADEWINDS BLOG (Dec. 16, 2009), <https://ustr.gov/about-us/policy-offices/press-office/blog/2009/december/weekly-trade-spotlight-trade-and-climate-change>.

member of the WTO¹³⁸ and a participant in the EGA.¹³⁹ While the United States' involvement in past negotiations invigorates a global solution surrounding renewable energy, the new uncertainty discussed in Part I(A) creates the need for forward-thinking, creative solutions to ensure negotiations continue.

If the Doha Development Agenda negotiations and the EGA fail, “[t]he WTO system, as it stands, could, and does, accommodate *bona fide* non-discriminatory measures that promote the scale-up and take-up of renewable energy. . . . That said, while the system, as it stands, is considerably flexible towards externalities such as environmental protection objectives, further trade liberalization remains the system’s principal objective.”¹⁴⁰ Without further Doha Development negotiations and the EGA, a conflict could arise between more environmental regulations in different countries¹⁴¹ and free trade.¹⁴² If there are stronger regulations, then there could be less importation because the importation may be detrimental to the environment.¹⁴³ On the other hand, the WTO’s trade liberalization allows for the exceptions mentioned in Article XX as a way to provide more flexibility to environmental causes.¹⁴⁴ Because of the concerns between the WTO and the environment, debate has ensued on whether a World Environment Organization could be better suited to work with the WTO on these issues.¹⁴⁵ Whether world leaders develop a new treaty like the EGA, develop a new world organization, or develop multilateral environmental agreements, the United States needs an internal solution to be able to negotiate agreements with the rest of the world.

E. Impetus for a Treaty Based off an Interstate Agreement

While an interstate agreement among all of the states would be a significant accomplishment in itself, a treaty based off of an interstate agreement would allow the United States to address the threat of climate

¹³⁸ *Understanding the WTO: The Organization Members and Observers*, WORLD TRADE ORG., https://www.wto.org/english/thewto_e/whatis_e/tif_e/org6_e.htm (last visited Jan. 30, 2018).

¹³⁹ *Progress Made on Environmental Goods Agreement, Setting Stage for Further Talks*, *supra* note 135.

¹⁴⁰ Dr. Rafael Leal-Arcas & Andrew Filis, *Renewable Energy Disputes in the World Trade Organization*, 13 OIL, GAS & ENERGY L.J. 1, 49 (2015), <https://www.ogel.org/article.asp?key=3535>.

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ Appellate Body Report, *supra* note 130, at 423–34.

¹⁴⁴ KISS & SHELTON, *supra* note 130, at 242–50.

¹⁴⁵ *Compare* Steve Charnovitz, *A World Environment Organization*, 27 COLUM. J. ENVTL. L. 323, 326–27 (2002), *with* Jonathan Skinner, *A Green Road to Development: Environmental Regulations and Developing Countries in the WTO*, 20 DUKE ENVTL. L. & POL’Y F. 245, 269 (2010).

change on a large scale with more resources and as a world power.¹⁴⁶ Instead of regional agreements,¹⁴⁷ this treaty would provide a way for the United States to act and to encourage other countries to take action while allocating the risk internally by dividing the responsibility, breaking out of the past reluctance of the United States to enter into enforceable, binding treaties on climate change.¹⁴⁸ Other countries are influenced by the United States,¹⁴⁹ and some expect the United States to take action.¹⁵⁰ The proposal in this Comment attempts to find a practical way for the United States to join with other countries in creating future enforceable, binding international treaties addressing climate change.¹⁵¹

To illustrate, in the past, the lack of contributions by the United States for climate change policy led the French Prime Minister to propose taxation on imports and the Canadian opposition leader to recommend trade sanctions, alleging an illegal subsidy.¹⁵² Looking at greenhouse gas emissions in 2011, the United States accounted for sixteen percent of global carbon dioxide emissions from fossil fuel combustion and industrial processes, while the European Union accounted for ten percent, India for six percent, the Russian Federation for six percent, and Japan for four percent.¹⁵³ Because of the failure of the United States to adopt greenhouse gas emissions reduction obligations in the past, China opposed the United States' demands that China adopt emissions cuts, and instead relied upon norms of noninterference, sovereignty,

¹⁴⁶ *Best Countries: Power*, U.S. NEWS, <http://www.usnews.com/news/best-countries/power-rankings> (last visited Jan. 30, 2018).

¹⁴⁷ See *supra* Part I(C).

¹⁴⁸ *Supra* Part I(C). (“While the United States signed the Kyoto Protocol in 1998, the United States never ratified or entered it into force . . .”); see *Status of Ratification of the Kyoto Protocol*, *supra* note 107; see also Goldberg, *supra* note 103, at 669 (referring to the Climate Convention negotiations, “the commitment section of the Chairman’s text acknowledged the fact that a legally binding commitment to reduce greenhouse gases was beyond reach, if the U.S. was to be a signatory.”).

¹⁴⁹ See generally *Global Indicators Database: U.S. Influence on Country*, PEW RESEARCH CTR., <http://www.pewglobal.org/database/indicator/53/> (last visited Jan. 30, 2018).

¹⁵⁰ HUNTER, SALZMAN & ZAELKE, *supra* note 107, at 630, 677 (“Perhaps the loudest cheers during the entire Rio +5 Session greeted British Prime Minister Tony Blair when he indirectly criticized the United States by saying ‘some of the greatest industrialized nations’ have not lived up to their promises. He stated further that: ‘The biggest responsibility falls on those countries with the biggest emissions. . . . We in Europe have put our cards on the table. It is time for the special pleading to stop and for others to follow suit.’”).

¹⁵¹ A future enforceable, binding international treaty addressing climate change through renewable energy sources is the EGA. See *supra* Part I(D)(2).

¹⁵² Green & Epps, *supra* note 128, at 1.

¹⁵³ *Global Greenhouse Gas Emissions Data*, *supra* note 18.

and the right to development.¹⁵⁴ Without an enforceable and binding international climate regime, international emissions leakage and a race to the bottom could ensue where “operations would be outsourced from areas subject to emissions regulations to areas, such as China, where no such regulations apply.”¹⁵⁵

However, because greenhouse gas emissions affect the upper atmosphere and not one region, these emissions affect the common heritage of mankind in international law.¹⁵⁶ Further, the United Nations Environmental Programme (UNEP) held negotiations for the ozone regime as part of the common heritage of mankind.¹⁵⁷ Emissions affecting clean air and the protection of the environment could also pose customary law concerns. If the United States continues taking the place as the second top emitter¹⁵⁸ despite other countries’ disapproval, then cross-sections of the world may concur that the rate emitted by the United States is a violation of customary law. Although the United States accepted no obligation through action under international law, the United States signed and ratified the Paris Agreement that imposes this sense of obligation.¹⁵⁹ Further, clean air and the protection of the environment are a matter of *jus cogens erga omnes*, meaning they are so salient against everyone that countries cannot contract around them and a treaty that does so will be null and void. While the United States has been able to free-ride in the past, the Paris Agreement¹⁶⁰ propels the United States to mobilize and prepare for enforceable and binding agreements that will arise in the future, such as those contemplated by the EGA negotiations.¹⁶¹ Otherwise, the United States may be subject to penalties or liabilities by individuals¹⁶² or by other countries.

¹⁵⁴ Cinnamon Carlarne, *The Glue that Binds or the Straw that Broke the Camel’s Back?: Exploring the Implications of U.S. Reengagement in Global Climate Change Negotiations*, 19 TUL. J. INT’L & COMP. L. 113, 127 (2010).

¹⁵⁵ *Id.* at 113, 124.

¹⁵⁶ Common heritage of mankind encompasses Antarctica and the Antarctic Treaty, the outer space treaty, the law of the sea, and the ozone regime. JANIS & NOYES, *supra* note 2, at 683–700.

¹⁵⁷ *Id.* at 697. UNEP helped negotiate the ozone regime, including the Montreal Protocol with amendments adopted in London, Copenhagen, Montreal, and Beijing. *Id.* at 692–700. 694–697

¹⁵⁸ *Global Greenhouse Gas Emissions Data*, *supra* note 18.

¹⁵⁹ *Paris Agreement – Status of Ratification*, *supra* note 112.

¹⁶⁰ *Id.*

¹⁶¹ *See supra* Part I(D)(2).

¹⁶² Jaclyn Lopez, *The New Normal: Climate Change Victims in Post-Kiobel United States Federal Courts*, 8 CHARLESTON L. REV. 113, 115 (2013) (“[A]rgued that between the UNFCCC, the Kyoto Protocol, and the Convention on Air Pollution, a customary international law has emerged reflecting that nations have a responsibility to address climate change. It argues that an [Alien Tort Statute (ATS)] plaintiff may at this point succeed where other ATS plaintiffs have failed because climate change is the result of transboundary harm, and the failure to address it is a sufficiently specific harm.”).

II. ANALYSIS

The proposal of this Comment first begins with an interstate agreement that enables the United States to enter future treaties while allocating risk internally. Consequently, this Comment first analyzes how the proposed interstate agreement functions. The interstate agreement interacts with current laws in the United States, requires states to act, may require congressional consent, and could rely on translocal organizations of government actors and uncooperative federalism. Then, this Comment concentrates on how the United States may join future treaties using the interstate agreement framework by obtaining senatorial consent or alternatives in the event the Senate does not grant consent.

A. *The United States and an Interstate Agreement*

1. *Potentially Implicated Laws in the United States*

a. *The Clean Air Act*

The Clean Air Act limits state power to regulate emissions by preempting the regulation of vehicle emissions with the intent to prevent a burden on interstate commerce.¹⁶³ However, the Environmental Protection Agency (EPA)¹⁶⁴ may allow a waiver if the state's action aligns with the Clean Air Act's intent from history and text, but not if the action is arbitrary and capricious, is not necessary to meet compelling and extraordinary conditions, or conflicts with Title 42, Section 7521(a) of the United States Code.¹⁶⁵ Therefore, an issue may arise requiring the EPA to administer a waiver to all of the states that volunteer to commit to an interstate agreement to the extent that state action implicates the Clean Air Act.¹⁶⁶

¹⁶³ John Stegman, *Cooperative State Cap and Trade to Mitigate Climate Change*, 55 SANTA CLARA L. REV. 215, 230–32 (2015).

¹⁶⁴ *Massachusetts v. E.P.A.*, 549 U.S. 497, 528 (2007) (holding that the Clean Air Act authorizes the EPA to regulate greenhouse gas emissions from vehicles if contributing to climate change).

¹⁶⁵ Stegman, *supra* note 163, at 230–31.

¹⁶⁶ *Utility Air Regulatory Grp. v. E.P.A.*, 134 S.Ct. 2427, 2442–43 (2014) (holding that the EPA's interpretation of the Clean Air Act unreasonable when the EPA subjects stationary sources to Prevention of Significant Deterioration permitting requirements on the sole basis of a source's potential to emit greenhouse gases).

b. Commerce

Because the proposal suggests states should join together to incentivize renewable energy sources¹⁶⁷ and commit to a treaty for the future, both the Commerce Clause and the dormant foreign Commerce Clause are implicated. First, the interstate agreement proposal must allow incentives for states to join without discriminating against or placing undue burdens on the states that do not volunteer for the interstate agreement in order to prevent a violation of the Commerce Clause. Because the exact proposals among states depend on each state's environmental department's or health department's assessment for how much energy the state can produce with renewable energy and how the state is willing to incentivize renewable energy sources, issues arising from the Commerce Clause are hard to pin down. However, each state has the opportunity to join this agreement. The proposal suggests no exact standard but allows for flexibility based on each state's plausible contribution in terms of the specific cost-benefit analysis the state faces. When the state is acting as a market participant rather than as a market regulator, the Dormant Commerce Clause does not bar a state's different treatment of in-state and out-of-state interests.¹⁶⁸ Therefore, a burden on interstate commerce remains possible but unlikely.

2. Congressional Consent

This Comment's proposal suggests an interstate agreement among states willing to take on more responsibility and to commit to an international treaty, with consent from Congress.¹⁶⁹ When President Barack H. Obama introduced the carbon-market bill, the House passed the bill but the Senate failed to

¹⁶⁷ Renewable energy sources may have a substantial impact on interstate commerce by individual states and cumulatively among states due to the influence of consumption of energy from other sources. U.S. CONST. art. I, § 8, cl. 3; *Wickard v. Filburn*, 317 U.S. 111, 131–33 (1942). Under the *Lopez/Morrison* factors, energy production is an economic activity, the jurisdictional hook between different states emerges within the agreement to regulate incentives for renewable energy production, deals with a national problem needing a national solution, has a direct effect on interstate commerce, and would create a comprehensive scheme of regulation. *United States v. Morrison*, 529 U.S. 598, 609–17 (2000); *United States v. Lopez*, 514 U.S. 549, 559–68 (1995).

¹⁶⁸ The Dormant Commerce Clause protects Congress's authority to regulate and allows Congress to regulate by empowering the states to do so as fit, restoring power that the Dormant Commerce Clause took away. U.S. CONST. art. I, § 8, cl. 3; *South-Cent. Timber Dev., Inc. v. Wunnicke*, 467 U.S. 82, 82–83 (1984).

¹⁶⁹ Interstate action requires congressional consent. U.S. CONST. art. I, § 8, cl. 3.

approve it,¹⁷⁰ wanting states to act instead. An example of state action and a model for this proposal is the Great Lakes-St. Lawrence River Basin Water Resources Compact (the Compact), which was established as state and federal law after each state legislature ratified the Compact and Congress consented.¹⁷¹ The Compact created an agreement for management to protect the Great Lakes-St. Lawrence River Basin while also allowing each state¹⁷² to enact programs and laws to protect the Basin.¹⁷³ Because this interstate agreement is voluntary, congressional approval treats the states equally.¹⁷⁴

3. *Voluntary State Action*

As discussed in Part I(C), states already enter into interstate agreements for renewable energy. In this proposal, states are volunteering together to lead efforts of the United States to reform the promotion of renewable energy as interstate action because “[f]ederal climate policy will be most successful if it is designed with the relative strengths of each level of government in mind.”¹⁷⁵ Since states will volunteer to an agreement with one another and with the United States, conflicting issues between state law and the interstate agreement and treaty are not anticipated, but the agreements would take precedent over state law.¹⁷⁶ While states may continue to act, the protection of the natural environment is a national interest,¹⁷⁷ which justifies Congress approving interstate agreements and approving a treaty. Although there is precedent which suggests individual states may not be bound by an international agreement entered into by the United States but not given domestic force, that is not the situation proposed here.¹⁷⁸ Here, the states that agree to take action

¹⁷⁰ Robinson Meyer, *How Obama Could Lose His Big Climate Case*, THE ATLANTIC (Sept. 29, 2016), <http://www.theatlantic.com/science/archive/2016/09/obama-clean-power-plan-dc-circuit-legal/502115/>.

¹⁷¹ *Great Lakes-St. Lawrence River Basin Water Resources Council*, GREAT LAKES COMPACT COUNCIL, <http://www.gslcompactcouncil.org> (last visited Jan. 30, 2018).

¹⁷² States include Illinois, Indiana, Michigan, Minnesota, New York, Ohio, Pennsylvania, and Wisconsin. *Id.*

¹⁷³ *Id.*

¹⁷⁴ Because this would be an agreement among states, it would not violate the Constitution. U.S. CONST. art. I, § 9 (declaring that no preference will be given by a regulation of commerce of one state over another).

¹⁷⁵ *Climate Change 101: State Action*, CTR. FOR CLIMATE AND ENERGY SOL. 1, 8 (Jan. 2011), <https://www.c2es.org/docUploads/climate101-fullbook.pdf>.

¹⁷⁶ *Missouri v. Holland*, 252 U.S. 416, 431–35 (1920).

¹⁷⁷ *Id.* at 435 (dealing with migratory birds as a national interest.).

¹⁷⁸ In *Medellin v. Texas*, the Supreme Court decided the state of Texas was not bound when the International Court of Justice (ICJ) asserted jurisdiction since the ICJ only has jurisdiction in disputes against states and Texas was not a party to the dispute. *Medellin v. Texas*, 552 U.S. 491, 497–500, 508–12 (2008) (asserting Article 59 of the ICJ statute).

will enter into an agreement among other states and the U.S. federal government, thus resolving the states' consent to a dispute resolution mechanism. Further, the President would need specific authority to implement a treaty in opposition to state law in a non-self-executing treaty.¹⁷⁹

4. *Translocal Organizations of Government Actors & Uncooperative Federalism*

Although congressional approval for interstate agreements¹⁸⁰ is technically required, these approvals may not be enforced. In the event that congressional approval is not obtained and states take voluntary action to create interstate agreements, translocal organizations of government actors (TOGA) and uncooperative federalism theories provide other ways to address federalism.

TOGA consists of local-level public officials¹⁸¹ who act while mirroring “layers of the federal system” and crisscross the vertical and horizontal relationships among states.¹⁸² For example, translocal action creates a de facto transnational alliance where mayors and governors among several cities and states take action and enter into agreements, thus “undermin[ing] essentialist categorizations of the subject-matter competencies of local and of national governments.”¹⁸³

While some sovereigntists¹⁸⁴ believe transnational agreements of the sort proposed belong in the exclusive domain of the national government, others, like the proponents of TOGAs, believe these agreements are not truly national and should be resolved through different venues and levels of government.¹⁸⁵ Because this proposed solution relies heavily on each level of government, TOGAs could provide an alternate route to authorize the proposed solution.

Otherwise, without authorization, to conform with the proposed solution, states will push uncooperative federalism. “Uncooperative federalism occurs

¹⁷⁹ *Id.* (President George W. Bush instructed a state court to comply with the ICJ's ruling by rehearing cases, but the Supreme Court held the President needed specific authority to implement a treaty in opposition to state law.).

¹⁸⁰ U.S. CONST. art. I, § 10, cl. 3.

¹⁸¹ Symposium, *Ratifying Kyoto at the Local Level: Sovereignism, Federalism, and Translocal Organizations of Government Actors (TOGAS)*, 50 ARIZ. L. REV. 709, 711–13 (2008) (written by Judith Resnik, Joshua Civin & Joseph B. Frueh).

¹⁸² *Id.*

¹⁸³ *Id.* at 711.

¹⁸⁴ *Id.* at 712 (“[L]egal and political doctrines that we collectively refer to as “sovereignism” seek to essentialize a problem as if it naturally belonged to a particular level of government”).

¹⁸⁵ *Id.*

when . . . states implementing federal environmental law use that power to push federal authorities to take a new position”¹⁸⁶ and generally, in practice, when “states use their power as federal servants to resist, challenge, and even dissent from federal policy.”¹⁸⁷ Although the Supreme Court consistently condemns commandeering and favors preemption, proponents of uncooperative federalism insist that the Court is wrong¹⁸⁸ and “would push the Court to tolerate a degree of conflict between such laws and their federal counterparts”¹⁸⁹ along with “greater federal-state integration.”¹⁹⁰ Therefore, although the Supreme Court has not yet approved this theory, uncooperative federalism¹⁹¹ provides a way for states to continue to push the proposed solution to increase renewable energy sources.

B. *The United States and a Treaty*

As discussed in Part I(E), a treaty after an interstate agreement would effectuate climate change reform with the United States as a leader. For the treaty, the dormant foreign Commerce Clause imposes restrictions on states’ ability to interfere in foreign commerce.¹⁹² The federal government regulates foreign trade by speaking with “one voice.”¹⁹³ So, federalism limits states’ attempts to legislate respecting foreign affairs, and most commentators agree that the United States should speak with one voice for foreign affairs¹⁹⁴ with the President as the sole organ or representative to foreign nations.¹⁹⁵ While wide powers are given to the President to enter into international treaties, the President must have the consent of two-thirds majority of the Senate.¹⁹⁶

¹⁸⁶ Jessica Bulman-Pozen & Heather K. Gerken, *Uncooperative Federalism*, 118 YALE L.J. 1258–59 (2009).

¹⁸⁷ *Id.* at 1307.

¹⁸⁸ *Id.* at 1259.

¹⁸⁹ *Id.* at 1303.

¹⁹⁰ *Id.* at 1297.

¹⁹¹ *Id.* at 1256–1310.

¹⁹² Welton, *supra* note 97.

¹⁹³ In *Japan Line, Ltd. v. City of Los Angeles*, a “state tax resulted in double taxation and impeded the federal government’s ability to speak with ‘one voice’ in regulating foreign trade.” *Japan Line, Ltd. v. City of Los Angeles*, 441 U.S. 434, 450–51 (1979); Welton, *supra* note 97.

¹⁹⁴ JANIS & NOYES, *supra* note 2, at 239–84; *Explore: Earth Minute Videos*, *supra* note 21.

¹⁹⁵ *United States v. Curtiss-Wright*, 299 U.S. 304, 318–22 (1936) (explaining the President is better able than Congress to judge conditions that exist in foreign nations, is afforded substantial discretion and wide latitude in those decisions, and acts based on congressional resolution, but also with the advice and consent of the Senate).

¹⁹⁶ U.S. CONST. art. II, § 2; Congress regulates commerce with foreign nations. U.S. CONST. art. I, § 8; *Dames & Moore v. Regan*, 453 U.S. 654, 668–69 (1981) (validating Youngstown); *Youngstown Sheet & Tube Co. v. Sawyer*, 343 U.S. 579, 662–63 (1952) (discussing that presidential power is highest with congressional support).

Although treaties are, in principal, self-executing by virtue of Article VI,¹⁹⁷ the American Restatement of Law states that a treaty envisioning future conduct will not be self-executing, and senatorial consent is needed for such a treaty.¹⁹⁸

While a treaty becomes equivalent to federal law¹⁹⁹ and different states will have different obligations under this proposal, because the agreement last in date is the ruling law, Congress could promulgate law to bind states to certain standards after signing a treaty. The order of the process would first be an interstate agreement, a treaty, and then an agreement showing that the treaty will enforce the interstate agreement. However, much like the TOGAs and uncooperative federalism discussed *supra* Part II(A)(4), if a treaty becomes impossible, then the states will use the examples of other interstate agreements set forth in Part I(C) and international agreements set forth in Part I(D) to continue involvement in an agreement with other countries.

III. SOLUTION

A. Proposal

The question thus becomes how to best reconcile the need for manageable negotiations with the need for holistic thinking.²⁰⁰ The relevant science is complex . . . and the costs and benefits of various strategies to address climate change have proved highly contentious.²⁰¹

To address climate change and energy independence through agreements on renewable energy production, both a regional and a holistic solution are necessary. By first making an interstate agreement more specific to each state, each state's department of the environment or public health²⁰² determines the

¹⁹⁷ U.S. CONST. art. VI.

¹⁹⁸ *Dames & Moore v. Regan*, 453 U.S. at 654, 680 (citing the Restatement (Second) of Foreign Relations Law of the United States § 213 (1965)).

¹⁹⁹ U.S. CONST. art. VI (Supremacy Clause); *Foster & Elam v. Neilson*, 27 U.S. 253, 254 (1829) (explaining a non-self executing treaty requiring future acts requires a legislative act executed before rule for the court); *Ware v. Hylton*, 3 U.S. 199, 277 (1796) (discussing that the Constitution prevails over a treaty, a treaty and federal law are of equal status and the one dated later prevails, and a treaty prevails over state law).

²⁰⁰ David D. Caron, *Protection of the Stratospheric Ozone Layer and the Structure of International Environmental Lawmaking*, 14 HASTINGS INT'L & COMP. L. REV. 755 (1991), in JANIS & NOYES, INTERNATIONAL LAW CASES AND COMMENTARY, *supra* note 2, at 684, 692.

²⁰¹ JANIS & NOYES, INTERNATIONAL LAW CASES AND COMMENTARY, *supra* note 2, at 699.

²⁰² *Health and Environmental Agencies of U.S. States and Territories*, ENVTL. PROT. AGENCY, <https://www.epa.gov/home/health-and-environmental-agencies-us-states-and-territories> (last visited Jan. 30, 2018).

feasibility of renewable energy production from a cost-benefit analysis, comparing the costs of climate change²⁰³ in the future and the benefit of producing renewable energy for energy independence.²⁰⁴ The states that choose to participate with more stringent emissions standards and high production of renewable energy sources will be hubs for climate change reform in the United States. Once each state determines the amount of renewable energy the state can produce, the state will choose how to commit resources along with the other states that also choose to create an interstate agreement, with the intent of creating a treaty in the future. This proposal calls for congressional approval to hold the states accountable to each other and to the United States. However, if congressional approval is not obtained, the states will employ theories such as TOGAs and uncooperative federalism. Either with Congress's approval or TOGAs and uncooperative federalism, the interstate agreement's accountability and enforceability framework for each state will be one of the following methods: tax subsidies,²⁰⁵ regulatory approaches,²⁰⁶ or cap-and-trade programs.²⁰⁷

After the interstate agreement has been formed, this Comment proposes that the United States will be able to enter into treaties on climate change as a nation while allocating the risk to each state internally based on each state's commitment under the interstate agreement. For the United States to enter into a binding, enforceable treaty with foreign countries, senatorial consent is required before the President may ratify the treaty.²⁰⁸ A binding and enforceable treaty, similar to the Kyoto Protocol but with enforcement

²⁰³ Kingson, *supra* note 65; see BERGSTROM & RANDALL, *supra* note 41, at 221–22 (“Regardless of whether BCA is used as a filter, a ranking device, or a contribution to an informal and multidimensional information system, it carries some imperative or suggestive force.”).

²⁰⁴ See *Energy Analysis: Fact Sheet Series on Financing Renewable Energy Projects: Power Purchase Agreement Checklist for State and Local Governments*, *supra* note 55.

²⁰⁵ BERGSTROM & RANDALL, *supra* note 41, at 307, 309–10 (“Tax subsidy approaches attempt to restore efficiency by manipulating the price of residuals[, and] provide a continuing incentive for improved abatement [of emissions] performance.”).

²⁰⁶ *Id.* at 309–11 (“Regulatory approaches directly or indirectly attack the quantity of residuals released [I]n the case of the tax, all unabated emissions are taxed. On the other hand, with a regulatory approach, there is no incentive for abatement beyond that required by the standard.”).

²⁰⁷ *Id.* at 309–14 (“Cap-and-trade programs use government authority to establish the total quantity of residuals, but use markets to allocate residuals production among the various potential polluters [T]he pollution control agency determines the total permissible emissions of a given pollutant in a geographic region—this is the “cap” [T]he pollution permits would be freely transferable—this is the “trade” component This trade component encourages innovation in pollution abatement, because innovators are rewarded by income from the sale of permits no longer needed.”).

²⁰⁸ Frederic L. Kirgis, *International Agreements and U.S. Law*, AM. SOC'Y OF INT'L LAW (May 27, 1997), <https://www.asil.org/insights/volume/2/issue/5/international-agreements-and-us-law>.

mechanisms more like the WTO, prevents unrealistic expectations and provides a practical, working solution instead of unmet pledges.²⁰⁹ While this treaty will bind the United States, each state that participates in the interstate agreement will be bound to both other states and the United States.²¹⁰ Under this proposal, states will enter an agreement to indemnify the United States if the targets not met in the interstate agreement cause the United States to breach a binding, enforceable treaty.

Therefore, among the states that agree to this proposal, each level of government will contribute to reducing the contribution to climate change. The local government will provide information to determine how the state will contribute. The state will perform the cost-benefit analysis of entering into an interstate agreement and treaty.²¹¹ The United States will take the responsibility of uniting the states to enter into agreements with other nations. Thus, the United States will continue as a leader of innovation and escape any liability previously discussed²¹² from not participating in climate change reform.

B. Remaining Challenges

Because many environmental problems are of a global nature,²¹³ it may be necessary to prevent a free rider problem where “one . . . receives the benefit of a good without contributing to its costs.”²¹⁴

The proposal this Comment suggests is not a perfect plan but a creative solution for the United States to participate in global climate agreements and

²⁰⁹ Scott Barrett, *Climate Treaties and The Imperative of Enforcement*, OXFORD REV. OF ECON. POL'Y (2008), http://ycsg.yale.edu/sites/default/files/files/barrett_OxREP.pdf; Citelli, Barassi & Belykh *supra* note 38, at 10; Coral Davenport, *Paris Climate Deal Passes Milestone as 20 More Nations Sign On*, N.Y. TIMES (Sept. 21, 2016), http://www.nytimes.com/2016/09/22/world/americas/climate-change-paris-agreement-united-nations-ban-ki-moon.html?_r=0.

²¹⁰ By the states consenting to enforcement mechanisms in the interstate agreement for the future treaty, *Medellin v. Texas* issues should not arise. *Medellin v. Texas*, 552 U.S. 491, 497–500, 508–12 (2008) (discussing that the International Court of Justice does not have jurisdiction against a U.S. state, but only the United States as a state).

²¹¹ Different states have different cost-benefit analyses based on the costs from threats from climate change and the benefits from the amount of renewable energy that may be produced due to land suitability. *See DOE to Invest up to \$2.3 Million to Identify Renewable Energy Zones in Western States*, U.S. DEPT. OF ENERGY, <https://energy.gov/articles/doe-invest-23-million-identify-renewable-energy-zones-western-states> (last visited Jan. 30, 2018); Kingson, *supra* note 65; *see also Climate Change 101: Understanding and Responding to Global Climate Change: State Action*, *supra* note 175.

²¹² *See supra* Part I(E).

²¹³ HUNTER, SALZMAN & ZAEKE, *supra* note 107, at 1–15.

²¹⁴ BUTLER, DRAHOZAL & SHEPHERD, *supra* note 40, at 26, 627 (“Public goods and commodities that generate external benefits offer people the opportunity to become free riders.”).

promote less controversy within Congress.²¹⁵ As such, this proposal faces two main challenges. First, voluntary assent is necessary for states to comply with an interstate agreement and for the United States to join an enforceable, binding treaty. Second, for states, the capacity for renewable energy may not correlate with state officials or state legislatures' policies on energy.²¹⁶

First, because states consent to join the interstate agreement and the Senate and the President consent to a treaty, economic concerns may hinder consent.²¹⁷ Appropriate consent may depend on Pareto efficiency²¹⁸ rather than Kaldor-Hicks efficiency.²¹⁹ Leakage—when a state may have other priorities and not enough resources to deal with the problem so that the externality being avoided is not offset—leads to nonparticipation which makes the state less likely over time to participate while enjoying the benefits of other states and participating as a free-rider.²²⁰ The beneficiaries pay for the benefits of restricting activity rather than forcing payment for the external costs of activities,²²¹ which will only continue if the marginal payment yields more in benefits from controlling externalities.²²²

²¹⁵ Meyer, *supra* note 170; *see also* Barrett, *supra* note 209; Coral Davenport & Eric Lipton, *How G.O.P. Leaders Came to View Climate Change as Fake Science*, N.Y. TIMES (June 3, 2017), www.nytimes.com/2017/06/03/us/politics/republican-leaders-climate-change.html (describing the current controversy regarding climate change in Congress).

²¹⁶ For example, Texas' governor has called on the EPA to refrain from issuing new ozone standards, but Texas also has a great capacity for renewable energy sources like wind. *See* Press Release, Governor Abbott Meets With Senators McConnell, Cornyn And Cruz To Discuss Texas Response to EPA Overreach, *supra* note 16; *see also* Jude Clemente, *The Great Texas Wind Power Boom*, FORBES (Oct. 11, 2016), <http://www.forbes.com/sites/judeclemente/2016/10/11/the-great-texas-wind-power-boom/#2654d3ac192b>.

²¹⁷ Jonathan Wiener, *Global Environmental Regulation: Instrument Choice in Legal Context*, 108 YALE L.J. 677, 743–44, 767 (1999) (“[T]he Pareto-improving approach would assign burdens in proportion to national net benefits of cooperation.”). This section assumes that economic concerns drive state action rather than a sense of morality.

²¹⁸ *Id.* at 743, 767 (“[T]he Pareto-improving approach would assign burdens in proportion to national net benefits of cooperation.”). *See also* BERGSTROM & RANDALL, *supra* note 41, at 221–22 (“A potential Pareto-improvement (PPI) (see Chapter 8) is a change that could make, after compensation, at least one person better off and no one worse off. In other words, if there were sufficient gains to compensate all losers to the extent of their self-evaluated losses and still have some gains remaining, the change would be judged a PPI. Clearly, the PPI criterion is identical to the maximum value of social product criterion (see Chapter 8).”)

²¹⁹ Wiener, *supra* note 217, at 703 (“[T]he Kaldor-Hicks test: Aggregate benefits must exceed aggregate costs (so that winners gain enough to be able to compensate losers, although such compensation need not actually occur”).

²²⁰ *Id.* at 747–48.

²²¹ *Id.* at 752–53.

²²² *Id.* (“Under the Voluntary Assent voting rule, regulatory instruments must instead follow a “Beneficiaries Pay Principle.”).

As Professor [Robert] Dorfman puts it, the crucial “complication” of international environmental problems is that “the world is divided into entities called ‘sovereign nations,’ each of which is entitled to use, or misuse, the transnational commons in whatever way it considers advantageous, unless it agrees voluntarily to forgo some or all of these rights.” If the status quo represents a property rule to emit, then the victim (the “beneficiary”) must negotiate to purchase the entitlement at a price high enough to cover the source’s cost of abatement.²²³

Therefore, assuming economic concerns predominantly drive states to act rather than a sense of moral obligation, individual states and the United States collectively consenting to this proposal along with the expenses for participation may prove to be a daunting impediment.

Second, a state’s renewable energy production does not necessarily correlate with the state’s renewable energy policies or incentives.²²⁴ For example, California is a leader in renewable energy but still produces a smaller percentage of renewable energy out of all energy production than some other states.²²⁵ Because the proposal suggests an increase in renewable energy sources, the willingness of leaders and legislatures of state governments to act²²⁶ in accordance with the proposed solution may be more of a benefit to the state than the ability of the state to produce renewable energy.²²⁷ Divided states or states where the population approves of the interstate agreement but the state officials or legislature choose not to act in accordance with the

²²³ *Id.* at 769–70.

²²⁴ While Texas is the number one producer of energy from wind turbines, Texas’ current and past governors deny climate change. Richard Martin, *In Texas Oil Country, Wind Is Straining the Grid*, MIT TECHNOLOGY REVIEW (Aug. 6, 2016), <https://www.technologyreview.com/s/602112/in-texas-oil-country-wind-is-straining-the-grid/>. See generally *Renewable Energy Production by State*, *supra* note 3; *U.S. Overview*, *supra* note 3; Irina Ivanova, *The Future of Renewable Energy in Texas*, MONEYWATCH (July 27, 2017), <https://www.cbsnews.com/news/texas-is-leading-the-way-in-renewable-energy/>; Ryan Koronowski & Tiffany Germain, *Here’s What Every Governor Thinks About Climate and Clean Energy*, THINKPROGRESS (Jan. 26, 2015), <https://thinkprogress.org/heres-what-every-governor-thinks-about-climate-and-clean-energy-473eee930193#.13sru4rq5>.

²²⁵ *Renewable Energy Production by State*, *supra* note 3.

²²⁶ *State Legislation from Around the Country*, CTR. FOR CLIMATE AND ENERGY SOL., <https://www.e2es.org/us-states-regions/key-legislation> (last visited Jan. 30, 2018).

²²⁷ Some states are more energy-rich than others, and as long as the state is striving for an increase in renewable energy, the state should be able to join this proposal. See *Renewable Energy Production by State*, *supra* note 3; see also *How You Can Stop Global Warming*, NAT. RESOURCES DEF. COUNCIL (July 17, 2017), <https://www.nrdc.org/stories/how-you-can-stop-global-warming>; *U.S. Overview*, *supra* note 3.

proposal²²⁸ could pose an impediment to the interstate agreement. Even if this happens, if some states commit that are not regionally connected, such as California and New York, then the United States will still have a greater voice in international affairs regarding renewable energy sources and climate change.

CONCLUSION

While climate change remains a political debate in the United States, allocating risks to states that want the United States to participate in international climate change reform could pave the way for the United States to be a leader in climate change reform instead of continually displaying reluctance to address climate change. Under this proposal, the individual states in the United States that understand the importance and urgency behind addressing the effects of climate change commit to individualized standards through an interstate agreement. The United States will then use the interstate agreement to determine the United States' capacity to enter enforceable, binding treaties in the future. If an individual state does not comply with the commitment, the state will be held accountable to other states and the United States for a breach, although the United States will still be held accountable to other countries. The United States' willingness to enter into treaties from this allocation of risk will allow for better international relations since the United States will contribute to climate change reform, meeting other countries' expectations.

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²²⁸ See Coral Davenport, *Clean Energy 'Moving Forward' Despite Trump's E.P.A. Pick*, *Experts Say*, N.Y. TIMES (Dec. 8, 2016), <http://www.nytimes.com/2016/12/08/us/politics/trump-climate-epa-coal-jobs.html> (describing the complexity of politics regarding renewable energy and the coal industry); Davenport & Lipton, *supra* note 215.

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