

# KOREA ETS EVOLVING

## SUNGWOO KIM, HYOUNGCHAN KIM AND HEEJIN KIM ANALYSE THE PERFORMANCE OF THE K-ETS SO FAR AND LOOK TO WHAT CHANGES PHASE II WILL BRING ASIA'S FIRST CAP-AND-TRADE SYSTEM

The Korea ETS (K-ETS) is currently in the final year of the first phase. Initiated in 2015, the nationwide ETS is at the forefront of the Korean government's climate mitigation policy, covering 68% of the country's emissions. It provides a clear signal to domestic entities to consider the economic value of emission reductions in their operations. However, there remain challenges which must be addressed for the market to accomplish the national GHG reduction target in a cost-effective way.

### PHASE I RECAP: HOW THE K-ETS HAS WORKED

It might be too early to evaluate the first phase as the period is still going on. However, experiences of the first implementing year and subsequent responses from the government are sufficient enough to represent key aspects of the first phase of the K-ETS.

In 2015, there was a net deficit of 3 million tonnes, comparing the total amount of allowances with verified emissions – but with a total allocation of 550 million allowances, it's only a 0.5% shortfall. This is far from what the industrial sector initially anticipated, that they will suffer from a significant lack of allowances since the cap is simply not enough for them. Yet this hardly implies that entities made great contributions to their emissions reductions; many understand this relatively low amount of emissions from the industrial sector would result from a slowdown in economic growth. It is expected that this trend could be maintained until the end of the first phase, considering the following features:

the annual economic growth in the Republic of Korea has dropped to 2% since 2012; and the government made allocated an additional 68 million allowances for early action that entities earned before the start of the K-ETS.

A structural imbalance between allowance supply and demand inhibits smooth functioning of the market mechanism.

The inflow of surplus allowances to the carbon market has rarely been seen for the last two years. The share of allowances traded in the market is only around 1.4% of the total cap. In the meantime, carbon prices had continuously increased until earlier this year, eventually hitting three times the price from the beginning of the ETS. This is mainly because entities were reluctant to trade their surplus allowances, as they intend to carry them forward in case of any shortfall they might encounter in the future. There were 283 entities in such a position, with a combined total of 15 million excess allowances.

Furthermore, there was not much room for offset credits since new projects have rarely begun after the launch of the K-ETS, although some market participants have used credits from CDM projects implemented before the launch of the K-ETS. Consequently, the government increased the amount of allowances

emitters can borrow from the future, from 10% to 20%, for the first phase, aiding 239 entities which were short of allowances. Those entities met more than half of their shortfall with the borrowed allowances.

The highest carbon price in the K-ETS history to date was €20 (\$23), reached in February 2017, due to this supply-demand imbalance. As a result, the government in April announced a carbon market stability plan, effective immediately. This plan includes a provision to limit the total amount of banking to the next phase for each entity.

### WHAT CHANGES ARE EXPECTED FOR PHASE II?

A key rationale behind the changes brought into Phase II is to incentivise more entities to invest in reducing their emissions. This approach is well illustrated in the broad application of benchmarking method and the consideration of emission reduction credits generated in 2015 and 2016.

Specifically, the government will use a benchmarking approach more broadly than in the first phase. Although the sectoral coverage of the application is still in consideration, it seems that it will be extended initially from three sectors (aviation, cement, and refinery) to eight in total, including the power sector. Altogether, this means that almost 50% of the total emissions covered by the K-ETS will be allocated allowances via benchmarking.

## THE NATIONWIDE ETS IS AT THE FOREFRONT OF THE KOREAN GOVERNMENT'S CLIMATE MITIGATION POLICY

The government will allocate to the remaining entities via grandfathering, factoring in any emissions reductions made in 2015-16. This means entities can receive allowances based on their actual verified emissions, and along with this, additional allowances are given according to verified reductions. The government intends for this to motivate emitters to invest in reduction technologies, to maximise their allocations in the next phase.

Another critical feature of the second phase is auctioning. The government is currently reviewing the sectoral coverage for auctions, based on trade intensity and carbon costs of subsectors. By law, the total amount of allocation via auction is precisely 3% of the total national cap. During Phase I, auctioning is expected to generate millions of euros of auction proceeds, which will be used for international and national low-carbon development and support businesses in reducing emissions.

The last important feature worth highlighting is newly introduced measures to increase market liquidity. Key measures are the aforementioned limit provisions on banking and borrowing, and the early initiation of using international credits. In the case of allowance banking, the government set a limit on the amount which can be carried over to the next phase, and when entities bank more than their limit their allocation will be cut. On the other hand, the borrowing cap was increased from the current 10% to 15% – but, the borrowing cap will then be reduced in the following year in accordance with the amount borrowed. This measure is intended to resolve imbalance situations, whereby allowance demand intensifies at the end of the implementation period. In reality, there have been positive consequences, such as an increase of traded volume. Carbon prices eased to €15 after the release of the plan in April.

## EFFICIENT FUNCTIONING OF THE MARKET IS VITAL FOR THE THE COUNTRY TO MEET ITS EMISSION REDUCTION TARGET

When it comes to international credits, the government earlier this year amended the regulations to approve the use of credits generated from CDM projects in the ETS. Detailed rules and principles are under discussion and are expected to be available once the final allocation plan for the next phase is published in mid-August. This will open a window for domestic companies to seize opportunities to earn carbon credits with business development, as well as easing low market liquidity.

### WHAT IS NEEDED FURTHER TO STIMULATE MARKET ACTIVITY?

Efficient functioning of the market mechanism is vital not only for covered entities to fulfil their obligation, but also for the country to meet its emission reduction target. The K-ETS is undergoing extensive changes, given the lessons learned from the first phase. Nonetheless, it provides a clear and certain mid/long-term signal of a stable and continuous operation of the regulation for market players. This is mainly because corporates' decisions on investments in low-carbon projects generate consistent carbon reduction effects over the years.

In particular, domestically, it is critical to eliminate uncertainty by setting a detailed implementation pathway towards achieving a national reduction target of 37%, compared with business-as-usual projections. This pathway should also clearly aim to further drive low-carbon investment by the private sector.

Also, from an international perspective, the rules regarding a transfer of carbon reduction credits and double-counting issues between different countries under the Paris Agreement has not been agreed yet. Considering that existing CDM projects

normally generate carbon credits for at least seven years to a maximum 21 years, it is necessary to clarify the relationship between the use of international carbon credits and the implementation of Korea's national reduction plan under the Paris Agreement by next year. Clearly, any uncertainty on the use of carbon credits gained from international projects should be avoided, especially once the rules for the market mechanism under the Paris Agreement are agreed.

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