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# China's Role in International Climate Cooperation

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<sup>1</sup>Takes account of data on "intended nationally determined contributions", for COP21, up to 23 October 2015.

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## Executive Summary

Effective international cooperation can enable the world to (i) develop along a pathway that provides a strong probability that global average temperatures will not exceed 2°C above pre-industrial levels; and (ii) adapt to the climatic changes already locked-in as a result of past and ongoing greenhouse gas emissions. It can also help countries seize the many opportunities and benefits associated with the transition to a low-carbon economy; to achieve an attractive form of inclusive growth that is sustainable. The United Nations climate change conference in Paris at the end of 2015 is an important opportunity to advance toward those objectives. China has a critical role to play in relation to the Paris conference and international climate cooperation more broadly.

In every aspect of international climate cooperation, China has a very important role to play. Already, China's efforts in innovation and manufacturing have helped drive down the costs of key technologies such as wind turbines and solar PV modules globally, and it has embarked on a radical path of change toward a sustainable, low-emissions economy. These provide strong foundations on which China can build a leadership role in the global transition to a low-carbon economy.

On the road to Paris, China could:

- Help to build the necessary shared understanding, particularly among developing countries, of the problem and the nature of the responses to it (including its opportunities and attractions), as outlined above;
- Support the inclusion in the Paris agreement of the long-term and dynamic aspects of the agreement discussed above, including the shared long-term “net zero” goal and the five-yearly review-and-revision cycle for countries’ (non-binding) commitments;
- Communicate transparently to other countries the factors that render its commitments so credible, emphasising the strengths of its institutionalised policy planning processes and its successful track record in achieving previous commitments. By so doing, China can help to overcome persistent misunderstandings in other countries about its actions and plans.

As the world's largest originator of foreign direct investment, and a major player in the establishment of new international financial institutions — e.g. the Asian Infrastructure Investment Bank (AIIB), the BRICS-led Development Bank, and the Silk Road Fund — China's role in financing infrastructure over the next 15 years will be critical to reducing global emissions in line with a 2°C pathway. It is strongly in China's interests for China to use its influence as a foreign investor to ensure that a low-carbon, sustainable development model also becomes the “new normal” for the developing world. It could do this by helping to ensure that the new financial institutions it helped establish are inherently “clean” in the sense of prioritising finance for clean infrastructure and refraining from financing high-carbon projects.

China also has a critical role to play in clean innovation. There is a strong case for China to focus increasingly on the demonstration and early-stage deployment of technologies with a high potential for emissions reductions and cost reductions. In this, China's *scale* gives it a special advantage: it enables China to investigate different technologies and processes and to learn from such experimentation, and allows it to carry and spread the risks inherent in all forms of innovation. It can therefore help the world discover quickly the potential for cost reductions in key technologies.

As Chair of the G20 in 2016, China has a valuable opportunity to work with its partners to bring together the economic aspects of the climate change and sustainable development agendas and show how they are mutually reinforcing. China could particularly help to focus the G20 on measures to implement and build on the commitments arising from these processes, including in relation to sustainable infrastructure financing, innovation, energy efficiency standards, and carbon pricing.

The prize is a much more attractive and dynamic form of economic growth and development that creates a much healthier environment for people everywhere, overcomes poverty, and can be sustained over the long term.

## 1. Introduction

In late 2015, representatives of close to 200 national governments and tens of thousands of civil society observers will come to Paris for the 21<sup>st</sup> Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC). It is widely hoped that this will be the conference at which a new international agreement is negotiated, setting out how countries will cooperate to tackle climate change, with a particular focus on the post-2020 period. The conference presents an important opportunity to advance global cooperation toward the urgent task of reducing global emissions of greenhouse gases and adapting to the impacts of climate change.

At COP20 in Lima, Peru, in December 2014, each Party agreed to set out their “intended nationally determined contributions” (INDCs) ahead of COP21 in Paris. These INDCs lay out national plans for decarbonising their economies, indicating what can be achieved, what assistance is required, and explaining the UNFCCC why it is fair or equitable in light of national circumstances. It was further agreed that each of these INDCs will “represent a progression beyond the current undertaking of that Party”.<sup>1</sup>

The collective response from INDCs until 23 October 2015 has been commendable: 154 Parties have submitted pledges, together accounting for over 85% of global annual emissions of greenhouse gases and producing over 90% of global GDP.<sup>2</sup> While initial estimates suggest there has been progress in reducing emissions compared with a possible ‘business as usual’ global emissions pathway to 2030, there is a gap between the emissions pathway that would result from current ambitions and plans, including those goals outlined by the submitted INDCs, and a pathway that is consistent with a reasonable chance of limiting the rise in global average temperature to no more than 2°C above pre-industrial levels.<sup>3</sup>

Notably, the two largest emitters of greenhouse gases, the US and China, were early in proposing their own emissions pathways. In November 2014, President Xi Jinping of China and President Barack Obama of the US jointly announced their respective post-2020 pledges.<sup>4</sup> In the statement, President Xi pledged that China would “intend to achieve the peaking of CO<sub>2</sub> emissions around 2030 and to make best efforts to peak early and intends to increase the share of non-fossil fuels in primary energy consumption to around 20% by 2030.” This would later be central to China’s INDC submission of 30 June 2015.

More recently, on 25 September 2015, Presidents Obama and Xi reaffirmed these commitments to act on climate change by presenting a joint vision for the Paris climate conference. For China, this included fleshing out elements for their transition to a low-carbon economy, including promoting clean power use

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<sup>1</sup> UNFCCC (2014; p.3).

<sup>2</sup> Boyd, Turner and Ward (2015).

<sup>3</sup> See Boyd, Turner and Ward (2015) for more information.

<sup>4</sup> Office of the White House Press Secretary (2014).

in the electricity network, strengthening low-carbon policies and regulations, and increasing ambition over time with longer term strategies.

These announcements and the INDCs highlight the increasing importance of cooperation and coordination, ensuring all countries continue to work together to ensure a global transition to low-carbon economies. The purpose of this paper is thus to discuss the areas of international climate cooperation in which China has an especially important role to play and suggest how China could constructively fulfil these roles (Part 3). First, by way of background, we briefly describe the basic model and key features of the climate agreement that is likely to emerge in Paris, and identify some of the obstacles that could inhibit a successful outcome (Part 2).

## 2. The road to Paris: directions and obstacles

### a) Directions

The Paris COP is the next major event in a long history of such meetings, beginning in the early 1990s. The UN climate process has resulted in: the establishment of the UNFCCC (a framework agreement that mostly sets out broad principles, but with some commitments on emissions reporting); the more detailed, prescriptive, and centralized and Kyoto Protocol, whose first commitment period ended in 2012; the less centralized and non-binding Copenhagen Accord/Cancun decisions in 2009/2010, which records climate change targets for individual countries to 2020; and the Durban process, beginning in 2011, which set in train the process of agreeing a post-2020 framework by the end of 2015.

The ongoing negotiations toward a new international agreement in Paris are converging on a “hybrid” framework that mixes binding and non-binding elements, centralised and decentralised elements, based partly on a pragmatic assessment of what has worked better, and what less well, in previous international agreements (Bodansky and Diringer 2014).

Under this hybrid model, it is widely expected that the agreement overall will be formally legally-binding, but the provisions would include mainly obligations of process/conduct, obliging participating parties to, for example, *submit, record, implement* and *regularly review* their emissions reduction commitment.<sup>5</sup> The substance of those commitments will be “nationally determined”; there will not, in all likelihood, be an internationally legally binding obligation on parties to *achieve* their commitments.<sup>6</sup> While many think that a more centralised and

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<sup>5</sup> A similar approach is expected with regard to adaptation and financial support (i.e. from developed countries for both mitigation and adaptation in developing countries), i.e. there may be obligations of process with regard to formulating national adaptation plans and financial strategies: see Morgan et al. (2014).

<sup>6</sup> This “nationally-determined” approach was agreed at COP19 in Warsaw and affirmed at COP20 in Lima. One suggestion as to how to achieve the non-binding aspects of the agreement that has attracted considerable interest is to record countries’ commitments in a

binding approach would be better, this is not necessarily the case (IPCC 2014, ch 13). Since different countries have different motivations and capacities for reducing emissions and for engaging with international processes, and different means of achieving their emissions reductions, we think a more flexible approach is more likely to increase participation in the agreement (e.g. by the US), and to encourage greater ambition from key countries (e.g. from China and India), initially and over time (Green 2014; Stern 2014).

On the other hand, some of the other centralized institutional elements in existing UN agreements have worked relatively well and could usefully be built upon in a new agreement. For example, there is widespread support among parties for a common framework, agreed rules and some centralized institutions, concerning the accounting, monitoring, reporting and verification (MRV) of countries' emissions. Moreover, many parties support the inclusion in the agreement of long-term shared goal (or goals), and centralized processes and mechanisms to prompt higher ambition from parties over time<sup>7</sup> (which we discuss further below). Such elements would enable a greater degree of coordination and interaction among Parties than under the Copenhagen/Cancun model (Bodansky and Diringier 2014).

## **b) Obstacles**

Yet many obstacles remain on the road to Paris, and on the longer pathway toward an effective and equitable response to climate change. Most prominently, there will remain a significant gap between the aggregate of national commitments pledged toward the Paris agreement and those consistent with plausible 2°C pathways, meaning commitments will need to be ramped-up.<sup>8</sup> Indeed, countries should be considering opportunities to narrow the gap before and after the COP21 summit in Paris, including (Boyd, Stern and Ward, 2015):

- i. hard work over the next few weeks by all countries to find credible ways of achieving bigger emissions reductions which can be included in INDCs to be submitted to the UNFCCC secretariat, and/or achieved through additional efforts by partnerships (e.g. through specific decarbonisation initiatives among willing countries);
- ii. an intensification of efforts to increase investment and innovation, particularly in relation to the development of cities, energy systems and land use, that could help to close the gap between intentions and the goal before and after 2030;

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separate, non-binding document, such as a schedule to the main agreement. See, e.g., New Zealand (2014) and United States (2014).

<sup>7</sup> Again, it is envisaged by many that these institutionalised processes could extend not merely to emissions reduction commitments, but also processes for reporting on, and scaling-up over time, adaptation and financial support: see Morgan et al. (2014).

<sup>8</sup> Boyd, Turner and Ward (2015).

- iii. the creation of a mechanism, to be included in the agreement emerging from COP21 in Paris in December 2015, for countries to review their efforts and to find ways of ramping up the ambition of their emissions reductions by 2030 and beyond; and
- iv. concerted efforts by all countries to build strong and transparent domestic bases for the implementation of their INDCs, setting countries on a path to decarbonisation and enabling them to ramp up their ambitions.

There are also concerns about how credible the non-binding pledges will be, necessitating an increased focus on the domestic (institutional, legal, policy and political) arrangements affecting the ability of countries to deliver on their commitments and to scale them up over time. And there are concerns over how equitable the agreement in Paris will be, and whether particular developed and developing countries are contributing equitably to the response to climate change.

Equity concerns have been particularly prominent in discussions of climate finance (and, to a lesser extent, non-financial forms of support) within the UNFCCC and could pose a challenge to reaching agreement in Paris. And yet these discussions focus on only a small part of the overall challenge of financing sustainable development over the next two decades — a key issue in tackling the two great challenges of this century, ending poverty and mitigating (and adapting to) climate change.

Finally, innovation in zero-carbon technologies and processes will be crucial to addressing these twin challenges, and yet inadequate investment in China's role

### **3. China's influence over, and interests in, strong international climate cooperation**

In every aspect of international climate cooperation and low-carbon transition considered above, China has a very important role to play. There are at least four important senses in which China has great influence over global emissions and over the developmental and economic choices that determine emissions. First, its sheer size — geographically, demographically, economically, and in terms of its energy use and greenhouse gas emissions — means China will always be a critical participant in global climate action. Second, China, for developing countries, is seen as both an influence on growth strategy and a leader in world economic discussions. Third, China influences politics in rich countries, where there is a lack of understanding about the measures China has already taken and about its future plans with regard to emissions. For example, China's emissions are cited by some (however unfairly) as a justification for inaction in those countries. And fourth, China can be an example to countries everywhere in the way it goes about reducing its emissions, pursuing a wide range of policies and measures, and playing a critical role in



clean innovation and in global supply chains for low-carbon technologies (Garnaut 2014; Green and Stern 2015).

Because China's actions on climate change strongly influence the extent of global action, a more proactive leadership role by China in the global low-carbon transition would likely lead to much stronger global action overall, both at the Paris conference and more broadly. Such a stance would also be consistent with — indeed, it would advance — both China's domestic and foreign interests as articulated by China's central leadership.

Domestically, China is coming to terms with a range of economic, social and environmental pressures and challenges arising from a long period of investment-led and export-oriented development focused primarily on energy-intensive heavy-industry (2000–2011) (CCICED 2014; Garnaut et al. 2014; GCEC 2014b).<sup>9</sup> In response, China's leadership has articulated and begun to implement reforms associated with a new development model, a “new normal”, including: a shift in the balance of growth away from fixed asset investment and toward domestic consumption, particularly of services (private and public); increasing the productivity of capital, natural resources and energy; becoming a more innovative producer and move up the global value chain; expanding the role of the market in setting prices and allocating resources; reducing inequalities (interpersonal, city–rural, and east–west) in the distribution of income and wealth (CCCPC 2013; Zhang 2014); and lower pollution, congestion, waste and environmental damage, including through reductions in coal use and expansions in non-coal energy sources (CCCPC 2013; State Council 2013; State Council 2014). This new development model is taking hold very quickly. For example, China's coal consumption fell nearly 3% in 2014 compared with 2013 (NBS 2015).

Most of the structural shifts in China's new development model involve changes that would also strongly reduce China's GHG emissions; the cumulative mitigation potential associated with the full implementation of this new model could be very large (Garnaut 2014; Green and Stern 2015). Accordingly, a more proactive leadership stance on climate change internationally is now consistent with China's short- to medium-term domestic interests (Garnaut 2014). With regard to the international climate negotiations, “the lowering of emissions growth trajectories within the new model of economic growth allows China to put before the international community commitments that can encourage greater ambition in reducing emissions in other countries” (Garnaut 2014, 15). Such a stance, moreover, would *advance* China's domestic interests, since it would stimulate stronger climate action in other countries and hence the global markets for clean technologies in which Chinese firms are already leading suppliers of capital goods, and in which China is seeking to expand. It would

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<sup>9</sup> These challenges and pressures include: lower growth as the returns to capital investment diminish; high levels of excess capacity, including in heavy industrial sectors such as steel and cement; high levels of inequality (interpersonal, city-rural and east-west); diminished energy security associated with increased reliance on imports of fossil fuel energy; and severe pollution of air, water and soils and wider forms of ecological damage, and associated public health impacts.

also advance China's long-term interests in minimizing the risks and impacts of climate change.

Internationally, President Xi has confirmed an important shift in China's foreign policy theory and strategy, recognizing China as a "major country" that proactively influences its external environment toward the goals of "peace, development, cooperation, and mutual benefit" (quoted in Shi and Tweed 2014). Central to this approach, emphasised President Xi, is China's advocacy of "a new type of international relations underpinned by win-win cooperation", and a desire to "increase China's soft power, give a good Chinese narrative, and better communicate China's message to the world" (quoted in Miller 2014). Playing a global leadership role in the transition to a low-carbon economy would be an opportune means for China to demonstrate still further its role as major influence, and its desire and ability to achieve mutually-beneficial global cooperation on one of the most important global issues of the 21<sup>st</sup> century.

Below, we identify some of the specific ways in which China could play a leading role to advance the global transition to a low-carbon economy, on the road to Paris and beyond.

### **a) On the road to Paris**

China has an important role to play in the Paris process. First, China has recognized that there are many potential synergies between economic, energy, local environmental, and global climate objectives and therefore that these can be pursued together in ways that ensure the emissions reduction task is a great opportunity for both better growth and a better climate. As an influential country in the process, China could do much to popularize — especially among the G77 group of nations — a shared understanding of the climate problem, and the necessary response to it, that recognizes these synergies and opportunities.

Second, building on that understanding, China could support the inclusion in the Paris agreement the long-term and dynamic aspects of the agreement, including a shared long-term goal of reducing emissions to "net zero" within this century, and the five-yearly review-and-revision cycle for countries' (non-binding) commitments. This was later affirmed in the second joint US-China presidential statement on climate change, in September 2015,<sup>10</sup> where "[t]he two sides recognize that Parties' mitigation efforts are crucial steps in a longer-range effort needed to transition to green and low-carbon economies and they should move in the direction of greater ambition over time."

China has shown in the past that it is capable of making and delivering increasingly ambitious commitments. Moreover, through its efforts in innovation, finance, manufacturing and elsewhere, it will itself be instrumental in creating the conditions needed for countries to scale-up their ambition over

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<sup>10</sup> See Office of the White House Press Secretary (2015).

time. China therefore has good reason to be confident that the inclusion of dynamic elements in the Paris agreement is in its national interests.

Third, China could enhance others' perceptions of the credibility of its own commitments by communicating transparently to other countries the institutional, policy and political factors that render its commitments so credible. The fact that strong emissions constraints are now consistent with China's own sustainable economic development plans, and that China has strong institutional and political means of implementing its policy commitments through its development planning process, remains poorly understood in many other countries (Garnaut 2014; Green and Stern 2014). At the same time, frankness about the areas of institutional design and policy implementation that China is likely to find more challenging can help developed countries tailor their international assistance (e.g. institutional capacity-building) to areas that would be most effective.

Fourth, China can act as a role model for other developing countries, particularly the large emerging economies, in its attitude toward equity, advocating a dynamic, collaborative and opportunity-focused approach to emissions reduction of the kind advocated earlier, and moving away from the static and divisive language of burden-sharing. It could help other emerging economies to recognize their common opportunities to build large amounts of new infrastructure in cities, energy systems and other areas in a low-carbon way that brings multiple co-benefits in terms of greater efficiency, and lower pollution, congestion and waste, and to frame their INDCs accordingly.

## **b) On finance/investment**

As the world's largest originator of foreign direct investment, and a major player in the establishment of new international financial institutions — e.g. the Asian Infrastructure Investment Bank (AIIB), the BRICS-led Development Bank, and the Silk Road Fund — China's role in financing infrastructure over the next 15 years will be critical to reducing global emissions in line with a 2°C pathway.<sup>11</sup> This role will be particularly influential given that China's overseas investments are concentrated predominantly in other developing countries, giving China a unique ability to shape global economic development patterns.<sup>12</sup>

China's state development banking institutions are already playing a globally significant role in financing renewable energy and other low-carbon infrastructure in China at a low cost of capital (GCEC 2014a; Mazzucato 2013). They are thus providing the financial underpinning to China's emerging sustainable development model — its "new normal". There is a very strong case for China to use its market and political power as a foreign investor to ensure

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<sup>11</sup> China's overseas investments increased from \$45 billion in 2004 to more than \$600 billion in 2013 (Ministry of Commerce (China) 2014).

<sup>12</sup> In 2013, 68% of China's total outbound investment flows went to Asian countries, 17% to Latin America and Africa, and the remainder split between Oceania, Europe and North America (Ministry of Commerce (China) 2014), although these may not truly reflect end use (WRI 2015a). See also WRI (2015a) for more information on these overseas investments.

that a low-carbon, sustainable development model also becomes the “new normal” for the developing world.

First, given its vulnerabilities to climate impacts, it is strongly in China’s interest that the world reduces emissions in line with a 2°C pathway (or better). Expansions of high-carbon and energy-intensive infrastructure in developing countries jeopardise China’s interest in securing a transition to a low-carbon world. By contrast, financing low-carbon development globally can advance that interest. Indeed, the joint US-China statement in September 2015 alluded to prioritising cleaner energy over dirtier varieties in the energy system,<sup>13</sup> increasing confidence that these investments will be utilised, while the Chinese INDC presents an ambition to increase the share of primary energy from non-fossil fuel to 20% by 2030.<sup>14</sup>

Second, the more other emerging economies develop in a low-carbon way, the lower the demand pressures will be on scarce fossil fuel resources. To the extent China remains an importer of those resources, the corresponding downward pressure on global fossil fuel prices would be to China’s economic advantage.

Third, investing in low-carbon projects overseas helps to expand export markets for low-carbon goods and services produced by Chinese firms.

Fourth, there is an important dynamic element to low-carbon innovation that China can help stimulate through its overseas investments. If China can encourage other countries to deploy low-carbon technologies and services, and to further innovate in these areas, then this will have global spillover effects in the form of knowledge and cost-reductions that will to some extent redound to China’s benefit as it decarbonises its own economy.

Fifth, China exerts considerable normative power through the ideas, practices and technologies it transmits through its lending activities. These practices have sometimes been criticised by developed countries and traditional international financial institutions.<sup>15</sup> China now has an opportunity to finance sustainable, low-carbon, climate-resilient development that avoids pollution, congestion and waste in developing countries, and in doing so demonstrate its responsible commitment to promoting mutually-beneficial development.

One concrete step China could take, working with other member countries and donors, is to use its influence in the new financial institutions it has helped set up (the AIIB, BRICS Bank and Silk Road Fund) to ensure that the lending and investment policies and practices of these institutions are inherently “green”, i.e. that they: (i) prioritise finance for green infrastructure and leverage private finance towards this goal (and that the institutions possess the requisite skills

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<sup>13</sup> Office of the White House Press Secretary (2015).

<sup>14</sup> The INDC could see perhaps up to 1000 GW of non-fossil fuel generation capacity installed by 2030, close the volume of generation capacity in the current US power system (WRI, 2015b).

<sup>15</sup> See, for example, the literature on the “Beijing Consensus”.

and capacity in green financing); and (ii) refrain from financing high-carbon projects and strategies (unless there is a clear development rationale without viable alternatives) (GCEC 2014a). In this way, these international institutions could become strong forces for sustainable growth in Asian and emerging markets.

Moreover, in partnership with other multilateral, regional and state development banks (and green investment banks), these new institutions could form part of a global network for green infrastructure investment. This would present China with an important opportunity to provide leadership in the developing world as a financier of sustainable growth, building on the ongoing work of the China Development Bank in the International Development Finance Club. By contrast, whether developed countries lend support to the AIIB and BRICS Bank, through funding and otherwise, will be a critical test of their sincerity in supporting climate finance initiatives in the developing world.

### **c) On Innovation**

China has unique capabilities relevant to innovation that make it a central player in the low-carbon innovation story. China's current comparative advantages in innovation lie in adapting and improving on technologies developed overseas, and achieving cost reductions through deployment at scale and incremental manufacturing and process innovation (Zhi et al. 2013), which it fosters through a wide range of support mechanisms across these areas (CPI 2013). This approach has achieved real successes (Zhi et al. 2013). It has enabled China to drive large price reductions for solar PV and wind, with considerable global climate mitigation benefits (Grau et al. 2012; Wang, Qin and Lewis 2012); and it has established major shares in the global markets for these technologies.<sup>16</sup> As China's industrial structure evolves in line with its aspirations for higher value-added, high technology industries, and its skills advance relative to others, it will increasingly make sense for China to invest in innovation further "upstream" in the innovation chain (Green and Stern 2014; Grau et al. 2012).

There is an especially strong case for China to focus increasingly on the "middle" part of the innovation chain — demonstration and early-stage deployment of technologies with a high potential for emissions reductions and cost reductions, such as next generation solar PV technologies, concentrating solar power, offshore wind, battery storage, electric vehicles and associated network infrastructure (electricity grid modernisation and battery charging), nuclear power, and wave/tidal technologies (see IEA 2012). First, these technologies are critical to China's ability to decarbonise (especially its electricity and transport sectors) in the years and decades ahead. Second, increasingly sophisticated innovation in these technologies will allow China to capture increasing shares of the value chain for technologies that will be needed for the world to decarbonise. Third, such innovation will increasingly be

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<sup>16</sup> Along with Germany, China is the world's largest producer and exporter of clean goods — the two countries have between them one third of the market for globally-traded climate-related goods: Umwelt Bundesamt (2014).

necessary to sustain high growth rates in the context of a falling savings and investment rate (Stern 2011; Green and Stern 2014) — the fact that all of these technologies fall within China's portfolio of strategic emerging industries suggests that China recognises this imperative.<sup>17</sup>

The size of China's internal market means it has a special advantage — unparalleled globally — of *scale* when it comes to fostering the maturation of these and other high-potential, low-carbon technologies through activities in the middle of the innovation chain. China's scale not only enables China to achieve cost reductions through economies of scale: it also enables China to investigate different technologies and processes and to learn from such experimentation, and allows it to carry and spread the risks inherent in all forms of innovation. It can therefore help the world discover quickly the extent to which scale deployment and learning-by-doing can bring down the costs of different technologies. In the context of the global innovation deficit highlighted earlier, this capacity means China's has a critical role to play in the global transition to a low-carbon world.

#### **d) In the G20**

One forum for international cooperation with the potential to play a critical role on the economic aspects of the low-carbon transition is the G20. China will be chairing the G20 in 2016 and therefore hosting the G20 leaders' meeting. By this time, the Paris COP, the UN processes relating to sustainable development (SDGs) and their financing will all have been completed, and China's 13<sup>th</sup> Five-Year Plan will have been finalised. China has a valuable opportunity to work with its partners to bring together the economic aspects of all of these processes and their outcomes the climate change and sustainable development agendas and show how they are mutually reinforcing. China could particularly help to focus the G20 on measures to implement and build on the commitments arising from these processes, including in relation to sustainable infrastructure financing, innovation, energy efficiency standards, and carbon pricing.

## **4. Conclusion**

The Paris climate conference provides an important opportunity to advance global cooperation toward a low-carbon future that greatly mitigates climate risks and helps countries adapt to those already locked-in. This paper has highlighted the keys to successful international climate cooperation in Paris and beyond, and the critical role that China can play. Through the various channels of China's influence that we have discussed here, China's actions on climate

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<sup>17</sup> These are also crucial areas for synergies: vehicle electrification implies a growing demand for electricity and declining demand for oil; the full climate benefits of vehicle electrification will be achieved only if the electricity is generated from non-fossil fuel sources, and the full benefits of grid integration of intermittent renewable energy can be realised only through the co-integration of vehicle-based battery storage.

change have, more than any other country, the potential to push global expectations, markets and policies toward a zero carbon global economy.

The prize of successful international climate cooperation in Paris and beyond is a much more attractive and dynamic form of economic growth and development that creates a much healthier environment for people everywhere, overcomes poverty, and can be sustained over the long term.

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