China acting on climate change

Key Findings

• Due to natural environmental disasters, increased media coverage and seasonal abnormalities even those far away from the corridors of policy making are aware of the damage climate change can cause to all levels of Chinese society.

• According to many recent estimates, China is the world’s largest carbon emitter and accounts for up to one-quarter of global emissions. Chinese emissions make up for an incredible 57 per cent of the global increase in carbon emissions within the last decade.

• The realization that climate change will cause significant damage has caused the Chinese political leadership to start taking action. The main concern is the impact on economic and social stability, as well as the repercussions for other development and environmental challenges caused by climate change.

• The Chinese leadership has shown political commitment by setting ambitious national targets related to climate mitigation and adaptation. China’s success in meeting these targets will be decisive in determining whether the Chinese leadership feels confident to take on further mitigation policies and to commit to international agreements.

• Climate security is increasingly seen as a geopolitical issue where China’s role as a responsible world actor is central to its range of options within global climate talks. An indicator of this is the potential change of Chinese alignment: away from the G77 and towards a position where China negotiates to maximize national interests.

• China has much to gain and little to lose by playing a more active role in global climate talks. The coming decade is a strategic window for China to balance the opportunities and risks in the context of climate change and international negotiation.

• China is deeply suspicious of the intentions of western countries in the negotiations. For a deal to be reached, solemn trust must be built between China and other countries.

Setting the scene

After 30 years of near double digit growth, China has become the world’s second largest economy. China is also the largest trading partner of almost all of the world’s major economies, and since 2007, China contributes more to global GDP (Gross Domestic Product) growth than the U.S. does. In the course of only the past decade China has thus come to play a major role in global climate and energy securities.

China’s first National Assessment Report on Climate Change, released in January 2007, showed how hard China will be hit by climate change. Many parts of the country will experience drastic temperature increases and an overall rise in precipitation levels. The expected rise in temperatures would worsen the water shortage problem in northern China, and heavy rainfall in the upper reaches of the Yangtze River could trigger landslides or mudflows in the Three Gorges Dam area.

Following the report, and responding to China’s increasing emission levels and the high rate of climate abnormalities,
the Chinese perception of the climate challenge is changing. Increased coverage of climate change by the Chinese media and concerns among government officials, together with mounting international pressure, have caused the central leadership to place more emphasis on climate change.

**Climate and energy security hand in hand**

Energy security is closely tied to the priorities of the Hu-Wen administration: economic development, poverty alleviation and social stability. As the legitimacy of the Chinese Communist Party is dependent on its ability to deliver continued reform and development, the government’s focus on energy security is not merely an economic necessity – it is also about political survival.

With 200 million Chinese people living under 1 US dollar a day PPP (Purchasing Power Parity) and nearly half of the population below 2 US dollars a day, China’s development needs are immense. However, development is fuelled by growth, and growth requires energy. China presently covers half its oil demand from imports. Given how large a percentage of global economic growth China is responsible for, an economic slowdown in China generated by energy shortages would have far-reaching effects on the global economy. China’s energy security, as well as the framework for its climate commitments and measures, has thus become a global concern.

**Policies beginning to make a difference**

Present political ambition is taking China in the right direction to reduce carbon emissions. If the current targets to cut energy intensity 20 per cent were extended into the 12th and 13th five-year plans (2010 – 2020), a total of more than 50 Gt CO\textsubscript{2} worth of emissions could be avoided compared to constant CO\textsubscript{2} intensity.

The target to reduce energy intensity by 20 per cent has so far resulted in a significant slowing of emissions growth, with energy intensity decreasing by 1.8 per cent in 2006, 3.7 per cent in 2007 and 4.6 per cent in 2008. If the targets are met China would, in the year 2010 alone, avoid emitting 1.5 billion tons of CO\textsubscript{2} compared to a development path with constant energy intensity. This would arguably represent the largest policy driven cut in CO\textsubscript{2} emissions worldwide.

**China as an international climate actor**

On the global arena, China negotiates as part of the “G77 + China” coalition of developing countries, and stresses the need for developed countries to show leadership in tackling climate change. This position is supported by China’s White Paper, *China’s Policies and Actions for Addressing Climate Change*, released in October 2008. As a developing country, China does not have a legally binding emissions reduction target under the Kyoto Protocol.

There is a general impression that over the last couple of years China has become more active and constructive in global climate negotiations, with sophisticated diplomacy and knowledgeable negotiation teams. With its rapidly increasing emissions China is switching roles from an undeniable victim to an increasingly dominant contributor. As such China faces pressure to take a more proactive position in negotiations in order not to lose credibility in the international community.

**In the negotiation process**

The success or failure of international climate negotiations depends on the three way relationship, and level of trust, between China, the U.S. and the EU – which together account for over 50 per cent of global emissions and have the technological prowess to lead the global transition to a low-

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**Figure 1: CO\textsubscript{2} trajectories to 2020 – business as usual and political ambitions in China, EU and the U.S.**

*Lower trajectories indicate political ambition.*

- China: continued 20% intensity cuts in subsequent five-year plans
- US: Obama target to return to 1990 levels by 2020
- EU: 2020 target to reduce by 20%

*Upper trajectories indicate business as usual (BAU) assumptions*

- China: Energy intensity = economic growth
- US and EU: Use EIA high reference scenarios

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**China’s mitigation policies**

There are three key sets of interrelated climate and energy targets in China:

- **The goals and emission mitigation targets** stipulated in the 2007 National Climate Change Programme. Targets include the enforcement of mitigation regulations, developing relevant technology and improving energy efficiency and conservation. The successful implementation of the Programme’s mitigation targets would, according to the Chinese administration, result in 950 million tonnes of avoided CO\textsubscript{2} emissions by 2010.

- **Compulsory energy intensity targets** to reduce energy intensity by 20 per cent and pollution intensity by 10 per cent within the 11th five-year plan (2006–2010).

  - The renewable energy targets for 2010 and 2020 have been set for long-term energy security purposes. The aim is to increase the share of renewable energy in the nation’s energy mix to 10 per cent by 2010 and 15 per cent by 2020.
  - China has also set an objective of having 30 per cent or more of its total energy requirements met by renewable sources by 2050.
carbon economy. Each needs to be convinced that the others are intent on moving to a low-carbon economy – not just to prevent catastrophic climate change but also as part of a wider strategy to improve energy security.

China wants global recognition for its ambitious domestic intensity targets, appreciating that climate change mitigation is estimated to cost the Chinese government 200 million US dollars annually. China also wants the world to realise its right to development. Over the past decade China has shown an increased willingness to work within international norms and multilateral institutions. China looks likely to play a much more important role in global mitigation of climate change than was thought until recently.

Seeing climate change through Chinese eyes
The Chinese leadership realizes that if China does not significantly curb emissions growth, its cumulative per capita emission levels could reach world average as early as 2020, significantly weakening China’s bargaining position. But action that China takes at home to reduce energy intensity must not be confused with what China may or may not commit to in the global climate negotiations. The target of 20 per cent energy intensity reduction by 2010 is crucial to build confidence within China about the ability to take on future international commitments. What matters is not external pressure but the demonstration domestically of China’s own capabilities.
Recommendations

International cooperation on low-carbon economic development
A growing global focus on low-carbon economic development provides opportunities for China to gain competitiveness, international reputation and environmental benefits, at the same time as it lays a foundation for more balanced social and economic development. International co-operation within a new climate regime could give China access to important technologies and investment capital and allow exports of low-carbon, high-technology products.

Trust of each other’s good intentions
There is a general lack of trust from the Chinese side that the developed world will live up to declarations already made. From outside China there is doubt that China will live up to what has been promised. It is vital that China and the rest of the world understand each other’s interests in the climate negotiations.

China needs support and recognition from the international community
China’s ability and willingness to slow the growth of its carbon emissions is crucial for the success of global efforts to come to grips with the climate crisis. It is imperative that the international community acknowledges the role that climate and energy security play in China’s development and emergence as a global economic, political and cultural partner. China wants international recognition for its ambitious domestic energy intensity targets as a mean of reducing its climate impact. It also wants recognition for its long-term progress in decoupling carbon emissions from growth during most of the reform process.

Interplay of climate and energy security with development
Climate change is still predominantly a development issue and China wants external understanding of its right to development. Tradeoffs exist between the harm caused to development, and the costs of mitigation and adaptation. Development is fuelled by energy and so the concern for energy security drives China’s mitigation actions.