

Are the US and China ready, willing, and able to achieve their Paris Agreement goals?

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INTRODUCTION

After years of failing to produce a climate agreement backed by all of the world's major greenhouse gas emitters, the United Nations Framework Convention on Climate Change (UNFCCC) produced a historic success in Paris in December 2015. The Paris Agreement, backed by a consensus of all of the UNFCCC's members and entering into force on November 4, 2016, has been widely hailed as a turning point in combating global climatic disruption. It enjoys broader and deeper political support for the agreement than for any of its predecessors, especially from the world's two largest emitters, which have generally been reluctant participants in past international climate negotiations: the United States and China.¹

The Paris Agreement could garner so much support in large part because of its flexibility and open-ended nature: every country was asked to define its own Intended Nationally Determined Contributions (INDC), thereby setting its own commitment to emissions reduction relative to business-as-usual. Rather than aspiring to make these commitments binding through an international legal enforcement mechanism (of the sort that has often inspired opposition by those countries most jealous of their sovereignty), the delegates to Paris contented themselves with setting up a regime of transparent and honest reporting such that commitments can be reputationally enforced.²

This means that as we look ahead to the question of whether the Paris Agreement can live up to its supporters' hopes for it, the decisive factor will be whether countries are ready, willing, and able to deliver on their promises. The ambitiousness of these promises is often questioned: although, as part of the proceedings in Paris, the UNFCCC committed itself to try to keep total warming under 2°C, current modeling suggests that countries' INDCs would not jointly do nearly enough to achieve that goal.³ To achieve that more ambitious goal, the world's countries will have to create a virtuous cycle of emissions reductions achieved followed by pledges to do even more.

How should we think about whether this will happen—or even whether countries are likely to deliver on their initial INDCs? A great deal of speculation makes the outcome of particular elections pivotal. If democratic nations' elected leaders are committed to the Paris Agreement, the virtuous cycle can take off; if not, it might never get off the ground. But this focus on *who* will make decisions is less illuminating than trying to think about *why* they would make them. That means asking when and why the benefits of meeting INDCs will outweigh the costs of doing so.

In the U.S., the Republican party's consistent unwillingness to act on climate presents a significant obstacle to sustaining necessary political will over time.

This paper provides a framework for thinking through domestic political benefits and costs for the U.S. and China. That does not get us all the way to a prediction about how these leading emitters will ultimately orient themselves toward their initial Paris commitments, because it is too soon to tell what kind of international diplomatic dynamics will form around the Paris Agreement—in other words, just how strong

will the reputational benefits of meeting commitments, and the reputational costs of reneging on them, be? But thinking through what domestic factors will affect each country's likelihood of delivering on its commitments nevertheless takes us a long way toward a realistic understanding of where things currently stand.

I argue that in both the U.S. and China, national leaders' enthusiastic support for the Paris Agreement is significantly complicated by widely dispersed domestic opposition to ambitious climate action. In the U.S., the Republican party's consistent *unwillingness* to act on climate presents a significant obstacle to sustaining necessary political will over time. Even if Democrats keep control of the White House and push forward with administrative action on behalf of climate mitigation, Republican resistance at the state level will need to be confronted head on, with real political costs. In China, top-level support for aggressive climate action is unlikely to be shared by provincial officials, who may feel themselves politically *unable* to sacrifice any amount of economic growth on behalf of climate goals, and who will also face daunting technical challenges. In both countries, the divergence between the willingness to pay and the incidence of costs create thorny political problems that will hang over climate policy for many years to come. Leaders should think about how to constructively address these problems directly rather than hoping they will naturally dissipate over time.

READY – WHAT DID THE U.S. AND CHINA COMMIT THEMSELVES TO IN PARIS?

The U.S.'s [INDC](#) is structured around a single goal: a reduction of greenhouse gas emissions to a level 26-28% lower than 2005 emissions by 2025.

China's [INDC](#) includes the following components:

- A peaking of CO₂ emissions by 2030 or sooner;
- Lowering CO₂ emissions per unit of GDP by 60-65% of 2005 level;
- Increasing the share of non-fossil fuel primary energy consumption to 20%
- Increasing forest stock volume by 4.5 billion cubic meters.

Table 1 - Components of Intended Nationally Determined Contributions (INDCs), U.S. and China

	U.S.	China	Level of Ambition?
Economy-wide target	Reduce GHG emissions 26-28% relative to 2005 by 2025	Peak CO ₂ emissions by 2030 or sooner	U.S. – moderate China – low
Efficiency standard		Lower CO ₂ emissions per unit of GDP by 60-65% of 2005 level	China – moderate
Renewable energy promotion		Increase share of non-fossil fuel primary energy consumption to 20%	China – high
Land use		Increase forest stock volume by 4.5 billion m ³	China – high

A few critics have alleged that these goals are insufficiently ambitious and could be achieved by continuing business-as-usual policies and energy sector development, but the best analysis available does not support this view.⁴ Instead, there is good reason to agree with both the American and Chinese governments when they characterize (at least some parts of) their INDCs as ambitious and demanding, requiring considerable efforts over and above business-as-usual over the coming decade.

For the United States, reduction of CO₂ emissions will need to accelerate, doubling from a pace of 1.2% annually from 2005-2020 to 2.3-2.8% annually from 2020-2025.⁵ Not only will business-as-usual reductions fall far short, policies already planned (some of which face significant obstacles, as discussed below) will only deliver a reduction of 21.8% relative to the 2005 baseline, falling well short of the 26% promised in the INDC.⁶ In other words, the United States' Paris commitment is to follow through on all parts of the Obama administration's Climate Action Plan and then find ways to go beyond them in ways that will deliver significant reductions within a decade.

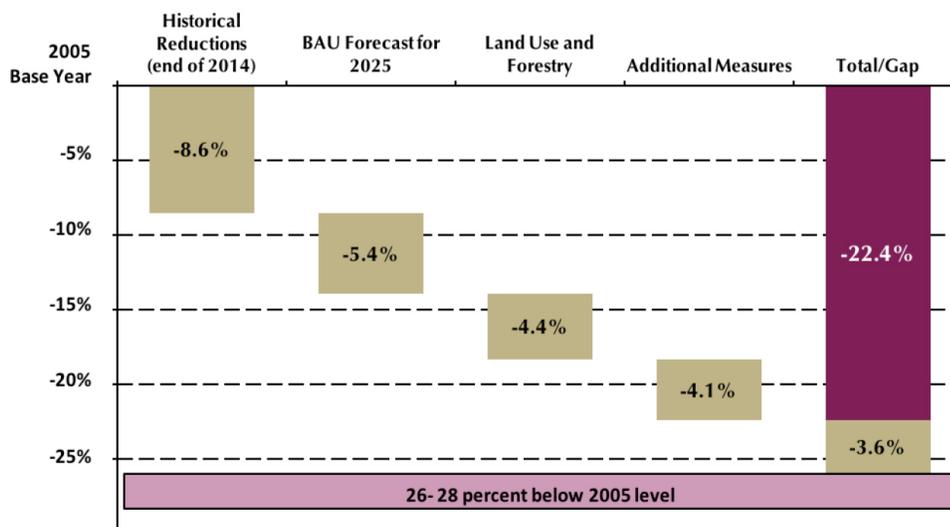


Chart from Doug Vine, “Achieving the United States’ Intended Nationally Determined Contribution,” Center for Climate and Energy Solutions (April 2016) (<http://www.c2es.org/docUploads/achieving-us-indc.pdf>) (this is an updated version, graciously provided by Vine).

For China, the goal of peaking emissions before 2030 appears to represent a significant improvement over business-as-usual: at least a 14% reduction.⁷ Some argue that China could achieve this goal merely through extension of policies already in place, and with an ambitious set of policies could see peak carbon emissions within the next few years.⁸ That may be overly optimistic about realistic rates of change, but it is probably fair to see the timing of China's emissions peak before 2030 as fairly easily achievable.

But the third part of China's INDC, which promises that 20% of the nation's primary energy consumption will come from non-fossil sources, is quite demanding. It includes sub goals of achieving 200 GW of installed wind power, 100 GW of solar, and 50 million tons of coal equivalent of thermal energy. As of its commitment, China had 397 GW of renewable and nuclear capacity—compared to 271 GW in the U.S.⁹ But achieving its 20% goal would require it to install another 800-1,000 GW—an amount nearly equivalent to total current US production from all sources.¹⁰ In short, China is promising to develop its non-fossil electric generating capacity in the coming decades by roughly three times the total renewable capacity of the European Union—a rate that would dwarf any in history. As colossal as China's infrastructure sector is today, that remains a very tall order. The fourth part, related to increasing China's forest coverage, is also quite ambitious.¹¹

With the U.S. and China's INDCs, the world's two largest emitters have declared their readiness to significantly accelerate their climate mitigation efforts. That readiness was almost certainly a crucial factor in securing unanimous support for the Paris Agreement. Whether these two countries are willing and able to deliver on their commitments will, in turn, be crucial to seeing what becomes of Paris in the implementation phase.

WILLING – DOES POLITICAL SUPPORT FOR FOLLOWING THROUGH OUTWEIGH POLITICAL OPPOSITION?

The intended ends established, we must now turn to the means. Governments will have to plan and execute a series of policies that prioritize emissions reduction, and the first question is whether “they” are really willing to bear the costs of implementing such policies over many years. But who is meant by “they”? In the wake of Paris, the natural tendency is to think of the national leaders who signed on to the Agreement. But a far wider circle of decision-makers will ultimately have to work toward fulfillment of the goals if they are to be reached, including those in subnational governments where the political opposition to dramatic climate change mitigation efforts is often strongest. And the leaders who signed on to Paris will eventually be replaced by others facing different political circumstances or bringing to bear different political priorities.

The importance of political fractiousness is especially apparent in the case of the U.S. Over the last eight years, the federal government has undertaken a wide variety of actions to promote renewable energy; make efficiency standards more stringent for appliances, buildings, and cars; and reduce the nation's reliance on coal. Most strikingly, the Environmental Protection Agency (EPA) has set forth a rule to govern greenhouse gas emissions from the nation's power plants, known as the Clean Power Plan.

While these policies represent an ambitious start to addressing global climate change, this work belongs entirely to one political party and faces vehement opposition from the other major party. During Barack Obama's two terms (2009-2016), his Democratic Party has dedicated itself to the idea that America should be a global climate leader, and today the issue is a source of unity cementing its coalition. (That said, the issue was not quite unifying enough to allow Democrats to push through a nationwide cap-and-trade law in 2010, the last time they controlled the White

House and both houses of Congress. Climate may well be a higher priority for Democrats today.) At the same time, opposition to the president's climate plan has become a defining issue for Republicans, some of whom present themselves as skeptical of everything about climate change, and virtually all of whom are unreconciled to the commitments embodied in the Paris Agreement and skeptical of large-scale, centrally directed (or even internationally coordinated) efforts to combat climate change.

This makes it difficult to say with certainty what the U.S. government will be willing to do to honor the country's INDC—or even whether combating climate change will remain a priority at all—when Republicans once again control the White House. Amidst so much confusion about the party's future, some imagine Democrats might enjoy a prolonged period of electoral dominance in the coming years that would allow them to deliver on Paris and beyond regardless of Republicans' position. But over the last six decades, no party has held the White House more than 12 years (Franklin D. Roosevelt and Harry Truman held it for Democrats from 1933-1952). Republican unwillingness to cooperate creates serious obstacles to formulating effective policy, and bespeaks a deeper unwillingness to bear the costs of climate change among a large slice of the American public, especially in regions still reliant on coal power. These citizens' (and their representatives') unwillingness to bear the costs of climate mitigation policies is a serious challenge to American climate policy that cannot be ignored.

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The situation in China is of course much different. The Communist Party is firmly in control of the government; its elites are committed to mitigating damages from climate change, which would be acutely felt in the country's populous coastal regions; and the country greatly prizes policy continuity when it transitions between leaders. The country's thirteenth five-year plan, covering 2016-2020, emphasizes environmental stewardship as a top priority and specifically takes steps to limit the use of coal power in 12 provinces, accelerate development of renewables, and, consistent with the country's INDC, limit energy consumption and carbon emissions.¹² Future plans can reasonably be expected to build on this foundation, without any changes in political control threatening a dramatic reversal.

But if it is relatively certain that China's national leaders will remain willing to take action against climate change, it is far less clear whether lower provincial and city-level officials more directly responsible for relevant decisions will share that willingness when making ground-level policy. As with many policy areas in China, the biggest challenge is in seeing through implementation of complex policy directives after they have been formulated in Beijing. Provincial officials will still be evaluated primarily in terms of whether they deliver economic growth, and, to the extent that reducing emissions is in tension with this goal, it may lose out.

When considering Chinese willingness to bear costs, it is also important to consider how decisions about climate change may change as local pollution problems become less acute. China's largest cities have confronted crisis levels of noxious smog in recent years, creating a powerful motivation to reduce industrial pollution, especially through reduction of coal usage. For now, that goal dovetails quite seamlessly with the less clearly visible cause of reducing carbon emissions.¹³ Pollution reduction *is* climate mitigation, without needing to clearly differentiate these

two goals. But that will not always be the case, and as *local* pollution levels get to be less intolerable, it is quite possible that the political will to focus on the *global* climate problem will abate.

Qi Ye and Tong Wu helpfully differentiate US and Chinese policymaking regimes for climate in a way that parallels this discussion.¹⁴ Table 2 simplifies and schematizes their conclusions.

Table 2 – American and Chinese Policymaking Regimes for Climate		
	Policy Choice	Implementation
U.S.	Hard	Easy
China	Easy	Hard

Because of the high levels of conflict and distrust in national politics in recent decades, committing to policy choices in the United States has become quite difficult. On the other hand, for now the nation’s rule of law and governance capacities both remain fairly healthy. If Congress provided new legislation dictating climate policies for the nation, few would doubt that it would be expeditiously implemented and produce widespread compliance. Even if Congress remains on the sidelines, if EPA regulations survive legal challenges (to be discussed in the next section) they would almost certainly be decisive in shaping the future of the U.S. power sector.

In China, policy choice is consensus-driven within the highest ranks of the party leadership. Once those leaders determine that climate mitigation goals are important and must be met, it is fairly easy for them to enshrine them as official goals that must be met. But in a sense the ease of this decision ensures that the implementation process will be hard, because in the course of taking the directive from theory to practice, lower officials will have to make difficult tradeoffs between conflicting priorities, as well as capacity limitations that higher-ups may not dwell on.

Despite these important differences, there is an underlying similarity. In both countries, the question is essentially the same: is there sufficient political commitment to be able to see through a climate policy into reality, given all the costs that entails? Oversimplifying considerably, the U.S. system confronts these costs up front, such that if choice is made then distribution of costs is set. The Chinese system tends to push cost-balancing questions down to the lower level, which may cause tensions to fester where they can be least well observed. The leaders in Beijing may have a high willingness to embrace climate policies, but this may be because they will not have to bear the costs—economic or political—of doing so.

In both countries, there are significant regional tensions over climate policies because the willingness to pay and the incidence of costs are largely divergent. To the extent that policies focus on reducing emissions by diminishing use of coal, they will almost certainly impose the highest costs on regions with the lowest willingness to pay, which are generally found in each country’s interior. These regions are poorer, mostly have less to lose from global climate change, and hope to reap significant benefits from their coal endowments and already-built coal plant capacity.¹⁵ Coastal regions, on the other hand, are richer, expect serious losses from climate-change-induced sea level rises, and are less dependent on coal—especially in the U.S., where natural gas has mostly already supplanted coal as the dominant fuel source on both coasts.¹⁶

This means that, in order to win the support of the whole country, emissions reduction policies must be bundled with some kind of side payment to poorer interior regions. That could prove to be very politically difficult, however, if people identify strongly with their own regions. In that case, asking for uniform standards will seem to be only a

matter of fairness to rich coastal regions, while those in coal regions may perceive failing to consider special compensation for them to signal a snobbish dismissal of their economic challenges. (The familiar developed-developing distinction that for so long stalled international talks thus remains present in countries' domestic politics.) In order to achieve *political sustainability*, policymakers must convince people in both types of regions to see the issue in terms of a shared common goal—obviously difficult in hyper-polarized America, where the geographic divisions largely track the political ones, but perhaps not much easier in China where interior regions remain quite poor in absolute terms and are suspicious of shifting resources away from continued growth.¹⁷

In the wake of Paris, the hope is that international pressures can increase countries' willingness to bear the costs of climate mitigation; after all, they have offered their INDCs as solemn commitments backed by their international reputations. If a pattern of many years of fidelity to commitments can be established, this might in time become a powerful norm that would cause a country's leaders to push for fulfillment of commitments even when the public is worried about bearing the costs of doing so.

But especially in the early years, doubts as to whether that pattern will become established are likely to dampen the international incentive. Some politicians who were not involved in the Paris negotiations—most likely because their party was in the minority at the time—may well choose to run *against* the treaty, suggesting that their countrymen should be skeptical of the commitments made by earlier leaders. Clearly this is the case with Donald Trump, but any other plausible Republican nominee would probably have sounded a similar note on this issue. Nor are Republicans a lone outlier. European right-populist parties, including France's National Front and Germany's Alternative für Deutschland have lately made clear their skepticism of climate change and especially of an international treaty addressing it.¹⁸ Canada's withdrawal from the Kyoto Protocol under its Conservative government provides another relevant example—though of course missing INDCs will not require that countries withdraw from the non-binding Paris Agreement. Still, one of the most important determinants of the Paris Agreement's success in many democratic countries will be whether opposition parties successfully mobilize some part of their citizenry's *unwillingness* to bear costs on behalf of global climate mitigation and then subsequently win office.

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ABLE – IF THERE IS A WILL, IS THERE A WAY?

If we put aside the possibility of a country intentionally repudiating its INDC as a result of a rejectionist coalition winning political control, we must still consider whether a country with a will to deliver on its commitments also has a way. In other words: given a willingness to bear some real costs, is there actually the ability to undertake the necessary projects, divert the necessary resources, see policies through to implementation, and adequately deal with those who see themselves as losers from the new policies? Answering these questions is quite different for China and the U.S., which are treated sequentially in this section before drawing out some common themes.

CHINA – THE MOUNTAINS ARE HIGH, AND THE EMPEROR IS FAR AWAY

The ability to bear the costs demanded by each country's INDC depends, most importantly, on just how big these costs will turn out to be. That, in turn, depends on a number of variables, including population growth, urbanization, global energy market shocks, pace of technological development (especially of carbon capture and storage) and diffusion, and the expense of up-front financing for capital-intensive projects (both in generation and transmission).¹⁹ The last three of these will largely determine the carbon intensity (the ratio of carbon emissions produced to GDP) of each country's energy supply, which researchers find to be the single most important determinant of wide model variation in predicting Chinese emissions.²⁰

The biggest question for China is to what extent and how fast its economy will shift away from construction and manufacturing to services—what will its “new normal” look like?

Most important is the path that economic growth takes in the coming decades, which is inherently difficult to predict. In spite of the considerable uncertainty surrounding the shape and size of growth, INDCs are not conditional on economic growth trajectories—which means that a great deal of ability to meet the goals is sensitive to economic performance.

The dynamics here are complicated. Do economic slowdowns ensure intensity level compliance without needing to do that much, such that the bad economic

scenarios are necessarily good climate scenarios? Or, conversely, does an economic downturn take away disposable resources—i.e., is climate mitigation spending a national normal good, sensitive to income growth?

And then just as important as the amount of growth is the kind of growth, which directly impacts the economy's carbon intensity. The biggest question for China, of course, is to what extent and how fast its economy will shift away from construction and manufacturing to services—what will its “new normal” look like? For its part, the Chinese government hopes to ease into that transition quite gradually and without arriving at the low-manufacturing endpoint of most developed countries. To ensure that its manufacturing sector remains robust in the short- and medium-term, it hopes to redirect its historically unprecedented manufacturing and infrastructure development capacity to its neighbors, thereby allowing exports to take up slack from the slowing of building in China itself. This initiative, variously dubbed “One Belt, One Road” or the “New Silk Road,” has been much touted but remains quite speculative for now; central Asia is far from a stable region, and so it is unclear whether its countries will become the kind of dependable trading partners China hopes for.

Putting aside these consequential questions about China's growth path, there is also the question of how effective deliberately manipulated policy levers can be in reducing emissions. In other words, will regulations work as advertised once they are actually implemented?

In the Chinese system, there is the potential for a great deal of slippage between centrally determined regulations and their local implementation. Command and control regulations set by Beijing are the dominant style, and can be effective when compliance targets are included directly into performance evaluations (both for local government officials and for managers of state owned enterprises). But often these regulations' uniform demands are quite inefficient, are oblivious to important local concerns, and are prone to being gamed or to creating perverse and unsustainable incentives, such as local governments choosing blackouts to meet electricity requirements. Some

incentives, such as those to promote the adoption of renewable energy, are diluted in practice by “institutional, technological, and financial barriers,” including limitations of China’s electrical grid, that low-level bureaucrats or managers may not have the wherewithal to overcome on their own.²¹

Even when regulatory design creates good incentives, China also faces serious questions about the accuracy and adequacy of its emissions reporting, monitoring, and record-keeping systems. Most notably, in November 2015 the Chinese government announced a huge 17% upward revision in its estimates of domestic coal use, saying that 600 million tons more were consumed in 2012 than had been previously reported, equivalent to 70% of annual U.S. coal consumption.²² China’s INDC does acknowledge this shortcoming, and other countries will be eager to help it work through the practical difficulties of creating accurate measurement systems, but its success (especially in the short term) should hardly be taken for granted.²³

A much more important challenge for China is building an electrical grid capable of making the most of its impressive renewable infrastructure development. Right now, there is a significant geographic mismatch of production capacity and transmission ability with needs. Some of the regions that supply the most renewable power find that their grids are not prepared to use it, and their grid operators find that shutting down renewables even as higher-emission power sources are utilized is the cheapest and most reliable way forward, even when doing so violates regulatory mandates to use cleaner power.²⁴ This phenomenon, known as curtailment, can be quite dramatic, especially in China’s less-developed western provinces: as much as 31% of usable wind power in Gansu is curtailed.²⁵ Curtailment is a symptom of underdeveloped institutions and unsophisticated pricing, and China’s leadership has gradually become aware of the problem and committed to developing “green dispatch” capacity, at least in principle. It is less clear that they have a “concrete—and politically workable” plan.²⁶

Curtailment of renewable power capacity illustrates a broader point: low-level officials responsible for delivering reliable and affordable power to local consumers (both retail and industrial) are the ones who run up against the costs of China’s climate policies most directly, and from their perspective prioritizing emissions reduction may not seem sensible. Especially in generally underdeveloped regions of the country, development remains the primary imperative, and the National Development and Reform Commission (NDRC) remains the dominant force. To the extent that making sharp changes in a region’s power supply might jeopardize the viability of some state owned enterprise vital to a local economy, perhaps because of its reliance on continued production and use of coal, officials may well balk at enforcing climate policies. If China’s robust economic growth of the past decades looks to be flagging, such will intensify²⁷—all the more if economic troubles threaten to foment social unrest.²⁸

Some hope that by adopting a market-based mechanism, China might facilitate an efficient economy-wide implementation of its climate targets, and so there is a great deal of enthusiasm about China’s decision to roll out a nationwide cap-and-trade system.²⁹ Unfortunately, around the world and in China’s pilot cap-and-trade projects, there is a growing record of inefficacy for these policies. Often, they are set with caps that are not at all stringent, leading to very low prices for emissions permits. And often they are not properly harmonized with the many other policies left in place. For example, anti-inflation controls on electricity prices often prevent price signals from being effectively transmitted.³⁰ There is thus a real chance that a cap-and-trade system will offer the form of a streamlining system without much of the function.

UNITED STATES – THE LAND OF THE FREE, AND THE HOME OF THE LITIGIOUS

Questions surrounding the United States' ability to implement its climate plans are quite different. Few people doubt that if lawmakers decisively prioritized greenhouse gas reductions, they could endow the EPA with plenty of legal authority to compel lower emissions from power generators, industrial emitters, and the transportation sector. The EPA's ability to enforce existing Clean Air Act requirements for conventional pollutants, through a combination of hefty fines and even potential criminal prosecutions, is unquestioned. Many environmentalists say that since the Obama

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administration's endangerment finding for greenhouse gases in 2009, which designated greenhouse gases as subject to Clean Air Act regulation, so-called "climate pollution" is no different from old-fashioned smog, such that greenhouse gas emitters exceeding permitted levels of emissions can expect to face the considerable power of the statute in just the same way as if they were emitting unacceptable levels of sulfur dioxide or particulate matter.

This vision of climate enforcement may yet turn out to be correct, but at present it is far from clear that this is the case. The Clean Air Act, which for now is almost the exclusive source of important federal authority for addressing greenhouse gas emissions, was designed to mitigate and prevent local air pollution problems, and interpreting its provisions (which have never been amended to specifically tailor the statute to target greenhouse gases) to apply to climate change issues presents some serious problems.³¹

Chief among them is uncertainty about what level of emissions reductions can be demanded from a particular emitter, such as a coal power plant, under the statutory rubric of requiring a polluter use the "best system of emissions reduction." On the EPA's rather ambitious interpretation of this language, a coal-fired electric generator may fairly be required to reduce its overall emissions profile by, e.g., purchasing emissions credits from renewable power generators, even when such reductions would clearly be "beyond the fenceline" of the plant itself. EPA's opponents see this reading and many of the requirements EPA derives from it as unsupportable and illegal. As is often the case in America, this means that litigation will follow every step of a Clean Air Act–based climate agenda.

That litigation should not be understood as a mere formality sure to be resolved in due time. In December 2015, a 5-4 majority of the Supreme Court put in place an injunction on the Obama administration's Clean Power Plan, meaning that the plan must remain unimplemented until the legal issues surrounding it are resolved. Though this is not necessarily a major problem for the plan, since its active requirements run from 2022-2030, it indicates that there is a substantial chance a final ruling on the plan's legality will go against the administration, effectively resetting the process of trying to regulate power plants and probably delaying efforts to regulate refineries and other industrial sectors.³²

Stepping back from the particulars of the Clean Power Plan, the larger point is that we should not be too quick to imagine that climate policy and its enforcement will quickly come to resemble every other kind of air pollution regulation currently on the books. Indeed, the one thing we can be sure of is that litigation with the potential to fundamentally undermine the EPA's climate strategy will remain a looming threat, even if the agency wins some key victories in court and succeeds in entrenching regulations such as the Clean Power Plan.

This makes it hard to envision a “normalized” enforcement regime, at least in the short run. Enforcement normally relies on the cooperation of state environmental agencies and law enforcement officials, but it would be a near certainty that at least some states—probably including some of the most intense emitters—would remain intransigent in their refusal to cooperate in any enforcement scheme. That would leave federal environmental regulators with an unprecedentedly large task, which they would face with uncertain logistical and legal resources.

If the U.S. Congress and the president could agree to re-establish the country’s climate policies with a new statute, or through extensive amendments to the Clean Air Act, that would likely provide a more reliable and efficient basis for stable policies in the coming years. Even then, however, corners of die-hard political opposition would remain, potentially making enforcement of climate policies a subject of lingering controversy. The U.S. surely has the technical capacity and resources to meet its INDC, but whether it will prove politically able to overcome the many sources of opposition is not yet clear.

COMMON THEME

Returning to the language of willingness to pay for climate policies, the common thread between China and the U.S. is that bottom-up willingness to pay will never be comprehensive. That means that when we think about leaders who *are* willing to see their nation bear certain costs, part of their ability to see through costly policies will be about whether they can manage to entrench politically sustainable policies, given the distribution of political resistance as it exists. They must be able to neutralize or overcome determined opposition. Otherwise, they may be willing, but politically unable.

CONCLUSION

The international climate change policy community—a uniquely wide-reaching grouping of scholars, government officials, industry representatives, and environmental advocates—is justly proud of its achievement in Paris. The agreement solidifies a basis for climate action in the years to come that has the potential to create a virtuous cycle of verified emission reductions followed by a shared deepening of the commitment to further reductions.

But the Paris Agreement will only be as good as the performance of the commitments that its signatory nations actually deliver over time. There is a chance that the virtuous cycle, which depends on international reputational incentives, could be interrupted or even prevented by domestic politics. And so as we try to assess the prospects for Paris, we must ask whether countries are willing and able—both politically and technically—to deliver on the commitments they have stated they are ready to pursue.

Domestic climate politics, though different in form, present significant complications for both of the world’s two largest emitters, the U.S. and China. In the U.S., the Republican party shows no sign of giving support to the climate agenda put in place by the Obama administration. Even if Democrats retain the White House and continue to develop climate policies through administrative means, Republican resistance at the state level and in the courts will be a serious impediment. In China, the elite political consensus on behalf of strong climate action looks quite reliable, but it is hard to know how deep it runs. Specifically, it is hard to know if lower-level officials’ abilities to implement plans formulated in Beijing will face insuperable political or technical obstacles. In both cases, leaders dedicated to delivering on their country’s Paris commitment with politically sustainable policies should squarely confront the ways in which domestic politics could prove a limiting factor.³³

ENDNOTES

- 1 The bilateral talks between these two countries—as well as others between the European Union and China—played a significant role in making the Paris agreement possible. See David Belis, Paul Joffe, Bart Kerremans, Ye Qi, “China, the United States and the European Union: Multiple Bilateralism and Prospects for a New Climate Change Diplomacy,” *Carbon & Climate Law Review* 9 (2015): 203-218. For the effective date, see United Nations Framework Convention on Climate Change, “Paris Agreement – Status of Ratification” (http://unfccc.int/paris_agreement/items/9444.php).
- 2 Johannes Urpelainen, “Here’s what political science can tell us about the Paris climate deal,” *Washington Post* (December 14, 2015) (<https://www.washingtonpost.com/news/monkey-cage/wp/2015/12/14/heres-what-political-science-can-tell-us-about-the-paris-climate-deal/>).
- 3 Brad Plumer, “The world just agreed to a major climate deal in Paris. Now comes the hard part,” *Vox* (December 12, 2015) (<http://www.vox.com/2015/12/12/9981020/paris-climate-deal>).
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