

Co-operation within Competition: Sino-U.S. Climate Engagement During the Biden Era

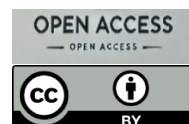
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Abstract

This study explores the shifting landscape of U.S.–China relations, where strategic rivalry, economic and technological competition, and selective cooperation unfold side by side. Grounded in Morton Deutsch’s theory of cooperation and competition, the research examines how both conflict and convergence take shape across key domains, including security, economics, technology, and climate diplomacy. Employing a qualitative method, the analysis draws exclusively from secondary sources such as policy papers, diplomatic statements, and scholarly literature. The findings highlight a growing divide in areas like military positioning and advanced technologies, yet also reveal ongoing collaboration, particularly around climate action. The U.S.–China relationship reflects a complex, interdependent dynamic where confrontation and cooperation continue to coexist.



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Introduction

The 21st century is marked by global competition, with China and the U.S. as the central actors in geo-strategic rivalry. These tensions are primarily driven by trade, technology, military, and the struggle for global dominance. The Biden administration fostered climate change co-operation with Beijing despite persistent strategic tensions. The states recognized that addressing the climate crisis jointly would yield long-term benefits. Despite the relationship being dominated by “political adversarialism”, both states realized the importance of mutual negotiations over climate change (BBC, 2021). Over the years, Beijing has become a prominent actor in the climate change sector, but Washington’s commitment to climate change has varied across administrations.

Co-operation on the climate issue began with the Obama administration, and the first joint commitment between both states was made regarding the climate crisis (The White House, 2014). However, the efforts were dormant during Trump presidency. Trump termed the climate crisis “a plot constructed by the Chinese and a hoax” (Phillips, 2016). His approach towards climate change also altered the cooperative dynamics with China. Trump reduced funding to support the global fight against climate change (Mathiesen, 2017).

However, with Joe Biden in office, it became evident that both the states share similar views on climate policy. A balance of competition and co-operation characterized Biden’s policy toward China. This policy was described by U.S. Secretary of State Antony Blinken as “competitive when it should be, collaborative when it can be, and adversarial when it must be” (Li, 2021, p. 2). Hence, despite several geopolitical challenges, co-operation on climate change occurred as a potentially important vanguard issue.

On his first day at the office in 2021, Biden, with the slogan of “America is back”, re-signed the Paris Agreement (Remarks by President Biden on America’s Place in the World”, 2021). In a speech at COP 26, Biden termed the climate crisis as “the existential threat to human existence” (Milman & Lakhani, 2021). He referred to the U.S. as having an “overwhelming responsibility” because it is wealthy and one of the major polluters (Milman & Lakhani, 2021). Hence, his policy towards climate change led to re-engagement with China to cooperate on reducing greenhouse gas emissions. Xi Jinping reciprocated similarly and pledged to dedicate efforts to this global challenge.

In 2012, Xi Jinping announced that he would prioritize climate change. He framed the issue as a worldwide challenge that requires global cooperation. (Tian, 2021). This led to China engaging with the U.S. on climate governance, despite its initial reluctance. Xi hoped for bilateral co-operation with Biden in office, stating that “China is willing to co-operate with the U.S. as both sides manage their differences and work together towards climate change”.

This paper explores the coexistence of cooperation and competition in U.S.–China relations during Biden administration. To address this, the study draws on Morton Deutsch’s theory of cooperation and competition. The analysis relies on a qualitative approach and is grounded entirely in secondary sources. The paper focuses on the period between 2017 and 2023. The paper discusses that military and technological arenas are marked by intensifying competition, and cooperation tends to emerge around the climate crisis.

Methodology

This study adopts a qualitative analysis grounded in secondary data. The dataset includes official policy documents from both the United States and China, speeches by political leaders and diplomats, academic journal articles, and reports from credible institutes. Sources were carefully selected, covering the period from 2017 to 2023. The research identifies patterns of cooperation and competition across four key domains: military affairs, economic policy, technological development, and environmental governance. Morton Deutsch's theory of cooperation and competition provides the analytical framework, offering insight into how perceptions of goal alignment or conflict shape bilateral interactions in each area.

Literature Review

Literature is not abundant on the issue focused here, so the study covers the four-year period of Biden Presidency. Following is a thematic literature review on strategic competition and cooperation between US and China, with a particular emphasis on the Biden administration.

Strategic Competition

The United States Department of State defines strategic competition as “contending with those adversaries across multiple domains, economic, technological, military, ideological, and in multiple geographies without escalating to armed force” (U.S. Department of State, 2024). The literature reflects the approach of engaging China in strategic competition. In “Strategic Competition and US–China Relations: A Conceptual Analysis, Winkler,” examines the concept of strategic competition between both states, particularly during the Biden administration (Winkler, 2023). Following Trump's footsteps, Biden remained engaged in strategic competition with China. Winkler describes Biden's policy as retaliating against China's aggressive or coercive actions with full force. Winkler discusses the US-China competition, which is dominated by technology and science, as well as the strengthening of alliances and the concerns and human rights issues that arise.

Yifei Tian's research, “The Trend of China-US Strategic Competition and Chinese Domestic Public Opinion about Sino-US Relations from Trump to Biden”, also discussed the growing US-China strategic competition. (Tian, 2021) The article explained how the ever-increasing competition between them stems from their conflicting interests. Additionally, favorable perceptions of Chinese opinion of the U.S. have declined considerably, a trend that persisted during the

Biden tenure. Tian advocated that China is well-positioned to take on a leadership role, whether with or without the U.S.

Despite the strategic competition, literature is replete with incidents indicating the Sino-U.S. collaboration on specific issues. This study will examine the reports by the United Nations that call for climate mitigation. The latest reports highlight the significant progress made in climate mitigation and calls for further efforts. While US and China are both signatories to these reports, the global community ultimately wants more efforts from them.

Sino-US Cooperation on Climate Change

Ewing's book chapter, "Pathways for U.S.–China Climate Cooperation under the Biden Administration," begins with the argument that Sino-US cooperation on climate change was fruitful during the Obama administration (Ewing, 2021). However, the cooperation became dormant once Trump became President and stopped completely when he announced withdrawal from the Paris Agreement. However, the author emphasizes that Biden should continue treading the path paved by Obama and engage with China to mitigate the global threats posed by climate change. By doing so, Ewing provided specific recommendations to the Biden administration on how to resume cooperation with Beijing: restart climate talks to rebuild trust, set bilateral goals for global accountability, negotiate to boost climate finance, cut coal investments internationally, promote support diverse dialogues for practical cooperation, find solutions to barriers in implementing the Paris Agreement, especially cross-border mitigation, and protect climate efforts from US–China relationship issues.

Gallagher (2023), in his article in *Foreign Affairs*, emphasizes that both countries should cooperate on the climate change issue, as it will help underdeveloped countries in fighting threats originating from climate change. He proposed the establishment of a joint fund to financially compensate the poor countries affected by climate change. According to him, this initiative is viable because both China and the US have the financial resources to fund and run the program effectively. He argued that as countries in the Global South sought to adopt renewable energy resources but lacked the necessary financial resources, the new fund will enable them to reduce their reliance on fossil fuels. Jugnoo Aijaz explained in her article "US–China Climate Cooperation under Biden," that the Sino-US cooperation on climate change began again in the Biden administration, but at a larger scale (Aijaz, 2024). This is evident from the appointment of John Kerry as a special climate envoy, who began engaging with the Chinese by meeting his counterpart, Xie Zhenhua, which signals that the administration is keen to cooperate with

China. She argued that the reengagement is significant and should be continued because both these countries account for almost 45% of total carbon emissions. However, she warned that although both the countries are cooperating, the long-term impact will depend on US domestic politics. If Biden were to lose the re-election, all progress would go in vain, because Trump's return to the presidency would mean the end of cooperation with China on climate change, as he considers this a waste of time and resources.

Global Climate Efforts

Various reports indicate the threats from climate change. *The Breakthrough Agenda Report 2024* is one such report. (IEA, 2024) It is an annual series, a joint product of the “UN Climate Change High-Level Champions and the International Energy Agency (IEA)”. This report proves that parties have made significant progress in cooperating on climate change, but further efforts are still needed. China and the US are signatories to the report and are part of the initiatives outlined in it. It also calls for aligning development funding with targeted support for deploying clean technology. The report serves as a roadmap for global leaders to align their efforts in combating climate change.

The Emissions Gap Report 2024 published by the “United Nations Environment Program for climate practitioners (NewClimate Institute, 2024), advises all countries to narrow the gap between their current emissions and their targets to meet the objectives of the Paris Agreement. It also highlights the importance of mitigation efforts and financial support for adaptation.

Much of the existing discourse concerns the state-centric rivalry between the two countries and this study will investigate how these two global powers, despite their ongoing strategic competition, have found common ground and cooperated on climate change.

Theoretical Framework

This section outlines the theoretical framework for the study. Despite strategic strains, the framework provides that Sino-US cooperation on climate change can be analyzed through Morton Deutsch’s theory of cooperation and competition (Deutsch, 1949). Morton Deutsch’s theory is based on the work of Kurt Lewin, a German American psychologist who advocated that mutual goals create interdependence among group members (Tjosvold & Johnson, 2000). However, Morton Deutsch posited that the tension systems of different people, arising from their individual goals, can result in either negative or positive interdependence.

The key element in this theory is the parties' interdependence and of the theory's two concepts, one revolving around interdependence among people's goals (Deutsch, 1949) and the second is based on the type of action people take in the situation. Goal interdependence can either be positive or negative (Deutsch, 1949). Positive goal interdependence is achieved when the probability is positively correlated with another individual's likelihood or level of achieving their goal (Tjosvold & Johnson, 2000). These situations foster cooperative relationships, exhibiting positive characteristics such as effective communication, coordination, and agreement with others' ideas.

Negative goal interdependence occurs when the probability or amount of an individual's goal is correlated negatively with the amount or likelihood of another's goal (Tjosvold & Johnson, 2000). Hence, such a situation leads to competition among the parties. The negative goal interdependence yields negative characteristics, such as obstructed communication, a lack of helpfulness, and a repeated experience of disagreement (Conflict Research Consortium Staff). In such situations, the rival groups strive to strengthen their power and diminish that of the opposite party. Thus, the individual seeks a personally beneficial outcome, which is detrimental to the other party.

The theory emphasizes the interplay between cooperative and competitive dynamics, which influences the outcome of interactions between the states. This framework explains the collaborative and competitive relations between the U.S. and China during Biden presidency. The climate change issue is a positive goal for interdependence between the two states. As the most significant greenhouse gas emitters, Biden and Xi acknowledge that both countries must work together to reduce emissions.

The joint climate efforts of China and the U.S. could lead to effective measures to combat the global climate crisis. Joint climate efforts will offer relative advantages to both countries, as the U.S. has a better innovation and research development sector, and China is the manufacturing leader. Therefore, cooperation between the two countries will yield economic and national security advantages to the U.S. and China. Mitigating climate change offers mutual benefits and results in effective communication and engagement between both States.

The positive goal interdependence in climate change results in positive characteristics between US and China. In joint climate actions, these positive characteristics are effective communication and diplomatic engagement. Such a display of positive characteristics was evident in the US-China bilateral

agreements. Both countries have appointed special climate envoys for effective communication. (See Figure 1).

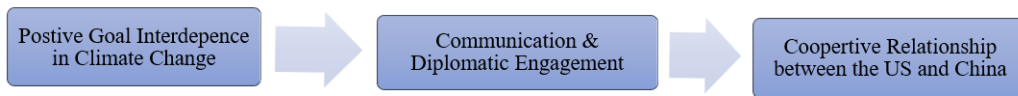


Figure 1: Co-operation over Climate Change

Despite positive goal interdependence in climate change, geopolitical rivalry has stained US-China relations. Regarding longstanding strategic tensions, negative goal interdependence is evident in economic, technological, and strategic dimensions. Therefore, negative goal interdependence displays negative characteristics, with both states trying to reduce the power of the other state.

The negative goal interdependence in economics is displayed in the negative characteristics of the U.S. imposing tariffs on Chinese goods. As retaliation, the Ministry of Commerce (MOFCOM) of China imposed ‘anti-dumping duties’ on selected imports from the U.S. Similarly, negative characteristics were evident in technological competition as both states are spurring their technological advancements to achieve supremacy. Strategic dimensions also display negative characteristics.

Negative goal interdependence in strategic dimensions implies that China perceives any strategic gain by the U.S. as a threat to its security and regional influence, and vice versa. The deployment of military assets or capabilities and presence in geopolitical chokepoints, such as the Indo-Pacific and Taiwan, as well as security pacts and defense technology, is often framed in zero-sum terms, where gains for one side mean loss for the other. Such a display of negative characteristics leads to competition among the states (See Figure 2).

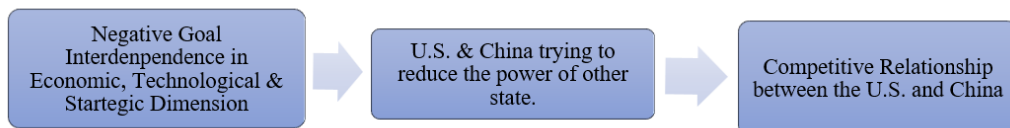


Figure 2: Sino-U.S. Competition

Theory of co-operation and competition by Deutsch supports the argument that collaboration can still exist even in a competitive environment if the states recognize the mutual benefits. Joe Biden recognized the shared environmental concerns with China. Hence, both states agreed to collaborate in mitigating the climate crisis. Climate co-operation amid geopolitical tensions highlights the interdependence between both states' negative and positive goals.

Sino-U.S. Relations and Climate Co-operation

Climate crises have worsened in the past decade, and the co-operation between Sino-US on climate change is in the best interests of both countries. The US-China carbon emissions accounted for 45% in 2020 (Wu et al., 2022). The graph in Figure 3 shows that the carbon emissions of China and the U.S. remained the highest in 2024. (Hausfather, 2025). Therefore, their joint actions towards the climate crisis are essential as the largest emitters. Washington and Beijing had been engaged in the negotiation process, conducted within the United Nations Framework Convention on Climate Change (UNFCCC) and its Conference of the Parties (COP), a yearly convention. (United Nations Framework Convention on Climate Change, n.d.)

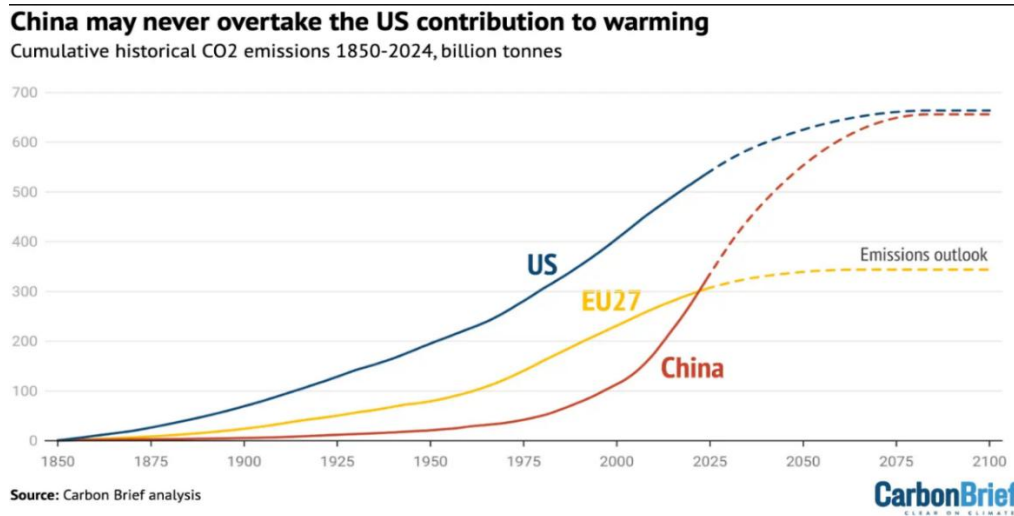


Figure 3: Carbon Emissions of the U.S. & China

In 1992, the UNFCCC was initiated, laying the foundation for the first COP, which was held in Berlin, the Kyoto Protocol. (UNFCCC, n.d.) ‘The Kyoto Protocol’ failed despite being the first vital step towards limiting greenhouse gas

emissions. The biggest failure was the U.S. (the biggest emitter of greenhouse gases) did not ratify the treaty. (Sabel & Victor, 2022). The U.S. Senate passed the Byrd–Hagel resolution, which stated that the U.S. would never sign any such protocol, as it would harm the country’s economy. China was one of the non-Annex parties (the developing countries) at that time, and it did not require reducing its emissions. According to Professor David Victor, the Kyoto Protocol’s failure was inevitable, but its failure would offer the opportunity to establish a more realistic alternative (Sabel & Victor, 2022).

In 2015, under the UNFCCC, the countries reached a landmark agreement in reducing carbon emissions. Before this agreement, in 2014, China and the U.S. made a joint announcement on climate change that called for cooperation on clean energy. (The American Presidency Project, 2014). Obama and Xi further decided to advance their domestic policies regarding climate change. The joint announcement showed the Sino-U.S. willingness to address climate change.

The ‘Paris Agreement’ is the most significant global arrangement on climate change. It was agreed that the “world average temperature should not rise more than 2°C above pre-industrial temperatures.” This agreement entered into force in 2016. Scholars worldwide have advocated that the Paris Agreement’s success was due to the bilateral co-operation between these two major powers. An international climate expert, David Waskow, stated, “When the two largest emitters lock arms to solve climate change, that is when you know we are on the right track”.

Even after the Paris Agreement, Sino-U.S. relations remain committed to fulfilling their obligations. Both nations signed agreements to grow and renew ‘the U.S.-China Clean Energy Research Centre (CERC)’ contracts. Washington and Beijing were also prepared to participate in the Climate Change Working Group (CCWG), where they would undertake significant carbon capture and storage projects.

However, these initiatives faced major setbacks during Donald Trump’s presidency in 2017. Trump termed “climate change a plot constructed by the Chinese and a hoax” (Wong, 2016). He rolled back all the climate programs and initiatives taken during the Obama tenure, and even the U.S. withdrew from the Paris Agreement. Trump viewed climate change more in terms of economic matters. Therefore, the tenure was marked by a lack of cooperation between them.

Sino-U.S. Contestations under the Biden Administration

The presidency of Joe Biden witnessed incidents of serious strategic tensions with China. However, the Biden administration followed a policy of competition and collaboration towards China. The economic, political, military, and technological pressures on Beijing from Biden have increased since he took office. Hence, his structured policies increased the tensions between the two states.

Sino-U.S. economic competition between the U.S. and China has been the central driver of tensions. During Biden's presidency, Washington advocated investing more in domestic industries to compete with China. In May 2024, Biden announced imposing approximately \$18 billion in tariffs on Chinese imports (Congressional Research Service Report, 2024). The tariffs were on industries like aluminum, steel, batteries, semiconductors, electric vehicles (EVs), minerals, solar cells, and medical products (Dinh, 2024). Biden said regarding the new tariffs that the "Chinese administration had been taking Chinese state money and pouring it in Chinese industries, it is not competition, it is cheating" (Al Jazeera, 2024).

China retaliated against the U.S. for imposing tariffs. In a statement, the Chinese embassy in Washington said that the U.S. tariffs would not work and instead backfire (Lawder, 2024). Moreover, MOFCOM in China assured that Beijing will take all measures to defend its interests (Global Times, 2024). Later, MOFCOM declared a 43.5 percent 'anti-dumping tariff' 'would be imposed on proprietary acid of U.S. origin entering the country (Global Times, 2024). The strategy of imposing tariffs demonstrated the Sino-U.S. rivalry in the economic and technological spheres.

The two major powers were also trapped in technological competition. During the Biden administration, the U.S. House of Representatives approved a bill that required 'ByteDance' to divest from TikTok or face a ban on operating in the U.S. (Shepardson, 2024). Earlier, the U.S. had decided to ban new Huawei and ZTE, referring to them as a security threat (BBC News, 2022). Such measures from Washington were to suppress China's tech capabilities. Furthermore, the U.S. sought to control the chokepoint technologies in global supply chains. Hence, it banned the U.S. companies, Advanced Micro Devices (AMD) and Nvidia, from exporting their premium supercomputing and AI chips to China (Nellis & Lee, 2022).

During his presidency, Biden focused on strategic competition with China in the Indo-Pacific region. Therefore, he emphasized strengthening the alliance structures with the Quad and AUKUS (Smith, 2021). However, Biden's most

significant initiative to counter China's influence was reinforcing the Quad. He elevated the Quad to the summit level (Freeman, 2024). In 2024 Quad summit, Biden told the leaders that an aggressive China was "testing us" (Agence France-Presse, 2024). Biden also initiated the Indo-Pacific Economic Framework for Prosperity (IPEF) to deepen economic ties in the region (Office of the United States Trade Representative).

In addition to the Indo-Pacific, 'China's Belt and Road Initiative (BRI)' is also being driven by several strategic challenges to the U.S. Hence, during Biden's presidency, their officials decided to respond to the BRI project (Al Jazeera, 2021). In 2021, President Joe Biden and G7 allies introduced the new global infrastructure project, "Build Back Better World (B3W)" (The White House, 2021). This project aimed to build billions of dollars in infrastructure for low and middle-income countries. Henceforth, the U.S. strategy to align its partners and create new initiatives is part of the broader strategic rivalry with China.

The Biden presidency witnessed another challenge in China-US relations: the Ukraine war. Reports from U.S. officials stated that Russia is seeking economic and military help from China. Threatening dire consequences, in a video conference with Xi, Biden warned of the consequences if China offered Russia material aid (Council on Foreign Relations, n.d.). The U.S. claimed that China is providing support to Russia, so it imposed sanctions on 400 Chinese entities and individuals (Slodkowski, 2024). China also refused to condemn Moscow's actions that led to war, stating that it had never "fanned fire or fueled the flames" (Al Jazeera, 2024). Although both countries advocated for peace, tensions heightened between Washington and Beijing due to the Russo-Ukrainian War.

Moreover, the 2022 visit of Speaker Nancy Pelosi of the U.S. House of Representatives to Taiwan was another incident that heightened tension between the Sino-U.S. relations (Davidson & Lin, 2022). The visit demonstrated the U.S.'s support for Taiwan unacceptable for China, which regards the island as its sovereign territory. Beijing countered it by conducting missile tests around the waters east of Taiwan and drills around the main island (Davidson & Lin, 2022). In response, US military also conducted aggressive maneuvers around the South China Sea region.

The tensions between the U.S. and China escalated due to various irritants during the Biden presidency. Despite geopolitical tensions, climate change has become one of the viable arenas for co-operation between the two states. China and the U.S. are the world's two largest economies and carbon emitters. The escalation in conflict makes cooperation increasingly challenging. However, in recent years, it

has become evident that climate change has become the issue that brought the U.S. and China together on a common platform.

Sino-U.S. Climate Engagement in the Biden Era

The Biden administration re-engaged in climate co-operation with China. He understood that working with China was crucial for a successful climate crisis solution. Therefore, his administration re-established bilateral ties with China to collaboratively address climate change. The move to re-enter the Paris Agreement marked a renewed commitment by him on mitigating risks posed by climate change. Regarding re-engaging with China on climate change, President Biden has assigned former U.S. Secretary of State John Kerry as the first-ever U.S. special political envoy. (U.S. Department of State, n.d.) This led to China appointing climate negotiator Xie Zhenhua to take on a corresponding role (who had collaborated with U.S. officials during Obama's rule) (Xinhua, 2024). The appointment of the climate envoys paved the way for bilateral engagement on the climate crisis.

Climate co-operation succeeded despite tense relations which resulted in deep disagreements in the first meeting between Biden's top officials and Chinese officials. The U.S. envoy John Kerry travelled to China in 2021, and the first meeting between the envoys was held in Shanghai in April (Office of the Spokesperson, 2021). At the end of the meeting, a joint statement was released. In this statement, both countries confirmed their commitment to cooperating with other countries towards climate change (Office of the Spokesperson, 2021). They further enhanced the commitments made in the Paris Agreement, particularly emphasizing to limit global temperature rise to well below 2°C and pushing it to a limit of 1.5°C. Both countries discussed further actions that will contribute to mitigating the climate crisis, such as formulating long-term plans to achieve net-zero emissions, financing investments in green energy for developing nations, etc. The joint statement stated that both countries would cooperate to achieve successful outcomes at COP26 in Glasgow.

The climate summit by the envoys was soon succeeded by the Virtual Leaders' Summit on Climate by Biden (The White House, 2021). The summit reflected the Biden administration's commitment to the climate crisis. It was attended by 40 leaders worldwide, including Chinese President Xi Jinping (The White House, 2021). Given that the summit focused on the climate crisis, President Xi's involvement suggests that, despite significant strategic differences, China was willing to collaborate with the U.S. on climate matters. This was followed by

John Kerry's visit to China in which he held talk with his counterpart to deliberate on climate action ahead of COP26 (Office of the Spokesperson, 2021).

At COP26 in Glasgow, both countries released a joint statement, on which both parties agreed to an agreement (International Energy Agency, 2022). In announcing the agreement, Kerry said that the U.S. and China have differences, but there is no other way to address climate change effectively than through cooperation. Under the agreement, the two countries were to develop regulatory mechanisms and environmental norms to mitigate greenhouse gas emissions. However, after COP26, the bilateral climate talks came to a halt.

Despite heightened Sino-U.S. tensions due to trade disputes, military tensions, and accusations of spying, climate talks resumed in July 2023. The U.S. envoy travelled to China to revive the joint climate efforts. Moreover, they signed Sunnyland agreement in Indonesia, reaffirming the commitments of Washington and Beijing to collaborate with other nations in response to the climate crisis (International Energy Agency, 2022). Additionally, despite tensions the two countries agreed to cooperate on climate change. For instance; China hosted a meeting of the US-China Working Group on Enhancing Climate Action in the 2020s (U.S. Department of State, 2024).

Albeit both countries remained committed to reduce emissions, reducing coal use, and boosting renewable energy investments, actual progress lagged behind their spoken commitments. Deep-rooted mistrust, tensions over Taiwan, and trade disputes, frequently disrupted consistent cooperation. Consequently, their climate diplomacy swung between cautious engagement and sudden suspension exemplified by Beijing freezing climate talks after Speaker Pelosi's Taiwan visit in 2022.

Did Engagement Yield Positive Results? The answer is that during the Biden's tenure, cooperation with China on the climate change issue undoubtedly expanded; however, this cooperation yielded only symbolic progress and limited concrete results. This is evident from the numerous pledges they make jointly to combat climate change at international forums, of which the COP 26 Declaration remains one primary example, where both actors agreed to set aside their geopolitical interests to collaborate closely on climate change. Likewise, when in 2023 during Biden-Xi meeting they recognized the climate change as "one of the greatest challenges of contemporary era". These developments along with many other were seen as a diplomatic triumph highlighting both actors' willingness to separate climate issue from their ongoing strategic rivalry.

However, the cooperation on climate change failed to deliver game-changing results because geopolitical irritants tend to emerge on a routine basis thus putting the climate change negotiations on the back burner. This showcased that the persistence of great-power rivalry limited both countries ability to move from joint declarations to tangible outcomes. Thus, while engagement produced normative alignment on climate urgency, it stopped short of producing results. However, this also highlights that cooperation remains possible between the rival powers, and both sides need to maintain their policy to fulfill the climate change pledges they have made earlier. This also shows, despite Trump's lack of interest to address climate change problem, significant progress can be made if he follows the Biden administration's approach, as Xi still remains committed to collaborating with the US regardless of ongoing tensions. The success depends on both sides keeping climate change separate from geo-political interests.

Conclusion

This study has attempted to analyze the US-China climate co-operation amid the ongoing geopolitical tensions during the Biden administration. Xi Jinping and Joe Biden showed a shared commitment and mutual interest in cooperating on the climate crisis. Despite friction persisting in other domains, like economics and technology, and strategic rivalry, climate change proved to be one arena where both countries cooperated.

The study's key findings are that both Sino-U.S. recognized the urgency of addressing the issue of climate change. Unlike the Trump administration, Biden separated the issue of climate change, leading to co-operation even when the tensions persisted. The commitment by both states led to high-level diplomatic engagement. These engagements led to bilateral climate agreements between the U.S. and China. The two states were global leaders at COP meetings, influencing climate negotiations.

The findings lend strong support to the core propositions of Morton Deutsch's theory. In areas where U.S. and Chinese interests are perceived as zero-sum, particularly in military strategy, security alignments, and cutting-edge technologies, both states adopt competitive postures. In contrast, domains shaped by shared global challenges, such as climate change, tend to foster cooperative engagement aligned with mutual goal compatibility. These patterns affirm that competition and cooperation are not opposing forces but can operate simultaneously within a flexible, issue-specific framework. The results partially validate Deutsch's model by showing how bilateral behavior shifts in response to evolving interests.

This study supports the argument that the Biden administration's approach to climate change can be a model for future co-operation. Despite tensions, the U.S. and China showed that rivals can cooperate on global challenges.

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