# STAKEHOLDER VIEWS ON INTERACTIONS BETWEEN LOW-CARBON POLICIES AND CARBON MARKET IN CHINA

Mengfei Jiang, the University of Edinburgh, +44(0)7594500213, M.Jiang-6@sms.ed.ac.uk Xi Liang, the University of Edinburgh, +44(0)131 6515328, Xi.Liang@ed.ac.uk David Reiner, Judge Business School, University of Cambridge, +44 (0)1223 339616, d.reiner@jbs.cam.ac.uk Boqiang Lin, Xiamen University, bqlin@xmu.edu.cn

#### **Overview**

China has set up pilot emission trading schemes in seven cities and provinces over the last year, as a crucial instrument to incentive emission reduction and to reach the 40-45% carbon intensity reduction target by 2020. Through a two-stage survey, this paper elicits stakeholder views and expectations on pilot carbon markets in China, with an emphasis on stakeholder perspectives of how the pilot emission trading schemes may interact with other existing or perspective low-carbon and clean energy policies. Our main results indicate that except government, other sectors are generally lack of confidence in Chinese carbon markets, due to the shortage of market knowledge and market information, as well as concerns on uncertainties in government policy and regulation. Interactions between the carbon market and other low-carbon policies were recognised as a significant obstacle for developing carbon market in China. However, the effect and impact of such interactions have not been widely understood.

#### **Methods**

Two-stage survey: internet-based self-completed questionnaire and semi-structured telecom interview.

#### Results

Past studies indicated that a great majority of Chinese stakeholders would prefer a market base instrument for controlling greenhouse gas emissions. However, the survey, after the implementation of seven pilot carbon markets, generated an inconsistent finding in this context, as only one third the stakeholders felt optimistic about the Chinese carbon market. The result consists with another survey on China's carbon market in 2013 by Climate Bridge, in which only 5% of participants believe that an active carbon trading market will form before 2015. Surprisingly, the preparation stage of Chinese pilots carbon markets was relatively short compared with Korea, Quebec, California (World Bank, 2014), but very few stakeholders considered the pace was 'too fast'. That might be explained by that most Chinese stakeholders prioritise 'speed of deployment' due to fast economic transition in the last few decades.

The lack of transparency in market information disclosure, a lack of knowledge within market participants, and an immature MRV system could pose uncertainties in carbon price discovery. Stakeholders' predictions on carbon price reflect a lack of consensus. Only 17% of survey participants believe the carbon price in Guangdong pilot will increase to above 100 CNY/t CO2 by the end of 2014 (the current average carbon price in Guangdong pilot is 60 CNY/t CO2), and 34% of them predict the carbon price will decrease to below 50 CNY/t CO2.

It is worth mentioning that respondents realised that the interactions between carbon market and other energy and low-carbon policies may decrease 'demand' in emission trading market, as more than one third the respondents considered the interaction as a significant challenge. However, it seems that this opinion was mostly held among the academia, as up to 75% of stakeholders from academia advocating for this statement.

There is relatively limit understanding on how other mechanisms may affect the price of carbon allowance. In theory, both a new carbon tax and a more stringent renewable target could shift the abatement curve rightwards in ETS, and reduce the allowance price. A large number of stakeholders considered renewable target is a pressure towards carbon price, whereas a majority of stakeholders suggested carbon tax could boost carbon price. In general, we found the degree of understanding on mechanism interaction is associated with the claimed time spent on energy saving and emission reduction policies. Two third (67%) the respondents who have spent more than 70% of their working time are agree with the statement, while less than one third (30%) the respondents who have spent less than 20% of their working time have the opposite opinion.

### Conclusions

The study, through two-stage stakeholder consultation, identified potential challenges and limitations in understanding of the Chinese carbon markets. We would like to make the following policy recommendations. -There was too much attention by government and key stakeholders on price and volume of carbon allowance in the China's pilot ETS schemes; stakeholders and policymakers should continuously assess the quality of regulation, market integrity and information disclosure.

-As carbon market is not likely being the only major low-carbon policy instrument in China, a correct interpretation of carbon pricing signal is needed as a part of capacity development within industry participants.

-Alternative carbon pricing signal, such as government's shadow carbon price should be proposed along with carbon market allowance price to signal industry the short-term and long-term cost of carbon emissions.

-Regulators and carbon exchanges should provide in-time and transparent information for market participants for price discovery.

-The Chinese government should heavily invest in MRV system, and establish a mandated professional and standard practice, calibrating existing data, to provide confidence for market participants.

-Moving towards a national carbon market, governments should encourage studying international linkage and improving the compatibility of carbon market pilots, though actual policies for international linkages need more considerations, including the alignment with climate policies.

## References

Climate Bridge (2013): China's Carbon Market Survey 2013. Special Edition.

IETA (2012): Greenhouse Gas Market 2012: New Markets, New Mechanisms, New Opportunities.

IETA (2014): GHG Market Sentiment Survey 2014 9<sup>th</sup> Edition: A survey of current market sentiment among IETA members.

Jotzo, F., De Boer, D., and Kater, H. (2013): China Carbon Pricing Survey 2013, October 2013. China Carbon Forum.

Sijm, J. (2011): The interaction between the EU emissions trading scheme and national energy policies. Climate Policy, 5:1, 79-96.

Sorrell, S. (2003): Who owns the carbon? Interactions between the EU Emissions Trading Scheme and the UK Renewables Obligation and Energy Efficiency Commitment. Energy & Environment, vol 14, No 5.

World Bank (2014): State and Trends of Carbon Pricing 2014. Washington, DC: World Bank. Doi: 10.1596/978-1-4648-0268-3

Zhang, D., Karplus, V. J., Cassisa, C., Zhang, X. (2013): Emission trading in China: Progress and prospects. Energy Policy.