

Putting a Price on Carbon: Carbon Emission Trading Debut

China

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Policy details

In 2010, China government released the 12th Five Year Plan, which explicitly identifies the carbon trading markets as one of the major measures for achieving the energy and carbon intensity reduction targets. In October 2011, the National Development and Reform Commission (NDRC) decided to start carbon trading pilot systems in seven provinces and cities, including Beijing, Shanghai, Tianjin, Chongqing, Shenzhen (the five cities) and Guangdong and Hubei provinces.

These pilot emissions trading systems (ETS) are expected to serve as testing ground for a national ETS to will be implemented after 2016. The seven ETS could eventually regulate between 0.8 -1 billion tons of CO₂. If those trading schemes are to be linked they could become the second largest cap-and-trade program aside from the EU-ETS (which is about twice as big).¹ The first pilot carbon emission trading program, China Emissions Exchange, was launched in June 2013 in Shenzhen. Any company that emits more than 5,000 tons/CO₂ per year will be obligated to participate

Quick facts

Zone	National territory
Time Frame	2010-2015
Topic	Carbon Trading Markets
Implementing Agency	National Development and Reform Commission

Case Study



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in the pilot ETS. As a result of this threshold, 635 companies which emit 5,000 tons of CO₂ per year and 197 buildings for public use were included in the Shenzhen pilot ETS during 2013-2015.² Also, it is expected that a nation-wide ETS will be unveiled in the next 5-year plan from 2016 onwards. Trading will take place in a designated trading platform at the China Emission Exchange. On the first day of trading (June 18, 2013) 21,112 tons of carbon dioxides were bought, with a total value of ¥613,236 (€70,685).³

While most experts agree that the ETS will not be a major driver of emission reductions in the immediate future, these pilots are an important capacity-building mechanism for the government, companies, and third parties to test relevant methodologies and procedures. In addition, the ETS scheme can be seen as a motivation mechanism, which promotes renewable energy and technology revolution in China. Carbon trading started late in China, but it is catching up with the market. Experts point out that China is under the heavy pressure of energy-saving and emission-reduction, while carbon trading can offer a market mechanism with low-cost and high-efficiency to achieve an energy-saving and emission-reduction task. Therefore the prospect of carbon trading market in China is worth anticipating.⁴

Challenge

The biggest challenge the carbon trading scheme of China is facing is data accuracy. International sources generally show China emitting more GHGs than the national estimations. In addition, the Chinese government has not yet set up a unified standard for accounting and reporting the emissions. Also, the difficulty in acquiring accurate emission data results in the challenge for emission quota allocation. In the China Emissions Exchange, an electronic system is used to allocate the emission quota with the participation of the enterprises. The companies will declare the estimated amounts of emission and the estimate increasing amounts in the following three years and report them to the system, and then the quota for the companies will be generated by the system automatically. If the declared amounts by the companies are not accurate, there will be a risk that emission limits will be

set either too high or too low. Another main challenge that the ETS pilots face is their legal basis. The ETS pilots are based on ordinances from local legislatures while emission rights and permits, trading rules, monitoring, collection of emission data, verification, enforcement and punishment for non-compliance--all these key aspects that enable a functioning emission trading scheme are not yet backed up by and embedded in a solid legal system.⁵ Ensuring that there are strong, enforceable penalties for non-compliance will be important for the success of the program.

References

The following documents informed the development of this paper:

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Video Materials

<http://baidu.vifeng.com/kan/VJr0/VJrG>

<http://my.tv.sohu.com/us/19892876/62322928.shtml>