

HOW THE US AND CHINA COULD RENEW COOPERATION ON CLIMATE CHANGE

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Introduction

Averting global climate catastrophe depends in large part on progress by the world's two greatest powers and emitters: the United States and China. However, relations between these two countries—particularly on climate action—have deteriorated over the past four years. With a new presidential administration set to enter the White House in January 2021, there is an opportunity for the US and China to build trust and cooperation on climate change in a way that supports a cooperative and dynamic bilateral relationship more broadly.

This commentary takes a close look at the Biden-Harris presidential platform with respect to climate action and China, and assesses China's domestic and international climate efforts, particularly with respect to the status of its 14th Five-Year Plan. Importantly, what emerges from this examination is a starting point for China and the US to improve their relationship through climate action and collaboration. China's announcement that it would seek to achieve carbon neutrality by 2060 is an important step towards such cooperation.¹

The most promising potential areas for US-China cooperation fall into three broad categories: renewing a shared commitment to global climate governance under the Paris Agreement; building trust to enable renewed bilateral cooperation, such as on technology innovation and investments; and supporting subnational leaders' progress in both countries through platforms where they can productively convene. Recognizing that a climate-safe future is bound up in our mutuality, these two world powers can promote a new era of climate action and resiliency.

Recent Neglect of US-China Cooperation on Climate Change

Formal, bilateral cooperation between the US and China on climate change has historically taken a number of different forms, including high-level dialogues, bilateral and multilateral commitments, trade and investment agreements and opportunities, joint research and development efforts, industry collaboration, and technical assistance. During the Obama administration, climate cooperation was a strong part of the US-China relationship and was critical in paving the way for the negotiation and success of the Paris Agreement. At the time, the two countries together represented almost 40 percent of global carbon emissions (China emitted 27 percent of global greenhouse emissions in 2019, while the United States accounted for 13 percent). Their involvement made it possible for the rest of the world to achieve the

required threshold for the Paris Agreement to be in full force and effect: participation from 55 countries accounting for at least 55 percent of global greenhouse gas emissions.

However, under the Trump administration, much of this bilateral climate cooperation was discontinued or diminished. For example, the Trump administration discontinued the US-China Ten-Year Framework for Cooperation on Energy and the Environment (2008–2017), which facilitated bilateral collaboration across a broad range of fields and agencies in the US and China. The US-China Climate Change Working Group, created in 2013 under the Strategic and Economic Dialogue to focus and advance cooperation on climate change, was also terminated. Another joint climate initiative, the US-China Clean Energy Research Center, established in 2009, does not appear to be producing new studies.

China's actions on a range of issues have also contributed to the deterioration of relations with the United States, from its posture toward Hong Kong and Xinjiang to IP protection, unequal market access, and security concerns. These have complicated US-China cooperation on a range of issues, including climate change. At the same time, Trump administration actions further stressed an already complicated dynamic, from the trade war to making joint academic research and collaboration more difficult.

Biden-Harris Plan and Presidential Platform on Climate and China

President-elect Biden's campaign platform included an historic \$2 trillion climate plan that pairs economic recovery with a clean energy future.² The platform focused on job creation and environmental justice while presenting bold and detailed climate action across sectors, including transportation, electricity, building and construction, and agriculture. It built on an earlier plan released toward the beginning of Biden's campaign that received criticism from many advocates for not being sufficiently ambitious.³

Major components of the Biden-Harris plan include:

- Carbon neutrality: Net-zero emissions by 2050 or earlier, with interim goals to be determined.
- Power generation: 100 percent carbon-pollution free electricity generation by 2035.
- Transportation: Rigorous greenhouse gas and fuel economy standards to ensure that by 2030 all new light- and medium-duty vehicles sold and all new American-built buses are zero-emission and that 500,000 electric vehicle charging stations are built, and that municipalities with more than 100,000 people have quality public transportation.
- Buildings and construction: Establish an Energy Efficiency and Clean Electricity Standard to: upgrade 4 million buildings and weatherize 2 million homes over 4 years, set a new net-zero emissions standard for all new commercial buildings by 2030, and establish a new target to cut the carbon footprint of the national building stock in half by 2035.
- Innovation: Create a new Advanced Research Projects Agency for Climate ("ARPA-C") to support "game-changing" low-carbon technologies to reach the proposed 100 percent clean energy target and midcentury carbon neutrality target.



- Oil and gas: Plug abandoned oil and natural gas wells and reclaim abandoned mines.
- Workforce development: Create a Civilian Climate Corps to support natural climate solutions, such as conserving 30 percent of America's lands and waters by 2030.
- Agriculture: Make American agriculture the first in the world to achieve net-zero emissions.
- Environmental justice: Establish a climate and economic justice screening tool to identify disadvantaged areas and an Environmental and Climate Justice Division within the Justice Department.

A Republican-controlled US Senate would have the potential to limit what a President Joe Biden could achieve on climate. Still, there are a number of pathways for progress that do not require congressional approval. These include actions taken through executive orders both to rescind Trump-era policies like the challenge to California's vehicles emissions standards and to advance new climate-focused efforts; use of existing authorities; an expanded "climate federalism" approach that engages actively with state and local governments; and, of course, leveraging US foreign policy.

Notably, while Biden's climate plan focuses primarily on domestic action, it also touches on the US-China relationship in some detail.

The plan takes a hard line on China, particularly when it comes to ensuring that countries make good on their climate objectives and by more fully integrating trade and climate policy. In the context of China, it discusses the concept of a carbon adjustment fee or quota on carbon-intensive goods, and conditioning future trade agreements on other countries' commitments to meeting their Paris targets.

The plan also proposes to address China's Belt and Road Initiative. It seeks to hold China accountable to high environmental standards for the program's infrastructure projects and to stop China from "subsidizing coal exports and outsourcing carbon pollution" by making future bilateral US-China climate agreements contingent upon eliminating export subsidies for coal and other high-emitting investments.

Further, the plan proposes to offer Belt and Road Initiative countries alternative sources of financing for low-carbon investments. There is also a nod to China's research and development (R&D) efforts, highlighting the need for the US to accelerate its climate-related innovation and R&D, including the development of a domestic supply chain for electric vehicles.

The Biden climate platform was complemented by recommendations from three documents: the Biden-Sanders Unity Task Force, a set of policy-focused committees that sought to bridge the divide between the more moderate and progressive wings of the Democratic Party⁴; the 2020 Democratic Party Platform⁵; and the House Select Committee on the Climate Crisis's 500-page report, "Solving the Climate Crisis," which investigated the causes and effects of the climate crisis and developed a menu of possible solutions from the Democratic-majority legislative body.⁶ The recommendations from the Biden-Sanders Unity Task Force, in



particular, informed Biden's platform, and, taken together, all three documents provide insight into where and how Democrats align on climate issues, and where there may be interparty differences—for example, on ending fossil fuel subsidies.

The 2020 Democratic Party Platform—essentially a summary of the party's core values and policy positions (but which can and does differ from the platforms of individual candidates)—shares with the Biden platform the view of China through a competitive rather than collaborative lens, focusing primarily on issues of trade, while also referring to outsourced pollution practices.⁷ This is not surprising, given the real challenges facing the US-China relationship, and the fact that being “tough on China” was a popular election-year stance across both major parties.

However, it is interesting to note that the Biden-Sanders Unity Task Force recommendations, released just prior to the 2020 Democratic Party Platform, took a slightly more collaborative position toward China and climate change issues. The recommendations touched less on China's role in trade and included a proposal for the US, China, and other countries to cooperate on a Presidential Net-Negative Emissions Moonshot.⁸ The proposed Moonshot program would challenge global scientists, innovators, and entrepreneurs to design technologies that remove carbon from the atmosphere. Other countries and regions, including China, Canada, the EU, Israel, and the UK, would be invited to partner specifically on breakthrough technologies under the Clean Energy Ministerial Carbon Capture Utilization and Storage Initiative⁹ and Mission Innovation.¹⁰ This approach could present an opportunity to dip a toe in the US-China climate cooperation waters, helping rebuild the foundation toward further cooperation on climate and other issues.

President-elect Biden has deep foreign policy expertise and experience and knowledge of China, having served for 34 years on the Senate Foreign Relations Committee, with 12 years as the committee's chair. He has spoken in support of the bilateral relationship and US efforts to encourage greater Chinese adherence to international norms and emphasizing “friendship” with China in 2016.¹¹ He has also said there is a need to “push back on China's aggressive and predatory behavior.” In a July speech about his proposed economic recovery plan, Biden described US-China relations on trade, intellectual property, and technology as a “race.” On the topic of clean energy in the same month, he described the need for the US to overtake China and lead the world in clean vehicle production. Despite a campaign critical of and competitive with China, Biden has also acknowledged the need to identify areas of cooperation; earlier this year, he described how he was able to “convince” Chinese President Xi Jinping to join the Paris Agreement “because, guess what, they need to be involved.”¹² The COVID-19 pandemic has further underscored the importance of a strong cooperative working relationship between the US and China to address pressing global problems. A Biden presidency will present an important opportunity to advance joint R&D efforts, dialogue, bilateral commitments and agreements, and trade and investment opportunities, among others.

Xi's Rhetoric and Action on Climate

Historically, climate change has been perceived in China as a problem caused by industrialized countries who are in turn responsible for its resolution. In the lead-up to the Paris Agreement,



and in light of China's drive to transition from a manufacturing-heavy economic model to a services-led one, China stepped up its efforts on global climate governance. At the 19th Communist Party congress meeting in 2017, President Xi said that China is in the "driving seat" of international cooperation to address climate change.¹³

Xi's climate focus stems from his broader theory of and desire for China to become an "Ecological Civilization," evolving from the concept of harmony with nature.¹⁴ This concept first appeared in a speech by former President Hu Jintao in 2007 and was subsequently codified in a party policy document that encouraged harnessing nature and human society to drive domestic energy sources away from coal and to "green" China's overseas investments.¹⁵ It was written into the Chinese Communist Party Constitution in 2012.¹⁶ Under the framework of Ecological Civilization, President Xi has led the country's climate change cooperation, pushed for energy transformation, and cultivated the renewable energy sector.¹⁷

During Xi's first term, he declared "war" against air pollution, calling antipollution efforts a "very important part of the China dream."¹⁸ Mitigation measures and enforcement efforts were undertaken, which helped improve air quality but also led to the closure of tens of thousands of businesses.¹⁹ At the United Nations (UN) Conference of the Parties in 2015 (COP 21), President Xi pointed out the need for effective control on greenhouse gas emissions and incentives for a green, circular, low-carbon economy. He further stated that China would, through technological and institutional innovation, build a low-carbon energy system, develop green buildings and low-carbon transportation, and create a nationwide carbon emissions trading market (building upon the existing provincial pilot programs). China committed to peak its carbon emissions by 2030 or sooner, cut carbon intensity (emissions per unit of GDP) by 60 to 65 percent from 2005 levels by 2030, and increase the share of "non-fossil" fuels in its primary energy mix to 20 percent by the same date.

In his second term, President Xi made a strong push toward a "win-win [mutually beneficial] global governance system²⁰"—a concept meant to guide China's relations with the world that includes strengthening relations with developing nations (and that also casts China as a responsible member of the international community—in juxtaposition to some perceptions of the US under President Trump). Although air pollution remains a top priority, the idea of a "community of common destiny"—coordination between economic and social development and Ecological Civilization—has meant that more measures such as central government bureaucracy, law, and enforcement reforms were put on the table to enhance the country's environmental governance.²¹

In 2016, following the Trump administration's decision to withdraw from the Paris Agreement, China began to engage more actively with other global powers and explored partnerships with the European Union and developing countries. In September 2019, at the UN Climate Summit in New York, State Councilor Wang Yi, President Xi's top diplomat, said China would inject new impetus into addressing climate change and that it would use its Belt and Road Initiative to boost cooperation with developing countries.²² In November that year, after a meeting with French President Emmanuel Macron, President Xi reaffirmed cooperation on climate change and called for biodiversity conservation, with the vision of "Ecological Civilization-building [for] a shared future for all life on earth," emphasizing the importance of harmony with nature.²³



Yet only recently has China seemed comfortable stepping more fully into the position of a global leader on climate change. President Xi's announcement at the UN General Assembly in September that China would aim to peak its emissions by 2030 and achieve carbon neutrality by 2060 was recognized worldwide.

China's Current Climate Policy and Its Five-Year Plans

President Xi's recent carbon neutrality pledge demonstrates China's level of ambition in tackling climate change, but it offered few details on how such a goal would be achieved or how policies would be shaped across major economic sectors. Some question China's ability to reach carbon neutrality by 2060, given its increase in new coal capacity over the past two years²⁴ as well as the rising carbon emissions from its energy sector, cement sector, and other industries.²⁵

A report titled "China's Long-term Low-Carbon Development Strategy and Pathway" by China's top experts on climate, energy, and environment suggested that China's carbon emissions could plateau by 2025 before beginning to decline around 2030, reinforced by further emissions-reducing policies.²⁶ The study stated that, under a 1.5°C global temperature rise scenario, by 2050, all CO₂ emissions from China's power sector will need to be net-zero and greenhouse gas emissions will need to be reduced 90 percent from peak levels.²⁷ Former Special Envoy for Climate Xie Zhenhua pointed out that although progress had been achieved during the 13th Five-Year Plan period (2016–2020), China's low-carbon transition still faces major challenges from: (1) its high energy intensity manufacturing sector; (2) coal making up more than 50 percent of China's energy consumption and carbon intensity (energy supply), which is 30 percentage points higher than the global average; and (3) high energy consumption per GDP, which is 1.5 times the global average and 2 to 3 times that of developed countries.²⁸

In fact, the 13th Five-Year Plan set the share of non-fossil fuel energy in the country's primary energy mix at 15 percent by 2020.²⁹ It also placed a cap on China's total energy consumption at 5 billion tons of standard coal equivalent by 2020.³⁰ According to a senior official from China's Ministry of Ecology and Environment, China had met its 2020 decarbonization target ahead of schedule in 2019, with its carbon intensity 45 percent lower than 2005 levels, though non-fossil fuel energy constituted 14.3 percent of total energy consumption.³¹

The 14th Five-Year Plan (2021–2025) will be critical for China's transition from "high-speed" development to "high-quality" development. This will be an important time for the country to realize its "beautiful China" goal (a national initiative emphasizing Ecological Civilization and the harmony between humans and nature), deliver on its Paris Agreement commitment to peak carbon emissions by 2030, and make progress on a "green transition" and post-COVID-19 recovery.

From a climate perspective, the 14th Five-Year Plan is expected to address:³²

- Implementation of the carbon neutrality commitment announced by President Xi at the UN General Assembly in September 2020.



- Whether or not to use carbon intensity as a binding constraint for measuring national development to guide local governments' work.
- The proper approach for reducing non-carbon emissions and carbon emissions from industrial sources.
- Metrics for and co-benefits of controlling air pollution and reducing carbon emissions.
- The next stage of the national carbon market, with more sectors covered.
- Climate-related lawmaking and enforcement by local governments.
- China's role in working with developing and developed countries under the Paris Agreement.

While it seems likely that tension and competition will remain undercurrents of the US-China relationship under a President Biden, the ambitious climate platform proposed by the Biden-Harris administration could help reengage China. Despite containment plans and competitive goals, there also seems to be a signaled interest from China in furthering communication and collaboration in research on the pandemic, climate, and health.³³ Further, the pandemic has highlighted the importance of a strong working relationship between the United States and China to solve pressing global problems, creating a window of opportunity to restore national and subnational dialogues on climate change and other existential challenges.

Potential Areas for US-China Cooperation under the Biden-Harris Administration

Xi's announcement that China will aim for carbon neutrality by 2060 paired with Biden's goal of a carbon-neutral US by 2050 lay the foundation for future collaboration on climate—and could reenergize bilateral relations. Potential areas for US-China cooperation fall into three categories:

1. *Renewing a shared commitment to global climate governance.* Both countries could lead the implementation of a global climate governance system under the Paris Agreement that is aligned with midcentury carbon neutrality and a 1.5°C scenario.
2. *Trust building to facilitate bilateral cooperation.* Trust building will be essential to ensure US and China midcentury targets can be translated into action, particularly on critical issues of shared interest—for example, transportation and buildings—as well as technological innovation, R&D, and climate investments that are de-risked and decarbonizing.
3. *Supporting subnational leadership.* In order to deliver on and overachieve domestic commitments in the US and China, respectively, subnational (state and local) climate action, coordination, and cooperation are needed to attain midcentury decarbonization and to support action across all levels of government.

A broader discussion of opportunities under the three categories of potential US-China cooperation follows.



Shared Commitment to Global Climate Governance

President-elect Biden has clearly stated that rejoining the Paris Agreement and engaging China and other international partners under the Paris framework will be a top priority for his administration. From the lens of global climate governance, a shared climate commitment by the US and China that boosts the countries' enhanced climate ambitions will likely need to involve a science-based path toward carbon neutrality, including implementation across the sectors of transportation, power, buildings, industry, and the management of natural and working lands. Given that China and the US both now have at least notional commitments to carbon neutrality by midcentury, the two countries could consider co-launching a major new initiative on carbon neutrality cooperation, where they can share information and coordinate the achievement of this goal, while also bringing other countries together.

The US and China could also consider leading cooperation in other forums (e.g., under the G20) and on areas where they may not always see completely eye-to-eye (e.g., an accelerated timeline to eliminate fossil fuel subsidies and cooperation on enhanced data accessibility and transparency). The US and China could also partner on reducing the carbon footprint of investments made by the international financial institutions and multilateral development banks in which they are both involved.

Other specific areas with significant and promising potential for minilateral and multilateral progress include carbon pricing and emissions trading, zero-emission vehicles, climate-related investments, and short-lived climate pollutants, to name just a few. The European Union, for example, could be a partner to engage with trilaterally on transportation, committing all three economies to new cars and vans being zero-emission by 2035. China and the US could also seek to work collaboratively to help other major economies—particularly across the Asia-Pacific region—to rebuild climate cooperation with Japan, Korea, and others.

Trust Building toward Bilateral Cooperation

As a basic first step, trust building will be essential to facilitate a return to bilateral climate cooperation between the US and China. Renewing or repurposing some of the bilateral cooperative mechanisms built with China under the Obama administration could be low-hanging fruit in the near term and critically important to restoring US-China communication channels and trust on climate. Such dialogue and communication mechanisms could include: the US-China Ten-Year Framework for Cooperation on Energy and the Environment, the US-China Climate Change Working Group (CCWG) created under the Strategic and Economic Dialogue, and the US-China Clean Energy Research Center, all discussed earlier in this commentary.

Restoring these mechanisms will largely depend on how the US-China bilateral relationship is reshaped in a Biden-Xi era and whether climate change is identified as a key area of cooperation. As former US Special Envoy on Climate Change Todd Stern pointed out in a recent article, there are tools that can be deployed by the Biden administration using the CCWG as the venue to conduct climate diplomacy and rekindle the US's climate alliances not only with China but also with other countries to build political support outside the Paris regime.³⁴



As trust is reestablished, new bilateral cooperation might be explored. Areas of shared interest could include:

- *Electrification/power sector transformation*: Despite their differences, the US and Chinese electricity sectors share four key areas of common concern: (1) the planning and operation of electricity systems with a high penetration of renewable energy; (2) the role of electricity markets in enabling efficient real-time dispatch and use of the transmission system and in facilitating the changes in the political economy needed for a transition to non-fossil fuel energy resources; (3) business models for electrifying industry, buildings, and transportation; and (4) environmental regulation of the electricity sector.
- *Zero-emission vehicles (ZEVs)*: Meeting the goals of the Paris Agreement requires at least doubling the pace of the global vehicle transition, so that all new cars and vans are zero-emission by no later than 2040. The only way to achieve this goal is through coordinated international action, with the US and China alongside the European Union all driving the transition. Encouraging ZEV adoption will increase economies of scale, further driving down the costs of these vehicles. Subnational governments like Jiangsu and California—the latter having recently announced that new vehicle sales will be 100 percent zero-emission by 2035—will continue to play a critical role in pushing national governments and markets to make the shift.
- *Buildings*: China has the largest buildings market in the world, making up 20 percent of all construction investment globally; it is expected to spend \$13 trillion more in the sector by 2030.³⁵ The US and China can collaborate on zero-carbon buildings, including sharing model building codes from leading US jurisdictions (e.g., California and New York). The two countries also can partner on better buildings data, buildings certification programs, prizes/competitions, and demonstration projects.
- *Investment*: Stimulus spending represents an opportunity to preserve and accelerate momentum in the transition to non-fossil fuel energy sources. The most important aspect of green stimulus spending by the US and China will be coordination on longer-term policy and technology objectives. One example is establishing environmental standards and verifying the carbon-reduction progress of the infrastructure investments China makes in other countries through its Belt and Road Initiative, thus setting a direction for industry and leveraging the benefits of these investments.
- *Nature-based solutions*: Nature-based climate solutions are no longer “forgotten measures” politically and substantively. The US and China can work together on: (1) the availability and credibility of data and statistics around nature-based solutions; (2) policy tools, financing instruments, or other mechanisms that can be applied to increase the pace and scale of activities on natural and working lands that maximize climate benefits while ensuring healthy, resilient ecosystems; and (3) approaches for agricultural lands, forests, wetlands, and other natural and working lands to absorb carbon with other sectors that mitigate carbon emissions.

Supporting Subnational Leadership

To achieve midcentury decarbonization in the US and China, subnational climate action will be critical. This will require both vertically integrated cooperation between national and subnational governments within each country, as well as cooperation between subnationals in the US and China.

At the domestic level, China and the US could restart and expand support for subnational and non-state actor cooperation that existed under the Obama administration and continued through the Trump administration. The 2015 and 2016 US-China Climate Leaders Summits, which connected major states, provinces, and cities in the two countries through shared climate goals, is a good example of how the US federal government can support and encourage cooperation between US and Chinese subnational and non-state actors. The Biden administration could help significantly expand subnational cooperation between the US and China by providing financial and diplomatic support as well as platforms for parties from both sides to convene.

Conclusion

To pull back from climate catastrophe, a cooperative US-China relationship is critical. Despite heated campaign rhetoric and heightened geopolitical and trade tensions, there is an incredible opportunity for climate change to be the issue that helps catalyze a significant improvement in US-China relations.

Notes

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