China Carbon Forum | 中国碳论坛

An independent platform to foster trust and cooperation among China's stakeholders for climate action

The Role of ETS in Supporting NDC Implementation

Executive Summary

This event, ***"The Role of ETS in Supporting NDC Implementation"*** was part of the China Low Carbon Leadership Network (LCLN), an event series jointly organized by Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ) and China Carbon Forum (CCF). This event was also held in cooperation with the International Carbon Action Partnership (ICAP).

The LCLN events aim to encourage communication among leading local and international experts in China's climate change sector. The event series are funded by the German International Climate Initiative on behalf of the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB).

The event featured a keynote speech by Mr Marc Allessie, Co-Chair of ICAP, and Director of the Dutch Emissions Authority (NEa), followed by an expert panel discussion analysing the role of China's national ETS in supporting the emissions goals set out in China's National Determined Contribution to the Paris Agreement.

The panel included distinguished experts from academia, media, an NGO, as well as ICAP. As the speakers came from both Chinese and international backgrounds, the audience were able to gain insights from a mix of perspectives, especially during Q&A sessions. After the discussion, the guests were enjoyed the follow-up networking event.

Record of Discussion

The following is an edited synthesis of discussion that took place at the event among panellists (around 1 hour) and open Q&A with participants (20 minutes). As per convention, individual's comments are not attributed.

This event was the 22nd Low Carbon Leadership Network event, organised jointly between GIZ and the China Carbon Forum, in partnership with the International Carbon Action Partnership (ICAP). Looking at the development of carbon markets in China and the Paris Agreement, the topic for this event is of high relevance. The Paris Agreement marked a turning point for the international climate negotiations and provided momentum for helping the world limit global warming to within 2 degrees Celsius.

The INDC's showcase what countries are doing to reduce emissions and adapt to climate change across many sectors, including shifting to renewable energy, improvements in energy efficiency, better land management, urban planning, and transport. It is essential that governments translate the NDCs in to specific policies and measures. Domestic and international carbon markets are one instrument which can be used to achieve these goals, and even raise ambition, as laid out in Article 6 of the Paris Agreement. The Agreement also emphasises the importance of international cooperation for reaching its goals. This includes supporting developing countries in reaching their objectives by providing financial, technical and capacity building support. The panel noted the importance of the fact the Paris Agreement text included the section on carbon markets (previously under some doubt). While countries that intended to use carbon markets for achieving their goals would probably have done so anyway, the provision of UN oversight of this process is important and will encourage further discussion of the role of carbon markets in future UN discussions.

Germany is one of the largest contributors to international climate action, and will continue to step up its commitments in the future. The German government supports international cooperation on climate change through both bilateral and multilateral programmes and funds that contribute to mitigation, adaptation and forest and biodiversity conservation. GIZ is engaged in these efforts towards sustainable development, including supporting the development of INDCs around the world. In China, this includes a capacity building project with the Chinese government on emissions trading schemes (ETS). This project was commissioned in 2012 and has recently been extended to 2019.

ICAP is also closely engaged with China's ETS development. ICAP is a forum for national and sub-national governments that have either implemented or are planning to implement an ETS. China is not currently a member of ICAP, but it is hoped that ties may be strengthened in the near future, thus the current ICAP mission to China. One of the major outputs for ICAP this year has been the "ETS Handbook" – *Emissions Trading in Practice: A handbook on design and implementation*. This resource draws together the lessons learned from more than a decade of ETS implementation worldwide. More than 100 experts from around the world contributed to the publication, which was jointly coordinated by the World Bank's Partnerships for Market Readiness (PMR) programme. GIZ will assist with the translation of the Handbook into Chinese in order to make it available to Chinese experts and policymakers as they work towards the national ETS.

The Handbook includes some key insights which may be relevant for China. First, 'be informed globally, but design locally', is at the heart of ICAP's approach. The ten years of ETS implementation has provided a number of lessons where aspects have been delivered both well and not so well. However, at the same time, there is no right or wrong approach to ETS. Ultimately ETS design will need to address the local circumstances involved. Second, ETS can only operate well together with robust institutions and reliable data. Third, changes are needed over time. It is crucial for market participants that changes take place in a predictable fashion, and do not erode confidence in the instrument overall. Finally, bring people with you. This includes both companies, which need to form compliance strategies, as well as all relevant government institutions which need to play a part. This also helps to create vested interests in the success of the ETS. A good example is the prominent role of the CDM community in China pushing for reliable institutions and regulations for the carbon market. It is also important to showcase champions for ETS. A large number of companies will be looking for examples as to how others have successfully adapted to the ETS regulation.

Emissions trading is on the rise worldwide. It has grown from one active system in 2005, to 17 such systems currently, and much of the most recent growth has happened in Asia. The schemes are covering an ever greater share of global carbon emissions, and as the caps in these systems decline, are contributing to emission reductions. Over coming years, two trends can be expected: first, prices will rise as ETS caps tighten and countries improve implementation; second, markets will become more closely linked, providing greater liquidity and options for reducing emissions cheaply. 40% of the world's GDP is produced in regions which have an ETS in place, and this will increase to almost half next year with the launch of China's national ETS. From a climate perspective, the proportion of emissions covered by ETS will rise from 9% to 16% once the Chinese national scheme comes online. In recent years, ICAP has helped train over 100 Chinese experts in ETS, and has thus played a small part in contributing to China's ETS development.

In its INDC, China identified a national ETS as a key policy measure that will be used to meet its commitments. As a first step, sub-national ETSs were established in seven pilot regions from 2013. The national scheme will start next year, 2017. The speed at which China has developed its carbon markets is extremely impressive. China, as the world's largest emitter of greenhouse gases, will not only have the largest ETS, but it will be the first developing country to use this tool in order to curb its emissions. This makes it a role model for other developing and emerging economies in relation to ETS, and how to implement it in a fast growing economy, or a partially liberalised energy sector. It is also makes the success of China's ETS implementation extremely important, as both success and failure may have ramifications elsewhere.

The panel noted that the success of the Paris Agreement very much depends on the implementation of the NDC's, making it a 'bottom-up' approach to achieving emissions goals. This helps the UN process to move from a zero-sum game to a cooperative process. However, there are a lot of challenges in order to make this effective in achieving the 2-degree target. There is a still a large gap between the existing NDC's and the emissions budget required to meet the target. China presented its INDC well before the Paris meeting, indicating that the leadership wanted the negotiations to be successful.

China's INDC also included commitments for a peak in carbon emissions by 2030 and a reduction in the emissions intensity of the economy of 60-65% from the 2005 level. China's national ETS will cover at least 50% of the country's carbon emissions, so it has a key role to play in achieving the INDC. A number of challenges remain, however. The first is in relation to how to coordinate the ETS with China's overall emissions commitment. The cap setting in China's seven pilot regions was mostly done through a bottom-up approach whereby the overall target is an aggregate of the individual targets given to enterprises. But in the future, the ETS must move towards a more top-down approach, first taking the target in the NDC and then disaggregating it to the sectors covered in the ETS. It is also important to then cap those sectors that are not covered by ETS, in order that the overall target can still be met.

Another challenge relates to how ETS will interact with other policies. China does not have a lack of policy in the energy sector, especially in relation to energy efficiency and encouragement of renewable energy. The government will have a difficult job managing the interaction of these policies in the future, and sometimes the interactions may be positive, but sometimes they may also be negative. From a theoretical perspective, this is interesting. With multiple policies implemented in the same sector, one may think that they will be additive, but in fact that is usually not the case. In

fact, the most stringent policy will likely have close to full effect, while others may be rendered ineffective. The panel suggested that it is important for policymakers to have a better understanding of these interactions, especially any potential negative effects.

A further challenge relates to competitiveness. Given that China will have the largest market, this makes issues around carbon leakage particularly important. Previously this had only been a concern for China internally, between ETS pilot regions and non-pilot regions. Next year, after the start of the national ETS, there may be concerns around carbon leakage to other countries. This will be addressed by free allocation and other instruments. The panel noted that must be done very carefully and based on detailed analysis. An over-allocation of free permits would lead to subsidisation of those industries and may create some other policy concerns.

Dynamic policy making is also important. The NDC will be updated every five years, based on the 'ratchet-up' mechanism within the Paris Agreement known as the 'global stocktake'. ETS will certainly help countries like China improve the cost effectiveness of the achievement of their emissions goals, and also to respond to changes in the global effort towards carbon pricing, possibly through linking at a later date.

The panel noted that in the early stages of China's ETS development, a very important task will be creating trust in the market and the institutions which manage it. In this regard it is encouraging that China's national ETS will base its allocation mechanism at least in part on benchmarking in the initial stage. This is apparently based on lessons from international best practice. Ideally, auctioning would also be introduced at the beginning, even if for a very small share of the overall allowances. This would help to visibly show some of the benefits of ETS, and then to create momentum for this share to gradually increase, with a consequent effect on the price of carbon.

The panel suggested that ETS practice has shown that government intervention in markets may be required more than was envisaged by economist who originally laid out the principles for ETS. There are different approaches of doing this, but in any case, it must be done in a transparent way in order that trust in the market and the incentives for emissions reduction are maintained.

The panel also discussed the role of ETS in emissions reduction in relation to other processes going on in the energy sector as a whole. While ETS is a cost-effective tool for emissions reduction, and may play a significant role in the medium to long -term in delivering emission reductions, probably the largest gains in the coming few years will occur due to the industrial restricting which China's

economy is undergoing, particularly in the coal sector. Since 2013 China's coal consumption has been declining, and this decline has probably increased this year. The huge contribution of China's coal sector to emissions in China, and indeed the world, mean that any structural change in that sector is of major significance. For example, China's 2020 emissions intensity target, announced prior to the Copenhagen UNFCCC meeting, will be over-achieved largely due to the changes in the coal sector.

At the same time, ETS has a very important role to play in the short term, more for the process rather the emissions outcome. This is particularly the case in relation to MRV, where provinces and enterprises are obligated to better account for their emissions. The very fact that the issue of climate change is now on the agenda of local governments is largely due to the ETS exercise. The importance of this institutional momentum should not be overlooked.

ETS also reflects the central government's larger goal of moving away from blunt policy instruments such as administrative measures, and towards more market-based tools such as carbon markets. Such measures are more flexible and should in theory better reflect the situation of the Chinese economy. At the same time, the central government should ensure that the process is coordinated effectively as possible, for example that provinces use the same methodology for emissions accounting, and that the cap is stringent enough, avoiding the problems created by over-allocation in the EU ETS.