



## **CHINA'S 12<sup>TH</sup> FIVE YEAR PLAN AND LOW CARBON INDUSTRIALISATION**

### **ROUNDTABLE DISCUSSION**

#### **CHAIR'S SUMMARY**

**28 February 2012, Ankara Sheraton Hotel**

#### **CONTEXT OF THE MEETING:**

China has made key strategic decisions in its 12<sup>th</sup> five year plan to move toward a low carbon economy. Its recent five year plan placed low carbon and clean energy industries at the heart of China's forward strategy for growth, competitiveness and industrial modernisation.

In order to deliver energy security, industrial competitiveness and increase innovation, technology development and deployment rate, China has taken various critical decisions. Implementation of these decisions offer many opportunities but also faces significant challenges. In the years ahead, China will aim to realise these decisions through efficiency targets, large scale public investment for low carbon infrastructure, a focus on technology development and innovation, and new regional governance structures. The government is planning to introduce carbon emissions trading pilot programmes through the 12<sup>th</sup> five year plan. China has also announced 'Low Carbon Zones' which include 8 cities and 5 provinces, covering over 300 million people. These would aim to attract international cooperation on technology, investment and capacity building, and provide testing grounds for regulatory, economic, trade and investment policies for regional low carbon development transformation.

As key emerging G20 economies, Turkey and China face similar challenges, such as fast growth and urbanisation rates. Their economies are largely dependent on imported fossil fuel. Given their overall growth prospects and especially as the top two countries with the world's highest rates of electricity market growth, energy security is at the top of their political agenda. In an increasingly carbon constrained world, Turkey has a competitive advantage over China due to higher energy efficiency of its overall economy (0.27 toe/thousand 2000 USD and 0.77 toe/thousand 2000 USD in 2009, respectively). On the other hand, China can achieve economies of scale due to the sheer size of its market. China's experiences in testing low carbon transformation at national and sub-national levels and through a range of public policy, finance, and governance structures, could provide useful lessons for Turkey's own energy security and industrial modernisation agenda within the context of Turkey's forthcoming 10<sup>th</sup> five year development plan in mid-2012 and further implementation of Turkey's National Climate Action Plan.

## **THE OBJECTIVE OF THE MEETING:**

London-based think-tank E3G and REC Turkey, with financial support from the British Embassy in Ankara, hosted an informal roundtable meeting in Ankara on China's 12<sup>th</sup> five year plan and its strategy to move to a low carbon development pathway. This meeting established an informal dialogue between Chinese and Turkish officials, the private sector and academics to discuss the risks and opportunities of moving to a low carbon economy. It also provided insight into China's thinking and strategy, and enabled the sharing of lessons learnt in transitioning to a low carbon economy. The meeting was held under Chatham House rules.

## **PARTICIPATION:**

Speakers and participants at the meeting in Ankara included around 35 experts from:

E3G	Ministry of Development, Turkey
REC Turkey	Ministry of Economy, Turkey
Ministry of Science and Technology, China	Ministry of Science, Industry and Technology, Turkey
Development Research Council, China	Turkey
Chatham House, UK	Ministry of Energy and Natural Resources, Turkey
Ministry of Foreign Affairs, Turkey	TTGV
Ministry of Environment and Urbanisation, Turkey	Private sector – TOBB, Aygaz, Carbon Clear
British Embassy in Ankara	

## **KEY ISSUES DISCUSSED:**

The first session of the meeting focused on China's 12<sup>th</sup> five year plan and strategic vision for low carbon development and aimed to provide insight into why China has adopted such a strategy. The second session looked closer at China's low carbon industrialisation and innovation strategy and policies.

### **Key drivers for China's 12<sup>th</sup> five year plan and its move to a low(er) carbon economy:**

- China's 12<sup>th</sup> five year plan has an integrated approach which includes broader economic and industrial policy around low carbon economy and a structural change from quantity to quality provided by going up the value chain. It was emphasised that as set out in China's 12<sup>th</sup> five year development plan, transition to a low carbon economy is very important for its long term socio-economic development, as China is dependent on imports for most resources including energy. Resource efficiency and environmental protection is, therefore, core to the government's economic strategy and policies.

### **Comparable challenges of emerging economies and opportunities for learning:**

- Some of the parallels between China and Turkey included fast growth and urbanisation rates, major infrastructure challenges, import dependency and energy security issues, focus on manufacturing as a major export sector (e.g. automobiles), and the EU acting as both the primary market and technology provider. Both countries are also extremely vulnerable to the impacts of climate change.
- The group also debated whether the similarities were limited. It was agreed that comparing the two countries in a literal manner is not appropriate; yet, as emerging economies, they still face similar challenges. One such challenge being that Turkey and China have the two

highest growth rates of electricity demand in the world. Also, looking at other countries' examples is helpful for thinking about the countries' own national interests and understanding where they stand in comparison, for example, understanding the role of policy in driving the creation of many new technology companies in China.

#### **Role of government vs. private sector:**

- It was noted that the recent financial crisis and resource scarcity issues led to a new debate on the role of the government vs. the private sector in the overall economy. In China, the role of government is mixed and evolving; however, it depends on whether the private sector could deliver or not. The government sees itself playing a strong role on these issues to address market failures and deliver public good.
- Another participant emphasised that in order to avoid 4°C of warming, a stronger government role is needed to drive change. Unless governments give a clear signal for demand and create markets (and collect revenue), the investment will not take place. This was a huge issue in the UK, however, now there is a consensus on the stronger role for the government to provide public goods (i.e. climate stability) and address market failures.
- Overall, governments need to think much harder in these major sectors. This would not mean a return to old style state planning but new types of mixed interventions similar to health policy where the state incentivises markets to innovate and supply public goods.

#### **State aid for supporting low carbon technologies:**

- One of the participants raised the critical issue on the 'subsidy race' for new technologies. The experts noted that there is strong Chinese state support for R&D in this area, but thought direct subsidies to companies are not the way forward. The growing market competition is also driving investment in this area which spurred development of new technologies without state support. For instance, leading companies in the Chinese solar PV industry were set up by expat Chinese entrepreneurs using Australian technology.
- Another expert noted that China wanted to leapfrog the current automotive industry and saw a significant future in electric vehicles. It was noted that Chinese EV companies were following the European car companies very closely. Indirect state aid could still play a significant role in pulling these technologies toward large scale deployment. For example, current support for EVs was two fold: first, only R&D incentives to private companies and second, as consumer subsidies to drive demand. This helped to avoid distorting competition. In addition, 6 cities are designated as pilots for EV roll-out at scale. This was thought necessary; otherwise these new fledgling industries won't be able to compete with incumbents where new entry to the market is very limited. Different companies are also currently testing various CCS technologies.
- The support for developing and deploying new low carbon technologies is closely linked with China's economic development strategy. In order to improve the energy efficiency of the economy, two dominant perspectives include moving to more efficient high-technology in industry (for example, in steel, iron and cement sectors China was among the top ten in terms of competitiveness) and electricity generation, and going up the value chain in exporting high technology manufactured goods.
- There has been significant cost reduction in renewable energy sources in China, especially in wind. In terms of employment, even though the experience has been mixed, some commentators argue that job creation was a top priority for China, therefore, it would not invest in a sector without job prospects. It was noted that a quarter of global wind jobs (about 150 thousand) were created in China (source quoted as REN21 Renewables Global Status Report 2011).

- Another participant noted that some older sectors, such as nuclear and coal, were still benefiting from significant levels of subsidies, both directly and indirectly (i.e. through public investment in enabling infrastructure). It was noted that there are ongoing discussions in China over an overall coal cap and an energy consumption cap.
- Overall, it was noted that countries should not be too complacent or overestimate China's rise in the low carbon race. While China is likely to lead in some sectors, growth in global low carbon markets would provide significant opportunities for other emerging players, including Turkey.

**Perceptions around Durban outcome, 2015 and long term national interests:**

- One of the participants suggested that the Chinese government was, overall, content with the outcome, and the fact that there was not negative press coverage or messaging about China. In addition, despite the forthcoming leadership change in China, all the future leaders give confidence that they will stick with the transition toward low carbon economy.
- 2015 was emphasised as a critical juncture, as decisions will determine what degree of warming we are getting locked-into. The Chinese debate focuses on the potential for peaking its carbon emissions between 2020-2030; the debate is very live in China. One of the experts argued that if China makes a concrete decision on peaking, none of the other emerging economies would be able to avoid similar commitments.
- Many participants referred back to China's statement as a 'responsible developing country'. Further thinking was needed to encourage other countries to become more 'responsible' in order to reach a global agreement on 2015. Many experts emphasised that countries need to define their national interests by looking at long-term opportunities and risks; this would then allow a judgement to be made on whether it is a good or bad investment for the future (e.g. Energy Roadmap to 2050, R&D education, institutional change, and infrastructure investments, resource and carbon constraints).

**Trade and future carbon constraints:** Border measures issues were mentioned as an emerging threat for Turkey and questioned whether China felt vulnerable. One of the experts argued that China is worried about this and has considered this as a key threat; hence played a part in driving its strategy for low carbon transition. However, it was not expecting any immediate implications, and there were many other laggards among developed countries.

**International cooperation and Europe:** Despite close economic ties, European policy makers were suggested to have little understanding of Turkey's views on these issues. While international cooperation on low carbon development and technology with China flourished, they didn't look at their own neighbourhood, and practical cooperation has become an orphan issue. Partnership between Europe and China mainly evolved on a bilateral basis with key member states in Europe; however, they are now looking to strengthen engagement at the EU level.

**Conceptual vs. practical approaches to low carbon economy:** Some pointed out the difficulties in defining concepts such as the low carbon economy and the green economy and, hence, assessing progress. Even though the low carbon economy concept was at first a foreign term, it chimed with the traditional Chinese way of thinking around a frugal lifestyle. It was emphasised that the Chinese took a more practical approach and they identified moving to low CO<sub>2</sub> intensity, and low/zero carbon as the main destination. Even though China, with its very high reliance on coal, doesn't fit any definition of low carbon economy, the trajectory towards a low(er) carbon economy is clear.