China’s green revolution

The world’s largest polluter is laying the groundwork of a new low-carbon economy. Europe should take heed

By Isabel Hilton | 06.07.2017

Tianjin Eco-city: a flagship project built with the latest green technologies and to serve as a model for future eco-cities in developing countries.

In January this year a sober-suited President Xi Jinping made a bid for the mantle of global climate leadership. In a speech delivered to the global elite at the World Economic Forum in Davos, President Xi presented China as a reliable and responsible international player that stood by its commitments both to the Paris Agreement and to globalisation.

In diplomacy, as in life, timing matters. Xi’s careful speech, sober demeanour and his pledge to be a steady partner resonated all the more against the example of the new US president. Since then, much ink has been spilled on the important question of whether China will or can fill the gap created by the Trump administration’s departure from the stage. To assume that leadership, China’s own low carbon transition would need to serve as an example to others.

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It is a question of particular concern to the EU, once itself a leader in climate diplomacy but now distracted by its own difficulties. Although there is still action at state and city level in the US, both the EU and China have lost a key partner since Obama left office. They are looking at each other, speculatively measuring up for the role. Neither is likely to exert the diplomatic force that an engaged
United States can bring to bear on the international negotiations. But, as important trade partners with
a deep commitment to climate mitigation and some, though by no means a full set of overlapping
interests, their cooperation on trade and investment should advance the climate agenda, despite the
headwinds.

Since Donald Trump announced the US “withdrawal” from the Paris agreement, Chinese and EU
leaders have pointedly emphasised their joint commitment. In early June, they prepared a strongly
worded 10-page statement on climate cooperation. But as a signal that cooperation is complicated,
the statement was not signed: unresolved trade disagreements got in the way. As China becomes
more of a competitor to Europe, such disagreements may deepen.

Europe’s transition to a low carbon economy is a work in progress, now hampered by internal stresses
and foot-dragging by some laggard member states. China’s transition is announced and underway, but
many years, if not decades, from completion. A closer examination of China’s existing commitments
and domestic raise some questions as to how useful a model it is for Europe.

Toxic growth

Since the 12th Five Year Plan (2011-2015) China’s strategic commitment has been clear: China is at
the end of a 30 year cycle of rapid, high carbon growth, fuelled by investment, cheap labour and
exports. That model has been exhausted for some years and is now as much a burden as an engine of
growth. Its infrastructure building is increasingly a deficit exercise, its environmental legacy is toxic
and its economic success is pricing China’s increasingly scarce labour out of the cheaper global
markets it once dominated.

To power its route through the much-discussed middle income trap, China needs to follow Taiwan,
South Korea, and Japan up the value chain, investing in technologies, innovation and efficiency. Low
carbon technologies offer a double benefit — that of domestic climate mitigation and economic
potential. China therefore has a direct interest in the carbon-constrained world that the Paris
Agreement seeks to bring into being, if for no other reason that China intends to supply low carbon
goods, services and technologies to that global market.

It is a project with a history of investment in renewable technologies that now allows China to boast the
largest installed wind and solar capacity in the world and, importantly, to claim that its capacity to
manufacture at scale has lowered the international price of solar panels by 80 percent in just a few
years, transforming the balance of costs between high and low carbon energy sources for third
countries. In addition, China is investing in the full range of advanced clean technologies, from battery
storage and electric cars to robotics, with the aim of dominating future innovation and global
technology. Its emissions are likely to peak by 2025 and the long march away from coal has begun.

“Make China great again”

And yet, despite this effort, China’s pledges under the Paris Agreement are not ambitious and it
remains unclear how far China will assert leadership beyond that afforded by its sheer weight in the
world, now that US influence is shrinking. China looks after its own interests first and has rarely
exercised diplomatic effort in defence or pursuit of global public goods. Xi Jinping’s current mission
remains that of making China great again, a mission that Donald Trump has done much to advance.

On the positive side, China’s leaders are scientifically literate and comprehend the basic physics of
climate change. China itself is highly vulnerable to the impacts of warming: from melting glaciers on
the Qinghai Tibet plateau, to rising seas that threaten its delta cities — Guangzhou, Shanghai and Tianjin. Add to that food insecurity and failing water supplies to most of north China and China’s leaders understand that the impacts on future prosperity are potentially huge.

But China’s actions at home have been bounded by a mix of vested interests and competing political and economic priorities that is familiar in other political systems. The regime must worry about the jobs tied up in pouring concrete, processing petrochemicals, making steel and mining coal. It is under pressure from the huge state owned enterprises that are largely tied to the old economy. How much faster the regime can move without undermining the support of these key constituents remains uncertain: Xi is seeking to appease the high carbon industries with the temptations of the ambitious global infrastructure projects of One Belt One Road, while at home he still struggles to implement the crucial Third Plenum Reforms and little progress is expected before the critical 19th Party Congress later this year.

Meanwhile, there are other issues to contend with: the last time the government shuttered zombie state-owned enterprises was when the then prime minister Zhu Rongji closed down the northern rust belt in the 1990s. The city of Shenyang, once the steel capital of China, subsequently blossomed as a garden city. Zhu was helped by the abundant job opportunities afforded by double digit growth; today growth is around 6 percent and the jobs the new economy might offer — in services and in advanced technologies — may not help those who will lose in the curtailment of coal, steel and new infrastructure projects.

The future is... green

China has potential for new green jobs: Chinese researchers have estimated that between 2005 and 2020 China’s low carbon transition could create some 30 million green jobs across forestry, power generation and the green parts of 2009 stimulus package. But if China is to succeed, it must find more ways to ensure that the low carbon economy not only drives growth but also absorbs the relatively unskilled labour the government wishes to move off the land.

China is rapidly laying the groundwork of a new economy, rolling out a network of rapid charging stations for electric vehicles and continuing to invest in renewable technologies. Although at present China’s technologies are outmatched by others, there is every reason to suppose China can catch up through state investment and exploitation of its large domestic market.

EU-China cooperation to date has been built on the synergies between more advanced EU economies that shared experience in everything from city planning to carbon trading, and the emerging China. That transfer of expertise could reverse if China succeeds, but beyond the headline message that the future is low carbon, it is not clear how closely China’s experience in creating a job-rich and prosperous green economy would read across to laggards within the EU.

Although both have benefited, the EU runs a stubborn trade deficit with China and there are growing signs of alarm at the implications of China’s eagerness to invest in European advanced technologies with better IP protection and increasing levels of competition could complicate future cooperation. Continuing restrictions on market access in China and gaps between internal political and economic systems may make lessons less transferable.

Coal dependent countries such as Poland, however, could find interesting models elsewhere: the state of Texas, for example, synonymous with the oil industry, is now the biggest generator of wind energy in the United States, and the fastest growing employment category is that of wind technician. In Texas alone, 22,000 jobs have been created by a wind industry that has thrown a lifeline to cattle ranchers stricken by climate related drought. One of the first US towns to be entirely powered by renewable
energy was the highly conservative town of Georgetown, Texas. They made their choice because renewable energy is cheaper and it has a long term future. It is a lesson that Poland would do well to heed.