



The Power of Optimism: The Paris Agreement and Road Ahead

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*“I am an optimist. It does not seem too much use being anything else.” –
Winston Churchill*

Pessimism and defeatism come easily when considering climate change. Yet two diplomatic triumphs in the past year highlight the power of optimism and determination.

US-China Climate Agreement

Consider first the [US-China climate agreement](#) announced by President Barack Obama and President Xi Jinping in Beijing in November 2014. In the run-up to their summit, odds were poor that the world’s two largest producers of heat-trapping gases could reach a deal to limit emissions. The two countries view each other with deep mutual suspicion. They disagree sharply on many issues, including cyber-security, currency values and the South China Sea. They bring starkly different perspectives to the issue of climate change, with US officials emphasizing the importance of limiting China’s emissions growth and Chinese officials emphasizing the United States’ historic responsibility for the problem.

Yet officials from both countries identified a potential strategic convergence. They persevered through months of challenging negotiations. In the end, these officials and their leaders produced an agreement with the most ambitious commitments either country had ever taken to limit emissions. Both countries followed up, in the months after, with important policies to implement their commitments.

An agreement of this kind can be explained in several ways. Such a deal would not be possible without a strong alignment of interests between the two countries. Yet that alignment alone is not sufficient for a diplomatic breakthrough. Such a deal also requires individuals within each government who believe an unlikely outcome is possible and are willing to take risks to achieve it. The optimism and determination that reflects are essential for the deal.

Paris Agreement

Next consider the agreement adopted last weekend at the 21st Conference of Parties to the UN Framework Convention on Climate Change (UNFCCC) in a suburb of Paris. An agreement of the UNFCCC requires unanimous or nearly unanimous approval by more than 190 countries – an absurdly difficult task. Every nation – rich and poor, fossil fuel importers and fossil fuel exporters, big polluters and small island nations at threat of extinction – must agree on a text. In the US Senate frustrations often run high because 60 out of 100 Senators must agree before an action is taken. The

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challenge in the UNFCCC is an order of magnitude greater. Before this weekend, the UNFCCC had not produced a landmark, widely hailed agreement for 18 years.

Yet officials from around the world saw a strong common interest in reaching agreement, despite their widely varying backgrounds. They persevered through years of difficult negotiations. Thanks to their belief a deal was possible and tireless efforts, the Paris Agreement was adopted Saturday in Le Bourget, just over 10 miles from the Eiffel Tower.

The Paris Agreement will not save the world, but it provides an important foundation for the global response to climate change. The fact an agreement was reached – that more than 190 nations put aside differences in the face of a common threat – sends an important signal to businesses and capital markets around the world. (More than 150 heads of state traveled to Le Bourget to open the Paris conference, showing solidarity in the face of both terrorism and climate change.)

At the core of the Paris Agreement is a system of national climate action plans to be submitted by all nations on a regular basis. The first round of these plans were submitted this year by more than 180 nations. Those plans focused leaders in capitals around the world on policies to limit emissions and respond to climate change. In many capitals, the plans were the most ambitious ever developed. Now those plans will be revised on a regular basis, with each plan more ambitious in reducing emissions than the one before it. Procedures for transparent review of those plans will be developed. The Parties will meet regularly to take stock of their progress.

The fact that all countries will submit plans is significant. The Paris Agreement calls on developed countries to “continue to take the lead” in cutting emissions, but does not include the rigid distinctions between developed and developing countries that helped doom the Kyoto Protocol. While recognizing the principle of “common but differentiated responsibilities” set forth in the UNFCCC, the Paris Agreement (in the words of legal scholar Dan Bodansky) “completes the paradigm shift” to a common global framework for addressing climate change.

On the crucial issue of finance, the Paris Agreement calls on developed countries to “continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels.” It encourages developing countries to do the same. The text states that amounts mobilized by developed countries should grow in the years ahead. Neither specific amounts nor specific countries are named. These provisions are a sensible compromise that allowed negotiators to resolve one of the most challenging issues in the talks.

The Paris Agreement establishes – for the first time -- a global goal of “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change.” This reflects a recognition that some impacts of climate change are unavoidable and international cooperation can play a central role in helping countries adapt to climate change. Much more attention to adaptation will be required in the years ahead.

The Paris Agreement establishes a new goal: to hold the increase in global average temperatures to “well below 2°C above pre-industrial levels” and “pursue efforts to limit the temperature increase to 1.5 °C above pre-industrial levels.” The 1.5°C (2.7°F) goal was a top priority for small island nations, some of which face a risk of complete submersion if temperatures rise higher. It was inspired in part



by a study which suggests that a global average temperature rise of 1.5°C (2.7°F) could lead to widespread melting of the Siberian permafrost, releasing billions of tons of methane, a potent heat-trapping gas.

Whether the goal is achievable is unclear. Global average temperatures have already risen at least 0.85°C (1.5°F) since the beginning of the Industrial Revolution. According to the Intergovernmental Panel on Climate Change (IPCC), to have a 66% chance of staying within a 2°C (3.6°F) rise, global emissions of carbon dioxide must not exceed roughly 900 billion tons – roughly 24 years of emissions at current rates. To have a 66% chance of staying within 1.5°C (2.7°F), according to the IPCC, global emissions of carbon dioxide must not exceed roughly 250 billion tons – 6-7 years of emissions at current rates. However global emissions are projected to rise for at least a decade if not more. There is no clear path based on existing technologies and development plans to stay within a rise of 1.5°C (2.7°F).

Does that mean the Parties to the UNFCCC made a mistake in adopting the 1.5°C (2.7°F) goal? Not in my view. If a 1.5°C (2.7°F) rise would create a serious risk of whole nations being submerged or catastrophic melting of the Siberian permafrost, it qualifies (to quote the language of the Framework Convention on Climate Change) as “dangerous anthropogenic interference with the climate system.” As part of the Paris Agreement, the 1.5°C (2.7°F) goal will increasingly be a factor in national and corporate decision-making (although the impact of other goals including economic growth will often be far greater). Furthermore, in the past year we’ve seen outcomes with respect to climate change that seemed unlikely at best. Of course there are many differences between successfully concluding long shot international agreements and transitioning the world’s economy to achieve a seemingly impossible goal. But the goal sends an important signal about the change needed, even in the absence of a plan to achieve it. Perhaps the optimism and determination that helped produce diplomatic breakthroughs with respect to climate change will help produce results here as well.

The Road Ahead

The road ahead on climate change is fraught with challenges that can seem insurmountable. New coal plants are being built across Asia. Transitioning the world’s vehicle fleets to low carbon energy will take decades. Forest fires are pouring huge amounts of carbon dioxide into the atmosphere each year.

Furthermore, climate change is a “super wicked” policy and political problem. It’s caused by invisible, odorless gases. It proceeds at a pace that scientists find alarming but can be difficult to perceive in day-to-day life. Many of its impacts -- including heat waves, severe storms, droughts, floods and forest fires – also occur naturally, making attribution seem difficult. The benefits of cutting emissions are global while the short-term costs are often local.



It would be easy to give up. Yet in the face of these challenges there are reasons for hope. The diplomatic successes discussed above are a start. To name a few more:

- 1) Global energy-related CO₂ emissions stayed flat in 2014 and may have fallen in 2015, even as the global economy grew.
- 2) Costs of clean energy are falling sharply, led by steep reductions in the cost of solar and wind power in recent years.
- 3) Twenty nations from around the world just agreed to double their budgets for clean energy research and development in the next five years.
- 4) Twenty-eight billionaires led by Bill Gates just agreed to deploy billions of dollars of new capital in clean energy innovation.
- 5) Polling data indicates younger voters support action to address global warming more than their parents and grandparents.

The Paris Agreement sends a strong signal of global consensus about the need to address climate change. It establishes a system for encouraging and supporting national action to do so. Its success will depend upon national policies, technological innovation and many other factors. Optimism and determination will be essential.