



China, EU And The United States Find Common Ground On Climate Actions

By Erik BAARK and CHEN Gang

US President Joe Biden invited 40 world leaders to the Leaders' Summit on Climate he hosted from 22 to 23 April 2021. As China, the EU and the United States are responsible for about half of global CO₂ emissions, whether Beijing, Brussels and Washington can forge joint emission cutting actions will have significant implications for the world's climate change mitigation. Both President of European Commission Ursula von der Leyen and Chinese President Xi Jinping addressed the virtual Earth Day climate change summit, demonstrating that the three superpowers have found common ground and reached consensus on climate change commitments despite their divergences or even confrontations in other areas.

CHINA, THE UNITED STATES AND EU, PLEDGE CARBON NEUTRALITY AMIDST CLIMATE CHALLENGES

President Xi Jinping's statement on Chinese climate change commitments at the Summit was long on philosophical issues of harmony between man and nature but relatively short on concrete actions. Many initiatives in China are guided by the concept of an ecological civilisation launched by the Chinese Communist Party in 2007, which seeks to attain a harmonious relationship between man and nature as encapsulated in Xi Jinping's statement at the Summit: "Ecological advancement and conservation have been written into China's Constitution and incorporated into China's overall plan for building socialism with Chinese characteristics. China will follow the Thought on Ecological Civilization and implement the new development philosophy".¹

However, one paragraph of the speech provided specific details for China's targets in the immediate and long-term future – largely repeating commitments that President Xi had delivered in September and December 2020. One new target concerned limiting coal

¹ http://www.xinhuanet.com/english/2021-04/22/c_139899289.htm, accessed 18 May 2021.

consumption during the 14th and 15th Five-Year Plans (FYP, 2021-2030) and “strictly controlling” projects for coal-fired power generation projects. Xi also expressed a strong desire to collaborate with the United States and other nations on climate actions, including an ambition to ensure that Chinese projects in the Belt and Road Initiative will be sustainable and “green”. According to a joint statement between US Special Presidential Envoy for Climate John Kerry and China Special Envoy for Climate Change Xie Zhenhua in Shanghai, the two countries will take appropriate actions to maximise international investment and finance in support of the transition from carbon-intensive fossil fuel-based energy to green, low-carbon and renewable energy in developing countries. Xi also recognised the significance of other greenhouse gasses than CO₂, such as methane and HFCs which China needs to phase out too.

Simultaneously, the 14th FYP demonstrates that China has intensified its green innovation policy, lending new support to the development of renewable energy and other technologies to reduce China’s carbon footprint during the decade, until non-fossil energy sources contribute at least 20% to total energy consumption by 2025. China is already home to the world’s largest production capacity in wind turbines and solar panels, contributing around 45% to global wind turbine production, while its share of solar panel manufacturing is about 72% of total global output. Installed wind power capacity has also increased dramatically, from 31GW in 2010 to 280GW in 2020; from 2015 to 2020, solar power installations grew from 42GW to 250GW. At this rate, an installed capacity of 1,200GW combined wind and solar power would be within reach in 2030, while a further reduction of the cost of non-fossil sources of energy could potentially increase the share of such sources to 60% of energy consumption in 2030.²

The challenges ahead are not insignificant, however. The sticking point for China is coal. China’s dependence on coal for energy production has been a notorious barrier to the improvement of not just emission rates, but also the struggle against air pollution and its related health effects in urban environments. Nevertheless, local governments are still frantically building new coal power plants, often prompted by the need of provincial officials to achieve economic growth for boosting their chances of promotion and so on. In 2020, China commissioned 38.4GW of new coal plants, more than three times the 11.9GW commissioned in the rest of the world. Chinese provinces had also granted construction approval to 36.9GW of coal power projects in the same year.³ It is these contradictory policies that Xi Jinping now wishes to “strictly control”. The transition to a low-carbon economy – and ultimately to a net-zero emission status in 2060 – will require huge investments and comprehensive reform. China’s total financial needs are estimated to reach RMB55.95 trillion between 2016 and 2030 in order to achieve the targets incorporated in China’s commitments submitted earlier to the UN.⁴

Ursula von der Leyen addressed the Leaders’ Summit for Climate with a statement on Europe’s ambition to reduce greenhouse gas emissions in 2030 by at least 55% compared to 1999 levels. This commitment is designed to follow up on the targets adopted in Europe’s Green Deal launched in December 2019.⁵ The EU aims to be climate neutral in 2050, with the implications that there will be no net emissions of greenhouse gases in Europe by 2050, economic growth will decouple from resource use, and no person and no place will be left behind.

² [https://chinadialogue.net/en/energy/china-can-benefit-from-a-more-ambitious-2030-solar-and-wind-target/#:~:text=While%20from%202015%20to%202020,wind%20turbines%20\(~45%25\)](https://chinadialogue.net/en/energy/china-can-benefit-from-a-more-ambitious-2030-solar-and-wind-target/#:~:text=While%20from%202015%20to%202020,wind%20turbines%20(~45%25),), accessed 18 May 2021.

³ <https://globalenergymonitor.org/report/china-dominates-2020-coal-development/>, accessed 18 May 2021.

⁴ <https://themasites.pbl.nl/commit/wp-content/uploads/COMMIT-Fact-Sheet-China-Climate-Policies-NDCs-and-Financial-needs.pdf>, accessed 18 May 2021.

⁵ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en, accessed 18 May 2021.

The recent agreement on a European Climate Law will make the 55% reduction a legal obligation for the EU and its member states, and establish a European Scientific Advisory Board to advise policymakers on the alignment of EU policies with the bloc's climate neutrality goal.⁶ It was also agreed to formulate a greenhouse gas budget, which will determine how much carbon the EU can emit up to 2050 before it breaches the Paris Agreement.

However, some member states opposed making the 2050 goal a legal obligation for every country individually, and instead insisted that carbon neutrality by 2050 should be a collective EU goal, with some countries reaching the objective later while others decarbonising their economies sooner. This is an indication of the potential fragmentation of climate policy within the European Union where the Visegrad Four (Czechia, Hungary, Poland and Slovakia) experience difficulties following the ambitions of the majority of member states.⁷

Brexit – the United Kingdom's decision to leave the European Union – has also had a negative impact since the UK had been a proponent of ambitious climate policy goals.⁸ Furthermore, the long and difficult negotiations related to Brexit and the delay in its actual implementation for four years have disrupted the EU's political and administrative work and drawn attention away from essential tasks, such as reaching consensus on climate change mitigation and adaptation.

The United States has made an aggressive new commitment to fighting climate change shortly after the Biden administration took over: cutting its greenhouse gas emissions by 50% to 52% relative to 2005 levels in less than a decade. As the host of the Leaders' Summit on Climate, President Joe Biden announced ambitious plans for investing in agriculture to store carbon in soil, making electric vehicles, capping pipelines that leak methane and building green hydrogen plants. As Biden has led the United States to re-join the 2015 Paris Agreement, such a commitment will be regarded as part of the self-imposed targets known as Nationally Determined Contributions, or NDCs, under the Paris Agreement. This NDC is supposed to be much more aggressive than the first NDC proposed by the Obama administration in 2015, which aimed to cut emissions by only 26% to 28% from the year 2005. Like other major economies, the United States also wants to be carbon neutral by 2050.

CLIMATE COOPERATION AND ENGAGEMENT

The ambitions for cooperation on climate change have been frequently expressed at joint meetings on EU-China cooperation. For example, the *EU-China Joint Declaration on Climate Change* in 2005 was followed by similar memoranda in 2010, 2013 and 2015, and most recently by the EU-China Leaders' Statement on Climate Change and Clean Energy 16 July 2018.⁹ In the aftermath of the Paris Agreement in 2015, China and the EU have also expressed strong commitment to working together on clean energy, low-carbon technologies and emissions trading. This mutual commitment was strengthened by a sense of more urgent

⁶ <https://www.edie.net/news/11/Breakthrough-as-EU-negotiators-clinch-deal-on-European-climate-law/>, accessed 18 May 2021.

⁷ See Veronika Zapletalova and Magda Kominkova, "Who Is Fighting against the EU's Energy and Climate Policy in the European Parliament? The Contribution of the Visegrad Group", *Energy Policy* 139 (2020).

⁸ See Alexandra-Maria Bocse, "The UK's decision to leave the European Union (Brexit) and its impact on the EU as a climate change actor," *Climate Policy*, 20:2 (2020), 265-274.

⁹ https://ec.europa.eu/clima/sites/default/files/news/20180713_statement_en.pdf, accessed 18 May 2021.

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responsibilities given the US Trump administration's decision to withdraw from the Paris Agreement (which fortunately has been reversed by the Biden administration).

Over the years, China has gained enormous know-how and revenue through participating in the Clean Development Mechanism (CDM), a UN emission trading scheme that allows an industrialised country with an emission-reduction commitment under the Kyoto Protocol to implement an emission-reduction project in developing countries. The launch of a nationwide carbon trading market in Shanghai by June 2021 may offer further opportunities for international collaboration. In the long run, the Chinese may welcome foreign players, including those from the EU and the United States, to trade carbon reduction credits on this platform.

Notably, the fundamental visions and policy approaches to climate change and low-carbon economy in China and Europe differ in vital aspects, even if they share the ultimate goals of achieving carbon neutrality by mid-century and attempting to restrict global warming by 2100 to 2°C or lower. China adheres to the philosophy of ecological civilisation, as discussed earlier, but implements this overall philosophy through state-directed economic plans and regulations. The European approach is based on The Green Deal, which encompasses many different laws, policies and initiatives that seek to mobilise both state and market actors. Nevertheless, there are areas such as carbon markets and trade, development of technologies for energy transition, and promotion of a circular economy that will ultimately serve to meet common carbon-neutrality goals.

The EU carbon emissions trading system has been operational for more than 15 years; having overcome initial difficulties it now has reached its fourth trading phase (2021-2030) after a major reform in 2018 that served to reduce surplus free allocations of permits, hence raising the price of a permit to emit one ton of carbon from less than 10 Euros to more than 50 Euros. The Chinese national emission trading system becomes operational during 2021, drawing considerable inspiration from the experience of the European system and assistance from a large number of EU organisations and countries. Cooperation between the two systems has been strengthened and there is a prospect that EU and China can work together to develop rules for an international emission trading infrastructure for trading across the two systems. This would create the basis for the largest carbon trade market in the world to help major contributors of global annual carbon emissions to reduce their impact on climate change.

Another key area of cooperation is energy transitions, which are prioritised in both EU and China. Development of innovative technologies and services for the clean energy transition can exploit the complementarity that exists between EU and China. EU companies have been world leaders in low-carbon innovations, while China has reached production capacity in renewable energy technologies that constitute more than two-thirds of the world market.

John Kerry visited Shanghai and met Xie Zhenhua in April 2021. The United States and China promised to continue the discussion, in preparation of the COP 26 in Glasgow and beyond, on concrete actions to be taken in the 2020s to reduce emissions in accordance with the Paris Agreement-aligned temperature limit. Measures include policies and technologies to decarbonise industry and power through a circular economy; ensuring energy storage and grid reliability; enhancing CCUS (carbon capture, utilisation and storage) and green hydrogen capability; increasing deployment of renewable energy; promoting green and climate resilient agriculture, energy efficient buildings and green, low-carbon transportation; and cooperation on addressing emissions of methane and other non-CO₂ greenhouse gases and emissions from

international civil aviation and maritime activities. They will also further cooperate on promoting a successful COP 15 of the Convention on Biological Diversity in Kunming, China.

While the bilateral statements and agreements on cooperation in fighting climate change have witnessed more ambitious commitments recently, the actual scope for cooperation with the United States has been severely undermined by the Trump administration's withdrawal from the joint goals of Paris Agreement, repealing of the Clean Power Plan that could have reduced power-sector emissions by 32% by 2030, and weakening of legislation relating to emissions standards for cars, trucks, among others. The international community has taken note of the potentially short-lived nature of US climate policy, while awaiting for the United States to demonstrate that Biden's domestic carbon-reduction plan can secure long-time feasibility, for instance through bilateral support in Congress.¹⁰

COMPETITION FOR GLOBAL GOVERNANCE LEADERSHIP

Cooperation between the three powers has already strengthened their efforts to reduce greenhouse gas emissions, but competition is also rife, both in terms of seeking the political prestige of being regarded as the leading proponent of ambitious climate change mitigation and in terms of occupying a leading position in development and production of low-carbon technologies. For example, China is in a leading position in the global market for such key green technologies as wind turbines with the installation of more than half of wind power capacity worldwide, and in solar power where Chinese producers occupy 80% of world solar cell manufacture. Observers in both EU and the United States are concerned that China will dominate these and other low-carbon industries in the future.¹¹

The competition for global leadership has intensified in the past few years, especially among major powers like the United States, EU and China. Climate change is a grave challenge towards global governance and human survival, yet due to the exorbitant cost of reducing carbon emissions, few powers had readily assumed leadership in global climate politics until recently when a number of major carbon emitters including the United States, China, EU, Japan and Korea have all announced their carbon neutrality pledges by mid-century. For a long time, major powers used others' inaction as an excuse for not capping their own domestic emissions. Now, in the pursuit of global influence and leadership, superpowers are raising self-imposed mitigation targets to show international responsibility and soft power. On the one hand, the three superpowers will continue to compete in renewable and other green technology sectors, while on the other, they may have to cooperate, or at least reach consensus, on key mitigation and adaptation imperatives to control emissions and save the planet. In the foreseeable future, competition and cooperation will co-exist among major powers in international climate politics.

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¹⁰ Antony Froggatt and Daniel Quiggin, *China, EU and US Cooperation on Climate and Energy: An Ever-Changing Relationship*, Chatham House, March 2021, <https://www.chathamhouse.org/2021/03/china-eu-and-us-cooperation-climate-and-energy>, accessed 18 May 2021.

¹¹ <https://www.forbes.com/sites/kenrapoza/2021/03/14/how-chinas-solar-industry-is-set-up-to-be-the-new-green-opec/?sh=3f3ee0991446>, accessed 18 May 2021.