

# China's Climate Change Strategy and the U.S.–China Relationship

*Testimony before the U.S.–China Economic and Security Review Commission*

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Vice Chair Glas, Commissioner Friedberg, distinguished members of the US-China Economic and Security Review Commission,

Thank you for the opportunity to share my work and views with you regarding China's climate change strategy and the U.S.–China relationship. Below is my written testimony.

## Summary

*This section provides the highlights of each of the following sections in the statement, followed by policy recommendations.*

### How China became the world's top emitter

China's GHG emissions **more than quadrupled** over the course of the past two decades, making China **the primary driver of global emissions growth** over the period. Emissions growth in 2000-2008 was predominantly driven by an export-driven industrial and investment boom. From 2009 to 2021, emissions growth was driven by two waves of real estate, infrastructure and industrial expansion. China's high emissions relative to GDP are due to both a coal-heavy energy structure and an economic structure relying heavily on construction and energy-intensive industry.

China's emissions surged after the onset of COVID-19, due to economic recovery policies aimed to stimulate construction and industrial output, including export industries. Now, the country's emissions are falling. **The cool-down is not primarily driven by deliberate climate policies but by economic policies aiming to tamp down on real estate speculation and low-value construction projects.**

### China's motivations to act on climate

**China has a strong self-interest in climate action**, due to pressing environmental challenges at home, as well as the impacts of climate change on food security, water resources, and the regional security environment and other key aspects of national security. **Climate action aligns with China's long-term economic and industrial goals**, including the ambition to become a technological and market leader in the essential technologies of the 21st century.

There are also **strong interests that oppose climate action and reduction in fossil fuel use in China**, including provinces and state-owned enterprises with a high reliance on coal and coal-related industries.

China has been able to **leverage climate diplomacy to meet its global agenda**. China wants to be seen as a steady partner and a crucial contributor to solving global environmental issues. Climate policy and diplomacy have allowed China to pursue many foreign policy goals - shaping the international rules, portraying China as a responsible stakeholder and provider of important public goods, building a multipolar world, and increasing China's influence and presence in developing and emerging markets.

## Assessing China's commitments and implementation

China's long-term target of achieving carbon neutrality before 2060 is **aligned with the low end of the Paris agreement goals** (limiting global temperature rise at 2°C) but *not* the high end (1.5°C). The level of ambition is at least comparable to that of most developed economies (net zero emissions by 2050).

The CO<sub>2</sub> emissions peaking and carbon neutrality targets are a **high domestic political priority**. President Xi Jinping has staked his personal credibility on delivering the first of the two, peaking CO<sub>2</sub> emissions before 2030. **This target is, therefore, very likely to be met.**

China's emissions target of peaking emissions before 2030, with no specific emissions pathway or ceiling, is **much less ambitious than required** for the global climate effort to succeed, **nor does the target reflect the country's capacity for emissions reductions**. This undermines the global effort to peak and decline emissions as a matter of urgency. The target for peaking "before 2030" leaves space for either an earlier emissions peak and decline or a significant rise in emissions before 2030 and slow emissions reductions thereafter. This makes it difficult to assess whether the country is on track to meet the long term goal.

The construction and industrial slowdown and coal shortage in the second half of 2021 led to the government focusing its current priority on boosting industrial output and stable economic growth, which means that the temporary slowdown might soon be replaced by an emissions rebound.

State-owned enterprises in the coal power and steel sectors continue to invest in coal-based capacity. These sectors are China's two largest emitters of CO<sub>2</sub>, and there is no sign of investment in coal-based capacity being scaled back yet. **A complete shift of new investments into clean capacity is needed** to put China on track to peak CO<sub>2</sub> emissions and avoid a glut of unneeded power and industrial capacity.

## China's narratives and messaging on climate

China's international messaging on climate seeks to portray the country as **a responsible stakeholder**, and **a reliable and committed contributor to international efforts**.

China's messaging obviously **aims to strengthen the legitimacy of the party and the government**. Both internationally and domestically, narratives focus on the country's perceived strength in implementation and long-term planning. However, this contrasts with the country's failure to pin down a specific emissions trajectory or to place a cap on the increase in emissions until 2030.

## China's diplomatic aims and international influence

A significant focus for Chinese negotiators continues to be communicating the actions that China is taking, and defending the country against criticism. **China is under pressure from both developed countries and the most vulnerable developing countries to increase its ambition.**

China's climate diplomacy also **seeks to further broader foreign policy aims**: proactively shape the international system; move from a U.S.-led system to a "multipolar" system by building developing country alliances; and establish China as an important contributor and partner to solving global challenges and for economic development; and spreading Chinese technology and technology standards.

The Belt and Road Initiative is a key vehicle of China's diplomacy and influence. Investments under the initiative have been coal and fossil fuel-heavy in past years, but **China has taken the first steps to align these with the climate effort.** New coal power projects abroad have been excluded, and investments in clean energy have increased. However, investments into certain other types of carbon-intensive projects have continued. These include oil- and gas-fired power plants, oil and gas production as well as coal-based industrial capacity. Chinese financing and construction is a genuine value proposition that plays to China's strengths and responds to demand from many developing countries. Further progress in cleaning up the investment portfolio is in part conditional on creating the enabling conditions for faster clean energy take-up in the developing countries hosting the projects.

In addition to financing, engineering and construction, China also has an increasing footprint on international aid. The Global Development Initiative (GDI) includes climate change and green development as one of eight focus areas.

## Climate change and the U.S.–China bilateral relationship

China puts a lot of emphasis on the US-China bilateral relationship, and pays very close attention to US climate politics and policymaking. There is a hope of **climate as a stabilizing element** in this relationship, and over the past year, China demonstrated a willingness to take meaningful steps to achieve this. Effectively leveraging the relationship to make progress on climate likely requires making the issue a part of a broader set of negotiations encompassing other aspects of the relationship, rather than seeking to make climate a standalone issue.

Outside of dedicated climate talks, the U.S. has influenced China's economic, energy and climate policies in numerous ways, both positive and negative, particularly through trade policies. There is a lot of scope to increase and better target this influence.

## Policy recommendations

- **Monitor and assess China's progress and efforts closely.** Consider publishing a regular, formalized assessment of China's performance (possibly along with that of other major emitters).
- **Elevate climate change and emissions reduction performance into a cross-cutting priority issue** in bilateral and multilateral diplomacy and foreign policy. It should be clear to other major emitters that success in reducing emissions will affect all aspects of their relationship with the U.S.
- **Ensure that U.S. targets and ambitions on emissions and climate are met** — failure to do so would make it far easier for China to renege on its commitments. Conversely, rapid progress in the U.S. would be a powerful factor to spur China on.
- **Dramatically increase financing and support for clean energy and energy transition in developing countries.** This should include enabling measures, such as improving electrical grid infrastructure, regulation, markets and institutions, as well as technology transfer and establishment of manufacturing capacity in key developing markets. Financing should expand from a project-by-project approach to financing and underwriting auctions or other policy programmes that can advance a large number of projects. Such enabling measures would also support a shift towards clean energy in China's outbound investments. It's essential for the U.S. to develop a genuine value proposition towards developing countries in this field.
- **Engage with China and other major emitters to obtain a successful outcome** from the process set up in the Glasgow Climate Summit, where all countries agreed to “revisit and strengthen” their 2030 emissions targets in 2022. This involves and requires bringing up enhanced targets for the United States.

The best thing the U.S. can do to push China to do more on climate, and to contend for global leadership, is **to institute a domestic climate action program** comparable in scale and ambition to China's carbon neutrality goal at home, and **a global clean energy initiative** at least comparable in scale to the energy investment under the Belt and Road Initiative. If China's leadership sees the U.S. and allies pulling ahead with 100 percent clean electricity, smart grids, electrified transport, zero-carbon manufacturing, and major financing and technology partnerships with the developing world, that would spur the country to speed up its own transition, given **the country's ambition to lead or compete** in these technologies.

The more competitive and even confrontational state of international geopolitics has also opened the door to **building mechanisms to track progress and sanction laggards**. It is essential for the U.S. to articulate its expectations towards China, measure the country's emissions trends and policies against those expectations in a systematic way, and be prepared to take action, whether positive or negative, through trade, diplomatic, economic, security and other policies as appropriate.

This approach of **elevating climate to a cross-cutting foreign policy priority**, where all available levers are used to persuade other countries to do their fair share, doesn't only apply to China of course: the approach should be applied equally to *all* countries and *not* selectively to China — both to make it clear that **the purpose is not to pick unfairly on China** and because the policies of other emitters matter as well.

## Addendum: How Russia's invasion of Ukraine could affect the content of this testimony

The sanctions against Russia will have indirect negative consequences for the global and Chinese economy. This, combined with the new Covid-19 outbreaks makes the "medium-high" GDP target of 5.5% that China just published for 2022 even harder to meet and means more pressure to increase investment spending and ease policy towards the real estate sector. This in turn will tend to increase coal demand and CO2 emissions.

The breadth of the sanctions imposed on Russia likely reinforces the determination of China's leadership to pursue technological, financial and economic self-sufficiency. Regardless of the clear justification for the measures, they demonstrate how western countries retain control over significant parts of the global financial and economic system that the Chinese leadership resents.

Similarly, the fossil fuel price shock and security of supply issues will mean redoubling the efforts to increase domestic energy production—both fossil fuel and clean energy—and reduce reliance on imports e.g. through electrification in oil and gas using sectors, and through the production of synthetic fuels from coal.

On foreign policy, China's leadership appears to be walking a tightrope of sticking to the content of the recent China-Russia declaration of "friendship without limits", and the strategic calculus that led to it, while refraining from crossing the red line for the U.S. and Europe—active measures to help Russia circumvent or offset the economic impact of the sanctions.

China's options are open to either distance itself gradually from Russia's atrocities and prevent further damage to China's international standing, and the credibility of its long-held "non-interference" policy; to position itself to benefit from the subservience, natural resources, and economic and technological vacuum of a weakened and isolated Russia; or to maintain the current ambiguity.

Pragmatically, the leadership must be carefully weighing the potential downsides of siding more closely with Russia, and the potential upsides of taking a more neutral or anti-war stance. This includes but is not limited to the ramifications for China's relationship with the U.S. and Europe.

How China's position evolves, and how that affects the relationship with the U.S., obviously matters a great deal to the outlook for bilateral climate interactions. My policy recommendations aim to suggest a range of steps the U.S. could take depending on the overall tenor of the relationship.

# Introduction: How China became the world's top emitter

China is **the world's largest greenhouse gas emitter today**, and the second-largest historical emitter, after the United States. In 2019, it produced 27% of global greenhouse gas emissions, with 18% of the world's population and GDP. China's share of global emissions rose to this level from less than 10% in 1990. China was responsible for 60% of the increase in global CO<sub>2</sub> emissions from 2010 to 2019, and is the only major emitter to increase emissions after the beginning of the COVID-19 pandemic (see Figure 1). The country's high emissions relative to GDP are due to both a coal-heavy energy structure and an energy-intensive economic structure that relies heavily on construction and smokestack industries.

China has committed to CO<sub>2</sub> emissions and clean energy targets since the Copenhagen climate summit in December 2009. Actions to achieve these targets have made the country the world leader in deploying renewable energy and nuclear power, but have not been sufficient to peak CO<sub>2</sub> emissions from fossil energy consumption.

China first committed to peaking CO<sub>2</sub> emissions "around 2030", in the Obama-Xi climate declaration in 2014. In 2020, President Xi Jinping pledged that China would target carbon neutrality before 2060 and peak CO<sub>2</sub> emissions "before" 2030.

**The increase in China's emissions in the 2000s was driven by its rapid industrial growth after the export and investment boom started by the WTO accession.** This boom came to a head with the global financial crisis, and in 2008 the leadership responded with an unprecedentedly large infrastructure stimulus program that drove even faster emissions increases in 2009-2012. This spending was predominantly directed at the most energy-intensive parts of the economy - construction and heavy industry, particularly steel, cement and other construction-materials industry.

When the effect of the stimulus programme started to wear out in 2013, coal, steel and cement consumption began to fall. This fall was compounded by the "war on corruption" launched by General Secretary Xi Jinping, curbing local government permits and enthusiasm for construction projects.

The leadership's initial response to the slowdown of the industrial economy was to brand the changes as a part of an "Economic New Normal" in which household consumption, services and high value-added industries would become the key drivers of growth. This was also the time when Presidents Xi and Obama announced the "climate deal" between the two countries, including China's CO<sub>2</sub> peaking commitment and paving the way for the Paris agreement, and the air pollution crisis dominated domestic headlines, creating a unique window of opportunity to limit coal consumption at least in the more prosperous coastal areas.

However, falling demand and prices for key commodities and heavy industry products led to major financial distress at state-owned enterprises towards the end of 2015. A new wave of stimulus was launched in late 2015. This stimulus-driven growth continued in the following years and intensified as the government sought to offset the economic impact of the COVID-19 pandemic with construction supply-side stimulus measures.

## China's motivations to act on climate

*Relevant questions from the Commission: To what extent does the CCP see climate change and environmental concerns as issues that impact its domestic legitimacy? How does it approach this challenge domestically?*

The announcement of the 2060 carbon neutrality goal aimed to both inject momentum to the international climate negotiations, in which it succeeded, and to pre-empt the US and European pressure, and occupy moral high ground before the 2020 elections and the inauguration of president Biden.

Domestically, Xi Jinping has set low-carbon development as a strategic priority for China<sup>1</sup>. There are obvious reasons to do this:

- **Pressing environmental challenges at home can threaten the CCP's legitimacy.** China's climate and clean energy policies since the early 2010s were strongly motivated by the urgency of tackling air pollution and other pressing domestic environmental issues. Air pollution became a turning point because it led to social unrest and civil society movements that confronted CCP's governance, undermining its credibility and accountability.
- **Climate is a national security issue.** food security, water resources, and the regional security environment, all key strategic issues, would be jeopardized by runaway climate change. In Xi's concept of "holistic national security", climate change is considered part of the "risks on environment and resources". In that sense, the CCP considers climate change a national security issue.
- **Climate action aligns with China's long-term economic and industrial goals.** The carbon neutrality goal aligns with China's priorities of "high-quality development", which means transforming its development model, energy and economic structure. China's ambition is to become a technological and market leader in the key technologies of the 21st century, including low-carbon technologies.
- **Leveraging climate diplomacy to meet its global agenda.** China wants to be seen as a steady partner and a crucial contributor to solving global environmental issues. Climate policy and diplomacy have allowed China to pursue many foreign policy goals - shaping the international rules, portraying China as a responsible stakeholder and provider of important public goods, building a multipolar world, and increasing China's influence and presence in developing and emerging markets.

**It is important to acknowledge that Xi's personal interest in foreign policy and environmental issues also plays an important role.** Xi pays attention to foreign policy more than any Chinese leader since Mao, and has a far more ambitious foreign policy agenda. Xi appears to also be using international announcements and commitments to advance his domestic economic and environmental goals.

**There are also strong interests that oppose climate action and reduction in fossil fuel use in China,** including provinces and state-owned enterprises with a high reliance on coal and coal-related industries. In general, putting a stop to China's carbon-intensive growth pattern is something the country is still grappling with: the leadership has been talking about addressing the unbalanced nature of the economy and excessive reliance on heavy industry and investment spending for more than a

decade, but in the past years, steel production again outpaced overall economic growth, indicating that the importance of heavy industry and construction increased.

## Assessing China's commitments and implementation

*Relevant questions from the Commission: How do China's climate commitments compare to those of other countries, and to what extent do they contribute to achieving global climate goals relative to the commitments of other countries? Is China on track to uphold its climate commitments? How do we assess the credibility of Chinese leader statements and commitments on climate?*

**China's long-term goal of carbon neutrality by 2060 can be seen as compatible with the goal of limiting global temperature rise to 2°C** - according to the IPCC's sixth assessment report, major developing countries should reach carbon neutrality between 2050 and 2070. **It is not compatible with the 1.5 degree target**, which requires net zero emissions globally by 2050<sup>2</sup>. However, given that China's emissions haven't peaked yet structurally, and the country's average living standards are still low, the long-term goal is at least comparable in ambition to the 2050 net zero goals of most large developed economies.

In the nearer term, besides pledging to peak CO<sub>2</sub> emissions before 2030, China has committed to reducing CO<sub>2</sub> intensity by at least 65% from 2005 level by 2030, and by 18% from 2020 to 2025. The country also has a target of raising the share of non-fossil energy sources (renewable energy and nuclear) to 20% by 2025 and 25% by 2030. **The country is on track to meet or exceed these targets. However, they still allow total emissions to rise by up to 10% by 2025 and 20% by 2030, compared with the 2020 level\***.

Over the next two decades, which are the crucial period for achieving rapid reductions in global greenhouse gas emissions, **China's goals are neither ambitious nor specific enough to correspond to the urgency to act**. The target of peaking CO<sub>2</sub> emissions before 2030 leaves space for emissions increases until late this decade and for a very wide range of possible emissions trajectories over the decade that follows (see Figure 2).

To keep the Paris agreement goal within reach, **it's essential that China's emissions peak and decline much faster** than required by the pledged targets. Both when assessing China's progress and commitments, and when engaging with Chinese decision-makers, making a distinction between the requirement to fulfil formal commitments, and the need for those commitments to be either overachieved or strengthened, is important.

The initial expectation communicated by China's policymakers after the carbon goals were announced was that the Central Committee of the CCP and State Council top-level policy documents on CO<sub>2</sub> peaking and carbon neutrality would specify a timetable and a roadmap for carbon peaking<sup>3</sup>. These documents were released before and form the basis for China's Nationally Determined Contribution.

However, in the second half of 2021, China experienced two developments that led to **shifting political signals that might lead to less stringent climate actions in the near-term**. First, the government's measures to tamp down on real estate speculation and limit lending to the sector led to a

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\* Assuming GDP growth averages 6% in 2021-25 and 5% in 2026-30.



steep slowdown in construction and heavy industry. The production of steel, cement and other construction materials is the largest source of CO<sub>2</sub> emissions in China. Secondly, the country experienced a shortage of coal caused by price controls and heavy-handed anti-corruption and mine safety campaigns at a time when coal demand was increasing fast. The shortage led to electricity cuts and rationing across the country.

Reflecting the changed priorities, in September 2021, in the depth of the coal and electricity crisis, premier Li Keqiang said “in light of the current situation, we must deepen the calculations and analysis, and...propose a timetable and roadmap for peaking emissions”<sup>4</sup>, indicating that the government was **not yet prepared to pin down a more specific pathway for emissions**.

Accordingly, the top-level climate policy documents, which the Chinese authorities call “1+N” policy framework<sup>5</sup>, and China’s updated climate pledge (formally, its nationally determined contribution)<sup>6</sup>, published just before the Glasgow COP26 climate summit, were **very light on targets and did not specify the emissions peaking timeline or peaking level**.

Instead, the plan relies on implementing a long list of actions and policies, including the promotion of clean energy, electric vehicles, electricity market reform, carbon trading, green financing, low-carbon industrial development, green transport infrastructure, circular economy, recycling, innovation capability and numerous other aspects of the low-carbon transformation. However, **almost all of these policy areas lack measurable or verifiable targets**.

A large number of sectoral and thematic implementation plans have been published thereafter and they have continued the same theme. It seems to be a case of throwing everything at the problem and seeing how far it gets you. As all these policies go into action, **this could entail the possibility of earlier emissions peaking, but provides no guarantees**.

The hesitancy to commit to a specific emissions pathway or ceiling for this decade might seem like a paradoxical result from the current downturn in emissions. However, **the real-estate slump and coal crisis have increased the uncertainty over China’s economic outlook**.

Through the policies and actions outlined in China’s climate plans, the government aims to create the political and economic preconditions for rapid emissions reductions in the following decades.

The lack of ambitious and measurable medium-term emissions goals means that both China’s progress towards the long term target, as well as the credibility of the target, is **not straightforward to measure analytically**. Under the targeted trajectory, it might take 15 years or more for China’s emissions to fall at a rate consistent with reaching carbon neutrality by 2060 (Figure 1), but the government can still say everything is going to plan.

Chinese state-owned enterprises have continued to invest in new coal-based power and steelmaking capacity<sup>7</sup>, which the government argues is not in conflict with the country’s carbon goals but certainly is not consistent with the rapid emissions reductions required by the Paris agreement. Under such an emissions trajectory, there isn’t space for existing coal power or coal-based steel plants to be utilized until the end of their conventionally assumed lifetimes, let alone for new ones to be added<sup>8,9</sup>.

Since the third quarter of 2021, China’s coal consumption and CO<sub>2</sub> emissions have been falling. However, the government’s near-term economic policy for 2022 has **shifted to supporting and**

**accelerating carbon-intensive infrastructure and industrial projects**, as well as the “steady” growth of energy intensive industry output<sup>10</sup>. In a further indication of the shift of priorities, the government workplan for 2022 focuses on boosting GDP growth and, unusually, refrained from setting targets for reducing emissions intensity of GDP<sup>11</sup>, presumably to allow for more energy intensive growth.

The recent measures aim to smoothen the current slump in construction and heavy industry. However, it is **too early to assess** whether they will lead to the resumption of rapid growth in emissions which, if it happens, would severely undermine the global climate effort.

## China’s narratives and messaging on climate

*Relevant questions from the Commission: How do Chinese policymakers use the issue of climate change to influence global perceptions of China? What narratives is the CCP pushing on climate change? Is there a difference between China’s international and domestic posturing on this issue?*

China’s international messaging on climate seeks to portray the country as a **responsible stakeholder**<sup>12</sup>, and a **reliable and committed contributor** to international efforts.

In the government’s communication both domestically and internationally, climate targets and green development are tied to modern, technologically advanced country that is moving ahead fast.

Domestically, environmental goals are a **part of the CCP’s vision of turning China into a modern, socialist country by 2035**. The vision includes green production and lifestyle, a clean and low-carbon energy system and an economic system with green development; fundamental improvement in air and water quality and reduction in soil contamination; protection of natural ecosystems; as well as falling CO2 emissions. The modernization goal also envisions China playing a more important role in addressing global climate change.<sup>13</sup>

According to opinion surveys, Chinese people are among the most concerned in the world about climate change<sup>14</sup>, highly supportive of government climate action<sup>15</sup>, and there is very little denial of the science. However, **the impacts of climate change are not communicated very actively**. For example, some reporting in China’s top state media on the catastrophic floods in Henan in summer 2021 mentioned climate change as a contributing factor, but much less prominently than international coverage. The official news agency Xinhua published a story on extreme weather events linked to climate change outside of China at the time of the floods.

The “dual carbon goals” became a top-level political priority and media issue in early 2021, after Xi gave speeches on the issue. This evidences that **messaging on climate issues is very top-down**.

Domestic media coverage focuses on technological and engineering achievements, such as records being broken for clean energy capacity and output.

For developing countries, **China’s message is a compelling story**: it involves integrating climate with modernization, industrialization, digitalization and economic growth, and presenting climate measures as a part of moving forward. Developed country messaging is often heard as positioning climate action as a barrier to development.

**China's messaging obviously aims to strengthen the legitimacy of the party and the government.** Both internationally and domestically, narratives focus on the country's perceived strength in implementation and long-term planning. The country has met and exceeded its previous commitments. This is in particular contrast with the U.S., which the Chinese perceive as gridlocked and unable to implement ambitious and consistent climate policies.

While many outside of China share the frustration over U.S. federal climate policy, the weakest aspect of China's messaging is the fact that the country's emissions continued to increase until very recently, and the country's targets anticipate a rise until late this decade.

At the Glasgow Climate Summit in November 2021, China's international narrative faced multiple obstacles. **The country's new climate pledge failed to pin down a specific emissions trajectory or to place a cap on the increase in emissions by 2030.** This made it difficult to position China as the country capable of long-term planning and implementation. In response, the Chinese delegation adopted a new line of communication<sup>16</sup>, emphasising concrete action<sup>17</sup> and the large number of policies that China has in place in favor of quantitative targets. The messaging also implicitly called into question the value of other countries' commitments.

## Diplomatic aims and tools

*Relevant questions from the Commission: How do Chinese diplomats use "climate diplomacy" to advance their objectives related to climate change and energy security? How is Beijing using diplomatic and other tools to achieve its objectives related to climate change? Conversely, how is Beijing using the climate change issue to try to advance its other diplomatic objectives (i.e. dissuading the US and other countries from opposing its initiatives in other areas for fear of disrupting possible cooperation on climate issues)?*

China's climate and environmental diplomacy has come a very long way in the past decade, reflecting both the increased priority of environmental issues and climate in the Communist Party's policies and ideology, and a more assertive and proactive foreign policy stance overall.

China has viewed international climate policy and diplomacy as **an opportunity to proactively shape the international system**, starting at least from the early 1990s. The first key aim was the acceptance of the principle of "Common But Differentiated Responsibilities", placing the primary responsibility for climate action on developed countries, and uniting developing countries behind this principle. As China's emissions grew, the country started to face pressure from vulnerable nations, particularly small island developing nations. China has a history of opposing the 2°C and later 1.5°C targets, because they required more ambitious emission reductions in China, as a mathematical necessity.

In the negotiations, **China has gradually accepted more responsibility, but continues to stick to its classification as a "developing country"**: China refuses to participate in the negotiations on "loss and damage" from historical emissions, despite its ranking after the second-largest historical emitter after the U.S., and on climate finance.

A significant focus for Chinese negotiators continues to be communicating the actions that China is taking, and defending the country against criticism. **China is under pressure from both developed countries and the most vulnerable developing countries to increase its ambition.**

China has placed a strong emphasis on the commitment of developed countries to mobilize \$100 billion in climate financing for developing countries. This is not because China wants a cut but because the country wants to defend the position of the broader bloc of developing countries and strengthen their negotiating position.

Beyond climate policy, **a core aim of China's diplomacy overall is to move from a U.S.-led system to a "multipolar" system.** Building up the G77 as a unified developing country group, as a counterweight to developed countries, aligns with this effort, as does establishing the BRICS group.

After the U.S. retreat from the Paris agreement in 2017, Xi sought to profile China as the defender of the agreement<sup>18</sup>. There was however little diplomatic follow-up to this — the EU-Canada-China ministerial process made little headway. **China's climate-related diplomacy has focused more on tangible investment projects and collaboration** than on encouraging stronger targets or aiming to shape countries' negotiating positions.

**China has had a more proactive and more positive stance in biodiversity negotiations** and in supporting the UN Environment Programme, particularly in south-south capacity building, and of course around infrastructure (BRI). The likely reasons for this are that Chinese leaders have confidence that the country has important contributions to make and a demonstrable track record, and that these issue areas have a much less developed international framework and are less contested than climate, **allowing China to play the role of a "rule-setter"**.

## Climate change and the U.S.–China bilateral relationship

**China puts a lot of emphasis on the US-China bilateral relationship, and pays very close attention to US climate politics and policymaking.** This includes symbolic aspects, such as the fact that Kerry was the only senior US official visiting China during the first year of the new administration. There is a hope of climate as a stabilizing element in this relationship. However, the changes in the priorities of the U.S. between the Obama, Trump and Biden administrations have understandably given the Chinese side whiplash. The inability of the Biden administration to pass legislation on climate so far obviously has not helped. Therefore, after these experiences, **climate is seen as a short-term issue in the relationship where any concessions should produce quick returns.**

In the run-up to the Glasgow Summit, the U.S. side sought to deal with climate as a standalone issue, while apparently having little to bring to the table by way of additional commitments or concessions that the U.S. could (credibly) make. China's response indicated that progress on climate would be affected by progress in other aspects of the relationship. The Chinese delegation's statements indicated a willingness to move on climate as a part of a broader set of negotiations that could encompass trade and security<sup>19</sup>.

China signing on to the Kigali Amendment and pledging to stop building new coal power plants abroad is a lot more than the U.S. committed to as a result of these exchanges, so it does demonstrate a willingness to take meaningful steps.

Obviously, **the Chinese government would want to see reciprocity**. Making major unilateral concessions in response to U.S. advances on climate would be particularly problematic, because China has the sense that it has delivered on its international commitments while the U.S. has not.

**There is plenty of scope for the U.S. to influence China's emissions trends and policies outside dedicated climate talks.** The tariffs on China's exports enacted by the Trump administration mainly affected relatively high value-added, low-carbon sectors. China's policy response was to offset the economic shock by boosting construction and carbon-intensive manufacturing, in a backward step for economic transformation and low-carbon development. The U.S.–EU carbon-based sectoral arrangement for steel<sup>20</sup> and the EU carbon border tariffs are examples of trade policies that are aiming to exert a positive influence.

A part of the motivation for China's leadership to pursue the carbon neutrality target is **achieving technological and market leadership in key zero-carbon technologies**, such as wind, solar, nuclear, electric vehicles, electrical transmission and storage, high-speed rail, green hydrogen, green steel and others. Whether China's leaders feel they need to step up efforts in these areas therefore depends strongly on what other major economies are doing and whether China is keeping up or pulling ahead. Besides raising the bar, progress in other major economies also reinforces the idea that **zero-carbon technologies are central to economic success** in the 21st century.

There is also scope for **a race to the top in international negotiations and commitments**. For example, the decisions by South Korea and Japan to stop financing overseas coal power projects helped pave the way for China's decision, as did direct diplomatic engagement.

## China's international influence

*Relevant questions from the Commission: How has China attempted to position itself as a global leader on climate issues? How and to what end has China exerted its influence on climate change in international organizations and standard-setting bodies addressing global green energy and emissions? Do China's efforts to position itself as an international leader on climate change align with its global energy investments, including along the BRI?*

China's official line is to portray itself as an **“important participant, contributor, and torchbearer”** to addressing climate change<sup>21</sup>. The concern about declaring China as a “leader” on climate was that the country doesn't have enough influence or soft power to play the role of a leader, and also that this positioning would set up high expectations for China's own climate action that the leadership is not prepared to meet.

The Belt and Road Initiative (BRI) is a key vehicle of China's diplomacy and influence. The BRI is a loosely coordinated brand tying together a wide range of projects and investments carried out by hundreds of actors with different aims and motivations. The initiative includes both projects that are engineered politically in a top-down manner and projects that are pursued by Chinese firms bottom-up. The first category of projects has to align with economic, diplomatic, geopolitical or other political objectives, while for the second category it's sufficient not to cross political red lines. Due to the diversity of actors and projects, there are few universal truths about the nature of the initiative. However, the projects are in general only possible because they respond to real demand from developing countries, and they play to China's strengths in infrastructure, financing and project execution.

First through the “going out strategy” and later through the Belt and Road Initiative, **China became the largest financier of coal power plants abroad.** Risk appetite, low-cost financing, equipment supply and construction enabled many coal power projects in the developing world to move ahead that would not have been viable otherwise. In this way, China’s domestic structural subsidies to state-owned enterprises worked to skew the energy choices of other countries.

In September 2021, Xi Jinping announced that China would “**no longer build coal power plants abroad**”. He also promised that China would support the development of green energy in developing countries, which reflects the increase in clean energy investments under the Belt and Road Initiative that is already taking place. In 2021 the amount of investment clean energy in outbound energy investments increased to a record, while the overall volume of energy investment shrunk. The average size of deals has decreased, which is conducive to more clean energy projects.<sup>22</sup>

With these policies, **China has begun to align outbound investments with the climate policy.** In fact, this alignment has progressed faster than in the case of domestic investments, which still include a lot of coal-fired power.

There is a major gap between the growing energy needs of developing countries and the amount of financing and equipment supply available to expand clean energy. **China is filling this gap with financing, construction services and technology.** This will certainly enforce China's "climate leadership" on the global stage, especially in the global south where countries have been repeatedly been short-changed by developed countries on climate finance.

While coal-fired power plants have been excluded, other types of carbon-intensive projects are still being financed, including captive coal-fired power plants linked to industrial complexes; oil- and gas-fired power plants; steel plants and other coal-based industrial capacity; coal-to-chemicals projects and oil&gas production.

After Xi announced the ban on new coal power abroad, **China has started to build “post-coal” energy diplomacy,** for example by incorporating clean energy investment and regional renewable energy centers to China–ASEAN talks and the Forum on China-Africa Cooperation (FOCAC). There hasn’t been a similar overture yet in the Central and Eastern Europe initiative (16+1).

The BRI is about big, shovel-ready projects. There is readiness and ambition to shift the investments to clean energy but a lot of institutional bias towards traditional sectors and types of projects remains. On the host country side, a lot of work is needed to remove barriers and create an enabling environment for clean energy and other low-carbon investments. This includes improving electrical grid infrastructure, regulation, markets and institutions, as well as technology transfer and establishment of manufacturing capacity in key developing markets.

China's involvement includes financing, engineering and construction, but also increasingly aid. The Global Development Initiative (GDI) proposed by President Xi at the UN General Assembly, has become a significant part of foreign policy. In speeches and interviews at the end of 2021, the Minister of Foreign Affairs Wang Yi vowed to make the rolling out of the GDI one of his top priorities for 2022. **The initiative includes climate change and green development as one of eight focus areas,** along with others such as digitalization and industrialization<sup>23</sup>.

China has also built up influence by **engaging in south-south cooperation through UNEP and BRI projects**, as well as integrating the BRI into the UN structures. The country is collaborating with the International Energy Agency and has a representative in the Executive Committee<sup>24</sup>.

## Figures

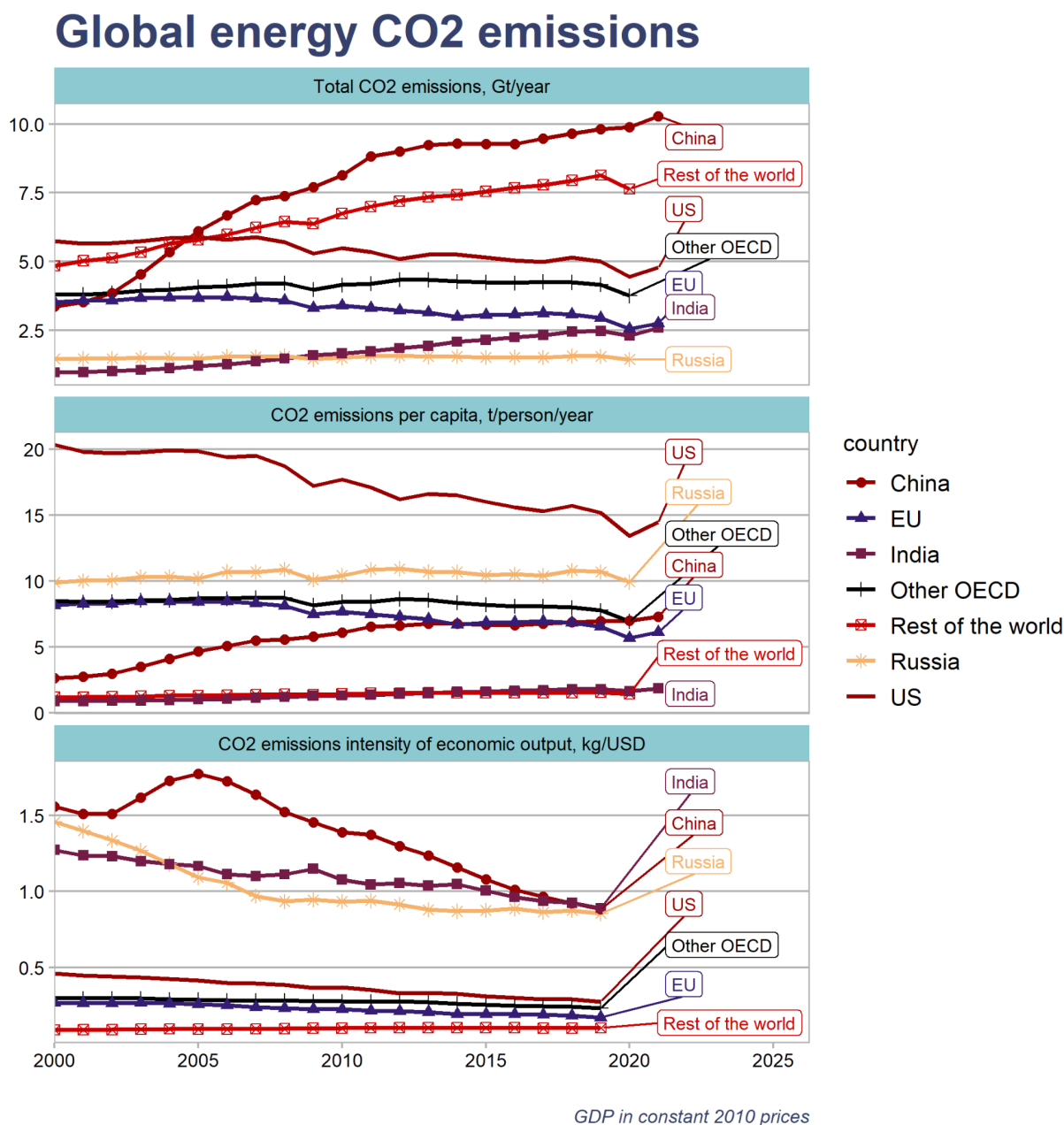


Figure 1. The CO2 emissions from fossil energy use for the world's largest emitters, shown in terms of absolute total emissions, emissions per capita and emissions per unit of economic output. China is by far the world's largest emitter in terms of absolute totals. The country's per capita emissions have overtaken the EU and the OECD, while remaining far below those of the U.S. The emissions intensity of China's economy is close to that of India, a much poorer developing country, and far above that of developed economies, despite steady reported progress in reducing intensity. Sources: CO2 emissions until 2020 from BP Statistical Review of World's Energy; 2021 from Global Carbon Budget; other data from World Bank databank.

## Indicative emissions pathways for China

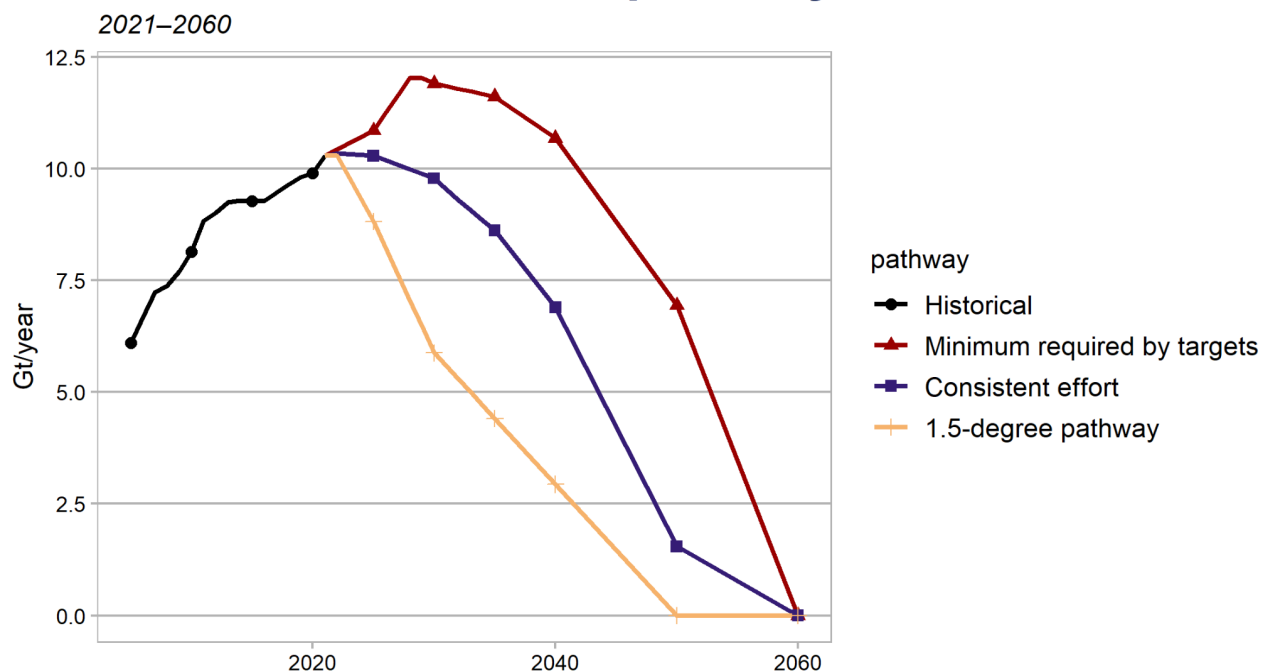


Figure 2. The wide range of emissions outcomes allowed for by China's commitments. The orange line shows the highest possible emissions pathway that China could follow while meeting the 2025 and 2030 CO<sub>2</sub> intensity targets, and the commitment to peak emissions before 2030. After 2030, emissions fall slowly and gradually, requiring very rapid reductions in 2040s and 2050s. This does not violate China's commitments but results in large cumulative emissions and does little to demonstrate the commitment to the long term goal over the next two decades. The "consistent effort" pathway shows a path to the carbon neutrality target in which emissions plateau until 2025 and start falling thereafter, avoiding a steep increase in the amount of effort required in the following decades. The 1.5-degree pathway would be extremely challenging to achieve, but it is what China and other countries should strive towards based on the Paris agreement. Sources: CO<sub>2</sub> emissions until 2020 from BP Statistical Review of World's Energy; author analysis.



# Endnotes

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- <sup>1</sup> Xinhua May 1, 2021: Xi stresses strategic resolve on building eco-civilization. [http://www.xinhuanet.com/english/2021-05/01/c\\_139919713.htm](http://www.xinhuanet.com/english/2021-05/01/c_139919713.htm)
- <sup>2</sup> Climate Action Tracker 2020: China going carbon neutral before 2060 would lower warming projections by around 0.2 to 0.3 degrees C. <https://climateactiontracker.org/press/china-carbon-neutral-before-2060-would-lower-warming-projections-by-around-2-to-3-tenths-of-a-degree/>
- <sup>3</sup> Xie Zhenhua, July 2021: A detailed explanation of the 1+N policy system as the timetable and roadmap for the realization of the dual carbon goals. <http://finance.sina.com.cn/zl/china/2021-07-27/zl-ikqcfnc9266336.shtml>
- <sup>4</sup> China State Council readout of the meeting of the National Energy Commission, Oct 11, 2021. <http://www.scio.gov.cn/32344/32345/44688/47166/47173/Document/1714527/1714527.htm>
- <sup>5</sup> Carbon Brief: China Briefing, 28 October 2021: '1+N'; Xi's energy instruction; Climate 'white paper'. <https://www.carbonbrief.org/china-briefing-28-october-2021-1n-xis-energy-instruction-climate-white-paper>
- <sup>6</sup> China's Achievements, New Goals and New Measures for Nationally Determined Contributions. <https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/China%20First/China%E2%80%99s%20Achievements,%20New%20Goals%20and%20New%20Measures%20for%20Nationally%20Determined%20Contributions.pdf>
- <sup>7</sup> Centre for Research on Energy and Clean Air 2022: Most coal power plants since 2016 entered construction in China in 2021, investment in coal-based steelmaking accelerated. <https://energyandcleanair.org/china-coal-power-steel-2021/>
- <sup>8</sup> UNFCCC. (n.d.). *UN Chief Calls for Immediate Global Action to Phase Out Coal*. Retrieved March 7, 2022, from <https://unfccc.int/news/un-chief-calls-for-immediate-global-action-to-phase-out-coal>
- <sup>9</sup> Vogl, V., Olsson, O., & Nykvist, B. (2021). Phasing out the blast furnace to meet global climate targets. *Joule*, 5(10), 2646–2662. <https://doi.org/10.1016/j.joule.2021.09.007>
- <sup>10</sup> Centre for Research on Energy and Clean Air 2021: "Stability, stability, stability" — what will China's 2022 economic priorities mean for the climate? <https://energyandcleanair.org/china-economic-work-conference-2021-climate/>
- <sup>11</sup> 2022 Government Work Report (Mar 5, 2022). <http://bj.crmtd.com/doc/1063/1/4/7/106314764.html?coluid=93&kindid=10095&docid=106314764&mdate=0305121435>
- <sup>12</sup> Renjie, F. (2021). The Making of China's Climate Diplomacy: Analysis from the Perspective of Two-Level Games. *China Report*, 57(4), 398-416.
- <sup>13</sup> Article on the 2035 goal by Vice Premier Han Zheng. *People's Daily* Nov 19, 2020. <http://politics.people.com.cn/n1/2020/11/19/c1001-31936103.html>
- <sup>14</sup> European Investment Bank 2020: 2019–2020 EIB climate survey. <https://www.eib.org/en/infographics/2nd-climate-survey-climate-change-fear-china-eu-us>
- <sup>15</sup> China4C's 2017 National Public Opinion Survey Report Climate Change in the Chinese Mind. <https://unfccc.int/sites/default/files/resource/Press%20Release%20-%20202.pdf>
- <sup>16</sup> The Guardian, Nov 10, 2021: China's top Cop26 delegate says it is taking 'real action' on climate targets. <https://www.theguardian.com/environment/2021/nov/10/chinas-top-cop26-delegate-says-it-is-taking-real-action-on-climate-targets>
- <sup>17</sup> Xinhua, Nov 1, 2021: Written Statement by Xi Jinping at the World Leaders Summit. [http://www.news.cn/english/2021-11/01/c\\_1310284288.htm](http://www.news.cn/english/2021-11/01/c_1310284288.htm)
- <sup>18</sup> UN PAGE, Jan 18 2017: China tackles climate change and honors the Paris Agreement. <https://www.un-page.org/china-tackles-climate-change-and-honors-paris-agreement>
- <sup>19</sup> Chinese Ministry on Foreign Affairs readout of a meeting between Wang Yi and John Kerry, Sep 1, 2021. [https://www.mfa.gov.cn/web/wjbxhd/202109/t20210901\\_9137796.shtml](https://www.mfa.gov.cn/web/wjbxhd/202109/t20210901_9137796.shtml)
- <sup>20</sup> White House, Oct 31, 2021: The United States and European Union To Negotiate World's First Carbon-Based Sectoral Arrangement on Steel and Aluminum Trade. Fact Sheet. <https://www.whitehouse.gov/briefing-room/statements-releases/2021/10/31/fact-sheet-the-united-states-and-european-union-to-negotiate-worlds-first-carbon-based-sectoral-arrangement-on-steel-and-aluminum-trade/>
- <sup>21</sup> Xi Jinping's speech at the 19th party congress: [https://www.chinadaily.com.cn/china/19thcpnationalcongress/2017-11/04/content\\_34115212.htm](https://www.chinadaily.com.cn/china/19thcpnationalcongress/2017-11/04/content_34115212.htm)
- <sup>22</sup> Green Finance & Development Center 2022: China Belt and Road Initiative (BRI) Investment Report 2021. <https://greenfdc.org/brief-china-belt-and-road-initiative-bri-investment-report-2021/>
- <sup>23</sup> Chinese Ministry of Foreign Affairs, Sep 23, 2021: the Global Development Initiative will Push for the International Community to Meet the Challenges and Jointly Seize Opportunities. <https://www.mfa.gov.cn/ce/cgsy/eng/xwdt/t1909388.htm>
- <sup>24</sup> International Energy Agency 2017: IEA and China deepen ties with extensive three-year work programme. <https://www.iea.org/news/iea-and-china-deepen-ties-with-extensive-three-year-work-programme>