

## BUILDING A KOREAN ETS FOR THE FUTURE

At the start of 2015, the world's second-largest national emissions trading system began in South Korea. Sungwoo Kim and Hyoungchan Kim evaluate its performance so far and the outlook for the post-2020 Korean carbon market

The Korea Emissions Trading Scheme (KETS) began at the start of 2015, with the aim of achieving the government's 2020 reduction target of a 30% cut compared with business as usual, in a cost effective manner. In terms of emissions covered, the KETS is the second largest market after the EU ETS, and it is expected to play a leading role in spreading emissions trading to developing and emerging countries.

The 525 covered entities consist of private companies and public organisations with emissions greater than or equal to 125,000 tCO<sub>2</sub>e at the entity level, or greater than or equal to 25,000 tCO<sub>2</sub>e at an installation level. In total, 66% of national GHG emissions are captured by the programme.

The first two compliance periods both span three years (2015-17 and 2018-20), expanding to five years from Phase III (2021-25). Emitters are obliged to submit allowances corresponding to their emissions by the end of June of the subsequent calendar year, with penalties for noncompliance, set at around three times the average trading price of the compliance year by the Ministry of Environment, up to a maximum of KRW 100,000 (approximately \$90) per tCO<sub>2</sub>e.

### PHASE I SO FAR...

The total allowances issued for Phase I represent 1,687 million t CO<sub>2</sub>e. Of these, 95% has been allocated, and the remaining 5% is reserved for unexpected new installations and capacity expansions, for early action, and for market stabilisation measures.

The total volume of allowance traded in the KETS's first nine months amounts to a reported 181,380 tonnes. By comparison,

in the past, approximately 780,000 tonnes of offset credits during the same period, focusing on reduction results via Clean Development Mechanism (CDM) projects, were traded with a total trade value of \$8 million. It has been reported that, as of October 2015, 19 transactions have happened in the market so far. Even though the system is still at its preliminary stage so it is too early to judge its effectiveness, for an active and smoothly operating market system, it is worth taking note of the concerns below.

Two main factors appear to be limiting further active trading: the unlimited banking of allowances, and the dominance of a relatively small number of players in the market - 50 companies account for 80% of allocations. It is also difficult for many covered entities to access CDM credits which had been expected to be used to cover much of the shortfall - participation in 70% of domestic CDM projects was limited to a handful of covered entities.

The carbon price therefore seems to reflect the intent of the government that allowance prices should remain around KRW10,000 for market stability, rather than the economics of abatement, and this may result in weakening the incentive for emission reductions for participating entities.

Given that most participants are expected to have a shortfall of allowances, lack of

liquidity in the market is a more immediate concern than price volatility, especially given the limited range of realistic abatement options, at least in the short term. This led many players to stockpile offsets before the launch of the KETS and carry the costs of these forward on their balance sheets against future shortages of emission allowances.

### LESSONS LEARNT

As recommended by the IPCC, most developing countries set emissions reduction targets against business-as-usual (BAU) projections. Our experiences with the KETS demonstrate the importance of considering uncertainty in setting a cap with BAU projections.

Unlike developed countries, it is critical to disclose information on how future emission scenarios are determined, and whether the involvement of stakeholders is guaranteed in the processes of cap setting, to ensure emissions reductions and economic growth are achieved.

The market mechanism should function properly: it should send a price signal based on market activity so that emitters can establish cost-effective reduction strategies. When the number of participants in the market is limited, and a few entities hold a significant number of allowances, it is fundamental to consider how to increase the liquidity of emission trading. A possible solution is to offer an opportunity for other players to participate in the market, and

## THE KETS DEMONSTRATES THE IMPORTANCE OF CONSIDERING UNCERTAINTY IN SETTING A CAP WITH BUSINESS-AS-USUAL PROJECTIONS

encourage the trade of derivative products facilitating the market but not interfering with market stability.

## TO PARIS – AND BEYOND

The Korean government submitted its Intended Nationally Determined Contribution for the Paris agreement to the UNFCCC at the end of June. It essentially states that the country's voluntary commitment is to reduce GHG emissions by 37%, compared to BAU projections, by 2030. Of the required reductions, 11.3% will be met with international credits, and the reduction target for the industrial sector will not exceed 12%. When the national emissions reduction target is set via the conclusion of the UNFCCC 21st Conference of the Parties (COP 21) in Paris, the government will provide a detailed implementation plan, including the annual reduction targets for each sectors.

## IT IS CRITICAL TO DISCLOSE INFORMATION ON HOW FUTURE EMISSION SCENARIOS ARE DETERMINED

Some experts have highlighted that the 2030 domestic reduction target (26%, after deducting the international carbon credits from the total reduction target), is lower than the existing target for 2020 (30%), and moreover, the reduction target for the industrial sector eases from 18.5% to 12%. This is mainly because the changes could allow KETS entities to expect an adjustment of the reduction target for 2020 and, most importantly, additional allocation during Phase I. It may lead to an increase of market uncertainty, and consequently, make the entities to delay their own decision makings for further investment to mitigate their carbon emissions during the first compliance period. Thus, it is highly recommended to minimise market uncertainty by finalising the mitigation roadmap 2030 as early as possible.

**Sungwoo Kim** is the Regional Head of Climate Change & Sustainability in KPMG Asia Pacific, with over 16 years of professional experience. He has been advising public and private decision-makers since 2008 on issues related to carbon pricing, climate finance, and corporate social responsibility. He is a member of World Bank External Advisory Group for sustainable development.

**Hyoungchan Kim** is a Director in KPMG Korea, and has over 10 years of professional experience in climate change and sustainability practices. He advises Korea Government on development and implementation of ETS, and private sector clients on its low carbon strategy and carbon market engagement.

