Is the Paris Climate Conference Already a Success?

By David Sandalow | July 14, 2015

June was a big month for climate diplomacy. So big, the 21st annual Conference of Parties to the U.N. Framework Convention on Climate Change, which will open with enormous media attention in Paris in late November, is already in part a success. Let's look at what happened and what it means.

1. China Submits Its Climate Plan

On June 30, the world's largest greenhouse gas emitter -- China -- released its climate action plan. The plan was released as Chinese Premier Li Keqiang arrived in Paris for a summit with French President Francois Hollande and then formally submitted to the U.N. Framework Convention on Climate Change, which is collecting climate action plans ahead of its Paris conference.[i]

The plan explains China's climate policies in considerable detail. Here are five highlights:

First, China reaffirmed the headline target it announced last fall during the summit between Chinese President Xi Jinping and US President Barack Obama – to peak carbon dioxide emissions around 2030. This was China's first-ever commitment to reduce absolute levels of carbon dioxide emissions. Previous Chinese targets had been framed in terms of reducing emissions per unit of GDP or energy per unit of GDP – important metrics but ones under which emissions could keep rising.

As Chinese analysts have pointed out, the 2030 peak means that China will begin reducing emissions at an earlier stage of economic development than either the EU or US. In 2030, China's per capita GDP is projected to be roughly $14,000. When the EU reached peak emissions in 1992, its per capita GDP was roughly $30,000. When the US reached peak emissions in 2007, its GDP per capita was roughly $50,000.[ii] The timing of China's emissions peak – as well as the level of that peak and the pace at which emissions decline afterward – will make a huge difference for the global climate.

Second, China supplemented this headline target with several other broad, economy-wide pledges.

- China reaffirmed a second target announced last fall – "to increase the share of non-fossil fuels in primary energy consumption to around 20%" by 2030. To meet this pledge, Chinese analysts project the country will need to add roughly 900 gigawatts of renewable and nuclear generating capacity in the next 15 years – roughly the same as China's installed thermal capacity today. Interestingly, leading Chinese analysts project that more than two-thirds of this new capacity will be in solar and wind.[iii] That will help drive down prices of solar and wind power globally.

- China also announced a new target -- to reduce carbon intensity 60-65% from 2005 levels by 2030. (Carbon intensity is defined as emissions of carbon dioxide per unit of GDP.) This new target is broadly consistent with China's other targets and builds on its 2009 pledge to reduce carbon intensity 45% from 2005 levels by 2020.

Third, China identified 110 policies it is implementing to reduce emissions and respond to climate change, including seven numeric targets. The policies include:

- "steadily implementing a nationwide emission trading system," building on the seven pilot emissions trading programs launched several years ago;
- achieving 200 GW of installed wind capacity by 2020 (total wind capacity in the US today is roughly 70 GW);[iv]
- achieving 100 GW of installed solar capacity by 2020 (total solar capacity in the US today is roughly 21 GW);[v]
- lowering coal consumption at new coal-fired power plants to 300 grams per kWh (the average for all US coal plants is roughly 475 grams per kWh);[vi]
- increasing the share of green buildings in new buildings to 50% by 2020; and
- developing nuclear power "in a safe and efficient manner."

The plan underscores the breadth of China's climate policy architecture. The policies described in China's climate action plan cut across many substantive areas, including energy, transportation, land use, agriculture, forestry, science, technology, statistics, accounting and public awareness. Many of the policies listed are in the nature of general aspirational goals (such as "to enhance education for all citizens on low-carbon way of life"), while some are quite specific (such as "to phase down the production and consumption of HCFC-22 for controlled uses, with its production to be reduced by 35% from the 2010 level by 2020 and by 67.5% by 2025 and to achieve effective control on emissions of HFC-23 by 2020"). Like the United States and European Union, China used its climate action plan to report on existing policies, not to announce new ones.

Fourth, China said its policies to mitigate climate change are driven not only by domestic factors but also "by its sense of responsibility to fully engage in global governance." At one level, this can be interpreted as rhetoric easily offered. Yet it reflects an evolution in the Chinese position. For years, China resisted international dialogue on its emissions levels, emphasizing that industrialized countries are by far the most significant cause of global warming. That became increasingly untenable as China became the world's largest emitter of heat-trapping gases. China's submission includes references to "common but differentiated responsibilities" – canonical language from the text of the 1992 Framework Convention on Climate Change concerning the relative responsibilities of industrialized and developing countries. Yet the plan also explicitly recognizes China's responsibilities as a member of the global community to help fight climate change.

Finally, Chinese officials released extensive analysis explaining its climate action plan.[vii] Leading officials from a government think tank released a paper that describes the basic assumptions and considerations behind the plan, summarizes trends in Chinese greenhouse gas emissions and examines the relationship between China's targets and the global goal of limiting warming to 2°C/3.6°F. The

paper provides evidence of the sophisticated analysis and modeling behind Chinese climate policymaking.

2. US and Brazil Announce a Climate Agreement

On June 30, US President Barack Obama and Brazilian President Dilma Rousseff capped a two-day summit with a headline announcement on climate change. Before getting into details, let's pause to recognize the significance of that last sentence. Climate change has not always been a top tier issue at Presidential summits. The US and Brazil have not always worked closely together on climate. Obama and Rousseff have had a strained relationship for several years, since reports that the U.S. National Security Agency spied on Rousseff and her aides. So the fact that President Obama and President Rousseff met, agreed on a climate announcement and then highlighted it required a number of barriers to be overcome.

What did they agree on? First and most important, that each country would "increase the share of renewables – beyond hydropower – in their respective electricity generation mixes to the level of 20% by 2030."

- In the United States, non-hydro renewables (mainly wind and solar) currently provide 7% of electric generation – a figure that will need roughly to triple in 15 years under the joint announcement. The rapidly falling price of solar power helps put that goal within reach, but achieving it will likely require full implementation of the President's Clean Power Plan as well as other policy tools such as strong state Renewable Portfolio standards, an extension of federal tax credits for solar and wind power, R&D investments at the US Department of Energy and procurement of renewable power by federal agencies.

- In Brazil, hydro power provides roughly 75% of electric generation. Non-hydro renewables (mainly biomass, with small amounts of wind and solar) currently provide roughly 10% – a figure that will need to double in 15 years. That will require significant increases in Brazil's installed base of wind and solar power in particular.[viii]

As part of the announcement, Brazil also pledged to restore and reforest 12 million hectares of forest by 2030 and "pursue policies aimed at eliminating illegal deforestation." Deforestation in Brazil has been averaging roughly 600,000 hectares per year[ix] and the Brazilian government is pledging to restore and reforest, on average, more than that (12 million hectares over 15 years equals 800,000 hectares per year). That said, the qualifiers preceding the pledge on eliminating illegal deforestation -- "pursue policies aimed at…" -- suggests something less than fierce determination. Yet given the enormous cultural sensitivity in Brazil around foreign interference in the Amazon, the fact that a statement on this topic was included in a joint announcement with the US should be welcomed. There may be room to strengthen the pledge on illegal deforestation in other contexts in the months ahead.

3. Pope Francis Speaks

On June 18, Pope Francis released a 180-page encyclical on climate change.[x] In a volume filled with reflections on science, technology, policy, diplomacy, morality and theology, the Pope embraces climate science, saying "a very solid scientific consensus indicates that we are presently witnessing a disturbing warming of the climatic system." (Para. 23). He issues a fervent plea to address climate change, calling it "a global problem with grave implications" (Para. 25) and frames climate change as a moral issue, focusing in particular on its impact on the poor.

Pope Francis also makes clear that he has his eye on the international climate negotiations. Early in his encyclical, he writes "I will advance some broader proposals for dialogue and action which would involve each of us as individuals, and also affect international policy." (Para. 15) The Pope devotes a full section of the encyclical to a "Dialogue on the Environment in the International Community." (Paras. 164-175) In this section, he writes "with regard to climate change, the advances have been regrettably few." (Para. 169.) In an apparent reference to the Paris climate conference, he writes "even as this Encyclical was being prepared, the debate was intensifying. We believers cannot fail to ask God for a positive outcome to the present discussions." (Para. 169)

The Pope's encyclical was sent to the roughly 400,000 Catholic priests around the world.[xi] It received enormous media attention, with extensive coverage on the front pages of newspapers and on TV news. (Google News lists more than 9000 entries in June for the words "Pope encyclical climate change.")

On June 18, the Pope also sent 63 tweets drawn from the text of his encyclical, including one that read "Climate change represents one of the principal challenges facing humanity in our day." The Pope has 6.5 million Twitter followers.

4. Other Developments

There were other climate diplomacy developments in June as well.

At the beginning of the month, leaders of the G7 industrialized countries (U.S., U.K., Germany, France, Japan, Italy and Canada) met in Elmau, Germany. In their Declaration, the leaders called for "decarbonisation of the global economy over the course of this century" – an objective never before embraced by those leaders. The 23-page Declaration also highlighted the Paris climate conference, stating on its first page that "2015 is a milestone year for international cooperation and sustainable development issues. The UN Climate Conference in Paris COP 21 is crucial for the protection of the global climate…"[xii]

Also at the beginning of the month, South Korea – the world's seventh largest greenhouse gas emitter – released four options for its 2030 emissions target. The options – which ranged from 15% - 31% below business-as-usual as estimated by a leading South Korean think tank – drew negative reactions from domestic and international commentators. Following a review of the options, as well as a call from President Obama to South Korean President Park Geun-hye, the South Korean government decided to adopt a more ambitious target -- 37% below business as usual projections by

2030. On June 30, South Korea formally submitted a climate action plan with that goal to the Framework Convention on Climate Change. [xiii]

As of the end of June, 44 countries had submitted climate action plans to the Framework Convention. Those countries represent roughly 55% of global emissions.[xiv]

In a letter released June 1, six major oil companies (BG Group, BP, Eni, Royal Dutch Shell, Statoil and Total) sent a letter to France's Foreign Minister Laurent Fabius and Christiana Figueres, Executive Secretary of the UN Framework Convention on Climate Change, calling for national and international carbon pricing. The companies stated that they already participate in carbon markets and apply shadow carbon pricing in their own operations, but believe carbon pricing policies are important. They wrote:

> "we call on governments, including at the UNFCCC negotiations in Paris and beyond to:
> - introduce carbon pricing systems where they do not yet exist at the national or regional levels
> - create an international framework that could eventually connect national systems."[xv]

5. Is the Paris climate conference already a success?

So what does all this mean for the Paris climate conference? It means that four months before its opening session, the Paris conference has already helped galvanize significant action to address climate change. That includes:

- a climate agreement between the US and China,
- a climate agreement between the US and Brazil,
- a historic climate statement by the Pope, and
- climate action plans from most of the world's largest emitters, including China, the U.S., the European Union and South Korea.

Would some of these have happened without the Paris climate conference on the horizon? Perhaps.

But consider the US-China climate agreement. When the leaders of the world's two largest economies meet, the agenda includes an enormous range of issues including cyber security, North Korea, Iran, the South China Sea, dollar-RMB exchange rates, trade disputes, a bilateral investment treaty and much more. Certainly climate change is important, but many issues compete for attention at a summit. Major international meetings such as the Paris conference help put climate change high on the agenda for heads of state.

The Paris conference was an important factor behind the U.S.-China climate agreement. Both countries had agreed to announce their post-2020 emissions goals in the run-up to the conference and likely saw advantages in making an early announcement. Indeed President Xi Jinping mentioned the Paris climate conference in announcing China's goals.[xvi] It's no coincidence that Premier Li Keqiang later released China's climate action plan, elaborating on China's emissions goals, on the day he arrived in Paris for a summit

The same is true of the U.S.-Brazil accord. When leaders from the two largest economies in the hemisphere meet, the agenda includes trade, investment, agriculture, Cuba, Venezuela, the U.N. Security Coucil and much more. Would climate change have emerged as a headline announcement without the Paris climate conference fast approaching? Perhaps, but the Paris conference helped make sure that climate change received attention.

The climate plan South Korea released in June is another example. South Korea (like other parties to the Framework Convention) agreed to submit a climate plan ahead of the Paris conference. That led the government to release options for emissions reduction goals, which led to public commentary as well as diplomatic engagement at the head of state level, resulting in a stronger reduction goal than any of the original options.

(History suggests such national climate goals make a difference. The Obama administration, for example, has worked hard to achieve the climate goal it announced in 2009 ahead of the Copenhagen climate conference, as have many other governments around the world.)

Even the Pope's encyclical appears to be in part due to the Paris conference. True, Pope Francis appears to care deeply about climate change, independent of any one meeting. But he mentions international climate negotiations several times in his encyclical, making clear that he's watching them with interest. It does not appear to be a coincidence that, after more than two years as the Holy Father, Pope Francis chose to release his encyclical five months before the Paris conference.

So is the Paris climate conference already a success? Yes in part.

The purpose of the U.N. Framework Convention on Climate Change – convener of the Paris conference -- is to prevent dangerous human interference with the climate system.[xvii] The Paris conference has already contributed to that objective in important ways, as developments during June demonstrate. If a conference of parties to the Framework Convention helps put climate change on the agenda of world leaders, motivates major global powers to reach bilateral climate agreements, spurs countries around the world to develop national climate action plans and plays a role in causing spiritual leaders to speak out on climate change, then that conference is having an impact.

Needless to say, the conference itself will address important issues. Those include procedures for reviewing and strengthening national climate action plans, how best to mobilize financing for developing countries and long-terms goals for fighting climate change. These matter.

But it would be a mistake to think about the Paris conference too narrowly, with a focus solely on the paper negotiated by national governments during the meeting. Of course, that paper matters. A strong agreement in Paris could make a big difference. But the broader impact of the meeting on national governments, businesses and public opinion is also of central importance.

That's especially so because the rules of the Framework Convention make large steps forward during its formal meetings unlikely. Like many U.N. bodies, the Framework Convention operates by "consensus," meaning all or almost all parties must agree before a decision is reached. That means more than 150 nations with vastly different backgrounds, national circumstances and ideologies must reach agreement before the Framework Convention can move forward. Getting 60 US Senators to agree on anything is hard enough. For the Framework Convention on Climate Change to take a decision, officials from the US, China, India, Russia, Germany, South Africa, Brazil, Venezuela and Vanuatu – among many others – must all reach agreement.

The Framework Convention's formal decisions will always be least-common-denominator products, unlikely to be adequate in light of the urgency of the climate threat.[xviii] But that doesn't mean the Framework Convention lacks impact.

In the decades ahead, change will not come solely, or even mainly, from the top down. Change will not come solely, or even mainly, from national governments acting together. A top-down institution such as the Framework Convention will never "solve" climate change at one of its annual conferences, but those conferences can make a difference. Indeed the next one already has.

In the decades ahead, transformational change will often come from the bottom up – from individuals, companies, universities, religious groups, cities and states, among many other actors. If the Paris conference can help inspire responses to climate change around the globe, then it is having an impact and, at least in part, succeeding.

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[i] The plans are labeled "Intended Nationally-Determined Contributions" or "INDCs" in the terminology of the Framework Convention.
[ii] See Fu Sha, Zou Ji and Liu Linwei, "An Analysis of China's INDC," China National Center for Climate Change Strategy and International Cooperation, 30 June 2015, https://gallery.mailchimp.com/d3bc64666dfd7124281abff35/files/Comments_on_China_s_INDC_01.pdf (Chinese GDP per capita in 2030 projected to be around $14,000);
US Department of Agriculture, Economic Research Service International Macroeconomic Data Set, http://www.ers.usda.gov/data-products/international-macroeconomic-data-set.aspx.
(China's GDP per capita in 2030 projected to be $15,930, EU-15 GDP per capita. in 1992 was $29,573, US GDP per capita in 2007 was $49,902, all in 2010 US$).
[iii] Fu Sha et al. (see note 2) at Figure 2.
[iv] American Wind Energy Association, "Wind Energy Facts at a Glance," http://www.awea.org/Resources/Content.aspx?itemNumber=5059 (US installed wind capacity in Q4 2014 was 66GW);

US Energy Information Administration (EIA), "Today in Energy," 18 December 2014, http://www.eia.gov/todayinenergy/detail.cfm?id=19251 (US installed wind capacity by end of 2015 projected to be 76 GW).

[v] Solar Energy Industries Association, "US Solar Market Insight," 9 June 2015, http://www.seia.org/research-resources/us-solar-market-insight (US installed solar capacity in Q1 2015 was 21 GW).

[vi] US EIA, "How much coal, natural gas, or petroleum is used to generate a kilowatthour of electricity?" 2 July 2, 2015, http://www.eia.gov/tools/faqs/faq.cfm?id=667&t=2 (On average, 1.05 pounds of coal used to generate 1 kWh of electricity in US).

[vii] Fu Sha, et al. (see note 2).

[viii] US EIA, "Today in Energy," 17 June 2014,http://www.eia.gov/todayinenergy/detail.cfm?id=16731 (75% of Brazil's electricity from hydro power);
US EIA, "Brazil Overview," 29 December 29, 2014, http://www.eia.gov/beta/international/analysis.cfm?iso=BRA.

[ix] Mongabay.com, "Calculating Deforestation Figures for the Amazon," http://rainforests.mongabay.com/amazon/deforestation_calculations.html.

[x] Pope Francis, "Laudato Si," 18 June 2015, http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.

[xi] Carol Glatz, "Vatican Statistics," Catholic Herald, 5 May 5 2014, http://www.catholicherald.co.uk/news/2014/05/05/vatican-statistics-church-growth-remains-steady-worldwide/ (414,313 priests in 2012).

[xii] "Leader's Declaration," G-7 Summit 7-8 June 2015, https://www.g7germany.de/Content/EN/_Anlagen/G7/2015-06-08-g7-abschluss-eng_en.pdf?__blob=publicationFile&v=3 .

[xiii] United Nations Framework Convention on Climate Change, "Country Brief 2014 – Republic of Korea," http://newsroom.unfccc.int/media/303967/country-profile-korea.pdf;
Seo Jee-yeon, "Korea Urged to Set Ambitious Target, Korea Herald," 24 June 2015, http://www.koreaherald.com/view.php?ud=20150624001204.

[xiv] UNFCCC, "INDCs as communicated by the Parties," http://www4.unfccc.int/submissions/indc/Submission%20Pages/submissions.aspx;
WRI Climate Analysis Indicator Tool, http://cait.wri.org/indc/.

[xv] UNFCCC Newsroom, "Six Oil Majors Say: We Will Act Faster with Stronger Carbon Pricing," 1 June 2015, http://newsroom.unfccc.int/unfccc-newsroom/major-oil-companies-letter-to-un/.

[xvi] Office of the Press Secretary, "Remarks by President Obama and President Xi Jinping in Joint Press Conference," The White House, 2 November 2015, https://www.whitehouse.gov/the-press-office/2014/11/12/remarks-president-obama-and-president-xi-jinping-joint-press-conference.

[xvii] UNFCCC Article 2, http://unfccc.int/resource/docs/convkp/conveng.pdf.

[xviii] With respect to the urgency of the threat, see the Intergovernmental Panel on Climate Change Working Group 2 Summary for Policymakers (2014) at p.13 (describing risk of death, injury, ill-health and disrupted livelihoods from extreme weather events, droughts, floods, sea-level rise, breakdown of food systems, loss of marine and terrestrial ecosystems, and more) -- http://www.ipcc.ch/pdf/assessment-report/ar5/wg2/ar5_wgII_spm_en.pdf .