

China, the United States and the European Union: Multiple Bilateralism and Prospects for a New Climate Change Diplomacy

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This article argues that one of the most significant evolutions in global climate politics in recent years is the redefinition of power relations that has emerged since the 2009 Copenhagen summit. In the run-up to a potential new climate deal at the 2015 Paris summit, a new climate change diplomacy may be emerging among three actors that are in many respects the most powerful and influential: China, the United States and the European Union. The rise of China is affecting many areas of global governance, but nowhere is it more evident than in the case of climate change, where a very specific mix of power politics, economic interests and normative environments defines the direction of the debate. This article explores how the latter three elements are shaping and re-shaping "multiple bilateralisms"¹ between the US, China and the EU and identifies tentative steps toward stronger collective action. The article concludes that a new, perhaps more decentralized but potentially more inclusive approach on climate change is being established.²

I. Introduction

This article studies one of the most significant evolutions in global climate politics in recent years, namely the redefinition of power relations since the 2009 Copenhagen summit. It does so by looking at the diplomatic relations between China, the EU and the US, the three actors that are in many respects the most influential at present. In the run-up to a potential new climate deal at the 2015 Paris summit, a new climate change diplomacy may be emerging among these three. We will use the "traditionalist" definition by Hedley Bull of diplomacy as the "conduct of relations between states and other entities with standing in world politics by official agents and by peace-

ful means" as a conceptual basis throughout the article.³

The conduct of these relations is the central topic of this article. Each of these relationships is unique and has its own characteristics and dynamics. But, while much more empirical and conceptual work is required to underpin the explorative analysis presented here, there seems to be an emerging common thread in the sense that some of the old paradigms are gradually abandoned and replaced by a new, perhaps more decentralized but potentially more inclusive approach to the collective action problem that is climate change.

Each of the three actors is faced with different kinds of political and economic interests and norma-

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1 The term "multiple bilateralism" is borrowed from Stephan Keukeleire and Hans Bruyninckx, "The European Union, the BRICs, and the Emerging New World Order", in Christopher Hill and Michael Smith (eds), *International Relations and the European Union* (Oxford: Oxford University Press 2011), pp. 380 et seq., at p. 401.

2 The authors would like to thank Professor Simon Schunz, College of Europe, for his helpful comments during the writing process of this article.

3 Hedley Bull, *The Anarchical Society: A Study of Order in World Politics* (New York: Columbia University Press 1977), at p. 162.

tive environments. In the longer term, therefore, the singular (perhaps Westphalian) way of measuring which actor is “dominant” could be superseded or complemented by a new perspective. The emerging approach, acknowledging decentralization and interdependence, asks how the three actors interact as part of a broader world order, or at least how the collective effect of each one’s individual actions affects that order and is affected by it. For example, one implication of the new dynamic, by contrast with a system premised on one dominant actor, is that leadership may fluctuate due to multiple factors and takes place in a more decentralized, “bottom-up” environment. In fact, the foundations for such a new approach in the climate arena are already being established, as elaborated upon in this article.

II. Geopolitical Background

In recent years, China, the US and the EU have moved to center-stage in virtually all areas of global governance. This is particularly true in the case of climate change, one of the defining socio-economic, political and moral challenges of our time. Much has changed since the adoption of the 1992 UN Framework Convention on Climate Change (UNFCCC) and the 1997 Kyoto Protocol, which featured climate mitigation targets for developed (Annex I) countries only.⁴ At present, the world can no longer be easily divided into rich, developed countries on the one hand, and poor, developing countries on the other. The rise of emerging economies and their increasing share of global emissions, means that a much broader participation in mitigation efforts is required. China, for instance, has become both the world's largest energy user and greenhouse gas (GHG) emitter, in addition to being the second largest economy worldwide,⁵ despite the fact that its per capita income and emissions are still far behind the developed countries as a whole.⁶

However, the split between Annex I and Non-Annex I Parties (developed and developing countries respectively) is deeply institutionalized in the Framework Convention, through the principle of common but differentiated responsibilities (CBDR) and respective capacities.⁷ CBDR continues to influence the debates on mitigation contributions, finance, and MRV (measurement, reporting and verification). And indeed, one can argue that there are important

reasons to maintain a certain kind of differentiation, in light of significant differences in terms of GDP per capita, economic capacities, historical responsibilities in terms of emission reductions and equity concerns more generally.

It is against this challenging background that the 2009 Copenhagen summit, the first attempt to negotiate a new global climate agreement, took place. In retrospect, it failed to meet the unrealistically high expectations, but made it crystal clear that a new approach to the climate regime had become a necessity. This new approach consists of at least two elements: (1) inclusive participation and (2) bottom-up, nationally determined pledges (Intended Nationally Determined Contributions, or INDCs). This process started with the launch of the Durban Platform in 2011, and is expected to result in a new agreement at COP 21 (the 21st Conference of the Parties to the UNFCCC) in Paris, December 2015, to come into effect by 2020.

The second attempt differs from the first one in another respect as well. In contrast to the run-up to Copenhagen, expectations are lower for Paris, at least for the near term, as there will be a significant gap between the total amount of pledges and the commonly agreed goal to remain below a 2°C warming compared to pre-industrial levels, a target set in the Copenhagen Accord.⁸

From an international relations perspective, however, the most significant difference between the two attempts is the redefinition of power relations that

4 Michael Grubb, “Climate policy: a new era”, 3 *Climate Policy* (2014), pp. 325 et seq., at p. 325.

5 International Energy Agency, *World Energy Outlook 2011* (Paris: International Energy Agency 2011); World Bank, “Indicators”, available on the Internet at <data.worldbank.org> (last accessed on 22 July 2015).

6 Note that according to some sources, Chinese per capita emissions (7.4 t/cap) already surpassed mean per capita emissions in the EU-28 (7.3 t/cap) in 2013, though they remain well behind the US (16.6 t/cap), see Jos G.J. Olivier, Greet Janssens-Maenhout, Marilena Muntean, and Jeroen A.H.W. Peters, *Trends in Global CO₂ Emissions: 2014 Report* (The Hague, Ispra: PBL Netherlands Environmental Assessment Agency and European Commission, Joint Research Centre 2014), at p. 4.

7 Pieter Pauw, Steffen Bauer, Carmen Richerzhagen et al., *Different Perspectives on Differentiated Responsibilities: A State-of-the-Art Review of the Notion of Common but Differentiated Responsibilities in International Negotiations*, Discussion Paper 6/2014 (Bonn: DIE German Development Institute 2014), at p. 1.

8 However, a significant issue for Paris, acknowledged in the September 2015 US-China presidential summit, is the need for a longer-range effort that ramps up low carbon ambition over time, see White House, U.S.-China Joint Presidential Statement on Climate Change, 25 September 2015, at par. 6.

emerged during and after Copenhagen. The rise of China is central to understanding this redefinition.⁹ Launched in 1978, China's economic reform and opening-up policy, *gaigekaiifang*, came to fruition in the 1990s, and resulted in it becoming a central part and a driver of the globalizing world economy. Its 2001 accession to the World Trade Organization (WTO) formalized this process and kick-started another decade of phenomenal economic growth.

As a result of its economic growth, however, China also increasingly became a global geopolitical power and is - cautiously - asserting itself as such. It could use climate change as an arena, moreover, where it can co-determine the international norms, practices, rules, and power distribution from the start, as opposed to being a rule-taker in existing, Western-dominated arenas such as security (UN security council), finance (IMF) and trade (WTO).

The Copenhagen summit for the first time demonstrated this geopolitical shift, but also showed that none of the important actors, including the US, the EU and China itself, were fully prepared for the challenges that this entails. Copenhagen and its aftermath also showed however that it is the interplay among these three that often seems to drive global climate diplomacy and its outcomes.

The next sections of this article analyze each of the three relationships in further detail, with a first section studying the US and China, the second focusing on the EU and China, and the third on the transatlantic relationship.

III. US-China Climate Change Relations

During most of the 1990s and 2000s, US-China relations on climate change kept a relatively low profile. China, on the one hand, did not have to embrace any emission reduction obligations under the Kyoto Protocol, while the US, on the other hand, decided not to ratify the Protocol, effectively side-lining itself

temporarily. Nevertheless, China implemented its domestic programs on energy efficiency and renewable energy. In the U.S., endeavor to achieve energy independence contributed to a shale gas revolution which significantly decreased the use of coal along with other factors such as renewable energy and efficiency initiatives. Moreover, the limited US-China interaction on climate has changed dramatically since Copenhagen as elaborated upon below. One of the most important developments in the bilateral relations as of recently was the November 2014 US-China Joint Announcement on Climate Change. It signaled a change not only in the domestic approaches towards climate policy in the US and China, but also a new, invigorated trend in bilateral climate diplomacy that has important international implications.

1. Short History

On 12 November 2014 the presidents of the United States and China announced in Beijing the actions of their countries on climate change for the period following 2020.¹⁰ The United States pledged to cut GHG emissions 26-28% below 2005 levels by 2025, while China announced targets to reach a peak in CO₂ emissions around 2030, with intention to peak sooner, and to increase its non-fossil fuel share of energy use to around 20% by 2030. Both sides hoped that their announcement would inspire other countries to come forward with ambitious actions. They also stated that they would work together and with other countries to achieve an ambitious climate change agreement at the UN conference to occur in Paris in December, 2015 and that they would work to increase ambition over time. By the end of June, 2015, both the US and China had incorporated these targets with further refinements into their respective INDCs to the UNFCCC.¹¹

The US-China Joint Announcement on Climate Change represents a new phase in the relationship of the two countries regarding climate change. China and the United States are the two largest economies in the world and also the two largest emitters of GHGs. Their new understanding has implications for the European Union and other countries, and for broader international agreement to address climate change.

For some two decades China and the United States were unable to achieve a meeting of the minds over

9 See e.g. Ye Qi, Tong Wu, Jiankun He and David A. King, "China's Carbon Conundrum" 7 *Nature Geoscience* (2013), pp. 507 *et seq.*

10 White House, "FACT SHEET: US-China Joint Announcement" (Washington, D.C.: White House 2014).

11 UNFCCC, "INDCs as communicated by Parties", available on the Internet at <www4.unfccc.int/submissions/INDC/Submission%20Pages/Submissions.aspx> (last accessed on 23 July 2015).

climate action. China, along with many other developing countries, maintained that the US and other developed nations, but not developing nations, should have internationally binding obligations to reduce GHG emissions.

At the climate change negotiations in Copenhagen in December, 2009, President Obama pledged the United States to reduce GHG emissions by 17% by 2020, the amount specified in the Waxman-Markey bill that had passed the House. Based on an economy-wide cap and trade approach, the bill eventually failed to be taken up in the Senate.¹² Prime Minister Wen Jiabao, representing China in Copenhagen, pledged that China would reduce carbon intensity by 40 to 45% by 2020. The conference was unable to reach agreement, however, on a legally binding agreement. As a result, the outcome of the meeting, the Copenhagen Accord, was styled a politically binding rather than legally binding agreement. China and other developing countries continued to maintain that they were describing their voluntary domestic action, not an international obligation.¹³

However, at the Durban climate negotiations in 2011, the Parties agreed that they would develop by 2015 an instrument with legal force covering all parties.¹⁴ In Warsaw in 2013 the Parties decided to invite each to put forward an Intended Nationally Determined Contribution (INDC) as their pledge for the 2015 negotiations.¹⁵ When the United States and China made their joint announcement in November 2014, it was expected that the targets included were the first draft of their INDCs. Although Congress never passed the climate legislation sought by President Obama, the US announcement stuck to the trajectory announced in Copenhagen. China went beyond its Copenhagen pledge and for the first time announced an intention to peak emissions.

2. Emergence of the Joint Announcement

At the beginning of his second term, President Obama asked Secretary of State John Kerry and White House adviser John Podesta to seek an understanding with China. In 2013, Kerry and his Chinese counterparts set up the US-China Climate Change Working Group to collaborate on an agenda of low carbon projects. In February 2014, Todd Stern, US climate envoy, quietly raised the possibility of an accord with his counterpart Xie Zhenhua, and Kerry pursued it

in meetings in Beijing with President Xi and others. President Obama sent President Xi a proposal in the spring. In June 2014, the Environmental Protection Agency (EPA) announced the Clean Power Plan to reduce power plant emissions.¹⁶

Discussions took place on the margins of the Strategic and Economic Dialogue in Beijing in July 2014, involving Stern, Podesta, Xie and Vice Premier Zhang Gaoli. China indicated that a deal was possible in 2015 but Podesta and Stern wanted it to be sooner to achieve more influence on the Paris negotiations. Obama sent Xi another letter about outcomes for the November Asia-Pacific Economic Cooperation (APEC) meeting in Beijing, emphasizing climate change. At the UN climate summit in New York in September, Obama met with the Chinese representative at the event, Vice Premier Zhang Gaoli, and Zhang said Xi had made a decision to reach an accord and announce it at APEC. Kerry and Podesta pursued the details and Podesta went to Beijing in October to work out the text. On the US side, the statement reflected many months of work by the EPA and others to establish the elements of the US pledge. But as the president flew to Beijing, Podesta and Stern were still working out the final details.¹⁷

The joint announcement of November 2014 emerged for several reasons. While the White House raised the priority of climate action in the second Obama administration, Podesta believed an understanding with China would be important. The US cannot solve the global problem alone, and China has become the leading emitter, with the US second. Moreover China's example could be influential with other developing countries.¹⁸ China had many rea-

12 William Antholis and Strobe Talbott, *Fast Forward, Ethics and Politics in the Age of Global Warming*, revised ed. (Washington, D.C.: Brookings Institution Press 2010, 2011), at pp. 47-50.

13 UNFCCC, "Copenhagen Accord", available on the Internet at <unfccc.int/meetings/copenhagen_dec_2009/items/5262.php> (last accessed on 23 July 2015); Antholis and Talbott, *Fast Forward*, *supra* note 12, at p. 67.

14 Decision 1/CP.17, Establishment of an Ad Hoc Working Group on the Durban Platform for Enhanced Action, FCC/CP/2011/9/Add.1, at par. 4.

15 Decision 1/CP.19, Further advancing the Durban Platform, FCCC/CP/2013/10/Add.1, at par. 2.

16 Michael Crowley and Andrew Restuccia, "The Climate Deal That Almost Wasn't", Politico, 12 November 2014; Jeff Goodell, "The Secret Deal to Save the Planet", Rolling Stone, 9 December 2014.

17 *Ibid.*

18 Goodell, "The Secret Deal", *supra* note 16.

sons for acting to address climate change.¹⁹ Still, it had previously maintained that developed countries should move first. However, the release in June 2014 of the Obama administration's proposed rules on power plants may have helped change the calculus.

Foreign countries watched EPA action and US diplomats believed the EPA proposed rules would help in the climate negotiations.²⁰ At a special UN meeting in New York in September, President Obama pressed his case that with the US taking action, China should act. Li Junfeng, director general of China's National Center for Climate Change Strategy, confirmed the relevance to the negotiations of US action, saying in an interview in the *New York Times* that his team had developed options and that China would make a choice based on the "perceived stringency" of US plans, while Vice Prime Minister Zhang Gaoli, who addressed the UN in New York stated that "[a]s a responsible major developing country" China would "take on international responsibilities that are commensurate with our national conditions."²¹

The Joint Announcement contains three critical points that may have cemented the accord. While China's 2030 peak leaves open questions about the shape of the peak, the Chinese pledge on non-fossil energy makes it evident that China will need to take aggressive new action comparable to building an en-

tire US grid by 2030. Also, the Announcement provides on the one hand that the two countries seek long-term deep decarbonization and on the other hand it recognizes the distinction between the commitments of developed and developing countries.

The first point was especially important to the US and the second to China, but ultimately minds met on all of these key points.²² Regarding commitments, the text included the following line: "They [the US and China] are committed to reaching an ambitious 2015 agreement that reflects the principle of common but differentiated responsibilities and respective capabilities, *in light of different national circumstances*."²³ This formulation found its way into the Climate Action Plan agreed at the 2014 climate summit in Lima, as a solution for addressing the distinction of commitments between developed and developing countries, without relying on reference to the division between Annex I and Non-Annex I Parties to the Convention.²⁴

3. The Morning After – Implications at Home and Abroad

Analysts called the China-US Joint Announcement a breakthrough and a move from business-as-usual to stretch goals.²⁵ Chinese observers noted that China has become more comfortable with slower growth and interested in addressing pollution problems.²⁶ In the US, the *Washington Post* editorialized that critics of climate action claiming China won't act even if the US does, were undercut by the deal.²⁷ In both countries, the relevance of domestic politics to climate diplomacy was evident.

In China, the hard-hitting documentary on air pollution, *Under the Dome*, created by the former China Central TV news anchor, Chai Jing, became a YouTube sensation, indicating the importance of evidence of government action. In the US, the Republican Senate leader redoubled his criticism of climate action, arguing that China's pledge to peak around 2030 meant it did not have to do anything until then. In response, Senator Sheldon Whitehouse quipped that this makes sense only if you assume China will "wake up on New Year's Eve in 2029 and suddenly build 1,000 gigawatts of clean energy in one night."²⁸ Additionally, speculation began over how the deal will play in the coming presidential election, with critics saying they can gain by claiming harmful eco-

19 Luke Schoen, "Why is China Taking Action on Clean Energy and Climate Change?" (WRI: ChinaFAQs 2013).

20 Justin Gillis and Henry Fountain, "Trying to Reclaim Leadership on Climate Change", *New York Times*, 1 June 2014.

21 Mark Landler and Coral Davenport, "Obama Presses Chinese on Global Warming", *New York Times*, 23 September 2014.

22 Goodell, "The Secret Deal", *supra* note 16.

23 White House, US-China Joint Announcement on Climate Change, 12 November 2014, at Art. 2.

24 Ed King, "US-China chat broke impasse at Lima climate talks", available on the Internet at <<http://www.rtcc.org/2014/12/16/us-china-chat-broke-impasse-at-lima-climate-talks>> (last accessed on 22 July 2015), emphasis added.

25 Michael Levi, "What the Big US-China Climate Announcement Means", *Council on Foreign Relations*, 12 November 2014.

26 Wang Tao, "No Copenhagen Déjà vu", *China-US Focus*, 13 October 2014; Hu Angang, "Embracing China's 'New Normal'", *Foreign Affairs*, 20 April 2015; see also "Coming down to earth", *The Economist*, 18 April 2015.

27 "The US and China Reach a Landmark Climate Deal", *Washington Post*, 12 November 2014.

28 Goodell, "The Secret Deal", *supra* note 16; see also a discussion of the efforts required to achieve peak emissions in Paul Joffe and Geoffrey Henderson, "Taking Stronger Action" (WRI: ChinaFAQs 2015), available on the internet at <http://www.chinafaqs.org/files/chinainfo/ChinaFAQs-Taking_Stronger_Action%20V4.pdf> (last accessed on 15 October 2015).

nomic impacts and champions of action pointing to polls favoring climate action.²⁹

Another place where domestic politics and policy intersect with climate diplomacy is implementation. The Obama administration designed the targets in the US-China accord to be reachable under existing legal authority, without recourse to new action by Congress. A recent World Resources Institute study confirms that the targets are ambitious but achievable using only existing authority,³⁰ although some believe that will be difficult.³¹ With the history of congressional failure to complete passage of the cap and trade legislation during the first Obama administration and Congress now controlled by Republican opponents of climate action, the administration is relying on the Clean Air Act and other existing authority. Opponents say they will fight this but the administration is confident the politics are favorable.³² However, advocates of climate action argue that eventually it will be necessary to set targets more ambitious than those pledged in November and additional congressional authority will be needed.

On the Chinese side, implementation is also an issue but in somewhat different ways. The Chinese leadership recognizes the need to shift from the old priority for economic growth to sustainable development, but challenges for execution remain. Will plans to expand non-fossil fuels go smoothly, especially the ambitious plans to expand nuclear power? While coal-fired power plants are more and more constrained in the polluted eastern cities, will enough be done nationwide to bend down the curve of China's coal consumption and CO₂ emissions? Positive signs abound that China is shifting from its old energy intensive economic model toward greater reliance on services and consumption, that the growth of coal consumption has slowed, that despite some ups and downs coal consumption may even have already reached a "structural peak" based on shifting demand, and that China may reach peak CO₂ emissions well before the 2030 target. Nevertheless, as with the United States, particularly for the out years beyond 2025, challenges remain regarding whether strong enough action will be taken to achieve rapid reductions, in China's case, especially after the peak.³³ Both countries have made progress but work remains. Perhaps there is growing recognition that they are more likely to succeed by coordinating their actions. This would herald the start of a new and more invigorating climate diplomacy, but also one that is far more

decentralized than the top-down model the EU and other actors have long aspired to.

The China-US accord has also changed the international dynamics. First, standing up with the United States signaled increasing Chinese willingness to play a visible international role on climate change.³⁴ Also, the UNFCCC chief and the French climate envoy commented that the accord contributed to progress for Paris.³⁵ Jairam Ramesh, former environmental minister of India, said "Obama and Xi broke the logjam." Noting that previously China had argued the developed countries were mostly responsible, Ramesh said "this raises the bar for other nations."³⁶ What has been called a "serious diplomatic breakthrough"³⁷ is potentially consequential simply by the logic of international collective action. Countries do not always like to acknowledge they are acting because of others, but when the two largest emitters of GHGs seemed adrift regarding climate action, it was easy for others to temporize. Now that they are leaning forward along with the EU and a few others, the spotlight is on the rest. In fact, in the Joint Announcement itself, the two presidents acknowledged their countries have an important role to play and hope to "inject momentum into the global climate negotiations and inspire other countries to join in coming forward with ambitious actions...."³⁸

29 Coral Davenport, "In Climate Deal With China, Obama May Set 2016 Theme", *New York Times*, 12 November 2014.

30 Karl Hausker, Kristin Meek, Rebecca Gasper et al., "Delivering on the US Climate Commitment", Working Paper May 2015 (Washington, D.C.: WRI 2015).

31 Davenport, "In Climate Deal", *supra* note 29; Levi, "What the Big US-China Climate Announcement Means", *supra* note 25.

32 Goodell, "The Secret Deal", *supra* note 16.

33 Fergus Green and Nicholas Stern, *China's 'new normal': structural change, better growth, and peak emissions* (London: Grantham Research Institute and Centre for Climate Change 2015); see also Ye Qi and Tong Wu, "The politics of climate change in China", 4 *WIREs Clim Change* (2013), pp.301 *et seq.*

34 Levi, "What the Big US-China Climate Announcement Means", *supra* note 25.

35 UNFCCC, "US, China Climate Moves Boost Paris Prospects", 12 November 2014, available on the Internet at <<http://newsroom.unfccc.int/unfccc-newsroom/us-china-climate-moves-boost-paris-prospects>> (last accessed on 15 October 2015); EurActiv, "Laurence Tubiana: 'EU-China climate agreement is conceivable'", 28 January 2015, available on the Internet at <<http://www.euractiv.com/sections/climate-change-road-paris/laurence-tubiana-eu-china-climate-agreement-conceivable-311604>> (last accessed on 15 October 2015).

36 Goodell, "The Secret Deal", *supra* note 16.

37 Levi, "What the Big US-China Climate Announcement Means", *supra* note 25.

38 White House, US-China Joint Announcement, (2014), *supra* note 23, at Art. 4.

In September, 2015, the two countries provided additional momentum to the bilateral effort launched with the previous Joint Announcement. At a state visit by President Xi Jinping to the United States, President Xi and President Obama issued a joint presidential statement spelling out key actions they plan to take domestically to achieve the goals previously announced. They also signaled common ground for Paris, at least in general, on transparency, review of action and support, the need for greater ambition over time, the importance of adaptation, and funding for needs of developing countries.³⁹

In summary, the US-China deal and its aftermath has opened the door for some (cautious) optimism. While expectations for the summit in Paris are generally low – or at least lower than before Copenhagen – most observers agree that some sort of multilateral agreement is within reach. Much depends on other developed and developing countries, of course, and the pledges that they bring to the table. The next section focuses on the relationship between China and the EU, the latter being one of the most ardent supporters of a global, legally binding agreement.

IV. China and the European Union

This section focuses on China and the European Union and aims to demonstrate that EU-China relations on climate change have evolved considerably. This offers the potential for a “new” (i.e. more invigorated and inclusive but less rule-of-law based) climate diplomacy to emerge between these two actors, particularly in view of the changing nature of US-China diplomacy on the issue. Many challenges and hurdles remain, however, epitomized by what promises to be long and arduous negotiations towards a possible deal at the 2015 Paris summit.

39 White House, U.S.-China Joint Presidential Statement on Climate Change, (2015), *supra* note 8.

40 David Belis and Simon Schunz, “China and the European Union: Emerging Partners in Global Climate Governance?”, 3 *Environmental Practice* (2013), pp. 190 *et seq.*

41 David Held, Anthony McGrew, David Goldblatt and Jonathan Perraton, *Global Transformations: Politics, Economics and Culture* (Stanford: Stanford University Press 1999), at p. 14.

42 Alexander Wendt, “Anarchy Is What States Make of It: The Social Construction of Power Politics”, 2 *International Organization* (1992), pp. 391 *et seq.*

43 See e.g. Michael Grubb, “Copenhagen: Back to the Future”, 2 *Climate Policy* (2010), pp. 127 *et seq.*

1. The Impact of Structural Changes on EU-China Climate Diplomacy

Many structural changes have significantly affected the relationship between the EU and China since the onset of the climate regime in the early 1990s. Two of the most important ones are globalization and the economic rise of China itself.⁴⁰ Globalization, or the “widening, deepening and speeding up of global interconnectedness”⁴¹, and particularly economic globalization, has engendered environmental issues of global concern, most notably climate change. Global environmental problems transcend any single country’s jurisdiction and therefore require a global solution. In international relations, however, the Westphalian understanding of sovereignty is still the political point of departure. Anarchy, or the lack of a global authority, for better or for worse, still heavily structures how states interact with each other.⁴²

The most powerful states, including the US and its allies in the EU, have tended to dominate the most important global governance institutions since the end of World War II, notably through the Bretton Woods institutions in the domain of economic and financial governance and the UN Security Council in the domain of peace and security. China’s economic and geopolitical rise, in addition to the rise of other major emerging economies such as India and Brazil, are drastically changing the picture, however. In the late 2000s, China became the second largest economy worldwide, and also the world’s largest energy user and source of GHG emissions. The 2009 Copenhagen summit demonstrated this shift of power and the restructuring of the global world order very clearly – as since then, China, together with the US, are acknowledged to be crucial to failure or success in the climate regime.⁴³

At the same time, China has been called upon for a number of years to actively take up its responsibility as a “great power”, notably in the domain of climate change. There are important signs that the new leadership in China, under the presidency of Xi Jinping, is taking up the challenge. Most observers agree, however, that China has its own take on foreign policy and involvement, perhaps stemming from a long history of sovereignty encroachments, going back to the “century of humiliation” (1842-1949), which was closely linked to the so-called “unequal treaties”, a set of treaties signed in the lat-

ter half of the 19th century that were highly in favor of Britain, Japan and several other foreign powers.⁴⁴

Some prominent Chinese scholars argue that China should only gradually or moderately develop its hard power capabilities, and maintain its attraction-defensive stance.⁴⁵ The successful establishment of the Asian Infrastructure Investment Bank (AIIB) in 2015, and particularly the buy-in and membership of e.g. the UK, Germany, France and Italy (much to the distress of the US), is an important signal of how China is carefully crafting its changing role and proactive engagement in world politics.

In the arena of climate change, China is similarly keen on guarding itself from entering into a regime on “Western” terms, and seeks to avoid being in a situation similar to when it acceded to the WTO in 2001, for example. In contrast, it aims to put its mark on the formation of the climate regime itself, and is likely to succeed in doing so. This has earned China the reputation of being stubborn and – at times – seeking to revert to sovereignty reflexes, with the Copenhagen summit as a case in point.⁴⁶

However, China’s reluctance to commit to top-down, binding targets⁴⁷ may make strategic sense in view of the very low probability of the US agreeing to similar commitments due to wide-spread opposition in the US Congress⁴⁸ against climate policy – not to mention other developed countries that have a doubtful legacy in the “binding” Kyoto Protocol (KP) regime (e.g. Canada’s official withdrawal from the Protocol before the end of the KP’s first commitment period).

2. Tracing EU-China Climate Change Relations

In the EU, however, China’s stance has not always been fully appreciated. The European Union has always promoted and supported a rule-of-law based system, mirroring its internal binding emission reduction targets and policies, at the international level. This becomes all the more clear when looking back at the history of EU-China relations (see also Table 1).⁴⁹

In the 1990s, China, as part of the G-77, played only a minor role compared to today. The KP, moreover, was designed on the basis of a clear distinction between the commitments of developing and developed countries, with only the latter having (binding)

targets. This distinction has been enshrined in the principle of common but differentiated responsibilities (CBDR), which, though evolving in many respects, remains highly relevant up until today. Throughout this first decade of the climate regime, EU-China relations remained largely confined to the multilateral level, under the umbrella of the UNFCCC.

For several reasons, the year 2001 marked a watershed for EU-China relations on climate change. Defining features of the 1990s such as the Tiananmen Incident faded away as China’s geopolitical and economic rise became more and more apparent. In the global climate regime, the hard-fought agreement reached in Marrakech (2001) and its eventual adoption at COP/MOP 1 in Montreal (2005) signaled the start of international mitigation efforts, notably through emissions trading and the Clean Development Mechanism (CDM).

In 2003, the EU adopted Directive 2003/87/EC, establishing its Emissions Trading System (EU ETS), followed by the 2004 “Linking Directive” (2004/101/EC), which enabled the import and use for compliance of CDM credits. The CDM, part of the package of flexible mechanisms agreed upon in the KP, allows for the

44 William Callahan, *China: The Pessimist Nation* (New York: Oxford University Press 2010).

45 Zhimin Chen and Lulu Chang, *The Power Strategy of Chinese Foreign Policy: Bringing Theoretical and Comparative Studies Together*, NFG Working Paper 3 (Berlin: Freie Universität Berlin 2013).

46 Hans Bruyninckx and Ye Qi, “The Increasingly Complex Nature of EU-China Climate Relations”, in Hans Bruyninckx, Ye Qi, Quang T. Nguyen and David Belis (eds.), *The Governance of Climate Relations between Europe and Asia: Evidence from China and Vietnam as Key Emerging Economies* (Cheltenham and Northampton: Edward Elgar 2013), pp. 25 et seq, at p. 35.

47 It should be mentioned here that in its INDC, China states that the new agreement “shall be a legally binding agreement.” The agreement can include “a core agreement plus COP decisions.” But it says the NDCs “by developed and developing countries can be listed respectively and separately in the Paris outcome.” This language does not really change China’s previous position but it does signal a new, cautious flexibility.

48 There are circumstances under which the President can enter into legally binding international agreements without a two thirds vote in the Senate. Trade agreements are approved by majority vote of both houses. In some circumstances, the president can enter into agreements based on existing authority without any new congressional involvement, as was the case with e.g. the 2013 Minamata Convention on Mercury; which may also be applicable to a legal outcome in Paris, see Daniel Bodansky, “Legal options for U.S. acceptance of a new climate change agreement” (Arlington: Centre for Climate and Energy Solutions 2015).

49 See also David Belis and Simon Schunz, “China and the European Union”, *supra* note 40.

Table 1: EU-China relations in global climate governance

| | | | | | |
|---|----------------|--|----------------------|---|-------|
| Early years of the climate regime | | The road to Copenhagen | | The Durban Platform and the road to Paris | |
| UNFCCC | Kyoto Protocol | Marrakech Accords | China-EU Partnership | Copenhagen Accord | Paris |
| 1992 | 1997 | 2001 | 2005 | 2009 | 2015 |
| China as part of G77/China negotiation coalition China-EU climate relations mostly limited to UN arena | | Rising importance of China in international negotiations Launch of China-EU partnership | | China as a pivotal actor in international negotiations Evolving China-EU strategic partnership | |

Source: See also: David Belis and Simon Schunz, "China and the European Union", supra note 40, at p. 193.

development of emission reduction projects in developing countries, including in China, and results in Certified Emission Reductions (CERs), or credits that can be sold to developed countries for compliance with Kyoto targets. In the latter half of the 2000s, China and the EU respectively became the largest single sources of supply and demand for CERs worldwide.

This evolution was politically backed by the 2005 EU-China Partnership on Climate Change, which included an EU-China CDM Facilitation Project, in addition to several other practical, on-the-ground initiatives such as the development of a pilot carbon capture and storage (CCS) project by 2020, and the establishment of a Europe-China Clean Energy Centre (EC2) in Beijing.⁵⁰

The EU's strategy was to attempt to use its capacity to influence and assist the development of China's climate policy, mainly through extensive dialogues and concrete hands-on initiatives. It is difficult to assess a counterfactual scenario in which the EU might not have engaged China. It largely failed, however, to translate its efforts into tangible outcomes in the international arena, most clearly demonstrated by its diplomatic failure in Copen-

hagen, where the world (and most importantly the US and China) basically abandoned a top-down, "Cartesian" approach to climate politics.

Following the adoption of strong domestic EU policies in 2008-2009 and the achievement of its emission reduction targets, the EU was still able to hold on to at least some of its authority and leadership that it so cherishes in the global climate talks. This was most prominently displayed by a major diplomatic success at the Durban summit in 2009, where Parties agreed on the so-called Durban Platform, or "Ad Hoc Working Group on the Durban Platform for Enhanced Action (ADP)", with a mandate "to develop a protocol, another legal instrument or an agreed outcome with legal force", which is to be completed no later than 2015 (COP 21 in Paris) and come into effect from 2020.⁵¹

Bilaterally, the relationship also evolved, with a new series of projects involving more comprehensive technical cooperation launched at a China-EU Summit in September 2012, including a programme on sustainable urbanization and a 5 million euro capacity building project on China's emerging carbon market.⁵² The latter built on the previous experiences with the CDM⁵³, although the CDM as an international mechanism had lost much of its credibility in the EU, and provisions were incorporated in the EU Emissions Trading System to limit the use of CDM credits.

Still, in 2013-2014, China successfully rolled out 7 ETS pilots (4 municipalities: Beijing, Chongqing, Shanghai and Tianjin, 2 provinces: Guangdong and Hubei, and the special economic zone of Shenzhen), and adopted the *Interim Management Rules on Emis-*

50 EU and China Partnership on Climate Change, MEMO/05/298, 2 September 2005.

51 Decision 1/CP.17, supra note 14, at p. 2.

52 The European Union and China join forces to address environment, urbanisation and climate change challenges, European Commission press release, 20 September 2015.

53 David Belis and Bart Kerremans, "The Socialization Potential of the CDM in EU-China Climate Relations", *International Environmental Agreements: Politics, Law and Economics* (forthcoming, doi: 10.1007/s10784-014-9269-y).

sions Trading in December 2014, laying out the rules for a national ETS which is expected to start in 2017.⁵⁴

The EU, through its former engagement in the CDM and its capacity building project, distinctively contributed to these evolutions. In June 2015, finally, at the occasion of a EU-China Summit that also celebrated 40 years of diplomatic relations, a joint statement on climate change reiterated both sides' engagement on climate change and confirms the continuation of existing bilateral collaboration programmes, notably on emissions trading and urbanization. More importantly, however, was the announcement of China's INDC on the heels of the summit, when Premier Li Keqiang visited French President Hollande a day later, on 30 June 2015. The INDC contains both the non-fossil fuel and peaking target that were part of the US-China announcement, but also includes a carbon intensity target of 60 – 65 %, to be achieved by 2030 and based on 2005 levels.⁵⁵

The timing of this summit and the subsequent boost in bilateral ties was not accidental, and clearly aimed at promoting a successful outcome in Paris, i.e. a protocol, legal instrument or agreed outcome "with legal force", with the EU's preference still resting on the first of these options. At the time of writing, the expectation is that Paris will deliver, but probably not fully on the EU's terms. The reality is that the EU still holds substantial agenda-setting power, but it remains to be seen to what extent it can use its leadership position during high-level negotiation sessions, where the EU, because of its size and decision-making process, is at a disadvantage compared to the US and China.

However, with a target of "at least" 40 % emission reductions by 2030, the EU still has, by at least some measures, the most significant INDC of all three. If Paris succeeds in topping up the collection of INDCs with a robust accounting and review system, the EU will have achieved many of its goals. But the EU needs to come to terms with China's changing role in global (climate) politics, and better appreciate and understand the very different contextual and structural factors that define China's position, vis-à-vis the EU itself, but also vis-à-vis other major powers such as the US.

Also, it is worth remembering that Paris is not a finale. If climate change is to be successfully addressed, Paris will need to be the beginning of additional cycles of climate action over many decades. In light of the different economic, political and norma-

tive factors influencing the strength of climate action by each of the actors, the strength of the leadership by each is likely to fluctuate. The need for each actor to demonstrate such leadership is likely to remain a prerequisite for successful collective action.

V. Assessing Transatlantic Relations

1. Background

Without doubt, both the United States and the European Union stand out as significant actors in international climate and environmental regulation and governance. To a certain extent however, both seem to be in significantly different positions on several environmental issues, including on climate change. There is the more pro-active approach of the European Union with respect to GHG reduction targets in the UNFCCC negotiations, the lingering doubts about the scientific claims behind climate change in the US as compared with the EU, the efforts of the EU to include extraterritorial principles in aircraft GHG emission reductions, and the far more stringent EU approach towards both GMO's (and their potential environmental impact) and chemicals.

Most of these issues refer one way or the other to environmental diplomacy, and quite often to Transatlantic environmental and climate diplomacy. Here, US and EU negotiators engage in direct talks, either in a bilateral, a plurilateral, or a multilateral setting. In some cases, they find each other, in some others, they oppose each other. Sometimes, these settings deal with environmental issues only (such as in the case of the UNFCCC or the Montreal Convention), and sometimes with trade (such as in the debates on GMO's, fish subsidies, or trade in environmental goods).

In many of these cases, the EU's self-perception as an environmental leader significantly affects the stances that it takes and the objectives that it targets. This is most visible in a strict environmental negotiating context such as in the UNFCCC. There is no in-

54 Maosheng Duan, "From Carbon Emissions Trading Pilots to National System: The Road Map for China?", *Carbon & Climate Law Review*, further in this issue.

55 Enhanced Actions on Climate Change: China's Intended Nationally Determined Contributions, National Development and Reform Commission of China, 30 June 2015, at p. 5.

dication however, of the fact that the EU's self-perception and resulting environmental ambitions have been directly able to push the US in a position closer to the one of the EU. From a diplomatic angle therefore, it is not really possible to claim that the EU's environmental leadership ambition has bought it more clout at the negotiating table.

Sometimes, even the opposite has happened, as the closing day of the 2009 Copenhagen negotiations on climate change has shown us. When assessing Transatlantic climate and environmental relations, and specifically the ability of the European Union to exert a leadership role there, one needs to look beyond the EU's direct diplomatic impact. That is at least the conclusion one can draw from the extent to which the European Union has become a point of reference in domestic environmental debates in the US while on the direct diplomatic relations between the EU and the U.S. on climate change, there is not much to report. Indeed, the paucity of action in these relations is remarkable, which stands in contrast to the extremely high levels of action in the area of trade or even security.

This paucity is due to the fact that direct diplomatic environmental relations have been influenced to a large extent by the increasing divergence of the environmental policies between the two sides of the North-Atlantic, specifically with regard to climate change. Typical in that respect is the EU-US High Dialogue on Climate Change, Clean Energy, and Sus-

tainable Development, created in 2006 but without any meetings since 2009. As the website of the European Commission's DG Environment notes, the Dialogue is "now in abeyance", although informal high-level contacts have continued on a regular and productive base since then.⁵⁶

When it comes to climate change, the topic where Transatlantic diplomatic interactions have been more intensive is energy. In 2005, an EU-US Summit adopted a Declaration on Energy Security, Energy Efficiency, Renewables and Economic Development, followed by a Joint Statement on Energy Efficiency, Security and Climate Change at the 2007 Summit, and the creation of a EU-US Energy Council at the 2009 Summit.⁵⁷

Although the 2005 Declaration didn't explicitly refer to climate change, it contained a number of objectives directly related to it such as increasing energy efficiency, the use of renewable energy sources, and the capture of methane, and the fostering of "the development and deployment of clean, efficient technologies (...) through the Carbon Sequestration Leadership Forum", given continuing global reliance on fossil fuels. The same issues showed up in the 2007 Joint Statement even if there, the issue of climate change itself was tackled more directly. The Joint Statement referred to a number of ways in which the EU and the U.S. were already collaborating on this issue and their plans for the future in that regard. Topics here were carbon capture and storage, methane, biofuels, energy efficiency, nuclear energy, trade in environmental goods, and research collaboration on all these issues.

The creation of the EU-U.S. Energy Council in 2009 established a mechanism where diplomatic cooperation on energy-related issues could be undertaken on a regular (annual) basis. The Council met six times since its creation, with its last meeting in December 2014 and its next one in December 2015. The topics discussed there include the ones mentioned above, but overall cover a wider array of issues, including geopolitical questions related to energy. The statements by the Council reflect however, the ebbs and flows in U.S. activism on climate change and the opportunities seen in it by the EU to enhance Transatlantic cooperation here.⁵⁸ As such, it clearly reflects what Cusumano has called the "functional relationship" that the two sides have established here over time, a relationship the ebb and flow of which is determined by "the varying ability of competing domestic interest groups in shaping state preferences."⁵⁹ As

56 EC DG Environment, "International Issues", available on the Internet at <ec.europa.eu/environment/international_issues/relations_usa_en.htm> (last accessed on 15 October 2015).

57 EEAS, "EU-US Co-operation by Sector", available on the Internet at <eeas.europa.eu/us/sector_en.htm> (last accessed on 15 October 2015).

58 The following part from the Council's 2014 Joint Statement is indicative here (note that the statement was made only a few weeks after the U.S.-China Joint Announcement on Climate Change of November 12, 2014): "Coordinated action by the EU, the United States, and all major and emerging economies will be essential in tackling the threat of global climate change, which remains the defining challenge of our generation. The Council reaffirmed the strong determination of the United States and the EU to work towards the adoption at the United Nations Climate Conference in Paris in 2015 of an ambitious protocol, legal instrument or agreed outcome with legal force, under the Convention and applicable to all parties, which would strengthen the multilateral, rules-based regime. The agreement must be sufficient ambitious, robust, and dynamic in light of the goal to limit global temperature increase to below 2°C." See EU-U.S. Energy Council, Joint Statement, 3 December 2014, at par. 17.

59 Eugenio Cusumano, *Handing Over Leadership: Transatlantic Environmental Governance as a Functional Relationship*, TransWorld Working Paper n° 36 (The Transatlantic Relationship and the Future of Global Governance, TransWorld 2014), at p. 14.

such, Transatlantic climate change diplomacy has been hostage to the domestic political paralysis on this issue inside the U.S.

As suggested above and given the paucity of action in the diplomatic relations between the U.S. and the EU on climate change, if one wants to assess the impact of the Transatlantic relationship here, one needs to look at the domestic debates on climate change, particularly in the U.S. Indeed, a closer look at the major environmental debates at the federal level in the US since 2009, both with regard to regulation and legislation, and with attention for the position of both proponents and opponents of stricter environmental laws or regulations, and for the positions taken by both Democrats and Republicans reveals that references to the European Union and its environmental laws, regulations, and policies pop up to such extent, that many debates between proponents and opponents of environmental policy-making at the federal level in the US take place in the shadow of what the European Union has done, wants to do, or has experienced in this area.

It should be mentioned here that the European experience comes up as a topic in debates in the U.S. Congress in negative as well as positive ways, with opponents and proponents of action offering different interpretations of initiatives in Europe, such as the ETS or the German *Energiewende*. It is not only that the EU is by far the most referred to foreign entity when it comes to many issues, a position with China as an increasingly close follower, but also that its policies are used as a standard to define or defend domestic positions and expected effects of environmental policy proposals at the federal level in the US. This conclusion has to be drawn on the basis of a systematic review of reports on US environmental policies in the specialized weekly "Inside EPA". Frequencies only tell part of the story however. It is even more interesting to look more closely at the ways in which the EU is being used as a point of reference here. Based on the review mentioned above, several ways can be discerned: the EU as a normative standard, as a semi-hegemonic competitor, and as an empirical touchstone.

2. A Normative Standard

The first way in which the EU shows up as a point of reference could be defined as "the EU as a normative standard." This means that the EU is put forward as a best example, as a system with a level of envi-

ronmental regulation or protection that the US should try to achieve. The position of the EU with respect to the UNFCCC negotiations, first in the run-up to Copenhagen in 2009 and then in the run-up to the 2015 Paris Conference (with all the conferences in between), stands out as the most straightforward example here. US policy-makers were pushed to defend themselves – and actively did so – in reference to the ambitious GHG reduction targets that the EU had set (and has set) for these negotiations.

Typical in that sense was the US debate with respect to the claim that its target of 17% reduction in comparison with 2005 levels by 2020 for the Copenhagen conference was significantly lower than what the EU had proposed. The US proposal was first transformed in a proposal that used the EU's proposed baseline year (1990). Second, on the basis of that, it was concluded that the US would only reduce its GHG emissions with 3-4% against the EU's 20% (or even 30% in case significant GHG reductions would be proposed by the other participants in the negotiations). Third, the US tried to defend itself by indicating that the EU had only set targets for 2020 and that the US was making commitments that targeted an 83% reduction by 2050 whereas the EU still had to define such a target. As U.S. climate negotiator Jonathan Pershing put it: "We look to the EU for a similar kind of long-term trajectory as they look to us."⁶⁰ The standard against which the US proposal was assessed was therefore, the one of the EU, not just in terms of what the critics of the US's approach claimed to be the case, but also in terms of the ways in which US policy-makers defended themselves.

3. Semi-Hegemonic Competitor

The second way in which the EU shows up in the US's domestic environmental debates, is as a semi-hegemonic competitor. Here, the EU is not seen as an actor that is so important that it would be able to determine the rules of the game via overwhelming market power (as that would make it a hegemonic actor), but rather as an actor whose market power is so significant that its rules have a significant impact on the competitive position of economic agents in the US. A typical example is here the question of the

⁶⁰ Inside EPA, 7 December 2009. See also Inside EPA, 5 June 2009.

limitation and reduction of aviation GHG emissions and the EU's attempt to give extraterritorial effect to its own internal emission reduction rules. The EU's actions in this area were not only seen as a significant threat to US airlines, they also provided a stimulus for the U.S. and other countries to actively engage in efforts inside the International Civil Aviation Organization (ICAO) to limit such emissions, and empowered US environmental activists to push the U.S. Environmental Protection Agency (EPA) to do so.⁶¹

The aviation case also shows the limits of the EU's potential however. While it certainly pushed the issue of GHG emission reduction within ICAO – with mixed results – it also triggered a severe backlash against EU GHG regulations in the U.S., specifically in the U.S. Congress. Indeed, as a consequence, the U.S. Congress adopted a bill – later signed by the President – that prohibits U.S. airlines from participating in the EU GHG trading program.⁶²

4. Empirical Touchstone

The third way in which the EU showed up in US environmental debates is as an empirical touchstone.

Environmental protection is an information-intensive business. Complex causal relations need to be established between a myriad of policy measures and environmental outcomes, and lots of empirical data need to be generated in order to test these causalities and to control whether environmental rules and laws are being followed. The more ambitious – in terms of the breadth of measures and their depth – an environmental protector wants to be, the more it needs to invest (or force others to do so) in data collection and in the analysis of the measures' impact. In cases where such a protector acts as a first mover, it needs to decide the types of data it needs to collect, the ways in which such data can be or need to be collected, and the kinds of analyses it needs to target. What costs do they really entail for companies (as opposed to the originally expected costs)? What effects have they on the achievement of certain environmental standards (as opposed to the effects that were hypothesized)?

Some of these decisions and their outcomes may be private, and others are inevitably public. The first mover paves the way for others to follow, or at least lowers the barriers for others to do so. An economist would refer to this as positive externalities. In many respects, the EU is such a first mover in the environmental arena, and as such it has generated such positive (informational) externalities. And these externalities mattered in the domestic debates on environmental issues in the US. It is indeed the position as first (significant) mover that provided the EU – intendedly or unintendedly – the role of empirical touchstone.

This became visible in several areas, such as the question of aviation GHG emissions, or the impact of separating HFC-generated emission certificates from the rest of the carbon market (with the EU banning the use of HFC credits in the EU ETS⁶³). The latter leads (in principle) to a rise in the price for carbon emission certificates because in a joint market, small reductions in HFC emissions would generate a high number of carbon credits. This is due to the fact that the greenhouse gas effects of HFC emissions are much stronger (by a factor of up to 14800) than those of carbon dioxide.⁶⁴

Similar effects could also be seen with respect to the U.S. CAFE standards for cars,⁶⁵ and the GHG emission effects different approaches to reaching these standards would have.⁶⁶ This was particularly the case with the impact of reduced sulfur levels in

61 As Kevin Morris, aviation and environment manager at ADS, an organization that represents British aerospace industry, phrased it more generally: "The EU got ICAO to take emissions seriously and deserves credit. (...) At least, people are taking about it, which wasn't the case in the past." Cf. Euractiv, Euractiv Report on Aviation, 17 July 2014.

62 Inside EPA, 26 September 2012 & 14 November 2012.

63 Note that this decision was also a result of environmental integrity concerns related to the enormous amounts of credits generated very cheaply by just a handful of (developing country) companies through the Clean Development Mechanism (CDM), and allegations that several of those companies did not just very cheaply gained a lot of credits, but would also have inflated their baselines (see Carbon Market Watch, "Perverse incentives of HFC-23 projects", Newsletter #9, 16 July 2010).

64 IPCC, Climate Change 2007: Working Group I: The Physical Science Basis: Direct Global Warming Potentials, available on the Internet at <https://www.ipcc.ch/publications_and_data/ar4/wg1/en/ch2s2-10-2.html> (last accessed 14 October 2015).

65 CAFE stands for Corporate Average Fuel Economy and is expressed in mpg (miles per gallon). A standard of 60 mpg requires for instance that all the cars produced by a vehicle manufacturer have on average to be able to cover at least a distance of 60 miles with one gallon of fuel.

66 Note however that this only applies to cars. On efficiency standards for trucks and for heavy engines in general, the U.S. is catching up and even surpassing the EU, see International Council on Clean Transportation (ICCT), "Europe's global leadership on vehicle emission standards at risk in the truck sector", available on the Internet at <<http://www.theicct.org/blogs/staff/europes-global-leadership-vehicle-emission-standards-at-risk-truck-sector>> (last accessed 15 October 2015).

automobile fuels on GHG emissions, as experienced by the EU. These EU experiences became the standard against which the debate about the best approach in the U.S. took place, and on which the political economy of that U.S. debate unfolded, particularly the opposition here between car producers and oil refiners. The higher the sulfur levels in fuel, the lower the heat of a car's waste, and with it the capacity of catalytic converters in cars to absorb carbon dioxide. Maintaining that capacity would require an extra heating of the converter and thus more fuel (and GHG emissions). The question was then whether sulfur levels in fuel needed to be reduced – as the EU is doing – or whether engines needed to be redesigned to so-called lean burn engines so as to allow a car to run more miles with the same amount of exhaust (and thus GHG emissions). As the debate turned on the technological ability to reduce sulfur levels while maintaining or increasing a fuel's combustibility (and therefore performance levels), EU experiences were used as an empirical benchmark.⁶⁷

Even more fundamentally, the question on CAFE standards and its targeted GHG emission reduction effects also turned around the question of feasibility. Was it feasible to achieve a certain fuel efficiency level in the first place? In the U.S., that debate focused on the 60 mpg standard, and the main argument was here that such a standard compared to what the EU was about to realize by 2020 and that “this mean[t] that this standard is technologically and economically achievable.”⁶⁸

That the EU acts as empirical touchstone does not mean that its way of working is always followed. It means that its experiences mattered in U.S. domestic debates. That it is not always followed despite being a touchstone, was shown by the debate on third-party verification of GHG emission reporting in the U.S. The question here was whether the U.S. Environmental Protection Agency would accept information from producers directly – and process that information itself – or would require producers to hand that information over to a certified third party that would verify the data and would hand its conclusions over to the EPA. Ultimately, the EPA decided to verify the data itself, due to pressures from producers that the EU system had shown that working through third-party verification would be costly and time-consuming, and against complaints by states that this would undermine consistency with GHG regulatory regimes outside the U.S.⁶⁹

5. Assessing the Impacts

When assessing the impact of the EU on Transatlantic environmental relations, one needs to look further than the direct impact that the EU may have on the US in international negotiations on environmental regulation. A closer look into US domestic debates on such regulation has indeed indicated that these debates take place within the shadow of the EU's environmental policies and standards and that this happens because the EU acts – intentionally or unintentionally – as a normative standard, a semi-hegemonic competitor, and an empirical touchstone in such debates. Interesting here, is not only the fact that there are strong indications of EU implicit leadership on the environment, but also that several mechanisms need to be taken into account in the study of leadership or influence in general.

As one surveys the history of climate diplomacy, it might seem that the initiative on climate diplomacy has passed from the EU to China and the U.S. But this may be a short term perspective. Confronting climate change is a multi-generational task. With changing economic fortunes and the vicissitudes of politics, leadership is likely to fluctuate. The problem of climate change, however, will not conveniently wait for political will. Successful collective action will therefore likely benefit from involvement of different actors with varied strengths who can compensate for each other's weaknesses or perform complementary roles such as the role of the EU illustrated in this section, even as roles may change over time and extend to other (public and private) actors.

VI. Conclusion: Climate Diplomacy and Global Governance

1. Main Findings

This article highlighted some of the key features and evolutions in the conduct of climate relations among China, the US and the EU. Recognizing that each of

⁶⁷ Inside EPA, 4 April 2013 & 26 April 2013.

⁶⁸ Inside EPA, 30 March 2011. With respect to the price effects of developing and producing low-sulfur fuel, the EU was equally used as an empirical touchstone, but this time together with California and Japan (see Inside EPA, 4 March 2015).

⁶⁹ Inside EPA, 25 September 2009.

these relationships is in a way unique and has its own characteristics, we did not aim to construct a single conceptual mold to capture the different dynamics. Instead, we focused on a number of key trends and events that took place in recent years in an attempt to discern whether a new form of climate diplomacy is taking shape. We find that a new climate diplomacy is indeed emerging in which there is a marked difference not just in the quantity of the diplomatic exchanges, but also in the quality and orientation of the relationships.

The following observations stand out as the most striking ones. First, China-US relations have evolved quite dramatically, in part due to the efforts of the Obama administration to create an atmosphere of trust with their increasingly ambitious and climate-aware Chinese counterparts.

Second, the quality and quantity of the exchanges between China and the EU on climate change have cautiously but consistently improved, with a number of high-profile capacity building projects laying a sound basis for trust and understanding on a number of issues, including on emissions trading.

Third, the strength of cooperation in the transatlantic relationship has varied. In a short term perspective, the US might seem to have overtaken the EU' self-defined leadership. As noted earlier, however, the collective action required to confront climate change is likely to benefit from actors with varied strengths and capabilities. Insufficiently noted, in this context, are the frequent indications of implicit leadership by the EU, with the EU acting either in-

entionally or unintentionally as a normative standard, a semi-hegemonic competitor, and an empirical touchstone in internal US debates.

Finally, the more inclusive engagement of different actors in the emerging decentralized system, while perhaps adding uncertainty to the system's environmental integrity, can also be a strength in maintaining the momentum of collective action despite changing economic and political conditions in the different countries.

2. The Broader Stakes

It is now recognized that cooperation on energy and climate is one of the most successful areas of China-US, China-EU and EU-US cooperation, while difficulties are more prevalent in other fields, such as trade and cyber security.⁷⁰ In contrast with the contretemps at Copenhagen, China and the US agreed in their Joint Announcement to make Paris work, while the EU has been pushing forward the debates in a relatively pragmatic manner as well, specifically when U.S. or Chinese preparedness to walk in that direction were at their weakest.

These facts suggest that in the area of energy and climate change, all three actors have found common purpose, that it is deepening and expanding, and that together they may have provided a decisive push in climate change policies globally. Perhaps it is possible to say that the multiple bilateral relationships are being interwoven into tentative steps toward stronger collective action.

The resulting growing positive momentum on climate change is potentially contagious since there may be synergies between and among progress on low carbon development, trade, employment, health, energy security, and national security, although we need to be careful not to be overly optimistic, the better to identify what is possible.⁷¹

Not surprisingly, the climate issue has moved from the periphery to the center of international relationships.⁷² Close observers of international relations suggest that a key to global order is the cultivation of common purpose between China and the United States and its extension in an inclusive manner to other nations and regions, including the EU.⁷³ The incentives and the opportunities exist to achieve cooperation rather than conflict, but cooperation will require conscious decisions recognizing the emerging new reality.⁷⁴

70 Melanie Hart (ed.), *Exploring the Frontiers of U.S.-China Strategic Cooperation: Energy and Climate Change* (Center for American Progress 2014); Zou Ji, Zhang Xiaohua, Fu Sha, Qi Yue et al., "Implications and Challenges of the US-China Joint Announcement on Climate Change Cooperation" (China Carbon Forum, undated); Belis and Schunz, "China and the European Union", *supra* note 40.

71 Kelly Levin, Benjamin Cashore, Steven Bernstein and Graeme Auld, "Overcoming the tragedy of super wicked problems", 45 *Policy Sciences* (2012), pp. 123 *et seq.*, at pp. 127, 136, 141; China and the New Climate Economy (Global Commission on the Economy and Climate 2015) available at <newclimateeconomy.net/sites/default/files/china-nce-exec-summary-eng_reduced_1.pdf> (last accessed on 23 July 2015); Zou Ji, Zhang Xiaohua, Fu Sha, Qi Yue et al., "Implications and Challenges", *supra* note 70; Fergus Green and Nicholas Stern, *China's 'new normal'*, *supra* note 33.

72 Scott Moore, "President Obama's Climate Diplomacy", Brookings Planet Policy, 30 January 2015.

73 Henry Kissinger, "The Future of US-Chinese Relations", Foreign Affairs, March/April 2012; Joseph Nye, "The Future of US-China Relations", China-US Focus, 10 March 2015.

74 Ernest May and Zhou Hong, "Power Transition and Its Effects", in Richard Rosecrance and Gu Guoliang (eds), *Power and Restraint: A Shared Vision for the US-China Relationship* (New York: Public Affairs 2009), at p. 21.

This is not your grandfather's balance of power because many of the great global challenges of our day do not have a zero-sum character and also have a strong and increasingly recognized ethical and normative character.⁷⁵ Climate change is perhaps the prime example of the new issues that demand a new type of more cooperative diplomacy which could be consistent with the type of power relations that China called for with the United States during the first meeting of the two presidents at Sunnyland in June 2013. Progress on climate change may contribute to the development of a more inclusive international

system, and conversely, greater cooperation may facilitate progress in confronting climate change. Great challenges and difficulties remain, but the possibility is now evident.

75 Dale Jamieson, "Climate Change, Responsibility, and Justice", 16 *Science and Engineering Ethics* (2010), pp. 431 *et seq.*, at p. 431; Mary E. Pettenger (ed.), *The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses* (Aldershot: Ashgate 2007); Kelly Levin, Benjamin Cashore, Steven Bernstein and Graeme Auld, "Overcoming the tragedy of super wicked problems", *supra* note 71, at pp. 146-147.