NOVEMBER 2017
IB: 17-11-A

ISSUE BRIEF

THE PARIS AGREEMENT ON CLIMATE CHANGE

The Paris Agreement requires all countries—developed and developing—to make significant commitments to address climate change. Countries responsible for 97 percent of global emissions have already pledged their Nationally Determined Contributions (NDCs) for how they will address climate change. Countries will revisit their current pledges by 2020 and, ideally, strengthen their emissions reduction targets for 2030. The Paris Agreement includes a stronger transparency and accountability system for all countries—requiring reporting on greenhouse gas inventories and projections that are subject to a technical expert review and a multilateral examination. Countries will continue to provide climate finance to help the most vulnerable adapt to climate change and build low-carbon economies. While the Paris Agreement does not "solve" climate change, it allows us to start the next wave of global climate actions, creating a virtuous cycle for more aggressive action in the decades to come.

In Paris on December 12, 2015, countries adopted an international agreement to address climate change that requires deeper emissions reduction commitments from all countries—developed and developing. Countries responsible for 97 percent of global emissions submitted their climate commitments prior to the conference. These commitments have been enshrined in over 160 countries with domestic ratification, acceptance, or approval. The agreement contains provisions to hold countries accountable to their commitments and mobilize greater investments to assist developing countries in building low-carbon, climate-resilient economies. Encouragingly, businesses, investors, states, provinces, cities, financial institutions, and others have also pledged actions to help governments implement the agreement and even exceed their commitments.

While the Paris Agreement does not "solve" climate change, it is a critical inflection point. It brings us much closer to a safer climate trajectory and creates an ambitious path forward for decades to come. Countries have put forth an agreement that helps strengthen national action by ensuring that the current commitments are the floor—not the ceiling—of ambition. The agreement will also help spur greater action by cities, states, provinces, companies, and financial institutions. The Paris Agreement has created a virtuous cycle of increased ambition over time.

"A great tide has turned. Finally the world stands united against the central environmental challenge of our time, committed to cutting the carbon pollution that's driving climate change. This agreement sets us on a course of verifiable gains we can build on over time. It provides real protection for people on the front lines of climate chaos. It speeds the global shift away from dirty fossil fuels and toward cleaner, smarter energy options to power our future without imperiling our world. And it sends a clear message to our children: we will not abandon you to pay the price for reckless habits that wreak havoc and ruin on our planet and lives. A crisis that took centuries to get here won't go away overnight. But climate change has met its match in the collective will of a united world. Our challenge now, in our country and all others, is to make good on the promise of Paris, by turning the action we've pledged into the progress we need."

– Rhea Suh, President, Natural Resources Defense Council[1]

WHAT ARE THE KEY ELEMENTS OF THE PARIS AGREEMENT?

The agreement in Paris was built on the foundations of the United Nations Framework Convention on Climate Change (UNFCCC) and the Copenhagen and Cancun Agreements. This new agreement has set countries' minimum obligations, implemented mechanisms to spur additional action in developing countries, supported the most vulnerable countries in addressing climate change, and established systems to hold countries to their commitments. The Paris Agreement will be strengthened over time using its solid framework.

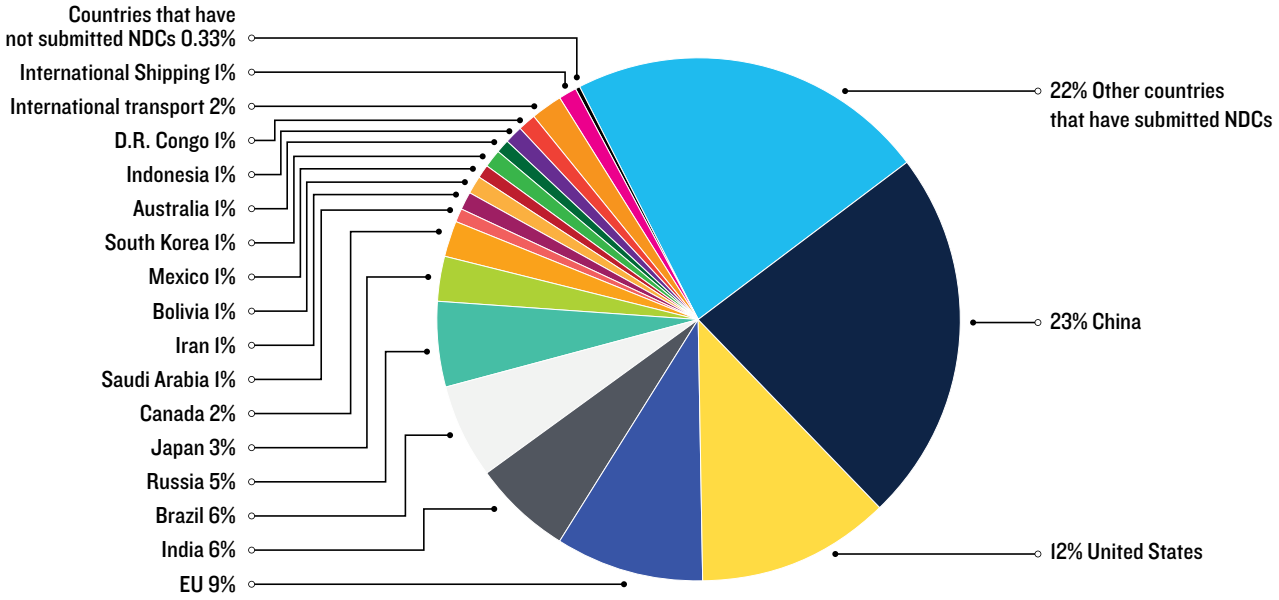
WHAT NEW EMISSIONS REDUCTION TARGETS HAVE COUNTRIES AGREED TO IMPLEMENT?

Countries responsible for more than 80 percent of global greenhouse gas emissions made specific commitments to reduce their emissions by 2020 as a part of the Copenhagen and Cancun agreements. The Paris Agreement includes commitments that go beyond 2020, reflecting a greater level of ambition than in the previous commitments.[2] Countries' emissions reduction commitments reflect their different levels of development and capabilities. For example, the United States and European Union have committed to economy-wide emissions reduction targets (e.g., cuts below 2005 levels), whereas developing countries and emerging economies have committed to targets that reflect their level of development and historic contribution to climate change (e.g., greenhouse gas intensity targets). The 192 countries responsible for more than 97 percent of the world's climate pollution have announced specific reduction plans also known as Nationally Determined Contributions (NDCs) (see Figure 1).[3] The Paris Agreement entered into force on November 4, 2016, one month after 55 parties representing 55 percent of global emissions joined. To date, 160 parties have formally joined the Agreement.

WILL THE AGREEMENT DRIVE EVEN GREATER ACTION IN THE YEARS TO COME?

Countries will need to re-visit their current pledges by 2020 and, ideally, strengthen their 2030 targets because they discovered that they can achieve more aggressive action than they envisioned at this moment. This will start a process in which countries outline their next set of commitments every five years—setting a framework for continuously ratcheting down emissions over time toward a long-term target of emissions neutrality. Beginning in 2018 and every five years thereafter, countries will have a chance to take stock of the aggregate effort of all national pledges to determine whether the world is on a path to keep the global average temperature to well under a 2 degrees Celsius rise from pre-industrial levels. This is one of the most critical outcomes of the Paris Agreement—a solid process for reassessing and deepening emissions reduction commitments every five years.

FIGURE I: SHARE OF GREENHOUSE GAS EMISSIONS BY COUNTRIES WITH CLIMATE TARGETS



Source: Natural Resources Defense Council. Countries' share of emissions was calculated as a share of the world total GHG emissions for 2012, as reported by EDGAR. Countries that have not submitted targets are: Libya, Syria, Nicaragua. (Syria has not joined the Paris Agreement.) Emissions Database for Global Atmospheric Research, "GHG (CO_2, CH_4, N_2O, F-gases) emission time series 1990-2012 per region/country," European Commission Joint Research Centre, http://edgar.jrc.ec.europa.eu/overview.php?v=GHGts1990-2012.

PARIS AGREEMENT: BUILDING UPON A HISTORY OF INTERNATIONAL AGREEMENTS

The United Nations Framework Convention on Climate Change (UNFCCC), formed in 1992 by 196 parties, set the ultimate objective to "stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system."[4] The world has come a long way since the inception of the UNFCCC, sometimes in fits and starts. In 2009, the Copenhagen climate change conference produced the Copenhagen Accord. This Accord was expanded and formally adopted in 2010 as the Cancun Agreements where dozens of countries—including the United States, China, European Union, and India—committed to reducing their emissions by 2020. Countries also agreed to a new set of mechanisms to help developing countries reduce emissions and adapt to climate change, as well as a new system to track countries' progress on their commitments. In 2011, climate negotiations in Durban, South Africa set the end of 2015 as the deadline for a new international agreement "applicable to all." The Paris Agreement has fulfilled this mandate to establish a post-2020 agreement.

HOW WILL THE AGREEMENT TRACK COUNTRY-LEVEL PROGRESS?

The Paris Agreement includes a stronger transparency and accountability system that holds governments accountable to their commitments. The new transparency regime is legally binding, and applies to all countries. Countries must report their greenhouse gas inventories and progress towards their emissions reduction targets every two years. The reports will also require reporting on adaptation and will provide assistance to developing countries that need help to improve their reporting. These national level reports will be subject to an independent "technical expert review." Countries will then be subject to a "multilateral examination" to consider progress toward their targets. These strengthened tools will shine a spotlight on whether countries are following through with their commitments as we will have publicly available and regular opportunities to track progress. These transparency and accountability tools will be aided by the powerful domestic motivation to follow through on their new commitments, since countries have realized that acting on climate change is in their own national interest.

HOW WILL DEVELOPING COUNTRIES BE ASSISTED IN REDUCING EMISSIONS AND ADAPTING TO THE IMPACTS OF CLIMATE CHANGE?

In Copenhagen, countries agreed to establish the multilateral Green Climate Fund (GCF) to help mobilize funding in developing countries to reduce emissions and adapt to the impacts of climate change. Nearly $11 billion has been pledged to the GCF from 31 countries, including a $3 billion pledge from the United States. In addition, countries agreed to help mobilize $100 billion by 2020 through public and private financing to assist developing countries in reducing emissions and adapting to climate change. These investments help spur additional global action on climate change and help countries address its devastating impacts.

The Paris Agreement further catalyzes action and implementation over time, as developed countries have agreed to continue the existing collective mobilization commitment on finance ($100 billion annually), through 2025. And prior to 2025, developed countries would set a new collective quantified goal of mobilizing at least $100 billion for climate finance. Other countries are encouraged to also help mobilize finance. To provide predictability on climate finance, developed countries will communicate every two years on projected levels of public climate finance for developing countries, while developing countries will report on climate finance on a voluntary basis. Regular updates send a signal for where low-carbon investments can be made, and the resources available to help the most vulnerable communities adapt to climate change.

WHAT ARE COUNTRIES' POST-2020 CLIMATE TARGETS?

Prior to the 2015 Paris Climate Conference, countries submitted their proposed climate commitments, including specific targets for emissions reductions. So far, 192 countries— accounting for 97 percent of global greenhouse gas emissions—have submitted their climate pledges.[5] These proposed commitments turned in to NDCs as soon as each country formally joined the Paris Agreement.

- **United States:** cut economy-wide emissions of greenhouse gas emissions by 26 to 28 percent below its 2005 level by 2025 and make best efforts to reduce its emissions by 28 percent.
- **China:** peak carbon emissions no later than 2030, increase non-fossil fuels to 20 percent of the energy mix, and reduce carbon emissions per unit of gross domestic product (GDP) by 60 to 65 percent from 2005 levels by 2030.
- **India:** reduce emissions intensity by 33 to 35 percent from 2005 levels by 2030, increase cumulative electric power installed capacity from non-fossil fuel energy resources to 40 percent by 2030, and create additional carbon sequestration of 2.5 to 3 billion tons of carbon dioxide equivalent by 2030.
- **Mexico:** cut greenhouse gas and short-lived climate pollutants 25 percent below business-as-usual (BAU) by 2030, implying a reduction of 22 percent for greenhouse gas emissions and 51 percent for black carbon.
- **European Union:** reduce emissions to at least 40 percent below 1990 levels by 2030 through only domestic measures.

- **Brazil:** reduce economy-wide greenhouse gas emissions by 37 percent below 2005 levels by 2025, increasing renewable resources to 45 percent of the energy mix by 2030, and increasing the share of non-hydropower renewables in the electricity mix to 23 percent by 2030.
- **South Korea:** reduce greenhouse gas emissions by 37 percent from BAU levels by 2030 across all economic sectors.
- **Indonesia:** cut emissions by 29 percent from BAU levels by 2030.
- **Japan:** reduce greenhouse gas emissions by 26 percent from 2013 levels by 2030.
- **Australia:** reduce economy-wide greenhouse gas emissions by 26 to 28 percent below 2005 levels by 2030.

WILL THESE ACTIONS ON CLIMATE CHANGE ACTUALLY BE IMPLEMENTED?

Since the 2009 Copenhagen Accord, nations have rolled up their sleeves and implemented domestic actions to move toward low-carbon economies, including renewable energy targets, cap-and-trade programs, and sector-specific policies. For example, more than 160 countries now have renewable energy targets and policies.[6] China has just announced a new set of domestic actions including plans for a national cap-and-trade program, and climate policies have been adopted in the vast majority of the world's major economies. Countries have realized that it is in their own interest to cut their carbon pollution. They have concluded that, far from destroying the economy, domestic climate action produces real benefits for their citizens, including new jobs, reduced poverty, and lower mortality rates. And as natural disasters increase in frequency and intensity, they have seen that not addressing climate change has real and lasting consequences.

THE PARIS AGREEMENT WON'T "SOLVE" CLIMATE CHANGE

While the Paris Agreement won't "solve" climate change, it puts us much closer to a safer trajectory and highlights the path forward. Before the Copenhagen Accord, we were potentially headed for an increase in global average temperatures of 5 degrees Celsius (9 degrees Fahrenheit) above pre-industrial levels by 2100. The commitments from the Copenhagen Accord were estimated to bring this temperature increase down to 3.6 degrees Celsius (6.5 degrees Fahrenheit). The commitments submitted in advance of the Paris climate summit put us on a path to a 2.7 degrees Celsius (4.9 degrees Fahrenheit) temperature rise by the end of the century, closer to the 2 degrees Celsius (3.6 degrees Fahrenheit) goal.

The Paris Agreement will now allow us to start the next wave of global climate actions. This agreement ensures that the national pledges are the floor—not the ceiling—of ambition. It will have five-year reviews under a single global transparency system with flexibility for developing countries that need it. It will spur countries to undertake even deeper cuts before 2030 and mobilize resources to help countries implement even stronger domestic reforms. Aggressive climate targets are still within reach if countries enact a virtuous cycle of ever more aggressive climate action as outlined in the Paris Agreement.[7] Now that we have the first global climate agreement with commitments from all countries, it is time to roll up our sleeves to ensure future cycles of climate commitments can become more and more ambitious over time.

ENDNOTES

1 Rhea Suh, "NRDC President: Climate Change has "Met its Match in the Will of a United World" Natural Resources Defense Council. December 12, 2015.http://www.nrdc.org /media/2015/151212.asp.

2 The Lima Decision from December 2014 set forth that these commitments will: "represent a progression beyond the current undertaking of that Party" (see para 10): United Nations Framework Convention on Climate Change, "Decisions adopted by the Conference of the Parties," Report of the Conference of the Parties, 20th sess., Lima, Peru, December 1-14, 2014, http://unfccc.int/resource/docs/2014/cop20/eng /10a01.pdf.

3 CAIT Climate Data Explorer, "INDC Dashboard", World Resources Institute, http://cait.wri.org/indc, (accessed June 6, 2017).

4 United Nations, "United Nations Framework Convention On Climate Change," United Nations, 1992, https://unfccc.int/resource/docs/convkp/conveng.pdf.

5 CAIT Climate Data Explorer, "INDC Dashboard", World Resources Institute, http://cait.wri.org/ind, (accessed June 6, 2017).

6 REN21, *Renewables 2015 Global Status Report*, REN21 Secretariat, 2015, www.ren21.net/status-of-renewables/global-status-report.

7 Climate Interactive conducted a study to show that in a "ratchet success" scenario, it would be possible to cut emissions to 1.8°C (3.2°F) of warming above pre-industrial levels. Under this scenario countries set in motion regularly more aggressive climate actions in the years to come. For more see: https://www.climateinteractive.org /wp-content/uploads/2015/12/Ratchet-Success-14-December-2015.pdf.