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# Carbon trading in the Asian Century: China's ETS on track

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#### DISCLOSURE STATEMENT

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On the international stage, China is reluctant to cut emissions. Back home, its new emissions trading scheme will be the world's second largest. [Flickr/peregrinari](#)

In the United Nation's annual climate change conference **held in Doha** last December, delegates from 194 countries came together at the last minute to **extend the Kyoto Protocol**. The Protocol is a legally binding climate accord by which rich countries are required to make quantified carbon emission cuts.

But the second phase of the Protocol, commencing in 2013, still omits China - the world's biggest national source of greenhouse gases.

China is often seen as a **roadblock** in international climate change talks. Its own greenhouse gas emissions have soared in the **past decade**. With a population of 1.3 billion it has contributed **19.1%** of the greenhouse gas emissions produced

#### TAGS

Climate change, Emissions, China, Sustainable development, emissions trading, Asian Century



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worldwide.

Senior Chinese officials reject emission reduction in **absolute terms**. They insist that **rich nations should do more on the climate** before they commit more.

But China is more ambitious back home than it appears in international scenes.

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It has pledged to cut back emissions intensity (emissions per unit of GDP) by 40-45%, relative to 2005 by 2020. Short-term goals include reduction in energy intensity by 16% and carbon intensity by 17%, for the period from 2011 through 2015. The most prominent plan is to run a **national emission trading scheme** (ETS), ahead of the US and along with Australia. It is destined to be the world's second-largest emissions market.

The notion of carbon emission trading has found its way in industrialised economies, notably the European Union (EU). Yet, carbon trading had experienced an uncertain period in 2009 when the world economy stumbled and international climate change negotiations encountered major hurdles. At the time of uncertainties, a non-traditional market advocate cast a vote of confidence for the contested concept of carbon trading.

That is China, which has called itself a "socialist market economy".

In late 2011, the Chinese government appointed **seven pilot sites** across the country, including two provinces (Guangdong and Hubei) and five cities (Beijing, Tianjin, Shanghai, Chongqing, and Shenzhen). Altogether they account for 27.4% of China's national GDP and 18.4% of its population.

The short-term goal is to establish trans-provincial and trans-regional trading schemes in transition to a national scheme by 2015. The pilot schemes begin operation from 2012/2013. Beijing, Shanghai and Guangdong launched their **pilot programs** on March 28, August 16, and September 11, 2012, respectively.

Australia is happy to see the roll-out of China's emissions trading scheme. In this **Asian Century**, the Chinese scheme is one institutional window through which Australia can strengthen its role in regional climate policy development.

South Korea and Vietnam have also approved plans for implementing a national emissions trading scheme. Tokyo has

a metropolitan ETS and India started a pilot scheme in three states. If the Chinese ETS works, one may expect other Asian national economies to follow suit. With the current efforts by Australia and New Zealand, there are some prospects for an Asia-Pacific network for emission trading.

From 2015, Australia will run a national ETS, eventually **tied to the EU ETS**. In the same year (if not 2016), China (and South Korea) will introduce a national ETS. This means Australia is moving forward in tandem with two key developments in the international carbon economy; that is, maturation of the world's largest emissions trading scheme, operated by the EU, and evolution of an Asian ETS, with China destined to be a key player.

Australia would benefit from establishing bilateral or multilateral linkages with these regional schemes. Emission permits would be traded across these regions. Australian firms would be able to meet their assigned emission reduction targets by sourcing emission permits from officially linked carbon markets abroad. The regional developments could offer better trading opportunities for Australia. Ultimately this means lower costs of emission reduction.

The challenge is that China falls short of what is required for an efficient trading scheme.

A binding emission cap is a prerequisite of "cap-and-trade" mechanisms, such as an ETS. China has no national cap. Local authorities are left to set the rules as they see fit. Under the pilot schemes they have the discretion to determine emission targets and permit allocation rules, and to develop governance systems and market infrastructure. These include the emission caps for the pilot schemes.

Conceivably, there is very strong resistance from the ground. To the local officials, strong economic growth remains top priority. **GDP always comes first**. Pilot schemes are likely to be based upon emission intensity caps, rather than absolute caps. This situation is different here in Australia - it's just one technical issue for bilateral linking.

There are political-economic challenges too. In China, key commodity prices, including electricity prices, are actively **regulated by a central authority**. Since the prices of emission permits are supposed to be reflected in commodity prices, will permit prices under the Chinese ETS actually

follow market fluctuations? They are more likely to reflect political judgements, which are a source of price distortion. Synchronising carbon prices across continents would then be impractical.

Legal enforcement is another issue. The pilot schemes face **considerable challenges** in setting up robust monitoring, reporting and verification mechanisms. Chinese experience with trading other emissions is not very encouraging. For example, the country's SO<sub>2</sub> (sulphur dioxide) emissions trading schemes are predominantly based on self-reporting. Emissions are not regularly monitored. The regulatory infrastructure is far from complete and not up to international standards.

The ETS developments in Asia raise prospects for a common carbon price across the globe. Nations may be able to achieve more together through such economic mechanisms than international "talks".

But this is Asia.

Unlike stock markets, compliance carbon markets are primarily regulation driven.

The Chinese ETS operates in a different institutional system. Not built upon a mature free market and a transparent democratic regime as we know in the western world, it is going to be a totally different animal from what we have here. Negotiations on trade terms will be highly politicised. Emissions trading schemes with Asian linking are likely to become just another venue for political struggles among participating countries.