

Biden's green agenda: another dimension of Sino-American rivalry

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Main points:

- The Biden administration unveiled unprecedented investment plans for advancing America's clean energy agenda and outcompeting China in what the White House identifies as the critical battlefield for the Sino-American rivalry: the race for technological supremacy in the low-carbon future.
- In the long run, the steps laid out in the plan are intended to reorient the U.S. economy away from fossil fuels. The intermediate transition period, which is expected to last decades, will see increased competition for less emitting fossil fuels, especially natural gas. Chinese demand for Russian gas will boost relations between Beijing and Moscow at the expense of Washington's interests.
- Biden's grand plan is framed into pledges for curbing GHG emissions announced, inter alia, during the April climate summit. Notwithstanding the structural U.S.-China competition, both nations appear receptive to the need for cooperation in addressing climate change.

Convened by President Joe Biden, leaders of forty of the world's most emitting countries met virtually during a two-day event in late April to define a new roadmap in the fight against climate change. In spite of deep tensions between China and the United States, as well as the latter's troubled relationship with Russia, the Chinese and Russian presidents, Xi Jinping and Vladimir Putin, both participated in the summit organized by their American counterpart, thus emphasizing the importance attached by the world's largest powers to climate issues. Held seven months ahead of the much-awaited COP26 summit in Glasgow, the talks resulted in new emission reduction pledges being made, and previous ones being affirmed. Perhaps most importantly, however, the event – organized weeks after he unveiled plans for lavish spending on the green transformation – has sent out the following message: **the U.S. is back at the table, and it intends to take the lead in the global race towards carbon neutrality, which is increasingly inseparable from the strategic Sino-American competition.**

Three steps forward, two steps back: restoring credibility to American climate policy

It was no coincidence that President Biden's climate summit, organized through his own initiative, was convened within the first 100 days of his presidency – the period during which

newly-elected U.S. presidents attempt to highlight prioritized areas of policy. The event was meant to bring credibility to the process of restoring America's commitments to the climate action and undo the vast reputational damage caused – not least in the climate sphere – by the Trump presidency. Biden's summit was his second major move in a month intended to exhibit his administration's commitment to the climate cause. Weeks earlier, following the introduction of a \$1.9 trillion pandemic relief bill (the "American Rescue Plan"), the White House announced a monumental infrastructure plan worth a combined \$3 trillion and intended to accelerate America's transition to green energy (the "American Jobs Plan").¹ The amounts involved are unparalleled in U.S. history, drawing comparisons to Roosevelt's New Deal.² **The White House bluntly stated that the goal is to "position the United States to out-compete China"³ by funding rural broadband, 5G telecommunications, advanced training for millions of workers and millions of affordable and energy-efficient housing units, investments in roads, bridges, railways, ports, electric vehicle charging stations and improvements to the electric grid and other parts of the energy sector.** At least \$600 billion are expected to be set aside for realizing the green energy transition, including a \$175 billion investment in electric battery development and funding for 500,000 electric vehicle charging stations across the United States. \$35 billion would be spent on "solutions needed to achieve technology breakthroughs that address the climate crisis and position America as the global leader in clean energy technology", and another \$15 billion on "demonstration projects for climate R&D priorities, including utility-scale energy storage, carbon capture and storage, hydrogen, advanced nuclear, rare earth element separations, floating offshore wind, biofuel/bioproductions, quantum computing, and electric vehicles, as well as strengthening U.S. technological leadership in these areas in global markets". The Biden administration wants to modernize the electric grid, mandate the construction of electric vehicles and build a distribution chain. Most intriguingly, the proposal identifies "high-growth industries of the future" as areas which will receive funding.

Notwithstanding all the fanfare surrounding Biden's latest moves, **the fate of this economic reorientation, priced at over \$2 trillion, depends on whether the package will receive the**

¹ White House. 2021. *FACT SHEET: The American Jobs Plan* [online] White House Statements and Releases. Available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/31/fact-sheet-the-american-jobs-plan/>

² See Scott Smith J. 2021. *The real lesson of the New Deal: Biden can't make unforced errors*. [online] Washington Post. Available at: <https://www.washingtonpost.com/outlook/2021/05/04/real-lesson-new-deal-biden-cant-make-unforced-errors/>

³ *Supra*, 1.

Congressional support it needs, which in turn depends primarily on how it is going to be financed. Republicans are expected to torpedo Biden’s attempts at rising corporate taxes, which the Democrats have alluded could be one way to fund the plan. With the relief bill having already been enacted, however, Biden’s subsequent spending frenzy promise has been identified as plausible. Or, in any case, credible enough to shore up the credibility of the pledge announced at the summit, that **the U.S. will have reduced its GHG emissions by 26-28% below 2005 levels by 2025, and 50-52% by 2030.** These numbers set very ambitious targets; while the American emissions are believed to have already decreased by 13% from the 2005 levels⁴ in 2019 and 21% in 2020⁵, with the latest drop being attributed to the crisis-induced decline of economic performance, they are now again on the rise as the country begins to recover from the pandemic. According to a recent study by the University of Maryland⁶, in order to cut its emissions by half, the proportion of renewable energy in electricity production in the U.S. would have to quadruple by 2030 and be accompanied by a massive increase in the production of electric cars. This is why the Biden administration's climate change strategy is based on both huge spending and widespread new regulations.

Reaching the above-listed goals will require extensive and continuous efforts from both public and private sectors and, as one analyst put it, “national mobilization that makes the Manhattan Project look like an elementary school science fair”.⁷ On the domestic plane, Biden’s push for green transition must reach far enough in the next four years so as to render its undoing impossible for a Republican administration. Rhetoric will continue to weigh heavily on the climate debate in the U.S., which is why the new administration emphasizes the economic gains and job creation that the green transition should entail, rather than on the social burdens associated with carrying out the process. To maintain the desired narrative, Biden’s message will need allies from the Big Tech, who have already appeared receptive to his pro-climate orientation. In the run-up to the recent summit and in a show of support, Apple has endowed

⁴ United States Environmental Protection Agency (EPA). 2021. *Inventory of U.S. Greenhouse Gas Emissions and Sinks*. [online]. EPA. Available at: <https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks>

⁵ Larsen K., Pitt H., Rivera A. 2021. *Preliminary US Greenhouse Gas Emissions Estimates for 2020*. [online]. Rhodium Group. Available at: <https://rhg.com/research/preliminary-us-emissions-2020/>

⁶ Hultman, N., Clarke, L., McJeon, H., Cui, R., Hansel, P., McGlynn, E., O’Keefe, K., O’Neill, J., Wanner, A., Zhao, A. Charting an Ambitious U.S. NDC of 51% reductions by 2030. [online] University of Maryland School of Public Policy, Center for Global Sustainability. Available at: https://cgs.umd.edu/sites/default/files/2021-03/Working%20Paper_ChartNDC_Feb2021.pdf

⁷ Patrick, S. M. 2021. *Biden’s Ambitious Climate Pledge Puts U.S. Credibility on the Line*. [online] Council on Foreign Relations. Available at: <https://www.cfr.org/article/bidens-ambitious-climate-pledge-puts-us-credibility-line>

a new \$200 million Restore Fund to invest in forestry projects.⁸ Google has added time-lapse videos to its Google Earth site, which show the transformation of certain geographic areas in time-lapse over four decades,⁹ and Facebook has joined the club of companies that use 100% renewable energy.¹⁰

Standing up to the green dragon: the Sino-American competition with climate change as a backdrop

China is responsible for 28.8% of CO₂ emissions,¹¹ twice as much as the United States, the world's second-largest polluter. Washington is aware that there can be no significant reductions in global greenhouse gas emissions without robust and timely actions committed to and implemented by Beijing.¹² Thus far, China has made great strides in the fight against global warming, and **President Xi Jinping reiterated China's commitment made last year to achieve carbon neutrality by 2060, in a recent video conference with France and Germany.**¹³ **At April's climate summit, President Xi Jinping pledged that China's coal consumption would peak in 2025 and coal would be phased down in China's energy mix until 2030.**¹⁴ However, resisting the pressure from John Kerry – Biden's climate envoy – during a meeting held in April in Shanghai, the Chinese administration declined to accelerate its 2060

⁸ Apple. 2021. *Apple and partners launch first-ever \$200 million Restore Fund to accelerate natural solutions to climate change*. Apple Press Release. Available at: <https://www.apple.com/newsroom/2021/04/apple-and-partners-launch-first-ever-200-million-restore-fund/>

⁹ Associated Press. 2021. *Google Earth adds time lapse video to depict climate change*. Associated Press. Available at: <https://www.marketwatch.com/story/google-earth-adds-time-lapse-video-to-depict-climate-change-01618578260>

¹⁰ Ivanova, I. 2021. *Facebook reaches 100% renewable-energy milestone* [online] CBS News Marketwatch. Available at: <https://www.cbsnews.com/news/facebook-renewable-energy-commitment-100-percent-milestone/>

¹¹ Chemnick J., Storrow, B/ 2021. *China Says It Will Stop Releasing CO₂ within 40 Years*. [online] Scientific American. Available at: <https://www.scientificamerican.com/article/china-says-it-will-stop-releasing-co2-within-40-years/>

¹² See Colgan, J. D. 2020. *The Climate Case Against Decoupling*, [online] Foreign Affairs. Available at: <https://www.foreignaffairs.com/articles/united-states/2020-09-14/climate-case-against-decoupling>

¹³ Ministry of Foreign Affairs of the People's Republic of China. 2021. *Xi Jinping Holds Video Summit with French and German Leaders*. [online]. Available at : https://www.fmprc.gov.cn/mfa_eng/zxxx_662805/t1869825.shtml

¹⁴ Liao, N., Yep, E., Zhou, O. 2021. *China to curb coal demand growth in economic plans as part of climate targets*. [online] S&P Global. Available at: <https://www.spglobal.com/platts/en/market-insights/latest-news/electric-power/042321-china-to-curb-coal-demand-growth-in-14th-5-year-plan-reduce-further-in-15th-plan>; Plummer, B., Popovich, N. 2021. *The U.S. Has a New Climate Goal. How Does It Stack Up Globally?* [online] New York Times. Available at: <https://www.nytimes.com/interactive/2021/04/22/climate/new-climate-pledge.html>

target for achieving carbon neutrality or indeed to commit to absolute emissions cuts by 2030¹⁵. Together with India, the world's thirdlargest GHG emitter, China continues to insist on the principle of "common but differentiated responsibilities," arguing that, as developing countries, they cannot possibly accept the same obligations as wealthier nations – whose per capita emissions remain far higher – as they are still on the path to reaching their eventual economic potential as developed economies.¹⁶ President Trump used to point out that the reliance by China and India on their status as developing economies has been detrimental to America's economic interests. Perhaps President Biden should rephrase this argument to advance the climate agenda, which in fact corresponds with his plans for the economic reorientation of the U.S.

Undoubtedly, President Biden's climate ambitions are as much about combating global warming as they are about Washington's structural competition with Beijing. Being acutely aware of the high geopolitical stakes in the green technology race, China has been pushing hard for years to secure its lead. As pointed out in a 2019 report by the Global Commission on the Geopolitics of Energy Transformation, **China is now the world's largest producer, exporter and installer of wind turbines, solar panels, electric vehicles and batteries and holds about 30% of all renewable energy patents (i.e. 10% more than the U.S.). It has overtaken the U.S. as the country investing most in renewables, with expenditures varying from \$119.3 billion in 2015 and \$83.4 billion in 2019.**¹⁷ All these efforts, combined with extreme concentration of rare piles of earth in China and vast reserves of lithium, all of which are critical components of renewable energy hardware, place Beijing at the forefront of the long-term game for technological primacy in the low-carbon future.

Still, it will take decades before the outcome of the "green competition" becomes clear. Its developments will vary across the spectrum, with the intermediate process of transitioning to a low-carbon global economy being likely to stretch out into three phases. The first phase, which the world has already been entangled in, will see increased reliance on low-emissions fossil fuels, mostly natural gas and (not necessarily clean) hydrogen, especially

¹⁵ Jiangtao, S. 2021. US climate envoy John Kerry ends China trip with little to show . [online] South China Morning Post. Available at: <https://www.scmp.com/news/china/diplomacy/article/3129979/us-climate-envoy-john-kerry-ends-china-trip-little-show>

¹⁶ Ministry of External Affairs of India. [2015]. Joint Statement on Climate Change between India and China during Prime Minister's visit to China [online]. Available at: https://mea.gov.in/bilateral-documents.htm?dtl/25238/Joint_Statement_on_Climate_Change_between_India_and_China_during_Prime_Ministers_visit_to_China

¹⁷ 2020. "Frankfurt School-UNEP Centre and BNEF, Global Trends in Renewable Energy Investment 2020", Frankfurt School-UN Environment program Centre and Bloomberg New Energy Finance: 43.

in Europe and Asia, as well as concentrated spikes in coal consumption, most notably in China. In the second phase, the largest economies will phase out fossil fuels once enough energy production from renewables and nuclear sources is secured and are reliable enough to cover both their ongoing energy demand and secure long-term sustainable growth. Lastly, the third phase is expected to revolve around the rush to assist less developed economies in performing the green energy transition, which is expected to feature geopolitical frictions with neocolonial overtones.

Each of these three phases will generate a different set of geopolitical settings and uncertainties than those which will have become dominant once the global energy landscape turns low-carbon. The intricacies of the first phase are already discernible. In Europe, for instance, American firms are pushing to finally gain a market share in the continental gas market.¹⁸ Invigorated by the pandemic-induced market shakeup and supported by Washington's on-and-off push to prevent Russia from launching its Nord Stream 2 pipeline, U.S. companies are stacking up government contracts for LNG deliveries in the CEE region. Fuelled by the desire present in the East more than in the West of Europe to reduce energy dependence on Russia, the increase in imports of American gas translates into political and economic outcomes. No wonder then that President Biden has not spoken against the hydraulic fracturing, the environmentally unfriendly technique which has rendered the American gas shale revolution possible. Another important shift unfolding in this first phase concerns Russia, which, increasingly pushed out from Europe and lured by the insatiable Asian markets, is directing its gas exports to the East, particularly to China.¹⁹ **The Sino-Russian rapprochement, already stimulated by the energy transition underway, may be further tightened thanks to the geopolitically disrupting manifestations of climate change.**²⁰ The melting ice caps in the Arctic will allow to reduce the journey from Shanghai to Hamburg by 10-15 days, or 5,000 miles. To gain access, China, who looks forward to its Polar Silk Road and the Arctic's seabed

¹⁸ See Russell, M. 2020. *Energy security in the EU's external policy*. [online]. European Parliamentary Research Service report. Available at:

https://www.europarl.europa.eu/thinktank/en/document.html?reference=EPRS_IDA%282020%29649334;

Mitrova, T., Boersma, T. 2018. *The Impact of US LNG on Russian Natural Gas Export Policy*. [online] Columbia SIPA Center on Global Energy Policy report. Available at:

<https://www.energypolicy.columbia.edu/research/report/impact-us-lng-russian-natural-gas-export-policy>; EU

EEAS 2018. *EU imports of U.S. LNG are up nearly 600% since July 2018*. [online] EU EEAS factsheet.

Available at : https://eeas.europa.eu/delegations/tajikistan/71723/eu-imports-us-lng-are-nearly-600-july-2018_ru;

¹⁹ See Chow, E. 2021. *Sino-Russian Energy Relations: A Match Made in Heaven?* [online] Carnegie Moscow Center. Available at: <https://carnegie.ru/commentary/83757>

²⁰ See Goodman, S. Maddox, M. 2018. *China's Growing Arctic Presence*. [online] Wilson Center Polar Institute. Available at: <https://www.wilsoncenter.org/article/chinas-growing-arctic-presence>

resources (China already owns a nearly 30% stake in Russia's Yamal LNG project), may therefore be inclined to strengthen Russia in ways in which the latter could not have been otherwise given the burden of Western sanctions imposed on it (Beijing could, for instance, offer to modernize Russia's increasingly obsolete industry). Close cooperation between Moscow and Beijing would be troubling for Washington for all sorts of reasons. Asked about what keeps him awake at night, one U.S. admiral reportedly said: "the view of a Chinese LNG vessel in the Northern Sea Route, escorted by a Russian nuclear submarine".²¹

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²¹ Bordoff, J., Goodman, S., Yergin, D.H., Sherwood-Randall, E. 2020. *The Future of Energy, Climate and Geopolitics*. [online] Debata w Council on Foreign Relations. Available at: https://www.youtube.com/watch?v=vedVgCJg3dw&list=PLb8Oqk-TOXvyK_VUgLNY3KIG_zoWJ-2j8&index=8

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