CHAMBER OF COMMERCE OF THE UNITED STATES OF AMERICA

February 27, 2019

The Honorable Frank Pallone Chairman Committee on Energy and Commerce U.S. House of Representatives

The Honorable Paul Tonko Chairman Subcommittee on Environment and Climate Change U.S. House of Representatives The Honorable Greg Walden Ranking Member Committee on Energy and Commerce U.S. House of Representatives

The Honorable John Shimkus Ranking Member Subcommittee on Environment and Climate Change U.S. House of Representatives

Dear Chairman Pallone, Ranking Member Walden, Chairman Tonko, and Ranking Member Shimkus:

We welcome this opportunity to submit this correspondence for the record of the hearing entitled, "We'll Always Have Paris: Filling the Leadership Void Caused by Federal Inaction on Climate Change."

The Chamber takes a great deal of interest in the work of the UN Framework Convention on Climate Change (UNFCCC) and is an official UNFCCC observer. We make several points.

- Global climate change is among the most complex challenges facing governments and the businesses community. The Chamber recognizes that the climate is changing, that humans are contributing to these changes, and that these changes pose risks. The question for businesses and policymakers is how to best manage these risks while still maintaining U.S. global economic leadership.
- Technology and innovation offer common ground for climate solutions. Addressing climate change is primarily a technology challenge. A realistic and resilient climate policy should focus on creating technological solutions that can thrive in global commercial markets. The United States, therefore, should build on its leadership role in advanced, game-changing technologies. The business community will continue to serve as the key driver and incubator for innovation and technology advancement. It is also important to support a vibrant scientific enterprise more broadly.
- The Paris Agreement fulfills the Durban Platform's goals of an outcome with legal force, as it contains many legally-binding "shall" provisions, including committing the Parties to make future, more ambitious non-binding mitigation commitments and to provide financing and technology assistance.

- The binding aspects of the Paris Agreement imply implementing legislation and regulation potentially affect every sector of the U.S. economy. An agreement with such far-reaching consequences, if it is to be considered binding on future administrations and Congresses, should have been undertaken with the input of Congress.
- It is important to distinguish between the Paris Agreement, and the separate U.S. government pledge that accompanied it. The Obama Administration's pledge of a 26% to 28% reduction in total net greenhouse gas (GHG) emissions from the 2005 level by 2025 was completely and the Obama Administration lacked a specific plan to achieve it. This and any future pledges should be developed through consultation with and approval of Congress.
- A review of the Paris emission pledges show that they are very uneven, with a handful of developed countries being responsible for nearly all of the actual emission reductions while many other countries pursue "business as usual."
- The United States has a huge energy-price advantage over many of its competitors. The uneven nature of the emissions goals, however, could raise U.S. energy prices and lead to carbon leakage to other countries with fewer environmental controls.

Introduction and Background

The Chamber has for years supported international cooperation to address climate change, and there are many aspects of the Paris Agreement that are improvements over previous efforts such as the Kyoto Protocol, particularly its bottom-up vs. top-down approach. The Chamber has, however, expressed reservations about the process by which the Obama Administration committed the United States to the Paris Agreement without Congressional or stakeholder participation or input.

The UNFCCC² was adopted in 1992 and entered into force in 1994. It was one of three conventions—the other two cover biodiversity and desertification--agreed to at the 1992 Earth Summit in Rio de Janeiro, Brazil.

The ultimate goal of the UNFCCC, found in Article 2, is the "stabilization of greenhouse gas concentrations in the atmosphere at a level [undefined] that would prevent dangerous anthropogenic interference with the climate system." This goal should be "achieved within a time frame that would allow ecosystems to adapt naturally top climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."

¹ See for example: Testimony of Karen A. Harbert U.S. House of Representatives Select Committee on Energy Independence and Global Warming. February 9, 2009. Available at:

 $[\]underline{\text{https://www.globalenergyinstitute.org/testimony-karen-harbert-international-climate-negotiations-house-select-committee.}$

² UN. 1992. "United Nations Framework Convention on Climate Change." Available at: http://unfccc.int/files/essential background/background publications htmlpdf/application/pdf/conveng.pdf.

More than 190 governments are Parties to the UNFCCC. The U.S. Senate gave its advice and consent to ratification of the agreement in 1992 by voice vote. This consent, however, came with the understanding that any future agreement pursuant to the UNFCCC that included emissions target and timetables would be subject to the Senate's advice and consent.³

Since 1995, the Conference of the Parties (COP) to the UNFCCC has met annually, and in December 2015, the 21st meeting of the COP took place in Paris, France to complete a new agreement.

From the very beginning, the structure of the UNFCCC has virtually guaranteed gridlock. Consider the notion of historical responsibility, which plays an oversized role in the dynamics between and among developed, emerging, and developing country Parties. Developing countries assert that since developed countries bear "historical responsibility" for most of the build-up of atmospheric carbon dioxide, they bear a greater responsibility to reduce emissions and to provide finance for reductions in developing countries.

Historical responsibility buttresses the UNFCCC principle of "common but differentiated responsibilities and respective capabilities" under which, ". . . developed country Parties should take the lead in combating climate change and the adverse effects thereof." That is, developing countries are not expected to do as much as developed countries, which have greater economic and technological capabilities to curb emissions.

The principle of common but differentiated responsibilities is on full display in the 1997 Kyoto Protocol, which only saddles developed countries with binding obligations to reduce emissions. (Although the Clinton Administration signed the Kyoto Protocol, it never sent it to the Senate for its advice and consent.)

Over the years, however, it has become readily apparent that developed countries alone cannot reduce global emissions by themselves—all countries have to participate. Developing countries, however, have been reticent to take on any substantial obligations for the reasons cited above and because economic development remains their priority. Paris was supposed to be the first agreement that would bring developing countries into the fold as full partners.

The first cracks in this UNFCCC wall separating developed from developing countries appeared in the Bali Roadmap⁵ that emerged from the UNFCCC talks in Indonesia in 2007, where developing countries agreed to consider "nationally appropriate mitigation actions" that are "measurable, reportable, and verifiable." Bali began a two-year process to strengthen the international response to climate change through the "full, effective and sustained

³ U.S. Senate. 1992. Senate Executive Report No. 102-55. 102nd Congress, 2nd Session.

⁴ UNFCCC. 1998. "Kyoto Protocol to the United Nations Framework Convention on Climate Change." Available at: http://unfccc.int/resource/docs/convkp/kpeng.pdf.

⁵ UNFCCC COP. 2007. "Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007." FCCC/CP/2007/6/Add.1*. Available at: http://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf.

implementation of the Convention through long-term cooperative action, now, up to and beyond 2012, in order to reach an agreed outcome and adopt a decision." This process was to culminate with the agreement of a new, comprehensive international treaty (or treaties) at COP-15 in Copenhagen, Denmark at the end of 2009.

In the months leading up to COP-15, it became apparent that the Parties would not be able to achieve a comprehensive treaty. With a treaty clearly out of reach, the leaders from about 30 countries negotiated a deal, the Copenhagen Accord,⁶ outside the UNFCCC process.

This short-circuiting of the formal UN process was received with suspicion by many developing countries, which saw it as an attempt by the "big" countries to by-pass the UN process to strike a backroom deal that would be forced on the COP for its rubber stamp. It did not work out that way. Instead of agreeing to the Accord, the COP decided to simply "take note" of it.

Nevertheless, the Accord did break some new ground with its call on countries—developed, emerging, and developing alike—to make bottom-up, voluntary emission pledges through 2020. More than 60 countries plus the European Union eventually made commitments of widely varying quality and ambition. Major aspects of the Copenhagen Accord were brought formally into the UNFCCC in Cancún, Mexico the following year.⁷

The Durban Platform for Enhanced Action,⁸ which was adopted at COP-17 in 2011, charged the Parties to adopt a "protocol, another legal instrument or an agreed outcome with legal force" at COP-21 and for it to "come into effect and be implemented from 2020." The Parties at COP-17 approved the establishment of the Ad Hoc Working Group on the Durban Platform for Enhanced Action to shepherd such an agreement to a conclusion no later than the end of 2015.

Four years later, representatives of nearly 200 countries met at COP-21 in Paris and concluded a new post-2020 climate change deal. The 29 articles (12 pages) of the agreement and the 140 paragraphs (19 pages) of the decision include provisions covering broads issues areas, including but not limited to: objectives, mitigation, forests and land use, international carbon markets, adaptation, loss and damage, finance, technology development and transfer, capacity building, transparency of action and support, a global assessment of progress, and implementation and entry into force.

⁶ UNFCCC COP. 2009. "Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009." FCCC/CP/2009/11/Add.1. Available at: http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf.

⁷ UNFCCC COP. 2010. "Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010." FCCC /CP/2010/7/Add.1. Available at: http://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf#page=2.

⁸ UNFCCC COP. 2011. "Report of the Conference of the Parties on its seventeenth session, held in Durban from 28 November to 11 December 2011." FCCC/CP/2011/9/Add.1. Available at: http://unfccc.int/resource/docs/2011/cop17/eng/09a01.pdf.

⁹ UNFCCC COP. 2015. "Adoption of the Paris Agreement." FCCC/CP/2015/L.9/Rev.1. Available at: https://unfccc.int/resource/docs/2015/cop21/eng/109r01.pdf.

In many ways, the Paris Agreement could be described as a more comprehensive and robust version of the Copenhagen Accord. The Copenhagen and Cancún meetings put in place many elements of the Paris Agreement—non-binding, bottom-up national commitments, a global (if undefined) temperature goal, increased levels of finance and technology transfer, and recognition of the importance of measuring, reporting, and verifying implementation of national commitments. The recently concluded meeting at COP-24 in Poland completed the "rulebook" that will guide implementation of the Paris Agreement.

A Technology Challenge

The Chamber believes there is much common ground on which all sides of this discussion could meet to craft a practical, flexible, and durable approach to address the challenges presented by climate change.

At its most fundamental level, reducing carbon dioxide emissions from energy is a technology challenge that, as a 2002 article in *Science* famously noted, "cannot be simply regulated away." Neither can it be negotiated away.

Indeed, technology and innovation offer the best solution for managing climate risks and reducing emissions across the United States and the globe. We believe that instead of regulating our way to lower emissions, a realistic, effective, and lasting climate policy should focus on creating innovative technological solutions that can thrive in commercial markets.

The United States should build on its leadership role in advanced, game-changing technologies, such as advanced nuclear, energy storage, and carbon capture and storage/utilization, by supporting a broad-based public and private sector technology portfolio. It is also important to support a vibrant scientific enterprise more broadly. The Chamber will continue to be active in calling for sounds policies and greater resources to accelerate these advancements as much as possible.

The business community will continue to serve as the key incubator for innovation and technology advancement. As new technologies are able to compete on price, reliability, and scalability, the range of politically acceptable and durable policy options will broaden.

Does the Paris Agreement Satisfy the Durban Platform's Call for an Outcome with Legal Force?

Parties agreed at COP-17 that the outcome of the Durban Platform would be "a protocol, another legal instrument or an agreed outcome with legal force" by the end of 2015. The Obama

http://www.sciencemag.org/cgi/content/abstract/298/5595/981?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=existing+technologies+can+contribute&searchid=1&FIRSTINDEX=0&resourcetype=HWCIT.

¹⁰ M.I. Hoffert *et al.* 2002. "Advanced Technology Paths to Global Climate Stability: Energy for a Greenhouse Planet," *Science* 298. Available at:

Administration made it quite clear before the Paris talks, however, that it had no intention of sending the Paris Agreement to the Senate for its advice and consent.

Indeed, at the 11th hour of the Paris negotiations, Secretary of State John Kerry made a point of insisting on replacing the word "shall" with "should" in the opening sentence of Article 4, Paragraph 4, which sets out the overall emissions goal of developed and developing countries:

Developed country Parties shall should continue taking the lead by undertaking economy-wide absolute emission reduction targets. 11

If the word "shall" had remained in that sentence, the administration believed that it would have triggered unavoidably the need for Senate advice and consent of the agreement based (presumably) on the "target and timetable" language the Senate included in its report language accompanying its 1992 vote on the UNFCCC.

Nevertheless, there are other provisions in the agreement that legally commit the United States to actions that, either individually or collectively, arguably could be claimed to require Article II advice and consent.

Article 4 covering Mitigation adds detail. Paragraph 2 of this section leaves no room for doubt that Parties are obligated to make future mitigation commitments and to implement domestic policies and measures:

Each Party shall prepare, communicate and maintain successive nationally determined contributions that it intends to achieve. Parties shall pursue domestic mitigation measures, with the aim of achieving the objectives of such contributions [emphasis added].

The next paragraph also makes clear that each Party also is required legally to increase its level of ambition:

Each Party's successive nationally determined contribution will represent a progression beyond the Party's then current nationally determined contribution and reflect its highest possible ambition, reflecting its common but differentiated responsibilities and respective capabilities, in the light of different national circumstances [emphasis added].

Paragraph 9 states further:

Each Party shall communicate a nationally determined contribution every five years in accordance with decision 1/CP.21 and any relevant decisions of the

¹¹ The use of the world "shall" in this sentence in the penultimate agreement draft was blamed on ostensibly a clerical error by the UNFCCC Secretariat. See: J. Warrick. 2015. "How one word nearly killed the climate deal." *The Washington Post*. Available at: https://www.washingtonpost.com/politics/anatomy-of-a-deal-how-the-climate-accord-was-won--and-nearly-lost/2015/12/13/2a9b3416-a1df-11e5-b53d-972e2751f433 story.html.

Conference of the Parties serving as the meeting of the Parties to the Paris Agreement and be informed by the outcomes of the global stocktake referred to in Article 14 [emphasis added].

So, while targets and timetables are not included in the agreement *per se*, ¹² these provisions taken together unequivocally require future presidential administrations and Congresses to develop and put forward increasingly stringent targets and timetables according to a specific, open-ended timetable. This means, therefore, that parties have a legally binding obligation to make future commitments that, while not legally binding internationally, would necessarily entail many elements that would be legally binding domestically. Implementing those parts of the agreement obligating Parties to ratchet up of mitigation ambition would certainly involve enacting implementing legislation.

In addition to the Article 4 provisions on mitigation, the agreement includes other provisions with "shalls" that could, and most likely would, require legislation. Article 9 covering finance states: "Developed country Parties shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation in continuation of their existing obligations under the Convention."

The technology section (Article 10) notes that efforts to accelerate innovation "shall be, as appropriate, supported, including by the Technology Mechanism and, through financial means, by the Financial Mechanism of the Convention . . ."

Both of these provisions imply a legally-binding commitment on the part of the United States to make government funds available for these activities, funds that would require Congressional authorization and appropriation.

The Paris Agreement's Article 20 entry-into-force language certainly contemplates "ratification" or its equivalent. In fact, all but a handful of countries Party to the agreement went through a ratification process. The Obama Administration, however, opted for "acceptance," an option chosen by just five other countries. We noted in previous testimony to the House Committee on Science, Space, & Technology that without political backing from the Congress and stakeholders, the Agreement could not result in a politically durable climate policy.

The "acceptance" rather than the ratification of the Paris Agreement also raises issues about how it could be used by future administrations. For example, some legal analysts ¹³ have argued that the Paris Agreement could be used as a rationale for the Environmental Protection Agency to impose economy-wide GHHG regulations under section 115 of the Clean Air Act,

¹² Article 4, Paragraph 12 states that, "Nationally determined contributions communicated by Parties shall be recorded in a public registry maintained by the secretariat."

¹³ For example, "The success of the recent climate negotiations in Paris provides a strong basis for invoking a powerful tool available to help achieve the country's climate change goals: Section 115 of the Clean Air Act, titled 'International Air Pollution." See: Michael Burger (Lead Author). 2016. Legal Pathways to Reducing Greenhouse Gas Emissions under Section 115 of the Clean Air Act. Available at:

http://wordpress.ei.columbia.edu/climate-change-law/files/2016/06/Burger-et-al.-2016-01-Executive-Summary-Section-115-CAA.pdf.

which covers international air pollution. EPA can employ section 115 if the administrator determines that a foreign country "has given the United States essentially the same rights with respect to the prevention or control of air pollution occurring in that country by this section [i.e., section 115]." Congress must consider whether an agreement that has not been ratified by the Senate and an emissions pledge that has not be endorsed by the Congress constitutes sufficient legal justification for the assertion of broad regulatory authorities by administrative agencies, or is authorizing legislation necessary?

Uneven Paris Pledges Pose Competitiveness Concerns

The pledges under the Paris Agreement are none-binding. How those pledges—many of which are conditioned on financial support or technology transfer or both—are implemented by the Parties will be important part of the "stocktaking" review exercises envisaged by the Agreement.

To date, all but a few countries have submitted NDCs, but their quality, level of ambition, and completeness varies widely. ¹⁴ The Obama Administration's U.S. Paris pledge of a 26% to 28% reduction in net GHG emissions from the 2005 level by 2025 was completely unrealistic (as we have shown ¹⁵), and the administration had no plan to achieve it. While the NDCs are separate and distinct from the Paris Agreement, the Obama Administration would have been better served by reaching out to Congress.

To reduce GHG emissions appreciably, developing countries would have to take on meaningful commitments because they will be the source of future emissions growth. The International Energy Agency's (IEA) most recent "current policies" forecast for energy-related carbon dioxide emissions, for example, suggests developing countries will account for more than 100% of global increase—*i.e.*, 10 gigatons of the 9 gigaton global increase—in those emissions between 2017 and 2040 (excluding international bunkers). ¹⁶

Nevertheless, the differentiation between developed and developing countries remains evident in the NDCs, with all but a few developing countries opting for little beyond business as usual, and even then with conditions attached (usually involving the need for financial aid and technology transfer). The very large differences in the level of ambition are reflected in the very large differences in potential economic impacts.

An analysis of many NDCs by Dr. Keigo Akimoto of Japan's well-respected Research Institute of Innovative Technology for the Earth supports the idea that many large emerging economies, and some economies in transition, have committed to little more than business as

¹⁴ All of the NDCs cited in this testimony are available at the UNFCCC website here: http://www4.unfccc.int/submissions/NDC/Submission%20Pages/submissions.aspx.

¹⁵ See: S. Eule. 2015. Mind the Gap: The Obama Administration's International Climate Pledge Doesn't Add Up. Available at: https://www.globalenergyinstitute.org/mind-gap-obama-administrations-international-climate-pledge-doesnt-add.

¹⁶ IEA. 2018. World Energy Outlook 2018. Available at: http://www.worldenergyoutlook.org/.

usual.¹⁷ Figure 1 shows that under their respective NDCs, the marginal abatement cost for a ton of carbon dioxide, using a least cost approach, would be \$0 to \$4 in China, India, Ukraine, Turkey, South Africa, and Russia—essentially business as usual—while the cost to meet the Obama Administration's pledge would have been an estimated \$85 per ton in 2025 and for Japan a whopping \$378 per ton in 2030.

Although the Paris Agreement was supposed to shrink to the developed-developing country divide, that divide still exists and will exist for some time.

Take for example the NDCs being offered up by some of the world's largest and growing emitters of GHGs:

- China—the world's #1 GHG emitter —pledged to: (1) peak its carbon dioxide emissions at (an unidentified level) "around" 2030; (2) reduce its carbon dioxide emissions intensity (emissions per unit of GDP) 60% to 65% from 2005 to 2030; and (3) increase its share of non-fossil fuel energy consumption to "around" 20% of total demand by 2030. Data from the Putting China's 2005 to 2030 emissions intensity pledge in perspective, International Energy Agency (IEA) data¹⁸ show that from 1980 to 2005, the previous 25-year period, China reduced its emissions intensity about 62%, a rate within the range it's proposing for 2005 to 2030. In other words, business as usual.
- India—the world's #3 GHG emitter—has committed to reducing its GHG emissions intensity 33% to 35% between 2005 and 2030s, about one third of which was reached by 2010. We estimate that if it meets this goal, its emissions jump of at least 65% by 2030. Importantly, India's NDC is conditional on financial and technology assistance that it estimates could run to \$2.5 trillion out to 2050. (In the meantime, India announced shortly after Paris that it intends to double domestic coal output over the next five years to fuel economic expansion.
- The Russian Federation—the world's #5 GHG emitter—has proposed a 25% to 30% reduction in net GHG emissions by 2030 from a 1990 baseline. Data submitted by Russia to the UNFCCC, however, show that in 2015, the country's net GHG emissions were 48% below their 1990 level. This means Russia actually is proposing to *increase* its emissions in 2030 from 700 million to 900 million TCO2 eq. compared to the 2015 level.

Widely different ambitions among the pledges pose significant implications for competitiveness, investment, supply and value chains, and operations and could lead to carbon-leakage in countries with large trade-exposed industries, something governments and businesses will have to navigate.

¹⁷ K. Akimoto. 2015 "Measuring Emission Reduction Efforts of the NDCs and the Expected Global Emission Reductions and Economic Impacts." Presentation available at:

 $[\]underline{http://www.majoreconomies business forum.org/pdfs/Keigo Akimoto_RITE.pdf.}$

¹⁸ IEA. 2018. *CO2 Emissions From Fuel Combustion Highlights 2018*. Data available at: https://webstore.iea.org/Content/Images/uploaded/CO2%20Highlights%202018.xls.

380 Switzerland 378 Japan Bigger **EU28** 210 Canada Korea 95 New Zealand 85 United States Norway East Europe (Non-EU 58 54 Thailand Australia Mexico Kazakhstan Belarus Russia South Africa Turkey India Ukraine Smaller 0 China 0 50 100 150 200 300 350 400 CO2 marginal abatement cost (\$/tCO2)

Figure 1. International Comparison of CO₂ Marginal Abatement Costs (RITE DNE21+ Model)

Source: Kiego Akimoto. 2015. "Measuring Emission Reduction Efforts of the INDCs and the Expected Global Emission Reductions and Economic Impacts."
Research Institute of Innovative Technology for the Earth.

In closing, because business and industry will provide most of the investments, technology, and innovation needed to reduce global emissions, the voice of business is critically important as the Parties work to implement the Paris Agreement. America's business community is ready, willing, and able to provide the solutions that will continue to reduce emissions while growing the economy. Our companies and entrepreneurs will continue to lead by bringing innovation, technology, and ingenuity to this challenge, just as they have done with other environmental challenges. With a sensible policy environment that plays to America's strengths and business leadership, we can continue to make our economy cleaner and stronger by leveraging the America's edge in energy, technology, and innovation going forward.

Thank you for considering our perspective. We welcome the opportunity to serve as a resource to the subcommittee, the full committee, and the U.S. House of Representatives as you and your colleagues continue examining this important issue.

Sincerely,

Stephen Eule

Vice President for Climate & Technology,

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U.S. Chamber of Commerce